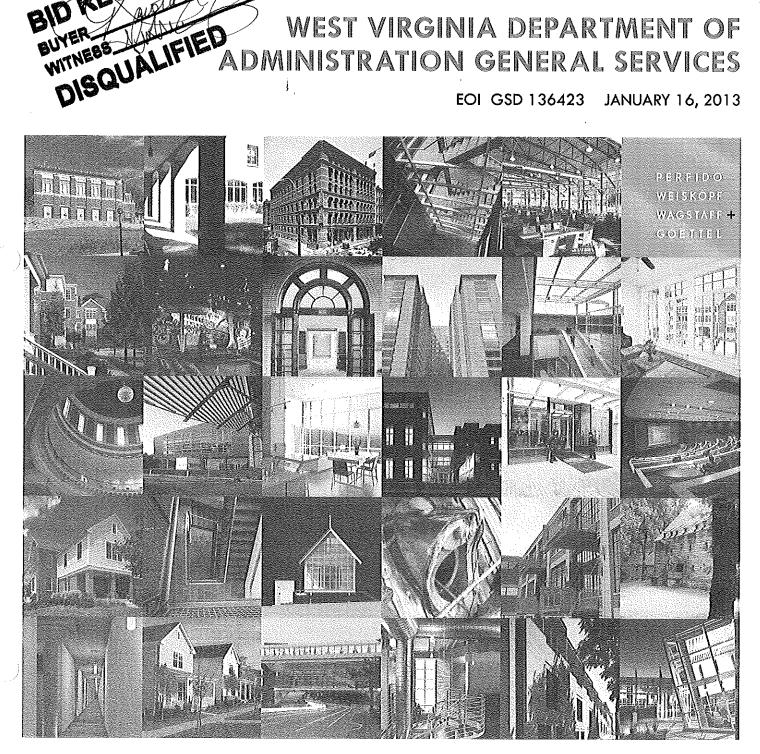


BID RECEIVED

ROPOSAL FOR ARCHITECTURAL/ENGINEERING SERVICES FOR GINA STATE CAPITOL BUILDING ROOF REPLACEMENT

### WEST VIRGINIA DEPARTMENT ADMINISTRATION GENERAL SERVICES

EOI GSD 136423 JANUARY 16, 2013



### 01/17/13 09:40:17 AM West Virginia Purchasing Division

PERFIDO WEISKOPF WAGSTAFF + GOETTEL

January 15, 2013

Krista Ferrell, Buyer GENERAL SERVICES DIVISION Department of Administration, Purchasing Division 2019 Washington Street, East Charleston, WV 25305-0130

RE: Expression of Interest for Architectural and Engineering Services - GSD136423
Roof Replacement at the WV State Capitol - Charleston WV

Dear Ms. Ferrell and Members of the Selection Committee:

Perfido Weiskopf Wagstaff Goettel (PWWG) is pleased to submit our qualifications to provide Architectural and Engineering Services for roof replacement at the main Capitol Building in Charleston. We have studied the EOI and we are familiar with the building from our work there restoring the rotunda. We are confident the enclosed materials demonstrate that our team is exceptionally well qualified to provide the best overall value to the state of West Virginia. The following items underscore specific qualifications of our team:

- We have extensive experience preserving and renovating historic structures, ranging from selective masonry
  repairs to the restoration of the entire roof, dome, and peristyle of the landmark PA Capitol building. We have
  completed restorations at the WV Capitol, the WV Capitol Complex, and other structures in WV, PA, OH and NY.
- We understand and are experienced with issues inherent in building forensics and making alterations to buildings
  of all vintages, including Historic Register structures.
- · Our team includes architects and consultants skilled in complex upgrades to existing buildings.
- We have developed a thriving regional practice in West Virginia; Since 2008, we have completed or are currently
  involved with 10 projects in various areas of the state, for institutional, academic, and government institutions.
- We have experience in designing for continued occupancy during construction.

As noted, we have experience working in West Virginia and locations that are some distance from our office. We have provided construction administration services on many of those projects and over the next 16 to 24 months we will be administering construction on significant projects in Charleston, Cincinnati, Lexington, KY, and Durham, NC. It has become part of our culture to deliver quality services at locations not immediately local to our office. PWWG is fully prepared to provide timely responses and a frequency of site visits and project meetings that meet your expectations. To do so, we will plan our work and commit ourselves to the travel time needed. This is not new for us.

We look forward to the opportunity for an interview to introduce ourselves in person, elaborate on our capabilities and discuss our process. Thank you for your consideration of our credentials. We view this project as an interesting challenge for one of the major public facilities in the state. We look forward to the opportunity of discussing your project in greater detail.

Sincerely,

Alan Weiskopf, AIA Managing Principal

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- Project Affidavit
- West Virginia Purchasing Registration

Forms .....

SECTION 5

### ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.; GSD136423

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.					
Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.					
Addendum Numbers Received:  (Check the box next to each addendum received)					
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[X]	Addendum No. 1	[	]	Addendum No. 6	
[]	Addendum No. 2	. ţ	]	Addendum No. 7	
i 1	Addendum No. 3	[	]	Addendum No. 8	
[ ]	Addendum No. 4	[	]	Addendum No. 9	
[ ]	Addendum No. 5	[	]	Addendum No. 10	
	t w				
I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.					
Perfido Weiskopf Wagstaff + Goettel					
Company					
An muskost					
				Anthorized Signature	

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

Rovised 6/8/2012

Date

#### **CERTIFICATION AND SIGNATURE PAGE**

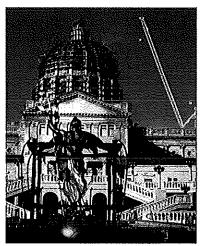
By signing below, I certify that I have reviewed this Solicitation in its entirety; understand the requirements, terms and conditions, and other information contained herein; that I am submitting this bid or proposal for review and consideration; that I am authorized by the bidder to execute this bid or any documents related thereto on bidder's behalf; that I am authorized to bind the bidder in a contractual relationship; and that to the best of my knowledge, the bidder has properly registered with any State agency that may require registration.

Perfido Weiskopf Wagsta	off + Goettel				
(Company)					
- Am Mun	okoji				
(Authorized Signature)	10				
Alan Weiskopf, AIA, Managing Principal					
(Representative Name, Title)					
412.391.2884, ext. 233	412.391.1657				
(Phone Number)	(Fax Number)				
January 14, 2013	•				
(Date)					

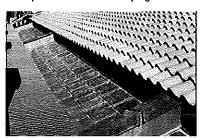
### SECTION 1 CONCEPT

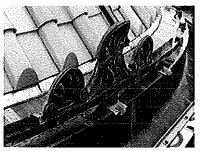
#### Concept

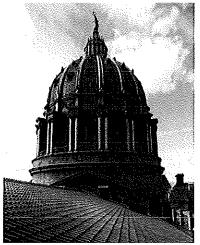
#### Perfido Weiskopf Wagstaff + Goettel



PA Capitol roof restoration in progress.







PA Capitol roof and peristyle deck.

PWWG's anticipated approach to the WV Capitol re-roofing project is best illustrated in the context of three projects whose scope of work includes components of those at the WV Capitol project. These case studies—and the project examples in Section 4—also demonstrate that our firm has considerable experience repairing and replacing roofs on historic landmark buildings of the calliper of the WV State Capitol.

#### PENNSYLVANIA CAPITOL ROOF RESTORATION AND PERISTYLE RESTORATION

The PA Capitol Building, constructed in 1906, is arguably one of the most significant buildings in Pennsylvania. For the PA Department of General Services, Perfido Weiskopf Wagstaff + Goettel completed all restoration, preservation, and conservation work to rehabilitate the roof, domes, cupolas, masonry, windows, exterior paving and steps of this historic landmark.

#### Roof Restoration—Primary Issues, Methods of Design, and Project Sequence

One of the principal challenges was restoring the building envelope consistent with sound preservation philosophy, while also introducing new elements to improve its integrity and allow it to withstand the next 50 to 75 years. Nowhere was this challenge more difficult than the roof. The glazed "Harrisburg Yellow" tiles covering the north and south domes had been installed over a steel-purlin system, without the use of a deck or membrane. The gutters at the base of the gabled roofs were promenade tile with conventional mortar joints. They leaked constantly and were prone to overflow in heavy rainfall and snow melt.

The solution to the dome problem involved the installation of new, custom-made, multicolored tile, carefully matched to the original design and installed over a new deck with a watertight membrane roof. The curvature of the domes was preserved so that their decorative copper elements could be reinstalled after repair.

The gutters, which are not visible from ground level, were entirely redesigned, and consist of lead-coated copper drainage basins with separate roof drains for each basin. The structure of the gutters was rebuilt at a lower elevation so as to prevent water from coming into contact with the granite surfaces, and to keep it from backing up under the new gabled-roof areas.

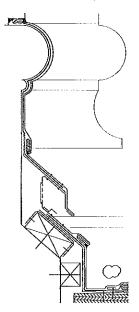
The project was constructed in phases over the course of several seasons, and in concert with the other interior projects at the Capitol. The building was user-occupied throughout construction.

#### Peristyle Deck Restoration — Primary Issues, Methods of Design, and Project Sequence

In 2007 PWWG was hired to complete a second major project for the PADGS at the Capitol: a detailed forensic investigation and restoration of the peristyle deck around the base circumference of the 52 million pound Main Dome of the building.

Leaks through the large, trapezoidal pieces of granite that form the peristyle walkway were documented as early as the 1950s, deteriorating the massive masonry walls of the tunnel directly below, and risking moisture damage to priceless historical murals and decorative plaster in the Capitol's Rotunda. In addition, water infiltration and resulting movement from repeated freeze/thaw cycles displaced many of the large granite facing stones below the deck. Water





Section/detail at vented drum flashing



New fashing at carved stone column base at the PA Capitol.



PWWG recently completed forensic evaluation and exterior facade restoration at Camegie Mellon's historic Margaret Morrison Hall. Shown here, detail of decorative terra cotta comice.



Restored balustrade & ornamental frieze.

infiltration was exacerbated by the elimination of a failed circumferential gutter system at the base of the dome in the mid-twentieth century.

Due to the complexity of the structure and logistics at this location, PWWG first coordinated a "pilot project" to assess the actual conditions, set the quality standard for all needed repairs, and prove the efficacy of the preservation approach in a series of mockups.

PWWG's approach to restoring the PA Capitol peristyle deck was to first remove all of the granite pavers and the saturated setting bed and deteriorated membrane in which they were set, install a new system of concrete supports, and then reinstall the pavers. The concrete supports were designed to facilitate long term drying of the saturated masonry below by lifting the granite slabs from the saturated masonry and allowing air to circulate around them. A new lead-coated copper roof was installed over the granite pavers, matching the intricate decorative profiles of existing stone walls and column bases.

PWWG also coordinated significant structural modifications to stabilize the large granite deck and facade stone panels and the concrete and masonry sub-structure. The ornamental granite balustrades surrounding the dome just above the pavers were also disassembled and restored as part of the project scope. The restoration preserves all of the original details of the balustrades and the particular dramatic sight lines created by them. All areas had to remain watertight throughout restoration, and the building remained fully operational.

By implementing the pilot project, PWWG avoided costly delays and change orders, incorporated significant structural design changes and refined the final bid documents. The project was finished on time and on budget.

### REPAIR OF RAIN CONDUCTORS AS PART OF FACADE RESTORATION OF HISTORIC REGISTER MARGARET MORRISON HALL (CARNEGIE MELLON)

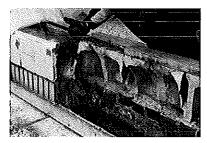
PWWG recently completed restoration of an elaborate and severely decayed terra cotta façade at Margaret Morrison College, a 1913 Historic Register building at Camegle Mellon University in Pittsburgh. A key element of the scope of work was reconstruction of interior rain conductors that manage drainage from narrow strip roofs at decorative setbacks on two levels of the building. PWWG's method of forensic investigation and subsequent wholistic approach to this project are directly applicable to the WV Capitol project. It also demonstrates our ability to develop construction details that replicate historic components for complex renovations.

#### Primary Issues, Methods of Design, and Project Sequence

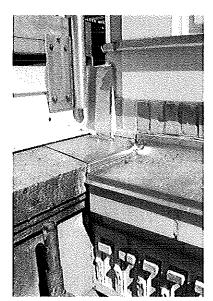
The west façade of this prominent campus building designed by architect Henry Hornbostel is an impressive composition with a vaulted base, a 2 story colonnade with monumental windows, an elaborate entablature, and an attic story capped by a terra cotta balustrade. The facade combines formed concrete, clay and stone masonry, glazed polychrome terra cotta, and wood. The façade is built to the standards of a bearing wall, but functions as cladding over the steel frame that is the structural system for the building. Margaret Morrison was built in an era when the long term performance of such complex systems was not well understood.

The project began with a study which found leaks in sky-facing joints in the terra cotta balustrade. It was determined that water had been penetrating to the core of the wall for decades and had severely damaged the steel frame. Corroding steel expands with great force, to many times its original volume, and the steel in Margaret Morrison had 'rust-jacked' terra cotta and brick facings, opening cracks that allowed additional water into the wall causing further





Forensic field investigations revealed significant deterioration of masonry and steel at the terra cotta frieze and balustrade.



New flashing channels water and protects sky facing joints.

damage. The problems were compounded when original rainwater conductors were abandoned and replaced by surface conductors which proved ineffective. The problems were also masked by a series of superficial repairs which dealt only with surface flaws.

PWWG designed a "restoration to modern standards" with 2 main goals: 1) restore the historic exterior of the façade in all its visible details including colors, and 2) reconstruct the interior of the wall in accordance with modern understandings of the performance of materials. The project involved a substantial amount of deconstruction and remedial repair. Structural steel was cleaned, patched, and coated and severely damaged pieces were replaced with new material. An entirely new balustrade was cast from glass fiber reinforced concrete (GFRC), using original pieces as molds, and the sky facing joints that were the source of much of the damage were isolated from the wall cavity by a new roof slab extension (fully concealed), and cap flashings.

Of direct interest for the WV Capitol project, the roof drainage system was replaced with new interior drains that have simplified routings and cleanouts. All damaged concrete was removed from the vaults and repairs were poured that match exactly the original compound curves. These repairs became undetectable when the vaults were repainted. Not wanting to miss an opportunity, the university also used the project to upgrade the building's hot and chilled water piping system.

This restoration project was complete on time and on budge, and Margaret Morrison remained fully occupied throughout construction.



#### SECTION 2 FIRM/TEAM QUALIFICATIONS

- Contact
- PWWG Team Member Roles, Responsibilities, and Resumes
- Consultants' Roles, Responsibilities and Resumes
- Ability to Handle the Project in Its Entirety
- Agency Ownership of Work
- Statement of No Litigation

### Firm/Team Qualifications Perfido Weiskopf Wagstaff + Goettel

#### CONTACT

The following will be the authorized contact for this project, will be responsible for the project, and will have full authority to execute a binding contract on behalf of the firm/team submitting the proposal:

Alan Weiskopf, AlA, Managing Principal Perfido Weiskopf Wagstaff + Goettel 408 Boulevard of the Allies Pittsburgh, PA 15219

Ph: 412.391.2884, ext. 233 e-mail: aweiskopf@pwwgarch.com

#### PWWG ROLES, RESPONSIBILITIES AND RESUMES

PWWG team members for your project are listed below and in the Organization Chart in Section 3. These are the people who will work with you throughout the project under the leadership of Principal-in-Charge Alan Weiskopf, and these are the people who will have direct responsibility for coordinating meetings with your staff, and for the preparation and implementation of drawings and plans. Additional design and CAD staff will be assigned to the project as appropriate.

Alan Weiskopf, Ala, LEED AP — Principal-in-Charge and Lead Designer. Alan will be the initial point of contact for all project phases. He will manage contractual arrangements and serve as a project resource, applying his considerable experience with institutional and government clients, code requirements and projects in West Virginia. He will lead the programming and design process, and provide executive leadership and oversight for the entire project team including all consultants throughout the project through construction.

<u>Joseph Filar, AIA, LEED AP</u>—<u>Project Manager and Construction Administration.</u> Joe will manage day-to-day issues, manage the complete project team including consultants, and coordinate communications, scheduling, budgeting, and meeting schedules. He will also be a client contact. Joe will also oversee construction administration for this project.

<u>Jan Irvin, AIA, LEED AP — Specification Manager and QA/QC.</u> Jan will write the front end and architectural technical specifications for PWWG and compile the complete project manual including all disciplines' technical specifications. He will also bring his seasoned QA/QC experience to your project through reviews of project design and coordination.

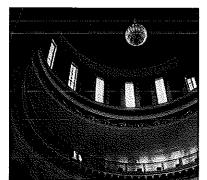
Resumes for each of our Capitol team members are included at the end of this section.

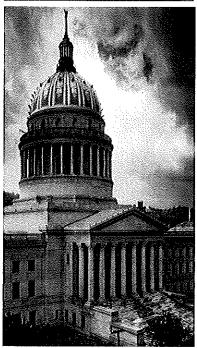
#### CONSULTANT'S ROLES, RESPONSIBILITIES AND RESUMES

Since PWWG specializes in architecture rather than a mix of engineering and architecture, we have the flexibility to custom build a team tailored to your project, including regional consultants with whom we have excellent long term relationships, and with whom we have worked on several recent large scale projects in West Virginia. Key team members are listed below, and in the Organization Chart in Section 4.

Resumes for each of our Capitol team members are included at the end of this section.

<u>CJL Engineering</u> — (Mechanical/Electrical/Plumbing Consulting). Should MEP issues arise in the scope of work for the Capitol project, we will work with CJL to address them. The firm has a working knowledge of the WV Capitol Complex utilities and an excellent long term relationship with the facilities staff at GSD. Within the past 5 years, PWWG has worked with CJL on 16 projects worth over \$123 million in construction costs.

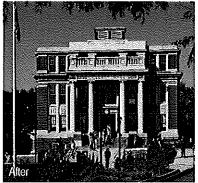




PWWG restored the interior surfaces of the main dome at the West Virginia State Capitol.







PWWG's comprehensive restoration of National Register Oglebay Hall at WVU Morgantown included a full roof replacement.

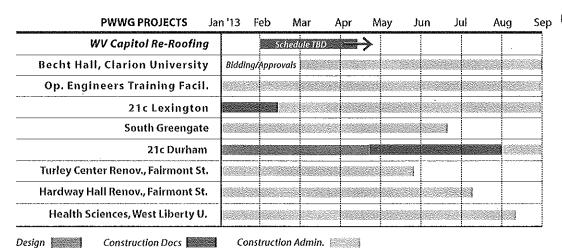
Moment Engineers — (Structural Consulting). PWWG will consult with Moment on any structural issues that arise during the project at the WV Capitol. The firm is headquartered in Charleston, and has collaborated successfully with PWWG on several recent and current projects of considerable size, including 2 new classroom buildings at WVU Parkersburg and a \$16 million new landmark lab and classroom building at West Liberty University.

H. Lee Forbes (Roofing Consultant). Lee Forbes will assist us in the evaluation of all the roof materials for this project at the Capitol, and in developing strategies for a replacement to be compatible with the overall design of the Capitol Building. Lee is based in Lewisburg, WV and has consulted with PWWG on several historic re-roofing projects including replacement of the Ludowici tile on Building #3 at the Capitol Complex in Charleston and on the recent comprehensive re-roofing of historic Main Hall at the WVU Institute of Technology in Montgomery.

<u>KDM (Cost Estimating).</u> KDM is particularly adept at providing reliable "conceptual" estimates that are vital to decision making in the early stages of planning. In addition, they bring regional experience to Understand the characteristics of the southern WV construction and bidding market. For the Capitol re-roofing project, once a preferred scheme is identified, they will prepare detailed cost estimates at the completion of Schematic Design, Design Development and at 100% completion of construction documents.

#### ABILITY TO HANDLE THE PROJECT IN ITS ENTIRETY

For all proposals and expressions of interest, PWWG performs an internal review of the firm's schedule for existing projects and adds an "overlay" of the estimated schedule for the project being sought. We have undertaken that exercise for the WV Capitol re-roofing project and have determined that we have ample qualified staffing, facilities, and technology to perform the services as outlined, and that they can be available in the timeframe to successfully complete the project. All members of the project team are available to start work on your project in the first quarter of 2013.



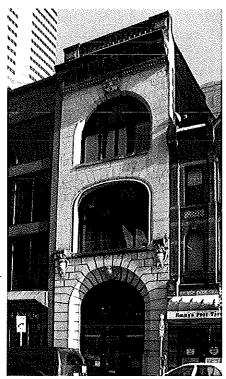
#### AGENCY OWNERSHIP OF WORK

PWWG accepts and understands that any and all work produced as a result of the contract for this project will become property of the Agency and can be used or shared by the Agency as deemed appropriate.

#### STATEMENT OF NO LITIGATION

No member of this team has litigation or arbitration hearings, including vendor complaints, that have been filed relating to their respective delivery of design services for the State of West Virginia's Purchasing Division or with other Agencies of the State of West Virginia.





PWWG's office in a former City firehouse in downtown Pittsburgh

#### **PWWG AT A GLANCE**

**Established** 1975 **Principals** Alan Weiskopf, AIA Sheldon Goettel, AIA, LEED AP Kevin Wagstaff, AIA, LEED AP Structure PA Limited Liability Company **Current Staff** 14 Architectural; 11 Registered, 10 LEED AP 2 Administrative and Support Offices (One, located in downtown Pittsburgh) 408 Boulevard of the Allies Pittsburgh, PA 15219 **Project Size Range** Very small up to \$60M

We are a design firm practicing architecture, planning, and urban design. We were founded in 1975 as L. P. Perfido Associates. In 1996 the firm was renamed Perfido Weiskopf Architects and became a partnership. Today we are Perfido Weiskopf Wagstaff + Goettel, a Pennsylvania limited liability company, owned and led by three Principals: Alan Weiskopf, AIA, Sheldon Goettel, AIA, LEED AP and Kevin Wagstaff, AIA, LEED AP. The full staff includes 11 Registered Architects, 3 Graduate Intern Architects, and 2 business support professionals.

In our 35 years of practice we have developed a reputation for creative, thoughtful solutions to complex problems, most often involving college buildings, housing of various types, and historic structures. Accordingly we are focused on three main areas of specialization—facilities for higher education, multi-family residential design (including affordable and market rate housing, student housing, senior housing, and luxury condominiums), and the rehabilitation and preservation of historic architecture. We also design hotels, civic buildings, theatres, and parking structures. Repeat clients include private businesses, institutions, public/private partnerships, and government.

#### Our work is guided by 3 principles:

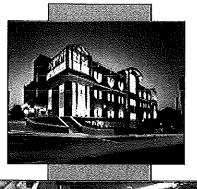
Form-making - We begin with the owner's needs and goals, the project and building type, and the surrounding context. Within these variables we find compelling reasons for some buildings to be contemporary, others traditional, and we work in many styles. What we find constant is the need to bring great usefulness, durability, and architectural clarity to each design. We therefore emphasize the 'craft' of architecture, and believe this approach yields results that are more authentic than work defined by allegiance to any one style.

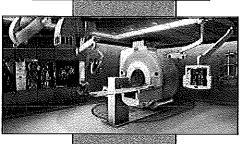
Interaction - We pay great attention to the connections between buildings and their surroundings, and find that each commission presents unique opportunities. It might be the prospect of a new building forming a court with existing structures, or a chance for a dialogue between new and historic buildings, or an alignment of paths that could connect to a larger setting. It is always our goal that our buildings have an uplifting effect on their surroundings.

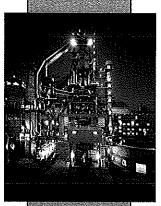
Integrated Design - We work in teams that follow projects from the first stages of planning through the completion of construction. The teams include all the necessary disciplines in a design process that is collaborative and highly interactive. Each team member understands the effect of their contributions on the design and the coordination of their work with others. The results are durable high performance buildings that are constructed on budget, with low operating and environmental costs, and that provide memorable settings for their occupants.

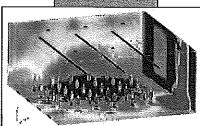
Perfido Weiskopf Wagstaff + Goettel is located in downtown Pittsburgh in a former City firehouse that dates from the 1890s. The high-ceilinged engine and crew rooms serve as our studios where we work together in an open office environment.



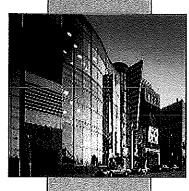












#### **CJL ENGINEERING**

#### FIRM OVERVIEW

CJL Engineering is a multi-disciplined Mechanical/Electrical/Plumbing consulting engineering firm that offers a full range of services, including analysis and concept, construction budgeting, detailed construction documentation and construction administration. With offices in Pittsburgh, Johnstown, PA, Youngstown, OH, and St. Louis, MO, CJL has a combined staff of over 130 personnel. The original office was established in 1938.

CJL Engineering has substantial experience in the design, construction and commissioning of high performance and LEED certified buildings, emphasizing integrated design and operational strategies for sustainable site development, water conservation, energy efficiency, resource conservation, and indoor environmental quality.

Areas of specialization provided by **CJL Engineering** include:

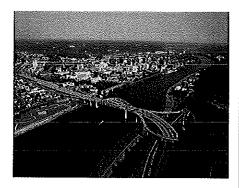
- HVAC Systems
  - Boiler
  - **Chiller Central Plants**
  - Geothermal Heat Pump Systems Telecommunications
  - Life Safety Systems
- Electrical Systems
  - Primary Power and Distribution Power System/Quality Evaluations
  - Cogeneration
  - Emergency, Standby Power
- Plumbing
- Fire Detection and Protection
- Civil Engineering

- LEED Green Building Design
- **Energy Solutions**
- Architectural Lighting and Controls
- Voice/Data/Audiovisual
- Security
- **Energy Conservation Studies**
- Life Cycle Analyses
- Retrofit Evaluations
- **Building Management Systems**
- Commissioning

CJL Engineering serves a broad range of clients that include: Historic and Adaptive Retrofit, Office Buildings, Master Planning and Design, Science, Laboratory and Research Facilities, Colleges and Universities, Schools (K-12), Healthcare (Hospitals/Medical Centers), Performing Arts Centers and Theaters, Libraries, Government and Secure Facilities, High Tech Buildings, Mission Critical Data Centers, Hotels, Resorts, Green Buildings, Apartments, Retirement and Assisted Living Communities, Central Plants and Utilities, Telecom Facilities, and Transportation.



### Background







### Moment Engineers, Inc.

Moment Engineers, Inc. is a professional consulting firm specializing in structural engineering. We serve the architectural and building construction communities throughout West Virginia. Based in Charleston, West Virginia at 179 Summers Street, Moment Engineers was founded by Douglas Richardson in early 2005.

Since 1993, Mr. Richardson has had sole responsibility for the structural engineering design of more than 5 million square feet of built space. The construction costs of these projects exceed a half billion dollars. This experience, which ranges from small to very large multi-phase projects, is invaluable in providing the technical expertise and creative flexibility to deliver results in a prompt and reliable manner.

Our staff's experience encompasses a wide variety of building types and sectors, and our expertise includes design analysis for steel, concrete, masonry, and wooden structures. The attached Sample Project information is representative of projects on which our staff have provided the structural engineering while at Moment Engineers, or a prior employer.



### H. Lee Forbes Roofing Consultant

PO Box 1851 • Lewisburg, WV 24901 • 304-661-4723

Design, Installation & Restoration of Historic Roof and Gutter Systems • Video Surveys

Years experience: 30+

Systems of primary focus: Slate, Tile, Copper and Architectural Metals

Familiarity with: All Types

Former Member: Board of Directors, National Slate Association

Mr. Forbes is a licensed general contractor and copper fabricator who has specialized in historic roof restoration and commercial/industrial roof systems for the last 30+ years. He is also an instrument rated private pilot, which enables him to access job sites quickly and efficiently. For the past sixteen years Forbes has traveled from Georgia to New York and from North Carolina to Texas as a consultant. Though most of his focus has been in evaluating roof systems, their needs and potential for restoration, he also teaches proper restoration technique, oversees restorations and installations and lectures on the same. As part of his service Mr. Forbes does a complete video survey of the roof and/or gutter system documenting details, current and potential problems and giving educational narrative informing owners or responsible parties of the buildings condition. This allows clients to make wiser and more prudent decisions. He was a seminar presenter at the 2000 Restoration and Renovation Conference in Washington, DC and the 2003 Restoration and Renovation Conference in Baltimore, Maryland on the subject of "Survey and Troubleshooting of Historic Slate and Tile Roofs."

Forbes functions well as a liaison between owner, architect and contractor.

#### Some of his projects include:

- Development and performance of the restoration technique for the roof of the Biltmore House, Asheville, NC
- Restoration of the roof and gutter system on the First Baptist Church, Asheville, NC
- Restoration of the roof and gutter system on Central Methodist Church, Asheville, NC
- Survey, trouble shooting and emergency removal of deteriorated cornice, facia, soffit and bracket pieces on the Marion County Courthouse, Fairmont, WV
- Development of roof and gutter details and oversight of the reroof of the Kanawha County Courthouse, Charleston, WV
- Development of roof and gutter details and oversight of the restoration of the roof for the First Baptist Church, Beckley, WV



KDM Consultants, LLC

**KDM Consultants, LLC** (Clarksburg, WV) is an independent construction cost estimating and project management firm.

KDM specializes in construction cost estimating, with specialties and qualifications in the disciplines of Civil, Structural, and Architectural estimating. Industries served include commercial, higher education, industrial, and residential. Delivery methods include design-bid-build, and design-build.

KDM is particularly adept at providing reliable "conceptual" estimates that are vital to decision making in the early stages of planning. In addition, they bring regional experience to understand the characteristics of the southern WV construction and bidding market.

### Alan Weiskopf, AIA — Principal-in-Charge for the WV Capitol Project Perfido Weiskopf Wagstaff + Goettel



Education University of Cincinnati Bachelor of Architecture, 1975 Registration Registered Architect in PA. WV, MD, OH, IN, NY, NC & SC **Professional Associations** NCARB Certification American Institute of Architects Chairman, City of Pittsburgh Board of Appeals AIA Pittsburgh Board of Directors (1990-1996) AIA PA Board (1997-2001) Member, Urban Land Institute Member, CEO's for Cities

Alan joined PWWG in 1981 as an associate and became a principal of the firm in 1986. He has served as the project architect or principal-in-charge of many of the firm's most significant projects, including several award winning projects. He has a wide range of experience in terms of project type and size, with a particular emphasis on higher education projects, projects involving restoration, renovation and preservation of culturally significant structures and hotel projects. He has also managed several of the firm's joint venture relationships. Among other activities, Alan is a past President of AIA Pennsylvania and has served on the Convention Center Design Commission Task Force for the David L. Lawrence Convention Center in Pittsburgh. He is a graduate of Leadership Pittsburgh, a past member of the Board of Code Review and he currently serves as Chairman of the Board of Standards and Appeals for the Bureau of Building Inspection in the City of Pittsburgh.

#### Selected Project Experience:

- Main Capitol Rotunda, Charleston, WV historic restoration of rotunda interior
- Main Capitol Restoration, Harrisburg, PA multi-phased historic restoration
- West General Robinson Street Garage, Pittsburgh 10 story event garage with 1200 spaces
- West Virginia Capitol Building Three, Charleston, WV renovation of historic office building
- 21c Museum Hotel, Cincinnati, OH rehabilitation of historic downtown hotel for new upscale 170 room hotel
- 21c Museum Hotel, Lexington, KY conversion of historic 15-story First National Bank Building in downtown Lexington to an upscale 90 room hotel
- PA Historic & Museum Commission, Pennsylvania three 5 year open-end contracts for historic restoration work
- Old Main Building Selective Renovations, West Virginia University, Montgomery, WV Exterior, interior, Life Safety, and Accessibility renovations and upgrades to this Historic Register building
- 575 Broadway, New York, NY adaptive reuse of historic urban building for office and museum uses
- Courtyard by Marriott Hotel, Pittsburgh adaptive reuse of historic urban building for 182 room hotel
- Oglebay Hall & Ming Hsieh Hall, West Virginia University, Morgantown, WV 55,000 sf historic renovation and 20,000 new building, LEED
- FORE Systems Campus, Warrendale, PA high tech office and manufacturing campus 5 buildings
- Hamburg Hall, Carnegie Mellon University renovation of historic building for academic facility
- Information Science & Technology Building, Penn State University \$50 million academic building
- Utilities and Infrastructure Improvements & Quad Design, West Virginia University, Evansdale, WV — PWWG is leading a team of engineers developing and implementing a coordinated infrastructure plan for 5 facilities on 150 acres on the campus.
- Campus Parking Expansion, West Virginia University, Evansdale, WV PWWG is leading
  a team of engineers developing new parking capacity on the campus, as a component of the
  Utilities and Infrastructure Improvements project.
- Uhler Hall, Indiana University of Pennsylvania academic building with labs & classrooms for psychology department



### Joe Filar, AIA, LEED AP— Project Manager for the WV Capitol Project Associate Perfido Weiskopf Wagstaff + Goettel



Education
Penn State University
Bachelor of Architecture,
1995 Sede di Roma Foreign Studies Program,
1993

Registration Registered Architect in PA

Professional
Associations
American Institute of
Architects
LEED Accredited Professional
National Historic Trust
Pittsburgh History &
Landmarks Foundation
Pittsburgh Downtown
Partnership

Joe began his professional career working in New York City, first for Castro-Blanco Piscioneri and Associates and then for Carpenter/Grodzins. Joe moved back to Pittsburgh in 1999 and joined Perfido Weiskopf Architects as an intern architect. He became licensed and an associate in the firm in July of 2003. Joe has a broad range of design experience as a project architect on diverse project types including higher education, market rate and subsidized housing, corporate offices, and historic rehabilitation of landmarks buildings. Several of his projects have received awards from the Pittsburgh and Pennsylvania chapters of the AIA.

#### Selected Project Experience

- 21c Museum Hotel, Durham, NC conversion of historic 17-story Hill Building in downtown Durham to an upscale 120 room hotel
- 819-821 Liberty Avenue Survey, Pittsburgh, PA—survey of existing historic building in Pittsburgh's Cultural District for renovation as an upscal hotel.
- Becht Hall, Clarion University 53,000 sf historic renovation for a Student Success Center, LEED Silver goal
- Oglebay Hall & Ming Hsieh Hall, West Virginia University 55,000 sf historic renovation and 20,000 new building, LEED Certifled
- West Virginia State Office Building No.3, Charleston, WV historic renovation of a 154,000 sf office building, LEED
- Dixie Cup Factory Lofts, Easton, PA 588,000 sf historic factory renovation into -/+ 300 one and two bedroom units
- R. B. Harrison Village, McKeesport, PA conversion of 3 story walkups to townhouse apartments
- Courtyard by Marriott Hotel, Pittsburgh, PA conversion of 9-story historic building into a 182-room downtown hotel
- Palace Theatre, Greensburg, PA restoration and renovation of historical theatre and administrative spaces
- Information Sciences & Technology Building, Pennsylvania State University -- new 200,000 sf campus building
- Three Rivers Center for Independent Living, Wilkinsburg, PA conversion of a nursing home into a disability center
- Marconi Communications, Buildings 5 and 6, Warrendale, PA headquarters buildings in a corporate campus
- · Pittsburgh International Airport, Pittsburgh, PA addition of private/public elevators in the airside terminal



### Jan Irvin, AIA, LEED AP— Specification Manager and QA/QC for the WV Capitol Project Senior Associate Perfido Weiskopf Wagstaff + Goettel



Education B.Arch Kent State University 1980 M. Arts Pittsburgh Theological Seminary, 1996

Registration Registered Architect in PA

Professional
Associations
American Institute of Architects
LEED Accredited
Professional

Jan Lyle Irvin has practiced architecture for the last 25 years across a broad spectrum of users and project types. These include master planning of residential communities, neighborhood infill housing, historic restoration, museums, educational facilities from K-12 through university, hospitals, labs, assisted living and commercial structures. Since joining PWWG in 2003 Jan has utilized such emerging technologies as prefabricated modular housing units and pressure-equalized rain screen wall design for various projects. He has extensive experience with renovations and additions (including adaptive reuse). Jan brings to the firm an unusual appreciation of the connections between design, constructability, and in-service performance. He has led workshops for staff and for local architects on construction specifications. He also develops and implements many of the firm's quality management initiatives.

#### Selected Project Experience

- Child Development Center, WVU Parkersburg, Parkersburg, WV New 8,000 sf early learning and clinical teaching facility
- Applied Technology Center, WVU Parkersburg, Parkersburg, WV New 20,000 sf classroom & lab building
- New Campbell Health Sciences Hall, West Liberty University, West Liberty, PA 71,000 sf new building to house every health care major offered by the university.
- S. Greengate Commons, Hempfield Twinship, PA new 47,200 sf 3-story low-income housing for seniors; PHFA Tax Credit funding
- Utilities and Infrastructure Improvements & Quad Design, West Virginia University, Evansdale, WV – PWWG is leading a team of engineers developing and implementing a coordinated infrastructure plan for 5 facilities on 150 acres on the campus.
- Campus Parking Expansion, West Virginia University, Evansdale, WV PWWG is leading a team of engineers developing new parking capacity on the campus, as a component of the Utilities and Infrastructure Improvements project.
- National Center for Youth Science Education, Davis WV Master plan study for year round science education facility.
- Drake Well Museum, Titusville, PA 24,000 sf renovation and additions located at historic oil discovery site.
- McClintock Oil Well and Drake Well Standard Oil Rig, Titusville area preservation of historic oil structures.
- Fort Pitt Museum, Pittsburgh PA repairs to 450 If of replica bastion walls, stone capstone and interior HVAC.
- West Park Court, Pittsburgh PA 10 story apartment building renovation including new metal panel facade.
- Laurel Estates, Uniontown, PA 56 single, duplex, and triplex homes with community building.
- Oak Hill Master Planning, Pittsburgh, PA 37 acre site, 450 unit mixed income development.
- Master Planning, Fort Mason & Crawford Village, PA reconnection and redesign of public housing sites.
- Pittsburgh Public Schools, Pittsburgh, PA Weil Technology, South Hills Middle and South Stadium renovations.
- Laboratory Design, Carnegie Mellon University biochemistry, general chemistry and NMR lab renovations.



# CHENGINEERING

#### James M. Vizzini, P.E. LEED® Accredited Professional

James M. Vizzini, P.E. is a Partner of CJL Engineering. He is responsible for management decisions, overseeing current projects, and maintaining relationships with architect and clients. Mr. Vizzini serves as a project engineer on numerous historic renovation projects. He also designs HVAC systems for various commercial and institutional projects, as well as schools (K-12), universities, historic renovations, and health care facilities. These projects have ranged from large equipment replacement such as boilers and air handling units, CFC upgrades and chiller replacements, entire HVAC systems design to district cooling plants.

A representative selection of Mr. Vizzini's historic renovation projects include:

State Office Building #3, West Virginia Capital Complex, Charleston, WV

Oglebay Hall (LEED Certified) University of West Virginia, Morgantown, WV

Soldiers & Sailors Memorial Hall / Museum, Pittsburgh, PA

St. John Gaulbert Cathedral, Johnstown, PA

Pasquerilla House, Johnstown, PA

Clarion University - Founders Hall, Clarion PA

Clarion County Courthouse, Clarion, PA

Oakmont Country Club, Pittsburgh, PA

Mishler Theatre, Altoona, PA

Benedum Theater - Pittsburgh Cultural Trust, Pittsburgh, PA

Community College of Allegheny County (CCAC) - Jones Hall, Pittsburgh, PA

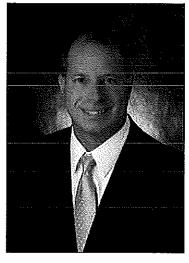
Allegheny College - Brooks Hall, Meadville, PA

University of Pittsburgh - Cathedral of Learning, Pittsburgh, PA

Allegheny College - Carr Hall Science Building, Meadville, PA

Community College of Allegheny County - West Hall, Pittsburgh, PA

DiSepio Health & Wellness Center (LEED), St. Francis University Loretto, PA



TITLE: Managing Partner

#### SPECIALIZATION:

Mechanical Engineering Master Planning District Cooling Plants

#### **EDUCATION:**

B.S. / 1987 / Mechanical Engineering Technology University of Pittsburgh at Johnstown

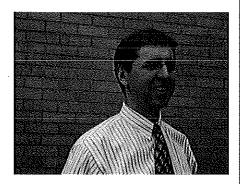
### REGISTERED PROFESSIONAL ENGINEER:

Pennsylvania
District of Columbia
Maryland
New Jersey
New York
Virginia
West Virginia
Delaware
North Carolina
Massachusetts

#### **MEMBERSHIPS/ACTIVITIES:**

LEED® Accredited Professional American Society of Mechanical Engineers (ASME) American Society of Plumbing Engineers (ASPE) American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), Association for the Study of Higher Education (ASHE) International Ground Source Heat Pump Association (IGSHPA) Pennsylvania Society of Professional Engineers (PSPE) National Society of Professional Engineers (NSPE) U.S. Green Building Council (USGBC)

### Resume



Douglas R. Richardson, PE, LEED AP President/Structural Engineer

#### Education

North Carolina State University, (8/87-5/89).

Masters of Science in Civil Engineering, major in structures and minor in construction.

GPA 4.0/4.0.

West Virginia University, (8/83-8/87)

Bachelors of Science in Civil Engineering.

Ranking: 1st out of approximately 450 College of Engineering graduates. GPA 3.98/4.0.

#### **Professional Registration**

Professional Engineer - WV #11699, MS #12349

Maintains active record with NCEES to facilitate prompt registration in additional states as required.

**LEED Accredited Professional** 

#### **Professional Affiliations**

American Society of Civil Engineers

American Concrete Institute

American Institute of Architects, Professional Affiliate

Structural Engineering Institute

Timber Framers Guild

US Green Building Council



### H. Lee Forbes Roofing Consultant

Design, Installation & Restoration of Historic Roof and Gutter Systems • Video Surveys

Years experience: 30+

Systems of primary focus: Slate, Tile, Copper and Architectural Metals

Familiarity with: All Types

Former Member: Board of Directors, National Slate Association

Mr. Forbes is a licensed general contractor and copper fabricator who has specialized in historic roof restoration and commercial/industrial roof systems for the last 30+ years. He is also an instrument rated private pilot, which enables him to access job sites quickly and efficiently. For the past sixteen years Forbes has traveled from Georgia to New York and from North Carolina to Texas as a consultant. Though most of his focus has been in evaluating roof systems, their needs and potential for restoration, he also teaches proper restoration technique, oversees restorations and installations and lectures on the same. As part of his service Mr. Forbes does a complete video survey of the roof and/or gutter system documenting details, current and potential problems and giving educational narrative informing owners or responsible parties of the buildings condition. This allows clients to make wiser and more prudent decisions. He was a seminar presenter at the 2000 Restoration and Renovation Conference in Washington, DC and the 2003 Restoration and Renovation Conference in Baltimore, Maryland on the subject of "Survey and Troubleshooting of Historic Slate and Tile Roofs."

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- Development of roof and gutter details and oversight of the restoration of the roof for the First Baptist Church, Beckley, WV

#### **DANIEL L. MOORE**

#### **CERTIFICATIONS**

C.P.E. -

"Lifetime Certified Professional Estimator" by THE AMERICAN SOCIETY OF PROFESSIONAL ESTIMATORS GEK – General Estimating Knowledge – 11/30/92 DST – Discipline Specific Test – 04200 Masonry – 11/30/95 LIFETIME CERTIFICATION – December 2008

#### **EMPLOYMENT HISTORY**

KDM CONSULTANTS, LLC , Clarksburg, WV JANUARY 2010 – PRESENT

Owner/Chief Estimator/Project Manager

My business incorporates my 30 years of experience in estimating and project management. KDM specializes in construction cost estimating, with specialties and qualifications in the disciplines of Civil, Structural, and Architectural estimating. Industries served include commercial, higher education, industrial, and residential. Delivery methods include design-bid-build, and design-build.

BBL CARLTON, LLC / CARLTON, INC., Albany, NY & Clarksburg, WV JANUARY 1989 TO JANUARY 2010

Chief Estimator/Project Manager; Opened and managed the Clarksburg satellite office for BBL in 1991.

<u>ESTIMATING:</u> Project Orientation, Bidding Schedules, Specification/Plan Review, Bid Document Procurement, Bid Formats, Solicitations, Quantity Surveys, Quantity Conversions to Computer Bid Format, Pricing, Subcontractor Bid Analysis, Estimate Consolidation, Risk Manager, Final Bid.

<u>PROJECT MANAGEMENT:</u> Project Schedules on Microsoft Project, Schedule of Values, Job Cost Coding and Monitoring, Job Cost Evaluations, AIA Billings, Change Orders, Contracts/Purchase Orders, Purchasing, Construction Management & Design Build

**HUFFMAN CORPORATION General Contractors/Construction Managers, Clarksburg, WV**APRIL 1987 TO AUGUST 1988

#### **Vice President / Member Board of Directors**

<u>ESTIMATING:</u> Project Orientation, Bidding Schedules, Specification/Plan Review, Bid Document Procurement, Concrete & Masonry Estimates, Solicitations, Quantity Surveys, Pricing, Subcontractor Bid Analysis, Estimate Consolidation, Final Bid.

<u>PROJECT MANAGEMENT:</u> Personnel & Placement, Purchasing, Field Operations, Project Schedules, Schedule of Values, Job Cost Coding and Monitoring, Job Cost Evaluations, AIA Billings, Change Orders, Contracts/Purchase Orders, Company Safety Officer,

#### MCANALLEN CORPORATION, General Contractors/Construction Managers, Bridgeport, WV

#### **Project Manager**

Estimating, Purchasing (Was on the Barton Mallow/Mcanallen Project Estimating team for the Veterans Administration Medical Center Additions/Renovations Project \$23,000,000.00

#### **SELECTED COMMERCIAL JOBS of NOTE** (as Chief Estimator/ Project Manager)

APPALACHIAN POWER PARK, Charleston, WV

WEST VIRGINIA DEP OFFICE CONSOLIDATION PROJECT, Charleston, WV

ELEANOR MAINTENANCE FACILITY – PHASE I, Eleanor, WV ELEANOR READINESS CENTER – PHASE II, Eleanor, WV

MARIETTA COLLEGE RESIDENCE HALLS, Marietta, Ohio

ROBERT C. BYRD ACADEMIC & TECHNOLOGY CENTER, MARSHALL UNIVERSITY GRADUATE COLLEGE Marietta, Ohio

DOW CHEMICAL BUILDING 307 RENOVATIONS & NEW MAIN ENTRANCE, South Charleston, WV

WV HUNTINGTON CONSOLIDATION PROJECT, Huntington, WV

MUSEUM IN THE COMMUNITY, Hurricane, WV

MARION-FAIRMONT REGIONAL CANCER CENTER, Fairmont, WV

U.S. ARMY RESERVE CENTER, Charleston, WV

APPALACHIAN POWER COMPANY - NORTH CHARLESTON SERVICE CENTER, Charleston, WV

ADDITIONS/RENOVATIONS TO STONEWALL JACKSON MEMORIAL HOSPITAL, Weston, WV

YEAGER AIRPORT PARKING FACILITY, Charleston, WV

### SECTION 3 PROJECT ORGANIZATION

- Management Plan and Project Organization Chart
- Location of Project Team Members
- Evidence of Firm's Ability to Provide Services
  - Staff Continuity on Capitol Complex Projects
    - Prior Work With Key Team Member H. Lee Forbes Roofing
    - Experience With an Array of Roofing Types
    - Experience Renovating Existing Historic Structures
    - Remedial Building Forensics and Envelope Repairs
    - Comprehensive Technical Capabilities
    - Essential West Virginia Experience
    - Effective Project Management and DeliveryMethods
    - Experience Working in Occupied Buildings
    - Approach to Budget, Schedule and Cost Control

### Project Organization Perfido Weiskopf Wagstaff + Goettel

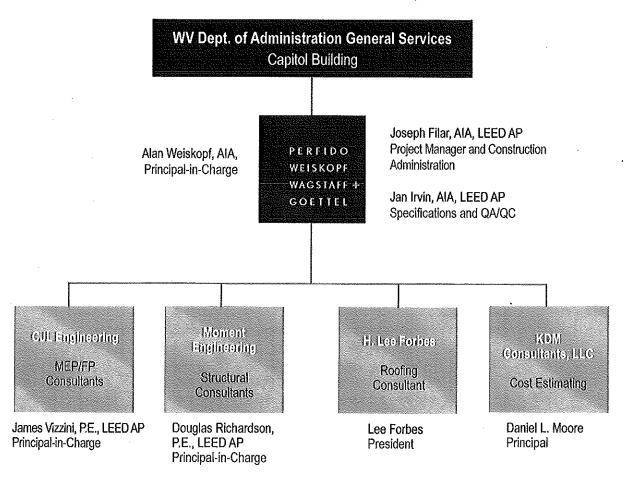
#### MANAGEMENT PLAN /ORGANIZATION CHART

Perfido Weiskopf Wagstaff + Goettel will be the prime for this project, and will manage all aspects of the Capitol Re-roofing project from its office in Pittsburgh, with administrative coordination by that same office.

PWWG has formed a team to provide the specific mix of skills required for your project. That team includes architects, engineers, specialty consultants and cost estimators who are skilled in forensic evaluation and renovation of historic structures. Each has depth and experience with projects for institutional and government clients.

Team members for the Capitol Re-roofing project and their roles are listed in the **Organization Chart** in this section. These are the people who will work with you throughout the planning process under the leadership of Principal-in-Charge Alan Weiskopf, and these are the people who will have direct responsibility for coordinating meetings with stakeholders, and for the preparation and implementation of drawings and plans. Additional design and CAD staff will be assigned to the project as appropriate. Firm profiles for each of our team members, and resumes for key personnel are included in Section 2.

Importantly, PWWG and all of our consultants will utilize an Integrated Design Process that focuses on the early **involvement of all consultants** so that the beneficial input of any one consultant can be captured and leveraged to the best advantage of the project by all other disciplines at the earliest point in the design process. PWWG will integrate the technical expertise of our engineering and specialty consultants with our own expertise and aesthetic considerations. Our team will review PWWG's design documents throughout the project as they relate to their specialties, and collaborate on technical specifications and drawing details.





#### LOCATION OF PROJECT TEAM MEMBERS

PWWG has established a thriving regional practice in West Virginia and other locations at some distance from our office in Pittsburgh. We have provided construction administration services on many of those projects and over the next 16-24 months we will be administering construction on significant projects in Charleston, Cincinnati, Lexington (KY), and Durham (NC). It has become part of our culture to deliver quality services at locations not immediately local to our office. PWWG is fully prepared to provide timely response and a frequency of site visits and project meetings that meet your expectations.

Perfido Weiskopf Wagstaff + Goettel 408 Boulevard of the Allies Pittsburgh, PA 15219

CJL Engineering 1555 Coraopolis Heights Rd Ste 4200 Moon Township, PA 15108

Moment Engineers 603 Peoples Building Charleston, WV 25301 H. Lee Forbes Roofing Consultant PO Box 1851 Lewisburg, WV 24901

KDM Consultants, Inc. 11 Brighton Circle Clarksburg, WV 26301





PWWG recently completed forensic evaluation and exterior facade restoration at Carnegie Mellon's historic Margaret Morrison Hall. Shown here, investigation and details of decorative terra cotta comice.

#### **EVIDENCE OF PWWG's ABILITY TO PROVIDE SERVICES**

#### Staff Continuity on WV Capitol Complex Projects

The senior member of PWWG's team assigned to your project at the WV Capitol, Principal-in-Charge Alan Weiskopf, acted in the same capacity for the WV Capitol Building Rotunda Restoration; He is currently acting as principal for restoration of Building #3 at the VW State Capitol Complex. Benefits to DGS include familiarity with and first hand knowledge of the Capitol Complex itself, a history of good working relationships with your staff and administration, and a solid understanding of and experience with the standards and procedures utilized by DGS.

#### Prior Work With H. Lee Forbes Roofing Consultant

Lee Forbes will assist PWWG in evaluating existing roof materials for this project at the WV Capitol, and in developing strategies for a replacement to be compatible with the overall design of the Capitol Building. Lee is based in Lewisburg, WV and has consulted with PWWG on several historic re-roofing projects including replacement of the Ludowici tile on Building #3 at the Capitol Complex in Charleston and on the recent comprehensive re-roofing of historic Main Hall at the WVU Institute of Technology in Montgomery. PWWG has an excellent working relationship with his firm.

#### PWWG's Has Experience Coordinating Repair/Replacement of a Variety of Roofing Types

PWWG has extensive experience designing and renovating all types of roofing, including built up, single ply membrane, metal, shingles, slate and tile. PWWG has experience designing and coordinating repair and re-engineering of damaged roofing systems at both historic and contemporary buildings. A sample includes: Margaret Morrison Hall at Carnegie Mellon University (reconstruction of elaborate rain water conductors in a 1913 building to simplify routing and drainage, and for ease of inspection and maintenance); PA Capitol (restoration, preservation, and conservation to rehabilitate a glazed tile roof, retrofit the deck with a watertight membrane roof, and redesign the building's entire gutter system); Oglebay Hall, WVU (replace the



entire slate roof and copper gutters); and replacement of the roofing system at WLU Shaw Hall.

PWWG has recently been through a very similar roofing evaluation on a historic project for the 21c Museum Hotel in Cincinnati with a relatively current replacement roof that was deemed too comprised and is being replaced.

#### PWWG's Has Experience Renovating Existing Historic Structures

Restoration has been a primary focus at PWWG for more than 25 years and we are recognized experts in the preservation, rehabilitation, and renovation of historic structures.

We provide design services for a wide range of restoration projects:

- Some of our projects are 'pure' restorations whose single purpose is the preservation of historic fabric.
- Many of our projects have included an historic 'component', as when a façade is restored as part of a building renovation.
- Most of our projects have used public funds and have been designed to US Park Service standards.

Most of our projects have involved both restoration and the solution of persistent technical problems which often date to the original construction. Our projects include rehabilitations at two state capitols (WV and PA, including the restoration of the entire envelope of the PA State Capitol building), other buildings for state governments, several historic projects on college campuses (various WVU campuses, WVU Tech, West Liberty University, Camegie Mellon, Clarion and the University of Pittsburgh), residential conversions and other structures for business and hotel use.

Our portfolio of historic projects includes buildings in Pittsburgh, Cincinnati, Charleston, Harrisburg, Durham, Lexington, Morgantown, NYC's SoHo Cast Iron Historic District, and several rural locations in the Pittsburgh region. In addition, PWWG is currently in our third 5-year term contract with the Pennsylvania Historical & Museum. Through PWWG's 13 years of continuous service, we have undertaken literally over 100 task order assignments at historic museum sites throughout PA, probably half of which were specifically for a historic structure. Our services for PHMC often include construction, so PWWG has served as the construction manager and contracted directly with many preservation tradespersons such as masons, specialty roofers, ornamental sheet metal crafters, etc. to implement the work. Among PWWG's active projects in various stages of progress are six historic structures either on the National Register or with determinations of eligibility.

Examples of our historic restoration work are included in Section 4 of this submission.

#### **Experience With Building Forensics and Envelope Repairs**

As an outgrowth of our work with PHMC, we have developed a sub-specialty in providing forensic investigation services for evaluating building envelope failures and determining the best method of making remedial repairs. We are also experienced with adapting historic structures for new uses and have completed a number of projects that took advantage of federal historic tax credits.

PWWG has a long history of providing investigative services for determining the best method of rehabilitation and repair of existing structures. We have worked on such projects with both government clients and higher education institutions. Through selective demolition as well as data collection and research we have discovered conditions not documented in the building's original drawings or details that were lost through successive renovations.

PWWG has worked on the restoration of numerous architecturally significant structures, including the Pennsylvania State Capitol Building and WV State Capitol Building. For the Pennsylvania





Invetigation and replacement of the roof were part of PWWG's scope at historic Shaw Hall at West Liberty University.



State Capitol, the Pennsylvania State Capitol Masonry Conservation Study was commissioned by the state and prepared by our project partner as a comprehensive, detailed analysis of all the unique conditions affecting the stone and joint conditions at the Capitol. It was undertaken to evaluate the entire envelope of the building and develop recommendations for the restoration of the envelope using appropriate methods and techniques to comply with the Secretary of the Interior Standards for rehabilitation of historic properties. In the course of undertaking this work, the team developed a process and checklist for the evaluation of exterior conditions and subsequent repairs, which included in place testing and laboratory analysis of the characteristics of the stone used on the project.

#### **Comprehensive Technical Capabilities**

PWWG is an early adopter of leading edge technologies for the architectural and construction industry. Since 2009, we have been using Autodesk REVIT, Building Information Modeling (BIM) software almost exclusively as our preferred visualization and production software. REVIT is an integrated building model approach which uses 3-dimensional parametric components that are referenced into 2-dimensional views for the project's construction documentation.

PWWG has a highly skilled team of design staff who are able to use the software nimbly in the early stages of design, through discipline coordination, and development of highly detailed construction documents. For the Capitol roofing project we are able to provide: The confidence and ability to visually and computationally cross-check the project; ability to accurately represent design characteristics, and ability to quickly create renderings as needed, enable the owner and the full design team to visualize, comprehend, and influence the design.

Clear and rapid communication facilitates the ability to rapidly absorb and iterate around changing project requirements. PWWG utilizes a password protected FTP site for the posting and exchange of current drawing information with our clients, consultants, and other team members. In addition, when appropriate, we utilize VPN connections to team members where very frequent exchanges of drawings are required. In the construction documents phase, we use standard database software for the management of construction phase documentation, including RFI's and ASI's.

#### Achieving Life Safety and Code Compliance in West Virginia

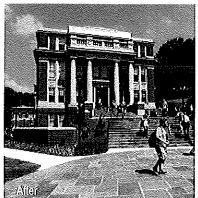
Over the past 30 years, PWWG has developed substantial experience in the thoughtful analysis of code compliance issues associated with building design and construction, particularly involving existing buildings. We achieve code compliance with minimal impact on the desired architectural character of the project. PWWG will begin the project to re-roof the historic Capitol by evaluating proposed options against code issues and ramifications in the early planning stages. We will also begin a dialogue with code officials so that the project parameters are familiar to them as the project progresses.

From our successful experience with multiple projects in West Virginia, PWWG takes pride in having a thorough working knowledge of the codes having jurisdiction in the state, which can pay dividends when addressing issues with the Fire Marshal's office. We fully understand and have experience addressing the unique conditions in WV where both NFPA and the IBC can apply on a particular issue thus requiring an evaluation of both.

#### PWWG and Our Team Members Have Essential WV Experience

PWWG's has both completed and on-going projects in various areas of West Virginia including Morgantown, Parkersburg (two projects with team member Moment), Charleston, Beckley, West Liberty, and Davis.





PWWG's renovation of National Register Oglebay Hall included complete masonry restoration of all exterior facades and roof replacement.



Through our numerous projects in West Virginia we have developed good working relationships with a number of West Virginia based consulting engineers (noted elsewhere in this proposal).

In addition to our work for universities, we have past and current work for West Virginia state government and the West Virginia based National Youth Science Foundation:

- West Virginia State Capitol, Rotunda Restoration, 1996
- Campus Masterplan, National Youth Science Foundation, Davis, WV, 2011
- · West Virginia State Capitol Building Three, renovation, construction contract pending

#### Effective Project Management & Delivery Methods

PWWG can point to deep experience with producing designs and documents for projects that combine new and existing construction.

- We have learned the importance of designing for a 'loose fit so that when unforeseen conditions are exposed new work can be adjusted to existing work without substantial changes, and normally without additional cost.
- We have learned the importance of performing selective demolition during design to understand the history of a building and probe and uncover actual conditions. Actual conditions often vary significantly from recorded conditions.
- We have learned the value of interviewing Maintenance and Facilities personnel to understand their direct experience with buildings, and to probe their memory of past problems.

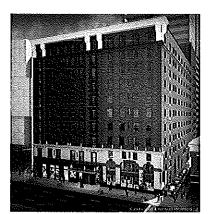
We take very little for granted when working with existing buildings, whatever their vintage or construction type. We take what we learn from interviews, selective demolition, and a 'loose fit' approach and build that knowledge and approach into our construction documents. Using these techniques, we are typically able to deliver completed and thorough renovations of older structures with Change Orders in the 1 to 2% range.

#### **Experience Working in Occupied Buildings**

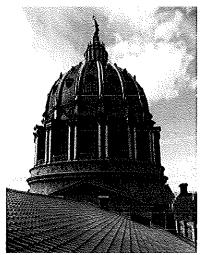
Upgrades to the Capitol Building roof will need to be undertaken while the building is occupied. Work in occupied buildings involves special challenges not only to minimize disruption to the occupants of the building, but also to maintain life safety systems in operation. This needs to be addressed by careful planning that incorporates appropriate temporary protection measures built into the contract documents. PWWG has successfully completed several projects in occupied buildings, one of note being the restoration of the roof and envelope of the PA Capitol in Harrisburg, which was completed in its entirety while the building remained occupied. In addition to the temporary protections, we also imposed several work restrictions relative to noise, worker access and material deliveries. PWWG recently administered the renovation of Carr Hall at Allegheny College, requiring us to maintain occupancy for a chemistry lab in a building that was otherwise vacant while new lab, classroom, restroom and lobby spaces were implemented.

#### Approach To Budget, Schedule And Cost Control

PWWG places a very special emphasis on construction budgets from the outset of all of our projects. We strongly believe in maintaining an open dialogue between the client and the cost estimating consultant in order to promote teamwork and derive the best value for the Owner. Our decision making process concerning budgets does not only focus on the first costs of the project but rather engages all disciplines to weigh-in on operating and life cycle costs.



PWWG recently coordinated roof replacement at the historic Metropol Hotel as part of its new use as a 21c Hotel in Cincinnati.



PWWG completed rehab and roof restoration at the PA State Capitol in Harrisburg.



PWWG is leading a comprehensive interior and exterior renovation of historic Building #3 on the West Virginia State Capitol Campus.

#### **Cost Control**

Cost control begins immediately and is integral to each phase of the project. Our first step upon completion of the programming is to break down the budget into systems costs, generally aligned with CSI formatting including appropriate contingencies. Having the benefit of the program, we will then have the data necessary to understand where there are unique costs associated with the project. As the conceptual phase of the project develops, we evaluate the cost impact of each of the schemes that are deemed worthy of further consideration. Using the systems costs as a guide, we have a general understanding of the cost impact of each scheme on the building system and the overall budget.

#### **Cost Estimating Accuracy**

Once a preferred scheme is identified, detailed cost estimates are prepared at the completion of Schematic Design, Design Development and at 75% completion of construction documents, with an update of that cost at 100%.

#### **Schedule Control**

Just as the contractor's first step in implementation of a construction project is the preparation of a schedule our process involves the immediate preparation of a design and production schedule. We believe that the key to schedule maintenance is the establishment of standing team meetings, similar to construction job conferences and often occurring twice a month, in which firm but realistic milestones are established. At every point in the project, there is always a milestone just ahead that must be met.



## SECTION 4 EXPERIENCE COMPLETING PROJECTS OF SIMILAR SIZE AND SCOPE

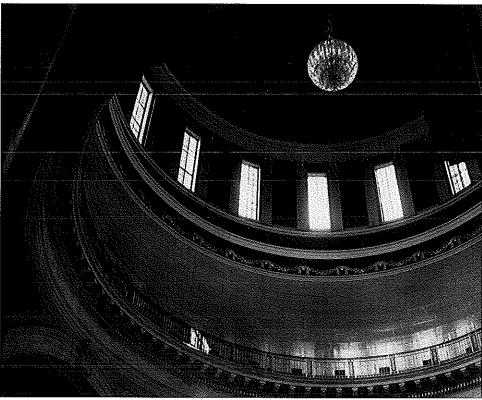
- Project Examples for PWWG and H. Lee Forbes Roofing
- References

#### Note:

References for PWWG projects included in this section are grouped at the <u>end</u> of this section.

### West Virginia State Capitol Rotunda Charleston, West Virginia Perfido Welskopf Wagstaff + Goettel

Size Not Applicable
Construction Cost
\$ 1,000,000
Firm Responsibility
Preservation Research
Architectural Design
Contract Documents
Contract Administration
Completion Date 1996
Client
State of West Virginia





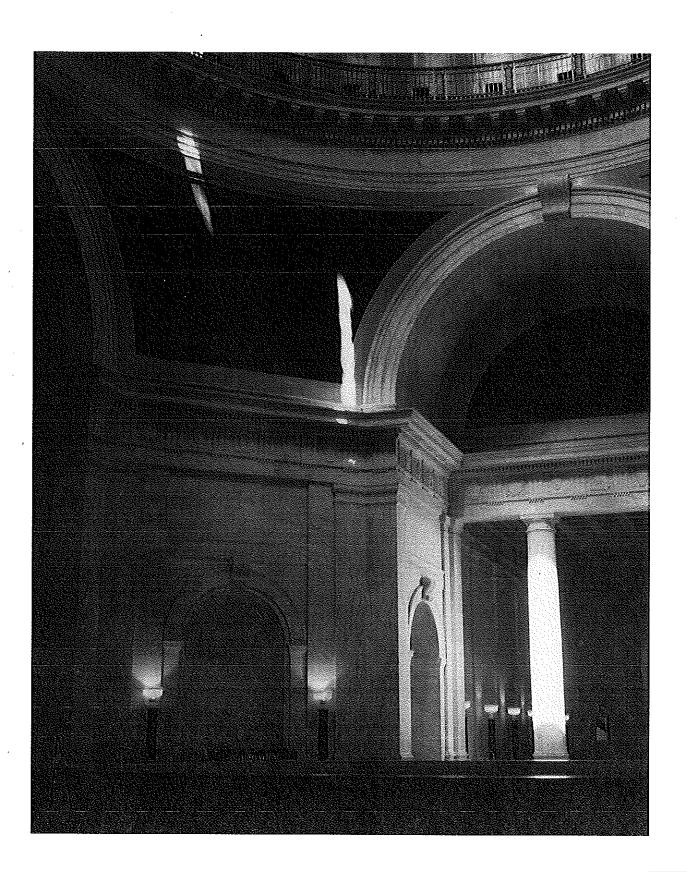
The West Virginia Capitol Rotunda project involved the restoration of the interior surfaces of West Virginia's main capitol dome and rotunda walls, and analysis and remedial repairs to substrate conditions affecting the inner surfaces of the dome and walls. In addition, the firm was responsible for preparing conceptual scaffolding designs, establishing detailed criteria for the final design, and engineering the scaffolding system that was to be chosen.

Detailed data collection and research were required in order to determine the original colors and materials. Working with our preservation consultant, Noble Preservation Services, we conducted on-site investigations to collect paint, plaster, mortar, and sealant samples and to document field conditions. A review of the State's archives confirmed the clues we obtained in the field as to the original methods used to construct and paint the dome.

Remedial work beyond the interior finishing included the removal of deteriorated exterior stone sealant joints and their replacement with lead-capped joints, as well as the relining of an interior gutter around the base of the inner plaster dome that was designed to shed water infiltration. The work included a detailed analysis of the hollow, clay-tile fireproofing and extensively cracked walls, and the design of appropriate remedial repair.





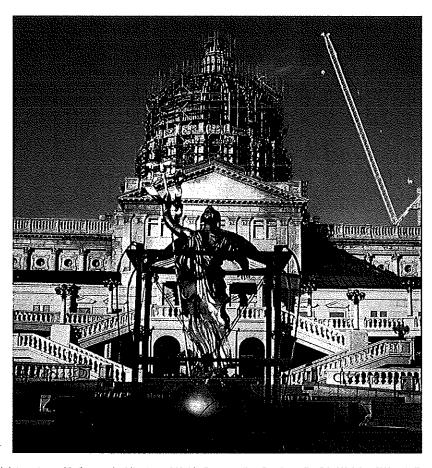




#### Pennsylvania Capitol Building Restoration

Harrisburg, Pennsylvania Perfido Weiskopf Wagstaff + Goettel / Graves / Noble Joint Venture

Size N/A **Construction Cost** \$ 25,000,000 Firm Responsibility Preservation Research Materials Testing/Analysis Design **Contract Documents** Contract Administration Completion Date 2005 Client Pennsylvania Dept. of **General Services Awards** Keystone Assoc. Builders & Contractors, Award of Excellence, 2000 Preservation Pennsylvania Historic Preservation Achievement, 1999



As a joint venture with Graves Architects and Noble Preservation Services, Perfido Weiskopf Wagstaff + Goettel facilitated the rehabilitation of the historic 1906 Main Capitol Building in Harrisburg for the Department of General Services. The project included all restoration, preservation, and conservation work needed to rehabilitate the roof, domes and cupolas, the masonry, the windows, and the exterior paving and steps. The cupola's "Commonwealth" statue was restored and re-gilded, a task last accomplished in 1945.

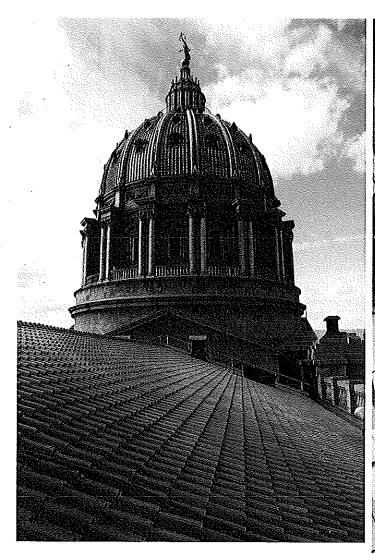
One of the principal challenges of the project was restoring the building envelope consistent with sound preservation philosophy, while also introducing new elements to improve its integrity and allow it to withstand the next 50 to 75 years. Nowhere was this challenge more difficult than the roof. The glazed "Harrisburg Yellow" tiles covering the north and south domes had been installed over a steel-purlin system, without the use of a deck or membrane. The gutters at the base of the gabled roofs were promenade tile with conventional mortar joints. They leaked constantly.

The solution to the dome problem involved the installation of new, custom-made, multi-colored tile, carefully matched to the original design and installed over a new deck with a watertight membrane roof. The curvature of the domes was preserved so that their decorative copper elements could be reinstalled after repair.

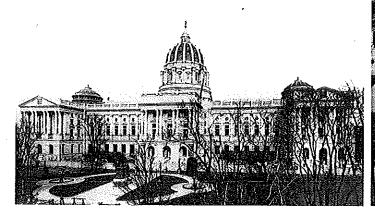
The gutters, which are not visible from ground level, were entirely redesigned, and consist of lead-coated copper drainage basins with separate roof drains for each basin. The structure of the gutters was rebuilt at a lower elevation so as to prevent water from coming into contact with the granite surfaces, and to keep it from backing up under the new gabled-roof areas.

The project was constructed in phases over the course of several seasons, and in concert with the other interior projects at the Capitol. The building was user-occupied throughout construction.







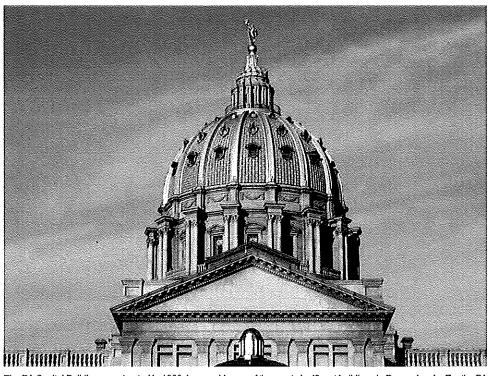




### Pennsylvania Capitol Peristyle Restoration

Harrisburg, Pennsylvania Perfido Weiskopf Wagstaff + Goettel / Noble Joint Venture

Size N/A
Construction Cost
\$4,000,000
Firm Responsibility
Preservation Research
Materials Testing/Analysis
Design
Contract Documents
Contract Administration
Completion Date 2011
Client
Pennsylvania Dept. of
General Services



The PA Capitol Building, constructed in 1906, is arguably one of the most significant buildings in Pennsylvania. For the PA Department of General Services, Perfido Weiskopf Wagstaff + Goettel had previously rehabilitated the historic landmark's roof, domes and cupolas, masonry, windows, and exterior paving. In 2007, as a joint venture with Noble Preservation Services, PWWG began a detailed forensic investigation and restoration of the peristyle deck around the base circumference of the 52 million pound Main Dome of the building.

Leaks through the large, trapezoidal pieces of granite that form the peristyle walkway were documented as early as the 1950s, deteriorating the massive masonry walls of the tunnel directly below, and risking moisture damage to priceless historical murals and decorative plaster in the Capitol's Rotunda. In addition, water infiltration and resulting movement from repeated freeze/thaw cycles displaced many of the large granite facing stones below the deck. Water infiltration was exacerbated by the elimination of a leaking circumferential gutter system at the base of the dome in the mid-twentieth century.

Due to the complexity of the structure and logistics at this location, PWWG first coordinated a "pilot project" to assess the actual conditions, set the quality standard for all needed repairs, and prove the efficacy of the preservation approach in a series of mockups.

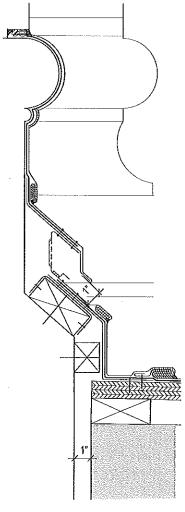
PWWG's approach to restoring the peristyle deck was to first remove all of the granite pavers and the saturated setting bed and deteriorated membrane in which they were set, install a new system of concrete supports, and then reinstall the pavers. The concrete supports were designed to facilitate long term drying of the saturated masonry below by lifting the granite slabs from the saturated masonry and allowing air to circulate around them. A new lead-coated copper roof was installed over the granite pavers, matching the intricate decorative profiles of existing stone walls and column bases. PWWG also coordinated significant structural modifications to stabilize the large granite deck and facade stone panels and the concrete and masonry sub-structure. The ornamental granite balustrades surrounding the dome just above the pavers were also disassembled and restored as part of the project scope. The restoration preserves all of the original details of the balustrades and the particular dramatic sight lines created by them. All areas had to remain watertight throughout restoration, and the building remained fully operational.

By implementing the pilot project, the team avoided costly delays and change orders, incorporated significant structural design changes and refined the final bid documents. The project was finished on time and on budget.



PWWG and Noble Preservation Services collaborated previously in 2005 on the rehabilitation of the Main Capitol Building, including the roof, domes and cupolas, the masonry, windows, and the exterior paving and steps. The cupola's "Commonwealth" statue was restored and re-gilded.



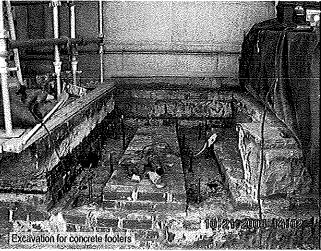






Section/detail at vented drum flashing







# Margaret Morrision Façade Restoration, Carnegie Mellon University Pittsburgh, Pennsylvania Perfido Weiskopf Wagstaff + Goettel

Size N/A
Construction Cost
\$2,200,000
Firm Responsibility
Forensic Investigation
Architectural Design
Contract Documents
Contract Administration
Completion Date
November 2012 (expected)
Client
Carnegie Mellon University

Restored balustrade & omamental frieze as scaffolding is removed (right). View of west facade (left).

This project restored the historic west facade of Margaret Morrison Hall, built circa 1913. The building was designed in the Beaux Arts style by the acclaimed architect Henry Hornbostel and is one the most prominent buildings on the CMU campus. The west façade is an impressive composition with a vaulted base, a 2 story colonnade with monumental windows, an elaborate entablature, and an attic story capped by a terra cotta balustrade. The facade combines formed concrete, clay and stone masonry, glazed polychrome terra cotta, and wood. The façade is built to the standards of a bearing wall, but functions as cladding over the steel frame that is the structural system for the building. Margaret Morrison was built in an era when the long term performance of such complex systems was not well understood.

The project began with a study which found leaks in sky-facing joints in the terra cotta balustrade. It was determined that water had been penetrating to the core of the wall for decades and had severely damaged the steel frame. Corroding steel expands with great force, to many times its original volume, and the steel in Margaret Morrison had 'rust-jacked' terra cotta and brick facings, opening cracks that allowed additional water into the wall causing further damage. The problems were compounded when original rainwater conductors were abandoned and replaced by surface conductors which proved ineffective. The problems were also masked by a series of superficial repairs which dealt only with surface flaws.



Forensic field investigations revealed significant detenoration of masonry and steel at the terra cotta frieze, balustrade and lintels above the windows.



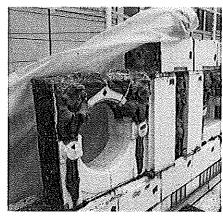


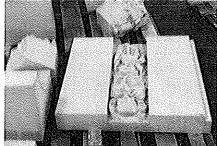


Cleaning and installation of new structural steel, various locations.

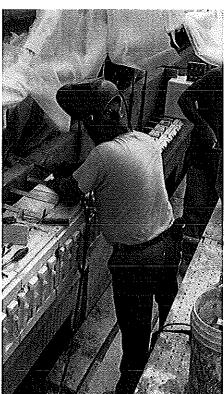
PWWG designed a "restoration to modern standards" with 2 main goals: 1) restore the historic exterior of the façade in all its visible details including colors, and 2) reconstruct the interior of the wall in accordance with modern understandings of the performance of materials. The project involved a substantial amount of deconstruction and remedial repair. Structural steel was cleaned, patched, and coated and severely damaged pieces were replaced with new material. An entirely new balustrade was cast from glass fiber reinforced concrete (GFRC), using original pieces as molds, and the sky facing joints that were the source of much of the damage were isolated from the wall cavity by a new roof slab extension (fully concealed), and cap flashings. The roof drainage system was replaced with new interior drains that have simplified routings and cleanouts. The monumental windows received new sills, restored master frames, and new sashes with double glazing. All damaged concrete was removed from the vaults and repairs were poured that match exactly the original compound curves. These repairs became undetectable when the vaults were repainted. Not wanting to miss an opportunity, the university also used the project to upgrade the building's hot and chilled water piping system.

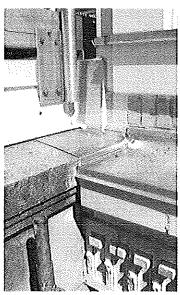
This restoration project was complete on time and on budget in November 2012. Margaret Morrison remained fully occupied throughout construction.





(top and above) Inventory of existing and GFRC recast ornamental polychrome terra cotta elements.





(above) New flashing channels water and protected sky facing joints.

(left) Ornamental frieze reconstructed and securely anchored with new detailing.



### Old Main Hall Roof Restoration — West Virginia University Institute of Technology Montgomery, West Virginia Perfido Weiskopf Wagstaff + Goettel

Construction Cost \$250,000 (Roof replacement) \$2 million (Total for all selective renovations)

Firm Responsibility
Forensic Investigation
Architectural Design
Contract Documents
Contract Administration

Completion Date January 2013

Client West Virginia University Institute of Technology



PWWG's scope of work included stripping and repointing all exterior masonry. Main entry before (left) and after (top)

Historic Old Main Hall was constructed in 1897 and is the oldest building at the Montgomery campus of West Virginia University. It is listed on the National Register of Historic Places, is in sound structural condition, and occupies a prominent site overlooking the town of Montgomery and the Kanawha River. PWWG was hired to coordinate a renovation of the building's interior and exterior including masonry restoration, systems upgrades throughout the facility, rest room upgrades, and restoration of the roofing of the original building and the additions from the 1950s.

The scope of work to restore the roof began with forensic testing and physical sampling to determine the extent of work and materials needed to provide lasting repairs. From field work performed by experts in historic roof restoration, PWWG determined that the following tasks needed to be completed: at the tall center portion of the building, install new slate roof with gutters and flashing to match the original historic components; install new SBS modified roofing on the center portion above the slate, at the tower, and at the 1957 addition; install new flashing and coping at the east wing of the building, and patch and repair the existing built-up roof membrane.

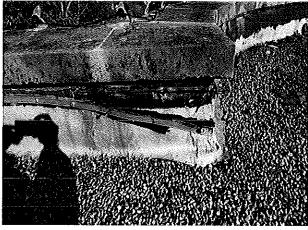
The preliminary investigations employed a variety of techniques including taking core samples to verify composition and status of existing substrates, and selective structural deconstruction. All work was completed in conformance with National Park Service standards for preservation and repair of historic roofs, and approvals were obtained

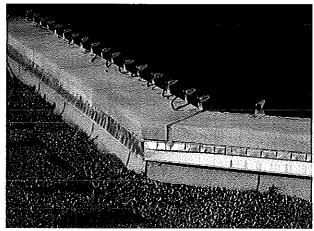




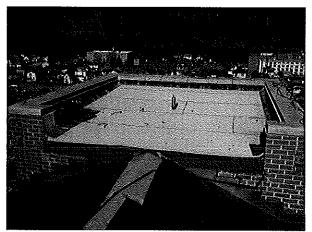
Original state roof (left) and repair/ replacement in progress (right).



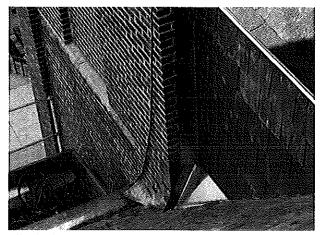




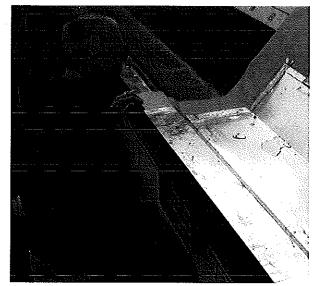
Existing damaged coping/flashing at parapet (left) and rebuilt parapet with new through-wall flashing and restored BUR roof. (right)



New SBS modified roof at addition.



New flashing, coping, and copper gutter to channel rainwater collected from the building's various roofing systems.

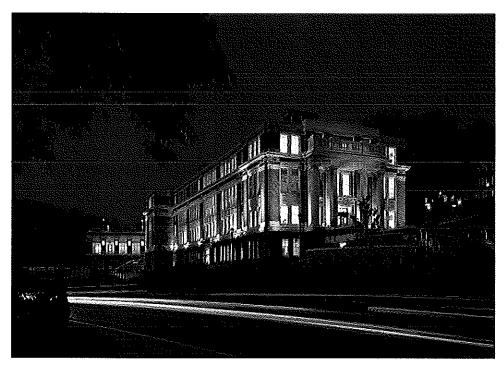


New copper drainage basin and roof drain under construction (left), and near completion (right)



# Oglebay Hall & Ming Hsieh Hall, West Virginia University Morgantown, West Virginia Perfido Weiskopf Wagstaff + Goettel

**Oglebay Hall Size** 50,000 s.f. renovation Ming Hsieh Hall Size 16,000 new building **Construction Cost** \$ 20,000,000 combined Firm Responsibility Programming Architectural Design Contract Documents Contract Administration Completion Date 2008 Client West Virginia University Certifications National Register Listed **LEED Certified** 



#### **Campus Paths and Places**

When classes change, as many as 3000 students are moving through the two buildings and the site. The design maximizes ways in and out of both buildings, capitalizing on the slope of the site to create "at grade" entrances at four different levels. Paths are organized to link to the existing patterns of movement, integrating stairs and bridges to navigate the grade changes. Places are provided for students to linger and gather. An oval plaza at the front of Oglebay Hall serves memorial functions for the University and incorporates a mast from the USS West Virginia. A terrace between the buildings becomes an intimate outdoor room with a view.

#### Oglebay Hall - Historic Rehabilitation

The National Register listed Beaux Arts classroom building was designed by architect Paul A. Davis, III and built in 1917. The vacant deteriorated building was stripped to its masonry shell and wood frame structure. The brick, limestone and terra-cotta exterior was restored and the interior was completely refitted with state-of-art classrooms, office and laboratories. Renovations also included a new slate roof with copper stepped flashing at the chimney and parapets, and new copper gutters and flashing to match the original historic design. The top two floors are now the home of WVU's Forensic and Investigative Science Program and contain high technology labs including Mitochondrial DNA labs. The lower two floors contain a mix of general purpose classrooms, labs and support spaces. Intensive mechanical systems were integrated into the building utilizing the existing attic and ventilation chimneys avoiding any impact on the building exterior.

#### Ming Hsieh Hall - Expanded Classroom Capacity

A new classroom building was built to increase capacity for lower level classes in the downtown campus. Ming Hsieh Hall occupies a previously vacant slice of land behind Oglebay Hall with a grade change of over 50' from College Avenue down to University Avenue. The building is organized around a double height gathering space with two large, technology intensive lecture halls built into the hillside. The new building has its own form and identity while at the same time playing a supporting role in the ensemble of new and old.

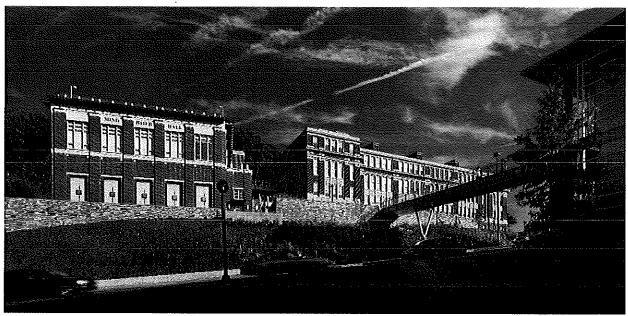


"In all my years in higher education it is the building I am most proud of. You guys hit a home run on the design."
Joe Fisher,
Associate Vice President

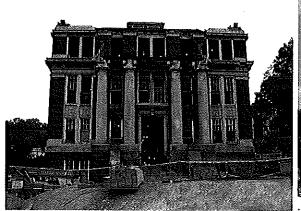
Facilities and Services

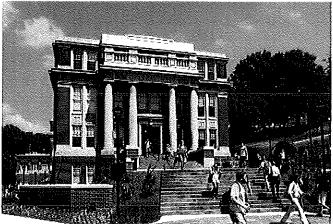




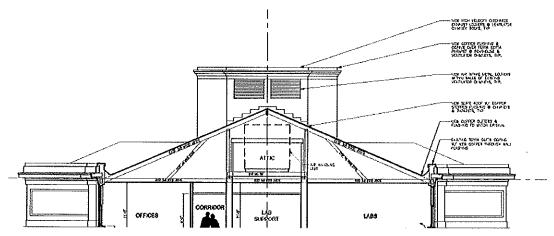


Renovated Oglebay Hall (right) and new Ming Hsieh Hall (left)





The comprehensive exterior and interior renovation of Oglebay Hall included a new slate copper roof. Before (left) and after (right).



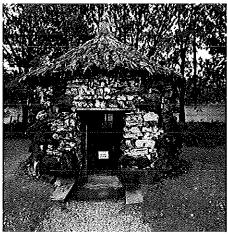
Section showing roof and gutter replacement

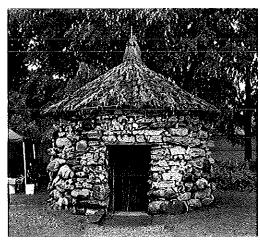


### Pennsylvania Historical & Museum Commission

Perfido Weiskopf Wagstaff + Goettel/Noble Preservation Services Joint Venture

Size Three 5-year Contracts, Multiple Sites
Firm Responsibility
Programming
Preservation Research
Architectural Design
Contract Documents
Contract Administration
Completion Date
Ongoing
Client
PA Historical & Museum
Commission





Grotto Entrance before (left) and after restoration

Perfido Weiskopf Wagstaff + Goettel is in its third five-year contract with the Pennsylvania Historical and Museum Commission, involving a wide variety of projects at all of the commission's nearly 50 sites in the Commonwealth. The current contract is a joint venture with Noble Preservation Services, and includes over 35 consultants and specialty tradesmen, allowing PHMC to call upon the team for planning, design, construction documents, and construction. Work is performed by qualified craftsmen with expertise in the skilled preservation trades.

The sites administered by PHMC range from whole villages and farms to unique individual structures, from small historic masonry-and-frame buildings to modern museums, and from sites dominated by landscape to tight urban settings. The scope of work undertaken by the JV is extensive and complex. The team has created historic structures reports for entire groupings of buildings (Ephrata Cloister and Landis Valley Museum), repaired chimney leaks, and installed new roofs (Old Economy Village, Washington's Crossing, and Landis Valley, among others). Our services include everything from historic carpentry and plaster work to structural investigations of oil derricks (Drake Well Museum in Titusville), from pest management studies and hazardous materials investigations to archaeological investigations.

Our partner, Noble Preservation Services, was primarily responsible for the preparation of an extensive Historic Structures Report (HSR) that served as the preservation plan for the previously unstudied buildings of Ephrata Cloister in Lancaster County. This collection of early 18th-century Germanic buildings, which once served the religious community founded by Conrad Beissel in 1732, is remarkably intact. These buildings are important, not only for their architecture, but for the rich history they reveal of the celibate life of the cloister.

The preservation plan, presented in 13 volumes, was to undertake the following:

- · Research each building to place it in its historic context;
- · Evaluate and document existing exterior and interior conditions;
- · Determine the extent to which each building has changed over time;
- · Analyze these changes and recommend future restorations and maintenance;
- Provide PHMC administrators with the necessary information to guide future-interpretive, educational, and curatorial work at the cloister.

During the lifespan of the two five-year contracts, PWWG has administered or worked on over 100 specificproject assignments to date.

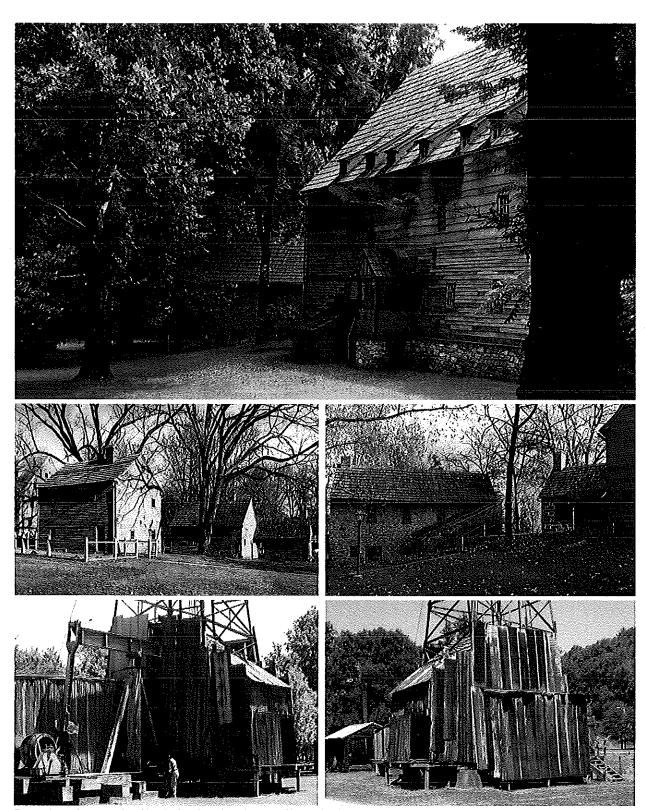






Restoration projects at Old Economy Village: (top to bottom) Grotto roof; chimney flashing; bake house and bake oven.



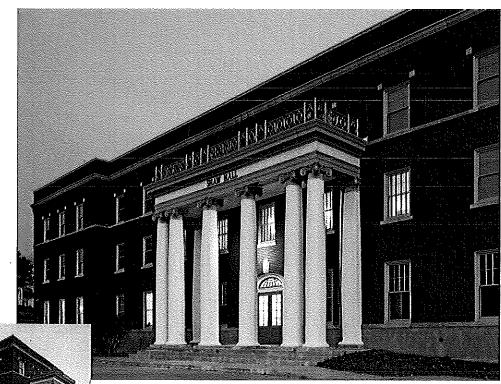


Restoration projects at various historic sites throughout the state of Pennsylvania



# Shaw Hall Exterior Restoration – West Liberty University West Liberty, West Virginia Perfido Weiskopf Wagstaff + Goettel

Size N/A
Construction Cost
\$ 280,260
Firm Responsibility
Forensic Investigation
Architectural Design
Contract Documents
Contract Administration
Delivery
Public Bid, Single Prime
Contract
Completion Date
November 2012
Client
West Liberty University



Restored columns and terra cotta entablature at main entry portico (above). Overall view of restored exterior (left).

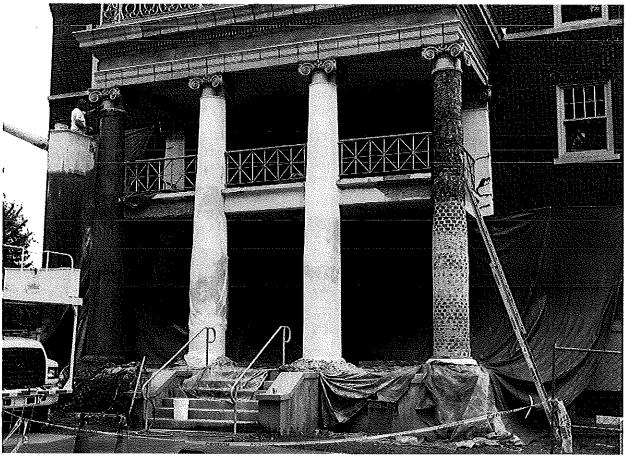
Historic Shaw Hall was constructed in 1919 and is the oldest building at West Liberty University. It was listed on the National Register of Historic Places in 1996, is in sound structural condition, and occupies a key site on the main thoroughfare through campus. In

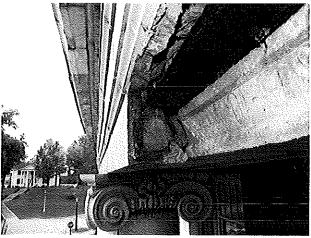
an earlier project, PWWG coordinated a full renovation of the building's interior including restoring historic windows, and adaptive reuse to house administrative offices and a student health center. With this project, PWWG completed a comprehensive forensic evaluation and restoration of the exterior.

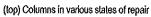
Work began with extensive testing and physical sampling to determine the scope of work and materials needed to provide lasting repairs. From evaluations and field work performed by experts in masonry restoration, PWWG determined that the following tasks needed to be completed: restoration of 14 plaster-faced masonry columns and pilasters at three ornate porticoes in the classical style; restoration of ornate terra cotta entablatures at each of these porticoes, and ornate terra cotta courses below the main parapets; replacement of existing concrete stairs connecting to the west portico; and pointing and cement parging necessary to preserve the brick masonry and above ground foundation walls of the building. The preliminary investigations employed a variety of techniques including taking core borings to verify composition of masonry substrates, chemical analysis to determine composition of original stucco, and selective structural deconstruction. All work was completed in conformance with National Park Service standards for preservation and repair of historic stucco, and approvals were obtained from the West Virginia Division of Culture and History.

PWWG coordinated the exterior restoration with the work of lighting design experts hired by the university to dramatically illuminate the columns at each portico.



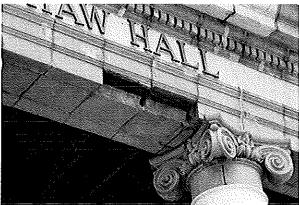






(above left and right) investigation of entablature at typical portico column.

(right) investigation of parapet wall.

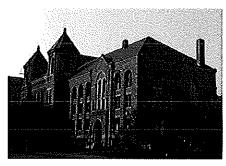






# H. Lee Forbes Roofing Consultant

Design, Installation & Restoration of Historic Roof and Gutter Systems • Video Surveys



PROJECT: Kanawha County Courthouse — Tile Roof Restoration (Charleston, WV) Description: The project involved removal of the existing tile roof system with associated copper flashings; Fabrication and installation of new copper flashings; Repair of damaged structure and substrates; and furnishing and installation of a new tile roof system to match the existing, and to maintain historical appearance.

Construction Cost (with addition): \$1,200,000



Scope of Services: Details for Construction Documents; On-site QC Consultation and training during the construction phase.

Owner's Proj. Manager: Maintenance Services Director, Kanawha County Courthouse; 304-357-0100



PROJECT: Biltmore House — Slate Roof Restoration (Asheville, NC)

Description: The project involved development and provision of restoration services for slate roof, copper gutters, and copper trim ornaments to maintain historical appearance.

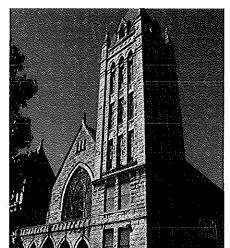
Construction Cost: \$285,000



Scope of Services: Researched, developed, and provided restoration services Owner's Proj. Manager: Rick King, President, Biltmore House; 828-225-1333

PROJECT: First Baptist Church — Tile Roof Restoration (Asheville, NC) Description: The project involved development and provision of restoration services for tile roof, gutters, lantern, and copper trim and ornaments to maintain historical appearance.

Construction Cost: \$165,000



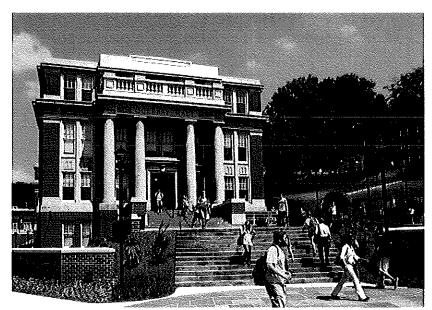
Scope of Services: Researched, developed, and provided restoration services Owner's Proj. Manager: Maintenance Supervisor, First Baptist Church; 828-252-4781

PROJECT: Central Methodist Church — Slate Roof Restoration (Asheville, NC) Description: The project involved development and provision of restoration services for slate roof, copper gutters, and copper comice to maintain historical appearance.

Construction Cost: \$120,000

Scope of Services: Researched, developed, and provided restoration services Owner's Proj. Manager: Business Manager, Central Methodist Church; 828-253-3316

# References for Similar Projects—PWWG Perfido Weiskopf Wagstaff + Goettel



The renovation of Oglebay Hall at WVU Morgantown included installing a new roof on this Historic Register building.

PA Historical & Museum Commission (Over 100 projects completed) Barry Loveland, PHMC Division of Architecture & Preservation Harrisburg, PA 717.783.5407

Carnegie Mellon University Ed Hydzik, Sr. Project Manager, Campus Design and Facility Dev. Pittsburgh, PA 412.268.8516

PA Capitol, Harrisburg Neal Rusnov, Project Architect PA Department of General Services Harrisburg, PA 717.346.5966

WVU IT
Paul Whiteman, Dir. of Planning Design
and Construction
WVU Institute of Technology
Morgantown, WV
304.293-8134

Oglebay Hall Robert Moyer, Director of Planning Svcs. West Virginia University Morgantown, WV 304.2932873



SECTION 5 FORMS

RFQ No.	GSD136423
THE PARTY	

### STATE OF WEST VIRGINIA **Purchasing Division**

## PURCHASING AFFIDAVIT

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

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

#### **DEFINITIONS:**

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

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

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

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

### WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: Perfido Weiskopf Wagst	aff + Goettel
Authorized Signature:	Date: January 14, 2013
•	
State of Pennsylvania	•
County of Allegheny , to-wit:	,
Taken, subscribed, and sworn to before me this	14 day of <u>January</u> , 20 <u>13</u> .
My Commission expires 5/20	, 20/5
	many in Corect Maile
AFFIX SEAL HERE	NOTARY PUBLIC (DSTANCEMO KLUST)

<u>Lummunwealth of Pennsylvania</u>

Notarial Seal Constance M. Grilliot, Notary Public City of Pittsburgh, Allegheny County My Commission Expires May 20, 2015 MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES Purchasing Affidavit (Revised 07/01/2012)

STATE OF WEST VIRGINIA
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
2019 WASHINGTON STREET, EAST
POST OFFICE BOX 50130
CHARLESTON, WEST VIRGINIA 25305-0130
02/24/2012

MECEIVED

FEB 2 9 2012

Perfidu Weignupp Wasstaff + Goettisl

CONNIE GRILLIOT PERFIDO WEISKOPF WAGSTAFF 408 BLVD OF THE ALLIES

PITTSBURGH PA

15219-1301

THIS IS TO CONFIRM RECEIPT OF YOUR VENDOR REGISTRATION FEE. PAYMENT OF THE FEE ENABLES YOU TO PARTICIPATE IN THE PURCHASING DIVISION'S COMPETITIVE BID PROCESS AND ENTITLES YOU TO A ONE-YEAR SUBSCRIPTION TO THE WEST VIRGINIA PURCHASING BULLETIN. A NEW ISSUE OF THE WEST VIRGINIA PURCHASING BULLETIN IS POSTED ON OUR WEB SITE EACH WEEK. BID OPPORTUNITIES ESTIMATED AT \$25,000 OR MORE ARE ADVERTISED IN THIS PUBLICATION. WE ENCOURAGE YOU TO LOG ON AND VIEW THE BULLETIN EVERY FRIDAY SO AS NOT TO MISS IMPORTANT BIDDING OPPORTUNITIES. OUR WEB ADDRESS IS:

HTTP://WWW.STATE.WV.US/ADMIN/PURCHASE

IN ORDER TO ACCESS THE WEST VIRGINIA PURCHASING BULLETIN, YOU WILL NEED YOUR VENDOR NUMBER, GROUP NUMBER (IF ANY), AND YOUR PASSWORD WHICH ARE PRINTED BELOW. YOUR ACCESS WILL BECOME EFFECTIVE ON THE FIRST MONDAY AFTER 02/24/2012, STATE HOLIDAYS EXCLUDED.

HELPFUL TIPS: YOUR COMPUTER-GENERATED VENDOR NUMBER BEGINS WITH AN ASTERISK, BUT DO NOT USE THE ASTERISK WHEN LOGGING IN. ALSO, OUR LOGIN SCRIPT IS CASE SENSITIVE. THEREFORE, IF YOUR VENDOR NUMBER CONTAINS A CHARACTER LIKE A, B, OR C, PLEASE TYPE IT IN UPPER CASE.

IF YOU HAVE QUESTIONS, FEEL FREE TO CONTACT US AT 304-558-2311 OR JEANNE.B.BARNHART@WV.GOV. THANK YOU.

SINCERELY YOURS,

Jeanne Boundard

VENDOR REGISTRATION

VENDOR NUMBER :

\*709020221

GROUP NUMBER :

PASSWORD :

34942

PERHIDO WEARSKADIENE WAXESHARR + COETTEL

From: (412) 391-2884 CONNIE GRILLIOT **PWWG ARCHITECTS** 408 BLVD OF THE ALLIES

PITTSBURGH, PA 15219

Origin ID: BTPA

**BILL SENDER** 

SHIP TO: (304) 558-2544 Krista Ferrell PURCHASING DIVISION 2019 WASHINGTON ST E

CHARLESTON, WV 25305

Ship Date: 15JAN13 ActWgt: 2.0 LB CAD: 5373647/INET3300

Delivery Address Bar Code



Ref# Invoice # PO#

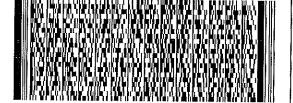
Dept#

WED - 16 JAN A2

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7945 1849 0280

FIRST OVERNIGHT



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25305 WV-US HTS



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1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.

2. Fold the printed page along the horizontal line.

3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

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