

PROPOSAL FOR ARCHITECTURAL/ENGINEERING SERVICES

**MODERNIZATION AND UPGRADES TO
CAPITOL COMPLEX ELEVATORS**

PREPARED FOR WV DEPARTMENT OF ADMINISTRATION,
GENERAL SERVICES DIVISION

PROJECT NO. GSD146401

August 8, 2013

PERFIDO
WEISKOPF
WAGSTAFF +
GOETTEL

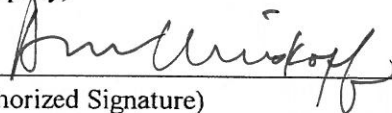
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West Virginia Purchasing Division

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 Wagstaff + Goettel

(Company)


(Authorized Signature)

Alan Weiskopf, AIA; Managing Principal

(Representative Name, Title)

412-391-2884 412-391-1657

(Phone Number)

(Fax Number)

7 August, 2013

(Date)

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.:

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.

N/A - No Addenda received


Addendum Numbers Received: N/A
 (Check the box next to each addendum received)

<input type="checkbox"/> Addendum No. 1	<input type="checkbox"/> Addendum No. 6
<input type="checkbox"/> Addendum No. 2	<input type="checkbox"/> Addendum No. 7
<input type="checkbox"/> Addendum No. 3	<input type="checkbox"/> Addendum No. 8
<input type="checkbox"/> Addendum No. 4	<input type="checkbox"/> Addendum No. 9
<input type="checkbox"/> Addendum No. 5	<input type="checkbox"/> Addendum No. 10

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


 (Alan Weiskopf) Authorized Signature

7 August, 2013

Date

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

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August 8, 2013

Krista Ferrell, Buyer Supervisor
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 - GSD146401
Modernization And Upgrades To Capitol Complex Elevators, WV State Capitol – Charleston WV

Dear Ms. Ferrell and Members of the Selection Committee:

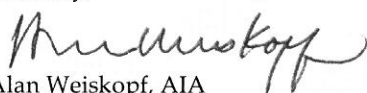
Perfido Weiskopf Wagstaff Goettel (PWWG) is pleased to submit our qualifications to provide Architectural and Engineering Services for phased elevator modernizations and upgrades at buildings on the Capitol Complex in Charleston. We have studied the EOI and we are familiar with the complex from our work there restoring the Capitol rotunda in 1996 and currently at work on a comprehensive renovation to Building #3. 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 West Liberty, 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

SECTION 1 METHODOLOGY

Methodology

Perfido Weiskopf Wagstaff + Goettel



PWWG is currently coordinating upgrades for three different sets of existing elevators throughout the historic 17-story Hill Building in Durham, NC for conversion from an office building to a 21c Museum Hotel.



For adaptive reuse of a group of historic buildings in Pittsburgh's Cultural District for a Marriott Hotel, PWWG inserted two new high-speed traction elevators.

The advent of solid-state control systems and ADA legislation, both of which occurred at about the same time, triggered the need for many elevator retrofits. PWWG has done our share of this work. Our firm has been responsible for dedicated elevator projects (both new and modernization) and new elevator and modernization projects embedded within larger building rehabilitation projects, many of which are historic structures.

Our experience in this type of work dates back to the 1980's when the firm modernized all of the elevators in the Labor and Industry Building, a high-rise structure in Harrisburg. This is a project that was handled by Alan Weiskopf who will serve as Principal-In-Charge for your project. Since that time, PWWG has also been responsible for other dedicated elevator projects ranging from the smallest personal (residential) elevators to large, expressive elevator additions such as the additional Landside and Airside elevators at Pittsburgh International Airport. We have experience in all types of low-rise elevator systems including the contemporary alternatives to the traditional hydraulic systems.

The following depict PWWG's initial thoughts about our approach to your project. **Evidence of PWWG's unique qualifications, as requested in the EOI, are included in Section 3.**

Programming for Renovation

Programming for the renovation of existing spaces involves bringing together "what you want"—the program—with "what you have"—the existing building. This involves two initially independent efforts that must be brought together to achieve the desired program within the constraints of the existing building. The same holds true for planning the work to modernize and upgrade elevators.

Methodology And Schedule

We propose an approach to planning the work that follows a 3 step methodology and has been found to be very reliable. Using this methodology, and working closely with the General Services staff.

Fact Finding — We propose to begin with simultaneous reviews of physical conditions in the building, (including Code, Accessibility, and life cycle assessments of each elevator), and a needs review for each use scheduled or anticipated for each building.

A thorough assessment of existing physical conditions will identify those elevator systems and building components that have continuing value, those that are near the end of their service lives, and those that are obsolete for pedagogical or Code or other reasons. Conceptual estimating begins at this stage to put costs on aspects of work that will be necessary to any plan for renovations.

Develop and Consider Alternatives — When the 'facts' of the project are in focus, including physical facts, the facts of program needs and goals, and the facts of budget realities, it is always useful to develop, compare, and contrast alternative approaches to design.

We generally develop several distinctly different options to a design for improvements. In the case of this project, options will be more limited and concentrate on the cost/benefit of various repair and replacement options for elevator components. The work moves to the next phase when your staff is persuaded that an approach has been identified that best supports your programming, is affordable, and can be delivered in realistic phases.

Refinement of a Preferred Alternative — We will prepare a document that presents a concise plan for the action to be taken for each elevator included in the project. The recommendations may range from modest repairs to expensive replacements. It will include drawings and nar-



For the historic Labor and Industry Building in Harrisburg, PWWG's elevator modernization involved the "overlay" of a new solid state elevator control system to replace the old fashioned controls for the car and group functions of two banks of elevators.

ratives describing programs of work that are prioritized, with cost estimates, and schedules for design and construction of the work in phases. The phases will be organized in conjunction with need, legislative session, special events at the capitol complex and efficiency of executing the work to minimize unnecessary cost.

Project Management and Schedule

A major portion of PWWG's responsibility will be team management. We will utilize a process of "orchestrated inclusiveness" to undertake the work. This means we will focus on having all of the required players at the table during the evaluation and design, but the output to General Services will be a single unified voice. This will be accomplished with a program of regularly scheduled working meetings.

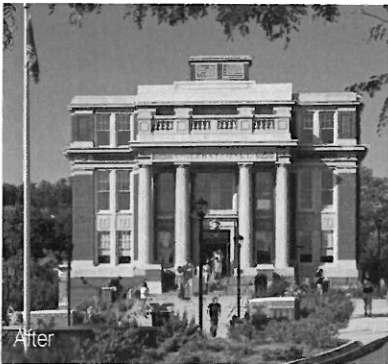
SECTION 2

FIRM/TEAM QUALIFICATIONS

- Contact
- PWVG 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



PWWG's comprehensive restoration of National Register Oglebay Hall at WVU Morgantown included inserting a new elevator shaft and bank in the existing building, which had no elevators.



PWWG's comprehensive restoration of National Register Shaw Hall at West Liberty University included creating a new passenger elevator where none existed.

CONTACT/SIGNATURE

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: (signature below)

Alan Weiskopf, AIA, 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


Alan Weiskopf, AIA, Managing Principal

8/7/13
Date

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, AIA — 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.

Jan Irvin, AIA, LEED AP — Project Manager, Specification Manager, QA/QC, and Construction Administration. Jan 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. Jan will also write the front end and architectural technical specifications for PWWG and compile the complete project manual including all disciplines' technical specifications. In addition, Jan will bring his seasoned QA/QC experience to your project through reviews of project design and coordination, and oversee construction administration for all phases of this project.

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 3.

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



Tower Engineering completed a comprehensive elevator modernization and systems upgrade at the Ruth Ann Musick Library at Fairmont State.



SKA Elevator Consulting's Steve Kinnaman completed elevator modernization at the landmark Hilton Towers in NYC.



Bruce Powell completed elevator modernization at the landmark Arcade Building in St. Louis.

Tower Engineering — (Mechanical/Electrical/Plumbing/Fire Protection Consulting). Should MEP issues arise in the scope of work for the General Services project, we will work with Tower to address them. The firm has completed 12 comprehensive elevator overhauls and upgrades, including two at Fairmont State's Turley Hall (with PWWG), and others at Fairmont's Feaster Center, Colebank Hall, Hunt Haught Hall and the Musick Library. Within the past 5 years, PWWG has worked with Tower on over 20 projects worth over \$86 million in construction costs.

Moment Engineers — (Structural Consulting). PWWG will consult with Moment on any structural issues that arise during the project at the Capitol Complex. 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.

SKA Elevator Consulting Group (Elevator Consultant). Steve Kinnaman will assist us in the physical evaluation of all of the existing elevators for this General Services project, and in developing strategies for replacements to be compatible with the logistical needs and overall design of associated buildings on the campus. Steve is based in New York City and has consulted with internationally known architects, developers, building owners, contractors, and public agencies. The firm has clients throughout the world and Steve is actively involved in existing building equipment modernizations, due diligence reviews, equipment performance and maintenance evaluations. His scope of work ranges from complete modernization to component upgrades in obsolete control systems. Steve's recent high profile modernization projects include the Hilton Towers (NYC), Citicorp Building (NYC), and the World Trade Center Towers (NYC—lead consultant overseeing modernization of the 212 elevators in the complex at the time of the 9-11 attacks).

The Bruce Powell Company (Elevator Consultant).

Bruce will be an additional advisor for the General Services elevator upgrades, assisting as needed with performance modeling to inform the benefits of various system improvements. His firm works often with SKA Elevator Consulting. In his 40+ years in the elevator industry, Bruce has completed hundreds of elevator modernizations, for clients throughout the world. Recent examples include the Arcade Building (St. Louis), Humana Tower (Lexington, KY), Oceanic Plaza (Vancouver), and Bay Adelaide Center (Toronto).

Complete profiles for each of our team members are included at the end of this section.

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 elevator modernization 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 time frame to successfully complete the project. All members of the project team are available to start work on your project in the fourth 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

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

Firm Profile

Perfido Weiskopf Wagstaff + Goettel



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
15 Architectural; 11 Registered, 10 LEED AP
3 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, 5 Graduate Intern Architects, and 3 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.

Alan Weiskopf, AIA

Managing Principal **Perfido Weiskopf Wagstaff + Goettel**



Education

University of Cincinnati
Bachelor of Architecture,
1975

Registration

Registered Architect in PA,
WV, MD, OH, IN, KY, 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 that were award-winning. He has a wide range of experience in terms of project type and size, with a particular emphasis on higher education, restoration and adaptive reuse, renovation and preservation of culturally significant structures, and hospitality 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 was 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.

Notable Project Experience

- PA Historic & Museum Commission, PA — Three 5 year open-end contracts for historic restoration work
- Pennsylvania Capitol Peristyle Deck Harrisburg — Investigation, analysis and design for waterproofing the exterior peristyle walkway at the base of the ornate dome of the historic PA State Capital Building.
- Main Capitol Rotunda, Charleston, WV — Historic restoration of rotunda interior.
- Main Capitol Restoration, Harrisburg, PA — Multi-phased historic restoration.
- West Virginia Capitol Building Three, Charleston, WV — Renovation of a historic office building.
- 21c Museum Hotel, Cincinnati, OH — Rehab 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.
- 21c Museum Hotel, Durham, NC — Conversion of historic 17-story Hill Building in downtown Durham to an upscale 120 room hotel.
- Courtyard by Marriott Hotel, Pittsburgh — Adaptive reuse of historic urban building for 182 room hotel.
- Congregation Poale Zedeck Renovation and Facilities Planning, Pittsburgh — Facilities planning, and exterior, interior, Life Safety, and Accessibility upgrades to this historic building.
- 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.
- Hamburg Hall, Carnegie Mellon University — Renovation of historic building for academic facility.
- Oglebay Hall & Ming Hsieh Hall, West Virginia University, Morgantown, WV — 55,000 sf historic renovation and 20,000 new building, LEED.
- 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 PA — Academic building with labs & classrooms for psychology department.
- West General Robinson Street Garage, Pittsburgh — 10 story event garage with 1200 spaces.
- FORE Systems Campus, Warrendale, PA — High tech office and manufacturing campus—5 buildings.
- Pittsburgh International Airport, Pittsburgh — Addition of landside and airside building passenger elevators.

Jan Irvin, AIA, LEED AP

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 Association

American Institute of Architects
LEED Accredited Professional

Jan Lyle Irvin has practiced architecture for the last 30 years across a broad spectrum of users and project types including 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.

Notable Project Experience

- 21c Museum Hotel, Lexington, KY — Conversion of historic 15-story First National Bank Building in downtown Lexington to an upscale 90 room hotel.
- 21c Museum Hotel, Durham, NC — Conversion of historic 17-story Hill Building in downtown Durham to an upscale 120 room hotel.
- 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 Township, 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 STEM 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 – Repairs to 450 lf of replica bastion walls, stone capstone and interior HVAC.
- West Park Court, Pittsburgh PA – 10-story apartment building renovation including new metal panel facade.
- MHA Scattered Sites, McKeesport, PA – 20 single-family, prefab modular units, neighborhood reconstruction.
- Heritage Health Foundation, Braddock, PA – Four single family, prefab modular infill units and two renovations.
- Laurel Estates, Uniontown, PA – 56 single, duplex, and triplex homes with community building.
- Oak Hill Master Planning, Pittsburgh – 37 acre site, 450 unit mixed-income development.
- Marriott Hotels, Various sites in PA and NC – New hotels with full service restaurant and indoor pools.
- Master Planning, Fort Mason & Crawford Village, PA – Reconnection and redesign of public housing sites.
- Pittsburgh Public Schools, Pittsburgh – Weil Technology, South Hills Middle and South Stadium renovations.
- Thomas Hughes House, Jefferson, PA – Adaptive reuse of 18th century home of Whiskey Rebellion leader.
- Laboratory Design, Carnegie Mellon University – Biochemistry, general chemistry and NMR lab renovations.
- J. Crew, Pittsburgh PA – Two-story retail store in dense urban shopping district.
- Memorial Christian Hospital, Sialkot, Pakistan – 60,000 sf additions, 10,000 sf renovation, sustainable practices.
- Arcor, Toronto, Canada – Accessible seniors modular housing type study for aging Canadian population.
- Stump Residence, Georgetown, Texas – Small town Texas traditional stone home.

TOWER ENGINEERING OVERVIEW AND SERVICES

AT TOWER ENGINEERING, OUR GOAL IS NOT TO JUST MEET OUR CLIENTS' NEEDS....
BUT TO EXCEED THEIR EXPECTATIONS.



Tower Engineering has been providing innovative mechanical, electrical, plumbing, and fire protection solutions and unparalleled client service since 1931. Primary markets of the firm include educational, health care, environments for the aging, and commercial renovations and new construction.



Tower Engineering's highly-trained staff of project managers, designers, and technical support personnel is capable of providing consulting services for every type of project - from a small, single-family residence to a high tech research facility incorporating redundant mechanical and electrical systems, DDC energy management and thermal storage.



Our engineers utilize state-of-the-art computer software programs for the design of lighting, electrical power and mechanical systems. Lighting analysis includes point-by-point calculations, ESI analysis, exterior lighting analysis, and life cycle cost comparisons. Electrical power analysis includes fault current and load flow analysis.

Mechanical analysis includes energy economy analysis, thermal storage analysis, heating and cooling load calculations, refrigerant piping design, water piping design, and duct work design. Our professional staff utilizes computer selection of air handling units, coils, pumps, terminal devices, fans, cooling towers, chillers, heat exchangers, kitchen hoods, hydronic and steam specialties, humidification equipment and heat recovery equipment.

SPECIFIC ENGINEERING SERVICES

HVAC

- Heating and cooling system design
- Ventilation system design
- Building automation systems
- Control systems and energy monitoring
- Geothermal heat pumps
- Heat recovery systems
- Kitchen and laboratory exhaust systems
- Smoke evacuation systems
- Computer room environmental control systems
- Building commissioning services

ELECTRICAL

- Interior and exterior lighting design and studies
- Lighting controls
- Primary and secondary voltage power distribution systems
- Fire detection and alarm systems
- Computer data and power systems
- Uninterruptible power supply systems
- Reinforced and masking sound systems
- Lightning protection systems
- Fault current studies
- System over-current protection coordination

TELECOMMUNICATIONS

- Voice communication systems
- Data network systems

PLUMBING

- Water resource efficiency analysis
- Sanitary drainage systems
- Storm water management
- Domestic water systems
- Waste water treatment systems
- Hospital and laboratory piping systems
- Fuel oil piping systems
- Irrigation systems

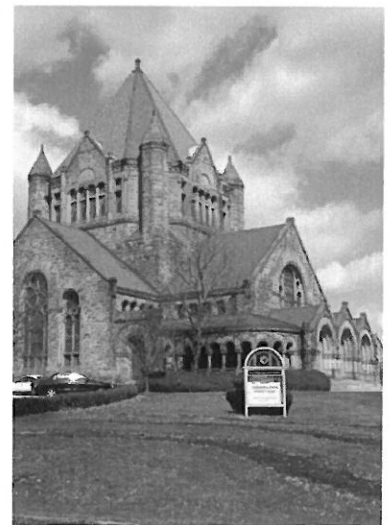
FIRE PROTECTION

- Standpipe and sprinkler systems
- Fire protection systems



DESIGN EXPERIENCE

- Agricultural & Science Buildings
- Airport Terminals & Hangers
- Athletic Facilities & Stadiums
- Auditoriums & Theaters
- Call Centers
- Classrooms
- Clean Rooms & Special Environments
- DataCenters
- Dining Halls
- Dormitory Buildings
- Environments for the Aging
- High-Rise & Low-Rise Office Buildings
- Historic Preservation & Adaptive Reuse
- Hotels/Motels
- Judicial & Courtroom Facilities
- Manufacturing & Industrial
- Movie Theaters
- Municipal Complexes
- Museums, Galleries & Libraries
- Nuclear Facilities
- Outpatient & Hospital Facilities
- Parking Garages
- Postal Facilities
- Prisons & Correctional Institutions
- Public Safety Buildings
- Recreational Facilities
- Religious Facilities
- Research/Laboratories
- Residential & Multi-Unit Housing
- Retail & Shopping Centers
- Schools
- Student Unions
- TV/Radio Stations
- Vehicle Maintenance Facilities
- Warehouses & Depots



Tower Engineering maintains full CAD capabilities utilizing AutoCAD Release 2013, which is compatible with most micro and mini based computer systems. Our AutoCAD software has been modified in-house to further enhance productivity per discipline. Firm-wide CAD standards are also in place to ensure uniformity.



EDUCATION

Bachelor Architectural Engineering
Pennsylvania State University
1989

REGISTRATION

PE, Pennsylvania
PE-045741-E

PE, West Virginia 016993
PE, New York
PE, Maryland
NCEES Registered

NCEES Registration

LEED Accredited Professional
2009

AFFILIATION

American Society of Heating,
Refrigeration & Air Conditioning
Engineers (ASHRAE)



JAMES N. KOSINSKI, P.E., LEED AP

PRINCIPAL, VICE PRESIDENT SENIOR PROJECT MANAGER, MECHANICAL ENGINEERING

Mr. Kosinski's primarily responsible for the design of HVAC systems and their components for hospitals, schools, universities, laboratories, office buildings, and commercial and light industrial facilities. He has experience with the design of numerous types of HVAC systems, including constant and variable air volume air handling, geothermal heat pump and exhaust systems; chilled water and hot water; electric/electronic, pneumatic and DDC control systems.

Mr. Kosinski's design responsibilities include load calculations, equipment selection, system layout, project specifications, cost estimates, direction of project drafting efforts, coordination with other engineering disciplines, and construction administration. Additional responsibilities include system analysis and energy studies, client contact, and project management and scheduling. He has performed energy conservation analyses, evaluated HVAC system performance, and justified the installation of DDC control systems and other energy saving measures. As a Mechanical Engineering Group Leader, Mr. Kosinski coordinates the efforts of a team of staff engineers, designers and CAD operators.

REPRESENTATIVE EXPERIENCE

Fairmont State University - Fairmont, West Virginia

Engineering Technology
New Dorm Attic Classrooms
Multiple HVAC Systems Studies in Multiple Buildings
Electro-Optics Center Addition
Musik Library Renovation

Fairmont, West Virginia

Public Safety Building Renovations

Allegheny Energy - Fairmont, West Virginia

New Operations Center (LEED)

West Virginia University - Morgantown, WV

New Recreation Center
Brooks Hall - Lab Renovation
Honors Hall
Law Building Phase I
Parkersburg Applied Technology Center (Parkersburg, WV Campus)

Department of Energy - Morgantown, West Virginia

New Record Storage Facility (LEED)

Morgan County Board of Education - Bath, West Virginia

Berkeley Springs High School Renovation/Addition



EDUCATION

BS, Mechanical Engineering
Penn State University
1982

REGISTRATION

PE, Pennsylvania
PE-040568-E

PE, West Virginia
PE-11973

PE, New York

NCEES Registration

LEED Accredited Professional
2009

AFFILIATION

American Society of Heating,
Refrigeration & Air Conditioning
Engineers (ASHRAE)
Pittsburgh Chapter
Past President



THOMAS J. GORSKI, P.E., LEED AP

PRINCIPAL, PRESIDENT

MECHANICAL ENGINEERING DEPARTMENT HEAD

Mr. Gorski's primary responsibilities are the design of HVAC systems and their components for schools, universities, commercial and light industrial office buildings, laboratory buildings, health care facilities, and military facilities. He has designed HVAC systems including constant and variable air volume, air handling and exhaust systems; chilled water and hot water systems and steam distribution systems; electric/electronic control, pneumatic control and DDC systems.

Mr. Gorski's design responsibilities include load calculations, equipment selection and system layout, project specifications, cost estimates, direction of the project drafting effort, coordination with architectural and other engineering disciplines, and construction administration. He also performs system analysis and energy studies, maintains client contact, and supervises the engineering effort of the Mechanical Engineering groups.

REPRESENTATIVE EXPERIENCE

Fairmont, West Virginia

Allegheny Energy New Operations Center

Fairmont State University - Fairmont, West Virginia

Engineering Technology Building

West Virginia University - Morgantown, West Virginia

New Intermodal Transportation Center

New Student Recreation Center

Student Recreation Center Building Commissioning

Caperton Center for Applied Technology

Parkersburg Applied Technology Center (Parkersburg, WV Campus)

Berkeley County Board of Education - Inwood, West Virginia

Musselman High School (new)

Musselman Middle School Renovation/Addition

Potomack Intermediate School (new)

Clay County Board of Education - Clay, West Virginia

High School Auditorium/Classroom Addition

Grant County Board of Education - Petersburg, West Virginia

Petersburg Elementary RTU Replacement

Mercer County Board of Education - Princeton, West Virginia

High School Addition

New Athletic Facilities

Mineral County Board of Education - Keyser, West Virginia

New High School

New Elementary School

United States Army Reserve Center - Jane Lew, West Virginia

Readiness Center and Organizational Maintenance Shop Building

Monongalia Health System - Morgantown, West Virginia

Renovations for ICU Suite



EDUCATION

BS Electrical Engineering
Case Western Reserve University
1997

REGISTRATION

Professional Engineer, PA
PE-061041

AFFILIATION

Illuminating Engineering Society
of North America (IES): Treasurer
Pittsburgh Section

AWARD

IES Design Award of Merit 2003,
Ross Twp. Municipal Complex
Pittsburgh, Pennsylvania

T. STEFFANIE BAKO, P.E.

SENIOR PROJECT MANAGER ELECTRICAL ENGINEERING DEPARTMENT

As an electrical designer and engineer, Mrs. Bako provides engineering services for the design of office buildings, educational facilities, municipal buildings, community/recreational buildings and commercial facilities. Her primary responsibility is for the preparation of electrical opinions of cost, technical specifications, engineering drawings, field observation, and coordination with architectural and other engineering disciplines.

Mrs. Bako's design responsibilities include lighting layout and fixture selection, including calculations and system coordination studies and calculations; computer rooms and associated support facilities; fire alarm and detection systems; emergency power, public address, audio-visual, security and closed circuit television systems. Additional responsibilities include client contact, field observation, and project management.

REPRESENTATIVE EXPERIENCE

Army National Guard - Fairmont, West Virginia
New Readiness Center

Canaan Valley Institute - Davis, West Virginia
New Office Building (LEED Silver)

City of Fairmont - Fairmont, West Virginia
New Parking Garage
Municipal Building Renovations

Fairmont State University - Fairmont, West Virginia
Engineering Technology Building
Musick Library Addition and Renovations

Glenville State College - Glenville, West Virginia
Student Center Renovations

Harrison County School District - Clarksburg, West Virginia
New Lumberport Elementary School

Marion County School District - Fairmont, West Virginia
New Middle School

Massey Energy - Charleston, West Virginia
New Office Building

Monongalia County School District - Morgantown, West Virginia
New Skyview Elementary School
New Mylan Park Elementary School

Twin Falls State Park Resort - Mullens, West Virginia
Lodge Expansion

West Virginia High Tech Consortium Office Building - Fairmont, West Virginia
Tenant Fit-ups



EDUCATION

BS, Mechanical Engineering
Penn State University
1997

REGISTRATION

Professional Engineer, PA
PE-062304, 2003

Certified in Plumbing
Engineering (CIPE), 1998

LEED Accredited Professional
2009



MICHAEL S. PLUMMER, P.E., C.I.P.E., LEED AP

ASSOCIATE, SENIOR PROJECT MANAGER

PLUMBING & FIRE PROTECTION ENGINEERING DEPARTMENT HEAD

As a mechanical designer/engineer, Mr. Plummer is primarily responsible for the design of plumbing and fire protection systems and their components for educational, governmental, and commercial buildings.

Mr. Plummer's plumbing/fire protection design responsibilities include performing calculations for hydraulically designed sprinkler systems; designing water supply and pumping systems including fire mains and sizing of fire pumps; design/testing of fire protection and alarm systems; and design of plumbing sewage, gas and water systems. In addition to plumbing/fire protection systems, Mr. Plummer is an experienced HVAC system designer, and performs load calculations, equipment selection and systems layout. His duties include preparation of project specifications, cost estimates, project management, and coordination with architectural and other engineering disciplines.

Mr. Plummer also performs construction administration duties including review of submittals, preparation of punch lists, and field problem solving, as well as supervising the engineering efforts of the Plumbing/Fire Protection Department.

REPRESENTATIVE EXPERIENCE

Brooke County Board of Education - Follansbee, West Virginia

Hooerson Heights Primary School
Bethany Primary School

Cacapon Resort - Berkeley Springs, West Virginia

Lodge Renovation and Expansion

City of Fairmont - Fairmont, West Virginia

Public Safety Building

Fairmont State University - Fairmont, West Virginia

Engineering Technology Building
Conference Center Computer Lab
MATEC Hangar Fire Protection Systems Evaluation

West Liberty University - West Liberty, West Virginia

Shall Hall Renovations

West Virginia Army National Guard - Fairmont, West Virginia

New Reserve Center

West Virginia University - Morgantown, West Virginia

New Transportation Center & Garage

West Virginia High Technology Consortium - Fairmont, West Virginia

Base Building & Tenant Fitup for Office Building Complex

West Virginia National Guard Readiness Center - Buckhannon, West Virginia

New Armory at Readiness Center



Elevator Consulting Group

Firm Introduction

SKA Elevator Consulting Group is an independent third party that specializes in the business of vertical and horizontal building transportation consulting that currently operates out of offices in New York, NY and Phoenix, AZ.

Our client base consists of internationally known architects, developers, building owners, contractors and public agencies. We provide full services from conceptual designs through the final stages of construction and testing of vertical transportation systems. Building segments include commercial offices, retail, hospitals, hotels, residential, parking facilities, museums, libraries, schools, correctional, public transit, and other specialty facilities that are located throughout the world. A comprehensive list of those projects is available upon request.

Although recently formed as a company, the firm made up of professionals drawn from throughout the elevator industry with an average of 35 years in experience. Our people have a broad range of expertise in all phases of elevator consulting including new building design, existing building equipment modernizations, due diligence reviews as well as existing equipment performance and maintenance evaluations.

Our professional affiliations include; The International Association of Elevator Engineers, The International Association of Elevator Consultants, American Society of Mechanical Engineers, The Construction Specifications Institute and The Council of Tall Buildings and Urban Habitat.

We invite you to visit our website at: www.skaecg.com



Elevator Consulting Group

Elevator Modernization Background

SKA is currently active in a number of elevator modernization projects that range from a full complete modernization to component upgrades in obsolete control systems. Individually, Mr. Kinnaman has worked with every major elevator company and numerous independent companies. Of significant note he has been personally involved in such high profile modernizations in the past such as:

- the Hilton Towers in New York City (Otis high speed gearless equipment)
- the Citicorp Building in New York (with Otis high speed double-deck elevators)
- the former World Trade Center Towers where he was the lead consultant on the joint-venture team overseeing the modernization of the majority of the 212 elevators in the complex. The project was on-going at the time of the 9-11 attacks.

The following chart is representative of the more recent elevator modernization projects either completed or in progress.

Project	Location	Client	Building Height (stories)	Number of Elevators	Scope	Equipment Type
60 Pineapple	New York	60 Pineapple HOA	6	1	Complete Replacement	GAL/Hollister-Whitney
The Bank of America Tower	Texas	TCTB Partners	24	7	Complete Modernization	Otis
Bank of America Garage	Texas	TCTB Partners	4	5	Partial - Fire Service upgrade	Otis
Western National Bank	Texas	WNB REI, LLC	12	4	Complete Modernization	Dover
Fasken Center Tower 1	Texas	Fasken Midland, LLC	13	5	Partial Modernization	Westinghouse
Fasken Center Tower 2	Texas	Fasken Midland, LLC	13	7	Complete Modernization	Dover
Fasken Center Garage	Texas	Fasken Midland, LLC	6	2	Partial – Fire Service upgrade	GAL/Hollister-Whitney
Independence Plaza	Texas	Haley Properties	16	6	Complete Modernization	Westinghouse
Graham Building	Texas	Haley Properties	5	1	Partial – control & fire service update	Westinghouse
900 Bush St.	San Francisco	La Galleria COA	23	3	Complete Modernization	US Elevator
2525 Larkin	San Francisco	Hill & Co.	8	1	Partial – control update	Hollister-Whitney/ O'Thompson
Ten Miller Place	San Francisco	Hill & Co.	23	2	Partial – Control upgrades	Westinghouse



Curriculum Vitae
Steve Kinnaman
Elevator Consultant – Principal & CEO
SKA Elevator Consulting Group

Education:

BA - Northern Arizona University 1969

Professional Experience:

After 15 years as Principal Consultant at three international elevator consulting firms, in 2009 Mr. Kinnaman formed his own firm, Steve Kinnaman & Associates LLC dba: SKA Elevator Consulting Group. Steve brings 42 years of experience in the vertical transportation field to the SKA team. Prior to forming his own firm, he was a principal in the west coast elevator consulting firm of HKA and prior to HKA he was with Jaros, Baum & Bolles (JB&B), a large international Consulting Engineering firm in New York City, as Director of the Vertical Transportation Department. Steve's New York operation was also responsible for providing all of the vertical transportation support for the JB&B office in London. Making the transition to consulting and design of vertical transportation systems Steve served as Regional Manager and Principal Consultant in New York for Lerch Bates and Associates, a large international elevator consulting firm, before moving to JB&B. His background includes the manufacturing and contracting as well as the consulting segments of the business. In the manufacturing and contracting segment, he was involved with product planning and application, equipment application, analysis, sales and marketing, construction project management and regional operations management. He currently does an extensive amount of work in New York City, the Middle East and in Europe.

Office Locations: New York, NY – Sun City West, AZ

Company Affiliations:

Consulting

HKA Elevator Consulting, Inc.
Jaros Baum & Bolles Consulting Engineers
Lerch Bates & Associates Elevator Consulting

Manufacturing & Installations

Fujitec America
Corona Elevator (Dong Yang USA)
Schindler Elevator Company
Westinghouse Elevator Company

Professional Affiliations:

Member, International Association of Vertical Transportation Professionals
Member, International Association of Elevator Engineers
Member, National Association of Elevator Safety Authorities
Member, Construction Specifications Institute
Member, American Society of Mechanical Engineers
Member, Council of Tall Buildings and Urban Habitat

Certifications:

**ASME Accredited Certified Elevator Inspector QEI-1184
New York City Licensed Elevator Inspector No. 419026**

Relevant Experience:**Partial List of Notable Projects:****Office Buildings**

Olive Grove Tower, Istanbul, Turkey
300 Madison Avenue, New York, NY
360 Madison Avenue, New York, NY
Canary Wharf, Buildings WF9, DS-1, DS-3, London, England
745 Seventh Avenue, New York, NY
7 World Trade Center, New York, NY
The Freedom Tower – World Trade Center, New York, NY
Towers 2, 3 and 4 at the World Trade Center, New York, NY
Soyak Tower, Istanbul, Turkey

Mixed-Use Complexes

Sony Center at Potsdamer Plaza, Berlin, Germany
Wet End Plaza Mixed-Use Complex, Frankfurt, Germany
Random House Office & Residential Tower, New York, NY
Federation Towers, MIBC Plot #13, Moscow, Russia
Project Slava Mixed-Use Complex, Moscow, Russia
Moscow Int'l Business Centre, Plot #14, Moscow, Russia
Moscow Int'l Business Centre, Plot #12, Moscow, Russia
Taishen Int'l Bank Office & Residential Tower, Taipei, Taiwan
1400 Biscayne, Miami, Florida

Residential

Park City Residential Complex, Moscow, Russia
Third and Mission Street, San Francisco, CA
Burj Residential Towers, Plots 55, 56 and 57, Dubai, UAE
Burj Residential Tower, Plot 11, Dubai, UAE
Project Crystal on the New Ring, Moscow, Russia
Paradise Living Residential Complex, Moscow, Russia
Astor Place, 26 Astor Place, New York, NY
469 West Street, New York, NY
East 96th Street & 3rd Avenue, New York, NY
The Veneto, 250 E. 53rd Street, New York, NY
The Caledonia, 450 W. 17th Street, New York, NY
The Harrison, 76th & Amsterdam, New York, NY
The Brompton, 86th Street & 3rd Avenue, New York, NY
500 W. 56th Street, New York, NY
Golden Tower, Jeddah, Kingdom of Saudi Arabia
Hunters Point South, Queens, New York

Hotels

The Westin Hotel at Times Square, New York, NY
W Hotel (formerly Planet Hollywood) Times Square, New York, NY
CB-1 Yerba Buena Tower (Hyatt), San Francisco, CA
Maui Westin Hotel, Maui, Hawaii
Four Seasons Resort, Carlsbad, CA
Intercontinental Hotels at Cleveland Clinic, Cleveland, OH
Baha Mar, Nassau, Bahamas (Westin-W-St. Regis-Caesars Hotels)
St Regis Hotel & Residences, Amman, Jordan

Specialty

John Jay College of Criminal Justice Phase II, New York, NY
New York School of Law, New York, NY
Museum of Islamic Arts, Doha, Qatar
Cleveland Clinic Addition, Cleveland, Ohio
Psychiatric Institute, Columbia University, New York
World Trade Center 911 Memorial Building, New York, NY
Sterling Memorial Library, Yale University
NASCAR Hall of Fame, Charlotte, NC

Retail

Desert Fashion Plaza Mall, Palm Springs, CA
Bronx Terminal Market, Bronx, New York
Gucci Store, Manhattan, New York
Hermes Store, Manhattan, New York
Gateway Center, Brooklyn, New York



Elevator Consulting Group

Curriculum Vitae

Nickolas A. Ribaudó

Senior Field Engineer

Mr. Ribaudó joined Jaros, Baum & Bolles in 2000 as a Vertical Transportation Department Field Engineer where he was recruited by Steve Kinnaman. Mr. Ribaudó brings 41 years of elevator experience to the SKA organization. His background includes all facets of vertical transportation systems engineering, design, installation, and troubleshooting with extensive electrical and motor control training. In addition to deep field experience, he has served as project manager for numerous multi-million dollar vertical transportation projects. As a certified elevator inspector, Mr. Ribaudó's highest professional certification consists of the ASME/QEI Supervisor S-59 issued by the National Association of Elevator Safety Authorities. Prior to joining SKA he was employed by Jaros, Baum & Bolles, and Lerch Bates & Associates where he and Steve Kinnaman first worked together. Mr. Ribaudó was primarily employed by Otis Elevator Co. in various capacities of field management and as Corporate Auditor of Quality Assurance in field installations. After retiring from Otis, he held various positions with other elevator consulting firms. Mr. Ribaudó holds five United States patents for new innovative elevator component products (US Patent Nos. 4,987,638 – 4,910,961 – 5,161,957 – 5,107,677 – 5,219,275).

Education	BS Program in Mechanical & Electrical Engineering – New York University Certified Technician - Motors, Generators and Control – Samuel Gompers Institute Certified Electronic Technician – RCA Institute of Technology Certified Elevator Inspector/Supervisor – National Association of Elevator Safety Authorities
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Certification	ASME Qualified Elevator Inspector Supervisor (QEI-S) S-59 NAESA
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Representative Projects	World Trade Center, New York, New York New York Hilton & Towers, New York, New York World Financial Center, New York, New York Manhattan Mall, New York, New York Lincoln Hospital, Bronx, New York Yankee Stadium, Bronx, New York Citicorp Center, New York, New York Penn Station, New York, New York Port Authority Bus Terminal, New York, New York Continental Airlines at Newark Airport Newark Airport Terminal C, Newark, New Jersey Eiffel Tower, Paris, France Tram Rail System, Salzburg, Austria Inter-Continental Hotel, Rome, Italy Migros Center, Zurich, Switzerland Meridian Hotel, Rio de Janeiro, Brazil Nile Hilton Hotel, Cairo, Egypt
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Bruce Powell provides consulting services in elevator traffic analysis

The Bruce Powell Company, Inc., was formed in early 2002 as an elevator consulting organization. The leader of the firm is Dr. Bruce A. Powell, a long time contributor in the application of mathematical modeling to elevator design and control systems. The company specializes in elevator system planning and dispatcher performance evaluation. Customers are building owners, elevator consulting firms, architectural firms, property managers, and elevator suppliers.

Powell has a total of 45 years of experience, the first 21 at the Westinghouse R&D Center and the next 13 years at Otis Elevator Company. He left Otis in early 2002, having achieved the highest technical individual contributor position in the company, that of Otis Fellow. He holds 37 U.S. patents, most relating to elevator dispatching, particularly the use of fuzzy logic in Early Car Announcement. In addition, Powell has published or co-published 15 articles in industry media. He has been cited in numerous media outlets, including The New York Times, National Public Radio, CNN, The Wall Street Journal, and Elevator World.

For the past 12 years, Powell has served as a principal traffic analysis consultant to ThyssenKrupp Elevator Corporation, having worked on the elevator planning for important projects including New York's Freedom Tower, Moscow's 80-story Federation Tower with TWIN elevators, and major modernizations projects at the University of Pittsburgh's Cathedral of Learning and Wachovia Bank's 42-story corporate headquarters in Charlotte which employs destination dispatch. *He has also provided traffic analysis expertise to a number of key elevator consultancies both in the U.S. and Canada.*

He holds a bachelor's degree in mathematics from Denison University, and both a Master's and Ph.D. in operations research from Case Western Reserve University.

Offices for The Bruce Powell Company are in Canton, CT.

The Bruce Powell Company, Inc.

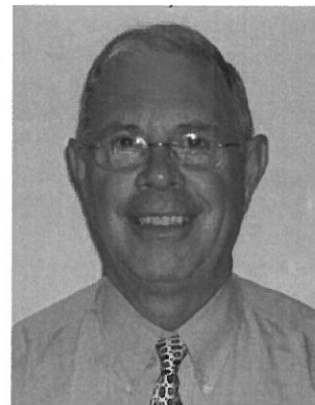


Elevator planning and
dispatcher performance analysis

Dr. Bruce A. Powell
President

71 Morgan Road
Canton, CT 06019
bruce.powell@comcast.net

Voice: (860) 693-1271
Cell: (860) 798-4354



BRUCE A. POWELL

71 Morgan Road
Canton, CT 06019
bruce.powell@comcast.net
(860) 693-1271

Dr. Bruce A. Powell is President of The Bruce Powell Company, a consulting firm that specializes in elevator planning and dispatcher performance analysis. He formed this firm in April 2002 after taking an early retirement from Otis Elevator Company's Engineering Center where he held the highest ranking technical position and earned an international reputation as an expert in traffic analysis. His consulting work is a direct outgrowth of his work at Otis where he and his team were responsible for the application of advanced technologies to the dispatching of elevators. His 36 U.S. patents and numerous publications speak to his technical skills. His activities as principal spokesman for technology and as a key participant in many important Otis marketing activities speak to his communications skills. His inventions have been deployed in operating elevator systems throughout the world, primarily in Europe, Japan, Australia, and North America.

Relevant technologies that Dr. Powell has been involved with include operations research algorithms, fuzzy logic, and neural networks. His work has been featured recently in the Wall Street Journal, New York Times, Washington Post, CNN, NOVA, and many other media outlets. In 1993, he was granted a Special Award for Management Effectiveness by Otis for his skills in communicating technical concepts to customers. He is a pioneer in the application of mathematical optimization and simulation to elevator systems. Prior to joining Otis in 1989, he spent 21 years as mathematician at Westinghouse Research Laboratories, planning new manufacturing systems, optimizing engineering designs, and performing elevator research.

EDUCATION:

B.S. (Mathematics with High Honors), Denison University, 1963
M.S. (Operations Research), Case Western Reserve University, 1965
Ph.D. (Operations Research), Case Western Reserve University, 1967

EXPERIENCE:

The Bruce Powell Company, Canton CT

April 2002 – Present: *President*

Serve as consultant to elevator suppliers and major lift consultants in the area of elevator traffic analysis. Conduct training workshops in fundamental concepts of traffic calculations, simulation of dispatching algorithms, and the use of Elevate traffic analysis software.

Otis Elevator Company, Farmington, CT

1997 - 2002: *Otis Technical Fellow*

Managed advanced technology projects in the group control core competency. Deliverables were software programs controlling elevators in buildings such as San Francisco's Transamerica Pyramid. Served as principal spokesman to customers and elevator consultants for advanced technology applications to controlling elevators.

1989 - 1997: *Principal Research Engineer*

Responsible for the development and introduction of advanced technologies into elevator dispatchers. These techniques include Fuzzy Logic, Artificial Neural Networks, and Mathematical Optimization. Authored or co-authored many patent disclosures on dispatching. Won "Best Paper Award" at the 1992 International Conference on Elevator Technology.

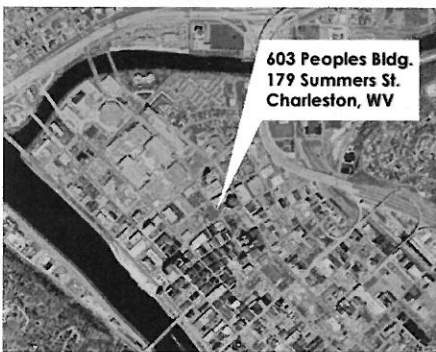
Westinghouse R&D Center, Pittsburgh, PA

1967 - 1989: *Advisory Mathematician*

Experience in general operations research consulting on various problems for operating divisions, with emphasis in the following areas:

- Simulation and optimization of elevator systems.
- Computer simulation of new manufacturing systems.
- Application of linear programming to production scheduling, curve fitting, and selection of equipment.
- Plant layout for adjacency optimization, design optimization for induction motors, system reliability modeling.
- Teaching operations research in internal short courses. Technical seminars given at various universities such as Carnegie Mellon, RPI, Pittsburgh, Duquesne, Michigan, and Johns Hopkins.

Firm Profile



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.

During his more than 25 years of experience, Mr. Richardson has had sole responsibility for the structural engineering design of more than 6 million square feet of built space. The construction costs of these projects exceeded a half billion dollars. His 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.



Resume



Douglas R. Richardson, PE, LEED AP
Principal 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, KY, and MS

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

Engineers Without Borders-USA



Resume



Michael J. White, PE
Project Engineer

Education

West Virginia University Institute of Technology,
(1/03-12/06)

B.S., Civil Engineering

Structural Emphasis

Professional Registration

Professional Engineer - WV

Professional Affiliations

American Society of Civil Engineers

American Institute of Steel Construction

Experience

WVU-P Applied Technology Center - Parkersburg WV

WVU-P Child Development Center - Parkersburg WV

Rainelle Elementary School - Rainelle, WV

Buffalo High School - Buffalo, WV

Marsh Fork Elementary School, Raleigh Co. WV

Izzy's Restaurant - Cincinnati, OH

Office Building - Batavia, OH



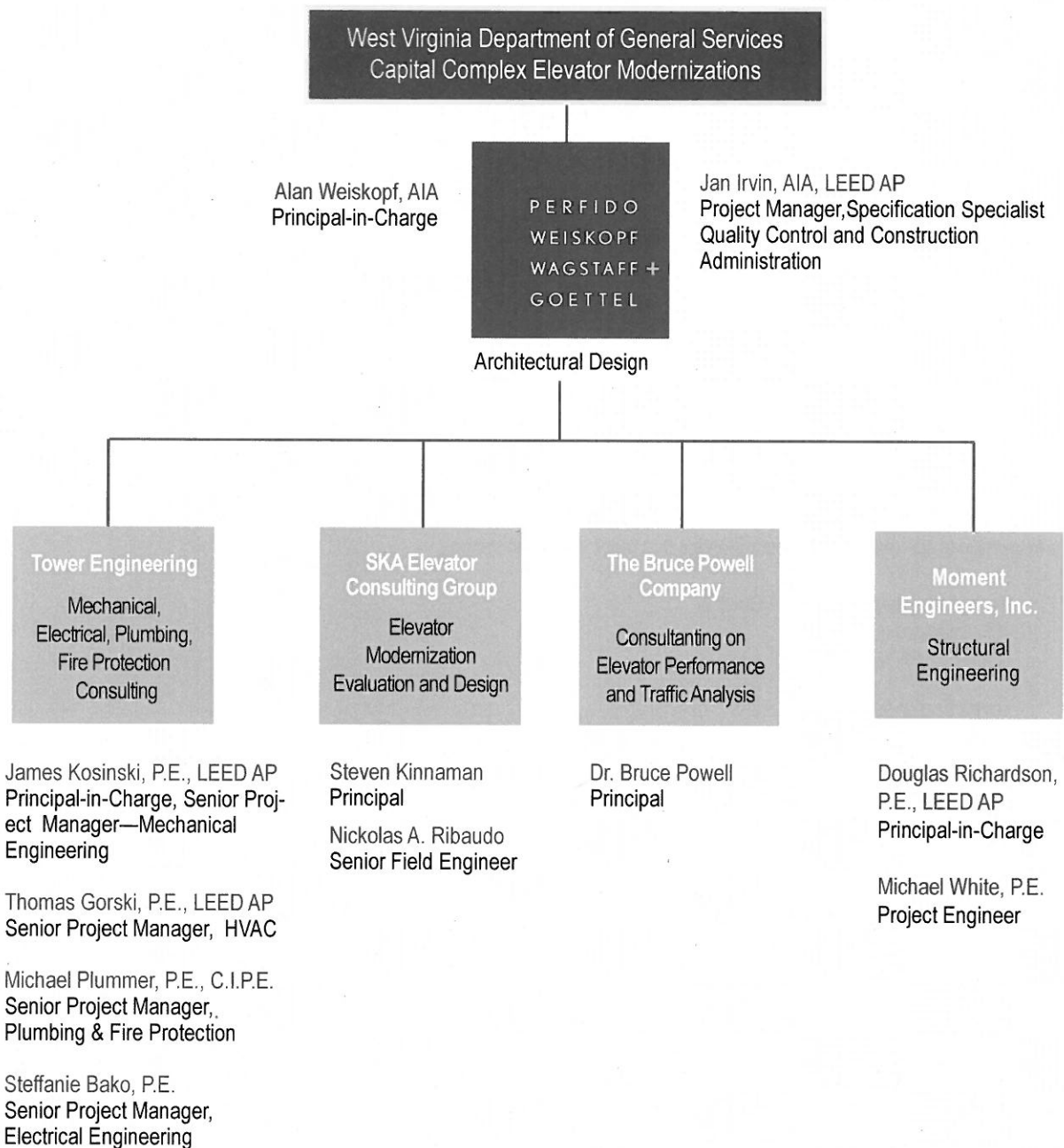
SECTION 3

PROJECT ORGANIZATION

- Organization Chart and Management Plan
- Location of Project Team Members
- Evidence of Firm's Ability to Provide Services
 - Experience With Building Forensics
 - Experience Renovating Historic Structures
 - Specialized Elevator Consulting
 - Elevator Cab Design
 - Experience With Elevator Contractors in WV
 - Life Safety and Code Compliance in West Virginia
 - Working in Occupied Buildings
 - Staff Continuity on WV Capitol Complex Projects
 - Phased Construction Experience

Project Organization Chart

Perfido Weiskopf Wagstaff + Goettel



Management Plan

Perfido Weiskopf Wagstaff + Goettel

Perfido Weiskopf Wagstaff + Goettel will be the prime for this project, and will manage all aspects of the General Services project from its office in downtown Pittsburgh, PA. We have formed a team to provide the specific mix of complementary skills required for your project. 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 specialized technical expertise of our consultants with our own expertise and aesthetic considerations. Our consulting engineers will review PWWG's design documents throughout the projects as they relate to their specialties, and collaborate on technical specifications and drawing details.

Team members for your 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 and implementation of the project.

Firm profiles for each of our team members are included at the end of Section 2.

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

Tower Engineering

115 Evergreen Heights Drive, Suite 400
Pittsburgh, PA 15229

SKA Elevator Consulting Group

116 W. 23rd Street, 5th Floor
New York, NY 10011

The Bruce Powell Company, Inc.

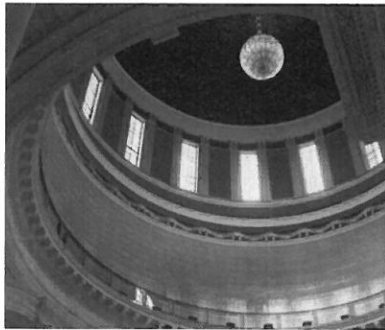
71 Morgan Road
Canton, CT 06019

Moment Engineers

603 Peoples Building
Charleston, WV 25301

Evidence of Ability to Provide Services

Perfido Weiskopf Wagstaff + Goettel



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

Experience With Building Forensics

Many of our commissions have included forensic investigations, and some have begun with a forensic study to verify conditions and establish needed scopes of repair. We have provided services as forensic specialists to the Pennsylvania State System of Higher Education and the Pennsylvania Historical and Museum Commission under term contracts. Current projects that have begun with forensic investigation include work at Slippery Rock University, Carnegie Mellon University, and the Maritime Museum in Erie, PA. We are also currently at work on the historic conservation of the exterior of the historic Henry Oliver Building in downtown Pittsburgh. This work involves a formal forensic phase, now underway, to carefully document existing conditions in an elaborate terra cotta cornice. Through careful examination, data collection, and selective demolition, we have discovered conditions not documented in the building's original drawings or details that were lost through successive renovations.

Experience Renovating Historic Structures

Restoration has been a primary focus at PWWG for more than 25 years.

Some of our projects are 'pure' restorations with the single purpose of 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 involved both restoration and the solution of persistent technical problems. The technical problems often date to the original construction.

Repeat clients include the PA Department of General Services and the Pennsylvania Historical and Museum Commission, the State of West Virginia, West Virginia University, West Liberty University, the Pittsburgh Cultural Trust, and Carnegie Mellon University.

Our historic projects include rehabilitations at two state capitols (WV and PA), other buildings for state governments, several historic projects on college campuses (WVU, West Liberty, Carnegie Mellon, Clarion, Pitt), residential conversions and other structures for business and hotel use. Our portfolio of historic projects includes buildings in Cincinnati, Pittsburgh, Charleston, Harrisburg, Morgantown, NYC's SoHo Cast Iron Historic District in Lower Manhattan, and several rural locations in the region. Among our currently active projects are four historic structures, either on the National Register or with determinations of eligibility.

Through PWWG's 15 years of continuous service to the Pennsylvania Historical and Museum Commission (PHMC), we have undertaken over 120 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 directly contracted with many preservation tradesmen such as masons, specialty roofers, ornamental sheet metal crafters, etc. to implement the work.

Specialized Elevator Consulting

Decisions on required elevator repairs and the resulting costs have often been developed by the elevator manufacturers and service companies who perform the work. We have elected to add two fully independent elevator consultants to assist us in these evaluations and decisions. Steve Kinnaman will be focused on physical evaluation of the components, both mechanical and solid-state. Bruce Powell will be available as needed to model performance of the elevators, thereby offering meaningful data to evaluate the benefit of various system improvements.

Elevator Cab Design

PWWG has experience with several projects that involve custom design of the elevator cab interiors. We have worked directly with specialty contractors who work almost exclusively on



PWWG's comprehensive restoration of the National Register 21c Museum Hotel in Cincinnati included removal of 1 elevator, upgrades to 2 others, and replacement of an existing manually operated elevator with a new service elevator.



PWWG's retrofit Landside Elevator at Pittsburgh Int. Airport is a partial steel and glass enclosure with no shaft. The steel pipes of its fully exposed frame are sympathetic to the steel trusses that form the vaulted roof structure of the space.

cab interiors. A significant number of projects, including three 21c Museum Hotels, the PA Labor and Industry Building, and 575 Broadway in NYC, have involved custom cab design because the manufacturer's standard cab designs were not able to achieve the design intent.

Experience With Elevator Contractors in WV

The competition among elevator contractors is limited, with a relatively small number of "players" in the market. As a result, competition may not be as strong as it is in other trades. Performance — especially in terms of schedule compliance — can be inconsistent. PWWG has current relevant experience with the performance of contractors in the West Virginia market that may benefit the General Services project.

Life Safety and Code Compliance in West Virginia

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.

Working in Occupied Buildings

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 which required us to maintain occupancy for a chemistry lab in a building that was otherwise vacant.

We will work closely with your staff to carefully define the "rules of the game" for the contractor including work hours, work areas, noise restrictions, dust control, access and egress routes, life safety systems operation, and temporary protection measures. All these requirements are clearly defined in the front end of the specifications, so that bidders understand the work conditions.

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 WV State Capitol Complex. Benefits to General Services 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 General Services.

Phased Construction Experience

The nature of PWWG's practice has led us to clients and projects that demand phasing considerations in which an orchestrated sequence of activities must occur. This has manifest itself in a number of ways. The most common has been the need to conform to the academic calendar of higher education. In other instances, it has involved phasing to get projects to ramp up in the right order to align with funding opportunities. Another example is the need to phase work because the completion of Project "A" is mandated for Project "B". A recent example is the WVU Evansdale Campus Infrastructure Upgrade. PWWG has sequenced the preparation of bid packages to advance the construction of certain utilities ahead of others in order for them to be in place and available for new construction under a different contract.

SECTION 4

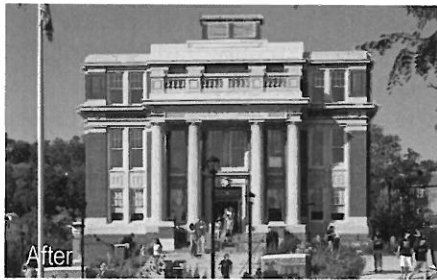
EXPERIENCE COMPLETING PROJECTS OF SIMILAR SIZE AND SCOPE

- Project Examples for PWWG
- References

Experience Completing Projects of Similar Size and Scope

Perfido Weiskopf Wagstaff + Goettel

PWWG has designed and coordinated dedicated elevator projects, elevator retrofits to achieve ADA compliance, and elevator upgrades and modernizations in both historic and contemporary buildings. The projects included in this section showcase our breadth of experience, familiarity with a range of elevator types, and work in various cities in WV.



1. Project/Location: Oglebay Hall Renovation, West Virginia Univ. (Morgantown, WV)

Description: For this PWWG project, Oglebay Hall, a 1917 vacant, deteriorated National Register historic building, was stripped to its masonry shell and wood frame structure. The masonry exterior was restored and the interior was gutted and refitted with classrooms, offices, and hi-tech labs. There was no existing elevator in Oglebay Hall— new shaft was inserted into the existing building. Intensive mechanical systems were also integrated into the building utilizing the existing attic and ventilation chimneys avoiding any impact on the building exterior.

Elevator type: Gearless traction; Manufacturer: Kone

Scope of Services: Programming, Architectural Design including coordination of state-of-the-art labs, Contract Administration, LEED Documentation

Project Size & Costs

50,000 sf renovation

Construction Cost: \$19,778,000 (Pedestrian Bridge added to scope)

Owner's Proj. Manager: John Thompson, Assoc. Dir. Facilities Management; 304-293-3625; Morgantown, WV 26506

Contract Information: Completed August 2008



2. Project/Location: Turley Hall Renovation and Repurposing, Fairmont St. (Fairmont, WV)

Description: PWWG completed a comprehensive rehabilitation of 50-year-old Turley Hall on the campus of Fairmont State for repurposing as a Student Success Center, for use by the entire student body. As part of interior upgrades to the three-story building, one existing elevator was refurbished and upgraded with new controls, and a new elevator was inserted into an existing curtain wall, requiring unique structural adjustments and reinforcement of the adjoining floor plates. One side of the new shaft and cab were faced with glass.

Elevator type: Existing — Hold Hydraulic, Manufacturer: Schindler; Modernized with Otis installed components

New Elevator — Machine room-less traction; Manufacturer: Otis

Scope of Services: Programming, Architectural Design, Interior Finish Upgrades, Signage, Contract Documents, CA

Project Size & Costs

40,000 sf

Construction Cost: \$5.6 million

Owner's Proj. Manager: Rick Porto, VP Administrative and Fiscal Affairs, Fairmont State; 304-367-4111; 1201 Locust Ave Fairmont, WV 26554

Contract Information: Completed August 2013



3. Project/Location: Shaw Hall Renovation—West Liberty Univ. (West Liberty, WV)

Description: Shaw Hall was constructed in 1919 and is listed on the National Register of Historic Places. PWWG coordinated a full renovation and adaptive reuse of the building to house the university's administrative offices. The scope included creating a new passenger elevator where none existed, coordinating comprehensive MEP upgrades, and upgrading all finishes. All work was done in conformance with the Secretary of the Interior's Standards for the adaptive reuse of historic structures.

Experience Completing Projects of Similar Size and Scope (cont.)

Perfido Weiskopf Wagstaff + Goettel



Elevator type: Traction, machine room-less; Manufacturer: Schindler

Scope of Services: Programming, Architectural Design, Furniture and Office Systems Layout, Contract Documents, CA

Project Size & Costs

32,000 sf

Cost of Construction: \$3,999,999

Owner's Proj. Manager: Jack Wright, Executive VP; 304-336-8180; 208 University Drive West Liberty, WV 26074

Contract Information: Completed June 2012



4. Project/Location: Little Sisters of the Poor 1923 Building Renovation (Pittsburgh, PA)

Description: This phased redevelopment of the Pittsburgh campus of LSOP included the complete gut, renovation and restoration of a historic 1923 Building to undo work not sympathetic to the original classical design. The scope of work comprised forensic repairs to windows, doors and exterior masonry, and a total overhaul of all MEP systems. PWWG also upgraded a passenger elevator, installing a new custom size cab into an existing shaft, with new hoistway doors and a remote machine room. This structure, as repurposed, now houses administration and support services for all residents, senior day activity areas, and the private convent for all the Sisters.

Elevator type: 5-stop, holed hydraulic; Manufacturer: Otis

Scope of Services: Programming, Architectural Design, Contract Documents, CA

Project Size & Costs

72,600 sf

Construction Cost: \$7,200,000

Owner's Project Manager: Sister Mary Vincent, Mother Superior 412-761-5373; 1028 Benton Ave Pittsburgh, PA 15212

Contract Information: Completed Fall 2008

Additional Information: Associated Builders and Contractors, Western PA Chapter "Excellence in Construction, Award of Merit"



5. Project/Location: 21c Museum Hotel, Cincinnati (Cincinnati, OH)

Description: The 100-year-old 10-story 156-room former hotel in the heart of downtown Cincinnati required extensive exterior rehabilitation and reconfiguration of all interior spaces including new systems, elevators, and infrastructure to house a 21st century program of guest rooms, meeting and conference rooms, spa, rooftop lounge, and a signature restaurant. Elevator upgrades included the following scope of work: Removed 1 elevator from an existing bank of 3, infilled openings at each level and added new masonry hoistway wall for 12 floors; For the remaining 2 elevators, PWWG replaced all equipment, stripped the cabs down to just the platform and rebuilt with new custom finishes (commissioned mirror art pieces) and controls. PWWG also reworked equipment rooms to comply with latest code requirements, e.g. installing a 2 hour rated wall. In addition, we replaced an existing manually operated corner post freight elevator with new service rated elevator (front opening only). PWWG worked with our WV General Services team member Bruce Powell to establish controls. The building was recently listed on the National Register of Historic Places.

Elevator type: Traction; Manufacturer: Thyssen Krup

Experience Completing Projects of Similar Size and Scope (cont.)

Perfido Weiskopf Wagstaff + Goettel

Scope of Services: Preservation Research, Forensic Investigation, Architectural Design, Contract Documents, Contract Administration

Project Size & Costs

159,000 sf

Construction Cost: \$28,000,000

Owner's Proj. Manager: Ron Carmicle, The McCall Group (owner's representative for 21c projects); 502.361.9268; 7112 Gerber Ave., Louisville, KY 40214

Contract Information: Completed 2012



6. Project/Location: 21c Museum Hotel, Durham (Durham, SC)

Description: PWWG is Executive Architect for the complex conversion of the 17-story Hill Building, an office building in downtown Durham, North Carolina to a 21c Museum Hotel. The historic building was designed by Shreve, Lamb, and Harmon, the firm best known for the Empire State Building. The Durham 21c will have 120 guest rooms, a restaurant, bar, meeting rooms, and multi-purpose ballroom. The project is currently in Construction Documents. Upgrades are being coordinated for three different sets of existing elevators throughout the building: a low-rise bank with historic tin finishes serving floors 1-6; a high-rise bank requiring new card swipe access controls serving floors 1-15 of the tower; and a low-rise bank serving the retail area, spa, and restaurant. A new 2-story service elevator is also being added. PWWG is working with our WV General Services team member Bruce Powell to establish controls to serve the new bustling hotel and its mixed-use program.

Elevator type: Traction; Manufacturer TBD

Scope of Services: Preservation Research, Forensic Investigation, Architectural Design, Contract Documents, Contract Administration

Project Size & Costs

134,000 sf

Construction Cost: \$25,000,000 (Estimated)

Owner's Proj. Manager: Ron Carmicle, The McCall Group (owner's representative for 21c projects); 502.361.9268; 7112 Gerber Ave., Louisville, KY 40214

Contract Information: Expected completion: 2015



7. Project/Location: 21c Museum Hotel, Lexington (Lexington, KY)

Description: PWWG is the Executive Architect for conversion of the historic 15-story First National Bank Building in downtown Lexington, KY to a 21c Museum Hotel. The Lexington 21c will have approximately 90 guest rooms, a restaurant, bar, meeting rooms, and multi-purpose ballroom. Elevator upgrades include the following scope of work: Remove 1 of 3 passenger elevators; Refurbish the remaining 2 existing geared traction passenger elevators with new cabs and controls on existing platforms, with existing hoist equipment to remain; Add 1 new service elevator, creating a new shaft in the existing building. PWWG is working with our WV General Services team member Bruce Powell to establish controls.

Elevator type: Traction (at existing hoistway); Manufacturer: TBD

New service elevator: hole-less hydraulic, front and rear opening;

Manufacturer: TBD

Scope of Services: Preservation Research, Forensic Investigation, Architectural Design, Contract Documents, Contract Administration

Project Size & Costs

100,000 sf

Construction Cost: \$27,000,000

Experience Completing Projects of Similar Size and Scope (cont.)

Perfido Weiskopf Wagstaff + Goettel

Owner's Proj. Manager: Ron Carmicle, The McCall Group (owner's representative for 21c projects); 502.361.9268; 7112 Gerber Ave., Louisville, KY 40214

Contract Information: Expected completion: 2015



8. Project/Location: Courtyard by Marriott Adaptive Reuse (Pittsburgh, PA)

Description: This project involved renovating three buildings into one 8-story 182-room hotel in a National Historic District. Each of the existing buildings was a full depth (160 ft.) structure with no undeveloped open space and floor plates that did not align. To adapt the structures for hotel use, a light well was cut from the third floor to the full height of the building, and a garden was installed on the third floor roof. At the lobby, a single elevator bank was created with two new high-speed traction elevators leading from the front desk to the guest and meeting rooms. In addition to new shafts and pits, an elevator machine room penthouse was added above the existing roof.

Elevator type: Traction; Manufacturer: Schindler

Scope of Services: Forensic Investigation, Programming, Architectural Design, Contract Documents, CA

Project Size & Costs

158,000 sf

Construction Cost: \$14,000,000

Owner's Proj. Manager: David Heaton, Asst. VP Development, Oxford Development Corp. 412-261-1500; One Oxford Centre, Ste. 4500, 301 Grant St., Pittsburgh, PA 15219

Contract Information: Completed 2004

Additional Information: Master Builder's Association, Western PA Chapter "Excellence in Construction" Award; Pittsburgh Historic Review Commission Preservation Award; Preservation PA Construction Project Award



9. Project/Location: Labor and Industry Elevator Upgrades (Harrisburg, PA)

Description: The project involved the "overlay" of a new solid state elevator control system to replace the old fashioned relay logic controls for the car and group functions of two banks of elevators in a historic high-rise building, 4 high-rise and 4 low-rise. The work also included new car operating panels, installing hall call stations, and cab interiors, and coordinating all associated mechanical and electrical work. *Note: PWWG understands that this project falls outside the 10 year time period, however we have included it because Alan Weiskopf, Principal-in-Charge of your project, served as Project Architect for this modernization. Furthermore, this was a "stand alone" elevator modernization project that closely resembles the services that will be required for the General Services elevator upgrades.*

Elevator type: High speed traction; Manufacturer: Schindler

Scope of Services: Forensic Assessment, Architectural Design, Contract Documents, CA

Project Size & Costs

sf: N/A

Construction Cost: N/A

Owner's Proj. Manager: N/A

Contract Information: Completed 1986

Experience Completing Projects of Similar Size and Scope (cont.)

Perfido Weiskopf Wagstaff + Goettel



10. Project/Location: Pittsburgh International Airport, Airside and Landside Terminals Elevator Insertions (Pittsburgh, PA)

Description: The project included adding 2 new elevators in 2 different buildings at the airport, one at the Landside Building and one at the Airside Terminal Building. Both were done while the areas were in full operation. All new services were brought to the new elevator locations and structural modifications were made to the existing structure with minimal disturbance to the facility. The Landside elevator is a partial steel and glass enclosure with no shaft. The steel pipes of its fully exposed frame are sympathetic to the steel trusses that form the vaulted roof structure of the space. The Airside project posed unique challenges because it had to be installed above the level where baggage is handled on automated equipment, thus barring any new supporting structure or hydraulic cylinders that penetrated very far below the lowest landing which the elevator served. The Airside elevator also included security controls to limit access to the control center at the top floor.

Elevator type: Hydraulic at Landside; Telescoping hydraulic at Airside



Scope of Services: Architectural Design, Contract Documents, CA

Project Size & Costs

sf: N/A

Construction Cost: \$1,300,000

Owner's Proj. Manager: N/A

Contract Information: Completed 2004

References

Perfido Weiskopf Wagstaff + Goettel

1.

Turley Hall Renovation and Repurposing, Fairmont State (Fairmont, WV)

PWWG completed a comprehensive rehabilitation of 50-year-old Turley Hall for repurposing as a Student Success Center. As part of interior upgrades to the three-story building, one existing elevator was refurbished and upgraded with new controls, and a new elevator was inserted into an existing curtain wall, requiring unique structural adjustments and reinforcement of the adjoining floor plates. One side of the new shaft and cab were faced with glass.

Contact: Rick Porto, VP Administrative and Fiscal Affairs, Fairmont State; 304-367-4111; 1201 Locust Ave Fairmont, WV 26554

2.

21c Museum Hotels, Cincinnati/Durham/Lexington

PWWG is the Architect of Record for 3 comprehensive renovations and adaptive reuse projects of historic properties in dense urban settings for new use as upscale hotels and 24/7 museums. Each includes complex elevator upgrades and insertions to accommodate the new program of guest rooms, restaurants, and retail.

Contact: Ron Carmicle, The McCall Group (owner's representative for 21c projects); 502-361-9268; 7112 Gerber Ave., Louisville, KY 40214

3.

Shaw Hall Renovation, West Liberty University (West Liberty, WV)

Shaw Hall was constructed in 1919 and is listed on the National Register of Historic Places. PWWG coordinated a full renovation and adaptive reuse of the building to house the university's administrative offices. The scope included creating a new passenger elevator where none existed, coordinating comprehensive MEP upgrades, and upgrading all finishes. All work was done in conformance with the Secretary of the Interior's Standards for the adaptive reuse of historic structures.

Contact: Jack Wright, Executive VP; 304-336-8180; 208 University Drive West Liberty, WV 26074

4.

Carr Hall Renovation, Allegheny College (Meadville, PA)

Carr Hall, a legacy building from the 1960's, was renovated to create a new home for Allegheny College's nationally recognized Environmental Science Department. The Richard J. Cook Center for Environmental Science contains classrooms, teaching labs and faculty offices. The project deftly preserved the best elements of the existing building, while infilling an obsolete tiered lecture hall to capture additional floor area. The centerpiece of the renovation is the complete transformation of the entry experience including a lobby incorporating solar tube daylighting, sustainable materials, a living green wall with rain water irrigation, an aquaponics demonstration, and a specially commissioned wall sculpture. All HVAC, lighting and electrical systems were either upgraded or replaced to maximize human comfort and energy efficiency. PWWG completed this comprehensive renovation while the building was occupied.

Contact: Clifford Willis, Dir. Physical Plant; 814-332-5378; 520 N Main St, Meadville, PA 16335

5.

Hotel Indigo and Suites (Asheville, NC)

PWWG was the design architect for this high-rise hotel with a 13-story tower with 100 guest rooms plus 12 condominiums on the top four floors.

Contact: Dennis Pearson, Hospitality Lodging Investors; 412-821-0515; 419 Friday Road; Pittsburgh, PA 15209

SECTION 5
FORMS

State of West Virginia



Certificate

*I, Betty Ireland, Secretary of State of the
State of West Virginia, hereby certify that*

PERFIDO WEISKOPF WAGSTAFF + GOETTEL, LLC

Control Number: 94200

a professional limited liability company, organized under the laws of the State of Pennsylvania has filed its "Certificate of Authority" in my office according to the provisions of Chapter 31B of the West Virginia State Code. I hereby declare the organization to be registered as a professional limited liability company from its effective date of May 30, 2007 until the expiration of the term or dissolution of the company.

Therefore, I hereby issue this

CERTIFICATE OF AUTHORITY OF A PROFESSIONAL LIMITED LIABILITY COMPANY

to the professional limited liability company authorizing it to transact business in West Virginia under the name

PERFIDO WEISKOPF WAGSTAFF + GOETTEL, PLLC

*Given under my hand and the
Great Seal of the State of
West Virginia on this day of
May 30, 2007*

Betty Ireland

Secretary of State



RFQ No. GSD 146401

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 failure 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 exceeds 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 Wagstaff & Goettl

Authorized Signature: *Alan Weiskopf*
(Alan Weiskopf, Managing Principal)

Date: 7 August, 2013

State of Pennsylvania

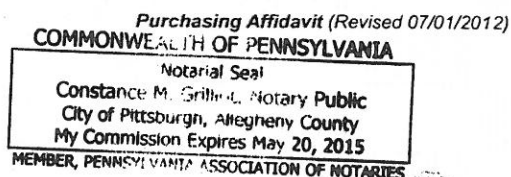
County of Allegheny, to-wit:

Taken, subscribed, and sworn to before me this 7 day of August, 2013.

My Commission expires May 20, 2015.

AFFIX SEAL HERE

NOTARY PUBLIC



PERFIDO
WEISKOPF
WAGSTAFF +
GOETTEL