

Expression of Interest:
Architectural & Engineering Services
St. Marys Correctional Center
RFQ# COR61531
June 12, 2012

RECEIVED

2012 JUN 19 AM 11:53

WW PURCHASING
DIVISION



405 Capitol Street, Upper Atrium - Charleston, West Virginia, 25301

p 1.304.346.0565 f 1.304.346.1522 www.silling.com

June 12, 2012

Tara Lyle
Purchasing Division
2019 Washington Street, East
P.O. Box 50130
Charleston, WV 25305-0130

Re: RFQ #COR61531

Dear Selection Committee Members:

Silling Associates, Inc. is pleased to submit an Expression of Interest to provide complete architectural/engineering design and construction administration services to the Division of Corrections for the St. Marys Correctional Center renovation project. We offer the Division of Corrections the most professional and experienced team of correctional facility design professionals in the state of West Virginia.

Silling Associates is the longest continuing architectural practice in West Virginia with origins dating to the early 1900s. We offer an unparalleled experience working with the Division of Corrections, Division of Juvenile Services, and the Regional Jail and Correctional Facility Authority, including work at ten major facilities totaling over 1.5 million square feet and 2,200+ beds of new construction, renovation, and adaptive reuse projects. This design experience includes the Industrial Home for Youth, Mount Olive Correctional Complex, St. Marys Correctional Center, Huttonsville Correctional Center, Stevens Correctional Facility, Martinsburg Correctional Center, and Pruntytown Correctional Center, to name a few. Most recently, we have completed (or are currently completing) various renovation and improvement projects at the Denmark Correctional, Anthony Correctional, Parkersburg Work Release, and Charleston Work Release Centers.

Complementing the architectural team will be Scheeser Buckley Mayfield, consulting mechanical/electrical/plumbing/civil engineers from Uniontown, Ohio and Shelley Metz Baumann Hawk, structural engineering firm from Columbus, Ohio.

Overall, Silling leads a design team comprised of 75+ design professionals with significant principal involvement, who will be dedicated to the successful design of the St. Marys Correctional Center project. We offer an extensive background in correctional facility design, an intimate understanding of state correctional facility operations, a creative and appropriate design approach grounded in the need for efficiency, economy, and security, rigorous attention to construction detail, and responsible administration of the construction contract.

We have enclosed a summary of our Design Team's qualifications for your review. We look forward to discussing our experience and approach to the St. Marys project in greater detail.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Thomas M. Potts', is written over a horizontal line.

Thomas M. Potts, AIA
President

Thomas M. Potts, AIA
Jody S. Driggs, AIA

EXHIBIT 10

REQUISITION NO.:

ADDENDUM ACKNOWLEDGEMENT

I HEREBY ACKNOWLEDGE RECEIPT OF THE FOLLOWING CHECKED
ADDENDUM(S) AND HAVE MADE THE NECESSARY REVISIONS TO MY
PROPOSAL, PLANS AND/OR SPECIFICATION, ETC.

ADDENDUM NO.'S:

NO. 1

NO. 2

NO. 3

NO. 4

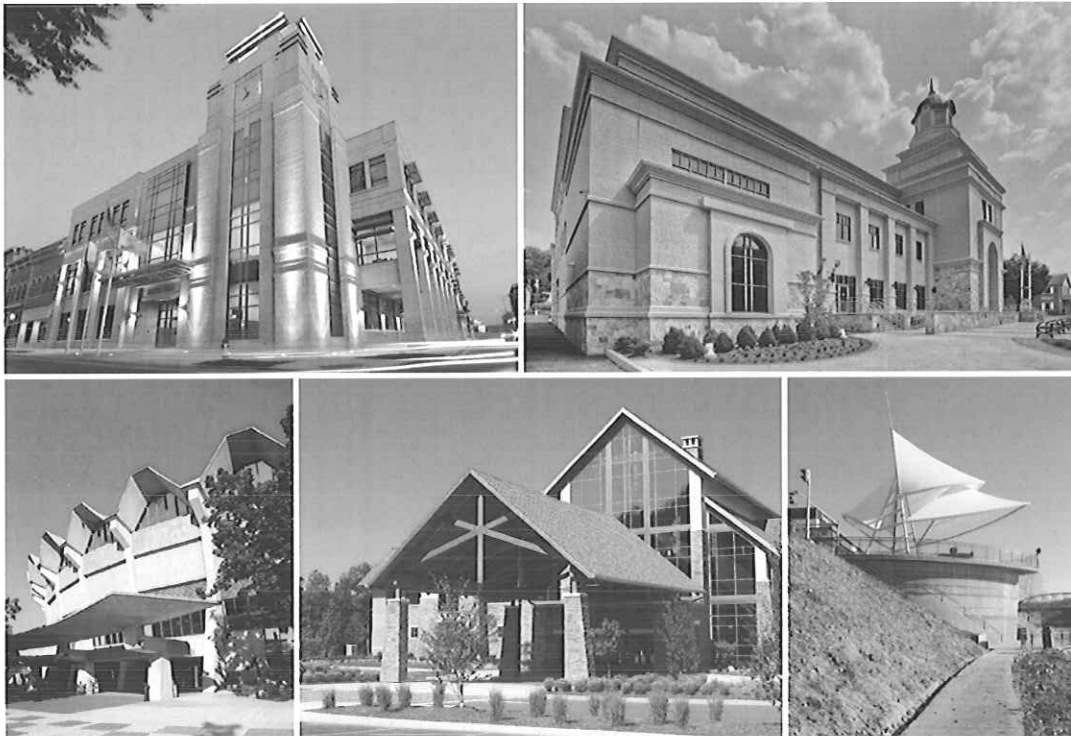
NO. 5

I UNDERSTAND THAT FAILURE TO CONFIRM THE RECEIPT OF THE
ADDENDUM(S) MAY BE CAUSE FOR REJECTION OF BIDS. VENDOR
MUST CLEARLY UNDERSTAND THAT ANY VERBAL
REPRESENTATION MADE OR ASSUMED TO BE MADE DURING ANY
ORAL DISCUSSION HELD BETWEEN VENDOR'S REPRESENTATIVES
AND ANY STATE PERSONNEL IS NOT BINDING. ONLY THE
INFORMATION ISSUED IN WRITING AND ADDED TO THE
SPECIFICATIONS BY AN OFFICIAL ADDENDUM IS BINDING.

.....
SIGNATURE

.....
Sillinger Associates
COMPANY

.....
6.12.2012
DATE



Silling Associates, Inc.
Architects + Planners
405 Capitol Street, Upper Atrium
Charleston, West Virginia 25301
p 304.346.0565
f 304.346.1522
web: www.silling.com

Number of Years in Business:
110 years

Firm Principals:
Thomas Potts, AIA
Jody Driggs, AIA

Total Employees:
19

Licensed Architects:
6

Graduate Architects:
3

Architectural success is measured by vision and an unwavering dedication to excellence. This axiom was the philosophical birth of Silling Associates Incorporated by H. Rus Warne in 1902. Following the lead of partners like Warne and its namesake, Cy Silling, the firm today has the proud distinction of being the oldest continuing architectural firm in West Virginia and one of the oldest in the eastern United States. Throughout, Silling Associates has woven itself into the very fabric of West Virginia, providing planning and architectural services that have touched the lives of virtually every citizen and delivering landmark projects collectively defining its built environment.

Whether through its early century beaux arts and neo-classical collection, its mid-century modern and post-modern portfolio, or its current contextual vocabulary, Silling has always been renowned as one of the premier architectural firms in the state. Today, Silling Associates continues to have a powerful impact on the region's architectural landscape through fresh, yet solid design and responsible project management.



Awards & Recognition:
2004 Honor Award for Excellence in
Architecture - Star USA Federal Credit
Union

2006 Merit Award for Achievement in
Architecture - James C. Wilson Union

2009 Honor Award for Excellence in
Architecture - Chesapeake Energy
Eastern Regional Headquarters

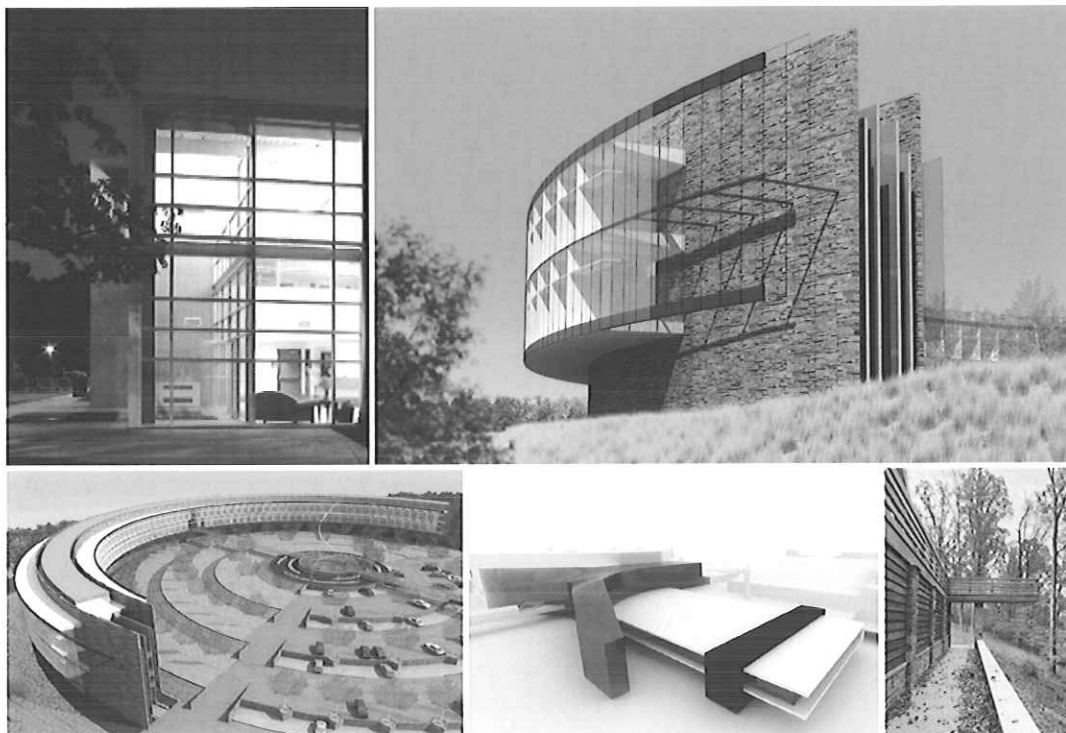
2010 Merit Award for Achievement in
Architecture - Bible Center Church

2011 Honor Award for Excellence in
Architecture - Haddad Riverfront Park
& Schoenbaum Stage

2011 Merit Award for Sustainable
Architecture - Private Residence

Silling Associates is a principal-led design practice, and the organizational structure of our firm is very much studio-oriented. The principals of our practice are actively engaged in all projects and routinely serve as daily project managers for all major design commissions. This structure ensures that first-hand project criteria, relayed directly from clients in programming and design review meetings, is directly applied to all work within the office; from conceptual design through construction detailing, specification writing, and construction observations services. Likewise, through this studio environment structure, all the talents and perspectives of the entire design and production staff at Silling are brought to each design task, allowing our firm to build multiple-person teams within the office to focus on a variety of projects simultaneously. Likewise, open sharing of project information, project status, and large picture scheduling of our workload allow architects, designers, and technicians to be informed on a number of current project needs and deadlines and cross-pollinate from job to job and task to task. This highly interactive and collaborative structure yield compelling design solutions, maintains client expectations throughout the process, and most importantly ensures quality through principal leadership.

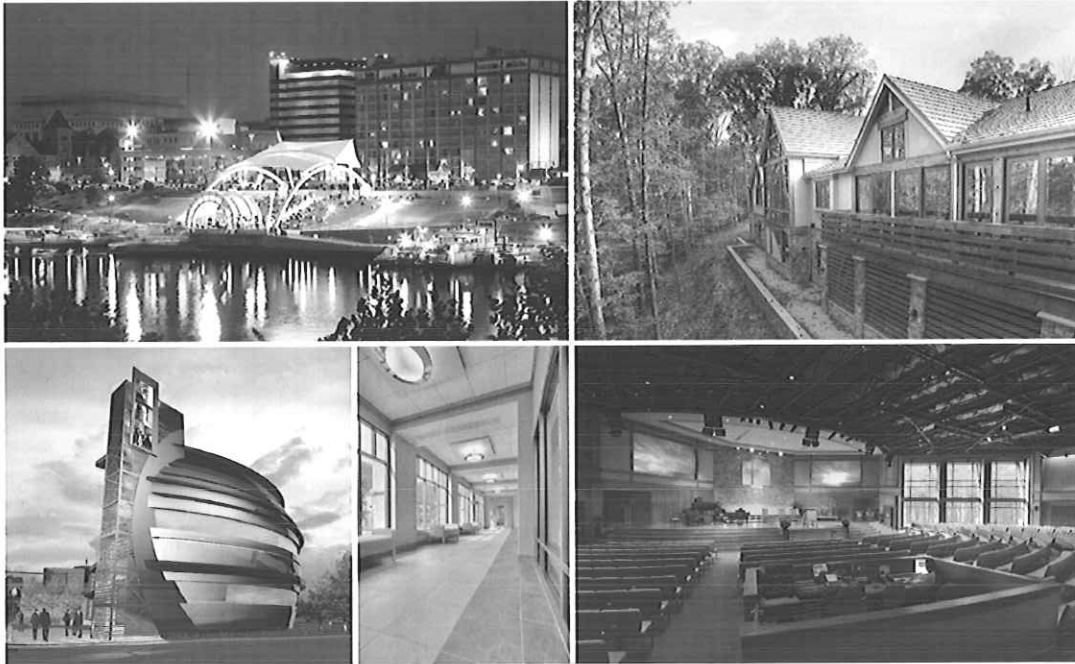
Our staff is comprised of six licensed architects with a combined 100 years of professional experience in design and project management. Each of these individuals bring unique qualifications, certifications, licensures, and professional service credentials, as well as a powerful resume of collegiate honors, graduate degrees, and community involvement. Three of our architects, including both partners, have served as current or past presidents of the West Virginia Chapter of the American Institute of Architects.



Today's dynamic marketplace demands versatility of the design professional. Silling Associates is structured to meet the needs of design/build, construction management, and the traditional design/bid/build delivery methods. Technology has driven the demand for increased design specialization. Collaboration and consensus are principles that are critical to the success of a project. Our staff has a track record of successful projects created both independent of, and in concert with, the most talented professionals within a given building type and engineering discipline. We are committed to delivering quality through understanding the nature of the project and composing the appropriate talents to achieve design excellence. At Silling we offer the following list of comprehensive architectural, planning, and interiors services:

- Feasibility Studies
- Master Planning
- Space Planning
- Architectural Programming
- Concept & Design Development
- Interior Design
- Furniture & Accessories Design
- Furniture & Accessories Specification
- LEED & Sustainable Design
- Construction Period Management
- Flexible Project Delivery

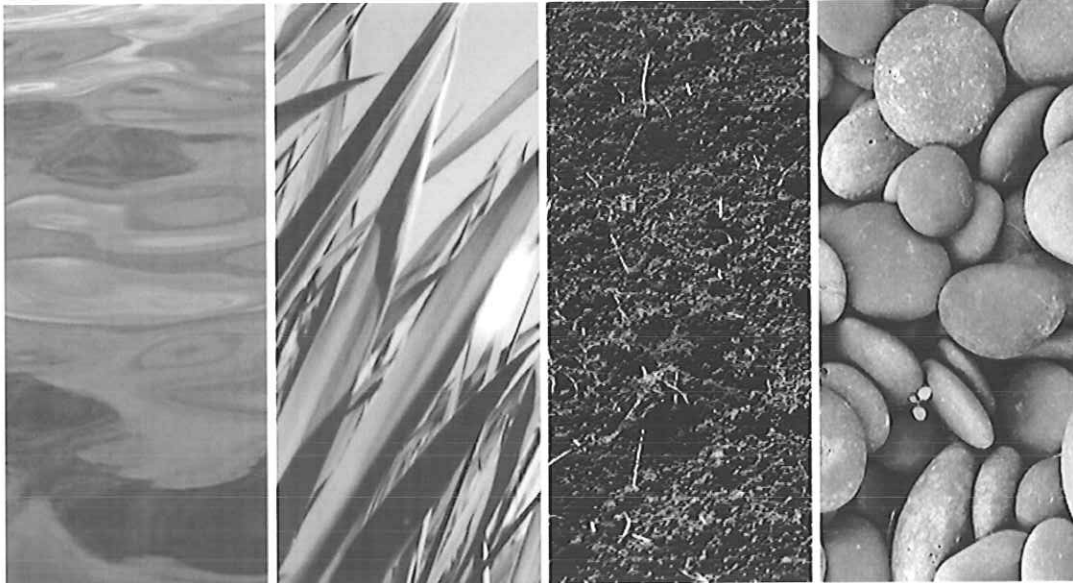
In addition, Silling routinely utilizes the services of some of the region's most qualified and talented engineering consultants, offering a proven history of project collaboration, seamless design integration, and excellent service to our clients.



As general practitioners of architectural design, Silling Associates has extensive recent and relevant, as well as historic, experience with virtually every building type imaginable. While we certainly have a core of project typologies that have evolved within our specific market demands, we have been highly successful through our flexibility and competencies to deliver excellent service for projects large and small, and in a broad range of uses. Recent projects include custom, sustainable design services for single family residences and residential additions, governmental projects ranging from small renovations to 100,000+ square foot new county facilities, new hotel and resort facility designs, state-of-the-art medical office centers, collegiate campus master plans, and new convocations centers and athletic arenas. In recent years, our firm alone has designed nearly 2 million square feet of building construction touching virtually every sector of building occupancy classification. At Silling, we are very proud of our diversity of design experience and our ability to create architecture that intimately speaks to our clients' missions, programs, budgets, schedules, sites, and their place in time.

Silling Associates offers a diverse range of planning and design leadership within the following core markets:

- **Architecture for Justice** - Courthouse, Judicial, Governmental Administration, Corrections, + Public Safety
- **Architecture for Learning** - Higher Education, Secondary Education, + Vocational Education
- **Architecture for Working** - Corporate, Governmental, Banking & Financial, Retail, & Hospitality
- **Architecture for Health & Wellness** - Hospitals, Medical Centers, + Medical Office Buildings
- **Architecture for Living** - Custom Residences, Loft Housing & Urban Living, + Condominiums
- **Architecture for Worship** - Worship Centers + Educational Centers
- **Architecture for Recreation** - Hotels & Resorts, Riverfront Development, + Athletic Recreation



Our philosophy about sustainability is based on an understanding that the environments where our clients live, work, learn, and play have a tremendous impact on their health, safety and well-being. Likewise, our work has a direct impact on the ecology of the locations where we build, the air we breathe, and the resources we consume to build. Our commitment to sustainability is evidenced by a fully integrated process where optimal design results derive from a long term project goal perspective which best serves the Triple Bottom Line of people, planet and profit combined with practical, yet sophisticated, technological solutions resulting in High Performance Buildings.

The High Performance Buildings we design embody these core design objectives:

- Site design with minimal disturbance to the landscape
- Stormwater management with no off-site discharge
- Rainwater capture for use as grey water
- Water conservation throughout the building
- Energy-conserving mechanical and electrical systems
- Renewable energy utilization
- Environment friendly products
- Indoor air quality enhancement
- Minimize operations and maintenance resources



As the building industry has shifted toward sustainability, various metrics have emerged which allows architects and the public they serve to both quantitatively and qualitatively measure each project's sustainable features. Silling has experienced staff working with two independent organizations which meter sustainability: the USGBC's LEED rating system and the more rigorous International Living Future Institute's Living Building Challenge. Using either rating system identifies your project's sustainable achievements and acknowledges your organization's leadership and commitment to people, planet and profit.



Thomas M. Potts, AIA
Principal

Tom is president of Silling Associates. A seventeen-year member of the firm, Tom has been a driving force in securing and implementing new work. He oversees projects from inception to completion, working closely with clients and contractors to insure the success of projects under his direction. He takes a "hands-on" approach to each and every project, working closely with clients to define and detail requirements for their facilities.

Tom's body of work includes architecture for local, state, and federal government entities, educational institutions, healthcare providers, corporate and professional organizations, and residential clients. He has considerable experience in the design of justice facilities, including courthouses, judicial centers, and correctional institutions. With over 1 million square feet of justice-related designs under his belt, Tom has led the firm's efforts in making Silling a regional leader in the field of justice architecture.

Professional Experience
22 years

Education

-Bachelor of Architecture
with High Honors
University of Tennessee, 1990

Licenses & Certifications
-WV, VA

Professional Affiliations

-Past President, American
Institute of Architects (AIA), WV
Chapter, 2006-2007
-Past Vice President, AIA, WV
Chapter, 2004-2005
-AIAWV Executive Committee
Member
-Academy for Justice Architecture,
American Institute of Architects

Awards & Recognition

-2004 AIAWV Honor Award,
Star USA Federal Credit Union

Select Experience

Morgan County Courthouse
Berkeley Springs, WV

Raleigh County Judicial Center
Beckley, WV

Hampshire County Judicial Center
Romney, WV

Greenbrier County Courthouse
Lewisburg, WV

Lewis County Judicial Center
Weston, WV

Allegany County District Court
Cumberland, MD

Medina County Courthouse
Expansion
Medina, OH

Franklin County Courthouse
Chambersburg, PA

Mount Olive Correctional Complex
Mount Olive, WV

Huttonsville Correctional Center
Huttonsville, WV

Stevens Correctional Facility
Welch, WV

St. Marys Correctional Center
St. Marys, WV

Parkersburg Work Release Center
Parkersburg, WV

Martinsburg Correctional Center
Martinsburg, WV

Visual Arts Center
Marshall University

Student Recreation Center Study
Marshall University

Athletic, Convocation, & Academic
Center
West Virginia State University

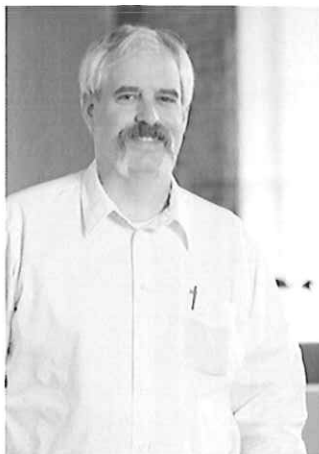
WV School of Osteopathic Medicine
Lewisburg, WV

Cabell County Courthouse, Circuit
Courtroom Renovation Study
Huntington, WV

Huntington VA Federal Credit Union
Huntington, WV

Mineral County 911 Center
Keyser, WV

Star USA Federal Credit Union
St. Albans, WV



Sean Simon, AIA

Construction Period Service Manager

Sean has twenty years' experience involving all phases of architectural programming, design, construction document production, and construction contract administration. Sean joined Silling in 2008 as a Construction Period Service Manager, working closely with the firm's production staff throughout the construction document phase and providing construction contract administration services. He is responsible for facilitating preconstruction meetings providing clear definition of project goals and owner expectations, reviewing contractor submittals, product samples, and shop drawings for conformance to the contract drawings and specifications, attending progress meetings to maintain clear communication with builders, observing installation of materials and systems to verify their conformance with the design intent, and monitoring the project schedule.

Professional Experience
20 years

Education

-Bachelor of Architecture
University of Tennessee, 1992

Licenses & Certifications

-WV, MD, PA, OH, VA

Professional Affiliations

-American Institute of Architects
(AIA), WV Chapter

Civic Involvement

-Cub Scoutmaster for Pack 434, Unit
Commissioner for Little Kanawha
District, Allohak Council

Select Experience

Joan C. Edwards Fine Arts Building
Renovation, Marshall University

Athletic, Convocation, & Academic Center
West Virginia State University

Multiple Boiler & Chiller Replacements
West Virginia State University

Marsh Hall, Fine Arts Building, & Library
Renovations, Concord University

Chesapeake Energy Regional Field
Operations Facilities, PA & WV

Morgan County Courthouse
Berkeley Springs, WV

Hampshire County Judicial Center &
Courthouse Facilities Renovations
Romney, WV

Raleigh County Judicial Center
Beckley, WV

Mardi Gras Casino Resort Hotel
Cross Lanes, WV

Putnam County Courthouse Renovations
Winfield, WV

Sullivan Hall Elevator Replacement
West Virginia State University

Huttonsville Correctional Work Camp
Huttonsville, WV

Anthony Correctional Center
White Sulphur Springs, WV

Kanawha Valley Heart Specialists
South Charleston, WV

Kanawha Valley Heart Specialists
South Charleston, WV

Huntington Pediatric Dentistry
Huntington, WV

West Virginia Lottery Headquarters
City Center West Renovation
Charleston, WV

Parkersburg Work Release Center
Parkersburg, WV

Putnam County Animal Shelter
Winfield, WV



Jeremy Jones, AIA
Project Architect

Jeremy is a graduate architect with nine years' experience in the architectural industry, including all phases of project design, development, production, presentation, and coordination of contract documents. He has completed all IDP training requirements and has passed the exam for licensure through the National Council of Architectural Registration Boards. Jeremy's educational experience included a study abroad of European Architecture at the Polytechnic Institute of Krakow, Poland, spring semester of 2002. Travel included Austria, Germany, the Netherlands, Italy, England, France, the Czech Republic, and Spain.

Select Experience

Allegany County District Court
Cumberland, MD

Lewis County Judicial Center
Weston, WV

Haddad Riverfront Park
Amphitheatre, Stage, & Canopy
Charleston, WV

WVDOC Work Release Centers
Multiple Locations, WV

Chesapeake Energy Eastern Regional
Headquarters, Charleston, WV
Chesapeake Energy Building One
Oklahoma City, OK

St. Johns United Methodist Church
Spencer, WV

Jefferson County Courthouse
Charles Town, WV

St. Matthews Episcopal Church
Charleston, WV

Kanawha Valley Heart Specialists
South Charleston, WV

Dr. Holmes Orthodontist
Charleston, WV

Morgan County Courthouse
Berkeley Springs, WV

Beverly Hills Baptist Church
Huntington, WV

Raleigh County Judicial Center
Beckley, WV

Governor's Mansion Restoration
WV State Capitol Complex

WV Lottery Headquarters
Charleston, WV

New Health & Technical Center
Southern WV Community College

Cabell County Circuit Courtroom
Huntington, WV

Professional Experience
9 years

Education

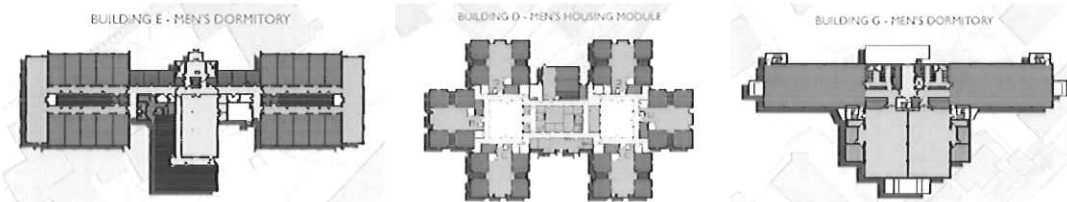
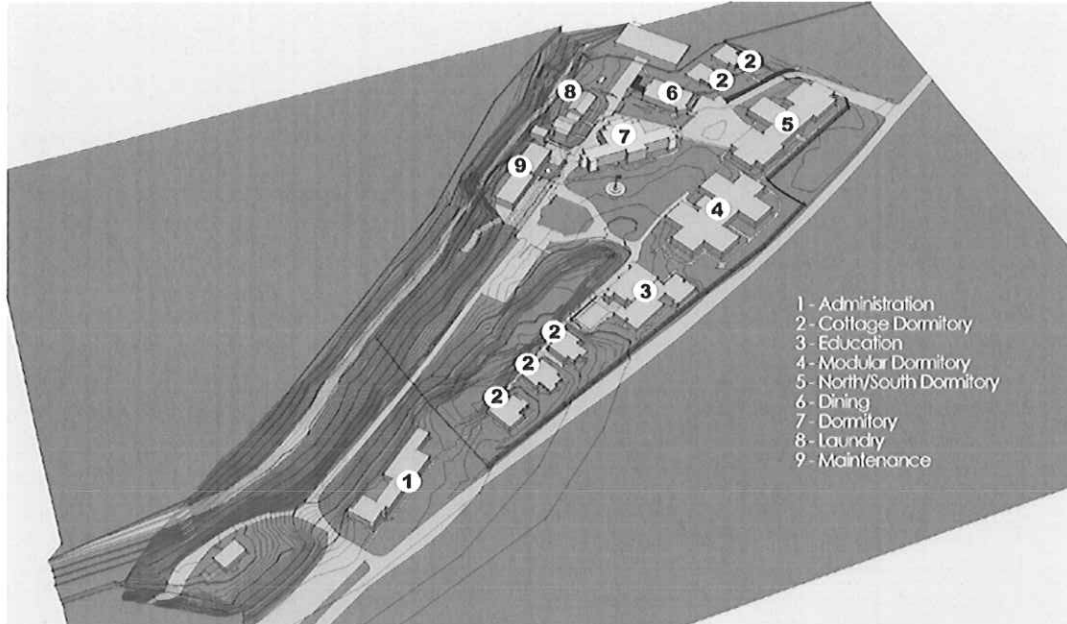
-Bachelor of Architecture, Cum Laude
The University of Tennessee 2003

Professional Affiliations

-American Institute of Architects
WV Chapter
-Historic Resources Committee

Awards & Recognition

-Fourth Year Design of Excellence
Award, top design fourth year level
-2002 West Virginia AIA Scholarship,
state's top architectural student
award
-2001 & 2002 Mark Freeman
Scholarships, architecture program's
top monetary award
-2001 U.T. Foreign Travel Scholarship
-2000 Tennessee Foundation
Scholarship, Middle Tennessee AIA
award
-Tau Sigma Delta Architecture Honor
Society
-Golden Key International Honor
Society
-National Collegiate Scholar
-Phi Eta Sigma Honor Society,
freshman honorary
-Phi Kappa Phi Honor Society,
senior honorary



Project Size: Combined 100,375+ gsf

Project Type: Additions/Alterations

Project Status: Completed in 1999-2004

Contacts: Mr. William M. Fox,
WV Division of Corrections, 304.684.5500

The St. Marys Correctional Center is a low medium security facility that was converted in 1998 from an existing state facility for the mentally and physically handicapped. Silling was responsible for the design of renovations to the existing 13 major buildings on the campus, and underground utilities in phases as funding was secured.

Phase I consisted of renovations to four cottage dormitories, the modular dormitory, and the laundry. The existing facilities were upgraded from non-secure facilities and involved interior renovations, MEP, as well as physical and electronic security improvement. Construction was completed in 1998.

Phase II involved the placing of all utilities below grade with a campus duct bank loop routing power and communications; new water supply and sewer lines; and high mast lighting. Construction was completed in 2001.

Phase III involved renovations to the North/South Dormitory. Renovations to the existing building included interior upgrades, MEP, and physical and electronic security.

Phase IV consisted of the addition and renovation of the existing Dining Hall, increasing the seating capacity to 200 inmates. Renovations to the existing building included interior upgrades, MEP, and physical and electronic security.



Project Type: New Construction & Renovations

Project Cost: \$26.8 Million

Project Status: Awaiting Funding

Contacts: Jim Rubenstein, Commissioner,
WV Division of Corrections, 304.558.2036

This present scope of work represents the final components of the Master Plan for the St Marys Correctional Center as reflected in the November 1, 1998 planning document prepared by Silling Associates reflecting the vision of the WV Division of Corrections.

Phase 1 - Site Development to include the new underground storm and earthwork completed; Demolition and construction of the new Administration Building - should be completed to allow administrative offices to be relocated from building 74; Construction of 20,000 SF Prison Industries/Vocational Education Building; Construction of Segregation Housing Building.

Phase 2 - Renovation of Building 74 to accommodate education and other program space from building 83.

Phase 3 - Renovation of Building 83.



Project Type: Renovations

Project Status: Complete

Project Cost: Various

Contact: Philip Farley, Construction
Manager, WV Division of Corrections,
304.558.2036

Water Line Installation - This project involves the installation of approximately 3,900 LF of 3 inch raw water line; approximately 100 LF of 2 inch water line; one (1) raw water lift station; and well head upgrades. The installation of a new well pump and upgrade to the existing well head which includes extending the casing pipe and a concrete well head protection structure. This construction will include all necessary valves, controls and appurtenances. The new water well will be piped to the existing raw water tank and tied into the existing valve box.

Water Treatment - This \$549,549 project involves the installation of approximately 355 LF of 1.5 inch and 125 LF of 2 inch raw water line; approximately 100 LF of 2 inch water line; one (1) 18,000 gallon raw water storage tank. There will be a 42 GPM treatment plant influent pump station. There are will be two (2) 20 GPM packaged water treatment plants with each plant having single stage flocculation, tube settler and mixed media filter and new chemical mixing equipment; chemical feed equipment for alum, hydro chlorite, potassium permanganate and polymer. There will also be a 2,500 gallon backwash vault with a submersible pump. This construction will include all necessary valves, controls and appurtenances. The 3 existing wells will be piped to the new 18,000 gallon raw water tank. Piping will be switched over in a manner that water production is stopped no more than 24 hrs. The existing water treatment facilities and piping will be abandoned in place. The new water treatment plants will pump the water to the existing storage tank for distribution.

Waste Water Improvements - This \$491,000 project involves improvements to the existing waste water treatment facility.

Huttonsville, WV

Huttonsville Correctional Center



This \$1.9 million project involves 1) miscellaneous fire and life safety upgrades to the existing facility; 2) addition to the existing inmate housing; 3) modifications to the existing dormitory-style housing; 4) new/replacement roofing.

Mt. Olive, WV

Mount Olive Correctional Complex



This \$4.5 million project involves the installation of a new electrical substation, building transformers, and distribution wiring at the Mount Olive Correctional Complex, Mount Olive, West Virginia.

Martinsburg, WV

Martinsburg Correctional Center



This \$598,281 project involves an addition to the existing Martinsburg Correctional Center for administrative and meeting room space as well as additional parking area.

Grafton, WV

Pruntytown Correctional Center



This \$1 million project involves earthwork, gravel pad, compound fence, packaged engine generator set, weatherproof enclosure, related generator switchgear, transformers, and overhead and underground power distribution.

Parkersburg, WV

Parkersburg Correctional Center



This \$8 million Parkersburg Work Release Center project involved the conversion of a former Holiday Inn in Parkersburg by the West Virginia Division of Corrections to a 120-bed work release center. The existing hotel is a two-story building with 142 regular size hotel rooms and seven larger suites. The hotel rooms are "wet" rooms with toilet, sink and a tub/shower combination. The facility is located on an approximate 23-acre site that includes access road, parking and a small metal building. The design of the work release center will be the 1st phase in a long-term approach to facility use which may be converted to a medium security correctional facility. The design scope includes Medium Security Facility Master Planning so that provisions for future infrastructure can be made in the immediate scope of construction.

Charleston, WV

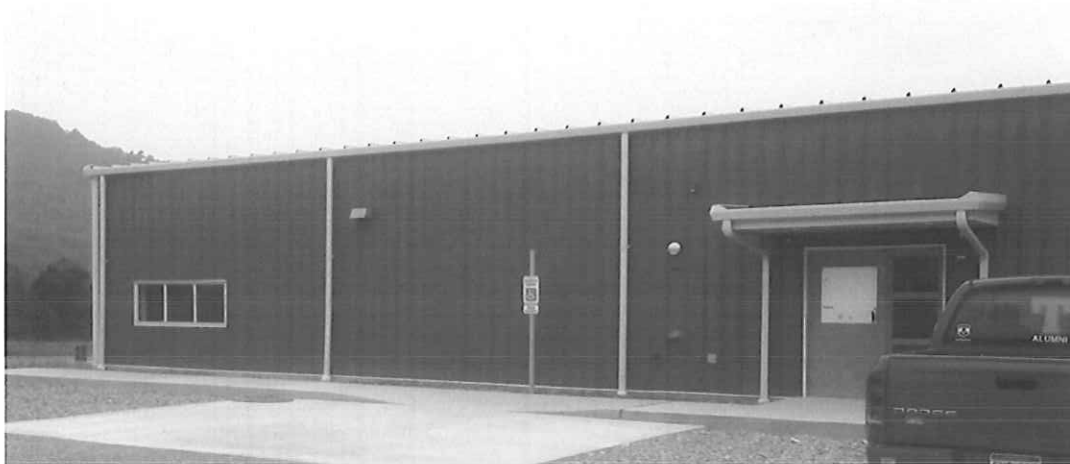
Charleston Correctional Center



This \$8.5 million project involved the adaptive reuse of existing 40,000 sf office building with complete HVAC and electrical upgrades. Facility accommodates 96 beds for work release division, and 32 beds for RSAT program. Sleeping rooms are arranged on exterior walls for natural light transmission. Other inmate space provisions include new restrooms, classrooms, library, laundry, and dayroom areas. Interior fit-out also includes full scale commercial kitchen, dining room, vehicular sally port, holding cells, administrative offices, visitation spaces, locker rooms, and conference rooms. Entire site is monitored with CCTV surveillance cameras and secured through new access control door hardware. Building will also serve as new home to the Charleston Parole Board on the first floor.

Huttonsville, WV

Huttonsville Correctional Center Work Camp



This latest addition to the Huttonsville Correctional Center campus provides a new, 5,400 square foot work camp housing 48 inmates for the WV Division of Corrections. The facility also includes an open multi-purpose room which will serve as a day room and dining area, two C.O. offices, a full warming kitchen, showers and toilets, and laundry room.

Beckley, WV

Beckley Correctional Center



The design and construction of a new grease trap interceptor at the existing Beckley Correctional Center.



Project Size: 425,000 gsf

Project Type: New Construction

Project Status: Completed in 1995

Contacts: Mr. Steve Cantebury,
Administrative Director
WV Supreme Court
304.558.0145

Mount Olive is West Virginia's primary correctional facility with a capacity of 800 adult male inmates. It is a 425,000 sf campus of fifteen buildings arranged in a classic fan shape arrangement inside a secure compound. The building inventory included medium, maximum and minimum security housing with typical support facilities such as education, recreation, prison industries, kitchen and dining, visitation, intake and classification, medical, and administration. The 80-acre former strip mine site which had uncontrolled mine overburden fill had been deep mined below, requiring extensive study and engineering to design several different foundation structural systems. The

infrastructure and support services were designed for future growth and can accommodate 240 additional beds when needed.

"The Mount Olive complex is not extravagant; it is something totally different. The beauty lies in a public building which constitutes the best evidences of the character of material, success and solidarity, culture and true civilization of the State of West Virginia. It is a stoic and durable structure; proof positive of our great faith and devotion, spirit and values." --Gregory K. Lipscomb, Upper Kanawha Valley Economic Development Authority





Project Size: 47,000 gsf

Project Type: Adaptive Reuse of Former Hospital

Project Status: Completed in 2006

Contacts: Jack Caffrey, Economic Development Authority,
304.436.5291

The Stevens project was an endeavor of the McDowell County Economic Development Authority to convert a former hospital into a state correctional facility. Renovations and additions resulted in housing for 334 inmates and support facilities including classrooms, administration, medical, kitchen and laundry.

Each wing of the four-story 1976 building becomes a housing unit consisting of 46 inmates in double-bunk cells constructed of CMU. Each housing unit shares a secure indirect supervision unit that promotes efficient staffing and inmate control. Dining, education and administration are located on the ground floor in captured open vehicular circulation space beneath the wings of the 1976 building. Vertical inmate movement and perimeter building/site security is monitored by a master control unit strategically located on the ground floor in the heart of inmate circulation. Master control has direct visual observation of visitation, outdoor recreation, dining and education entrance. The facility features state of the art electronic security video surveillance and perimeter management system.

The \$12 million project featured a total reconstruction of all interior architectural, mechanical, electrical, fire protection, and communications systems into the shell of the abandoned hospital.





Project Size: Combined 115,000 gsf

Project Type: New Construction

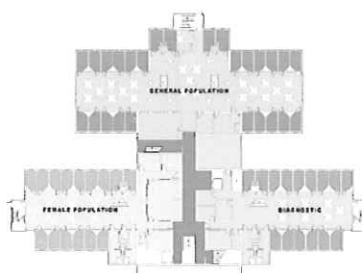
Project Status: Completed in 2001

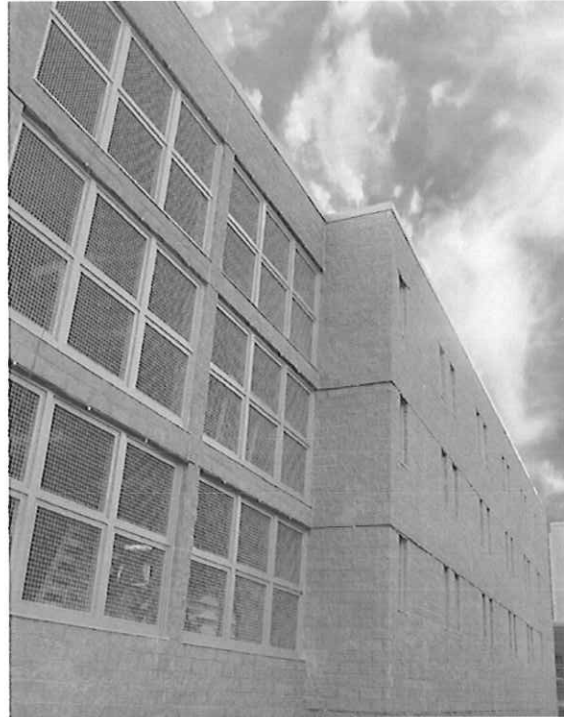
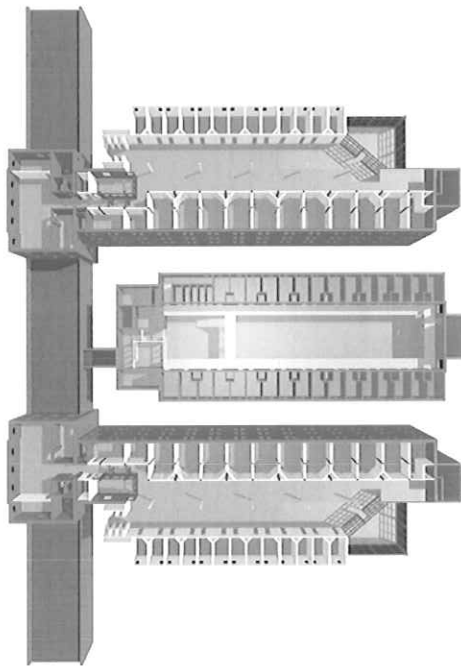
Contacts: Mr. Steve Canterbury,
Administrative Director
WV Supreme Court
304.558.0145

The existing Industrial Home for Youth is a secure compound. In 1999 the facility had a resident capacity of 115 with an inventory of seven structures located along the contours of two distinct ridges. The 2000 additions included a 200 bed, 100,000 sf housing building and a 15,000 sf educational building to a very limited campus site.

Operationally, the housing building called for a design that greatly minimized supervision while maximizing security. Thus, one housing building with limited circulation and a primary security control point was favored over independent housing units. This decision brought on the challenge

of developing a building which fit the existing campus in terms of scale and mass within the limited possible footprint of the building site. The resulting solution is a structure that is layered on the existing site. The front entry element is a one and two story mass that relate in scale to the adjacent buildings. It begins to increase in scale deeper into the building and rises toward the middle and rear consistent with the slope of the contours. Programmatically, the building contains six housing units; main campus kitchen and dining; gymnasium and recreation spaces; campus administration; intake; campus central control; and staff services. Housing units are direct supervision and vary in size from twenty to fifty residents. The higher security units are placed on the upper level to efficiently manage residents via a common central control. Each housing unit is designed with private resident rooms; toilets and showers; counselors' and unit managers' offices; and a covered outdoor recreation area grouped around a central dayroom.





Project Size: 74,500 gsf

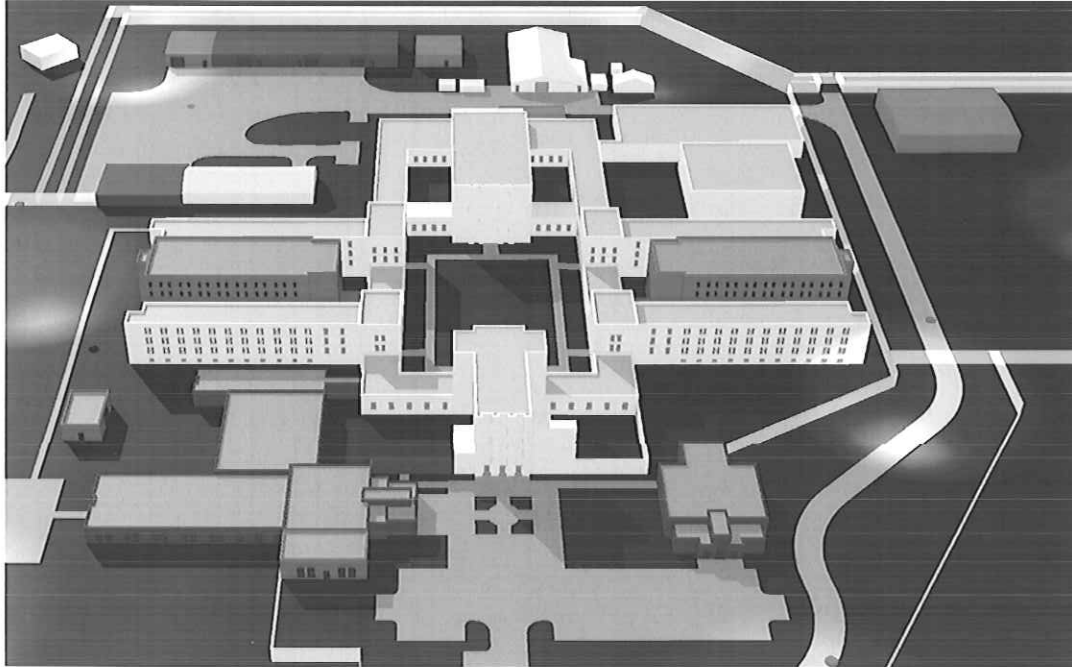
Project Type: Additions/Alterations

Project Status: Completed in 2007

Contacts: Mr. Steve Canterbury,
Administrative Director
WV Supreme Court
304.558.0145

Completed in early 2007, the Dormitory Addition and Renovation project involved a creative lateral expansion of the two three-story dormitory wings and converting them from open, dormitory style housing into more secure two- and six-man housing cells. The primary objective of this phase is to add 200 beds while increasing both staff efficiency and safety. The conversion increases each floor from 45 to 80 inmates, while maintaining current staffing patterns and introducing effective direct supervision. Six-man cells are developed inside the footprint of the 1938 section with steel cell walls that can be accommodated by the existing structural system. Two-man CMU cells are developed within the new footprint. All cells are wet with electronically controlled stainless steel combination toilet/lav units that minimize utility maintenance costs. Secure direct access recreation areas support effective management, allowing inmate outdoor access without mixing population with other housing units.

As second phase of the project included the replacement of two existing 1975 fuel oil 600hp Cleaver Brooks boilers and related support, including electrical service, deaerator tanks, and water softeners. A third phase of the project involved the replacement of the institution's kitchen concrete floor slab, which had suffered extreme deterioration, including cracked beams, erosion and spalling of the concrete from the joists, and exposed and rusted steel reinforcing. Our design solution included the temporary closure of the kitchen during structural repairs, the removal and temporary storage of existing kitchen equipment, the demolition and replacement of nine structural bays with a new elevated slab, new kitchen flooring, and new electrical conduit and mechanical piping.



Project Size: 101,875 gsf

Project Type: Additions/Alterations

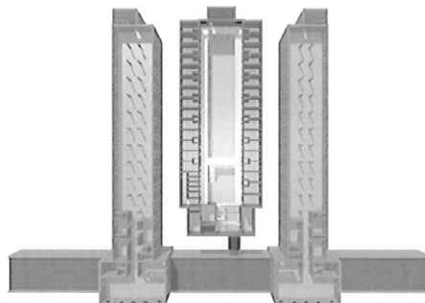
Project Status: Completed in 2000

Contacts: Mr. Steve Canterbury,
Administrative Director
WV Supreme Court
304.558.0145

Originally designed by Tucker and Silling Architects (a forerunner to Silling Associates) in 1938, the Huttonsville Correctional Center has undergone numerous renovations and additions to maintain its usefulness as a primary WV adult male correctional facility.

The Huttonsville Correctional Center Cell Block Addition project involved additions and renovations totaling a combined 101,875 square feet and included two, 120-bed medium security cell blocks placed between the existing dormitory components and linked to the primary corridor system.

Additional project components included prison industries, vocational education, administration renovation and addition, security tower, chapel, laundry renovation and addition, kitchen renovation, security fence and high mast lighting, clinical facilities renovation, and mechanical upgrades. The total construction cost was \$14,048,000 and the project was completed in 2000.





Project Size: 47,400 gsf

Project Type: Renovations

Project Status: Completed in 2004

Contacts: Mr. Steve Canterbury,
Administrative Director
WV Supreme Court
304.558.0145

This \$2.9 million project involved the conversion of the original 45,000 SF regional jail into an intake facility of Corrections. The facility houses 120 inmates for Classification. The renovations included upgrades to the mechanical and electrical systems, physical security, and addition of intake administrative space. Construction was completed in 2005. In 2008, Silling provided comprehensive design service for a 2,400 square foot addition to the Center, featuring a large conference/meeting-room, administrative offices, and hallway. The project also involved the expansion of the parking area, adding twentyfive for the West Virginia Division spaces.





Scheeser Buckley Mayfield
Mechanical, Electrical, Plumbing, Civil, + Telecom Engineering



Scheeser Buckley Mayfield LLC
1540 Corporate Woods Parkway
Uniontown, OH 44685
P 1.330.896.4664
www.sbmce.com

Number of Years in Business:
53 Years

Firm Principals:

Michael P. Wesner, PE, LEED AP
James P. Kulick, PE, LEED AP
James E. Eckman, PE, LEED AP
Marlon C. Hathaway, PE, LEED AP
Kevin M. Noble, PE, LEED AP
Chris J. Schoonover, PE, LEED AP
Vincent J. Feidler, PE, LEED AP
Chad B. Montgomery, PE, LEED AP
Joshua J. Roehm, PE, LEED AP
Ronald R. Radabaugh, PE, LEED AP

Total Employees:
44

Licensed Engineers:
14

Graduate Engineers:
11

Scheeser Buckley Mayfield LLC is a regional consulting engineering firm that serves clients throughout West Virginia, Ohio and the surrounding states. The firm was established in 1959 by Walter L. Scheeser and Edwin J. Buckley, specializing in the design of mechanical systems for the construction industry. The firm has enjoyed a steady growth in clients and geographical area served throughout its history, and its services now include electrical, civil, and telecommunication design. Scheeser Buckley Mayfield is entering its 50th year of operation.

Scheeser Buckley Mayfield LLC has developed an outstanding reputation for both its accessibility to its clients and the clarity and completeness of its documents. The firm has been a leader in the application of new technology. It has extensive experience in the design and analysis of projects of all sizes, which it can draw upon for future projects. Each project requires an analysis of the most cost effective system available based on the client's design parameters. It is also the responsibility of the design team to determine if other options exist which may be beyond the scope of the current budget and which need to be considered on the current project to allow for future growth. Scheeser Buckley Mayfield LLC gives this personal attention to each project by determining the project design which can be implemented within the client's budget while applying innovative design concepts.

Many of Scheeser Buckley Mayfield's projects originate from clients who have used its services previously and wish to continue a professional association. Scheeser Buckley Mayfield LLC strives to provide very professional and competent engineering services to all of our clients and to develop a personal relationship with these clients. This on-going association with clients provides an opportunity for them to better understand design concepts as well as the logic behind the decisions which may affect their systems for many years after the project's completion.



Resumes

KEVIN M. NOBLE, P.E., LEED AP

Principal – Civil / Plumbing Engineering



Mr. Noble attended the University of Akron where he received his Bachelor of Science degree in Civil Engineering in 1987 and continued his education through night school to receive his Masters of Business Administration from Averett College in 1991.

After graduating with a Civil Engineer degree, Mr. Noble accepted a position as a Water Resource Engineer at Dewberry & Davis, Inc., a top fifty engineering firm located in Washington, D.C. Mr. Noble was assigned to work on the firm's contract with the Federal Emergency Management Agency. His responsibilities included hydrologic and hydraulic analyses, flood plain delineations and storm water management facilities. Prior to leaving the company, he was promoted to project manager where he obtained valuable experiences in hydraulics and storm water control from projects involving the U.S. Army Corp of Engineers and Tennessee Valley Authority.

From Washington, D.C., Mr. Noble joined the staff of Elewski & Associates, Inc., a municipal civil engineering firm located in Independence, Ohio. There, he engineered a wide range of residential, commercial and industrial development projects and provided field support to facilitate timely completion of construction. Projects included public and private schools, athletic facilities, planned residential developments, multi-phased office parks, municipal building and retail centers. The site engineering involved design of water mains and pumps, sanitary sewers, force mains, pump stations and storm sewer and stormwater management systems. Prior to leaving, he was promoted to Village Engineer, in charge of plan review, infrastructure design, public work projects and construction inspection.

Mr. Noble joined Scheeser Buckley Mayfield LLC in early 1995 as a department head. Since that time he has participated and managed the design of numerous private and public civil and plumbing projects, including prisons, healthcare, utility companies, universities, municipalities, churches, schools and Federal Government. He attends local and national plumbing and civil conventions and seminars to stay in tune with current developing technologies.

Kevin is a LEEDTM Accredited Professional and is registered as a Professional Engineer in the State of Ohio, the State of West Virginia, the State of Florida, the State of South Carolina, the State of Pennsylvania, the Commonwealth of Virginia and the Commonwealth of Kentucky and is a member of the American Society of Civil Engineers, American Society of Plumbing Engineers, and the National Fire Protection Association.



Resumes

JAMES E. ECKMAN, PE, LEED AP, CBCP

President - Electrical Engineering



Mr. Eckman attended The University of Akron where he received his Bachelor of Science Degree in Electrical Engineering in 1984.

After graduation, Mr. Eckman began his career as a consulting engineer by accepting a position as junior engineer with Kucheman, Peters and Tschantz, Inc., an electrical consulting firm in Akron, Ohio. During this engagement, he gained experience in the electrical design of commercial, industrial and healthcare facilities. Mr. Eckman also served as project manager for many of the projects he designed.

Concurrently, Mr. Eckman taught an electrical engineering course called "Illumination" at The University of Akron.

After leaving KPT, Inc. in 1987, Mr. Eckman gained additional experience in the construction industry by accepting the position of Engineer/Estimator for Thompson Electric, Inc. in Munroe Falls, Ohio. During this engagement, he designed and acted as project manager for several large industrial projects. He also earned electrical contractor licenses in several area communities.

Desiring to further his career as a consulting engineer, Mr. Eckman accepted a position of Senior Engineer with Scheeser Buckley Mayfield LLC in 1989. Mr. Eckman was promoted to the position of Associate in 1990, became a Principal in the firm in 1991 and Vice President of Electrical Engineering in 1992, and President in 2003.

Mr. Eckman was a member of the Institute of Electrical and Electronics Engineers for eight years and is currently an active member of the Electrical League of Northeastern Ohio and the Illuminating Engineering Society (IES). Mr. Eckman has served as Treasurer and President of the Cleveland/Akron IES section and a member of the Executive Committee for the Electrical League. Mr. Eckman served on the College of Engineering Advancement Council for The University of Akron from 2002 to 2004 and is currently serving as Secretary of The University of Akron Electrical Engineering and Computer Engineering Advisory Council as Vice Chairman.

Jim is a LEED v2 Accredited Professional and is registered in the State of Ohio, West Virginia, Pennsylvania and Indiana.

In 2005, Jim received his Lighting Certification (LC) from the National Council on Qualifications for Lighting Professionals (NCQLP).

In 2009, Jim received his Certified Building Commissioning Professional (CBCP) administered by the AEE (Association of Energy Engineers).



MICHAEL P. WESNER, PE, LEED AP, CBCP

Vice President - Mechanical Engineering



Mike is a graduate of Ohio State University in Columbus, Ohio. He received a Bachelor of Science Degree in Mechanical Engineering in 1981 and later that year joined the consulting firm of Scheerer Buckley Mayfield LLC which was then known as Scheerer*Buckley*Keyser.

During his first few years with the firm, Mike was heavily involved with the Title III of the National Energy Conservation Policy Act (NECPA). This governmental program was established as a cost sharing energy conservation grant programs. This program provided funds to study the operation of schools and hospitals to determine if there were ways to reduce their energy consumption. The program then funded energy conservation measures identified in the reports. As a result of this involvement in many audits and retrofit programs for public school buildings, college and university buildings and hospitals, Mike gained valuable experience in formulating and implementing energy conservation programs in buildings that result in real world savings. This experience carries on in the work that Mike does today.

Since the mid 1980's Mike's project experience has been concentrated in the following areas:

- Large hospital Expansion and remodeling projects.
- Hospital Boiler Plant / Chiller Plant replacement projects.
- University Laboratory projects, both new construction and renovation.
- University Classroom Facilities
- University Dormitory Facilities
- Animal research facilities.
- Secondary education facilities.
- Industrial facilities.
- Telephone / Communications buildings
- Recreation/Athletic Fitness Centers
- Worship Centers

On all of the above facility types, Mike has acted as the Principal in Charge for the firm. The Principal in Charge (PIC) is the single point of contact and is responsible to make sure the project gets done on time and on budget.

Other types of project experience Mike has had are listed as follows:

- Projects where SBM was the prime design professional hired by the Owner. Typically this has been for chiller plant/boiler plant or other type of main A/C system replacement. This work involved hiring the sub-consultants, preparing the budget/schedule, writing the "front end" specification documents and doing all of the day to day construction administration.
- Projects where SBM was hired to diagnose and correct mechanical system problems
- Projects where SBM was hired to do Mechanical and Electrical Construction Cost Estimating

Mike is a LEEDTM 2.0 Accredited Professional and a member of ASHRAE, ASPE, NFPA and IBC. In 2009, Mike received his Certified Building Commissioning Professional (CBCP) administered by the AEE (Association of Energy Engineers).



Project Experience

St. Mary's Correctional Facility - Dining Hall Additions and Renovations

The project consisted of 2500 sq ft of new additions for the expansion of the existing dining room and storage spaces. The existing 8800 sq ft building that contained a dining room, kitchen, offices, and storage space was renovated. The HVAC design involved the installation of a rooftop unit to serve the new and existing dining room. Ductless split system heat pumps were installed to serve existing office spaces. Packaged terminal air conditioning units were used in the storage rooms. Plumbing design involved relocating site storm piping to accommodate the additions. A restroom was added to the building, one existing restroom was renovated, and a new water service was installed under the project. A dry pipe fire protection system was installed under the project as the existing building was not sprinkled. The system required a new fire service entrance and associated dry pipe system trim. New 2x4 acrylic lighting was installed in the kitchen and dining areas. A new 600A, 208/120V, 3-phase, 4W MDP was designed and fed from the existing MDP. This new MDP then backfed branch circuit panelboards, along with a new 200A, 120/208V, 3-phase, 4W panelboard, which fed new mechanical loads along with some branch circuits for lighting and receptacles. The new HVAC unit was also fed from this panelboard. New kitchen equipment was fed from existing panelboards. A new fire alarm system was installed throughout the new space. New telecommunications was provided in the new space, along with tying existing campus buildings together.

Beckley Correctional Center, WV Grease Interceptor Upgrades - Beckley, WV

This existing correctional institution had a small grease trap located in the kitchen area that required frequent maintenance. Due to the number of meals the Facility served, the Beckley Sanitary Board required the Department of Correctional to install an outside, underground, 2000 gallon grease interceptor. Scheeser Buckley Mayfield provided plumbing and site civil design services for this project which include field investigation of existing utilities, sanitary sewer main extension, plumbing piping rework, and site restoration.

Assumption Village Health Care Center, Sanitary System Improvements - Youngstown, Ohio

This assisted living facility was discharging towels, grease, and excess food wastes into an adjacent county sanitary pump station and was causing failures at that station. The County required that an immediate fix be implemented or the facility would be subject to large daily fines. The facility did not have plumbing and site drawings available and were unsure of the routing of onsite plumbing and sewer systems. SBM coordinate videotaping and dye testing services to determine the existing routing and conditions of underground sewers. This work also included determining effluent discharge locations of kitchen equipment. Once the existing conditions were determined, our office prepared plumbing, electrical, and site civil plans to address the situation. These plans included the installation of a new exterior sanitary sewer system with manholes, a muffin monster grinder, an emergency bypass channel in the event of a power loss to the muffin monster, a new 2000 gallon exterior grease interceptor, and reworking of the kitchen's plumbing system. This design and construction work was completed within 30 days and no fines were issued to the Facilities owner. SBM worked with the county's sanitary board and a selected contractor to ensure the project would be completed as quickly as possible.

Huntington Federal Complex, Sidney L. Christine Federal Courthouse - Sanitary Sewer Investigation

During significant rainfall events in the spring and summer of 2011, the basement of this building was subject to sanitary backups through floor drains, showers, and water closets. GSA did not have accurate plumbing plans of the building showing where rain leaders and sanitary lines tied together and enter the basement below slab system. Scheeser Buckley Mayfield was hired to complete a system investigation and to produce plans to eliminate the problem. Our investigation utilized dye tests and cameras to accomplish the following:



Project Experience

Identified the route and size of all vertical and horizontal storm/sanitary rain leaders and roof drain locations and mapped all drains and piping; Identified the route and size of all vertical and horizontal storm leaders which may not join sanitary lines and mapped all piping; Identified the route and size of all vertical and horizontal sanitary lines and vents and mapped all piping; Identified the route, size, and use of all basement under floor piping and mapped all piping; Identified the route and size of exterior storm/sanitary piping from the building to the public combination sewer main and mapped piping; Identified the need and function of the inverted vent in the parking lot manhole.

SBM's investigation report detailed our findings and deficiencies and included photographs and drawings of the existing conditions. Several options for remediation were prepared (including sketches, illustrations, etc.) along with an estimated construction cost and timeline for each option. These were presented to GSA, a remedy was selected and construction documents were prepared to address the flooding issue.

Cabell Huntington Hospital, Bed Tower - Huntington, WV

Scheeser Buckley Mayfield provided mechanical, electrical, and site civil engineering design services for the addition of a new bed tower to the existing Cabell Huntington Hospital. The project includes a new emergency room, ICU/CCU rooms, NICU, maternity floor, and patient rooms. The total project area consists of 175,000 square feet of new construction and 50,000 square feet of remodeled areas. The site civil portion of the work included redesign of an existing public alley way to lower the street centerline grades for access into the project's new parking garage and building entrance. The work also included relocating existing storm and sanitary sewers, water, fire and gas lines, and the installation of a new 2000 gallon grease interceptor. The final size of the grease interceptor and its location were coordinated with the owner, health department, and waste hauler to ensure the hospital's criteria of continuous access to the emergency department was met.



West Virginia Department of Corrections - Denmark Correction New Electrical Service Study

Scheeser Buckley Mayfield performed an electrical study for the facility to provide recommendations for ways to improve the system to make it safer, more reliable, and code compliant. The study included a site visit in order to determine the existing conditions, along with a report detailing the existing conditions along with options and recommendations with construction cost estimates and one-line diagrams. Some of these options included ways to eliminate the existing generator/transformer set-up on the primary lines, and provide a new generator and distribution system and back-fed existing loads. Another option was to upgrade wiring on the existing 1930's building. Many options also included ways to give the campus more capacity on the system in order to accommodate possible future air-conditioning loads. Options also included ways to eliminate the multiple incoming services into the same building, and have one main service into each building where possible.

West Virginia Department of Corrections - Denmark Correction New Electrical Service Study

Scheeser Buckley Mayfield performed an electrical study for the facility to provide recommendations for ways to improve the system to make it safer, more reliable, and code compliant. The study included a site visit in order to determine the existing conditions, along with a report detailing the existing conditions along with options and recommendations with construction cost estimates and one-line diagrams. Some of these options included ways to eliminate the existing generator/transformer set-up on the primary lines, and provide a new generator and distribution system and back-fed existing loads. Another option was to upgrade wiring on the existing 1930's building. Many options also included ways to give the campus more capacity on the system in order to accommodate possible future air-conditioning loads. Options also included ways to eliminate the multiple incoming services into the same building, and have one main service into each building where possible.



Project Experience

West Virginia Department of Corrections - Denmark Correction Kitchen/Dining

The project consisted of the addition of a new kitchen area along with a staff dining area, restrooms, office and a few storage rooms. New 2x4 acrylic fixtures were provided throughout the space with general strip fixtures in storage rooms. New smoke detectors were installed along with fire alarm audio/visual devices throughout the space. The existing electrical service was revised in order to upgrade the existing system to be code compliant. A new 400A, 240V/3 phase/3 wire MDP was installed and the existing kitchen area panelboard was back-fed from the new distribution system. A new 250A, 240V/3 phase panelboard was installed to feed the new 3 phase kitchen equipment loads, along with a new 200A, 120/240V, 1 phase panelboard to feed the 1 phase loads. The new distribution system also back-fed existing 240V, 3 phase loads and existing 120/240V, 1 phase loads, through a 75KVA transformer.

Huttonsville Correctional Institution, Dormitory Addition and Fire Alarm Upgrade - Huttonsville, WV

Scheeser Buckley Mayfield LLC provided HVAC, plumbing, and electrical design for the renovation and expansion of two dormitory wings as well as expansion of fire alarm systems at Huttonsville Correctional Institution. Electrical design included lighting, power and systems for the new dormitory. This power design included the coordination of a new utility service as well as installation of backup power for the renovated dormitories. The backup power consisted of a new diesel generator near the dorms and automatic transfer switches/distribution to support the facility. Additional aspects to the design included rework of existing alleyport entrance to the facility, Security systems including door hardware set requirements were integrated into the design for the dormitory. Fire alarm systems for the renovated dormitories were connected to the facility wide fire alarm system via a fire alarm network. This facility wide campus network was upgraded in order to allow a fully integrated system which could be monitored at Master Control. A large number of fire alarm signaling devices (smoke detectors, heat detectors, pullstations, strobes, etc.) were added throughout the facility to ensure that the facility complied with current fire alarm code.



A new heating/cooling system was installed to replace the existing heating only system consisting of steam and condensate risers located throughout the resident areas. The new HVAC design includes multiple constant volume DX cooling rooftop air handling units to serve the new resident areas. The new air handling units do not contain heat, but are supplemented with hot water reheat coils located throughout the spaces. A steam to hot water heat exchanger with associated heating water pump and condensate pump located in the basement of each new resident wing provides the heating water for the reheat coils. The steam and condensate utilized in the new heating water system originate in the main mechanical room with services extended to the new resident wings. The design of the airside system includes security diffusers and grilles along with security bars located throughout the spaces at designated security walls. Due to limited spacing in the plumbing/HVAC chases for each resident room, coordination of mechanical, electrical, plumbing and fire protection services was critical.





Project Experience

Mount Olive Correctional Facility, Command and Training Facility - Mt. Olive, WV

Scheeser-Buckley-Mayfield LLC provided mechanical, electrical, plumbing, and fire protection design services for this 4,000 sq. ft. training center. The project included an open area for group training as well as support spaces including offices, storage areas, command center, and an armory area.

Mount Olive Correctional Facility, New Substation - Mt. Olive, WV

The project consists of the design of a new 34.5kV to 12.47kV electric substation outside the facilities' boundary fence to replace the facilities' trouble prone 34.5KV distribution system. Drawings and Specifications are being prepared for the installation of a new electric substation, the replacement of the facilities' padmount transformers, and the underground high voltage cable loop feeding the transformers. The substation design is the low profile type and includes voltage regulation. Heating and ventilation systems for the switchgear house are provided.

The substation will have two transformers with a secondary tie at the 12.47 KV level. The substation secondary tie would permit feeding all substation loads in the event one of the transformers fails or is taken off line for maintenance. The design of the substation includes a 12.47 KV switchgear house to enclose the substation's 12.47kV switchgear. This is being done to improve reliability and ease of maintenance of the substation's switchgear. Project design will cover the extension of the existing 35 KV power company line to the new substation.

The project presents a design challenge in the area of substation grounding as the facility is on the top of a mountain in a reclaimed mine area having suspect soil conditions that can adversely affect a good grounding installation. The project presents challenges in interfacing with the facilities' standby power system as the system is old and interfaced with the distribution system in an unconventional manner. An additional design challenge is to maintain power to each of the facility buildings during the construction of the project. This will be taken care of by starting at one end of the facilities 34.5kV loop and reconnecting each padmount transformer on a one by one basis to the new 12.47kV distribution loop. A temporary generator will be connected to each building as its associated padmount transformer is replaced.

Pickaway Correctional Institution Dormitories

Scheeser Buckley Mayfield LLC provided HVAC, plumbing, electrical and civil design for two 38,000 sq ft, two-story dormitories for Pickaway Correctional Institution. The buildings are equipped with steam heat exchangers, hot water heating, ventilation systems with smoke purge controls, and full direct digital control systems. Site civil includes a shallow tunnel approximately 750 feet long housing new steam and condensate mains for the new buildings. Steam and condensate mains utilized ball joints and expansion compensators. SBM was also responsible for the design of the tie-in to the existing mains and required modifications to the existing piping which is fed from a central boiler plant. Electrical design includes lighting, power, and security systems for the two dorm buildings. Each building is serviced electrically by tying into the existing 13,200V high voltage loop system currently in service on the campus as well as via a new 750KVA transformer that splits the power between the two buildings. Emergency power is also being provided to each building through a common 200KW, 208V, 3 phase generator. Low voltage switching was utilized for lighting control throughout the building. In addition to interior lighting, exterior building and site lighting was also incorporated into the design. The security system is a state-of-the art touch-screen system that matches the current security system and allows for security control and integration throughout other areas of the campus. Additional site design included upgrades to the sanitary, storm and water system that were extended through the campus setting, site clearing and grading, erosion control plan and narratives, and vehicular and pedestrian access.



Project Experience

Multi-County Juvenile Attention Center

Scheerer Buckley Mayfield LLC performed mechanical and electrical design engineering services for a new 37,000 square foot facility. The building was designed to house 36 high security inmates and 20 inmates at a lower level of security. All inmates will live in the building full-time and the building was designed for a 24 x 7 occupancy. Included in the design of the building was a complete kitchen and dining area. In addition to serving the inmates, staff would also be served by the kitchen. The kitchen and dining area were totally air-conditioned. Kitchen exhaust systems included the use of a UL approved reduced flow kitchen hood and special fire suppression system for the kitchen hood. HVAC systems for the building included VAV and constant volume air systems along with hydronic perimeter heating systems. Smoke exhaust systems were also designed in areas where overnight occupancy is required. The entire building is controlled with a DDC control system which allows for remote monitoring for all mechanical systems. The plumbing design for the building included specialized fixtures for hostile prison environment. Plumbing also included special connections to multiple pieces of kitchen equipment.

Electrical design included low voltage remote relay controlled lighting for nighttime group shutdown. Lighting control features are integrated with the security system for remote emergency operations. All lighting fixtures in the facility are security type design. An addressable fire alarm system was also integrated with the security system for controlled exit/release of residents. All HVAC systems, egress lighting and the complete courtroom area are supported by an exterior diesel generator in the event of a utility outage. In addition, the entire security system is supported by an uninterrupted power supply (UPS) system for uninterrupted monitoring. Elevator design included power wiring for each elevator controller from the buildings distribution system as well as cab lighting. Elevator breakers were provided with shunt trip capabilities if the shafts, machine rooms and pits were sprinklered. Controllers were also tied in to the building fire alarm system as required for elevator recall (fireman's service functions). All functions were designed to NFPA, OBBC and ANSI/ASME codes and requirements that were applicable at the time of design.



Shelley Metz Baumann Hawk Structural Engineering



Shelley Metz Baumann Hawk, Inc.
1166 Dublin Road, Suite 200
Columbus, Ohio 43215
p 614.481.9800
f 614.481.9353
www.sbmce.com

Number of Years in Business:
40 Years

Firm Principals:
William Shelley, PE
Robert A. Baumann, PE
Stephen Metz, PE

Total Employees:
19

Licensed Engineers:
11

Shelley Metz Baumann Hawk, Inc. specializes in providing quality structural engineering services for architects, contractors and building owners. Our commitment to providing quality services since 1972 has resulted in exceptional experience with all building types including:

- Educational
- Institutional
- Religious
- Commercial
- Recreational
- Residential
- Healthcare
- Public Projects

As a full service structural engineering firm Shelley Metz Baumann Hawk, Inc. provides the following services:

- Design and documentation of building projects including new construction and renovations using steel, concrete, masonry and wood
- Analysis and inspections of existing structural systems
- Failure Analysis and Investigations
- Expert Witness Testimony
- Foundation Systems
- Feasibility Studies
- Code Analysis

The firm and individual staff members are committed to providing service of the highest quality. The key to success of any project is balanced design, functionality and costs. We work closely with our clients to ensure that the structural design compliments each building.

The leadership team of Shelley Metz Baumann Hawk, Inc. has over 120 years of combined experience in structural design and enjoys the challenge of developing creative structural engineering solutions.



Robert A. Baumann, PE
Vice President/Project Manager

Mr. Baumann has been employed in the consulting structural engineering business since 1981. He received a Bachelor of Science Degree in Civil Engineering in 1980. His prior office and field experience with a registered land surveyor contributes to his knowledge of the design and construction process. His work experience with a general contractor included the construction of building types built of reinforced concrete, steel, wood, masonry and precast concrete. Mr. Baumann has designed new buildings as well as additions and large renovation projects.

Mr. Baumann is experienced in the design of structures built from many types of construction materials including post tensioned concrete. His many years of experience allow him to design innovative, economical, and serviceable structures. Mr. Baumann is experienced in investigative work for adaptive reuse of existing structures. He has provided field observation during construction of many of the projects that he has designed.

Mr. Baumann is registered to practice in the following states: Arkansas, Georgia, Iowa, Kentucky, Nebraska, Nevada, Ohio, Oregon, Rhode Island, South Carolina, Washington and West Virginia.

Professional Affiliations Include:

- American Institute of Architects (AIA) – Affiliate Member
- American Society of Civil Engineers
- American Concrete Institute
- American Wood Council, Design Professional Member
- Structural Engineers Association of Ohio – Charter Member
- St. Elizabeth Church – Finance Committee Chairman
- American Institute of Steel Construction – Design Professional Member