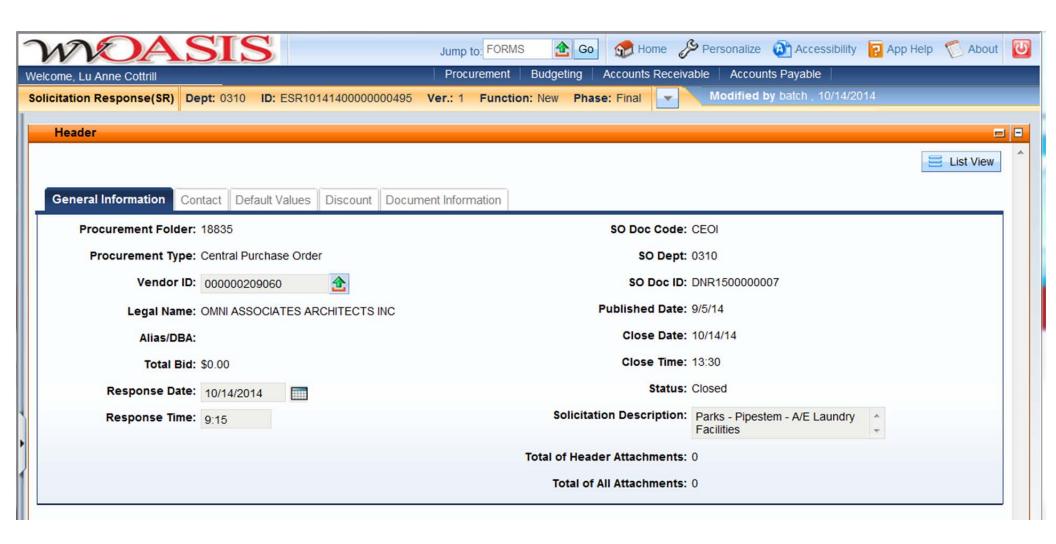
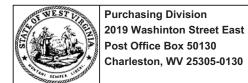


2019 Washington Street, East Charleston, WV 25305 Telephone: 304-558-2306 General Fax: 304-558-6026

Bid Fax: 304-558-3970

The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at *wvOASIS.gov*. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at *WVPurchasing.gov* with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.





State Of West Virginia Solicitation Response

Proc Folder: 18835

Solicitation Description: Parks - Pipestem - A/E Laundry Facilities

Proc Type: Central Purchase Order

Date issued	Solicitation Closes	Solicitation No	Version
	2014-10-14	SR 0310 ESR10141400000000495	1
	13:30:00		

VENDOR

000000209060

OMNI ASSOCIATES ARCHITECTS INC

FOR INFORMATION CONTACT THE BUYER

Dean Wingerd (304) 558-0468 dean.c.wingerd@wv.gov

Signature X FEIN # DATE

All offers subject to all terms and conditions contained in this solicitation

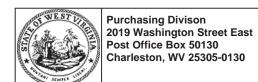
Page: 1 FORM ID: WV-PRC-SR-001

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1 Architectural/Engineering Services for Pipestem Laundry			\$0.00		

Comm Code	Manufacturer	Specification	Model #	
81101508				

Extended Description:

TO PROVIDE NECESSARY ARCHITECTURAL AND ENGINEERING SERVICES FOR THE RELOCATION OF EXISTING LAUNDRY FACILITIES INTO A NEW BUILDING IN A NEW LOCATION AT PIPESTEM RESORT STATE PARK.



State of West Virginia Centralized Expression of Interest 02 — Architect/Engr

Proc Folder: 18835

Doc Description: Parks - Pipestem - A/E Laundry Facilities

Proc Type: Central Purchase Order

	7. Contract districts of the					
Date Issued Solicitation Closes		Solicitation	n No	Version		
	2014-09-05	2014-10-14 13:30:00	CEOI	0310 DNR1500000007	1	
		13.30.00				

BID RECEIVING LOCATION

BID CLERK

DEPARTMENT OF ADMINISTRATION

PURCHASING DIVISION 2019 WASHINGTON ST E

CHARLESTON WV 25305

US

VENDOR

Vendor Name, Address and Telephone Number:

Omni Associates - Architects, Inc. 1543 Fairmont Ave., Ste. 201 Fairmont, WV 26554 304-367-1417

FOR INFORMATION CONTACT THE BUYER

Dean Wingerd 3045580468

dean.c.wingerd@wv.gov

Signature X FEIN # 55-0747253

DATE 10/14/2014

All offers subject to all terms and conditions contained in this solicitation

Page: 1 FORM ID: WV-PRC-CEOI-001

Purchasing Affidavit (Revised 07/01/2012)

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 exceed five percent of the total contract amount.

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

Vendor's Name: Omni Associates - Architects, Inc. Authorized Signature: Date: 10/14/2014 State of West Virginia County of Marion , to-wit: Taken, subscribed, and sworn to before me this 14 day of October , 2014 My Commission expires February 9 , 2021.

OFFICIAL SEAL NOTARY PUBLIC STATE OF WEST VIRGINIA ANGELA HAMMOND RR2 Box 331 # Fairmont, WV 26554 My Commission Expires February 9, 2021



October 14, 2014

Department of Administration, Purchasing Division 2019 Washington Street East Charleston, WV 25305-0130

Re: Expression of Interest – DNR 1500000007

Pipestem Laundry Facilities

Dear Sir or Madam:

Omni Associates-Architects, Inc. is pleased to submit our Proposal to the State of West Virginia Department of Administration for the construction / relocation of laundry facilities at Pipestem Resort State Park. We have enjoyed our past work with the Division of Natural Resources, and we would be happy to help you realize this project on time and within budget.

We have specifically selected our team, which includes **Allegheny Design Services**, **Tower Engineering**, and **Terradon Corporation** based upon our vast experience in working with these consultants and our knowledge of their skills, experience, and superior services. Our professional staff of architects, engineers, and planners possesses the dedication, expertise, and project experience to ensure that your project goals are realized.

Our team has extensive experience working in West Virginia, and we are prepared to provide the following benefits for this project:

- Innovative cost saving design approach to minimize building costs.
- Sustainable energy efficient systems to minimize operational costs.
- Flexible building design to address current and future needs.
- A realistic design and construction schedule to meet your needs

Our team shares a long history of successful project collaboration, providing full architectural and engineering services for private owners as well as government agencies. A few of our notable relevant projects include:

- Department of Energy Storage Facility, Morgantown, WV
- Mylan Pharmaceuticals Warehouse—main campus, Morgantown, WV
- Mylan Pharmaceuticals Warehouse—Collins Ferry Road, Morgantown, WV
- CDC Warehouse, Morgantown, WV
- Greer Warehouse and Garage, Morgantown, WV
- West Virginia Army National Guard—132,000 sf Maintenance Complex and United States Property and Fiscal Office parts storage warehouse in Eleanor, WV.

We are a proven team that listens and produces a quality product on time and within budget. We would greatly enjoy the opportunity to meet with you and the selection committee to further discuss our experience and qualifications.

Best regards,

OMNI ASSOCIATES - ARCHITECTS, INC.

Richard T. Forren, AIA, NCARB

anu

₽rincipal

Omni Associates - Architects, Inc. 1543 Fairmont Avenue - Suite 201 • Fairmont, WV 26554 Voice: 304.367.1417 • Facsimile 304.367.1418

WV Division of Natural Resources Pipestem Resort State Park Construction / Relocation of Park Laundry Facilities

Statement of Qualifications

Omni Associates – Architects, Inc. 1543 Fairmont Avenue, Suite 201 Fairmont, West Virginia 26554

Voice.304.367.1417 Facsimile.304.367.1418 Email: info@omniassociates.com www.omniassociates.com



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Project Examples following









General Qualifications

OMNI ASSOCIATES - ARCHITECTS is an award-winning architectural firm located in Fairmont, West Virginia. Our excellent reputation and superior work product are a direct result of mutual respect and effective communication with our clients and consultants, which enables our staff to provide outstanding architectural and engineering design services for our clients.

Since our inception in 1980, OMNI has earned recognition in the programming, planning, and design of a variety of facility types, including office buildings, recreational facilities, education facilities, religious facilities, health care, military, and multipurpose facilities.

Our approach to design has allowed us to avoid the confines of specialization and afforded us the opportunity to create a diverse body of work. Each project is a unique undertaking that begins with analyzing the needs and desires of the client and interpreting them into a distinctive design that meets specific needs and exceeds expectations.

Omni has a successful history of designing intimately with each client and working out collaborative solutions that meet the goals of the project, resulting in an impressive record of customer satisfaction. We are a proven team that listens, provides professionalism and attention to detail, and produces a quality product. These are qualities that draw our clients back, resulting in lasting relationships. That's why we enjoy a repeat client rate of more than 90% - a source of considerable pride.

Omni Associates – Architects' design team has developed designs for numerous projects which must comply with State and Federal regulations. Such projects include working with the following Agencies: Federal General Services Administration (GSA); WV General Services Administration; Corps of Engineers; National Guard Bureau; Federal Aviation Administration; Department of the Navy, Federal EDA; WV EDA; HUD, and the WV School Building Authority (SBA).

Our work has involved a variety of funding sources including the WV Development Office – Small Cities Block Grants, State Revolving Fund Loan, Rural Economic and Community Development Administration (Farmers Home Administration), WV Division of Environmental Protection – Construction Grants Branch, US Department of Commerce-Economic Development Administration, Water Development Authority, West Virginia Infrastructure and Jobs Development Council, and Appalachian Regional Commission, either individually or in combination.

Omni Associates provides clients with the results they value most: innovative designs consistent with the building program, cost effective designs which meet the budget, and efficient project management to provide on-time deliverables. We're confident of our reputation and expertise, and our clients are confident that they will receive superior services.



Omni Associates—Architects, Inc. 1543 Fairmont Avenue
Suite 201
Fairmont, WV 26554
304.367.1417 (voice)
304.367.1418 (fax)
info@omniassociates.com
www.omniassociates.com

OWNERSHIP

Professional Corporation

HISTORY

Established in 1980

SENIOR PERSONNEL

Stephen A. Barnum AIA, NCARB Senior Principal

Richard T. Forren AIA, NCARB Principal

John R. Sausen AIA, NCARB, LEED AP Principal

> David A. Stephenson Principal

Edward A. Luthy AIA, NCARB Principal







Omni Associates - Architects provides comprehensive, in-depth professional architectural services for new construction, renovation, addition, and adaptive reuse utilizing a variety of delivery methods to best serve our clients' needs.

Design-Bid-Build Delivery Method

Omni has performed private and public projects of every building type using this traditional method of project delivery. We organize your entire project in advance of bidding and work extensively with you to achieve alternates to program goals. Construction documents are prepared and bid to multiple general contractors to achieve competitive pricing. Omni has successfully negotiated with contractors to maintain changes and costs to a minimum and still achieve the initial time schedule.

Omni has also worked on "fast-track" and "multiple-prime" contract projects to achieve an accelerated building construction time schedule. As a variation of the traditional design-bid-build delivery, the negotiated select team approach allows for selection of a contractor early in the design process. We prepare construction drawings in stages and bid these "parts" of the total building program so construction can be ongoing as the next phase is programmed and designed. We have worked with General Contractors, Construction Managers and multiple prime subcontractors to successfully complete this type of project delivery.

Design-Build Delivery Method

More and more owners and developers are seeking a simpler delivery style with a single point of responsibility for both design and construction. Under design-build, a consolidated entity provides both design and construction services to the owner. A single contract is established between the owner and the architect—contractor or design-builder. Omni has experience with both scenarios and has contracted with owners and with general contractors to achieve this streamlined method of project delivery for two West Virginia schools as well as numerous private Owners. Additionally, Principal Architect Richard T. Forren was recently appointed to the West Virginia Design Build Board.

Construction Administration

Omni has worked on projects for only the construction phase of the total building life. This would include projects designed by another firm who needs local supervision or a "pre-designed" project from a national restaurant or store, which requires local implementation. Omni has also performed bank or financing inspections to determine the completion status of the project for periodic applications for payment.



Omni Associates—Architects

Conceptual Design & Planning

Site Selection

Master Planning

Program Development

Renderings

Cost Estimation

Schematic Design

Design Development

Bidding & Negotiating

Construction Document Development

•

Construction Administration

Post-Contract Services

Facility Management Services

domity Management Gervices

Feasibility Studies

Legal Consultation

Historical Restoration







Experience with Similar Projects

Our previous work with the West Virginia Division of Natural Resources, particularly at Pipestem Resort State Park, makes Omni Associates uniquely qualified to design the relocation of the laundry facilities for Pipestem Resort State Park.

Previous work with the West Virginia Division of Natural Resources:

- Audra State Park Swimming Bathhouse Renovation
- Bluestone State Park Pool and Bathhouse
- Canaan Valley Resort Boiler Replacement
- Canaan Valley Resort Office Addition
- Canaan Valley Resort Overnight Units Feasibility Study
- Canaan Valley Resort Cabin Expansion
- Canaan Valley Resort Ski Base Lodge
- Canaan Valley Resort Lodge Expansion
- Canaan Valley Resort Ice Rink
- Canaan Valley Resort Bear Paw Lodge Deck
- Canaan Valley Resort Lodge Restaurant Renovation
- Carnifex Ferry State Park Picnic Area and Rest Room
- Laurel Lake Wildlife Management Area Pool Bathhouse
- Panther State Park Residence
- Pipestem State Park McKeever Lodge and Cabin Expansion Feasibility
- Pipestem Resort State Park Miniature Golf Improvements
- Twin Falls Resort Lodge Addition and Renovation
- Tomlinson Run State Park Pool Repairs

The following projects have incorporated laundry room design:

- Rimfire Lodge, Snowshoe Mountain Resort
- Ravenswood Lodge, Snowshoe Mountain Resort
- Fairfield Inn and Suites-Morgantown, WV
- Wingate Inn—Charles Pointe, Bridgeport, WV
- Shenandoah Nursing & Rehabilitation Center
- The Madison Nursing & Rehabilitation Center
- Rosenbaum Family House at WVU Hospitals
- Genesis Youth Crisis Center













Technical Qualifications

BIM: Building Information Modeling

Omni is committed to continually upgrading existing technology and driving the evolution of design tools. This commitment springs from the firm belief that the responsible use of technology facilitates innovative design, results in economic benefits for our clients, and assists in efficient communication with clients and consultants.

In 2006, Omni Associates began the transition from traditional CAD software to Autodesk® Revit® Building Information Modeling (BIM). We immediately recognized the basic benefits to both designers and owners: more efficient, cost-effective project delivery and an accurate building model that can later assist in energy analysis and building management.

Omni implemented the use of BIM as our primary software platform for all projects in 2006. In utilizing BIM, we discovered the real depth of its value:

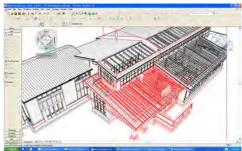
- With a virtual model of the building, clients can clearly see the design intent as the project progresses and design options can be explored with greater ease than ever before.
- Sharing the model among all disciplines as the design progresses allows early input from all of the design professionals involved, resulting in efficient designs.
- Creating a building in the virtual world before constructing it in the "real" world allows the design team to anticipate conflicts and objections before they arise, eliminating many issues which could result in project change orders or Requests For Information from the contractor.

Omni is proud to show that we don't just use Revit software, but we are adept at using it and can provide skilled support as needed. Omni staff member Reuben Losh is now an Autodesk Revit Architecture 2011 Certified Associate. Mr. Losh plans to test soon for the next level of certification, Autodesk Revit Architecture 2011 Certified Professional.

Obviously, using the latest computer software does not guarantee good design. Good design is built upon having a complete understanding of the client's needs and the knowledge & experience to create a space which addresses those needs in an elegant and practical manner. We see BIM as an advanced tool in making that goal a reality for each project that we undertake.











omni acconiatec

www.omniassociates.com







Electronic Submission of Project Documents

Since 2007, Omni has utilized a web-based solution for secure file storage and project team collaboration. The site employs a simple and intuitive interface, similar to social networking sites, that is much easier to navigate than an FTP site. This encourages communication among team members while leveraging the security of data encryption and controlled access.

This tool supports building information modeling (BIM) workflows and can be used throughout all phases of a project for such tasks as file storage, RFI and Shop Drawing management, and project milestone tracking. Since these processes are electronic, the time it would take to mail or fax documents is eliminated and project information is centralized. Project information is hosted on secure third-party servers, which means that it is available to team members from wherever they have internet access. The Owner and Architect work together to determine to whom and to what extent site access is given.



Case Study

Prior to its merger with First Energy, Allegheny Energy selected Omni Associates – Architects via a competitive selection process to provide all Architectural and Engineering services for its new transmission operations headquarters in Fairmont, West Virginia. Now the **Mon Power Regional Headquarters**, the environmentally friendly facility is located on a 9-acre parcel of land in the I-79 Technology Park.

Close communication was a critical part of this fast-track project with an aggressive design and construction schedule. Midway through the design process, the design team learned that the specialized technology for the building had advanced, prompting quick redesign work. The necessary changes could have greatly slowed progress, but because the design team was already utilizing collaborative tools such as building information modeling (BIM), electronic submission of project documents, and virtual meetings, impact on the project timeline was minimal.

Bidding and Construction Administration Services

Omni provides construction administration services on all of the projects we undertake. We also provide full bidding services on all projects utilizing the traditional design-bid-build delivery method. We organize your entire project in advance of bidding and work extensively with you to achieve alternates to program goals. Construction documents are prepared and bid to multiple general contractors to achieve competitive pricing.

Time and Budget

Omni has always provided timely performance on many aggressive schedules as well as funding constraints. We have successfully negotiated with contractors to keep change orders and costs at a minimum and achieve the initial time schedule.

Occupancy, Commissioning, Permits and Plan Approvals

West Virginia codes have a major influence on the design of any building. A good working relationship with local and state building agencies is critical for a successful project. Omni has extensive experience with code compliance and we have enjoyed an exceptionally compatible working relationship with The West Virginia State Fire Marshal's office for over 30 years. Omni has made it a practice to have face-to-face reviews with the WVSFM, which provide valuable feedback and result in many hours saved during design and production.







Cost Estimating

We take pride in our approach to solving our client's aesthetic goals while meeting budgetary constraints. Omni utilizes several methods of cost estimating to provide reliable cost of construction estimates for various construction types.

- Historical data from previous projects
- Construction-estimating periodicals such as Means Square Foot Costs
- Consultation with leading construction firms in the project region
- Professional cost estimators who evaluate a set of specifications and/or progress prints provided by our firm to determine estimated construction costs based on the project's specific location. For this project, cost estimation will be performed by **Blundall Associates**, a construction cost consulting firm with whom we've established a very successful working relationship over the past few years.



The combination of these resources provides reliable costs of construction for various building types.

Project WV Army National Guard Armed Forces Readiness Center Fairmont, WV	Budget \$23,210,000.00	Bid \$22,800,000.00
Lumberport Elementary School Harrison County, WV	\$10,000,000.00	\$8,600,000.00
Mon Power Regional Headquarters Fairmont, WV	\$35,000,000.00	\$33,000,000.00
Canaan Valley Institute Headquarters Davis, WV	\$5,900,000.00	\$5,154,000.00
WVU Child Learning Center Morgantown, WV	\$5,700,000.00	\$5,485,000.00
WV High Technology Consortium 5000 NASA Boulevard Fairmont, WV	\$18,339,281.00	\$16,331,589.91
WVU Hospitals North and Northeast Towers Morgantown, WV	\$36,000,000.00	\$35,000,000.00









LEED® (Leadership in Energy and Environmental Design)

The LEED Green Building Rating System provides standards for environmentally sustainable construction. LEED Accredited Professionals demonstrate a thorough understanding of green building practices and principles and familiarity with LEED requirements, resources, and processes. Omni Associates currently has three LEED Accredited Professionals.

A new headquarters for Canaan Valley Institute (CVI) near Davis, West Virginia completed construction in 2010. In accordance with CVI's mission, the Omni design team planned a "green" building that demonstrates environmentally friendly systems to visitors. The team utilized a number of "green" technologies and achieved its goal of LEED Silver certification.

Omni was also the Architect for the Mon Power Regional Headquarters in Fairmont, West Virginia. Completed in 2011, this project also incorporated LEED design features and is LEED Certified.

Recently Certified:

 Charleston Professional Building— LEED Silver

Current LEED Projects:

- WVARNG Fairmont Armed Forces Readiness Center—Following LEED standards but will "selfcertify".
- GSA Fairmont Office Complex— Seeking Certification under LEEDv3
- WVARNG Buckhannon Armed Forces Readiness Center— Seeking Silver certification under LEEDv3









Management and Staffing Capabilities

Omni Associates - Architects firmly believes that the best gauge in determining our performance and abilities is the quality of the personnel of which we are comprised. Omni's greatest resource is our professional staff of dedicated, experienced, and creative individuals.

Our skilled team includes **7 registered architects**, intern architects, computer-aided design specialists, an interior designer, and knowledgeable administrative support staff. Their quality, expertise, and dedication integrate to produce the solid foundation upon which Omni has built its reputation.

OMNI organizes its staff into several teams or "studios." A specific project team is established for each commission. Studio resources are combined for larger projects. Younger staff members bring a fresh perspective and gain valuable knowledge under the guidance of more experienced staff. Utilizing this approach, we are able provide the human resources required for all types of projects, including large and complex projects.

The project team, including the principal-in-charge, actively participates in the project from start to finish. The same professionals who develop an understanding of your needs in programming generate design alternatives, oversee the production of construction documents, and implement the concepts during construction. The consistency afforded by this approach is a benefit to OMNI and you.

In reality, the OMNI project team goes beyond our in-house staff. It includes consultants, client representatives, owners, and a construction manager, as required. It is the mutual respect of each team member's skills and perspectives that enables the design process to conclude with a successful project of which we all can be proud.

Throughout our years of experience, we have worked with a variety of consultants specializing in structural engineering, civil engineering, mechanical and electrical engineering, and other disciplines as each project dictated. You can be assured that the consultants we select for your project are selected for their particular and relevant expertise as well as their superior work ethic.

In short, we carefully staff the design team, including in-house professionals and outside consultants, with the type of personnel we would want working for us to work for you



Omni Associates -Architects, Inc.

Omni Associates has successful project experience throughout the East Coast of the United States. Our architects are licensed in the following states:

Florida Kentucky Maryland New Jersey New York North Carolina Ohio Pennsylvania South Carolina Virginia West Virginia

Firm Memberships:

American Institute of Architects U.S. Green Building Council West Virginia High Technology Consortium Marion County Chamber of Commerce







Proposed Project Team

Omni Associates – Architects carefully selects its project team based on each member's ability to add directly-related experience, ensuring our ability to meet the specific challenges and goals of each client. Our dedicated and experienced staff brings a unique level of ingenuity to every project. Omni has assembled a team of professionals who provide outstanding services for the specific needs of this project. Our proposed project team consists of Omni Associates - Architects, Tower Engineering, Allegheny Design Services, and Terradon Corporation.

Omni Associates - Architects, Inc.

Omni will provide the link to all communications with regard to interdisciplinary reviews, sub-consultant and contractor coordination, and state agency review and inspections, and will act as the control point to ensure that the Owner's goals and requirements are met. This is critical as project goals are typically not fixed but evolve throughout the design and construction process as new information is gained. It further ensures that operation and maintenance issues are incorporated into the design documents.

Richard T. Forren AIA, NCARB

In order to guarantee a constant level of dedication and commitment, it is Omni's philosophy and practice that a principal remains with the project from commencement to closeout. It is essential that a single individual be intimately involved in every aspect of the process to ensure the client's needs are being met in a timely and cost effect manner and that the Contract Documents reflect the intent as well as the content of the design.

Richard T. Forren will serve as Principal-in-Charge for your project. Mr. Forren has been Project Architect in charge of design and construction for Omni Associates – Architects since 1984. He received a Bachelor of Science degree in Civil Engineering Technology from Fairmont State College and achieved a Masters of Architecture from Virginia Polytechnic Institute and State University. He serves as a Colonel in the United States Army Reserves and is currently assigned to the Fifth United States Army as the Army's Emergency Preparedness Liaison Officer (EPLO) for West Virginia.

As a Principal-in-Charge and Project Architect, Mr. Forren's primary responsibility is to develop the overall concept of design by performing technical tasks which include: Project space programming; Schematic layout of functional spaces; Aesthetic design and development; Concept and coordination of building systems such as mechanical, electrical, plumbing and fire protection; Preparation of bidding documents and material specifications; Project management and Construction administration. These tasks are performed for a wide range of commercial projects that include master planning, land development, building construction and tenant build-out.









Richard T. Forren AIA, NCARB

PROJECT ASSIGNMENT

Principal-in-Charge Project Architect

EDUCATION

Master of Architecture Virginia Polytechnic Institute, 1983

BS, Civil Engineering Technology Fairmont State College, 1980

REGISTRATION

American Institute of Architects, Member
American Institute of Architects—West Virginia, Member
NCARB: National Council of Architectural Registration Boards
U.S. Green Building Council, Firm Membership
Associated Builders and Contractors Inc., Firm Membership
International Association of Emergency Managers, Member
Registered in West Virginia, Pennsylvania, Ohio, Kentucky, Florida,
and New Jersey

GENERAL EXPERIENCE

- Project Architect in charge of design and construction for Omni Associates - Architects since 1984.
- Responsible for coordinating and designing all aspects of a project from programming through construction administration and project close-out.
- Previously employed by Robert J. Bennett AIA & Associates, Morgantown, West Virginia 1983 to 1984.

RELATED EXPERIENCE

- Colonel in the United States Army Reserves currently assigned to the Fifth United States Army as the Army's Emergency Preparedness Liaison Officer (EPLO) for West Virginia.
- West Virginia Design-Build Board
- City of Bridgeport Emergency Services Council
- Bridgeport City Planning Commission
- Member of the Faculty Advisory Committee for Civil Engineering Technology and Architectural Engineering Technology, Fairmont State College, Fairmont, West Virginia
- Previously a part time Instructor of Architecture at Fairmont State College, Fairmont, WV responsible for the instruction of senior level students in architectural construction and detailing.

Select Project Experience

New West Virginia State Office Complex Fairmont, WV

Mon Power Regional Headquarters *Fairmont, WV*

West Virginia High Technology Consortium Fairmont, WV

5000 NASA Boulevard Allan B. Mollohan Innovation & Incubator Center

West Virginia Army National Guard

Buckhannon, WV
Armed Forces Readiness Center
Fairmont, WV
Armed Forces Readiness Center
Eleanor, WV

Armed Forces Readiness Center Maintenance Facility Access Road & Guard House

Fairmont State University

Fairmont, WV

Wallman Hall Renovations
Engineering Tech Addition and Renovations
Library Addition & Renovation
Feaster Center Addition & Renovation
Colebank Hall Renovation
Inner Campus Renovation
New Education and Health Sciences Bldg
Robert C. Byrd Aerospace Center

Pendleton County Schools, WV

Franklin Elementary School

Harrison County Schools, WV

Lumberport Elementary School Lumberport Middle School

Marion County Schools, WV

West Fairmont Middle School Fairmont Sr. High School Cafeteria

City of Fairmont, West Virginia

Public Safety Building Municipal Complex

General Services Administration

Federal Building Renovations
Wheeling, WV
Martinsburg, WV
Huntington, WV
Beckley, WV

Canaan Valley Institute Headquarters Davis, WV







Jason M. Miller AIA, NCARB

PROJECT ASSIGNMENT

Project Architect Project Manager

EDUCATION

Master of Architecture Virginia Polytechnic Institute, 2004

REGISTRATION / PROFESSIONAL AFFILIATIONS

American Institute of Architects, Member American Institute of Architects—West Virginia, Member National Council Architectural Registration Board U.S. Green Building Council, Firm Membership Associated Builders and Contractors Inc., Firm Membership

EXPERIENCE

- Seven years experience as an intern architect with comprehensive knowledge of project management from programming through construction administration.
- Architectural practice has included diverse project types including educational facilities, government and military facilities, office buildings, health care facilities, commercial design, multifamily and single-family housing, and custom fabrication.

RELATED EXPERIENCE

- Leadership Marion XXX (2011—2012)
- Adjunct Professor at Fairmont State University teaching Advanced Architectural CAD as well as Design classes.
- Board of Directors of Monongalia Arts Center
- Worked with Habitat for Humanity of Morgantown to develop potential low income housing strategies.
- Awarded Outstanding Thesis Award of 2004 from Virginia Tech faculty.

Select Project Experience

- West Virginia Army National Guard Armed Forces Readiness Center Buckhannon, WV
- Charleston Professional Building Federal GSA Building Charleston, WV
- West Virginia University Blanchette Rockefeller Neurosciences Institute Morgantown, WV
- West Virginia University Child Development Center Morgantown, WV
- Morgantown Utility Board Renovations Morgantown, WV
- West Virginia High Technology Consortium NASA and National White Collar Crime Fit Outs at 5000 NASA Boulevard Fairmont, WV
- University Health Associates MRI Addition Morgantown, WV
- Sundale Palliative Care Center Addition Morgantown, WV







Terradon Corporation

Terradon Corporation offers a wide range of civil engineering and environmental services, and is regarded as one of West Virginia's leading land and infrastructure planning and design firms. Formed in 1989, its staff includes engineers, landscape architects, surveyors, land planners, environmental scientists, designers, and technicians.

Terradon has vast experience working in the challenging mountainous terrain of our state. Understanding that for the owner, time is money, the firm has built its reputation by providing cost effective design solutions and maintaining the highest level of customer service.

Allegheny Design Services (ADS)

Allegheny Design Services is a consulting engineering firm specializing in structural building design and building analysis. With over 25 years of experience, ADS provides all phases necessary for the successful completion of a building project from schematic design studies to construction administration. ADS currently utilizes Autodesk REVIT for the development of project work.

ADS consistently delivers projects up to \$25 million in construction value. Building systems delivered by ADS include structural steel, reinforced concrete, precast concrete, and structural timber.

Tower Engineering, Inc.

Tower has been providing innovative mechanical and electrical engineering solutions and unparalleled client service since 1931. Through past experience, they have learned the importance of designing to allow adaptability for future growth and change. Their knowledge and design of special ventilation systems, code requirements, piping and hazardous materials handling are essential to our clients. The health and safety of the occupants of any facility depend upon the proper design of the mechanical and environmental control systems serving it.

Tower Engineering's highly-trained staff of project managers, designers, and technical support personnel utilizes state-of-the-art computer software programs for the design of lighting, electrical power and mechanical systems. Their experience includes numerous projects that include medium voltage distribution upgrades. Electrical power analysis capabilities include fault current, voltage drop and arc-flash studies. Lighting analysis includes point-by-point calculations, exterior lighting analysis, and life cycle cost comparisons. Mechanical analysis includes energy economy analysis, thermal storage analysis, heating and cooling load calculations, refrigerant piping design, water piping design, and ductwork design.

More information about our consulting engineers can be found in the tabbed sections following Omni's Statement of Qualifications.







References

Omni Associates realizes that our relationships with our clients is a vital component in the success of realizing their goals and needs. We encourage you to contact any of the following references in assisting you with your selection of a professional architectural firm.

First Energy

Toledo Edison 6099 Angola Road Holland, OH 43528

First Energy

Mon Power Regional Headquarters 5001 NASA Boulevard Fairmont, WV 26554

West Virginia HighTechnology Consortium Foundation

1000 Technology Drive, Suite 1000 Fairmont, WV 26554

Braxton Co. Development Authority

P.O. Box 1925 Charleston, WV 25314

Harrison County Schools

408 E.B. Saunders Way Clarksburg, WV 26554

City of Fairmont

200 Jackson Street Fairmont, WV 26554

WVARNG

Construction and Facility Management Office 1705 Coonskin Drive Charleston, WV 25311.1085

Ms. Linda Moss

President 800-447-3333

Mr. Bob Hellman

Supervisor, Facilities Management 304-534-7955

Mr. Brad Calandrelli

Facility and Property Program Mgr 304.366.2577 ext. 233

Ms. Terrell Ellis

Executive Director 304.342.6972

Mr. Neil Quinn

Clerk of the Works 304.326.7305

Mr. Jay Rogers

City Manager 304.366.6211

LTC David P. Shafer

Construction and Facility Management Officer 304.541.6539 "...this (West Virginia High Technology Consortium) is indeed an important economic development project for West Virginia, and I wish to thank Omni Associates for the predominant role that they played in making this endeavor, as well as many other significant projects across the state, a reality..."

Robert C. Byrd United States Senate

"In appreciation of all of your hard work, dedication, and technical support to the Eleanor Maintenance Complex, West Virginia Army National Guard. Your expertise has helped create one of the finest Maintenance Shops in the United States."

Robert D. Davis, CPT, OD, WVARNG CSMS Superintendent Warren T. Huxley, LTC, EN, WVARNG, Surface Maintenance Manager

"Omni has been an integral part of this entire process. The architects worked quickly to assess our needs and develop the frame work for this building and worked closely with us to ensure the final product would be efficient as well as beautiful. The team environment encouraged a collaborative effort to meet our specific needs."

Linda Moss Project Manager, Mon Power Regional Headquarters

"You have been an excellent team player, and we surely appreciate the quality of the building (Fairmont State University Education and Health Careers Building) you helped develop."

Robert J. Dillman President Fairmont State University







WEST VIRGINIA ARMY NATIONAL GUARD CONSTRUCTION AND FACILITY MANAGEMENT OFFICE 1705 COONSKIN DRIVE CHARLESTON, WEST VIRGINIA 25311-1085

26 March 2013

SUBJECT: Recommendation for Omni Associates - Architects, Inc.

To whom it may concern,

It is my pleasure to highly recommend Omni Associates - Architects, Inc. for design projects of any scale. I have had the privilege to work with Omni Associates on several projects in the past totaling over \$100M and we are currently in construction with two Readiness Centers designed by Omni. My office has found them to be extremely responsive to any owner needs and concerns and always as the best interest of the government in mind. Their quality assurance and dedication to success distinguishes them from other firms.

I have been very impressed with the team relationship between my office and Omni Associates. Of particular note, the principle Mr Dick Forren has over thirty years of military service as an engineer officer. As a result his firm is extremely knowledgeable about military units, equipment, and terms. Additionally, Omni Associates is very knowledgeable of the requirements for security and force protection. They have experience with numerous building types with the West Virginia Army National Guard and utilize 3D modeling design system that can be utilized for facilities maintenance.

Again, it is my pleasure to highly recommend The Omni Associates – Architects, Inc for your next design project as we will undoubtedly use them for future projects. Please feel free to contact me at 304/541-6539 if I can be of any further assistance.

Sincerely,

DAVID P. SHAFER LTC, EN, WVARNG

Construction & Facility Management Officer

Twin Falls Resort State Park Lodge Addition and Renovations



Twin Falls Resort State Park
Mullens, West Virginia
West Virginia Department of Natural
Resources
Parks and Recreation Division

28,000 Square Foot Expansion Construction Cost: \$7.3 Million

27 additional rooms
New Guest Services, Main Lobby,
Indoor Pool, Fitness Area, and Courtyard.
Improved Gift Shop and Enlarged Conference Rooms

Omni Associates – Architects was selected by the West Virginia Division of Natural Resources Parks and Recreation Division to design a new wing adjoining the Twin Falls Resort State Park lodge. According to Twin Falls State Park Superintendent Scott Durham, the changes at Twin Falls mark the park's maturing and coming into its own. "The architects have done a wonderful job putting together two dramatically different styles and preserving both."*

With the expansion project, the guest capacity has more than doubled, from 20 to 47 rooms. Other changes include a new courtyard, a transformed lobby, an indoor pool and fitness area, an improved gift shop, and enlarged conference rooms. Accessibility was also a design consideration. Although the original structure's multitiered steps present an obstacle for some guests, the new wing is fully accessible. The entrance to the new addition is on the same level as the restaurant and primary conference area, and an elevator provides easy access to other floors.

Although the new lodge is different architecturally, Omni Associates aimed to ensure it was compatible with the original. In 1967, Walter Gropius, the father of modern architecture, led The Architects Collaborative (TAC) in the design of the lodges at Twin Falls Resort, Hawks Nest, and Pipestem Resort state parks. The modernist style eliminates ornamentation and uses steel, glass, and concrete. The original Twin Falls lodge has a flat roof and box shape, while the new addition has a more Alpine appearance, with a peaked roof and exposed timbers. The original building was not altered in this expansion, except where the two sections join. Matching brick was used in the new structure for continuity between the two buildings. The original lodge's architectural details, such as railings and windows, harmonize with those elements in the new structure.

Following the park's tradition of using names from nature to identify its structures, the original Twin Falls lodge is now designated as the Monarch wing, after the state butterfly. The new addition is the Cardinal wing, after the state bird.

304.367.1417











Ski Base Lodge at Canaan Valley Resort





Ski Base Lodge
Canaan Valley Resort State Park
West Virginia
21,000 Square Feet
\$2 million
Park Operated by: Guest Services, Inc.

Omni Associates – Architects, Inc. was commissioned to design and administer construction for a new 21,000 square feet ski base lodge to replace two existing facilities at Canaan Valley Resort. Canaan is a state park in West Virginia. The existing facilities, no longer capable of handling the resort's growing requirements, remain in use to accommodate a new slope-side pub, overnight storage, day-use lockers and ski offices. The \$2 million lodge is situated on the site to allow easy access of all three buildings for its guests.

The two-story structure accommodates facilities for Canaan's growing number of guests. The main floor accommodates lift ticket sales, ski and snowboard rental areas, and retail space. The dining area, located on the second floor, can accommodate 500 skiers. Future plans include a deck, located off of the dining area, to act as a gathering area for guests.

A major goal of the new facility was to create a fluid traffic flow for skiers to enter the main entrance of lodge and allow easily access the slopes. This was accomplished by creating "traffic patterns" for guests solely purchasing lift tickets and those who wish to rent skis or snow boards. A pedestrian area was also created with the placement of the new lodge in relationship to the two existing facilities.

The pre-engineered steel structure possesses a "rustic" look, which is emphasized by a variety of building materials. The exterior façade is comprised of a metal roof, stone, and vertical wood shake siding. The dining area also includes a stone fireplace with exposed wood trusses and a vaulted ceiling. A clock tower, housing an interior elevator, is used as a key building design element.



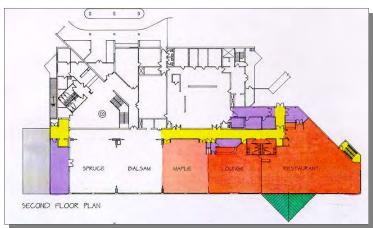




Canaan Valley Resort State Park



Canaan Valley Resort State Park Main Lodge Addition Davis, West Virginia Addition: 18,000 SF Renovation: 9,400 SF





Omni Associates- Architects designed an 18,000 SF two story addition to the Main Lodge at Canaan Valley State Park. The project was a "fast track" design in which portions of the building were under construction while the final design and construction drawings were being completed.

The addition was designed to incorporate a new indoor pool, enlarged restaurant, expanded kitchen facilities, exercise room, game rooms, and additional conference rooms. Sensitivity to the original design of the building as well as maximization of the view of the park was of utmost concern.

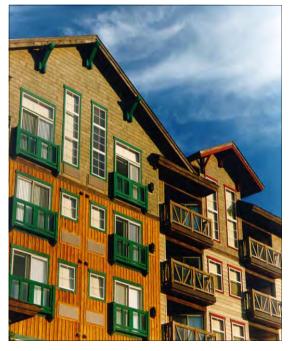
The design also included 9,400 SF of renovated space within the existing building while the operation of the Lodge was maintained. Renovations included conference rooms, break-out rooms and lounge.











Snowshoe Resort, an Intrawest Development resort property, teamed once again with Omni Associates - Architects for architectural services in connection with Rimfire Lodge, the first phase of the renaissance of Snowshoe Mountain Resort. Omni Associates was the coordinating architect for the sizable staff of professionals stretching from Vancouver, BC to Washington, DC. The 112,00 square foot facility is a hub of activity in the mountaintop The rustic center houses retail village. shopping, bar and nightclubs, restaurants, as well as luxurious condominiums. It boasts a Beautiful 360degree view of the scenic West Virginia mountain scheme.

Snowshoe is the largest ski resort in the Mid-Atlantic and Southeastern regions of the United States, with an annual skier visit count that puts the resort in the top five percent of ski areas in North America. Snowshoe/Silver Creek Resort was recently ranked by Snow Country Magazine as one of North America's Top 50 Mountain Resorts. Omni Associates is both excited and appreciative of our involvement with Snowshoe and with such a progressive and aggressive company as Intrawest.

Rimfire Lodge Snowshoe Mountain Resort Owner: Intrawest Snowshoe, West Virginia 112,000 Square Feet Ray Letkeman(Collaborating Architect) RLA, Inc., Vancouver, BC

Honor Award Excellence in Design West Virginia Society of The American Institute of Architects







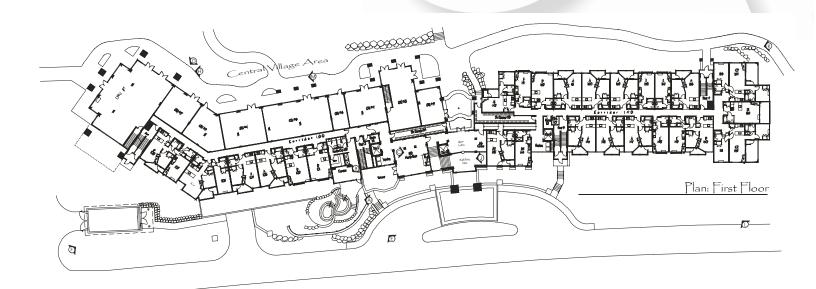








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The Story:

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The new Owners of a major mountaintop resort were about to launch a major full-scale real estate adventure. They were in search of a "New Mountaintop Identity" for a resort that had been in and out of bankruptcy for the last 25 years. The new Owners knew they had a major hurdle to overcome with the problematic history the resort had experienced with developers and the real estate market on the mountain. Many of the prior developers had been from coastal areas and from southern states. Consequently, the condominium projects on the mountain had the appearance of "stack-a shacks" seen at the beaches of the East Coast.

Not only a new image was needed, but also a new concept was essential. The ski market was strong and there were many people, mostly from the Southeast, still coming to the resort for some wintertime recreation. The goal would be to offer more than just winter sports and to be markedly distinct in the new architecture. The Owner wanted a whole new experience presented for total digestion. The existing condominium projects were all stand-alone experiences and spread over a 2-mile stretch of mountain. There was no identity, no sense of arrival and no communal spirit. All that existed were individual buildings totally unrelated to each other.



The architecture was to introduce a "New Mountain Style" unlike anything previously seen in this area. It would be the critical introduction of a new Developer and a statement that this developer was a partner and here to stay. It was critical to impart a sense of commitment and permanency. It was to offer the southern buyer a "place in the mountains".

After much analysis and many design charrettes, a concept was initiated to give the mountaintop a central village area that would be a gathering place in both winter and summer. The village would offer a sense of identity and a place of arrival. It would offer commercial space for shopping, gathering, a

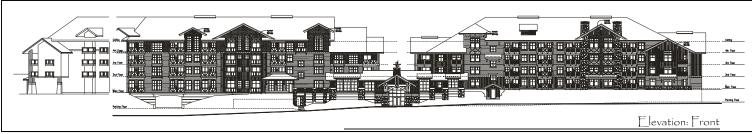




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place for activity and would also offer real estate for sale within the village proper. People wanted to see activity, a place of their own and to be a part of the activity. The concept would include a series of lodges comprising a village that would appear to be one that had grown over time.

The initial lodge was critical in presenting a concept to the users and buyers. It had to instill the theory of the concept on a small scale until the rest of the village was begun. It was to appear as if it had been built in two different eras. Part of the lodge was to be more rustic and rudimentary in appearance as if built in an earlier time; the other part was to appear as a later addition tied to the old lodge by a connecting lobby. One side of the lodge offered spectacular views to the west. The other side offered a view of the village and its activity. The new lodge was also to be sited to offer protection to the village gathering areas from the ever-present westerly winds and fierce weather.

An economy of construction was necessary due to the real estate price points established. The appearance of the two halves would be differentiated in the details. The success was verified in the volume of real estate sales enjoyed.



- Covered decks & patios

- Mountain bike storage

- Air conditioning

Exterior stone accent & detailing
Private sauna & workout room
Wood unit entry doors

Rimfire Lodge Snowshoe Mountain Resort / Intrawest

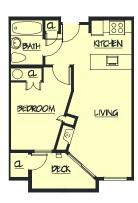
Building Amenities

- Located in Ski-in/Ski-out village
- Rustic exterior timber beams & columns
- Private underground parking
- All units have locking owners closet
- Vinyl wall coverings in hallways
- Ski lockers
- Laundry facilities
- "The Basin" Private hot tubs in landscaped setting
- "Alpenglow" hearth room with rustic stone & wood detailing
- Sprinkler fire protection system throughout building

Elegant Interior Features

- Natural wood baseboards and window trim bedrooms
 - Knotty pine kitchen cabinets
 - Full size, built-in dishwashers
 - Spacious closets with vinyl coated shelving





- Easy care laminate countertops with wood trim
 - Designer pedestal sinks in baths
- 4-burner range with self-cleaning oven in full kitchens
 - Convection-microwave oven in Jr. studio units
- Energy efficient gas fireplaces with solid wood mantel & tile surround
 - Built-in over-the-range microwave
 - Raised panel interior doors
- Berber Carpet in living area & Ceramic tile flooring in kitchens & baths
 - Tile backsplash in kitchen
 - G. E. Appliances
 - Convenient data port outlets
 - Garbage disposal



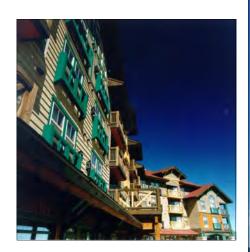














info@omniassociates.com





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Ravenswood Lodge at Snowshoe Mountain





Ravenswood Lodge Employee Housing Snowshoe Mountain Resort Snowshoe, West Virginia

Building One: 20 - Three Bedroom Units 18,853 Square Feet

Building Two: 17 - Three Bedroom Units 16,405 Square Feet

Total Project: 37 - Three Bedroom Units 35,258 Square Feet





Fairfield Inn and Suites - Morgantown, WV





Fairfield Inn and Suites Morgantown, West Virginia Construction Cost: \$5,881,037 Construction Completion: 2010

4 Floors 56,128 Square Feet 95 Sleeping Units

Indoor Swimming Pool / Jacuzzi Meeting Room Conference Room Dining Area Fitness Room Business library

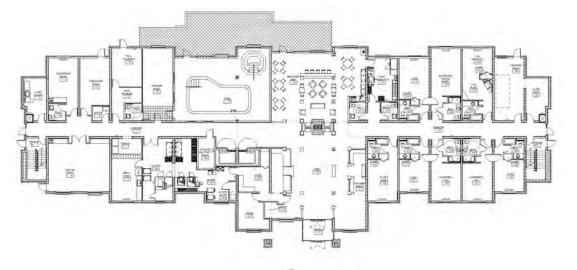


Fairfield Inn and Suites - Morgantown, WV







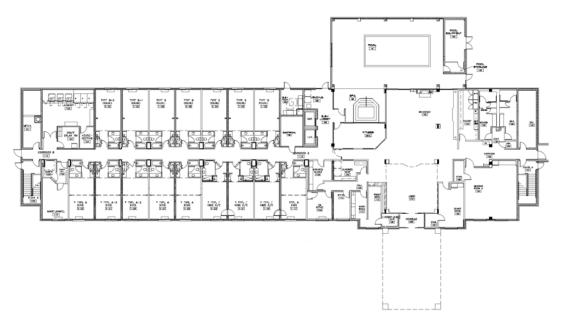






Wingate Inn - Charles Pointe, WV

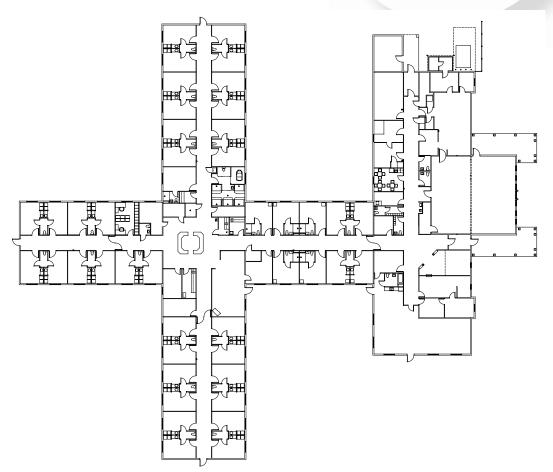




Wingate Inn Charles Pointe, West Virginia Construction Cost: \$6,337,000 Completed:

4 Floors 63,670 Square Feet 116 Sleeping Units

Shenandoah Nursing & Rehabilitation Center





Shenandoah Nursing & Rehabilitation Center Glenmark Associates Charles Town, West Virginia 78 Bed Facility 27,677 Square Feet





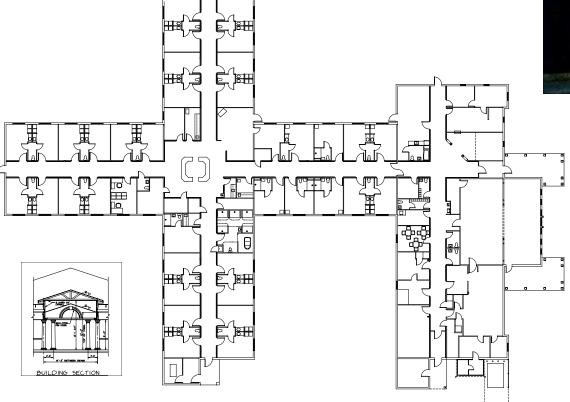


The Madison: Nursing & Rehabilitation Center



The Madison: Nursing & Rehabilitation Center Glenmark Associates Morgantown, West Virginia 62 Bed Facility 23,800 Square Feet







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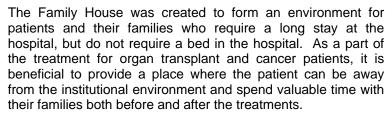
Rosenbaum Family House at WVU Hospitals



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The site required that the building be connected to the hospital so patients can freely go to the proper care areas and even use the hospital's cafeteria and other services. The site was difficult due to the severely sloping site and the confined area between the hospital to the west, the access drive on the south, the day care center to the east and large buried utilities on the north. The lower two floors connect the hospital to the conference rooms of the day care center and the upper two floors create a private environment for the Family House guests. The elevator and upper floor connections are controlled by card access to members only.



WEST VIRGINIA UNIVERSITY HOSPITALS

Rosenbaum Family House

WVU Hospitals Morgantown, West Virginia 28,000 Square Feet 20 Rooms 5 Apartments





Rosenbaum Family House at WVU Hospitals

The building massing was required to "blend" with the existing institutional urban articulation of the existing buildings. However, the interior of the lobby and the guest room areas needed to be an inviting and warm atmosphere that provided a sense of shelter and private care.

The Family House provides an internal environment of hospitality that gives the "guests" a level of pampered care. It contains hotel-like rooms, apartments for longer stays, a "quiet" lounge and an "activity" lounge. Each floor has a community kitchen and the third floor opens out to a semi-private outdoor garden space. The corridors open up to sequential entrances to the rooms. The interior spaces have large windows to flood the rooms with light and allow views out to the stadium on one side and the garden space on the other side.

Each family has private access to their room and can use the community spaces for group activities. Colors were selected to be elegant and give a sense of charm. Laundry and storage for personal possessions is also provided. The "bridge" connections allow patients direct access to the hospital for their care and emergency needs. Before this facility, patients had to travel for daily treatments or consultations and then try to secure hotel space in the area.

The lower lobby provides a guest entrance for the Family House but also is a breakout lounge for the adjacent conference rooms and provides direct access to the hospital's lobby and gift shop. This area has become a major connection for the three connected facilities.

The Family House has become an uplifting experience for the patients and the families that use the rooms and activity spaces as a part of their health recovery.









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Genesis Youth Crisis Center



Genesis Youth Crisis Center, Inc. provides a temporary safe haven and nutritional, educational, and supportive services for children who have been removed from their homes as a result of domestic violence, abuse, neglect, or have run away or are homeless.

Genesis selected Omni Associates - Architects via a competitive selection process in 2000. Omni worked with the client for several years developing numerous programs and schematic layouts for all of its facilities, including Genesis Youth Center and Alta Vista Shelter, until a piece of property was purchased in Harrison County for a new 14,400 square foot Youth Center.

The program requirements created an opportunity for the architect to design a residential structure that would also house the crisis center, administrative offices, classrooms, kitchen and gymnasium. Two wings of the building house the residential board and care unit. They include 8 single occupancy bedrooms of approximately 110 square feet and 4 double occupancy bedrooms of approximately 165 square feet. The bedrooms are connected by a lounge and clerestory recreation area. Four residential style bathrooms are provided along with staff offices and a laundry room. The service wing houses the classroom and cafeteria with occupancy for 20 people. The business wing is located at the front of the building with its only connection via a common secured entrance. The business wing consists of eight offices, a break room and a conference /training room.

The new campus will nearly double the number of beds provided by Genesis Youth Center and Alta Vista Shelter combined in the hopes that no child will be turned away for lack of room.



Genesis Youth Center Clarksburg, West Virginia

Estimated Construction Cost: \$6 Million Project Status: Fund Raising

Main Facility: 23,173 Square Feet Gymnasium: 4,588 Square Feet Total Project: 27,761 Square Feet







info@omniassociates.com



102 Leeway Street Morgantown, WV 26505 Phone: (304)599-0771 Fax: (304)212-2396 www.alleghenydesign.com



CONSULTING ENGINEERING FIRM SPECIALIZING IN STRUCTURAL BUILDING DESIGN AND BUILDING ANALYSIS

Allegheny Design Services is a consulting engineering firm specializing in structural building design and building analysis.

Dedicated to serving West Virginia and the surrounding region, *ADS* recognizes the need for reliable and full service structural engineering support. *ADS* provides all phases necessary for the successful completion of a building project including schematic design studies, design development, construction documents and specifications, and construction administration.

Over 20 years in Design and Project Management of:

- Commercial
- Industrial
- Institutional
- Educational Facilities



MIXED USE



HOTEL CONFERENCE CENTERS



SECONDARY EDUCATION



OFFICE BUILDINGS



PARKING GARAGES



ATHLETIC FACILITIES



METAL BUILDING SYSTEMS



HEALTH CARE



102 Leeway Street Morgantown, WV 26505 Phone: (304)599-0771 Fax: (304)212-2396

E-mail: <u>Dave@AlleghenyDesign.com</u> Web: <u>www.AlleghenyDesign.com</u>

FIRM PROFILE

Allegheny Design Services is a consulting engineering firm specializing in Structural & MEP building design and building analysis.

Dedicated to serving West Virginia and the surrounding region, ADS recognizes the need for reliable and full service engineering support. ADS provides all phases necessary for the successful completion of a building project including schematic design studies, design development, construction documents and specifications, and construction administration. We currently hold licenses in West Virginia, Pennsylvania, Maryland, Virginia, District of Columbia, South Carolina and Ohio.

ADS's experience in Design and Project Management includes:

Commercial Facilities

Industrial Facilities

Institutional Facilities

Educational Facilities

ADS was established by David Simpson, PE, MBA, in 2002 as a result of a need in North Central West Virginia for reliable structural engineering services. In 2009 MEP engineering services were added, led by Mike Chancey, PE. ADS utilizes a combination of office technology and a motivated staff to deliver projects typically up to \$50 million in construction value. Our clients include architects, contractors, developers, attorneys, and insurance companies.

ADS currently utilizes the latest engineering design and BIM software for the development of project work.



PROJECT PROFILE

Northside Fire Station Morgantown, WV







STRUCTURAL ENGINEER: CONTRACTOR:

Allegheny Design Services, Morgantown, WV Landau-Marks Construction, Wexford, PA

PROJECT SCOPE:

- New Construction
- Three Story
- Three Vehicle Apparatus Bay

PROJECT VALUE: \$3.2 Million

PROJECT COMPLETION: 2009



PROJECT PROFILE

Bridgeport Public Safety Building Bridgeport, WV



STRUCTURAL ENGINEER: CONTRACTOR:

Allegheny Design Services, Morgantown, WV City Window & Construction Company, Inc.

PROJECT SCOPE:

This substation will house the Bridgeport Fire and Police Departments directly off of Jerry Dove Drive. It is situated adjacent to the new United Hospital Center and the quickly growing business park development of White Oaks. The two story, 15,000 sq. ft. load bearing masonry building is the focal point of the entrance to Health Care Blvd. off of Jerry Dove Drive. The building features three apparatus bays capped with an asymmetrical bow arched roof.

PROJECT VALUE: \$3.2 Million

PROJECT COMPLETION: Fall 2009



Fairmont Senior High School Cafeteria Addition Fairmont, WV

ADS was a consultant to Omni Associates for the Fairmont Senior High School Cafeteria Addition. Completed in 2000, this \$2.5 Million addition consists of a cafeteria and mechanical space on the lower level



MSHA Offices - District 3 - Coal Mine Safety & Health Office Morgantown, WV

ADS is a consultant to Omni Associates for the MSHA Offices. The 21,000 sq. ft. facility serves the District 3 Mine Safety Division. It features a load bearing light gage wall system with wood trusses and metal bar joists. This project was completed in 2002 for approximately \$2 Million.



Mylan Corporate Office Parking Garage Morgantown, WV

ADS is a consultant to Omni Associates for the Mylan Corporate Office Parking Garage. The 400 car parking structure was completed in 2004. The \$5.5 Million facility is set into a terraced hillside.





St. Bernard Chapel Snowshoe, WV

ADS was a consultant to Omni Associates for the St. Bernard Chapel. This 7,200 square foot facility was completed in 2005. Consisting of a timber frame structure at a cost of \$1.5 Million. Received a Merit Award from AIA West Virginia.



Lakeside Physical Therapy Morgantown, WV

ADS was a consultant to Omni Associates for the Lakeside Physical Therapy Building. The 8,700 square foot facility was completed in 2006. It consists of offices, treatment rooms and aerobic area. Construction cost was approximately \$1.4 Million.



Gabriel Brothers—Bridgeport Hill Bridgeport, WV

ADS was a consultant to Omni Associates for the Gabriel Brothers—Bridgeport Hill Renovation. Project consisted of an addition and renovation to existing store. Foundation Repair due to expansive soils. Completed in 2008 for approximately \$2 Million





Canaan Valley Institute Headquarters/ Educational Facility Davis, WV

ADS was a consultant to Omni Associates for the Canaan Valley Institute Headquarters/Educational Facility.CVI Headquarters houses research facilities, offices, and public service facilities. Construction cost was approximately \$6.5 Million. It was completed in 2009.



Fairmont State University Feaster Center Addition Fairmont, WV

ADS was a consultant to Omni Associates for the Fairmont State University Feaster Center Addition. An entrance addition was added to the existing facility. Completed in 2009 for approximately \$1.1 Million.



Suncrest Towne Centre Building 600 Morgantown, WV

ADS is a consultant to Omni Associates for the Suncrest Towne Centre Building 600. This 13,000 square foot facility was completed in 2009 for approximately \$3 Million. The lower level consists of retail space with the upper floors consisting of offices.





Suncrest Towne Centre Office Buildings 451, 453 & 455 Morgantown, WV

ADS is a consultant to Omni Associates for the Suncrest Towne Centre Office Buildings 451, 453 & 455. These three office buildings are a total of 44,000 square feet in office space. The project was completed in 2009 for approximately \$4 Million.



Suncrest Towne Centre Site C Morgantown, WV

ADS is a consultant to Omni Associates for the Suncrest Towne Centre Site C. Engineering was provided for foundation design, miscellaneous structural consultation for a prefabricated metal building frame clad in masonry. Total retail space is approximately 60,000 square feet. This Project was completed in 2009 for approximately \$6 Million.



WVU Child Development and WVU Nursery School Morgantown, WV

ADS is a consultant to Omni Associates for the WVU Child Development and WVU Nursery School. The WVU Child Development Center is 18,907 Sq. Ft. and the WVU Nursery School is 4,163 Sq. Ft. This project was completed in Fall of 2009 for approximately \$6.1 Million





BFS Fairmont Fairmont, WV

ADS was a consultant to Omni Associates for the BFS Fairmont. This project consists of retail and auto center. Construction cost was approximately \$750,000 and it was completed in 2010.



Fairfield Inn/Marriott Morgantown, WV

ADS was a consultant to Omni Associates for the Fairfield Inn/Marriott. Full Engineering Services were provided Construction cost was approximately \$5.8 Million. It was completed in 2010.



Mon Power Regional Headquarters Fairmont, WV

ADS was a consultant to Omni Associates for the Mon Power Regional Headquarters Building. This building consists of Transmission Control Center; Offices, Conference Rooms; and Maintenance Center. It was completed in 2010.





Sundale Nursing Home Morgantown, WV

ADS is a consultant to Omni Associates for the Sundale Nursing Home. This project consisted of a Sundale Hospice Care Addition consisting of Load Bearing Light Gage Construction. The project was completed in 2010 for approximately \$2 Million.



GSA Building Charleston, WV

ADS was a consultant to Omni Associates for the GSA Building in Charleston, WV. The facility consists of Offices and Operations Facility. Completed in 2011 for approximately \$3 Million.



Jerry Dove Medical Office Building Bridgeport, WV

ADS was a consultant to Omni Associates for the Jerry Dove Medical Office Building. This building consists of Structural Mat Foundation System and Steel Framing. The facility was completed in 2011 for approximately \$6 Million.





Lumberport Elementary School Lumberport, WV

ADS was a consultant to Omni Associates for the Lumberport Elementary School. It consists of insulated concrete form (ICF) walls; steel joist floors and roof; and concrete on metal deck floors. This project was completed in the Spring of 2012 for approximately \$10 Million.



Fairmont AFRC Fairmont, WV

ADS was a consultant to Omni Associates for the Fairmont AFRC. Design is currently underway for a National Guard Readiness Center. It includes space for training, offices and multi-use public space.





102 Leeway Street Morgantown, WV 26505 Phone: (304)599-0771 Fax: (304)212-2396

E-mail: <u>Dave@AlleghenyDesign.com</u>
Web: <u>www.AlleghenyDesign.com</u>

KEY PERSONNEL

David R. Simpson, PE, SECB, MBA, President

West Virginia Institute of Technology, BS Civil Engineering West Virginia University, MBA Structural Engineering Certification Board

National Council of Examiners for Engineering and Surveying PE Licenses in the following States:

West Virginia District of Columbia

Pennsylvania South Carolina

Maryland Ohio

Virginia

Michael W. Howell, PE, SE, Sr. Structural Engineer

University of Pittsburgh, BS Civil Engineering

PE Licenses in the following States:

Virginia Maryland West Virginia Pennsylvania

American Society of Civil Engineers

Richmond Branch Past President

Richmond Joint Engineers Council - Past Chairman

American Council of Engineering Companies

Jason D. Robinson, PE, Associate Engineer

West Virginia University, BS Civil Engineering PE License - West Virginia

Jillian R. Nutter, EIT, Jr. Structural Engineer

West Virginia University, BS Civil Engineering WV EIT Certification

Education:

West Virginia Institute of Technology - B.S. Civil Engineering West Virginia University - Masters Business Administration West Virginia State College - Architectural Technology Courses

Professional Registrations:

Year first registered: 1984

West Virginia, Pennsylvania, Maryland, Virginia, District of Columbia, South Carolina, Ohio, Structural Engineering Certification Board and National Council of Examiners for Engineering and Surveying

Professional Memberships:

American Society of Civil Engineers, Structural Engineering Institute, Charter Member, American Concrete Institute, American Institute of Architects – West Virginia Chapter, American Institute of Steel Construction, Inc., American Iron and Steel Institute Member, Associated Building Contractors (ABC)

Professional Experience:

Responsible for strategic management, marketing, quality control, personnel development, business development, project management and design at Allegheny Design Services. Experience includes over 32 years in structural design and project management for industrial, commercial, institutional, and nuclear/chemical facilities utilizing steel, concrete, masonry, and wood. Past accomplishments include design and construction administration of health care facilities, hotels, schools, shopping centers, aircraft hangars, numerous retail facilities, and numerous forensic engineering assignments. Experience has been obtained from the following assignments:

Experience Record:

Allegheny Design Services, LLC, President, R.M. Gensert and Associates, Vice President, WVU, Assoc. Director of Planning, Design & Construction Simpson Engineering, Owner CECO Buildings Division, Senior Structural Engineer Rockwell International, Facility Structural Engineer Bellard Ladner & Assoc., Staff Structural Engineer PPG Industries, Facility Structural Engineer

Project Experience Includes:

Morgantown Event and Conference Center, Morgantown, WV
Phipps Conservatory Addition, Pittsburgh, PA
Waterfront Hotel and Conference Center, Morgantown, WV
WVU Basketball Practice Facility
WVU Mountaineer Field North Luxury Suites
UPMC Hillman Cancer Center
William Sharpe Hospital Addition
Chestnut Ridge Church
University of Pittsburgh Bio Medical Tower
Glade Springs Hotel & Conference Center
Fairmont State University Parking Garage

May 2002 to Present August 1998 to May 2002 August 1988 to August 1998 August 1988 to August 1998 April 1985 to August 1988 March 1982 to April 1985 Sept. 1981 to March 1982 January 1980 to Sept. 1981



MICHAEL W. HOWELL, PE, SE SENIOR STRUCTURAL ENGINEER

Education:

University of Pittsburgh - B.S. Civil Engineering
West Virginia University - Master of Business Administration (2014 expected graduation)

Professional Registrations:

Professional Engineer – Virginia, West Virginia, Maryland and Pennsylvania NCEES Record Holder

Professional Memberships:

American Society of Civil Engineers - Past Branch President Richmond Joint Engineers Council - Past Council Chairman Structural Engineering Institute - Member

Continuing Education:

Blodgett's Welding Design Seminar – April 2013 – Cleveland, OH
Simpson Strong-Tie Continuous Load Paths in Wood Structures – November 2011 – Charlottesville, VA
Kaplan 28 Hour SE Exam Review Course – August 2011 – Richmond, VA
Emerging Leaders Alliance Workshop – November 2010 – Denver, CO
OSHA 10 Hour Safety Course for Construction Personnel – April 2006 – Alexandria, VA
SE University multiple structural technical training webinars.

Professional Experience:

Responsibilities at Allegheny Design Services include project management and structural design. Professional experience is comprised of a wide variety of roles as both a designer and contractor. Past accomplishments include a mix of residential, commercial, industrial, military and government facilities utilizing all major building elements including steel, concrete, masonry, wood, and aluminum. Experience includes domestic as well as international projects for a variety of public and private clients from the following assignments:

Experience Record:

Allegheny Design Services, LLC, Sr. Structural Engineer Austin Brockenbrough and Associates, Structural Engineer McKinney and Company, Civil Engineer American Bridge Company, Field Engineer June 2012 to Present March 2008 to June 2012 March 2007 to March 2008 May 2005 to March 2007

Project Experience Includes:

Project experience (past and present) includes:

Puskar Center Vertical Expansion Analysis, West Virginia University, Morgantown, WV Milan Puskar Stadium Handrail Analysis & Repair, West Virginia University, Morgantown, WV Puskar Center Auditorium Expansion, West Virginia University, Morgantown, WV

White Oaks Office Development Building II, Bridgeport, WV

College Park Apartments, Morgantown, WV

University Park Dormitory, West Virginia University, Morgantown, WV

Brownsville Marine Product Plant Upgrade and Repairs, Brownsville, PA

Clarksburg Credit Union, Clarksburg, WV

High Bridge Trail State Park Pedestrian Bridges, Prince Edward County, Virginia

Observation Platform, Midlothian Mines Park, Chesterfield County, Virginia

Fuel System & Facility Upgrades, Fort Drum, NY

Eppington Plantation Restoration and Structural Stabilization, Chesterfield County, Virginia

Old City Hall Plaza Replacement, Richmond, Virginia

Woodrow Wilson Bascule Replacement, Alexandria, Virginia

WVU Baseball Stadium and Ball Park, Morgantown, WV



JASON D. ROBINSON, PE ASSOCIATE STRUCTURAL ENGINEER

Education:

West Virginia University - B.S. Civil Engineering

Professional Registrations:

Professional Engineer - West Virginia, Pennsylvania, Maryland

Professional Memberships:

Member of AISC

Associate Member of ASCE

Continuing Education:

WVU Steel Design—Fall 2007

AISC - Façade Attachments to Steel Frames - September 20, 2007

ASCE - Reinforced Masonry: Design and Construction - November 8, 2007

TSN - Cold-Formed Steel Seminar - Load Bearing and Curtain Wall Systems - December 4, 2008

Lincoln Electric Co. - Blodgett's Welding Design Seminar - October 13-16, 2009

Steel Camp - November 4-5, 2010

The New 14th Edition Steel Manual - October 25, 2011

ASCE-Design and Renovation of Wood Structures - October 2012

SE University multiple structural technical training webinars.

Professional Experience:

Responsibilities include structural engineering design, construction documents, quality control and field engineering.

Experience Record:

Allegheny Design Services, LLC, Associate Engineer

June 2007 to Present

Project Experience Includes:

University Park Mixed Use Building, Morgantown, WV

White Oaks Hawthorn Suites, Bridgeport, WV

BFS Suncrest, Morgantown, WV

Pikewood Creative Addition and Renovation, Morgantown, WV

GSD Fairmont, Fairmont, WV

Homewood Suites-Charles Pointe, Bridgeport, WV

Bridgeport Public Safety Substation, Bridgeport, WV

Canaan Valley Institute, Davis, WV

Charles Pointe BFS, Bridgeport, WV

Fairmont AFRC, Fairmont, WV

Gabriel Brothers Renovation, Clarksburg, WV

Genesis Youth Crisis Center, Clarksburg, WV

Goshen Baptist Church, Morgantown, WV

GSA, Charleston, WV

GSA DOE, Morgantown, WV

ICC Parish Center, Clarksburg, WV

Mason Dixon, Bridgeport, WV

Mylan Upper Warehouse to Labs, Morgantown, WV

Progress Centre 2, Bridgeport, WV

WVU Child Development, Morgantown, WV

White Oaks Progress Center, Bridgeport, WV

Thrasher Office Building, Bridgeport, WV

WVU Greenhouse Building, Morgantown, WV



JILLIAN R. NUTTER, EIT JR. STRUCTURAL ENGINEER

Education:

West Virginia University – B.S. Civil Engineering

Professional Registrations:

WV EIT Certification

Professional Memberships:

American Society of Civil Engineers Chi Epsilon

Continuing Education:

North Carolina State University – Master of Civil Engineering SE University multiple structural technical training webinars.

August 2012 - Present

Professional Experience:

Responsibilities include engineering design of structural steel, reinforced concrete, reinforced masonry, wood, foundations and analysis of existing systems.

Experience Record:

Allegheny Design Services, LLC, Jr. Structural Engineer

North Carolina Department of Transportation, Engineering Technician

January 2013 to Present

September 2012 to December 2012

Project Experience Includes:

Project experience (past and present) includes:

Triple S. Harley Davidson, Morgantown, WV Clarksburg Credit Union, Clarksburg, WV College Park Apartments, Morgantown, WV West Union Bank, Salem, WV Urlings General Store, Wayne, WV Mt. Morris BFS, Mt. Morris, PA Sabraton Shoney's, Morgantown, WV Suncrest BFS, Morgantown, WV WVU Puskar Stadium AD Suite, Morgantown, WV Elkins Coal & Coke Building, Masontown, WV Total Dental- New Multi-Tenant Building, Clarksburg, WV Webster 911 Center, Webster Springs, WV Gateway Commercial Building, Morgantown, WV Wesley United Methodist Church, Morgantown, WV Arthurdale High School Renovation, Arthurdale, WV Preston Contractors Office Addition, Kingwood, WV



Corporate Overview



TERRADON Corporation offers a multi-faceted approach to design engineering and consulting services. For the past 25 years TERRADON staff has provided a wealth of engineering solutions blanketing the Appalachian and Mid-Atlantic region with successful projects. The company built its reputation on expert personnel and quality, time-sensitive service. Those same founding principles hold true today.

The second-generation, family-owned business has built a strong reputation by providing flexible, cost effective design solutions and maintaining the highest level of customer service. The firm has been recognized through numerous awards from professional organizations and agencies including the American Society of Civil Engineers, State Highway Departments, the Department of Environmental Protection and the American Institute of Architects.

TERRADON's corporate culture promotes innovation and progressive thinking. Project leaders strive to sustain customers through a wide-range of engineering offerings. TERRADON employees understand the purpose behind their services and work to cultivate lasting relationships with clients through honest, hard work.

TERRADON is the largest woman-owned engineering firm in West Virginia. TERRADON is a certified Women's Business Enterprise as defined by the Women's Business Enterprise National Council and the National Women Business Owners Corporation.







Locations

TERRADON maintains three WV locations: headquarters near Charleston, WV and offices in Lewisburg and Charlton Heights. With headquarters located near the area of work, and additional support from TERRADON's Charlton Heights and Lewisburg, TERRADON is equipped to meet any engineering design needs for this project.



Qualifications



Land Development covers a broad swath of TERRADON's service offerings and sees a large percentage of its annual revenue from repeat clients or referrals. The group is composed mainly of Landscape Architects and CAD designers who frequently team with every other department within the company.

TERRADON's Land Development department collaborates with public and private entities and has a strong presence in the recreation, public/civil, educational and commercial development sectors. TERRADON is recognized as a leader in providing site design and land planning services. The firm's professional engineers work closely with the client from the project's initial phase through a schematic design, construction documents and project delivery. TERRADON's Landscape Development Group remains on the forefront of sustainable design, providing LEED Accredited Professionals to clients. Projects utilizing sustainable design best practices aid clients in significantly reducing energy costs on projects.

TERRADON's Land Development Group works in a variety of markets including: Civic/Public, Parks/Recreation, Commercial/Industrial, K-12 Education, Higher Education and Medical.

Projects include: Master planning, recreational planning, funding agencies assistance, economic development planning, surveying, engineering, architecture, historical preservation construction administration and inspection.

LAND DEVELOPMENT SERVICES

- Master Planning
- Presentation Drawings/Renderings
- Site Feasibility Studies
- Schematic Design
- Layout Plans
- Grading Plans
- Stormwater Management Plans
- Erosion Control Plans
- Planting Plans
- Construction Observation





TECHNICAL EXPERTISE - KEY PERSONNEL

Greg Fox, ASLA, LEED AP VP Land Planning & Development

Greg Fox has overseen the Land Development Department at TERRADON since its inception in 2000. He offers more than 25 years of industry experience, providing design services to a variety of markets. During his tenure, the Land Development Group has completed more than one hundred K-12 Educational projects and dozens of Higher Education projects.

Under his guidance, the group has been the recipient of Engineering Excellence awards from the West Virginia Association of Consulting Engineers, and the Gold Award for Engineering Excellence from the American Council of Engineering Companies. Additionally, the Land Development Group has been recognized numerous times for Merit Awards by the West Virginia Chapter of American Society of Landscape Architects. Fox is a registered Landscape Architect in West Virginia, Ohio, North Carolina, South Carolina, Pennsylvania and Virginia. He is an active member of the American Society of Landscape Architects. Fox received degrees in Landscape Architecture and Planning from West Virginia University.

Jim Nagy, PE Utility Infrastructure

Nagy performs Civil Engineering related to water and waste water projects at TERRADON. He specializes in the design of water treatment and distribution systems. He has more than 25 years of on-hand experience providing engineering for the largest private water company in West Virginia. He earned a B.S. in Civil Engineering from West Virginia University. His primary focus is on management of water and wastewater projects. He also performs design work related to water distribution systems and sewage collection systems.

Shawn Gray, ASLA Landscape Architect

Shawn Gray is an experienced Site Designer and Land Planner who serves as an integral part of the TERRADON design team. He offers experience on many of TERRADON's highest profile projects, focusing on large scale site development and parks and recreation projects. Gray also provides site design and landscape architecture services for K-12 and Higher Education projects. He is responsible for developing site, grading, landscape and utility plans, site detailing and erosion sediment control plans and permitting.

Peter J. Williams, ASLA Landscape Architect

"Pete" Williams is a graduate of West Virginia University with a Bachelor of Science in Landscape Architecture. His responsibilities include landscape architectural design, grading and storm water drainage design, the design of pedestrian circulation systems and related amenities, roadway design, site planning, and quality control. Mr. Williams is registered as a professional Landscape Architect in West Virginia with more than 13 years of experience at TERRADON and more than 22 years of overall experience.

Robert Thaw, PS VP Survey and Mapping

Robert Thaw, Vice President of Survey and Mapping, oversees all TERRADON Survey services. TERRADON's survey group serves a diverse range of projects in support of TERRADON's service groups in addition to managing survey-specific clients. Thaw manages a staff of Professional Surveyors and Computer Aided Drafting (CAD) designers who provide mapping, construction layout, ALTA survey, topographic survey and boundary survey services. Thaw's leadership has been instrumental in TERRADON's prioritization of the use of modern technology, ensuring clients the most efficient and accurate results. Additionally, he is responsible for in-house design of commercial property sites, parking and utility easements, and review of project plans and base mapping creation. Thaw's group also provides as-built surveys, utility identification surveys and deformation monitoring of design features such as retaining walls and dams.

Bill Hunt, PG, LRS VP Geo-Environmental, Materials Testing and Inspection

Bill Hunt serves as Vice President of Geo-Environmental at TERRADON Corporation. He will oversee any environmental needs, permitting and direct work for geotechnical tasks and testing and inspection required of the project. Hunt offers relevant experience in environmental documentation, investigations, and coordination with federal, state, and local agencies. He prepares Environmental Impact Statements, Environmental Assessments, Section 4(f) Evaluations, and other environmental technical documents. He supervises and participates in work plan development, field surveys, on-site monitoring, data collection, impact analysis, subconsultant management, public meeting organization and group presentations.



PRIOR EXPERIENCE - Fire Stations

Yeager Airport Fire/Crash/Rescue Station, Charleston, WV

TERRADON Corporation, as a subconsultant, provided site civil engineering design for the Yeager Airport Fire/Crash/Rescue Station in Charleston, WV. TERRADON was a part of the design/build team and created civil engineering plans & specifications for the siting of this large, 6-bay drive-thru design station. The team worked with tight existing conditions and infrastructure to make the design work economically.





Fairmont Public Safety Building & Fire Station, Fairmont, WV

TERRADON Corporation, as a subconsultant, provided site civil engineering design for the Fairmont Public Safety Building in Fairmont, WV. The Public Safety Building houses the Fairmont Public Works Department, the Fire Department and the Police Department.

TERRADON services included: Geotechnical Engineering; Design and Boundary Survey, Full Site Engineering Drawings, Layout, Grading, and Drainage and Erosion Control.

TERRADON performed engineering services as a subconsultant to the architect. TERRADON engineers considered site layout options in order to maximize land use while minimizing earthwork and utility installations. TERRADON provided landscape and hardscape design as well.





PRIOR EXPERIENCE - First Responder Centers

Kanawha County Metro 911

TERRADON Corporation, as a subconsultant, provided site civil engineering design for the Kanawha County Commission 911 Call Center.

TERRADON services included:

- Design and Boundary Survey
- · Full Site Engineering Drawings
- Layout
- Grading
- Drainage and Erosion Control

TERRADON performed engineering services as a subconsultant to the architect. TERRADON engineers considering site layout options in order to maximize land use while minimizing earthwork and utility installations, resulting in an end savings to the owner. TERRADON also designed parking, access, landscapes and hardscapes for the project. The Kanawha County Metro 911 Center is a central emergency hub who coordinates with 47 other agencies in emergency situations.





Lincoln County 911 Call Center

TERRADON Corporation, as a subconsultant, provided site civil engineering design for the Lincoln County Commission for the Lincoln County 911 Call Center. TERRADON performed engineering services as a subconsultant to the architect. TERRADON engineers considering site layout options in order to maximize land use while minimizing earthwork and utility installations. TERRADON provided landscape and hardscape design as well.



TERRADON services included:

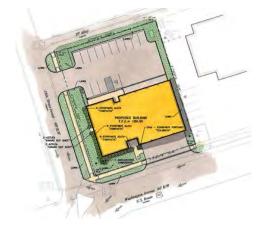
- Design and Boundary Survey
- Full Site Engineering Drawings
- Layout

- Grading
- Drainage and Erosion Control

Cabell County EMS Stations

TERRADON Corporation, as a subconsultant, performed Site Civil Engineering Services for two Cabell County EMS Stations—one on Norway Avenue and the other in Westmoreland. TERRADON'S services included site civil engineering design for the following:

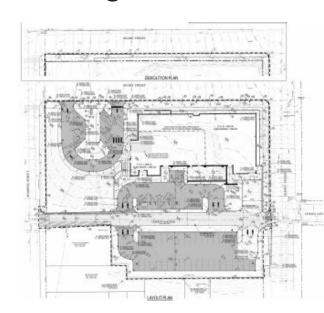
- Layout
- Grading
- Drainage
- Utilities
- Erosion and sediment control





PRIOR EXPERIENCE - Civil/Public Buildings

WV Department of Administration State Office Building, Fairmont, WV



TERRADON Corporation, as a subconsultant, is the Site/Civil consultant to the architect and also provided Environmental, Geotechnical and Survey services to West Virginia Department of Administration for the State Office Building located in Fairmont, West Virginia.

TERRADON Environmental team provided phase 1 and phase 2 Environmental site assessments (ESA) for the site, phase 2 ESA consisted of: soil and ground water sampling and pesticide wipe sampling. The team also conducted asbestos survey and lead-paint survey. For the project, TERRADON prepared quantities for bid documents and provided over sight for demolition and abandonment.

TERRADON Geotechnical experts conducted investigation of existing filled basements and foundation investigation and design of the Fairmont building site.

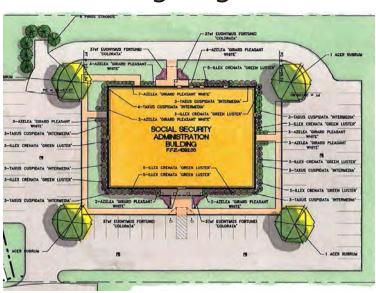
Social Security Administration Building, Logan, WV

TERRADON, as a subconsultant, Corporation provided site civil engineering design for the Social Security Administration Building in Logan, WV.

TERRADON services included:

- Design and Boundary Survey
- Full Site Engineering Drawings
- Layout
- Grading
- Drainage and Erosion Control







PRIOR EXPERIENCE - Transportation Storage/Dispatching Facilities

Cabell County Bus Garage

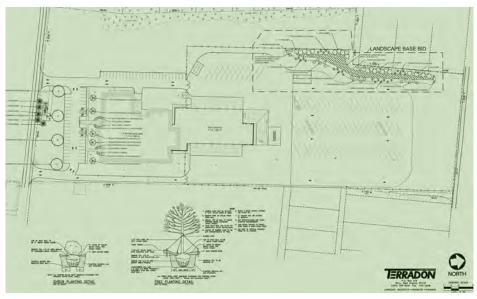
Construction began in April 2013 on the new Cabell County Schools bus garage located in Lesage, WV.

TERRADON Corporation, as a subconsultant, provided site civil design services for this major renovation project, which will house approximately 85 of Cabell County Schools' 120 buses and modernize its transportation operations by offering better access to eastern and central schools in the county. The new facility includes storage space for the large fleet of buses, service and maintenance equipment and wash bays that meet new EPA standards.

TERRADON services included:

- Civil Engineering
- Land Development
- Full Construction Documents
- Layout
- Grading
- Landscaping



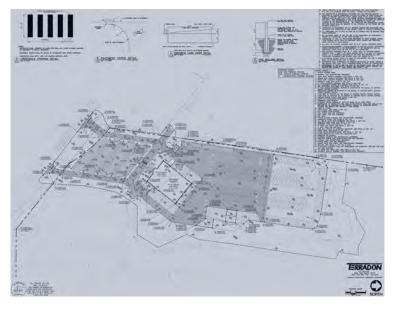


Jefferson County Bus Garage

TERRADON Corporation, as a subconsultant, provided site civil design services for the Jefferson County Bus Garage. When construction begins, this facility will provide parking for more than 200 buses and more than 200 cars. A fueling island, wash bay and new facility building also comprise the location.

TERRADON services included:

- Civil Engineering
- Land Development
- Full Construction Documents
- Layout
- Grading
- Landscaping





PRINCIPALS/KEY PERSONNEL

Greg Fox, ASLA, LEED AP

Vice President of Land Development

Greg Fox oversees TERRADON's Land Development Sector. Fox has been responsible for hundreds of notable commercial, educational and recreational site development projects during his 25-year career. During his time as Land Development Department Head, TERRADON has earned Engineering Excellence Awards from the West Virginia Association of Consulting Engineers, numerous Merit Awards from the American Society of Landscape Architects, and the Gold Award from the American Council of Engineering Companies.



The Bechtel Summit National Scouting Reserve

Provide Site Design for the 12,000+ acre site in Fayette County, WV. Responsible for site grading, construction drawings, NPDES design and coordination for all project subconsultants for NPDES permitting with WVDEP.

Greater Greenbrier Sports Complex

Provided Master Planning and Grading Design Services for the Greater Greenbrier Sports Complex located north of Lewisburg, WV. Five phases include: Master Planning, Grading Study, Full Construction Documents, Utility Layout, Road Design, Erosion and Sediment Control.

Advanced Technology Centers

Provided site grading, erosion and sediment control and utility design for two West Virginia Higher Education Policy commission Advanced Technology Centers located in Fairmont, WV and South Charleston, WV.

K-12 Educational Facilities

Responsible for Master Planning, Site Layout and Design, Schematic Renderings, Parcel Identification, Feasibility and Cost Analysis, and construction drawings for hundreds of k-12 educational facilities throughout West Virginia. Projects include new construction as well as renovations and additions.

• Fairmont State University

Responsible for Master Planning and Design of inner campus, including design of seating fountain, drainage features and landscaping.

Marshall University

Responsible for Site Design, Utility Design, Grading and Drainage for Applied Sciences Building, Student Housing, Wellness Center and Parking Garage. Provided ADA compliancy on campus buildings and site design for existing soccer field.

• Greenbrier Valley Medical Center

Responsible for master planning through site/civil construction documents for the Greenbrier Valley Medical Center in Lewisburg, WV.

Tazewell Community Hospital

Responsible for master planning through site/civil construction documents for the East Addition of the Tazewell Community Hospital in Tazewell, Virginia.

Thomas Memorial Hospital

Responsible for site/civil construction documents for Thomas Memorial Hospital in South Charleston, WV.



Education

B.S. Landscape Architecture West Virginia University B.A. Geography & Planning West Virginia University

Work Experience

2000-Present TERRADON Corporation

1996-2000 Martin Boal Anthony & Johnson Architects

1993-1996 Site Design

1989-1993 EG&G Inc

1988-1989 PSC Engineers



Jim Nagy, PE Senior Engineer

As a Senior Engineer at TERRADON, Jim Nagy's primary focus is on designing civil engineering projects for public and private development projects throughout West Virginia. Nagy specializes in the design of water distribution systems as well as sewage collection systems. Nagy offers decades of hands-on experience and has previously provided design engineering services for schools, commercial developments, residential developments, public utilities and more. He earned a B.S. in Civil Engineering from West Virginia University and is a Professional Engineer in the State of West Virginia.

Relevant Project Experience

School Projects

Responsible for layout, design, and permitting of water and sewer lines for numerous school projects in WV. Projects entailed coordination with PSDs, municipal water and sewer departments, State and Federal regulatory agencies for design of facilities. Schools include: Blue Ridge Community and Technical College, Blue Ridge K-12, Burnsville Elementary, Flatwoods Elementary, Davis Elementary, Sutton Elementary, Little Birch Elementary, Frametown Elementary, Buffalo High School, Clay-Battelle High School, Confidence Elementary, Jefferson Elementary, East Hardy High School, Eastwood Elementary, Flinn Elementary, Geary Elementary, Gilbert High School, Greenbrier West high School, Hampshire High School, Harpers Ferry High School and 19 additional schools.

Commercial Developments

Responsible for layout, design, and permitting of water and sewer lines for numerous commercial developments in WV. Projects entailed coordination with PSDs, municipal water and sewer departments, State and Federal regulatory agencies for design of facilities. Developments include: Fairmont Federal Credit Union, Allegheny Energy Union (Fairmont), First Ward (Clendenin) Apartments, Milton Crossing, Tri-State Hotel and multiple convenience store sites throughout WV.

Charleston Replacement Housing

Utility design, primarily water, sewer and stormwater, and coordination of overall site activities with the project developer for multi-unit housing development. Each phase entailed the design and layout of several hundred feet of water, sewer and stormwater line, including multiple connections with the utility providers, i.e., the Charleston Sanitary Board and West Virginia American Water, and applicable permit applications. Also responsible for construction monitoring and provision of as-built drawings as required by the respective utility providers.

Cathcart – Devonshire Development, Scott Depot, WV

Designed sanitary sewer and water distribution system to serve more than 900 housing units in this private development.

• Washington Woods Subdivision, Ravenswood, WV

Designed more than 9,000 feet of water and sewer line and a 500 gpm fire pump water booster station to serve a 150 lot subdivision.

• Sawmill Village, Snowshoe, WV

Designed approximately 2,800 feet of 8" water line and sanitary facilities to serve the Sawmill Village development project in Snowshoe, WV.

• Cabell County Water Main Extension Project

Worked on design and layout of approximately 46,000 feet of water main for the Salt Rock PSD/WVAW. Responsible for bidding, contract award, and project management.

• Putnam County Water Main Extensions

Worked on design and layout of approximately 63,000 feet of water main and a booster pumping station for the Putnam County Commission/WVAW. Responsible for bidding, contract award, and project management.

Manila Ridge Water Main Extension Project

Worked on design and layout of approximately 38,000 feet of water main for the Putnam County Commission/WVAW. Project has not received funding yet. However, will be responsible for bidding, contract award, and project management.



EducationB.S. Civil Engineering West Virginia University

Work Experience TERRADON Corporation 2007-Present

WV American Water 1991-2007

AWW SC 1984-1991

WV DNR 1982-1984

VTN, Inc. Consulting Engineers 1978-1982

J.H. Milam Consulting Engineers 1977-1978

WV DNR 1976-1977

WV Department of Highways 1975-1976

Registration

Professional Engineer: WV



Shawn Gray, ASLA Site Designer and Land Planner

Shawn Gray is an experienced Site Designer and Land Planner who serves as an integral part of the TERRADON design team. He offers experience on many of TERRADON's highest profile projects, focusing on large scale site development and parks and recreation projects. Gray also provides site design and landscape architecture services for K-12 and Higher Education projects. He is responsible for developing site, grading, landscape and utility plans, site detailing and erosion sediment control plans and permitting.

Relevant Project Experience

Greater Greenbrier Sports Complex Master Plan
Currently providing 5-Phased, Master Planning and Grading Design Services for the
Greater Greenbrier Sports Complex located north of Lewisburg, WV.

Valley Park Master Planning & Expansion Served as a Site Designer for the expanding Valley Park in Hurricane, WV. The project included planning for athletic fields, multiple parking lots, access roads and greenspace, but also incorporated a walking trail that ties into existing park trails. The plan was produced in coordination with the WVDOT to determine roadway/walkway ingress/egress and designed in accordance with local, state and federal regulations.

Volcano Island Master Planning Provided land planning and design engineering, utility location and mapping services for the properties. The master planning provided vision for Volcano Island Water Park, allowing the City of Fairmont efficient and value-based use of the former environmentally

concerned site.

Scott-Teays, Sheetz

Provided site design services for Sheetz Service Centers at Scott Depot and Green Acres, WV. The projects consisted of site layout and design, utility design, hardscapes and land-scape architecture.

Pioneer Federal Credit Union

Provided site design services for Pioneer Federal Credit Union in Hurricane, WV.

• The Bechtel Summit National Scouting Reserve

Provided Initial Site Selection/Conceptual modeling designs, site planning/grading and Erosion and Sediment Control services for the 12,000+ acre site in Fayette County, WV.

• Palatine Park Master Planning

Provided master Planning Services for the City of Fairmont for the redevelopment of Palatine Park on the east side of the Monongahela River adjacent to downtown Fairmont, WV. The Master Plan featured new parking areas, walking trails, a vista overlook, a picnic gazebo and retail space.

• Westmoreland Trail System Master Planning

Provided site design services for a trail connector designed on the top of an earthen flood levy to move through urban areas.

Harveytown Park & Connector Master Planning

Provided 3-Phase Master Planning for a heavily used section of trail.

Southridge Center Master Site Planning

Provided master planning and site civil engineering for several areas of Southridge Center in South Charleston, WV.



EducationB.S. Landscape Architecture West Virginia University

Work Experience TERRADON Corporation 2005-Present

OrganizationsAmerican Society of Landscape Architects



Peter J. Williams, ASLA

Landscape Architect

"Pete" Williams is a graduate of West Virginia University with a Bachelor of Science in Landscape Architecture. His responsibilities include landscape architectural design, grading and storm water drainage design, the design of pedestrian circulation systems and related amenities, roadway design, site planning, and quality control. Mr. Williams is registered as a professional Landscape Architect in West Virginia with more than 13 years of experience at TERRADON and more than 22 years of overall experience.

Relevant Project Experience

Fire Stations, Medical, First Responder, Public Facilities
Yeager Airport Fire/Crash/Rescue Station
Fairmont Public Safety Building & Fire Safety Station

Higher Education

Marshall University Student Recreation Center Marshall University Student Housing Fairmont State Inner Campus Design

K-12

Hurricane High School Sports Fields, Additions & Renovations
Lakeside Elementary School Additions & Renovations
Eastwood Elementary School Additions & Renovations
Flinn Elementary School Additions & Renovations
Musselman High School Additions & Renovations
Martinsburg North Middle School Additions & Renovations
Jefferson Elementary School Additions & Renovations
A New Blue Ridge Primary School
Winfield Elementary School Additions & Renovations

A New Confidence Elementary School

Greenbrier West High School Additions & Renovations

A New Lewisburg Elementary School

A New Rainelle Elementary School

A New Buffalo High School

Eastern Greenbrier Junior High School Additions & Renovations

Mason Dixon Elementary School Additions & Renovations

Poca High School Additions & Renovations

A New Winfield Middle School

A New Poca Elementary / Middle School

A New Mingo Central High School & Athletic Complex

A New University High School & Athletic Complex

A New Mountain View Elementary School

A New Pikeview Middle School

A New Moorefield Intermediate School

Numerous Industrial, Commercial, Parks and Recreation Facilities



EducationB.S. Landscape Architecture West Virginia University

Work Experience 2000 – Present TERRADON Corporation

1992-2000 Chapman Technical Group Registration

AffiliationsAmerican Society of Landscape Architects

West Virginia Chapter of American Society of Landscape Architects



PRINCIPALS/KEY PERSONNEL

Bill Hunt, PG, LRS

Vice President of Geo-Environmental, Testing & Inspection

Bill Hunt is a Licensed Remediation Specialist and serves as Vice President of Geo-Environmental and Testing & Inspection services at TERRADON Corporation. Hunt offers relevant experience in environmental documentation, investigations, and coordination with federal, state, and local agencies. He prepares Environmental Impact Statements, Environmental Assessments, Section 4(f) Evaluations, and other environmental technical documents. He supervises and participates in work plan development, field surveys, on-site monitoring, data collection, impact analysis, subconsultant management, public meeting organization and group presentations.

Relevant Project Experience

Hunt has provided environmental management services on a wide variety of projects. His experience includes:

- Phase I and II Environmental Site Assessments
- Section 401/404 Permitting
- · Wetland Assessments and Delineations
- Environmental and Industrial Hygiene Sampling
- Environmental Audits and NEPA Assessments
- Risk Assessments
- Remediation Design
- Statistical Analysis of Soil and Groundwater data
- Spill Prevention and Best Management Practices Plan Preparation

Key Projects

- 40 Phase I Environmental Site Assessments (ESAs) for fast food franchise at locations in WV, OH, IN, MO, KS, MI and WI. 25 of these Phase I ESAs led to Phase II ESAs
- Phase I and II ESA of coal loading terminal along the Ohio River. Phase II
 delineated Soil & groundwater diesel impact which was remediated using free
 product recovery, pump and treat and vacuum extraction—Kenova, WV
- Phase I ESA of more than 1800 acres of timber land which included Phase II soil sampling for mercury at natural gas wellhead sites – Various Locations, WV
- Phase I ESA of city block slated for demolition. Phase II activities included soil and groundwater sampling, asbestos sampling, lead based paint sampling and wipe sampling of surfaces within pesticide storage areas – Fairmont, WV
- Phase I ESA and wetland assessment and delineation at 900-acre undeveloped property Kingwood, WV
- Risk assessment for site closure at LUST site in Ohio, conducted in accordance with Ohio BUSTR guidelines.
- Risk assessment for RCRA closure at Barge Manufacturing Facility, Burlington, Ohio.
- NEPA Environmental Study, West Virginia Regional Airport, Randolph County Airport, Mason County Airport, Upshur County Airport, Mingo County Airport
- Exposure Assessment at pigment manufacturing facility as part of RCRA closure Cincinnati, Ohio



Education

B.S. Environmental Science, Morehead State University

M.A. Geography, Ohio University

Work Experience

2010—Present TERRADON Corporation Geo-Environmental Department Head

2008—2010 NGE, LLC Environmental Services Manager

2001—2008 Superior Marine Ways Director, Environmental Health & Safety

1991-2001 H.C. Nutting Company Environmental Group Leader

1989—1991 PSARA Technologies Environmental Services Division Manager

1986—1989 Westinghouse Environmental Scientist



Robert Thaw, PS

VP - Survey and Mapping

With more than 22 years of experience in a wide range of surveying projects, Robert Thaw serves as head of TERRADON's Survey and Mapping department. He organizes and supervises survey crews, reviews project plans and creates base mapping for various projects including noise barriers, interchanges, connectors, bypasses, sidewalks, bike paths and bridges. Thaw oversees all TERRADON survey activities, including: preparation of Right-Of-Way plans; the development of GPS static networks for aerial mapping in the design of roadways; identification of existing utilities and property lines; base image development and control placement for construction projects; and drafting of legal descriptions for ROW parcels.

Thaw has been directly responsible for survey and mapping services, including Right-Of-Way, on a number of notable transportation projects including:

• Laurel Fork Campground Bridge

TERRADON provided surveying and design engineering on a USDA Forest Service project in Randolph County, West Virginia. Surveyors led by Thaw provided Right-Of-Way services, including courthouse research, construction easements, and location of alignments. Additionally, provided topographic mapping, project control for construction, hydraulic cross sections and stream profiles.

Sedalia Arch Bridge

Thaw oversaw survey services for the replacement of an existing concrete arch bridge with a 72′ single span bridge. The bridge consisted of adjacent concrete prestressed box beams with a cast-in-place concrete deck. Survey services consisted of a topographic survey, ROW plans, construction control and legal description creation. Roadway design consisted of new bridge approaches and a designed detour. Drainage, maintenance of traffic and right-of-way plans were included in the scope of work.

Sleeth's Run Bridge

Thaw provided Right-Of-Way services during the design for the replacement of an existing truss bridge in Lewis County, WV. The project included the design of a new 200' structure and approaches. Survey services consisted of a topographic survey, ROW plans, construction control and legal description creation.

Grade Road

Thaw oversaw Right-Of-Way services for the new construction of two lanes adjacent to an existing two-lane roadway. Right-Of-Way services included Right-Of-Way Plans, legal descriptions, and questionnaires for take parcels.

St. Mary's Bypass

Working for the WWVDOT, Thaw led transportation survey services for the relocation of WV 16 in Pleasants County, from Pleasants County Route 18 to WV 2 in Saint Mary's, West Virginia for approximately two miles of highway. The project included topographic mapping, survey control mapping, right-of-way and utility cost estimates and inventories.



Education

A.S., Survey Technology, 1981, West Virginia Institute of Technology

B.S., Surveying, 1985, West Virginia Institute of Technology

Work Experience

TERRADON Corporation 1994-Present

Bowman Land Surveying 1992-1994

Dunn Engineers 1990-1992

Kelley Gidley Blair and Wolf 1988-1990

Pierson & Whitman Architects and Engineers 1984-1986

Registration

Professional Surveyor, West Virginia

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

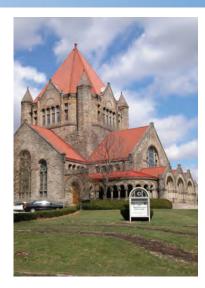




DESIGN EXPERIENCE

- 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.



Sustainable Building Design

U.S. Buildings use about 1/3 of all U.S. energy for heating, cooling, lighting an operation. In addition they produce more than 35% of all greenhouse gases.

A sustainable building, also referred to as a green building, is a structure that is designed, built, renovated, operated, or reused in an ecological and resource-efficient manner. Green buildings are designed to meet certain objectives such as protecting occupant health; improving employee productivity; using energy, water, and other resources more efficiently; and reducing the overall impact to the environment.

A sustainable building may cost more up front, but saves through lower operating costs over the life of the building. The sustainable building approach applies a project life cycle cost analysis for determining the appropriate up-front expenditure. This method calculates costs over the useful life of the asset.

Some benefits of sustainable design, however, are not easily measured. Improved occupant health, comfort, productivity, reduced pollution and landfill waste are just a few of the hidden benefits of sustainable design.

Even with a tight budget, many green building measures can be incorporated with minimal or zero up front costs and they can yield enormous savings.



At Tower Engineering we believe it is our responsibility to offer architects and owners sustainable design alternatives in addition to conventional choices, and to help our clients make the most informed decisions.

Engineering Expertise

Our engineers carefully consider preservation of site features, indoor air quality, natural lighting, energy efficiency and strategies to provide the best quality systems within limited budgets. Focusing on whole systems, not isolated components, our engineers determine the most efficient mechanical and electrical equipment properly sized for building needs. We have been involved with the design of numerous buildings which have implemented Green Building/ Sustainable Design features. Features considered and/or utilized include:

Engineering Services

- HVAC Energy Analysis
- · Mechanical and Electrical Systems Monitoring
- Building Commissioning

Equipment

- · Director-Fired Double-Effect Absorption Chiller/Heater
- Desiccant Dehumidification Units
- · Heat Recovery Wheel
- · Geothermal Heat Pumps
- · Underfloor Air Distribution Systems
- Building Automation Systems

GREEN BUILDING DESIGN STRATEGIES

- Install high-efficiency heating and cooling equipment. Well-designed systems including high-efficiency furnaces, boilers, and air conditioners; variable speed pumping; and premium motors not only save the building owners money, but also produce less pollution during operation. Install equipment with minimal risk of combustion gas spillage, such as sealed combustion appliances.
- Install high-efficiency lighting systems with advanced lighting controls. Include motion sensors tied to dimmable lighting controls.
- Install water-efficient equipment. Water conserving toilets, shower heads, and faucet aerators not only reduce water use, but also reduce demand on septic systems or sewage treatment plants. Reducing hot water use also saves energy.
- Install mechanical ventilation equipment. Mechanical ventilation is usually required to ensure safe, healthy indoor air. Heat recovery ventilators should be considered in cold climates because of energy savings, but simpler, less expensive exhaust-only ventilation systems are also adequate and should bean analyzed.



COMMISSIONING EXPERIENCE

Tower Engineering has experience providing design and commissioning services on numerous projects. Our extensive design experience insures that we will be familiar with all aspects of each project's mechanical, electrical and plumbing design.

Systems or technologies for which our firm has provided commissioning services include:

- Packaged or split HVAC
- Chiller System
- Boiler System
- Network/Technology







- Hydronic Systems
- Variable Air Volume Systems
- Energy Management System
- CCTV Access Control

- Variable Speed Pumping
- Variable Speed Fans
- Lighting Controls
- Electrical, Emergency Power

Our Commissioning Project Experience Includes:

Gateway School District - Gateway High School

This project involved commissioning services for approximately 200,000 SF of new and renovated space. As part of this project, Tower Engineering provided full commissioning services for all HVAC equipment including air handling units, variable volume boxes, chillers, boilers, pumps, unit ventilators, fan-coil units and DDC controls.

West Virginia University - Student Recreation Center Commissioning

Tower Engineering provided commissioning services for the 160,000 square foot Student Recreation Center. Systems commissioned included: chiller, cooling tower, glycol, heat exchanger, pumps,air handling units,pool water,witness start up and controls.

Moon Area School District - Bon Meade Elementary School

Tower Engineering provided retro-commissioning of rooftop units, air handling units, unit ventilators, chiller, and boiler, for renovation of 66,000 square feet.

Barbour County Board of Education - Philip Barbour High School Complex

Systems commissioned for this 180,000 square foot renovation/addition project included rooftop units, unit ventilators, heat recovery units, chiller, and boiler.

Pleasant County Board of Education - Middle School

Tower Engineering commissioned rooftop units and pool dehumidification units associated with this 60,000 square foot renovation project.

Upshur County Board of Education - Buckhannon High School

Tower Engineering is currently providing HVAC commissioning services associated with a full replacement of the original HVAC system in this 142,000 square foot renovation project.

Verizon Call Center

Commissioning of this 120,000 square foot new facility was completed in 2002. Systems commissioned included rooftop units, fan-powered boxes, computer room air conditioning units, exhaust systems and DDC controls.

Cranberry Woods III

Rooftop units, fan-powered boxes, exhaust fans and DDC controls were commissioned for this new 120,000 square foot office building.

Moon Area School District - High School

Commissioning of a new 200,000 square foot High school, with a WSHP HVAC system.

Moon Area School District - Middle School

Renovation and addition of the former high school. The HVAC system is a VAV system with multiple RTII's

Cannan Valley Institute

This project is a Research and Education Center comprised of staff offices, laboratories, conference rooms, and a tiered classroom. LEED Silver Certification.

Kaufman Program Center

A four story 19,411 SF community center with a large multi-purpose space. Work began in November 2009, which included renovation of the existing 16,893 SF facility with the addition of 2,518 SF. Tower Engineering was chosen as both the MEP design firm and the Commissioning Agent.



MUNICIPAL AND PUBLIC SAFETY EXPERIENCE

Tower Engineering has provided mechanical and electrical consulting engineering services for numerous municipal and public safety facilities. With seven decades of experience, our firm knows the importance of meeting the client's needs without exceeding the project's budget. Thoroughly familiar with current government standards, our firm has provided engineering services for the following projects:



Fairmont Public Safety Building - 2004

Tower Engineering provided mechanical and electrical engineering services for the renovation of existing retail space into a public safety building for the City of Fairmont, West Virginia. This 41,300 s.f. building houses the Police Department, Fire Department, Traffic Department and Municipal Courts. Total construction costs were \$4 million.



Hampton Township Municipal Complex - 2005

Tower Engineering provided an evaluation of the building systems at the Hampton Township Municipal Complex. Tower examined the existing mechanical and electrical systems, and provided a report of deficiencies, codes issues, longevity of systems, as well as providing recommendations and available options to support selected scenarios prepared by the architect for this master planning project. Facilities contained include the Municipal Building, Water Authority Garage, offices for Parks & Recreation and the Police Department, as well as a 5-bay Vehicle Maintenance Garage. This was a 50,000 s.f., \$8 million project.



Monroeville Municipal Building - 2000

Tower Engineering provided mechanical and electrical engineering services for the construction of a new four-story Municipal Building to house the police department, 911 Call Center, municipal offices, and record storage space. This 40,000 s.f. \$4.6 million facility was built on the site of the former municipal building which was demolished following completion of the new building, to make way for parking. The building is equipped with a state-of-the-art security system, which controls external and internal access to areas within the building.



MUNICIPAL AND PUBLIC SAFETY EXPERIENCE CONTINUED





Ross Township Municipal Complex - 2002

Tower Engineering provided mechanical/electrical engineering services for Ross Township's new 38,000 s.f. Municipal Community Center. The first floor of the Center houses all township departments including the police station, municipal offices, tax offices and Commissioners' meeting room.

The second floor contains the Township's Community Center, complete with flexible classrooms spaces, active and quiet lounges, a catering kitchen, and a gymnasium which also functions as an auditorium and banquet space. The Community Center is surrounded by a new park that contains a large playground, picnic facilities, basketball courts and ball fields. Total construction costs were \$6 million.

Additional Project Experience Includes:

- Bellevue Borough Building Study
- Castle Shannon Fire Department
- City of Erie Fire Department
- Cranberry Township Municipal Building
- Elfinwild Volunteer Fire Department
- Franklin Park Municipal Building
- Freeport Borough Building
- Haine School Road Fire Hall

- Hampton Township Municipal Bldgs Master Planning
- Marshall Township Municipal/Public Works
- McCandless Municipal Building
- Mt. Troy Volunteer Fire Co.
- Penn Township Municipal Complex
- Seville Volunteer Fire Department
- South Park Municipal Buildings
- South Strabane Township Municipal Bld. Renovations



FAIRMONT PUBLIC SAFETY BUILDING

FAIRMONT, WEST VIRGINIA

2004
SQUARE FOOTAGE
41,300
TOTAL CONSTRUCTION COST

YEAR COMPLETED:



Tower Engineering provided mechanical and electrical engineering services for the renovation of existing retail space into a public safety building for the City of Fairmont, West Virginia. This 41,300 s.f. building houses the Police Department, Fire Department, Traffic Department and Municipal Courts.





Stryker Brigade Combat Team Readiness Center&OMS

ARMY NATIONAL GUARD - CAMBRIDGE SPRINGS, PA

YEAR COMPLETED: 2008 SQUARE FOOTAGE

TOTAL CONSTRUCTION COST

QUARE FOOTAGE 89,700



Tower Engineering provided engineering services for the design/build of a new 69,900 s.f. Readiness Center and 19,800 s.f. Organizational Maintenance Shop (OMS) for the Stryker Brigade Combat Team. These facilities provide spaces for training and housing of troops, as well as storage and maintenance of military vehicles and equipment. The center was constructed to replace outdated armories in Erie, Corry and Meadville.

Sustainable design features were included in the design and construction of these facilities, with a goal of a SPiRiT rating of Gold. Design requirements included Anti-Terrorism/Force Protection(AT/FP).









Pennsylvania National Guard Readiness Center

YEAR COMPLETED: 2005
SQUARE FOOTAGE

TOTAL CONSTRUCTION COST \$4.1 million / MEP \$1.1 million

Square Footage 23,017

CONNELLSVILLE, PA



Tower Engineering provided mechanical/electrical engineering services for construction of a new 23,017 square foot armory at the Pennsylvania National Guard Readiness Center in Connellsville, Pennsylvania. This specially designed facility of permanent masonry type construction is constructed of brick and concrete block units with concrete floors, and a metal standing seamroof, including a one-story structure with mechanical and electrical equipment. The building contains offices, drill hall, classrooms, locker rooms, kitchen, toilets, storage, arms vault, Abrams Full-Crew Interactive Simulation Training ALIST Simulation Room, and maintenance training work-bays. Cost effective energy conserving features were incorporated into the design, including energy management control systems and high efficiency motors, lighting, and HVAC systems.





Monroeville Municipal Center

Monroeville, PA

2000 Square Footage 40,000

YEAR COMPLETED:

TOTAL CONSTRUCTION COST \$4.6 million



Tower Engineering provided mechanical and electrical engineering services for the construction of a new four-story Municipal Building to house the police department,911 Call Center, municipal offices, and record storage space.

Dedicated in May of 2000, this 40,000 s.f. facility was built on the site of the former municipal building which was demolished following completion of the new building, to make way for parking. This building is equipped with a state-of-the-art security system, which controls external and internal access to areas within the building.









Ross Township Municipal Community Center

PITTSBURGH, PA

SQUARE FOOTAGE
38,000
TOTAL CONSTRUCTION COST

YEAR COMPLETED:



Tower Engineering provided mechanical/electrical engineering services for Ross Township's new 38,000 s.f. Municipal Community Center. The first floor of the Center houses all township departments including the police station, municipal offices, tax offices and Commissioners' meeting room.

The second floor contains the Township's Community Center, complete with flexible classrooms spaces, active and quiet lounges, a catering kitchen, and a gymnasium which also functions as an auditorium and banquet space.

The Community Center is surrounded by a new park that contains a large playground, picnic facilities, basketball courts and ball fields.





US ARMY RESERVE CENTERS

JANE LEW, WEST VIRGINIA CLARKSBURG, WEST VIRGINIA

YEAR COMPLETED: 2008
SQUARE FOOTAGE
33,688
TOTAL CONSTRUCTION COST



Tower Engineering provided engineering services for the U.S. Army Reserve Training Center in Jane Lew, West Virginia. The Center provides a suitable facility for weekend and other intermittent training exercises of the Army Reserve. At 7,400 square feet, the facility includes offices, a large Assembly area, a full service Kitchen, Arms Storage, and supporting storage and mechanical areas.

A separate Organizational Maintenance Shop Building (OMS) provides an enclosed garage area for maintenance operations on the various vehicles, an office, and tools and parts storage.

Tower Engineering also provided mechanical and electrical consulting engineering services for the construction of an 16,120 s.f. Training Building and 10,168 s.f. Organizational Maintenance Shop at the U.S. Army Reserve Center in Clarksburg, West Virginia.

These facilities, as well as the buildings at Jane Lew, West Virginia, were designed in accordance with the U.S. Army Corps of Engineers' "Architectural and Engineering Instructions, Design Criteria."









Roles and Responsibilities

James N. Kosinski, P.E., LEED AP – Principal-in-Charge

• Principal/Vice President

Thomas J. Gorski, P.E., LEED AP – Mechanical Engineering Department Head

• Principal/President

Michael S. Plummer, P.E. – Plumbing & Fire Protection Engineering Department Head

• Associate/Senior Project Manager

John C. West, Jr., P.E. - Electrical Engineering Department Head

• Associate/Senior Project Manager



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.

Tom'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

Beaver County - Beaver, Pennsylvania Ice Arena Renovations

Bethel Park, Pennsylvania
Bethel Park Community Center

Cranberry Township, Pennsylvania
The Rose E. Schneider Family YMCA

Monroeville, Pennsylvania
Community Park Site Buildings

New Community Recreation Center

Penn Township, Pennsylvania Penn Township Civic Center

Pine Township, Pennsylvania
New Community Recreation Center

Ross Township, Pennsylvania
New Municipal Complex (includes Community Center)

Upper Saint Clair, Pennsylvania

Upper Saint Clair Community Recreation Center

West Virginia University - Morgantown, Pennsylvania New Student Recreation Center





Bachelor Architectural Engineering
Penn State University 1989

REGISTRATION

PE, Pennsylvania PE-045741-E

PE, West Virginia PF-016993

PE, New York PE, Maryland

NCEES Registered

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 is 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.

Jim'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

Allison Park, Pennsylvania

New Hampton Township Municipal Complex

Bethel Park, Pennsylvania

New Community Center

Fairmont, West Virginia

Public Safety Building Renovations

Morgantown, West Virginia

New West Virginia University Recreation Center

Pittsburgh, Pennsylvania

New Ross Township Municipal Complex

Wexford, Pennsylvania

New Marshall Township Municipal/Public Works Complex New Pine Township Community Center





BS, Architectural Engineering Penn State University 1994

REGISTRATION

PE, Pennsylvania PE-055525

AFFILIATION

Illuminating Engineering Society of North America (IES):

Past President Pittsburgh Section

AWARD

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

JOHN C. WEST JR., P.E.

Associate, Senior Project Manager Electrical Engineering Department Head

Mr. West has provided engineering services for the design of office buildings, educational facilities, municipal buildings, community/recreational buildings, health care, and commercial facilities. His 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.

John'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, nurse call, audio-visual, security and closed circuit television systems. Additional responsibilities include client contact, field observation, and project management.

REPRESENTATIVE EXPERIENCE

Bellevue Borough, Pennsylvania

Borough Building Systems Assessment

Bethel Park, Pennsylvania

New Community Center

Erie Municipal Airport Authority

Terminal HVAC Replacement

Indiana University of Pennsylvania - Indiana, Pennsylvania

Student Union Recreation Center Renovation & Expansion

Municipality of Monroeville, Pennsylvania

New Municipal Center; Public Safety Training Center Site Electrical

Penn Township, Pennsylvania

Municipal Buildings Renovation/Addition; Civic Center Renovations

Peters Township, Pennsylvania

New Recreation Center

Ross Township, Pennsylvania

New Municipal Complex

Seven Springs Mountain Resort - Champion, Pennsylvania

Skiers Services Building

South Strabane Township, Pennsylvania

Municipal Building ADA Upgrades & Fire Alarm System

Upper St. Clair, Pennsylvania

New Community Recreation Center

West Virginia University - Morgantown, West Virginia

New Recreation Center





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

Mr. Plummer is primarily responsible for the design of plumbing and fire protection systems and their components for educational, governmental, and commercial buildings. His plumbing and 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.

Mike 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. He 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 and Fire Protection Department.

REPRESENTATIVE EXPERIENCE

City of Fairmont - Fairmont, West Virginia Public Safety Building

PA National Guard Readiness Center - Connellsville, Pennsylvania New Armory at Readiness Center

Stryker Brigade Combat Team - Cambridge Springs, Pennsylvania Readiness Center & OMS

West Virginia Army National Guard - Buckhannon, West Virginia New Reserve Center

West Virginia Army National Guard - Fairmont, West Virginia New Reserve Center

