

**West Virginia Division of Culture & History  
Capital Improvements  
Camp Washington Carver  
Clifftop, West Virginia**

**Buyer: Shelly Murray  
RFQ. No.: DCH11015  
September 2, 2010  
1:30 pm**

**Expression of Interest DCH11015  
Architectural and Engineering Services**

RECEIVED

2010 SEP -2 A 10: 05

BUYING DIVISION  
STATE OF WV

Par-a-digm - (pär'-ə-dīm') n. An example that serves as pattern or model.



31 August 2010

Ms. Shelly Murray  
Purchasing Division  
2019 Washington Street, East  
Charleston, WV 25311-2214

RE: EOI DCH11015 for Capital Improvements – Camp Washington Carver  
Clifftop, West Virginia

Dear Ms. Murray:

It is with great pleasure that I submit this Expression of Interest for the Capital Improvements for Camp Washington Carver in Clifftop, West Virginia. For this project, **Paradigm Architecture** has partnered with the consulting firm, **Acoustic Dimensions**, to deliver you the highest quality of personal service, design expertise, and quality control throughout the course of this project. By combining our talents and experience, you will work with a unique, collaborative team of specialization in **Theater and Performing Arts** project types that will make this project a success!

Paradigm Architecture has **experience** planning and designing a variety of performance facilities. Recent examples include the **Morgantown Event Center** and **Chestnut Ridge Church**, both of which are in Morgantown, WV. In addition, we have worked with a number of clients in southern West Virginia, including multiple projects at Glade Springs Resort and Conference Center, in Daniels, and the WV School of Osteopathic Medicine in Lewisburg. At Paradigm, we believe that **service** and **responsiveness** are critical to project success and client satisfaction. Located in Morgantown, we are well positioned to respond rapidly to the unpredictable requirements of project design development and construction conditions. We believe that this approach to service has resulted in client loyalty and repeat business with organizations such as **West Virginia University, Fairmont State University, Davis & Elkins College, Platinum Properties (Morgantown Waterfront Development), Bright Industries (Glade Springs/Winterplace Resorts), Russell Medical Center, and Lenoir Memorial Hospital**. Please check our references with any of these clients.

The internationally acclaimed consultant, **Acoustic Dimensions**, brings a great deal of experience with projects of this type to our team. Their expertise is widely sought after for acoustics, audio/visual, and theatrical design. Project types range from Performance and Arts, to Worship Facilities, and to Sports and Entertainment Venues. Their portfolio includes the **Moonlight Amphitheatre** in Vista California, **PNC Bank Arts Center** in Holmdale, New Jersey, and the **Starlight Theatre** in Kansas City, Missouri. Our collaboration with them led to the successful design of the Morgantown Event Center and Chestnut Ridge Church, mentioned above.

The rest of our team also consists of specialized engineers and consultants that share our commitment to service and quality and will best serve the technical requirements and demands of this project. **KCI Technologies** will provide Civil Engineering services. **Allegheny Design Services** will provide Structural Engineering services. **H. F. Lenz** will provide Mechanical, Electrical, and Plumbing Engineering services. We have extensive professional relationships with these engineers and have successfully completed many projects together.

2450 Valleydale Road • Suite 150  
Birmingham, AL 35244  
Tele 205•403•2742 205•403•2743 Fax

2223 Cheat Road • Suite 300  
Morgantown, WV 26508  
Tele 304•284•5015 304•284•5014 Fax



We feel that it is important that we are **leaders in technology** and services that benefit our clients and improve the quality of our services. Paradigm utilizes the latest technology in project delivery including **Building Information Modeling (BIM)** to three dimensional model projects. This method of project documentation offers greater potential to identify conflicts in building systems during the design phases of a project. It also helps the Owner to fully comprehend the total design solution prior to construction.

We are also actively involved in **sustainable design**. Included in our proposal are a few examples of our work with federally-funded and LEED projects. These include projects for the **U. S. Department of Agriculture** and the **U. S. Department of Energy**, which are **LEED Certified** and **LEED Gold Certified**, respectively. The new Morgantown Event Center was designed to LEED Certification standards, however, the Owner did not seek certification.

On a **personal** note, Paradigm Architecture has strong ties to southern West Virginia, and it would truly be an honor and a privilege to work with you on this project. We have two founding members who are originally from the Beckley area. Both Jonathan Perry and I grew up enjoying the beautiful **New River Gorge** area and both of our extended families live in nearby Raleigh County. Needless to say, the opportunity to work on this project has very personal meaning to our firm!

It is our goal to provide a high level of personal service and design solutions that reflect the unique image and purpose of our clients. We welcome the opportunity to work with you on this project.

Best regards,

A handwritten signature in black ink, appearing to read "Paul A. Walker".

Paul A. Walker, AIA  
President

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State of West Virginia  
 Department of Administration  
 Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

# Request for Quotation

RFQ NUMBER  
**DCH11015**

PAGE  
**1**

ADDRESS CORRESPONDENCE TO ATTENTION OF  
**SHELLY MURRAY**  
**304-558-8801**

**RFQ COPY**

VENDOR

**TYPE NAME/ADDRESS HERE**  
 Paradigm Architecture, Inc.  
 2223 Cheat Road, Suite 300  
 Morgantown, WV 26508

SHIP TO

**CULTURE & HISTORY**  
**CULTURAL CENTER**  
**CAPITOL COMPLEX**  
  
**CHARLESTON, WV**  
**25305**                      **348-0220**

DATE PRINTED	TERMS OF SALE	SHIP VIA	FOB	FREIGHT TERMS
08/11/2010				

BID OPENING DATE: **09/02/2010**                      BID OPENING TIME **01:30PM**

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
1001	1	LS		906-29		
<b>EXPRESSION OF INTEREST</b>  THE WEST VIRGINIA PURCHASING DIVISION, FOR THE AGENCY, THE WEST VIRGINIA DIVISION OF CULTURE & HISTORY, IS SOLICITING EXPRESSIONS OF INTEREST FOR ARCHITECTURAL DESIGN-ENGINEERING SERVICES FOR A PERMANENT PERFORMANCE STAGE AND A PERMANENT BOX OFFICE/ENTRY POINT AT CAMP WASHINGTON CARVER, LOCATED IN CLIFFTOP, WV PER THE FOLLOWING BID REQUIREMENTS AND ATTACHED SPECIFICATIONS						
<b>ARCHITECTURAL/ENGINEERING SERVICES</b>  <b>BANKRUPTCY: IN THE EVENT THE VENDOR/CONTRACTOR FILES FOR BANKRUPTCY PROTECTION, THE STATE MAY DEEM THE CONTRACT NULL AND VOID, AND TERMINATE SUCH CONTRACT WITHOUT FURTHER ORDER.</b>  <b>NOTICE</b> <b>A SIGNED BID MUST BE SUBMITTED TO:</b>  <b>DEPARTMENT OF ADMINISTRATION</b> <b>PURCHASING DIVISION</b> <b>BUILDING 15</b> <b>2019 WASHINGTON STREET, EAST</b> <b>CHARLESTON, WV 25305-0130</b>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE 	TELEPHONE 304.284.5015	DATE August 31, 2010
TITLE President	FERN 63-1263568	ADDRESS CHANGES TO BE NOTED ABOVE

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



State of West Virginia  
 Department of Administration  
 Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

# Request for Quotation

RFQ NUMBER  
**DCH11015**

PAGE  
**2**

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**SHELLY MURRAY**  
**304-558-8801**

RFQ COPY

TYPE NAME/ADDRESS HERE

Paradigm Architecture, Inc.  
 2223 Cheat Road, Suite 300  
 Morgantown, WV 26508

SHIP TO

CULTURE & HISTORY  
 CULTURAL CENTER  
 CAPITOL COMPLEX  
 CHARLESTON, WV  
 25305 348-0220

DATE PRINTED	TERMS OF SALE	SHIP VIA	FOB	FREIGHT TERMS
08/11/2010				

BID OPENING DATE: **09/02/2010** BID OPENING TIME **01:30PM**

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
<p>THE BID SHOULD CONTAIN THIS INFORMATION ON THE FACE OF THE ENVELOPE OR THE BID MAY NOT BE CONSIDERED:</p> <p>SEALED BID</p> <p>BUYER: SHELLY MURRAY</p> <p>RFQ. NO.: DCH11015</p> <p>BID OPENING DATE: 09/02/2010</p> <p>BID OPENING TIME: 1:30 PM</p> <p>PLEASE PROVIDE A FAX NUMBER IN CASE IT IS NECESSARY TO CONTACT YOU REGARDING YOUR BID:            304.284.5014</p> <p>CONTACT PERSON (PLEASE PRINT CLEARLY):            Paul A. Walker</p> <p>***** THIS IS THE END OF RFQ DCH11015 ***** TOTAL: _____</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE 	TELEPHONE 304.284.5015	DATE August 31, 2010
TITLE President	FEIN 63-1263568	ADDRESS CHANGES TO BE NOTED ABOVE

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

STATE OF WEST VIRGINIA  
Purchasing Division

**PURCHASING AFFIDAVIT**

**West Virginia Code §5A-3-10a states:** No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owed is an amount greater than one thousand dollars in the aggregate.

**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.

"Debtor" means any individual, corporation, partnership, association, limited liability company or any other form or business association owing a debt to the state or any of its political subdivisions. "Political subdivision" means any county commission; municipality; county board of education; any instrumentality established by a county or municipality; any separate corporation or instrumentality established by one or more counties or municipalities, as permitted by law; or any public body charged by law with the performance of a government function or whose jurisdiction is coextensive with one or more counties or municipalities. "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.

**EXCEPTION:** The prohibition of this section does not apply where a vendor has contested any tax administered pursuant to chapter eleven of this 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.

Under penalty of law for false swearing (*West Virginia Code §61-5-3*), it is hereby certified that the vendor affirms and acknowledges the information in this affidavit and is in compliance with the requirements as stated.

**WITNESS THE FOLLOWING SIGNATURE**

Vendor's Name: Paradigm Architecture, Inc.

Authorized Signature: *[Handwritten Signature]* Date: August 31, 2010

State of West Virginia

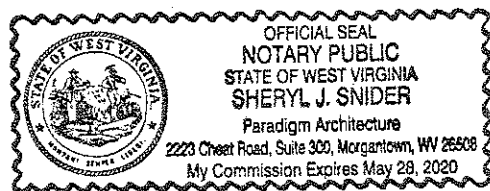
County of Monongalia, to-wit:

Taken, subscribed, and sworn to before me this 31st day of August, 2010.

My Commission expires May 28, 2020.

**AFFIX SEAL HERE**

NOTARY PUBLIC *[Handwritten Signature: Sheryl J. Snider]*



## Firm History



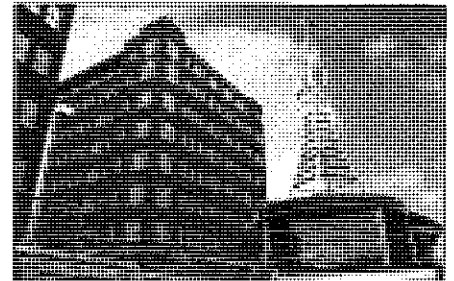
Paradigm Architecture was formed in October of 2000 by a group of likeminded individuals who believe that architecture provides the opportunity to practice the career that we love. We as individuals and as team members of a firm have a responsibility to exhibit that passion in the manner in which we live our lives.

We chose the name Paradigm because it means a model that serves as an example:

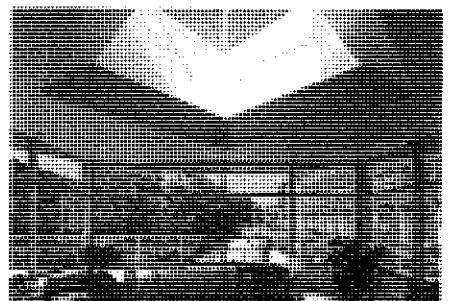
This represents our highest ideals...  
that our architecture would serve as an example  
that our client service would serve as an example  
that our service to our God would serve as an example.

Originally established in Birmingham, Alabama, Paradigm Architecture expanded in 2002 by opening an office in Morgantown, West Virginia. Our staff of eleven includes five registered architects, one intern architect, three CAD designers, and two administrative assistants. We utilize the most current technical hardware and software including AutoCAD, Revit, 3D site and building rendering programs, and Speclink specifications software.

It is our belief that we should assemble consultants that are uniquely skilled to satisfy the particular requirements of a project. We have close professional relationships with many engineers and specialized consultants and choose those that we feel will best serve the technical specialization, location of the work and sometimes even personality of the client. We choose not to work with firms who do not share our commitment to service and quality.



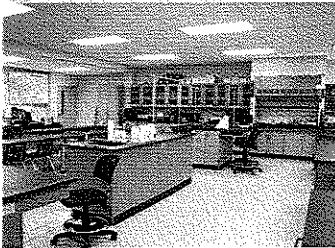
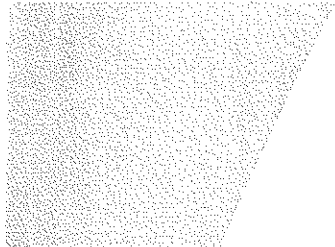
*Waterfront Marina*



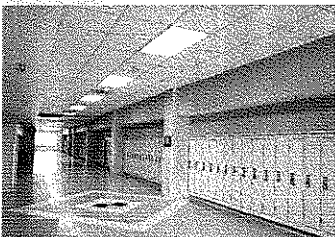
**Para-digm - (pär'e-dīm´) n. An example that serves as pattern or model.**



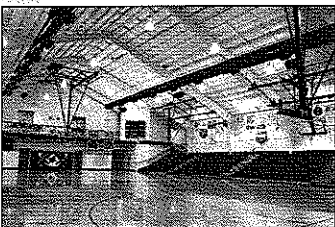
## Firm Profile



*Trinity Christian School*



*Trinity Christian School*



*Trinity Christian School*

Paradigm by definition means an example that serves as pattern or model. The goal of Paradigm Architecture is to be an example in client service, design quality, and technical proficiency. We practice architecture. For every project, Paradigm works closely with the unique requirements of the particular client to design a structure that reflects both the appropriate image and proper function to optimize the working or living environment.

## EXPERIENCE

Paradigm Architecture has experience in a broad range of project types. This work includes private individual, corporate, governmental, educational, and institutional clients.

### Educational

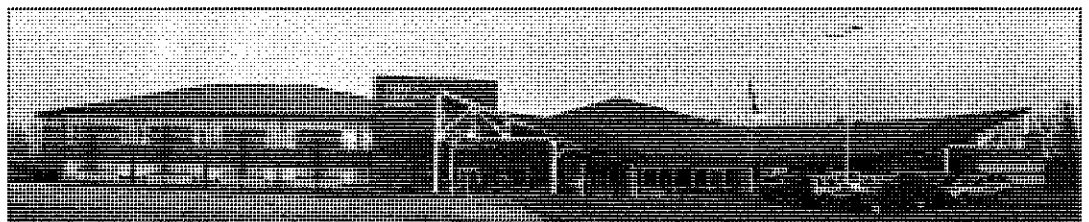
Educational experience includes administrative office space, parking facilities, student housing, libraries, student centers, athletic facilities, master planning, classrooms, and research laboratory facilities. We have worked on campuses that include: West Virginia University, Fairmont State University, Davis and Elkins College, The College of West Virginia, Hampden Sydney College, Wake Forest University, Ayers State Technical College, The University of North Carolina at Greensboro, and The University of Alabama at Birmingham. Paradigm's staff has also been involved in educational facilities at the elementary and high school level including new and renovated buildings.

### Master Planning

Paradigm Architecture has successfully completed master planning for the Waterfront Development and Trinity Christian School, in Morgantown, Avery Court in Parkersburg, and Glade Springs Resort, in Daniels. In addition, we have performed master planning for Asian Plaza in Birmingham, AL, and are about to begin updating the master plan for Russell Medical Center in Alexander City, AL, as well as the West Virginia School of Osteopathic Medicine in Lewisburg, WV.

### Governmental

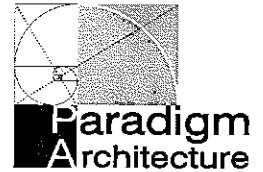
Members of Paradigm have been involved in various government projects at the Federal, State, and Local levels. Federal Clients include the GSA, Social Security Administration, Federal Bureau of Investigation, Drug Enforcement Agency, Small Business Administration, Mine Safety and Health Administration, USDA, and DOE. These projects range from new construction for new buildings to tenant fitups in shell buildings. State and local agencies include Department of Natural Resources, multiple higher education clients, Morgantown Chamber of Commerce, and Trussville City Hall.



*Trinity Christian School*

**Para-digm - (pär'e-dim')** *n.* An example that serves as pattern or model.

## Firm Profile



### Institutional

Medical and retirement life care projects dominate our staff's institutional portfolio. Medical projects include master planning, outpatient surgery centers, patient care rooms, emergency medicine, surgery suites, labor & delivery suites, Magnetic Resonance Imaging, X-ray diagnostic services, and heart catheterization spaces for hospital clients, radiation and chemotherapy treatment areas in cancer centers, and professional medical office space for private physicians. Retirement life care facilities range from independent elderly housing and assisted living facilities to full nursing care centers.

### Food Service

We have been privileged to design many Food Service facilities. These include many private restaurants as well as large, full service commercial catering kitchens and banquet facilities accommodating up to 1,500 guests at a time. Examples of these facilities include Two Waterfront Place Hotel and Conference Center, Morgantown Event Center, Regatta Bar and Grille, Rat Pack Lounge, Boathouse Bistro, Sargasso Restaurant, Trussville Family Center, Mountaintop Community Church's Family Life Center, and Shono's Restaurant. In addition, we are currently designing additions and renovations to Cacapon Resort, which includes updating the existing commercial kitchen and dining facilities.

### Residential

Paradigm's residential experience spans a variety of client types. Student Housing/dormitory facilities for higher education, hotel projects, elderly housing, and private residential that includes single family homes, townhouses, and high end condominium units.

### Corporate

Paradigm has designed entire office buildings as well as tenant fit-up spaces for clients such as Jackson Kelly PLLC, A.G. Edwards, Acordia, Petroplus & Associates Inc., National Biometric Security Project, Simpson & Osborne, DMJM Harris, and the West Virginia University Foundation. Projects also include banking regional and branch offices.



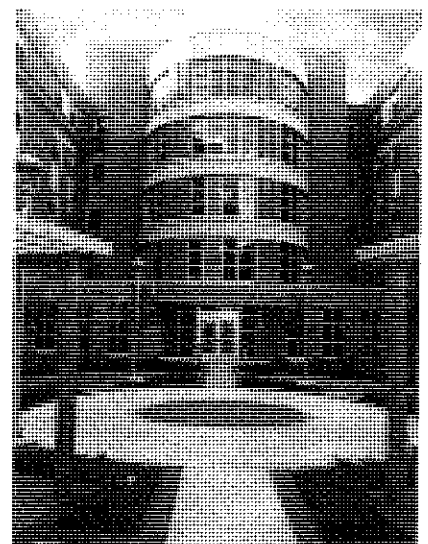
*Russell Medical Center*



*Glenmark Office Building*



*WVU  
Downtown  
Student  
Housing*



# Sustainable Design



## LEED / Green Building

Today, everyone is concerned with energy conservation, life cycle analysis, and green building techniques; and Paradigm Architecture is no different. We have completed two projects that are or will be LEED Certified.

U.S. Department of Energy Office of Legacy Management, Morgantown, WV

**LEED Gold Certified — Core & Shell**

**LEED Gold Certified — Commercial Interiors**

U.S. Department of Agriculture Office Building, Morgantown, WV

**LEED Certified**



These projects have incorporated sustainable design elements in all elements of construction such as white roofs, energy efficient building envelopes, non irrigated landscaping, on site bio filtration systems, use of local and regional materials, indoor air quality, enhanced commissioning, building automation controls, occupancy sensors, energy recovery systems, and energy efficient mechanical systems, energy modeling, low flow plumbing fixtures, sunshades, and daylighting.

In addition, we have been able to assist clients who are interested in applying green building techniques such as improving the energy efficiency of the building and reducing long term life cycle costs, even though they may not wish to pursue LEED Certification. An example of this includes the Morgantown Event Center and Garage. Although it was originally designed for LEED Certification, the Owner decided not to pursue. As a method of organization, we will utilize the LEED Checklist, even though the Owner does not want to pursue certification.

We have one LEED Accredited Professional on staff and others who are pursuing green building education. All of our consultants have experience with not only green building construction but also life cycle cost evaluations, value engineering, and materials/systems comparisons in order to give the Owner the best value in a project.



U.S. Department of Energy



U.S. Department of Agriculture

## Honors & Awards



*WVU Transportation Center  
& Garage*

### **Excellence in Construction by the Associated Builders & Contractors, Inc.**

2007 – Waterfront Marina, Morgantown, WV

2007 – Chestnut Ridge Church, Morgantown, WV

2004 – Madden Student Center at Davis and Elkins College, WV

2004 – Two Waterfront Place Hotel and Conference Center, Morgantown, WV

2003 – The Jackson Kelly Building, Morgantown, WV

### **Main Street Morgantown**

2008 – Best New Construction Award, Marina Tower, Morgantown, WV

2008 – Best New Office Award, Spilman Thomas Battle, Morgantown, WV

### **Alabama Masonry Institute**

2004 – The Top Block Award for

Russell Professional Office Building III, Alexander City, AL

### **Pittsburgh Corning Glass Block**

2004 – The Circle of Design Excellence Award for  
Lightning Strikes Family Fun Center, Trussville, AL

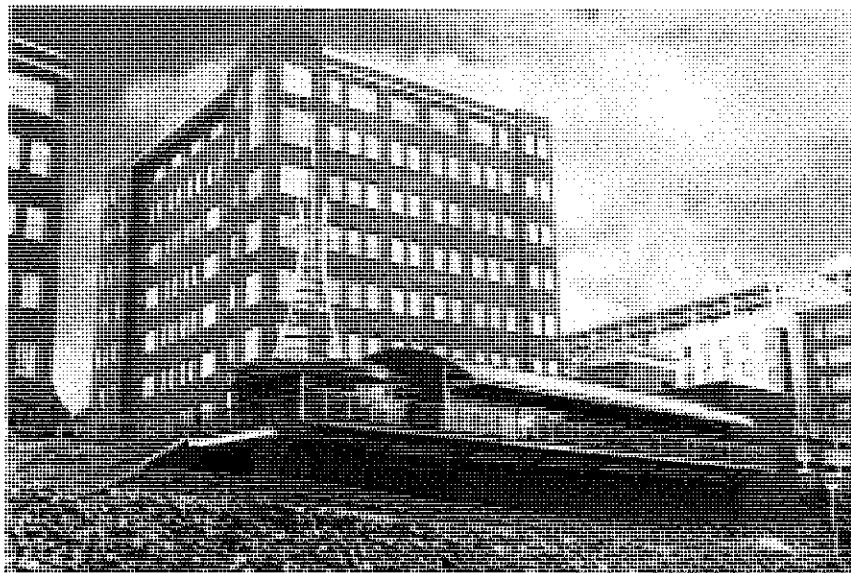
### **West Virginia American Institute of Architects**

2010 – Honor Award – Upper Monongahela River Center,  
Morgantown, WV

2010 – Merit Award – West Virginia University Transportation Center and Garage,  
Morgantown, WV



*Upper Monongahela  
River Center*



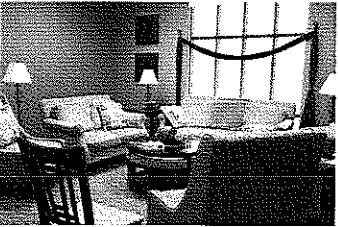
*Upper  
Monongahela  
River  
Center*

**Par-a-digm - (pär'e-dīm´) n. An example that serves as pattern or model.**

# Customer Relationships & Quality Assurance



*Glade Springs Resort*



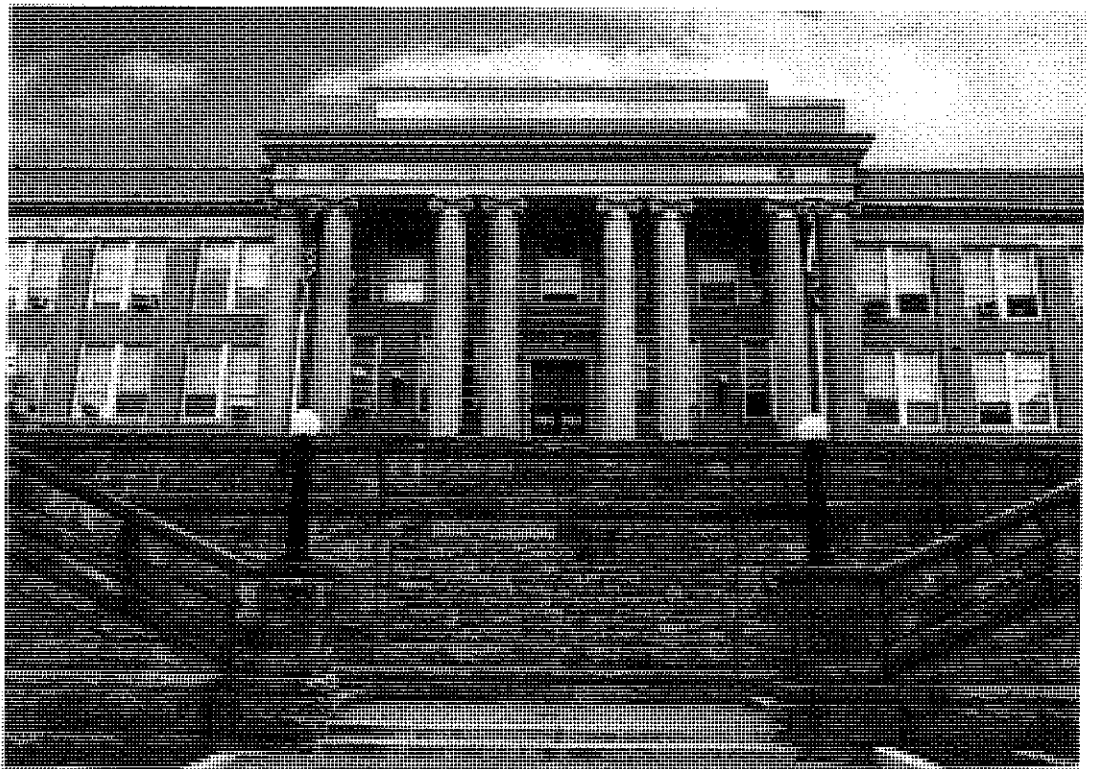
*Chestnut Ridge Church*

Paradigm Architecture prides itself on providing excellent client service. When asked one time whether Paradigm Architecture was primarily a Design Firm or a Technical Firm, the response was simply "We are a Client Service Firm." Our portfolio of projects exemplifies this as a quick review shows that the majority of our work comes from repeat clients. We are known for providing fast, local response as well as personal attention to each and every project, no matter how large or how small. The following pages are brief summaries of techniques used to maintain these valuable relationships.

## Project Management

Every project will be assigned a Project Manager who is a licensed Architect with appropriate project type experience. This project manager will be assigned to the project from conception to project closeout and will be the client's primary point of contact for the entire design team. Communication is of utmost importance for any project to be successful and a workflow of communication, including identifying key individuals' responsibilities and authorities will be established at the onset of the project. Unlike most design teams, we feel that it is important for the Owner to have direct contact with the consultants on the design team. There will be scheduled meetings throughout the duration of the project where the Owner will have the opportunity to be directly involved with all aspects of the project's design. These meetings will range from design charrettes to interviews with maintenance staff to feedback meetings at the conclusion of design phases.

*Fairmont  
State  
University  
Hardaway  
Hall*



**Par-a-digm - (pär'e-dīm´) n. An example that serves as pattern or model.**

# Customer Relationships & Quality Assurance



## Construction Contract Administration

In addition to the Project Manager, a Construction Contract Administrator will be assigned to each project. This individual will have extensive experience with the Client's established **Design Guidelines and Standards** and Construction Contract procedures. Unique to our company, this person will have been actively involved with the project during design and will have firsthand knowledge of the project's design. The Construction Administrator's roles will include managing and reviewing shop drawings, submittals, and RFI's for the entire design team. Additional roles include attendance at job site meetings, documenting construction progress and actively keeping the Owner through direct correspondence. The Contract Administrator will endeavor to have a good working relationship with the successful contractor bidding on the project to ensure that the project is a success for all parties involved.

## Project Closeout

Project Closeout Procedures will involve inspections by all members of the design team for Substantial Completion, and again at Final Completion. Each team member will generate a punch list of items that are either deficient or need to be completed. Closeout Submittals are required on every project and include not only Operations and Maintenance Manuals, but also Record Drawings, Approved Shop Drawings/ Submittals, Attic Stock, and Contact Information for all Subcontractors on the project. A careful review and confirmation of the Closeout Submittals will be conducted prior to approval of the Final Payment Application.

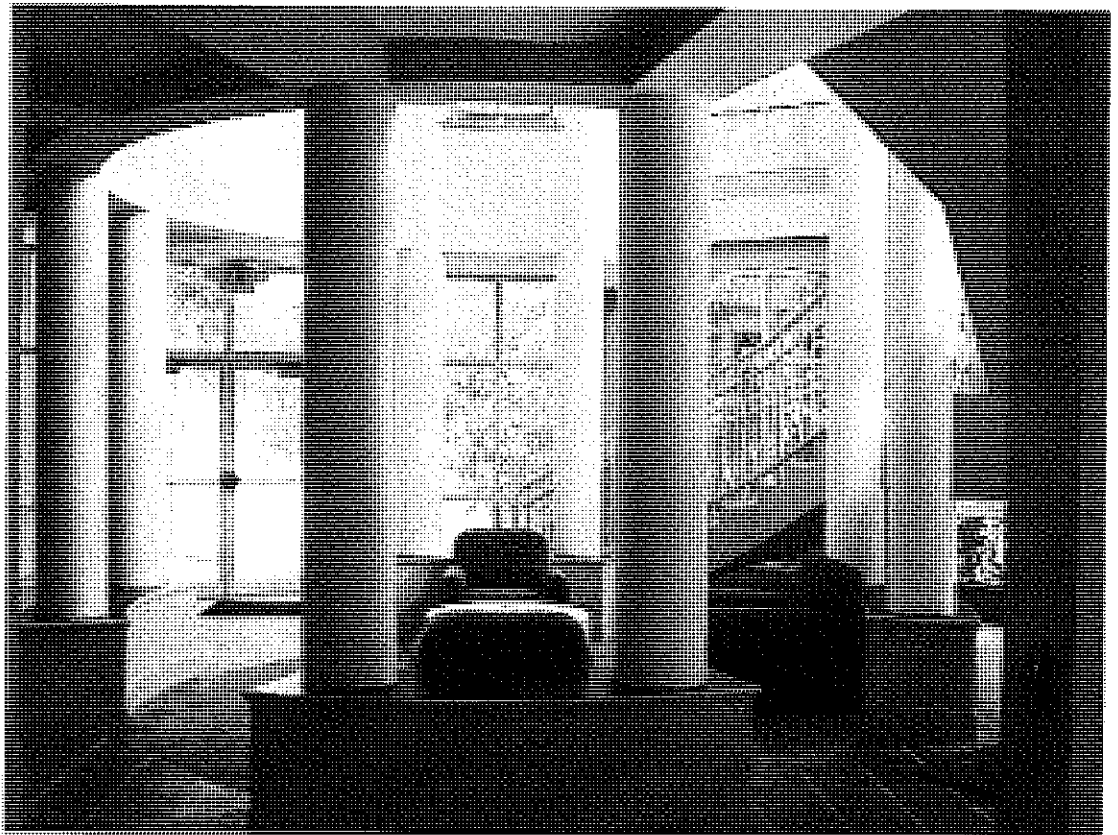


*Trinity Christian School*



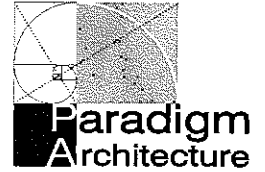
*WVU Intermodal Garage*

*Davis & Elkins College  
Madden Student Center*



**Par-a-digm - (pär'e-dīm')** *n.* An example that serves as pattern or model.

# Customer Relationships & Quality Assurance

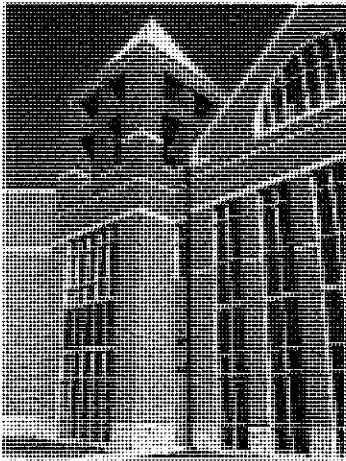


## From Program to Design to Construction

Once a program has been established, Paradigm Architecture will lead the design team through Schematic Design, Design Development, and Construction Documents. Schematic Design Deliverables will include Preliminary Architectural Floor Plans and Elevations, as well as Systems Narratives by all consultants. Design Development Deliverables will include detailed floor plans, elevations, sections, schedules, and single line engineering drawings. An outline specification will also be part of these deliverables, as well as 3d renderings for marketing purposes. Construction Documents Deliverables will include fully developed and completed drawings and specifications from all disciplines.

At all phases, an updated cost estimate will be provided that represents the current status of the project. As required for budget control, value engineering will take place prior to bidding and alternates will be included in the final bidding documents.

Once Bidding Documents have been approved by the Owner, Paradigm Architecture will assist the Owner in the Procurement Phase by prequalifying contractors, holding a Pre-Bid Conference, responding to questions, and issuing Addenda. After bids have been received, lowest responsible bidder approved, and a Construction Contract issued, Paradigm will provide Construction Contract Administration Services as described above.

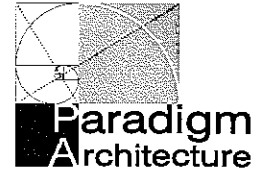


Chestnut Ridge Church



Glade  
Springs  
Resort

# Quality Control & Management



## Teamwork

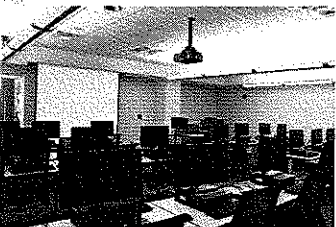
It has always been our philosophy that successful projects are the result of successful team relationships. And on any given construction project, there are a lot of relationships that come into play: owners, developers, facilities managers, architects, engineers, contractors, subcontractors, financial institutions, attorneys, code agencies, and tenants. We have learned a lot about how to work successfully together with all parties involved. Every project, whether large or small, is unique and requires strong leadership. Being a small business, you can be assured that local, senior staff and an experienced project manager will be assigned to all of our projects. Based on the specific requirements of the project, we always put together a team of consultants and staff who would best serve the needs of that individual project and client – while always maintaining a constant flow of communication and personal service with the owner. We have relationships with some of the best consulting companies in the region and the country to bring together the appropriate talents to meet the needs of a particular project. We currently have active relationships with consultants in WV, AL, IN, MI, OH, TX, NY, and PA.



Fairmont State University  
Falcon Center



Chestnut Ridge Church



Fairmont State University  
Classroom

## Technology

Paradigm Architecture prides itself on streamlining our project delivery and management methods. One of the ways we do this is to utilize the latest technology, including web-based project collaboration sites, electronic communication, electronic submittals for review and approval, video conferencing and the latest software packages for 3D renderings, Computer Aided Drafting (CAD), and Building Information Modeling (BIM). Our current software packages include the latest versions of Revit Architecture, Autocad Architecture, 3-D Studio, and Speclink. Far from the older methods of hand drafting, these tools help us to deliver faster and better coordinated projects, have fewer problems in the field, and provide the owner with excellent visualization tools during project development. We are always pursuing additional training and education for all our staff, including "in house" workshops, seminars, and online education for topics such as green building, BIM, project delivery and management, and current codes.

Chestnut  
Ridge  
Church



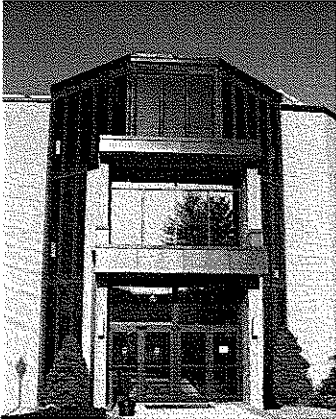


# Quality Control & Management



## Building Information Modeling (BIM)

Of particular interest is our use of BIM. More than just a 3D visualization tool, BIM allows for all disciplines to conduct "clash detection" tests for various disciplines and building components before the project goes to bid. This is extremely crucial for above ceiling coordination among the structural and MEP components. Use of BIM technology can result in better coordinated construction documents and less changes in the field. In addition, BIM allows the Owner to virtually experience the project before it is constructed. Utilizing Animations, we can "walk" the Owner through the building so that room layout surprises are eliminated during design. The use of renderings allows for careful material selections and presentations to internal departments and project stakeholders. At the conclusion of the project, the as-built model can be turned over to the Owner's Facilities Management Department for an actively working database to be used for years to come.



Fairmont State University  
Hunt Haught Hall

## File Transfer Protocol (FTP)

Throughout the life of the project, Paradigm hosts the FTP site. Paradigm sets up the site and all permissions for the site. If necessary, we lead a training session for the entire project team on how to use the site. The site will be maintained from the signing of Owner/Architect Agreement until the Project Closeout. All formal correspondence, as well as all required deliverables, throughout the duration of the entire project shall be uploaded to the FTP site. Paradigm creates an archive CD or DVD of all files on the project's FTP site at Project Closeout and delivers to the Owner.

## Project Delivery

We have successfully used a wide range of project delivery types on both public and private projects: design-bid-build, negotiated, design-build, develop-design-build, fast track, construction management agency, and construction management where the construction manager is also the contractor. We have extensive experience on fast-track construction projects, ranging from \$1 million to \$35 million. We assist the owner in developing critical path items and developing multiple early release packages while the design is still ongoing. These packages typically include initial site work, foundation, superstructure, long lead equipment, shell, and interior fit out. Although there are greater risks that must be assumed by the owner with this method, the benefits from meeting tight deadlines typically outweigh these risks. Expedient decisions must be made by all involved and open lines of communication and transparency are crucial. On any given type of project delivery, we have a quality control plan that includes developing an initial schedule with the owner for the entire project through the design, bid, and construction phases. Milestone points will be established and will include deliverables from both the design team and the owner. These milestone points will include sets of progress drawings and specifications for both the owner's and design team's review. We have an extensive "in house" coordination and review process that includes engineering coordination, specification coordination, code and life safety reviews, and the owner's program review. Before moving to each subsequent phase, the Owner will have an opportunity to review and "sign off" on each progress set so that all parties are always clear as to the direction the project is heading.



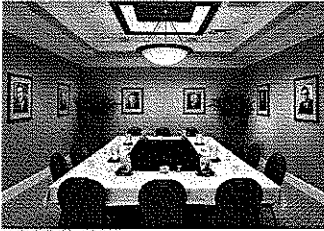
Fairmont State University  
Hunt Haught Hall

# Quality Control & Management

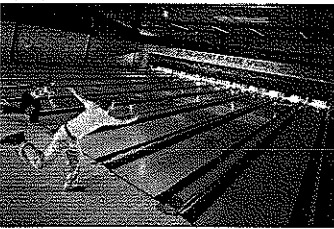


## Project Delivery

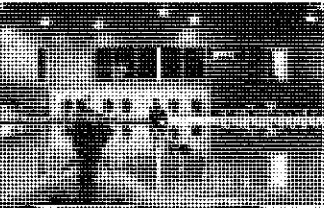
We have successfully used a wide range of project delivery types on both public and private projects: design-bid-build, negotiated, design-build, develop-design-build, fast track, construction management agency, and construction management where the construction manager is also the contractor. We have extensive experience on fast-track construction projects, ranging from \$1 million to \$35 million. We assist the owner in developing critical path items and developing multiple early release packages while the design is still ongoing. These packages typically include initial site work, foundation, superstructure, long lead equipment, shell, and interior fit out. Although there are greater risks that must be assumed by the owner with this method, the benefits from meeting tight deadlines typically outweigh these risks. Expedient decisions must be made by all involved and open lines of communication and transparency are crucial. On any given type of project delivery, we have a quality control plan that includes developing an initial schedule with the owner for the entire project through the design, bid, and construction phases. Milestone points will be established and will include deliverables from both the design team and the owner. These milestone points will include sets of progress drawings and specifications for both the owner's and design team's review. We have an extensive "in house" coordination and review process that includes engineering coordination, specification coordination, code and life safety reviews, and the owner's program review. Before moving to each subsequent phase, the Owner will have an opportunity to review and "sign off" on each progress set so that all parties are always clear as to the direction the project is heading.



Glade Springs Clubhouse



Glade Springs Clubhouse



Glade Springs Clubhouse



Glade  
Springs  
Clubhouse

Para·digm - (pär'e-dīm') *n.* An example that serves as pattern or model.

# Quality Control & Management



## Cost Control

Using internal cost data, and national databases, we are able to provide the Owner rough order of magnitude and schematic cost estimating for initial project development. We often conduct feasibility studies for clients to help them with initial project evaluations. For projects under \$1 million, we will provide more detailed cost estimating "in house" and have consistently been within an expected 10% range on bid day. However, unlike many architects and engineers, we feel that utilizing the services of a contractor or construction manager is extremely beneficial to the design process and helps keep the project moving in the right direction. Their services, such as cost estimating, constructability reviews, value engineering, current bid market analysis, and CPM scheduling have proven to be valuable assets to both the architect and owner. They are the experts in this area, just as we are the experts in the area of design, so why shouldn't we work together from day one to give the owner the best possible project? Therefore, we often suggest that these services be used on medium and large projects. If a project's funding sources do not allow for the general contractor to fill this role until the design is complete, then we can provide this role as consulting services under our contract. At times, we recommend both the architect and owner hire these consultants so that two third party reviews can be conducted and then any major differences be reconciled prior to bidding the project. Using these unique approaches, we find that it is rare for one of our projects to be over budget or behind schedule.



*Glade Springs Resort  
Hotel and Conference Center*



*WVU Intermodal Garage*

## Fast Track

We have been involved with multiple project delivery types where time is of the essence and have the capability to perform Fast Track Delivery Services if necessary. With Fast Track Delivery, the project is broken up in multiple construction packages with early release dates. Examples of these packages include Earthwork / Site Utilities, Foundations, and Superstructure. This allows construction to begin before the design has been complete.

*Lightning  
Strikes  
Trussville  
Family  
Fun  
Center*



# Quality Control & Management



## Facilities Operations and Maintenance

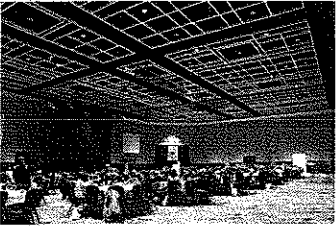
Recognizing the importance of long-term building operations and maintenance concerns, as well as building lifecycle costs, we encourage the involvement of the Owner's Facilities Management and/or Physical Plant staff throughout the project. We prefer to allow the engineers to get direct feedback from these individuals and we value their input to the selection of materials and systems. We diligently work to avoid past issues and concerns that have risen on past projects. In addition, our consultants have abundant experience in providing solutions and alternatives to pre existing maintenance conditions to alleviate those problems, provide a better building environment, and reduce lifecycle costs. This experience gives our team first-hand experience on the importance of having this staff involved with the design and allows for better decision making with the materials and systems selection.



Morgantown Event Center

## Critical Path Method

Paradigm Architecture has abundant experience in managing multiple projects with critical deadlines. Meeting these deadlines all starts with a clear definition of the schedule constraints. The ultimate project completion date is not the only date that should be targeted on the delivery schedule. Paradigm Architecture utilizes critical path method scheduling to define "Milestone" Dates for the entire project. These include deliverables dates for various phases, design time, Owner's review, Agency and Authority having Jurisdiction Review, procurement time, and construction time. Rather than viewing the schedule as a linear process, it is of utmost importance to determine those items that fall on the "critical path." If those deadlines are missed then the schedule must be adjusted immediately or the project will fall behind. We prefer to view the Schedule as a method of Monitoring and Control throughout the duration of the project. The entire design team and the Owner will be constantly informed and updated regarding schedule performance and corrective action will im-



Morgantown Event Center

Morgantown Event Center



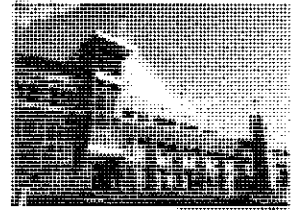
Para·digm - (pär'e-dīm') *n.* An example that serves as pattern or model.

## References



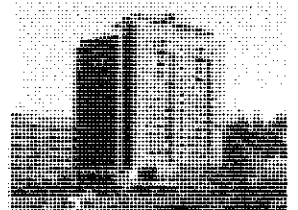
**Mr. John Thompson**  
Manager of Construction Services  
West Virginia University  
979 Rawley Avenue  
Morgantown, WV 26506-4629  
(304) 293-3625

*West  
Virginia  
University  
Intermodal  
Garage*



**Mr. G. Richard Lane II, AICP**  
Petroplus Lane, LLC  
150 Clay Street, Suite 200  
Morgantown, WV 26501-5948  
(304) 284-5000

*Waterfront  
Place*



**Mr. Ron Selders**  
Davis & Elkins College  
100 Campus Drive  
Elkins, WV 26241-3971  
(304) 637-1900

*Davis  
&  
Elkins  
College  
Athletic  
Center*



**Mr. Phil Weser, P.E.**  
March Westin Company  
360 Frontier Street  
Morgantown, WV 26505-3008  
(304) 599-4880

*Waterfront  
Marina  
&  
Boathouse  
Bistro*



**Mr. Brian Johnson**  
Bright Enterprises  
for Glade Springs Resort  
PO Box 460  
Summersville, WV 26651-0460  
(304) 872-3000 Ext. 219

*Glade  
Springs  
Clubhouse  
Expansion*



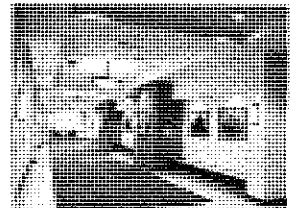
**Mr. Tim Haring**  
Chestnut Ridge Church  
Senior Pastor  
2223 Cheat Road  
Morgantown, WV 26508-4518  
(304) 594-0548

*Chestnut  
Ridge  
Church*



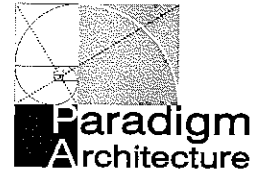
**Mr. James Decker**  
Fairmont State University  
1201 Locust Avenue  
Fairmont, WV 26554-2470  
(304) 367-4100

*Fairmont  
State  
University  
Conference  
Center*



Par-a-digm - (pär'e-dim') n. An example that serves

# Organization Chart



**WV Division of Culture & History  
Camp Washington Carver  
Owner**

**Paradigm Architecture**  
*Architecture & Project Management*  
**Paul A. Walker, AIA**  
*Principal-in-Charge*  
**Jonathan Perry, AIA, LEED<sup>AP</sup>**  
*Project Manager*  
**David Snider, AIA**  
*Assistant Project Manager*  
**Todd Christopher, AIA**  
*Project Architect*  
**Steve Konya**  
*Contract Administration*

**Acoustic Dimensions**  
*Acoustic / Audiovisual*  
**David Kahn, LEED<sup>AP</sup>**  
**David Stevens, LEED<sup>AP</sup>**

**KCI Technologies**  
*Site / Civil / Landscape*  
**John Rudmann, PE, RLA**  
**Steven Hamit, PE, CPESC**

**Allegheny Design**  
*Structural*  
**David R. Simpson, PE**  
**Michael L. Sipe, EI**  
**Jason D. Robinson, EI**

**H. F. Lenz Company**  
*Mechanical/Electrical/Plumbing*  
**Steven J. Gridley, PE**  
**Joel Shumaker, PE, LEED<sup>AP</sup>**  
**John Weiland, PE, LEED<sup>AP</sup>**  
**Steve Kormanik, CPD**  
**Jeffrey McKendree, CET**

Para·digm - (pär'e-dīm') *n.* An example that serves as pattern or model.

# Paul A. Walker, AIA

Principal-in-Charge and Design Architect



Mr. Walker has twenty-seven years of experience as an architect and received his registration in 1986. He became a business owner in October 2000 when he created Paradigm Architecture. Mr. Walker's design responsibilities include programming, development of construction documents, project management, and construction administration. Among the variety of projects he has designed and supervised are: commercial, corporate, educational, governmental, industrial, institutional, recreational, religious, and residential. The scope of projects ranges from a few thousand dollars to over 30 million dollars.

## Architectural Registration

NCARB

WW / AL / FL / NC / PA / SC

## Education

University of Tennessee

Knoxville, TN

Bachelor of Architecture,  
1982

## Professional, Civic and Other Activities

American Institute  
of Architects

Board Member  
Chestnut Ridge Church

**Cacapon Resort State Park  
Lodge Expansion**  
Completed: TBD  
Cost: \$22 Million

**West Virginia University  
Downtown Student Housing  
Morgantown, West Virginia**  
Completed: Summer 2009  
Cost: \$15.3 Million

**Davis and Elkins College  
Athletic Center  
Elkins, West Virginia**  
Completed: Spring 2007  
Cost: \$5.5 Million

**United States Department of Energy  
Office of Legacy Management  
Records Storage Facility  
Morgantown, West Virginia**  
Completed: Summer 2009  
Cost: \$8 Million (Shell)

**Morgantown Event Center  
and Parking Garage  
Morgantown, West Virginia**  
Completion: Spring 2010  
Cost: \$26.3 Million

**Two Waterfront Place  
Hotel and Conference Center  
Morgantown, West Virginia**  
Completed: Summer 2003  
Cost: \$35 Million

**West Virginia University  
Mylan Puskar Stadium  
Touchdown Terrace Club Addition  
Morgantown, West Virginia**  
Completed: Fall 2007  
Cost: \$800,000

**Chestnut Ridge Church  
Morgantown, West Virginia**  
Completed: Fall 2006  
Cost: \$10 Million

**United States Department of Agriculture  
Morgantown, West Virginia**  
Completed: Summer 2009  
Cost: \$6.5 Million (Shell)

**Glade Springs Resort  
and Conference Center  
Daniels, West Virginia**  
Completed: Fall 2005  
Cost: \$6 Million

**West Virginia University  
Coliseum and Athletic Office Renovations  
Morgantown, West Virginia**  
Completed: Summer 2008  
Cost: \$1.5 million

**Glade Springs Resort  
Clubhouse Expansion  
Daniels, West Virginia**  
Completed: Summer 2006  
Cost: \$1.1 Million

**West Virginia University  
Intermodal Garage  
Morgantown, West Virginia**  
Completed: Fall 2009  
Cost: \$14.5 Million

**West Virginia School of Osteopathic Medicine  
Master Plan  
Lewisburg, West Virginia**  
Estimated Completed: Winter 2010  
Cost: \$253,000

**Marina Tower  
Morgantown, West Virginia**  
Completed: Winter 2008  
Cost: \$10 Million (Shell)

**Para-digm - (pär'e-dīm') n. An example that serves as pattern or model.**

# Jonathan L. Perry, AIA, LEED AP

## Project Manager



Mr. Perry's responsibilities have included development of construction documents and drawings, project management, marketing presentations, bidding procedures, construction administration, and creating renderings for clients using computer aided design programs. He has a combined ten years of experience in commercial and residential architecture and has been with Paradigm Architecture for the last nine years. Project experience includes commercial, corporate, educational, governmental, healthcare, hospitality, industrial, institutional, recreational, and residential.

### Architectural Registration

NCARB

West Virginia

### Education

University of Alabama  
at Birmingham  
Birmingham, AL

Master of Engineering  
in Construction Management  
2009

University of Tennessee,  
Knoxville, Tennessee  
Bachelor of Architecture, Cum  
Laude  
1999

Politechnika Krakowska  
Krakow, Poland  
Semester Abroad, 1998

### Professional, Civic and Other Activities

American Institute  
of Architects

LEED Accredited  
Professional

Construction Documents  
Technologist

Lecturer at University of  
Alabama at Birmingham

**Cacapon Resort State Park  
Lodge Expansion**  
Completed: TBD  
Cost: \$22 Million

**West Virginia University  
Downtown Student Housing  
Morgantown, West Virginia**  
Completed: Summer 2009  
Cost: \$15.3 Million

**Davis and Elkins College  
Athletic Center  
Elkins, West Virginia**  
Completed: Spring 2007  
Cost: \$5.5 Million

**Morgantown Event Center  
and Parking Garage  
Morgantown, West Virginia**  
Completion: Spring 2010  
Cost: \$26.3 Million

**Two Waterfront Place  
Hotel and Conference Center  
Morgantown, West Virginia**  
Completed: Summer 2003  
Cost: \$35 Million

**Fairmont State University  
Colebank Hall Renovations  
Fairmont, West Virginia**  
Completed: Winter 2007  
Cost: \$1.5 Million

**Glade Springs Resort  
Clubhouse Expansion  
Daniels, West Virginia**  
Completed: Summer 2006  
Cost: \$1.1 Million

**Fairmont State University  
Hunt Haught Hall Renovations  
Fairmont, West Virginia**  
Completed: 2008  
Cost: \$233,000

**Davis and Elkins College  
Madden Student Center  
Elkins, West Virginia**  
Completed: Summer 2003  
Cost: \$1.5 Million

**Chestnut Ridge Church  
Morgantown, West Virginia**  
Completed: Fall 2006  
Cost: \$10 Million

**Glade Springs Resort  
and Conference Center  
Daniels, West Virginia**  
Completed: Fall 2005  
Cost: \$6 Million

**West Virginia University  
Mylan Puskar Stadium  
Touchdown Terrace Club Addition  
Morgantown, West Virginia**  
Completed: Fall 2007  
Cost: \$800,000

**Fairmont State University  
Colebank Hall Data Center Build-Out  
Fairmont, West Virginia**  
Completed: May 2007  
Cost: \$400,000

**West Virginia School of Osteopathic Medicine  
Master Plan  
Lewisburg, West Virginia**  
Estimated Completed: Winter 2010  
Cost: \$253,000

**Waterfront Master Plan  
Morgantown, West Virginia**  
Completed: Ongoing  
Cost: \$120+ Million

**Fairmont State University  
Hardway Hall Portico Renovations  
Fairmont, West Virginia**  
Completed: Summer 2010  
Cost: \$333,200

Par-a-digm - (pär'e-dīm') *n.* An example that serves as pattern or model.



# David H. Snider, AIA

## Assistant Project Manager / Specifications



Mr. Snider graduated from Auburn University with a degree in architecture and practiced in North Carolina before returning to his hometown of Birmingham, Alabama. He has spent the last nine years of his twenty-four year career with Paradigm Architecture. His responsibilities with Paradigm Architecture have included project management, construction documents, contract administration, and writing specifications. Project experience includes educational, healthcare, churches, libraries, schools, historic office buildings, airports, and commercial facilities.

### Architectural Registration

NC

AL—Pending

### Education

Auburn University  
Auburn, Alabama  
Bachelor of Architecture  
1984

Roofing Technology  
The Roofing Industry  
Educational Institute  
1995

### Professional, Civic and Other Activities

American Institute  
of Architects

**Benjamin Russell High School  
Addition and Renovations  
Valley, Alabama**  
Estimated Completion: 2010  
Cost: \$2.5 Million

**West Virginia University  
Mylan Puskar Stadium  
Touchdown Terrace Club Addition  
Morgantown, West Virginia**  
Completed: Fall 2007  
Cost: \$800,000

**Two Waterfront Place  
Hotel and Conference Center  
Morgantown, West Virginia**  
Completed: Summer 2003  
Cost: \$35 Million

**Glade Springs Resort  
and Conference Center  
Daniels, West Virginia**  
Completed: Fall 2005  
Cost: \$6 Million

**Davis and Elkins College  
Athletic Center  
Elkins, West Virginia**  
Completed: Spring 2007  
Cost: \$5.5 Million

**Christian School  
Morgantown, West Virginia**  
Completed: Summer 2005  
Cost: \$8 Million

**Russell Medical Center  
Professional Office Building #3  
Alexander City, Alabama**  
Completed: Spring 2004  
Cost: \$4.1 Million

**The Jackson Kelly Building  
Morgantown, West Virginia**  
Completed: Spring 2002  
Cost: \$4.5 Million (Shell)

**Davis and Elkins College  
Madden Student Center  
Elkins, West Virginia**  
Completed: Spring 2003  
Cost: \$1.5 Million

**United States Department of Agriculture  
Morgantown, West Virginia**  
Completed: Summer 2009  
Cost: \$6.5 Million (Shell)

**Waterfront Master Plan  
Morgantown, West Virginia**  
Completed: Ongoing  
Cost: \$120+ Million

**Fairmont State University  
Colebank Hall Renovations  
Fairmont, West Virginia**  
Completed: Winter 2007  
Cost: \$1.5 Million

**Fairmont State University  
Parking Facility  
Fairmont, West Virginia**  
Completed: Spring 2004  
Cost: \$10 Million Trinity

**Waterfront Marina  
and Boathouse Bistro  
Morgantown, West Virginia**  
Completed: Summer 2007  
Cost: \$4.2 Million

**Morgantown Event Center  
and Parking Garage  
Morgantown, West Virginia**  
Completion: Spring 2010  
Cost: \$26.3 Million

**West Virginia School of Osteopathic Medicine  
Master Plan  
Lewisburg, West Virginia**  
Estimated Completed: Winter 2010  
Cost: \$253,000

# Todd G. Christopher, AIA

## Project Architect



Mr. Christopher's responsibilities have included development of construction documents and drawings, project management, marketing presentations, bidding procedures, and construction administration. He has a combined eight years of experience in commercial and residential architecture and joined Paradigm Architecture in February 2009. Project experience includes commercial, corporate, educational, performing arts, healthcare, continuing care retirement communities, laboratories, industrial, institutional, sports facilities, and multi-family residential.

### Architectural Registration

NCARB

WV / NC

### Education

Virginia Polytechnic Institute  
& State University  
Blacksburg, VA  
Master of Architecture  
2002

Fairmont State College  
Fairmont, WV  
Bachelor of Science  
in Engineering Technology  
1999

### Professional, Civic and Other Activities

American Institute  
of Architects

U.S. Green Building Council

AIA Peer Mentor  
in conjunction with  
UNC Charlotte

College of Arts + Architecture

AIA Intern Development  
Program Mentor

**United States Department of Agriculture**  
**Morgantown, West Virginia**  
Completed: Summer 2009  
Cost: \$6.5 Million (Shell)

**Pi Kappa Alpha**  
**Renovation and Addition**  
**Morgantown, West Virginia**  
Completed: May 2010  
Cost: \$1.6 Million

**Booz Allen Hamilton Office Space**  
**Marina Tower**  
**Morgantown, West Virginia**  
Estimated Completion: May 2010  
Cost: \$200,000

**Star City Waterfront Master Plan**  
**Morgantown, West Virginia**  
Estimated Completion: Undetermined  
Cost: Undetermined

**GSA Office Space**  
**Marina Tower**  
**Morgantown, West Virginia**  
Completed: August 2009  
Cost: \$770,000

**KeyLogic Systems, Inc.**  
**Morgantown, WV**  
Estimated Completion: May 2010  
Cost: \$1.5 Million

**Catawba Valley Medical Center\***  
**Women's/Oncology Expansion/Renovations**  
**Hickory, North Carolina**  
Estimated Completion: Spring 2012  
Cost: \$79 Million

**University of South Carolina\***  
**Discovery I Biomedical Research Facility**  
**Columbia, South Carolina**  
Completed: Winter 2008  
Cost: \$12 Million

**Middletown Tractor Sales**  
**Fairmont, West Virginia**  
Completed: Spring 2011  
Cost: \$1.7 Million

**Mountain Island Library\***  
**Charlotte, North Carolina**  
Completed: Spring 2005  
Cost: \$2.5 Million

**National Institute of Aerospace\***  
**Hampton, Virginia**  
Completed: Summer 2006  
Cost: \$6 Million

**Davidson College\***  
**Duke Residence Hall**  
**Davidson, North Carolina**  
Completed: Summer 2007  
Cost: \$6.3 Million

**University of North Carolina at Charlotte\***  
**Robinson Hall Performing Arts Building**  
**Charlotte, North Carolina**  
Completed: Spring 2004  
Cost: \$23 Million

**University of North Carolina at Pembroke\***  
**Sampson Classroom Building**  
**Pembroke, North Carolina**  
Completed: Summer 2007  
Cost: \$4.7 Million

**University of North Carolina at Wilmington\***  
**Performing Arts & Classroom Building**  
**Wilmington, North Carolina**  
Completed: Fall 2006  
Cost: \$26 Million

**North Carolina State University\***  
**Frank Thompson Theatre Renovation**  
**Raleigh, North Carolina**  
Estimated Completion: August 2009  
Cost: \$11.5 Million

\*Key involvement in project with firm(s)  
other than Paradigm Architecture, Inc.

**Para-digm - (pär'e-dīm') n. An example that serves as pattern or model.**

# Steve Konya II

## Contract Administration



Mr. Konya's responsibilities have included development of construction drawings and documents, construction administration, project management tasks, marketing, and photography. He has a combined fifteen years of experience in commercial architecture and has been with Paradigm Architecture for five years. Project types have included commercial, corporate, educational, hospitality, institutional, and retail.

### Education

Fairmont State College  
Fairmont, West Virginia  
Bachelor of Science  
in Engineering Technology  
1996

### Professional, Civic and Other Activities

Professional Photographers  
of West Virginia

**Glenmark Office Building**  
Morgantown, West Virginia  
Completed: Spring 2009  
Cost: \$1.6 Million

**West Virginia University**  
Intermodal Garage  
Morgantown, West Virginia  
Completed: Fall 2009  
Cost: \$14.5 Million

**Fairmont State University**  
Hardway Hall Portico Renovations  
Fairmont, West Virginia  
Completed: Summer 2010  
Cost: \$333,200

**West Virginia University**  
Mylan Puskar Stadium  
Touchdown Terrace Club Addition  
Morgantown, West Virginia  
Completed: Fall 2007  
Cost: \$800,000

**Cacapon Resort State Park**  
Lodge Expansion  
Completed: TBD  
Cost: \$22 Million

**United States Department of Energy**  
Office of Legacy Management  
Records Storage Facility  
Morgantown, West Virginia  
Completed: Summer 2009  
Cost: \$8 Million (Shell)

**Morgantown Event Center**  
and Parking Garage  
Morgantown, West Virginia  
Completed: Spring 2010  
Cost: \$26.3 Million

**Fairmont State University**  
Conference Center & Classroom Fitup  
Fairmont, West Virginia  
Completed: Fall 2006  
Cost: \$770,000

**West Virginia University**  
Downtown Student Housing  
Morgantown, West Virginia  
Completed: Summer 2009  
Cost: \$15.3 Million

**Fairmont State University**  
Colebank Hall Data Center Build-Out  
Fairmont, West Virginia  
Completed: May 2007  
Cost: \$400,000

**Waterfront Marina**  
and Boathouse Bistro  
Morgantown, West Virginia  
Completed: Summer 2007  
Cost: \$4.2 Million

**United States Department of Agriculture**  
Morgantown, West Virginia  
Completed: Summer 2009  
Cost: \$6.5 Million (Shell)

**Marina Tower**  
Morgantown, West Virginia  
Completed: Winter 2008  
Cost: \$10 Million (Shell)

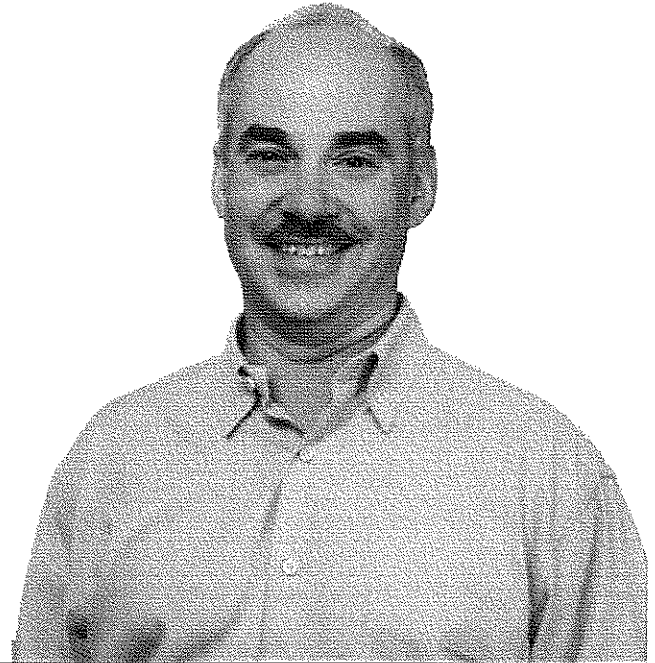
**Glade Springs Resort Clubhouse**  
Daniels, West Virginia  
Completed: Fall 2005  
Cost: \$6 Million

**WV Fairmont State University**  
Colebank Hall Renovations  
Fairmont, West Virginia  
Completed: Winter 2007  
Cost: \$1.5 Million

**Fairmont State University**  
Hunt Haught Hall Renovations  
Fairmont, West Virginia  
Completed: 2008  
Cost: \$233,000

**Chestnut Ridge Church**  
Morgantown, West Virginia  
Completed: Fall 2006  
Cost: \$10 Million

# biography



## David Kahn, LEED® AP principal consultant

David Kahn founded Acoustic Dimensions in 1991. As principal consultant, David provides lead design direction on many successful projects for clients such as: Columbus Association for Performing Arts (CAPA), Buffalo Philharmonic, Manhattan School of Music, Broadway Company of "Rent", St. Paul Chamber Orchestra and Woolly Mammoth Theatre.

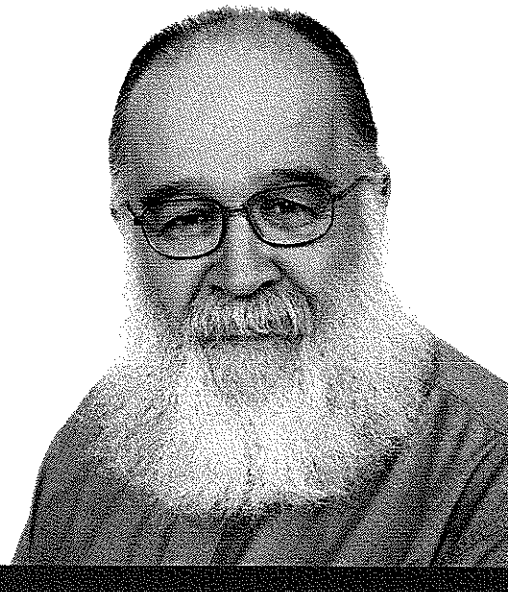
David has expertise in all three broad areas of architectural acoustics consulting: room acoustics design, sound isolation and mechanical and electrical systems noise and vibration control.

With a goal of focusing on performing arts facilities, David joined Artec Consultants in 1985, where he worked with Russell Johnson and Nicholas Edwards. His first major assignment was the Meyerson Symphony Centre in Dallas. He was also in charge of Artec's University-based performing arts facilities, including the Benson Great Hall at Bethel College and the Ted Mann concert hall at the University of Minnesota.

Over the past 18 years, David has designed numerous concert and recital halls and schools of music, theatre and dance for educational institutions. Among his current or recently completed projects are Tisch School of the Arts at New York University; The Pullo center at Penn State York; Gallagher-Bluedorn Performing Arts Center at the University of Northern Iowa; Illinois State University Performing Arts Center; Kennesaw State University Recital Hall and Mercersburg Academy Performing and Visual Arts.

David is on the faculty of Yale University in the graduate school of drama. He is also a visiting lecturer at the New Jersey Institute of Technology. David brings a musician's ear to all of the performance facilities he designs. He is currently active in the New York Symphonic Arts Ensemble as a trumpet player. He has a Master of Science in Acoustics from Pennsylvania State University, and a Bachelor of Science in Engineering from Columbia University.

# biography



david w. robb

senior associate

David W. Robb joined Acoustic Dimensions as Senior Associate in 2010 where he serves as the backbone of the Audio & AV Group; providing design direction, quality standards, documentation supervision, and a critical ear for all performance space projects.

David is one of the innovators of modern audio installation design, integrating products and techniques from the touring industry into the world of permanent installations. His two decades of audio systems design for performing arts venues are informed by his years of hands-on experience with live sound production acquired through extensive worldwide touring.

David specializes in the design of audio systems for live performance in music theaters, drama theaters, amphitheatres, pavilions, concert halls, opera houses, recital halls, and multi-purpose venues. Prior to joining Acoustic Dimensions, he devoted over twenty years as principal audio & video systems designer for JaffeHolden Acoustics where he directed all activities of the systems design group while providing innovative solutions and management for key projects, including Apollo Theater, New York; Hobby Center for the Performing Arts, Houston; Hollywood Bowl; John F. Kennedy Center, Concert Hall, Opera House & Eisenhower Theater; Lincoln Center, Alice Tully Hall & Juilliard School; Marion Oliver McCaw Hall, Seattle; New York Philharmonic and Metropolitan Opera's Carlos Moseley Pavilion; Radio City Music Hall; and Tokyo International Forum, Japan,

Earlier in his career, David acquired a wealth of practical knowledge about the entertainment business while touring in North America, Europe, and Japan. He began as a musician, then spent over twenty years as sound company manager, mix engineer, production manager, or electronics technology specialist on the road with such popular artists as Jimi Hendrix, Grateful Dead, Frank Zappa, Tom Petty, Bonnie Raitt, Yes, and Bob Dylan.

Educated at the University of Hartford and Worcester Polytechnic Institute, David is an active member of Audio Engineering Society, InfoComm International ICAT Council, National Systems Contractors Association, United States Institute for Theatre Technology, Synergetic Audio Concepts, and the TEC Foundation for Excellence in Audio awards nominating panel; and a retired member of American Federation of Musicians and International Alliance of Theatrical Stage Employees.

**ACOUSTIC** DIMENSIONS

# biography



david stephens, LEED® AP

senior consultant - vp

From his early years as a technician operating shows and later as a designer contributing to the overall development of facilities, David has the unique capacity to generate both creative and practical solutions. He is gifted at managing competing variables, and does it in a way that values relationships—making him a sought-after project manager. David also has the ability to observe and sense core dynamics allowing him to often diagnose and deal with the unnamed issues on a project.

David joined the Acoustic Dimensions team in 2000 to begin our lighting systems design group. His holistic understanding of using technology to create experience paired with his gifting at leading teams helped transition the firm from an engineering practice to a creative one.

Prior to joining Acoustic Dimensions, David had an 18-year career at Disney, where he became the Lighting Design Director working closely with architects, engineers and contractors developing, designing and overseeing installations for projects ranging from theatrical facilities to main street electrical parades. Some of David's facility and show design credits at WDW include design for American Gardens Theatre, Animal Kingdom Theatre, Reflections of Earth (EPCOT Center Lagoon Show), Architectural/Show Lighting system for Cinderella's Castle (Magic Kingdom) and Fantasmic! (Disney/MGM Studios). David also had the privilege of designing an electric light parade for WDW Japan and for providing the entertainment lighting systems design for Euro Disneyland.

David's career in entertainment began even prior to his work with Acoustic Dimensions and Disney. He attended high school at the Hawken School in Cleveland. The performing arts center hosted touring acts as well as academic performances, and David spent four years receiving hands-on experience. After graduation, David served as shop foreman for Washington University in St. Louis. The university performing arts center had a full season with a large dance program which included in-house productions and road companies. David has his Bachelor of Arts in Theatrical Lighting Design.

David is a Senior Consultant and Vice President in our Dallas office.

## education

Washington University - St. Louis BA in Theatrical Lighting Design

**ACOUSTIC DIMENSIONS**

**John Rudmann, PE, RLA, LEED AP**  
Civil Engineer

**Education**

BS / Civil Engineering  
BS / Landscape Architecture

**Registration**

RLA / WV / 341  
Also RLA in MD, OH, PA  
PE / WV / 14779  
Also PE in MD, PA  
LEED AP

**Total Years with KCI: 3**

**Total Years of Experience: 16**

Mr. Rudmann is a licensed civil engineer, a licensed landscape architect, and a LEED Accredited Professional. His responsibilities have included being a Project Manager, a Senior Civil Engineer, and a Senior Landscape Architect for many site design projects. As a designer, his design tasks have included site master planning, stormwater design, utility design, grading, access road design, erosion and sediment control design, pedestrian plaza design, site permitting, golf course design, and completing project specifications. He has designed several different methods of bio-filtration and has completed all the necessary credit paper work to achieve LEED Certification. From 1990 to 1992, Mr. Rudmann worked at the Institute for the History of Technology and Industrial Archeology. He lived at Camp Washington Carver for about 4 months while working on the Nuttallburg project. Relevant project experience includes:

**Nuttallburg Mine Complex Recording Project. Nuttallburg, WV.** Project Engineer. Mr. Rudmann was responsible for preparing HABS/HAER documentation drawings. The project consisted of recording all structures on-site and documenting the mining process. Maintained extensive project coordination with SHPO. The Town of Nuttallburg is currently funded to be rebuilt. The drawings and work Mr. Rudmann helped to complete are now being used. This town and others are being rebuilt so people can have a walking tour of history.

**Capacon Resort State Park Lodge Expansion and Park Improvement. Capacon, WV.** Civil/Site Engineer. As a subconsultant to Paradigm Architecture, KCI managed and performed tasks for water and wastewater system improvements as part of state park upgrades and expansion project. Mr. Rudmann is responsible for completing the design for golf course pond renovations, including pond bank stabilization and lowering the water surface elevation; complete sand bunker renovation, including new drainage system design, adding liners, re-shaping, re-edging, and re-contouring; and the replacement of most existing site drainage structures.

**Downtown Student Housing Project. Morgantown, WV.** Senior Design Engineer. KCI was a subconsultant to Paradigm Architecture for the New Honors Dormitory located on West Virginia University's downtown campus. KCI was responsible for overall site design, courtyard, utility lines, sidewalks, drainage, stormwater retention, grading plans, erosion and sedimentation control plans, and all the site/civil permitting. Mr. Rudmann was responsible for the overall design of all site/civil services which included an extensive landscaping plan, access roads, and courtyard pedestrian design. Due to severe space limitations, Mr. Rudmann utilized oversized piping and developed a gravel layer to be used for water detention to meet environmental standards.

**USDA Building Design/Build. Sabraton, WV.** Project Manager. KCI was a subconsultant to Paradigm Architecture for the USDA Building located in the Sabraton Area of Morgantown. KCI provided site/civil engineering and landscape architecture design services for this design/build project. This project is pursuing LEED certification. Mr. Rudmann was responsible for the overall design of all site/civil services which included site design, access roads, utility lines, sidewalks, drainage, stormwater quality and retention, grading plans, erosion and sedimentation control plans, and the permitting. Most of the stormwater filtration was achieved through the use of bio-filtration cells within the parking lot areas and swales located closer to the building. Mr. Rudmann also completed all the necessary LEED submittal paperwork for sustainable site and water efficiency credits. This building has been certified Silver.

**Steven Hamit, PE, CPESC**  
Water Treatment Engineer

**Education**

BS / Civil Engineering

**Registration**

PE / WV / 18043

Also PE in OH, PA  
CPESC

**Total Years with KCI: 11**

**Total Years of Experience: 31**

Mr. Hamit is the Corporate Practice Leader for Municipal Engineering with extensive civil engineering experience in the municipal/public works field. As City Engineer with the City of Massillon, Ohio, Mr. Hamit had a strong focus on project funding and scheduling. He also assisted the City's bonding council and played a critical role in obtaining funding from numerous sources. Since that time, Mr. Hamit has successfully managed numerous sanitary sewer, storm sewer, roadway, and site development projects. He is a highly-motivated, solution-oriented professional focused on client services. Relevant project experience includes:

**Cacapon Resort State Park Lodge Expansion and Park Improvement. Capacon, WV.** Quality Assurance/Quality Control. As a subconsultant to Paradigm Architecture, KCI managed and performed tasks for water and wastewater system improvements as part of state park upgrades and expansion project. Mr. Hamit provided QA/QC services on the design improvements to the golf course commensurate with a Robert Trent Jones style course. Specific design services included upgrading the park's waste water collection system, improving the potable water distribution, site/civil engineering and landscape architecture services to accommodate the addition to the resort that was designed by an architect.

**Stevens Park Area Drainage Design Phases 1 and 2. Niles, OH.** Civil Engineer. Mr. Hamit prepared a base map and drainage study for a large residential area in the City of Niles that drains to the Stevens Park Ravine. A new drainage system was modeled and designed to have the capacity required for a 10-year event and the hydraulic grade line was reviewed for the 25 and 50 year storm events. Construction drawings were then prepared for public bid. Prepared the Ohio Public Works Commission application and submitted the projects for funding. These projects were funded through Ohio Public Works Program and the City of Niles Capital Improvement budget. Also provided construction administrative services.

**High Glens Park Planning and Design Services. Cuyahoga Falls, OH.** Project Manager. Mr. Hamit coordinated the brownfield cleanup, assisted the City in the planning of the new South Front Street corridor, and design the High Glens Urban Park. This park is a passive park and to set the tone for all of the subsequent development in the area with wooden boardwalks, walking paths, drainage, and lighting.

**Wastewater Treatment Plant Upgrade. Massillon, OH.** Project Manager. Mr. Hamit was responsible for the planning, funding, design, and construction phases of the major upgrade (\$42,500,000). In an effort to lower the interest rate for the City of Massillon, extensive coordination with Ohio EPA DEFA and various other agencies throughout the state was performed resulting in the successful funding of six agencies' multiple projects. These projects included the Mahoning River Project, the City of Kent Dam Restoration, and the purchase of land for the University of Akron, Cleveland Museum of Natural History and the Sawmill Metro Parks. By sponsoring these various agencies, the City of Massillon was able to save \$250,000 per year in interest for the next 20 years.

**Fothergill Belmont Sanitary Sewer Project. Massillon, OH.** Project Manager. Mr. Hamit was responsible for the design of new sanitary sewer system, storm system and roadway to fit the existing driveways. Existing septic systems were abandoned. This project evolved into a total rebuild of the subdivision. The existing subdivision had 87 existing units. Funding was obtained from the OEPA DEFA as a low interest rate loan.





# Allegheny Design Services

*Structural & MEP Engineering*

102 Leeway Street  
Morgantown, WV 26505

Phone: (304)599-0771

Fax: (304)599-0772

E-Mail: [Dave@AlleghenyDesign.com](mailto:Dave@AlleghenyDesign.com)

Web: [www.AlleghenyDesign.com](http://www.AlleghenyDesign.com)

**David R. Simpson, P.E., SECB, MBA**  
**President**

## **Education:**

West Virginia Institute of Technology  
B.S. Civil Engineering

West Virginia University  
Masters Business Administration

West Virginia State College  
Architectural Technology

## **Professional Registrations:**

Year first registered: 1984  
Structural Engineering Certification Board  
West Virginia  
Pennsylvania  
Maryland  
Virginia  
District of Columbia  
South Carolina  
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

## **Continuing Education:**

2005 AISC Specification for Structural Steel Buildings – September 27, 2006 – Pittsburgh, PA  
ASCE Testifying Skills for Engineers – February 16, 2007 – Orlando, FL

## **Professional Experience:**

Responsible for project management and design at Allegheny Design Services. Experience includes over 24 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,	May 2002 to Present
R.M. Gensert and Associates, Vice President,	August 1998 to May 2002
West Virginia University, Assoc. Director Construction	August 1988 to August 1998
Simpson Engineering, Owner	August 1988 to August 1998
CECO Buildings Division, Senior Structural Engineer	April 1985 to August 1988
Rockwell International, Facility Structural Engineer	March 1982 to April 1985
Bellard Ladner & Assoc., Staff Structural Engineer	Sept. 1981 to March 1982
PPG Industries, Facility Structural Engineer	January 1980 to Sept. 1981

## Additional Professional Experience:

Experience encompasses design, project management, and construction administration for reinforced concrete, structural steel, precast concrete, masonry, and wood structures.

Project experience includes:

Fairmont Senior High School, Fairmont, WV  
Belmont Community Center, St. Clairsville, OH  
Monongalia General Hospital Operating Room Addition, Morgantown, WV  
Chestnut Ridge Church, Morgantown, WV  
West Virginia University Business and Economics Building, Morgantown, WV  
West Virginia University High Density Book Storage Facility, Morgantown, WV  
West Virginia University Life Sciences Building, Morgantown, WV  
West Virginia University Student Recreation Center, Morgantown, WV  
West Virginia University Wise Library Addition, Morgantown, WV  
West Virginia University White Hall Computer Center, Morgantown, WV  
UPMC Hillman Cancer Center, Pittsburgh, PA  
Carnegie Museum of Natural History Addition, Pittsburgh, PA  
Cultural Trust District Parking Garage, Pittsburgh, PA  
Delaware Valley Veterans' Home, Philadelphia, PA  
Fairmont State University Parking Garage, Fairmont, WV  
First Avenue Parking Garage, Pittsburgh, PA  
Hillman Cancer Center (UPMC), Pittsburgh, PA  
New Enterprise Precast Corporate Headquarters, New Enterprise, PA  
Respiroincs Corporate Office Facility, Pittsburgh, PA  
International Brotherhood of Electrical Workers Headquarters Training Center, Pittsburgh, PA  
Laurel Highlands Middle School Addition, Uniontown, PA  
Trinity High School, Morgantown, WV  
Mylan Pharmaceuticals Parking Garage, Morgantown, WV  
Phipps Conservatory Addition, Pittsburgh, PA  
Radisson Hotel and Conference Center, Morgantown, WV  
Western Pennsylvania School for Blind Children, Pittsburgh, PA  
In-Situ Vitrification Nuclear Waste Encapsulation Project, Richland, WA  
Dominion Transmission Office Building, Clarksburg, WV  
Multiple structural evaluations and expert witness for structural damage due to subsurface mining subsidence, floods, ice, wind, and construction errors  
Over 400 low-rise metal building projects from Maine to South Carolina, including warehouses, aircraft hangar facilities, shopping centers, industrial facilities, and office facilities.



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Web: [www.AlleghenyDesign.com](http://www.AlleghenyDesign.com)

## Michael L. Sipe, E.I. Engineering Intern

### Education:

West Virginia University Institute of Technology  
B.S. Mechanical Engineering  
Minor: Mathematics

### Awards/Achievements/Organizations:

Deans List, last 4 completed semesters  
Member of Pi Tau Sigma  
Member of AISC  
Associate Member of ASCE

### Professional Registrations:

West Virginia, Engineering Intern License # 8519

### Professional Experience:

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

#### Experience record:

Avery Court Apartments, Parkersburg, WV  
Cutlip Christie Office Complex, Clarksburg, WV  
Dominion Exploration Addition, Jane Lew, WV  
Fairmont State University Smoke Vents, Fairmont, WV  
Finite Element Analysis of Various Material Handling Structures  
Gassaway Bank, Flatwoods, WV  
Glenmark Office Building, Morgantown, WV  
Greer Limestone Conveyor Structure Renovations, Morgantown, WV  
Morgantown Event Center, Morgantown, WV  
Pressley Ridge School Residence Hall & Dining Facilities, Clarksburg, WV  
Proplex Athletic Training Facility, Morgantown, WV  
Waterfront Marina, Morgantown, WV  
West Milford Elementary School Classroom Addition, West Milford, WV  
WVU Downtown Student Housing, Morgantown, WV  
WVU Puskar Academic Center, Morgantown, WV

### Courses and Continuing Education:

WVU Structural Analysis I, Spring 2006  
WVU Steel Design, Fall 2006  
WVU Reinforced Concrete Design, Spring 2007  
AISC Design Steel Your Way with the 2005 AISC Specification, September 2006  
ASCE Steel Framed Buildings, May 2007  
AISC Façade Attachments to Steel Frames, September 2007  
ASCE Reinforced Masonry: Design and Construction, November 2007



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Web: [www.AlleghenyDesign.com](http://www.AlleghenyDesign.com)

## Jason D. Robinson, E.I. Engineering Intern

### Education:

West Virginia University  
B.S. Civil Engineering

### Awards/Achievements/Organizations:

Dean's List  
Member of AISC  
Associate Member of ASCE

### Professional Registrations:

West Virginia, Engineering Intern License #8699

### Professional Experience:

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

#### Experience record:

Bridgeport Public Safety Substation, Bridgeport, WV  
Canaan Valley Institute, Davis, WV  
Gabriel Brothers Renovation, Clarksburg, WV  
Genesis Youth Crisis Center, Clarksburg, WV  
Goshen Baptist Church, Morgantown, WV  
GSA DOE, Morgantown, WV  
Mylan Upper Warehouse to Labs, Morgantown, WV  
Rees Restaurant, Morgantown, WV  
The Dayton, Morgantown, WV  
The View at the Park Phase 2, Morgantown, WV  
WVU Child Development, Morgantown, WV  
White Oaks Progress Center, Bridgeport, WV

### Courses and Continuing Education:

WVU Steel Design – Fall 2007  
AISC Façade Attachments to Steel Frames, September 2007  
ASCE Reinforced Masonry: Design and Construction, November 2007



Mr. Gridley has over 30 years of experience and has served as Principal-in-Charge for numerous significant projects involving systems for specialized areas such as state-of-the-art auditoriums, conference centers, and exhibit areas; visitors centers; museums; computer labs; libraries; vocational shops; and various types of strictly-controlled laboratory and research facilities. He also has extensive experience in the design of chilled water, steam, hot water, refrigeration, air distribution, heat recovery and control systems, uninterruptible power supplies, underground power distribution systems, and interior building distribution systems of all types including building lighting, building security and surveillance, fire protection, normal and emergency power distribution, communication systems, and computer power systems. His projects include:

Warner Theater  
Erie, Pennsylvania

- *Renovation and expansion of a 2,500-seat performing arts center including a 15-foot stage expansion, new dressing rooms and practice rooms, rest rooms, rehearsal hall and meeting facilities, and storage areas*
- *New 100,000 sq.ft. air-conditioned convention hall*
- *Renovation of an exhibit hall with 36,500 sq.ft. of exhibit space*

University of Pittsburgh  
Pittsburgh, Pennsylvania  
*Renovation of the historic Stephen Foster Memorial Auditorium into a state-of-the-art facility for theatre art students*

DuPont Playhouse  
Wilmington, Delaware  
*HVAC study, electrical modifications, and ADA study for a 350-seat auditorium*

West Virginia University  
Morgantown, West Virginia  
*Electrical upgrade to the 14,000-seat, three-level, 500,000 sq.ft., multi-use WVU Coliseum*

Haverford School District  
Havertown, Pennsylvania  
*Auditorium renovations*

#### **Education**

Bachelor of Architectural Engineering 1979, Pennsylvania State University

#### **Experience**

H.F. Lenz Company 1979 - Present

#### **Professional Certification**

Licensed Professional Engineer in all 50 states

#### **Professional Achievements and Affiliations**

First Place, 1987 ASHRAE International Energy Award • National Society of Professional Engineers • Pennsylvania Society of Professional Engineers • Professional Engineers in Private Practice • American Society of Heating, Refrigerating and Air-Conditioning Engineers • Building Officials Code Administrators International • National Fire Protection Association

Point Stadium  
Johnstown, Pennsylvania

- *Designs for construction of: press box, new ground level box seat area, new dugouts, new main entrance plaza, new concourse with concession areas, storage areas, restrooms, and souvenir areas*
- *Upgrade field drainage system*
- *Provided waterproofing and protective coating to stadium structure*

Abington High School  
Abington, Pennsylvania  
*New sound system in auditorium and gymnasium*

Peters Township High School  
McMurray, Pennsylvania  
*Stadium rehabilitation including stadium, track and field, basketball court, and driveway lighting and mechanical and electrical design of restrooms, press boxes, ticket booths, concessions building, and maintenance storage building*

Johnstown Flood Museum  
Johnstown, Pennsylvania  
*Restoration and renovation of the historic Johnstown Flood Museum*



As a project engineer at H.F. Lenz Company, Mr. Shumaker is responsible for client contact, project scheduling, preparation of reports and cost estimates, coordination and supervision of project design teams, and other project management functions. Mr. Shumaker is experienced in the design of electrical systems for both new buildings and building retrofits for conference centers, educational, commercial, government, and utility-related facilities. He is experienced in the design of power distribution systems; emergency power systems and monitoring; uninterruptible power supplies; lighting and emergency lighting systems; fire alarm systems; nurse call; security; sound; and telephone systems. His project experience includes:

Indiana University of Pennsylvania  
Indiana, Pennsylvania  
*Renovation of the 1,600-seat Fisher Auditorium and a 20,500 sq.ft. addition*

Edinboro University of Pennsylvania  
Edinboro, Pennsylvania  
*Renovation of the 16,678 sq.ft. Memorial Auditorium, and 3,653 sq.ft. addition*

University of Pittsburgh  
Pittsburgh, Pennsylvania  
*Renovation of the historic Stephen Foster Memorial Auditorium into a state-of-the-art facility for theatre art students*

Latrobe High School  
Latrobe, Pennsylvania  
*Renovations and additions to the 300,000 sq.ft. facility including a 20,000 sq.ft. auditorium, a state-of-the art television studio, dance studio, music room and Center for Student Creativity*

West Virginia University  
Morgantown, West Virginia  
*New 51,000 sq.ft. alumni center with banquet hall, three conference rooms, offices, full service kitchen, and storage areas*

The Pennsylvania State University  
Altoona, Pennsylvania  
*Feasibility study and schematic design for the Community Arts Center addition*

Johnstown Convention Center  
Johnstown, Pennsylvania  
*Electrical and telecommunications design of new 30,000 sq.ft. conference center that accommodates 1,000 guests, and exhibit space*

Johnstown War Memorial  
Johnstown, Pennsylvania  
*Electrical renovation to an arena that seats 4,000 and hosts various social events and performances*

Pennsylvania State University  
McKeesport, Pennsylvania  
*New student union building with a large multi-purpose room and cafeteria stage area set up with sound and light capabilities so a performance take place at either location*

Gannon University  
Erie, Pennsylvania  
– *Performing Arts Center*  
– *Auditorium renovations*

#### **Education**

Bachelor of Science, Electrical Engineering Technology 1993  
University of Pittsburgh at Johnstown

#### **Experience**

H.F. Lenz Company 1985 - Present

#### **Professional Registration / Certification**

Licensed Professional Engineer in Pennsylvania • Maryland • West Virginia; LEED Accredited Professional; Certified Building Inspection Engineer

#### **Professional Affiliations**

Pennsylvania Society of Professional Engineers, Johnstown Chapter Secretary  
National Society of Professional Engineers  
Keystone Chapter of Association of Physical Plant Administrators



Mr. Weiland has several years experience in the design of HVAC systems. His responsibilities have included design calculations, equipment selection, schematic and construction document design, specification writing, and life cycle cost analyses. His experience includes the design of mechanical systems for primary and secondary educational facilities as well as hospitals. John is also responsible for documentation and coordination of the information required for the MEP LEED certification process. His project experience includes:

West Virginia University  
Morgantown, West Virginia  
*Design services for a two-story, 38,000 sq.ft. addition to the Agriculture Sciences Building; the new space included research and teaching facilities, office space for faculty, and a state-of-the-art lecture hall that seats 250*

Slippery Rock University  
Slippery Rock, Pennsylvania  
*New \$12.2 million, 79,424 sq.ft. science and technology building with 350-seat auditorium*

University of Pittsburgh  
Pittsburgh, Pennsylvania  
*Renovation of Benedum Hall laboratory building and new MSI building addition. John is responsible for the HVAC system design, documenting mechanical points for the LEED submissions and performing energy modeling related to EAc1*

The Pennsylvania State University  
University Park, Pennsylvania  
*New School of Architecture and Landscape Architecture with modern studio spaces, fabrication/modeling shops, gallery and exhibition spaces - LEED Gold. John was responsible of the HVAC design and documented mechanical related points for the LEED submission*

Westmoreland County Community College  
New Kensington, Pennsylvania  
*New academic building*

St. Vincent College  
Latrobe, Pennsylvania  
*Feasibility study and design services for the renovation and addition to the existing science complex, consisting of four buildings. John is responsible for the HVAC system design and performing energy modeling related to EAc1*

West Virginia University  
Morgantown, West Virginia  
*New 54,000 sq.ft. Alumni Center*

Allegheny College  
Meadville, Pennsylvania  
*Pelletier Library HVAC renovations*

K-12 Educational Facilities including auditoriums and music rooms:  
– *New Highland and Overlook Elementary Schools, Abington, PA*  
– *Big Spring Middle School Renovation, Newville, PA*  
– *New Manoa Elementary, Havertown, PA*  
– *New Washington High School, Charles Town, WV*

#### **Education**

Bachelor of Architectural Engineering, 2002, Pennsylvania State University

#### **Experience**

H.F. Lenz Company 2002 - Present

#### **Professional Registration / Certification**

Professional Engineer in Pennsylvania; LEED Accredited Professional

#### **Professional Affiliations**

ASHRAE – Johnstown, PA Chapter



Mr. Kormanik has designed complete plumbing and sprinkler systems for schools, colleges, hospitals, laboratories, office buildings, industrial facilities, prisons, and military installations. He is responsible for plumbing and sprinkler system design, layout, calculations; selection and sizing of equipment; cost estimates; and site surveys. He is knowledgeable of all applicable plumbing codes. Mr. Kormanik supervises drafting personnel; coordinates the plumbing design with utility companies, with other trades, and with the Project Engineer and Project Architect; and is responsible for assembling complete and accurate plumbing bid documents which meet H.F. Lenz Company standards. His project experience includes:

Indiana University of Pennsylvania  
Indiana, Pennsylvania

*Renovation and addition to Fisher Auditorium, a 1,600 seat auditorium building, with exhibit space for the University's museum collection and special exhibits*

Edinboro University  
Edinboro, Pennsylvania

*Renovation of the historic, 800-seat Memorial Auditorium*

University of Pittsburgh  
Pittsburgh, Pennsylvania

*Renovation of the historic, 478-seat, Stephen Foster Memorial Auditorium into a state-of-the-art facility for theatre art students*

Johnstown Flood Museum  
Johnstown, Pennsylvania

*Restoration/renovation of a 15,000 sq.ft. historic structure with a theatre, exhibit space, and gift shop*

Haverford School District  
Havertown, Pennsylvania

*Stadium renovations*

University of Pittsburgh at Johnstown  
Johnstown, Pennsylvania

- *New Living and Learning Center including banquet room for 400 people that can be segmented into three rooms by moveable partitions; five smaller meeting rooms administrative offices, a teleconferencing center and lounge*
- *Student Union Building addition with a multi-purpose room with teleconferencing capabilities that accommodates bands, concerts, and the college's film festival*

Brockway High School  
Brockway, Pennsylvania

- *New multi-purpose building and facilities*
- *Renovation design alterations and additions to existing building*

The Pennsylvania State University  
McKeesport, Pennsylvania

*New 25,000 sq.ft. Student Center including a full-service food service facility, cafeteria, bookstore, health suite, student government offices, game room, large multi-purpose room, set up with sound and light capabilities, which can also be utilized as a banquet hall*

#### **Education**

Associate, 1983, Interior Design, Art Institute of Pittsburgh

#### **Experience**

H.F. Lenz Company 1985 - Present

#### **Professional Registration / Certification**

Certified in Plumbing Design, American Society of Plumbing Engineers

Certified Plumbing Plans Examiner, Building Officials & Code Administrators International

Certified Plumbing Inspector, Building Officials & Code Administrators International





**Jeffrey A. McKendree, C.E.T.**  
**Fire Protection Designer**  
**NICET Level III Automatic Sprinkler System Layout**

Mr. McKendree is a graduate of Eastern Kentucky University's Fire and Safety Engineering program, a program of distinction in the Commonwealth of Kentucky as certified by the Commonwealth of Kentucky Board of Higher Education. Mr. McKendree's experience prior includes conducting site inspections for emergency incident planning in Lower Paxton Township in suburban Harrisburg, Pennsylvania. Typical sites included educational, industrial, manufacturing, and mercantile properties. These plans have been utilized to protect lives and property from the effects of fire through the use of NFPA and local standards for safety.

He is fully knowledgeable of NFPA standards and is experienced in the design of wet, dry, preaction, deluge, and special application fire protection systems. He is responsible for sprinkler system design, layout, and calculations; selection and sizing of fire protection equipment; cost estimates; and site survey work. Mr. McKendree coordinates with other trades, municipal fire protection authorities, utility companies, and with the Project Engineer and project Architect. His project experience includes:

Edinboro University  
Edinboro, Pennsylvania  
*Renovation of an 800-seat Memorial Auditorium, and various dressing rooms and preparation areas for plays, concerts, movies, and debates and addition of a new 3,653 sq.ft. Rehearsal Hall*

Fords Theatre / Peterson Home  
Washington, D.C.  
*New HVAC, fire protection, and electrical systems for the restoration of this active theater, museum, and historic site. The project consisted of upgrading and/or installing a new fire suppression, fire detection, climate control system, installation of new intrusion detection and alarm systems and improvements to the power distribution network that serves the theatre's production lighting systems.*

Sandstone Visitor/Orientation Center  
New River Gorge National River  
Sandstone, West Virginia  
*Designed fire protection system for a new 12,000 sq.ft. visitor center with informational area, exhibit spaces, audio/visual auditorium, and bookstore/gift shop*

The Pennsylvania State University  
McKeesport, Pennsylvania  
*New student union building with a large multi-purpose room and cafeteria stage area set up with sound and light capabilities so a performance take place at either location, and a lecture hall designed with capability to house multi-media productions. The project also included the design of a food court*

Grey Towers – The Letterbox  
Milford, Pennsylvania  
*Designed the additional fire protection service required for the existing historic buildings*

Maggie L. Walker  
National Historical Site  
Richmond, Virginia  
*Rehabilitation of six historic structures to house interpretive museum, offices, and archival storage and addition of mechanical, electrical, and life safety systems*

Second Bank of the United States  
Philadelphia, Pennsylvania  
*Designed the fire protection system for the existing structure*

**Education**

Bachelor of Science Degree, Fire and Safety Engineering, 1999, Eastern Kentucky University  
Associate of Arts Degree, Fire Science Technology, 1997, Harrisburg Area Community College

**Experience**

H.F. Lenz Company June 1999 – present  
Paxtonia Fire Company incident preplanning committee August 1995 - August 1997

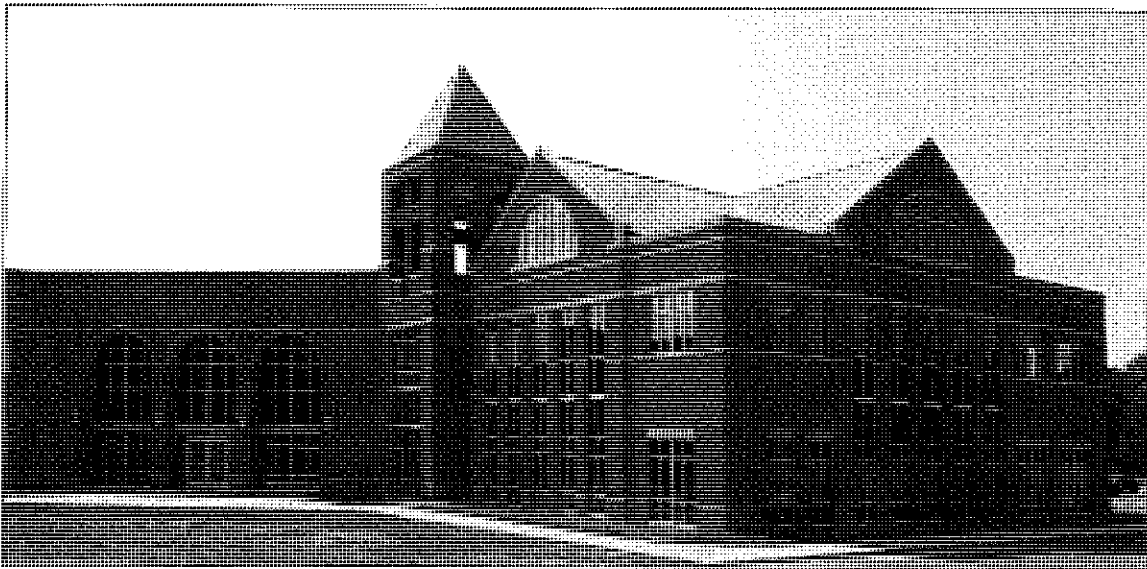
**Professional Registration / Certification**

NICET Level III in Fire Protection Engineering Technology / Automatic Sprinkler System Layout



## Chestnut Ridge Church

Morgantown, West Virginia



A 2,000+ seat auditorium, non-denominational church in the Cheat Lake area. Includes two additional chapels, a gymnasium, teen center, classrooms, a three story administration building, and 8,400 square feet of circulation / lobby space. The parking lot accommodates 750 spaces.

***2007 Excellence in Construction Award from the Associated Builders & Contractors, Inc.***

**Owner:** Chestnut Ridge Church

**Design Architect/ Project Manager:** Paul A. Walker, AIA

**Assistant Project Manager:** Jonathan Perry, AIA

**Technical Support:** Steve Konya

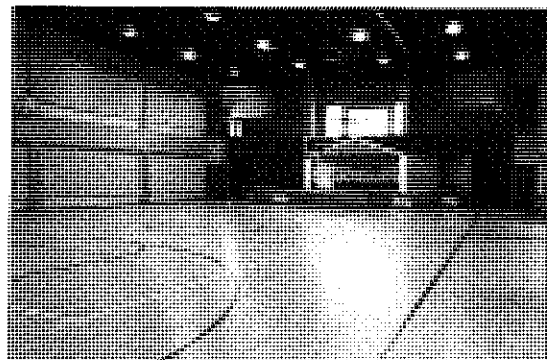
**Completed:** Fall 2006

**Cost:** \$10 Million

**Size:** 85,000 Square Feet

**Delivery Type:** Design-Build Negotiated

**Contractor:** The March-Westin Company





# Morgantown Event Center and Parking Garage

Morgantown, West Virginia



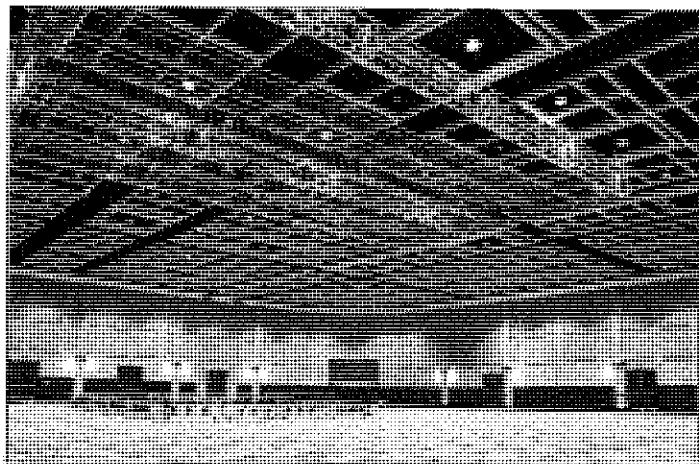
The Morgantown Event Center and 214-space Parking Garage is located adjacent to the Waterfront Place Hotel and Conference Center along the Monongahela River in Morgantown. The large main event room is designed to accommodate a variety of event types including concerts, plays, boxing matches, banquets, and conventions. The facility features a full catering kitchen and support spaces.

**Event Center Owner:** City of Morgantown  
**Parking Garage Owner:** Platinum Properties

**Design Architect:** Paul A. Walker, AIA  
**Project Manager:** Jonathan Perry, AIA

**Completion:** Spring 2010  
**Cost:** \$30.3 Million  
**Size:** 159,000 Square Feet  
**Delivery Type:** Design-Build Competition

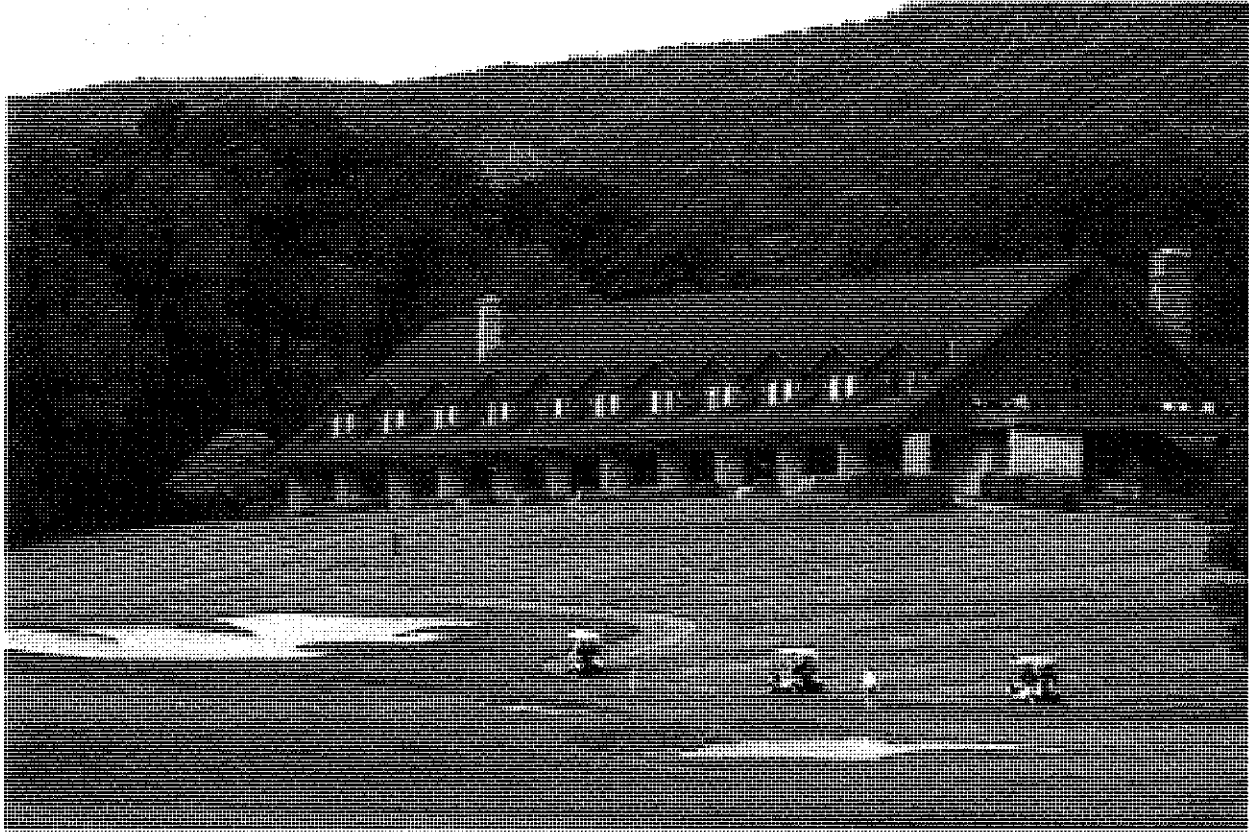
**Contractor:** The March-Westin Company





# Cacapon Resort State Park Lodge Expansion

Berkeley Springs, West Virginia



Located in the eastern panhandle of West Virginia, Cacapon Resort State Park is available for both family vacations and business retreats, offering access to golf, lake, and camping activities. The facility functions as the main lodging and meeting center of the resort and offers a mix of hotel rooms and suites, and a conference center. The new addition provides an additional 79 guest rooms, swimming pools, new dining facilities and commercial kitchen, and a spa and fitness area. Additional renovations to the resort includes golf course upgrades, as well as water and wastewater treatment upgrades.

**Owner:** WV Division of Natural Resources

**Principal-in-Charge & Design**

**Architect:** Paul A. Walker, AIA

**Project Manager:** Jonathan Perry, AIA,  
LEED<sup>AP</sup>

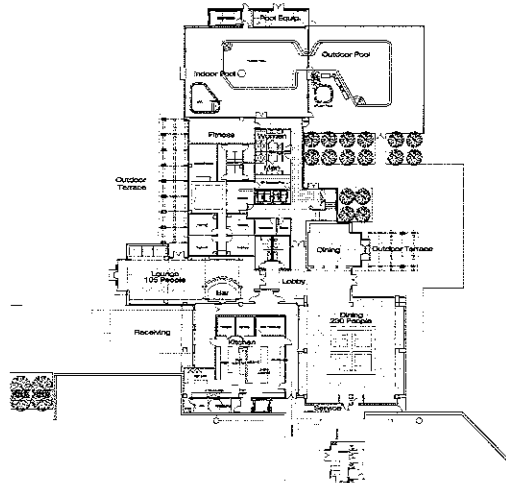
**Estimated Completion:** TBD

**Cost:** \$22 Million

**Size:** 63,669 SF

**Delivery Type:** Design-Bid-Build

**Contractor:** TBD





# West Virginia University Milan Puskar Stadium Touchdown Terrace Club Addition

Morgantown, West Virginia



A 7,800 square foot area including 1,332 square feet of landscaping provides 200+ additional club seats to the Milan Puskar Stadium at Mountaineer Field on the campus of West Virginia University.

**Owner:** West Virginia University

**Design Architect:** Paul A. Walker, AIA  
**Project Manager:** Jonathan L. Perry, AIA

**Completed:** Fall 2007  
**Cost:** \$800,000  
**Size:** 7,800 Square Feet  
**Delivery Type:** Design-Bid-Build

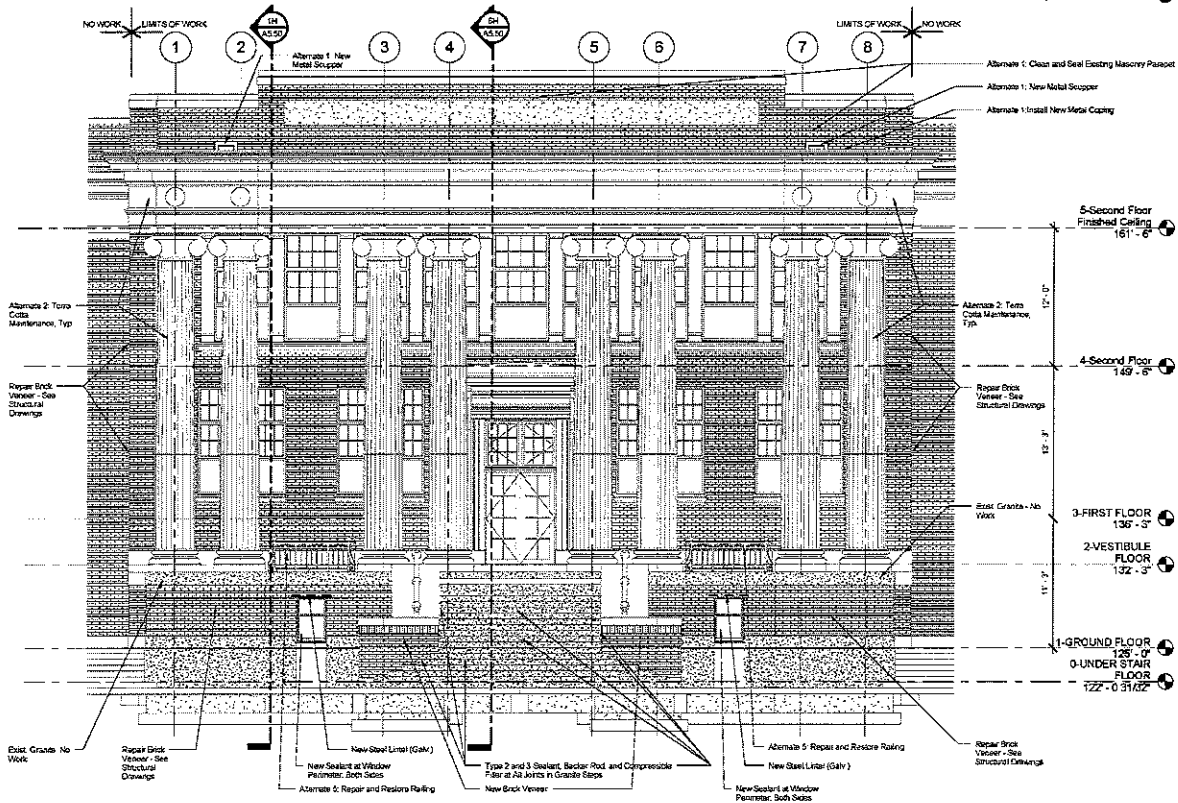
**Contractor:** Veritas Contracting





# Fairmont State University Hardway Hall Portico Renovations

Fairmont, West Virginia



Fairmont State University is planning to rehabilitate its administration building known as Hardway Hall. The portico and granite steps on the east (front) elevation are showing signs of structural failure most likely due to water intrusion and/or foundation settlement. In addition, aesthetic repairs are needed to rehabilitate historic elements of the building, such as masonry veneers, wrought iron railings, and terra cotta cornices.

**Hardway Hall is listed on the National Register of Historic Places**  
(Coordinated with the State Historic Preservation Office)

**Owner:** Fairmont State University

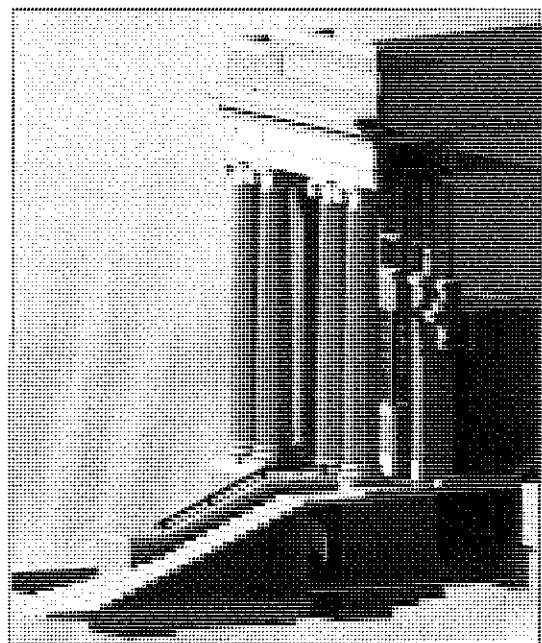
**Project Manager:** Jonathan Perry, AIA, LEED AP  
**Construction Administration:** Steve Konya, II

**Completion:** Summer 2010

**Cost:** \$333,200

**Delivery Type:** Design-Bid-Build

**Contractor:** Lombardi Development





# Glade Springs Resort and Conference Center

Daniels, West Virginia



Located in the Allegheny Mountains of West Virginia, this 48 room luxury hotel and conference center is available for both family vacations and business retreats, offering access to ski, spa, and golf activities. The facility is located on the site of the existing conference center and is connected to the existing commercial kitchen. The facility functions as the main lodging and meeting center of the resort and offers a mix of hotel rooms and suites, and an additional 4,100 square feet of ballroom and meeting space.

**Owner:** Glade Springs Resort

**Design Architect:** Paul A. Walker, AIA  
**Project Manager:** David H. Snider, AIA  
**Project Architect:** Grant T. Gramstad, AIA

**Completed:** Fall 2005  
**Cost:** \$8 Million  
**Size:** 48,500 Square Feet

**Contractor:** Alliance Construction Management





# Glade Springs Resort Clubhouse Expansion

Daniels, West Virginia



A two story addition to the existing golf clubhouse at Glade Springs Resort. The lower level features men's and women's locker rooms, and the upper level houses the Bunkers Restaurant. Outdoor dining is offered on a large deck overlooking the golf course.

**Owner:** Glade Springs Resort

**Design Architect:** Paul A. Walker, AIA

**Completed:** Summer 2006

**Cost:** \$1.1 Million

**Size:** 6,500 Square Feet

**Delivery Type:** Design-Build

**Contractor:** Alliance Construction Management





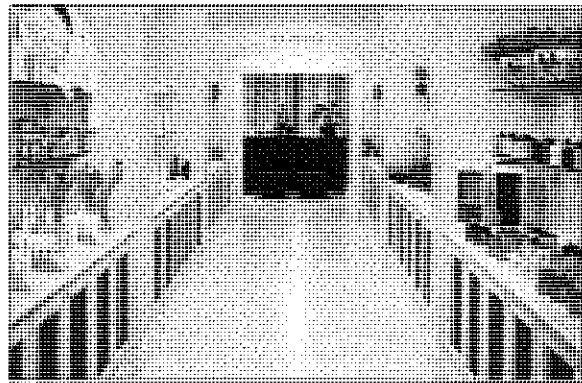


# Glade Springs Resort Leisure Center

Daniels, West Virginia



This renovation at Glade Springs Resort provides guests with year round recreation. Amenities include a ten lane bowling alley, indoor swimming pool, full service spa, sauna and steam rooms, fitness center, basketball and tennis courts, video arcade, cinema room, and full locker and shower facilities.



**Owner:** Glade Springs Resort

**Design Architect:** Paul A. Walker, AIA

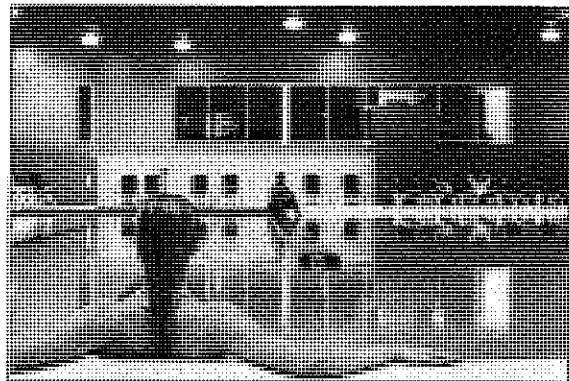
**Completed:** 2007

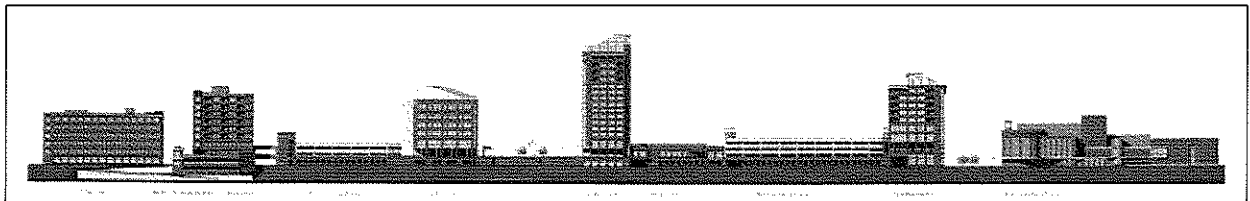
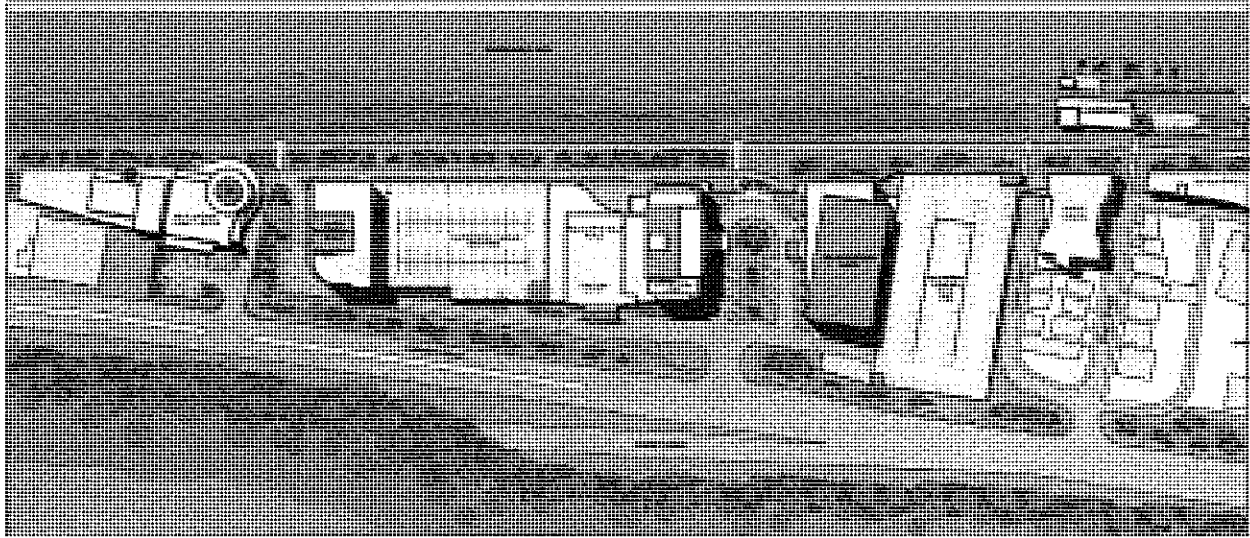
**Cost:** N/A

**Size:** 56,000 Square Feet

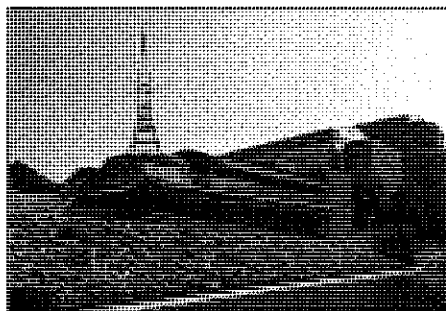
**Delivery Type:** Design-Build-Negotiated

**Contractor:** Alliance Construction Management

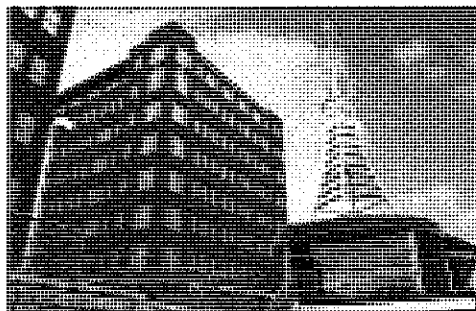




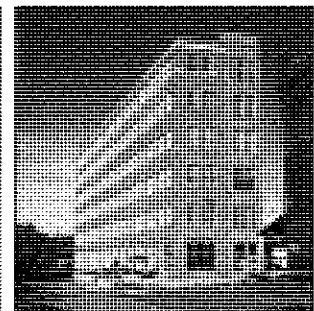
Situated on the Monongahela River and the Caperton Rail Trail, the Waterfront Development is a vital component to the redevelopment of the Wharf District of Morgantown. One Waterfront Place houses the WVU Foundation and WVU Administrative Services. Two Waterfront Place features the Waterfront Place Hotel and Conference Center with luxury residential units. The Jackson Kelly Building is a six story professional office building with a restaurant on the street level. The Waterfront Parking Garage accommodates 750 spaces and provides vital parking to support the new and old businesses. The Marina houses the WVU Crew team and features the Boathouse Bistro restaurant. Marina Tower, an eight story office building is currently under construction. As are the Morgantown Event Center, which is designed to accommodate a variety of event types including concerts, plays, boxing matches, banquets, and conventions, and its attached parking garage.



Waterfront Marina



Marina Tower



Jackson Kelly Building



# Two Waterfront Place Hotel and Conference Center

Morgantown, West Virginia



A seventeen story hotel, conference center, retail, dining, and residential mixed-use facility in the Waterfront District. Additional features include an indoor pool, athletic club, day-spa/salon, and private parking for residents.

***2003 Excellence in Construction Award from the Associated Builders & Contractors, Inc.***

**Owner:** Platinum Properties

**Design Architect:** Paul A. Walker, AIA

**Project Manager:** David H. Snider, AIA

**Project Architect:** Grant T. Gramstad, AIA

**Completed:** Summer 2003

**Cost:** \$35 Million

**Size:** 296,427 Square Feet

**Delivery Type:** Design-Build-Negotiated

**Contractor:** The March-Westin Company





# United States Department of Energy Office of Legacy Management

West Virginia University Research Park, Morgantown, West Virginia



A new sustainable office and Records Storage Facility for the United States Department of Energy Office of Legacy Management which was awarded through a Design-Build Competition sponsored by the General Services Administration. This one story building includes 37,000 square feet of NARA Certified Records Storage space, including a 1,200 square foot Cold Room, and 23,000 square feet for administration. The administration portion includes both open and individual office space, several conference rooms, a wellness center, locker rooms, a data center, a public research area, and an area for receiving / processing.

***LEED Gold (Core & Shell)***  
***LEED Gold (Commercial Interiors)***

**Owner:** FD Partners, LLC

**Design Architect:** Paul A. Walker, AIA  
**Project Manager:** Grant T. Gramstad, AIA

**Completed:** Fall 2009  
**Cost:** \$8 Million (Shell)  
\$2.7 Million (Tenant Improvements)  
**Size:** approximately 60,000 Square Feet  
**Delivery Type:** Design-Build-Negotiated

**Contractor:** dck North America, LLC





# The General Services Administration for the United States Department of Agriculture

Morgantown, West Virginia



Awarded through a Design-Build Competition sponsored by the General Services Administration. This facility houses five agencies of the USDA including: the Credit Union, Rural Development, Farm Services Administration, Natural Resource Conservation services, and the USDA Information Technology Services.

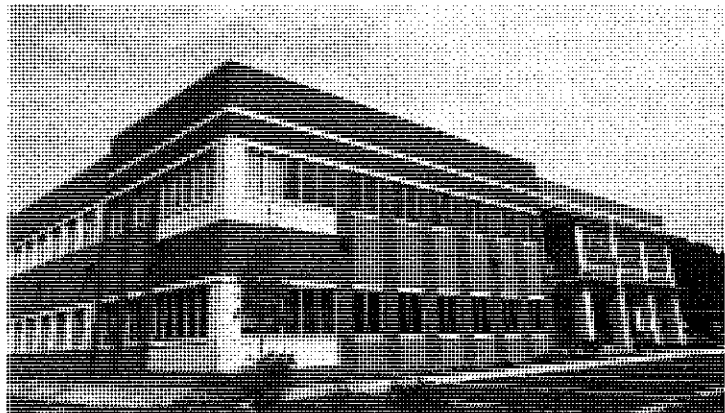
*This project is registered as a LEED Certified Building.*

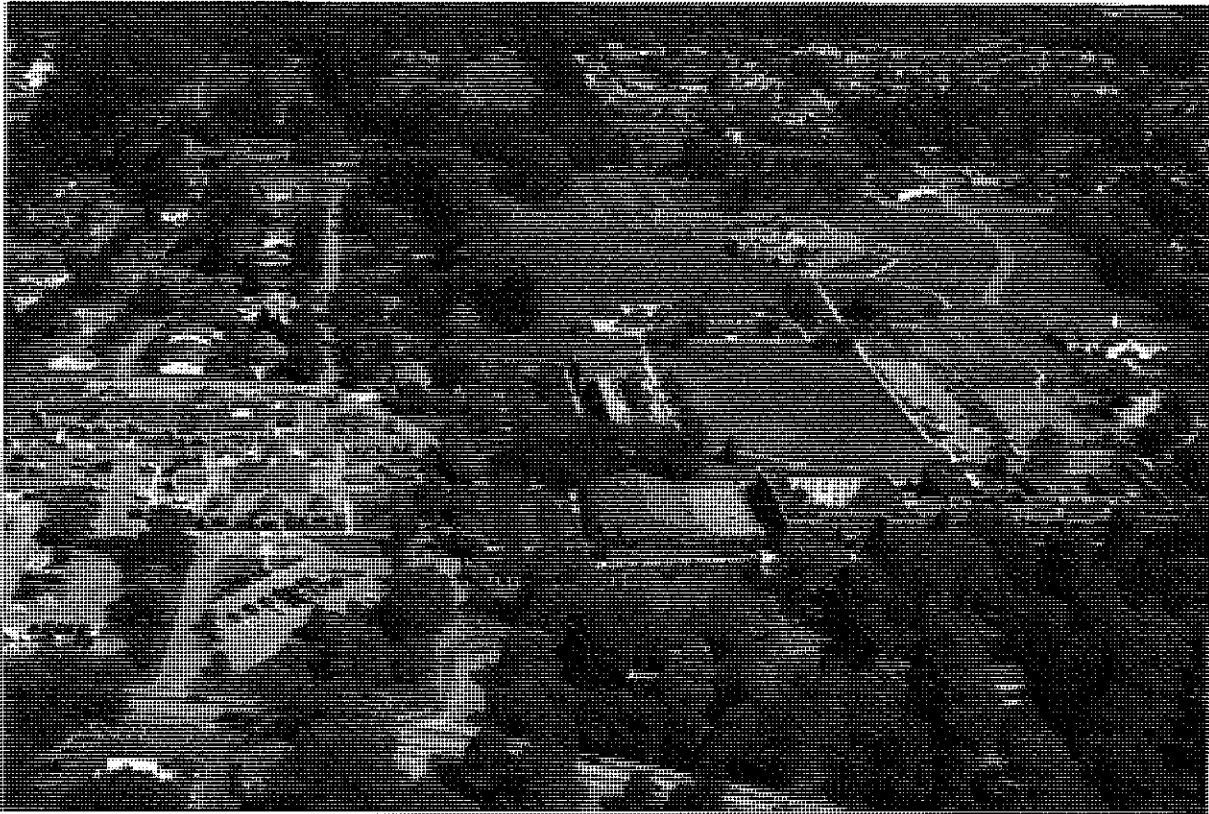
**Owner:** Glenmark Holdings, LLC

**Design Architect:** Paul A. Walker, AIA  
**Project Manager:** David H. Snider, AIA

**Completed:** Summer 2009  
**Cost:** \$6.5 Million (Shell)  
**Size:** 36,000 Square Feet  
**Delivery Type:** Design-Build Competition

**Contractor:** The March-Westin Company



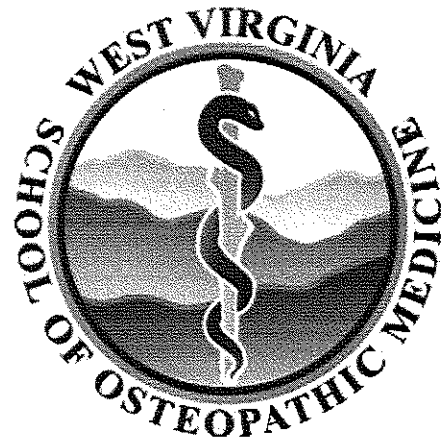


The study will establish the physical development necessary to support the current needs of the campus as well as for projected enrollment growth. The plan must address the current campus needs and goals while being sufficiently flexible to respond to future changes. In addition to physical evolution, the plan will address accommodation of academic programs. The physical planning shall include land use, campus capacity, transportation and circulation, building conditions, guidelines and quality standards for facilities, space requirements, utility needs, parking, landscape and open space structure.

**Owner:** West Virginia School  
of Osteopathic Medicine

**Design Architect:** Paul A. Walker, AIA  
**Project Manager:** David H. Snider, AIA  
**Project Architect:** Grant T. Gramstad, AIA

**Estimated Completion:** Winter 2010



# projects



## challenge america amphitheatre

Client : Challenge America with Erin Brockovich

Location: New York, NY

Seat Count: 450

Project Type: Renovation

Opening: 2001

Architect: HLW International

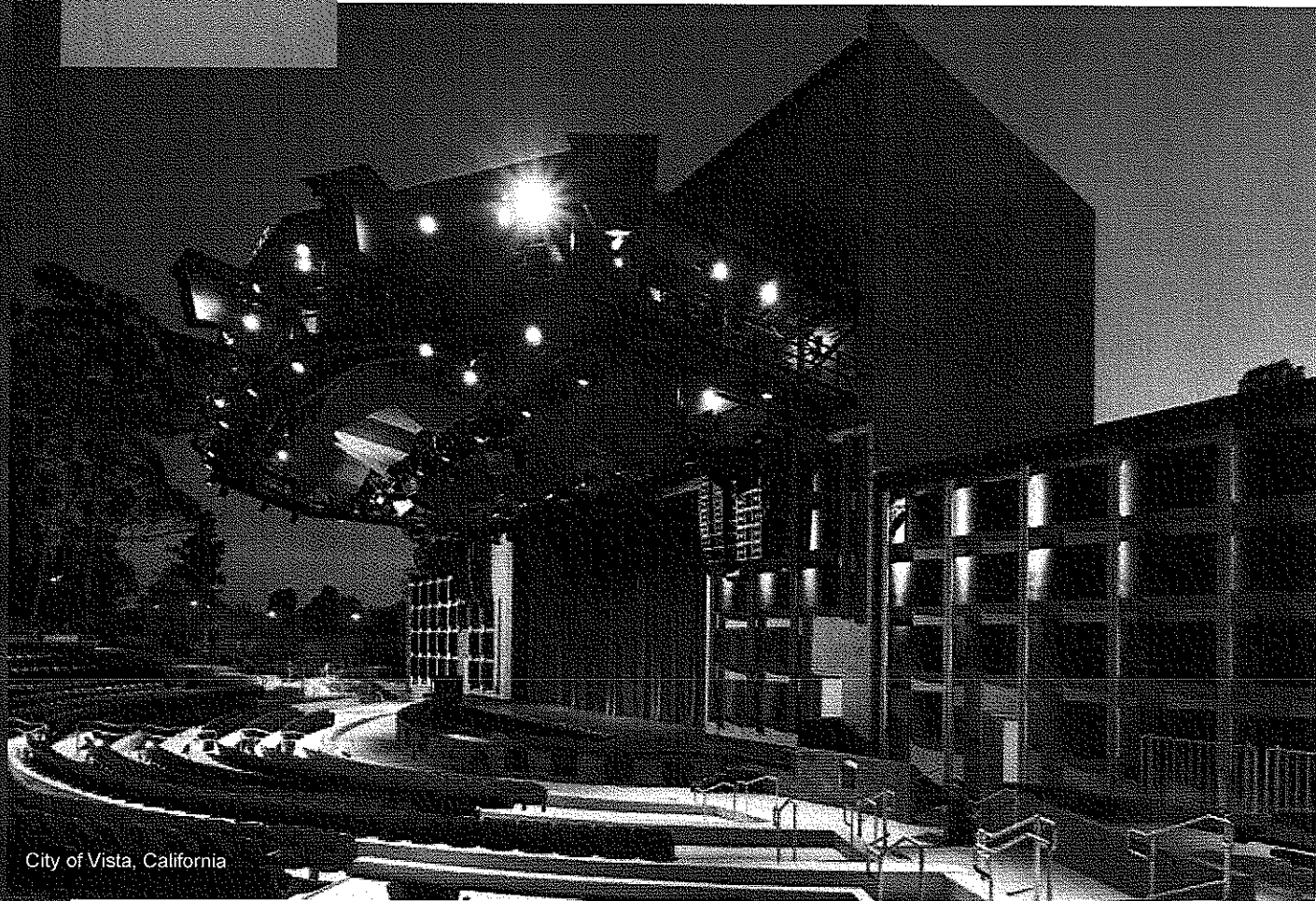
Contact: Keith Hanadel | HLW | 212.353.4600

AD Scope: Acoustics

As a spur to community action after 9/11, New York City Mayor Rudy Giuliani issued a challenge to rebuild an amphitheater and rundown soccer fields at a riverside park in lower Manhattan. Given just one week to complete the project, the innovative, reality-based television show "Challenge America with Erin Brockovich" worked with an all-volunteer design and construction team to create a jewel-like outdoor performance place.

The abandoned amphitheater was originally developed by Robert Moses in the 1930's. Joseph Papp used it in the 1950's as the first home for the famous New York Shakespeare Festival. By the 1970's, the theater itself had fallen into disrepair and neglect. AD donated its design services on the renovation of the amphitheater. The plan included the removal of the dilapidated stage house, leaving the band shell open to a beautiful view of the East River. A series of cables and canopies have reshaped the structure. AD consulted on the acoustics for the band shell and on the design of the cabling structure to eliminate vibration and whistling from the wind.

# projects



City of Vista, California

## moonlight amphitheatre

Client: City of Vista, California

Location: Vista, California

Project Type: Renovation

Seat Count: 2000

Opening: 2009

Construction Cost: \$11.5 Million

Architect: RNTA Architects

Theatre Consultant: Landry & Bogan

Contact: Marie Ertel | City of Vista | 760-726-1340

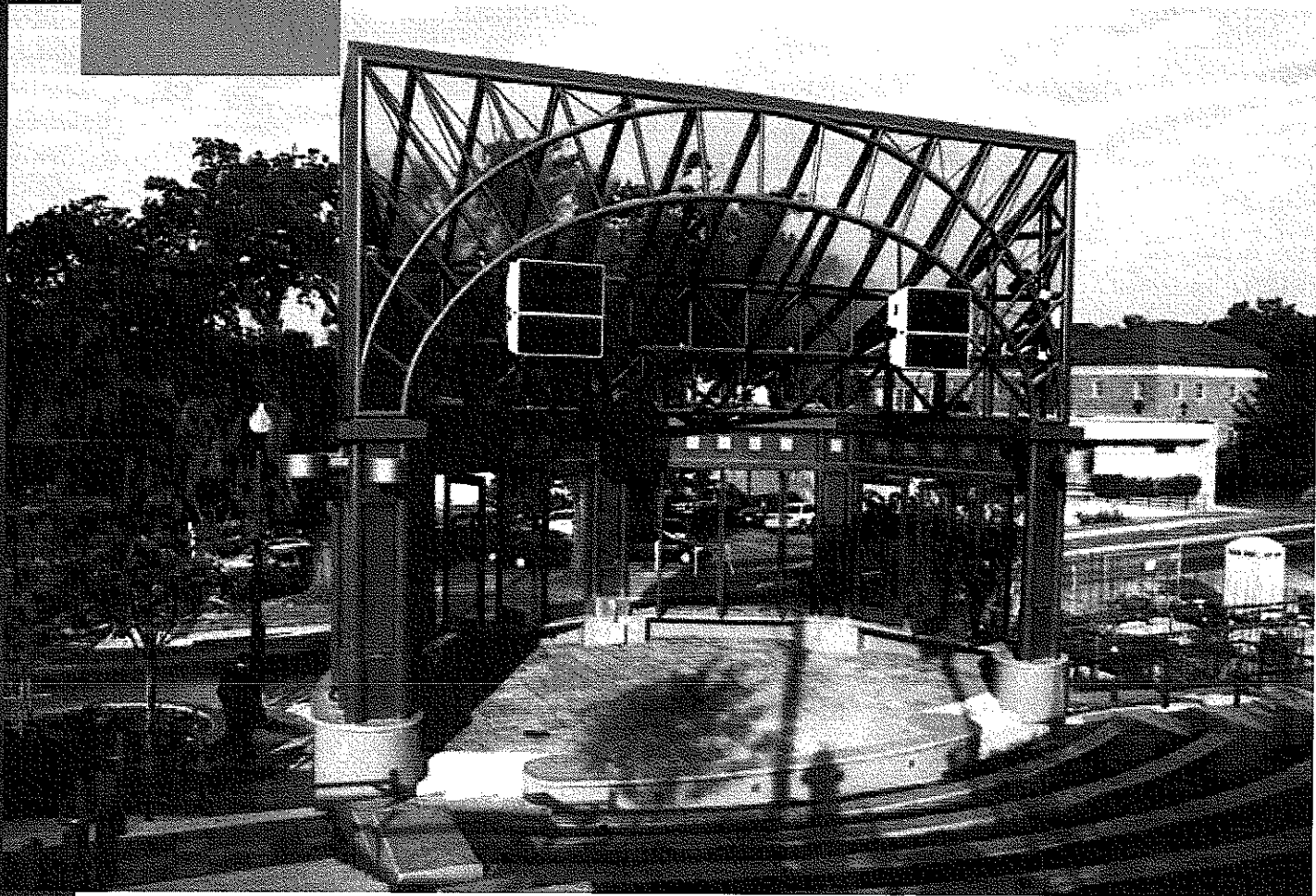
AD Scope: Acoustics | Audio | Environmental Noise Control

While many cities present entertainment in venues they own and operate, very few house their own dedicated theatrical production company. For almost 30 years, Moonlight Stage Productions of the City of Vista has produced professional musicals and theater productions from the ground up.

The renovation provided Moonlight with a fully equipped, modernized stage house complete with new audio systems, theatrical lighting, motorized rigging and full orchestra pit. AD California (as Sound Technology Consultants) provided acoustics recommendations including environmental noise control as well as designed audio systems that would optimize the space and ensure excellent sound coverage to all seating areas.



# projects



## performance steps

Client: City of Tallahassee

Location: Tallahassee, Florida

Project Type: New Construction

Seat Count: Open Air

Opening: 1998

Architect: Barnett Fronczak Architects

Contact: Rick Barnett | Barnett Fronczak Architects | 850.224.6301

AD Scope: Acoustics | Loudspeaker Design

The City of Tallahassee developed an outdoor area between two city blocks as an urban impromptu amphitheater. The concept was to encourage informal performances, and to provide another venue that could be used formally as an integral part of Tallahassee's civic activities.

We began with meetings with city representatives and other potential user groups in the area. The study concluded that the buildings planned on either side of the performance steps created a nearly ideal outdoor environment for classical music. An essential element of our study was site noise measurements. Particularly in an urban environment, site noise had the potential to preclude many types of performances. The performance platform was anticipated to be used for a broad range of performance genres ranging from unamplified chamber music, jazz ensembles, and highly amplified popular music groups. After concluding the viability of the steps as a performance venue, we worked with the architect and user groups to refine the design of the performance platform and the steps. Our scope of work included accommodation for sound reinforcement systems and detailed design of the band shell.

**ACOUSTIC** DIMENSIONS

# projects



## pnc bank arts center

Client: New Jersey Turnpike Authority  
Location: Holmdale, New Jersey  
Project Type: Renovation  
Seat Count: 7000 in theatre, additional 10,000 on lawn  
Opening: 1993  
Architect: HGA  
AD Scope: Acoustics | Audio Systems

Acoustic Dimensions provided room acoustics recommendations and the design of a new and upgraded sound system for the Garden State Arts Center, recently renamed the PNC Bank Arts Center. In order to accommodate the venue's wide range of programming throughout the summer concert season the acoustics and sound systems required state-of-the-art control and flexibility. A key goal for the project was the integration of the natural architectural acoustics and the use of electro-acoustic systems, both existing and new.

The audio systems replaced and reworked previous system upgrades done in 1978 and 1984, which were unsatisfactory for the venue's current programming requirements. A left-center-right stereo system with additional subwoofers was installed and is fully coordinated with large-screen video monitors. Accommodation for a Hearing Assistance system, per ADA guidelines, was also achieved. Extensive acoustical assessment of the current space, including seating area, stage house, and the interaction between them, was conducted. Acoustical treatment recommendations, including the addition of acoustical panels and curtains, were provided to reduce negative reflections and increase low-frequency absorption. PNC Bank Arts Center has been continually rated one of the Top Five most successful amphitheatres in the U.S.

**ACOUSTIC** DIMENSIONS

# projects



## starlight theatre

Location: Kansas City, Missouri  
Project Type: Renovation  
Seat Count: 7900  
Opening: 2000  
Architect: HNTB Architects  
Contact: Scott Rice | 816.472.1201  
AD Scope: Acoustics | Audio Systems

The Starlight Theatre was founded in 1950. It is Kansas City's largest and oldest performing arts organization and is the second largest theatre of its kind in the United States. In 1999, Starlight Theatre began plans to construct a new 12,000 square foot main stagehouse within the existing footprint in order to provide modern rigging capabilities for theatrical productions. This construction was designed to retain certain architectural elements of the current staging area, while increasing the height in order to provide fly and grid space.

AD provided acoustics recommendations and designed audio systems to ensure excellent sound coverage to the seating area while minimizing spill of sound outside of the outdoor theatre. The success of the renovation is evidenced by the opening night review by Robert Trussell, Kansas City Star: "At 10:44 on opening-night the audience at "Miss Saigon" burst into applause for one of the technical marvels of modern theatrical pageantry: the fabled helicopter. Without doubt, watching the chopper descend from Starlight Theatre's cavernous new fly space, with a deafening prop wash thundering through the sound system, was a sight to behold. The moment of pure spectacle says all that needs to be said about Starlight's \$10 million stage upgrade. The new facility's maiden voyage was flawless."

**ACOUSTIC** DIMENSIONS

# projects



## bailey performance center

Client: Kennesaw State University

Seat Count: 700

Project Type: New Construction

Opening: 2007

Cost: \$9 Million

Architect: Stevens & Wilkinson, Stang & Newdow

Contact: Harry Price | Dean | 770.499.3496 | Bobby Asher | Artist Director | 678.797.2555

AD Scope: Room Design | Sound Isolation | Noise Control | Audio | Video | Lighting

*"The Bailey Performance Center is simply a gorgeous instrument — as any musician relishes the unlimited scope of a special instrument, so any performing ensemble will celebrate the warm and vibrant acoustic atmosphere this exciting new hall affords. The Bailey Performance Center is a Georgia jewel."*  
—Donald Runnicles, Music Director and Principal Conductor of the San Francisco Opera; Music Director of the Grand Teton Music Festival; Principal Guest Conductor of the Atlanta Symphony Orchestra; General Music Director Designate of the Deutsche Oper Berlin; Chief Conductor Designate of the BBC Scottish Symphony Orchestra

The design challenges for Kennesaw State University's new concert hall in Kennesaw, Georgia related primarily to room shaping and sound isolation. The initial design concept featured a main, single side entry at the back of the concert hall. This inspired AD's asymmetrical design concept for the room, which was later developed with a curved, wrapped seating plan. With all the seating on the main floor and no balcony, AD incorporated an acoustical soffit around the sides and the back of the seating area to provide the same beneficial early reflections to the audience that a balcony supplies.

The room is designed to accommodate a wide range of programming, including large orchestras, ensembles, and choirs - in addition to jazz, amplified music performances, and lectures. The design features a coupled cavity outside of the visible boundaries of the room, which provides additional volume for a more expansive acoustical sensation without increasing floor area. Theatrical lighting is designed to highlight full orchestras and chamber orchestra. Theatrical lighting will also be used to illuminate portions of the main floor.

# projects



"My colleagues in the Philharmonia Orchestra are delighted with the acoustic qualities of the reengineered Butterworth Hall. The players can hear each other across the platform and can feel the bloom to the sound generated by the acoustical properties of the Hall.

From the audience the sound picture is warm, well balanced and built on a clear bass line. The sound from the platform fills the auditorium easily and the experience appears uniform across the Hall. To summarise, the Philharmonia Orchestra enjoy performing in the Butterworth Hall and the refurbishment, both back stage and in the Hall itself has been a great success."

David Whelton  
Managing Director  
Philharmonia Orchestra

## warwick arts centre - butterworth hall

Client: University of Warwick

Location: Coventry, England

Project Type: Renovation

Opening: July 2009

Seats: 1,232

Architect: Architects Design Partnership

Contact: Nick Woodcock | Project Partner | 0121.234.6440

AD Scope: Acoustics | Audio | Lighting | Stage Systems

Warwick Arts Centre is the largest arts centre in the Midlands, attracting around 280,000 visitors a year to over 2,000 individual events. AD provided design for acoustics, stage lifts, adjustable acoustics mechanisms, theatre grid, sound and lighting for the centre's concert hall -- Butterworth Hall.

Part of our design work was to accommodate the needs of different programming within the hall. Programming includes unamplified music and amplified music. Other important uses of the hall include speeches, meetings, and presentations – all of which use amplified speech. Previously, the hall had a single, fixed acoustic that favoured unamplified music. Adjustable acoustics significantly improve the acoustics of the room for amplified sound. The challenge was that the introduction of adjustable acoustics devices would inevitably reduce the acoustical quality of the room for unamplified music. Thus our design included a series of compensating proposals to improve the acoustics for unamplified sound so that the hall truly supports both unamplified and amplified music.



## willow creek community church

Client Willow Creek Community Church

Location Chicago, IL

Project Type New Construction

Seat Count 7,400

Opening August 2004

Architect Goss/Pasma Architects

Theatre Consultant Schuler Shook

Contact Doug Pasma | Project Architect | 847.475.1250

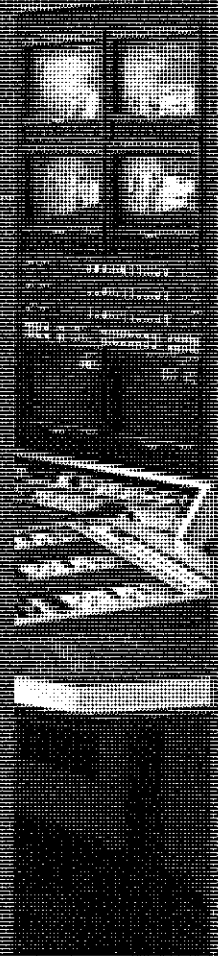
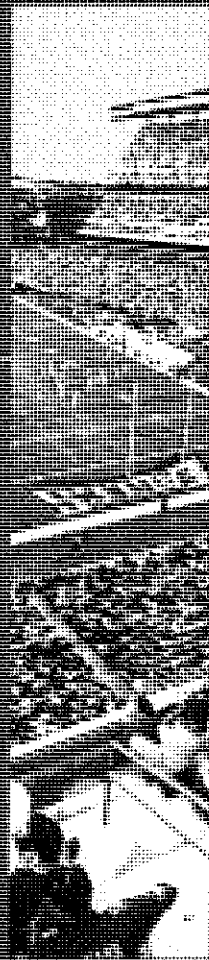
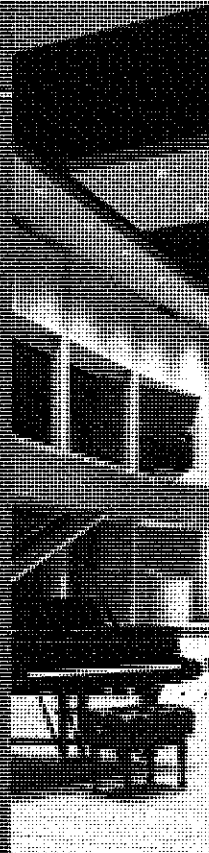
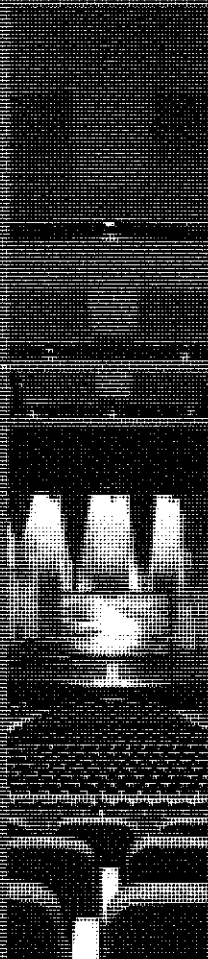
AD Scope Auditorium Design | Acoustics | Audio Systems | Video Systems | Video Production | Theatrical Lighting  
Production Communications

Willow Creek was one of the first churches to introduce a passion for the arts into the culture of their services. The philosophy is that in using modern tools of communication and production, they can minister to people who feel that church services have become outdated or irrelevant. Maybe it is the legacy of the Willow Creek name, which came from the rented movie theatre where the congregation first met in 1975. Or maybe it is because the church, located in the suburbs Northwest of Chicago, has created an environment where artists feel comfortable. In any case, the production approach has been wildly successful.

Every weekend 17,000-plus people attend six services featuring cutting-edge music, drama and teaching specifically designed to connect with people who do not typically go to church. The worship and arts crew is extensive: 50 vocalists, a 75-piece choir, seven rhythm bands, a 65-piece orchestra, 41 actors and a video production department — just to name a small portion of the volunteers.

**ACOUSTIC** DIMENSIONS

# ACOUSTIC DIMENSIONS



# about us

Acoustic Dimensions has substantial experience and extensive expertise in planning, sustainable design and specification of acoustics and AV systems for university facilities for teaching, research, and support services, including facilities for civic, cultural, recreational, and commercial activity.

Our experience with cultural projects has given us the insight to successfully design for the program requirements of our client. We have a substantial understanding of how to make these spaces viable.

We base our design on the requirements defined during a comprehensive needs analysis. The key component of a successful needs analysis is the contribution of the owner. Our design may include acoustical, audio, and audiovisual systems.

Our project experience also includes renovation of facilities with a wide range of existing conditions. Some of the challenges include intrusive traffic and vibration, non-uniform floor loading and clearances, and need to comply with structure renovation requirements.

## ACOUSTICS

Room Acoustics

Sound Isolation

Noise and Vibration Control

## PERFORMANCE & LOW VOLTAGE SYSTEMS

AV Systems

Audio

Audio Recording

Audio/Video Teleconferencing

Broadcast Accommodation

Broadcast Production

Cabling Infrastructure

Distributed Audio

Distributed Video

IMAG Production

IT Systems

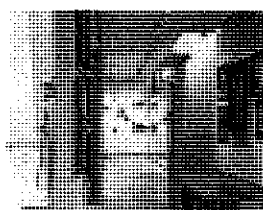
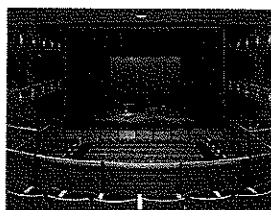
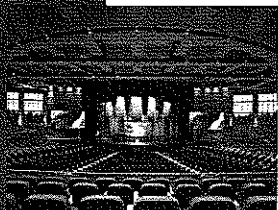
LED Displays

Production Accommodation

Security Systems

Video Production

Video Projection



### DALLAS

15505 Wright Brothers Drive  
Addison, TX 75001  
972.239.1505

### NEW YORK

145 Huguenot Street  
New Rochelle, NY 10801  
914.712.1300

### SAN DIEGO

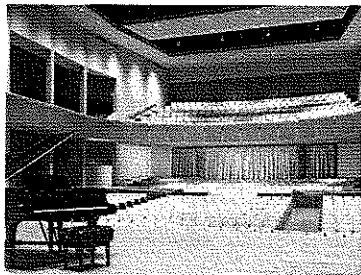
1935 Marshall Avenue  
El Cajon, CA 92020  
619.596.4800

### UK

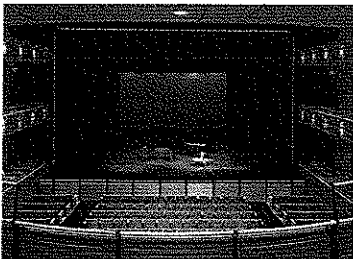
24 Styvechale Avenue  
Coventry, England CV56DX  
(0) 24.7667.3645



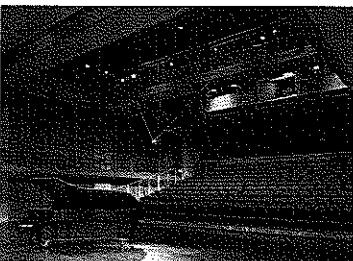
# performance & arts



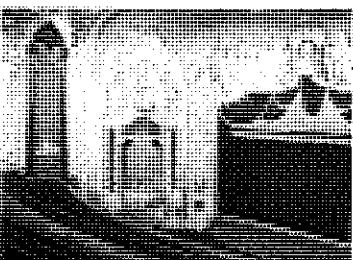
illinois state university p&a center  
bloomington-normal, illinois



'62 center, williams college  
williamstown, massachusetts



davis recital hall, uni  
cedar falls, iowa



stanley theatre  
utica, new york

## experience

'62 Center for Theatre & Dance, Williamstown, MA  
 Asia Society Hong Kong, Hong Kong  
 Beau Rivage Theatre, Biloxi, MS  
 Benedicta Arts Center, St. Joseph, MN  
 Benson Hall, Bethel College, Arden Mills, MN  
 Bonn Concert Hall, Bonn, Germany  
 Bromsgrove Arts Center, Bromsgrove, UK  
 Brooklyn Tabernacle, Brooklyn, NY  
 Brown Center, MICA, Baltimore, MD  
 Buntrock Community Center, St. Olaf College, Northfield, M  
 Centennial Center, Manitoba, Canada  
 Challenge America Amphitheatre, New York, NY  
 Courtyard Theatre, Hereford, UK  
 Dance Theatre Workshop, New York, NY  
 El Dorado Showroom, Reno, NV  
 Founder's Theatre, Lennox, MA  
 Franklin School for the Performing Arts, Franklin, MA  
 Gallagher-Bluedom Performing Arts Center, UNI, Cedar Falls, I  
 Grand Ole Opry, Nashville, TN  
 The Gatehouse, New York, NY  
 Hard Rock Live!, Orlando, FL  
 Hillsong Theatre, Sydney, Australia  
 Howard Community College, Columbia, MD  
 IBA Casa de la Cultura, Boston, MA  
 Illinois State University Performing Arts Center, IL  
 Jarvis Conservatory, Napa, CA  
 Kazan Concert Hall, Kazan, Tartarstan  
 Kennesaw State University, Kennesaw, GA  
 Kleinhans Music Hall, Buffalo, NY  
 Lawrenceville School Dance Studio, Lawrenceville, MA  
 Lincoln Theatre, Columbus, OH  
 Lucille Little Theatre, Transylvania University, Lexington, K1  
 Mahaiwe Theatre, Great Barrington, MA  
 Messiah College, Grantham, PA  
 Mercersburg Academy Perf. & Visual Arts, Mercersburg, PA  
 Meyerson Symphony Center, Dallas, TX  
 Midland Theater, Newark, OH  
 Napa Valley College PAC, Napa, CA  
 Newport R.I. PAC, Newport, RI  
 Niagara University Theatre, Niagara, NY  
 Norden Farm Arts Center, Maidenhead, UK  
 Ocean Music Venue, Hackney, UK  
 Ohio Theatre, Columbus, OH  
 Oldham Theatre, Sparta, TN  
 Palace Theatre, Columbus, OH  
 Peabody Conservatory, Baltimore, MD  
 Penn State University--York, Performing Arts Center, York, P  
 Playbox Theatre, Warwick, UK  
 PS-21, Performance Space for the 21st Century, Chatham, N1  
 Regent Theatre, Stoke-on-Trent, UK  
 Roundhouse, Camden, London, UK  
 Royal Shakespeare Theatre, Stratford-upon-Avon, UK  
 SDSU Performing Arts Center, Brookings, SD  
 Seattle Pacific University, Seattle, WA  
 Shubert Theatre, Minneapolis, MN  
 Southern Theatre, Columbus, OH  
 Ted Mann Concert Hall, Minneapolis, MN  
 Towson University Center for the Arts, Towson, MD  
 University of Baltimore Student Center, Baltimore, MD  
 University of California Davis Music Building, Davis, CA  
 Victoria Concert Hall, Stoke-on-Trent, UK  
 Woolly Mammoth Theatre Company, Washington, D.C.  
 Yuba College PAC, Woodland, CA

**ACOUSTIC** DIMENSIONS

## KCI & Paradigm

### **West Virginia University Downtown Student Housing Project Morgantown, WV**

KCI was a subconsultant to Paradigm Architecture for the New Honors Dormitory located on West Virginia University's downtown campus. This project was recently completed. KCI was responsible for overall site design, plaza, utility lines, sidewalks, drainage, stormwater quality and retention, grading plans, erosion and sedimentation control plans, and the site/civil permitting.

### **The View II at the Park Morgantown, WV**

KCI was a subconsultant to Paradigm Architecture for the View II. The View II is the second phase of a three phased development along the waterfront in Morgantown, WV. The View II is a 4-story structure that houses Morgantown Area Chamber of Commerce on the first floor, with residential condominiums on the upper floors. KCI was responsible for overall site design, utility lines, sidewalks, drainage, stormwater retention, grading plans, erosion and sedimentation control plans, and the site/civil permitting.

### **The Dayton Morgantown, WV**

KCI was a subconsultant to Paradigm Architecture for the Dayton. The Dayton is a 3-story modular building located at the corners of Ridgeway Avenue, Dayton Street and Richwood Avenue in Morgantown, WV. The building is a mixed used residential housing project with a parking garage and retail space located on the ground level. KCI was responsible for overall site/civil design, landscape design, water lines, sanitary sewer, general utility coordination, site/civil permitting and erosion and sediment control.

### **Morgantown Event Center Morgantown, WV**

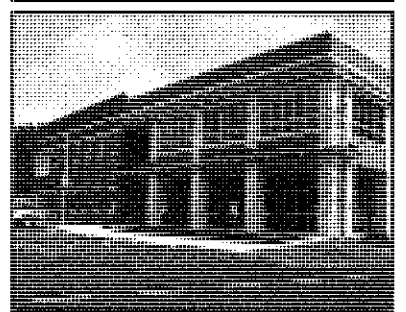
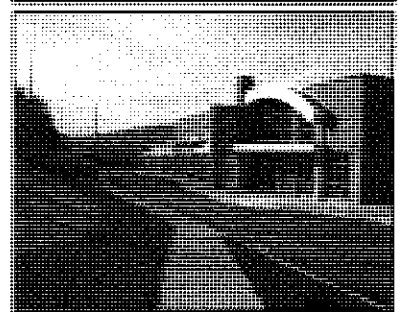
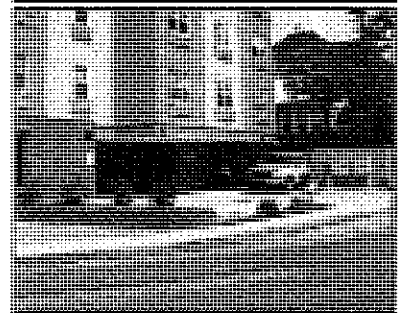
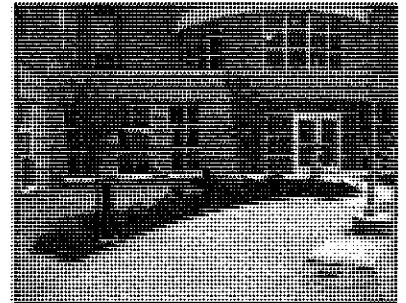
KCI is a subconsultant to Paradigm Architecture for the new Morgantown Event Center and Parking Garage, located in the Wharf District of Morgantown, WV. KCI is providing site/civil engineering and landscape architecture services for this design-build project.

### **USDA Building Sabraton, WV**

KCI was a subconsultant to Paradigm Architecture for the USDA Building located in the Sabraton Area of Morgantown. KCI provided site/civil engineering and landscape architecture design services for this design/build project. This project is pursuing LEED certification.

### **Cacapon Resort State Park Golf Course Improvements Cacapon, WV**

KCI is a subconsultant to Paradigm Architecture for the Cacapon Resort State Park Improvement Projects. KCI is currently providing engineering services for the golf course. The improvements are to be commensurate with a Robert Trent Jones style course. KCI is also providing design services to upgrade the parks waste water collection system, and improve the potable water distribution throughout the park. KCI will also be providing site/civil engineering and landscape architecture services to accommodate the addition to the resort that is currently being designed by Paradigm Architecture.



**Cacapon Resort State Park Lodge**  
*Berkeley Springs, WV*

**Client**

WV DNR Division of Parks  
and Recreation

**Contact**

Jonathan Perry,  
(304) 284-5015  
Paradigm Architecture

**Year Complete:** In Progress

KCI is a subconsultant to Paradigm Architecture for the Cacapon Resort State Park Improvement Projects. This project involves engineering services for the golf course. The improvements are to be commensurate with a Robert Trent Jones style course.

KCI is providing design services to upgrade the parks waste water collection system, and improve the potable water distribution throughout the park. Specifically, KCI performed water supply, treatment, and distribution studies and made recommendations for system improvements. The water supply study included field evaluation and documentation survey of water wells and using conclusions to plan water treatment plant upgrade, improvements to existing wells, and possible new wells. Water distribution system studies included domestic demand and pressure measurements and hydrant flow testing for fire flow and carrying capacity evaluation.

KCI will also provide site/civil engineering and landscape architecture services to accommodate the addition to the resort that is currently being designed by Paradigm Architecture.



## Downtown Student Housing Project

Morgantown, WV

### Client

West Virginia University

### Contact

John Sommers,

(304) 296-2856

West Virginia University

**Year Complete:** 2009

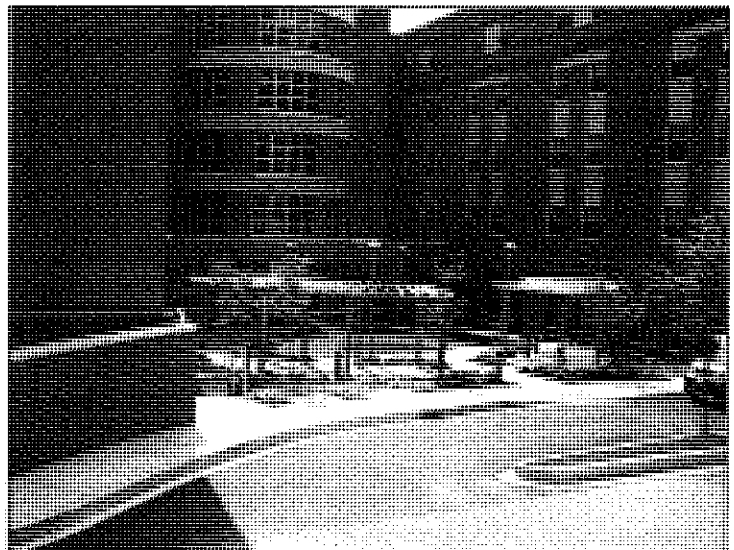
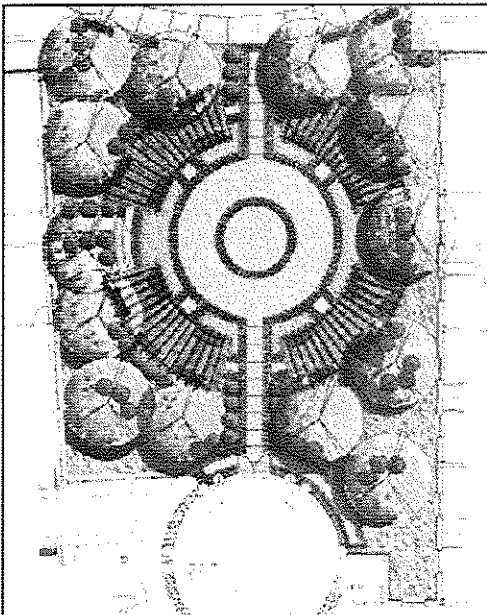
West Virginia University has been experiencing a constant and steady growth in enrollment over several years. With this increased enrollment comes an increased demand for on-campus housing. After reviewing the residential units available, the University determined that capacity in the downtown residential halls needed to be increased in order to comfortably house the student population.

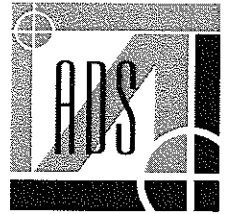
KCI was a subconsultant to Paradigm Architecture for the New Honors Dormitory located on West Virginia University's downtown campus. This project was completed in August, 2009. KCI was responsible for overall site design, plaza, utility lines, sidewalks, drainage, storm water quality and retention, grading plans, erosion and sedimentation control plans, and the site/civil permitting.

The landscape architectural design team was charged with the task of creating an inviting gathering space as a forecourt to the new dormitory building. The design team utilized the architectural design of the new dormitory as a launching point for the organization of the space. The circular plan reinforces the main entry of the building while the center organizing space reflects the dimensions of the building rotunda space. Radiating out from the central organizing circle are seating areas appropriate for small student gatherings or outdoor study. The open and encompassing nature of the design reinforces the function of the space as a gathering space not only for the residents of the building, but for other users as well. The space created reflects the inviting and inclusive nature of the building architectural design and provides an appropriate space for group interaction and individual study.

Drainage issues were critical in the design of the courtyard, as were soil considerations. The stringent city storm water requirements were achieved through innovative design. The ordinance requires a 10% quantity reduction in offsite runoff between the existing runoff rate and the final rate. There is also a requirement to filter out 80% of the total suspended solids. Since the project programming utilized 100% of the site area, these requirements were a challenge to meet. The courtyard itself is situated in a low point in the site topography and the storm water pipe ties into deteriorating substandard existing pipe. The soil in the courtyard was amended to provide percolation and filtration to the underground drains. The quantity reduction was met through underground storage by providing oversized pipe and constricting the size of the outlet and providing a gravel blanket under the courtyard. The quality standard was met through providing a dual vortex separator storm water filter and through bio filtration within the courtyard.

The natural lighting of the space was also a critical design issue. The design team examined the sun/shadow relationships of the space in light of plant material selection. Plant materials were also selected based on suitability for the campus. Requiring both technical innovation as well as creative landscape architectural design, the courtyard presented a challenging problem of combining functional storm water management requirements with the creation of an attractive, inviting outdoor space.





**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.

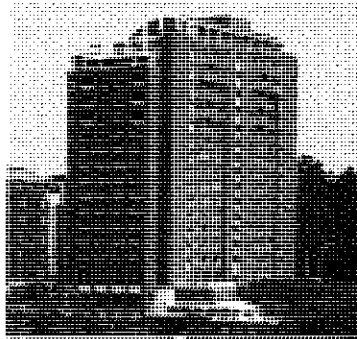
Dedicated to serving West Virginia and the surrounding region, ADS recognizes the need for reliable and full service structural engineering support. ADS provides all phases necessary for the successful completion of a building project including schematic design studies, design development, construction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

Over 20 years in Design and Project Management of:

- Commercial
- Industrial
- Institutional
- Educational Facilities



**MIXED USE**



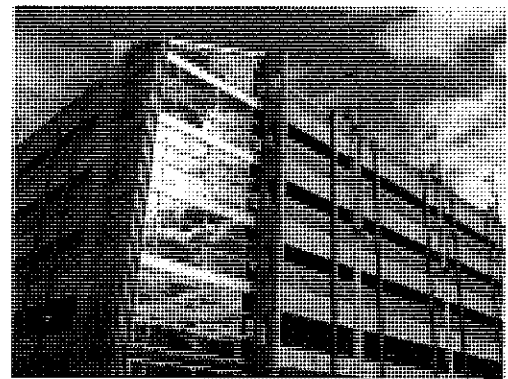
**HOTEL  
 CONFERENCE CENTERS**



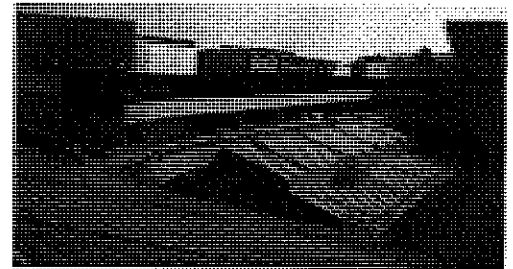
**SECONDARY EDUCATION**



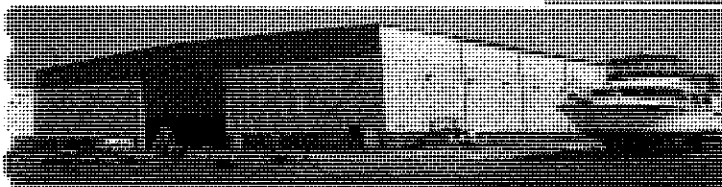
**OFFICE BUILDINGS**



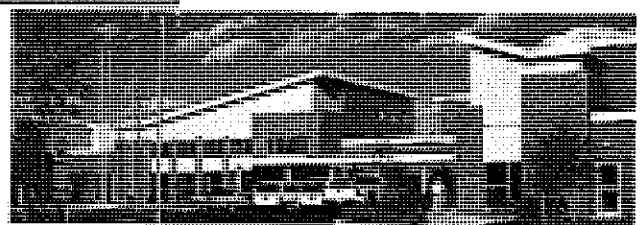
**PARKING GARAGES**



**ATHLETIC FACILITIES**



**METAL BUILDING SYSTEMS**



**HEALTH CARE**



# **Allegheny** **Design Services**

*Structural & MEP Engineering*

102 Leeway Street  
Morgantown, WV 26505  
Phone: (304)599-0771  
Fax: (304)599-0772  
E-mail: [Dave@AlleghenyDesign.com](mailto:Dave@AlleghenyDesign.com)  
Web: [www.AlleghenyDesign.com](http://www.AlleghenyDesign.com)

## **FIRM PROFILE**

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. We currently hold licenses in West Virginia, Pennsylvania, Maryland, Virginia, District of Columbia, South Carolina and Ohio.

ADS's experience exceeds twenty-five years in the Design and Project Management of:

Commercial Facilities

Industrial Facilities

Institutional Facilities

Educational Facilities

ADS was established by David Simpson, P.E., MBA, in 2002 as a result of a need in North Central West Virginia for reliable structural engineering services. ADS utilizes a combination of office technology and a motivated staff to deliver projects typically up to \$25 million in construction value. We have completed design work for over \$300 million in construction since our inception. Our clients include architects, contractors, developers, attorneys, and insurance companies.

Building systems delivered by ADS include structural steel, reinforced concrete, precast concrete, and structural timber. ADS currently utilizes the latest engineering design and BIM software for the development of project work.

ADS is covered under a \$2 million liability policy for errors and omissions through Travelers C & S Co. of America.

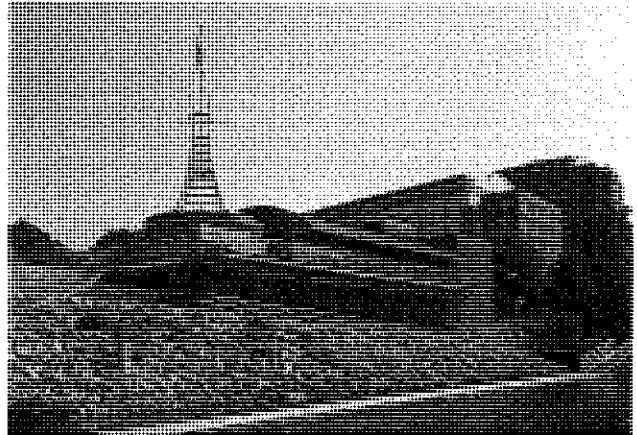


**Allegheny**  
**Design Services**  
*Structural & MEP Engineering*

## **ALLEGHENY DESIGN SERVICES' EXPERIENCE TEAMING WITH PARADIGM ARCHITECTURE**

### **Boathouse Bistro Morgantown, WV**

ADS was a sub-consultant to Paradigm Architecture for the Boathouse Bistro. The building houses a restaurant, a docking facility, and WVU Crew Team storage. The \$5 Million facility was completed in 2007.

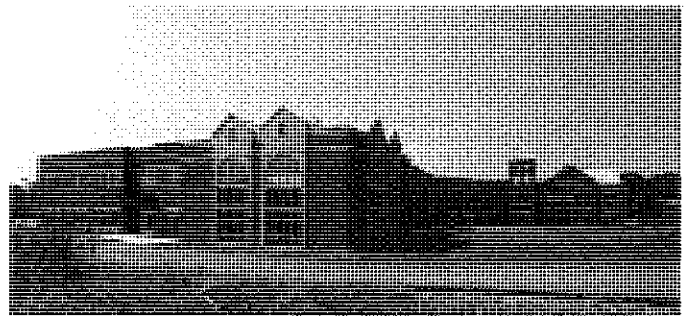


### **Cacapon Resort State Park Golf Course Improvements Cacapon, WV**

ADS is a sub-consultant to Paradigm Architecture for the Cacapon Resort State Park Improvement Projects. ADS will be providing design of foundations and structural system design for multimillion dollar addition.

### **Chestnut Ridge Community Church Morgantown, WV**

ADS was a sub-consultant to Paradigm Architecture for the Chestnut Ridge Community Church. At the time of completion in 2006 this was the largest church facility in West Virginia. At a cost of \$12 Million, it houses an education/gymnasium wing, administrative offices, and a 2000 seat sanctuary.





# Allegheny Design Services

Structural & MEP Engineering

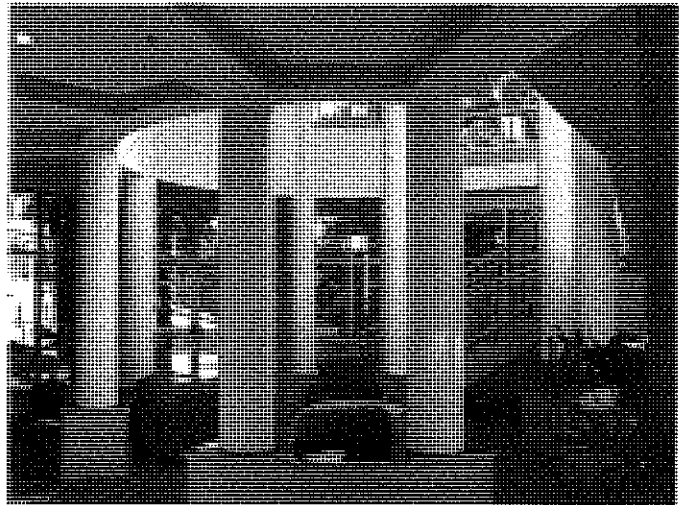
## **Davis & Elkins College Athletic Center Elkins, WV**

ADS was a sub-consultant to Paradigm Architecture for the Davis & Elkins College Athletic Center. The building houses a gymnasium, offices, and classrooms. At a cost of \$6 Million it was completed in 2006.



## **Davis & Elkins College Benedum Hall Renovation Elkins, WV**

ADS was a sub-consultant to Paradigm Architecture for the Davis & Elkins College Benedum Hall Renovation. This 16,000 square foot renovation to Benedum Hall included the addition of a rotunda at the entrance. The work was completed in 2003.



## **The Dayton Morgantown, WV**

ADS was a sub-consultant to Paradigm Architecture for The Dayton. The Dayton is a 3 story modular building located at the corners of Ridgeway Avenue, Dayton Street and Richwood Avenue in Morgantown, WV. The building is a mixed used residential housing project with parking garage and retail space located on the ground level. ADS was responsible for foundation and structural system design.





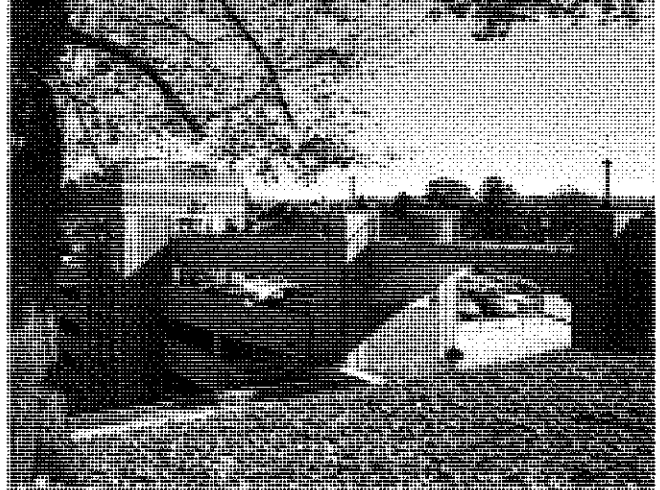


# Allegheny Design Services

Structural & MEP Engineering

## Fairmont State University Parking Garage Fairmont, WV

ADS was a sub-consultant to Paradigm Architecture for the FSU Parking Garage. This design-build project was completed in 2003 at a cost of \$9.2 Million. This 900 car capacity facility was built over mine cavities which required pre-grouting.



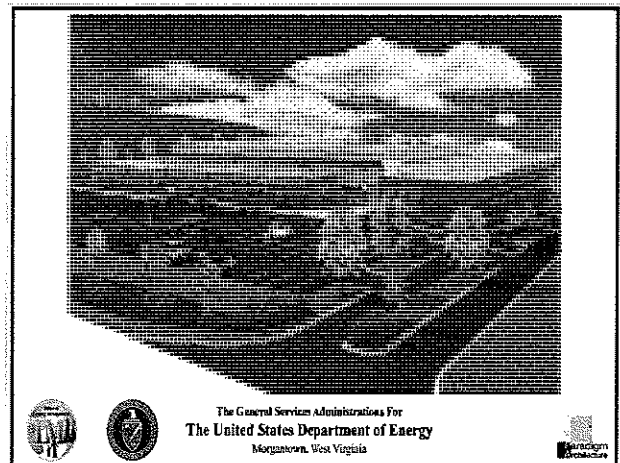
## Glade Springs Hotel & Conference Center Daniels, WV

ADS was a sub-consultant to Paradigm Architecture for the Glade Springs Hotel & Conference Center. The facility consists of a 40,000 sq. foot hotel wing, a 12,000 sq. foot conference center and a 2,000 sq. foot Porte Coche. It was completed in 2005 at a cost of \$5 Million.



## GSA - Department of Energy Morgantown, WV

ADS was a sub-consultant to Paradigm Architecture for the GSA - DOE. This office and records storage building was completed in 2009. At a cost of \$8 Million (shell only) it was awarded through a Design Build Competition sponsored by the General Services Administration.



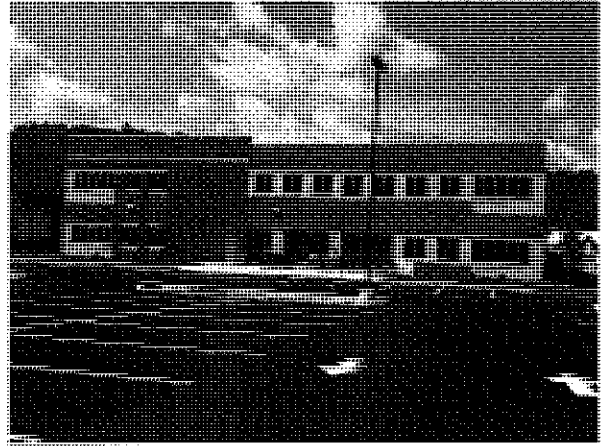


# Allegheny Design Services

Structural & MEP Engineering

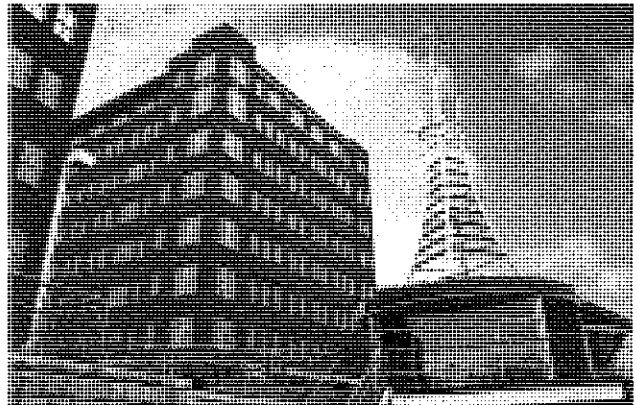
## **GSA/USDA Building Sabraton, WV**

ADS was a sub-consultant to Paradigm Architecture for the USDA Building located in the Sabraton Area of Morgantown. ADS provided foundation and structural system design. This project is pursuing LEED certification.



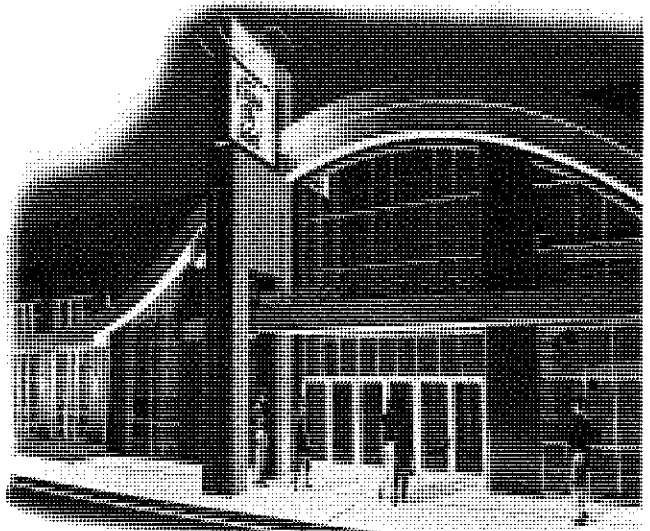
## **Marina Tower Morgantown, WV**

ADS was a sub-consultant to Paradigm Architecture for the Marina Tower. At a cost of \$10 Million (shell only) this building was completed in 2009. The eight story structure was a winner of an Excellence in Construction Award from Associated Builders and Contractors, WV Chapter.



## **Morgantown Event Center Morgantown, WV**

ADS is a sub-consultant to Paradigm Architecture for the new Morgantown Event Center and Parking Garage, located in the Wharf District of Morgantown, WV. ADS is providing foundation and structural system design.





# Allegheny Design Services

Structural & MEP Engineering

## **Trinity Christian School** **Morgantown, WV**

ADS was a sub-consultant to Paradigm Architecture for the Trinity Christian School. The 50,000 square foot high school was completed in 2004 at a cost of \$5 Million.



## **The View at the Park** **Morgantown, WV**

ADS was a sub-consultant to Paradigm Architecture for The View at the Park. The 6 story building contains 56 apartments. It was completed in 2003 at a cost of \$6 Million.



## **The View II at the Park** **Morgantown, WV**

ADS was a sub-consultant to Paradigm Architecture for the View II. The View II is the second phase of a three phased development along the waterfront in Morgantown, WV. The View II is a 4-story structure that houses Morgantown Area Chamber of Commerce on the first floor, with residential condominiums on the upper floors. ADS was responsible for foundation and structural system design.





# **Allegheny** **Design Services**

*Structural & MEP Engineering*

## **Waterfront Place Hotel & Conference Center** **Morgantown, WV**

ADS was a sub-consultant to Paradigm Architecture for the Waterfront Place Hotel & Conference Center. The \$33 Million hotel and conference center was completed in 2003. The 17 story building contains 300,000 sq. foot of heated space with a lower level parking garage.



## **West Virginia University Honors Dormitory** **Morgantown, WV**

ADS was a sub-consultant to Paradigm Architecture for the new Honors Dormitory located on West Virginia University's downtown campus. This project was recently completed. ADS was responsible for overall foundation and structural system design.



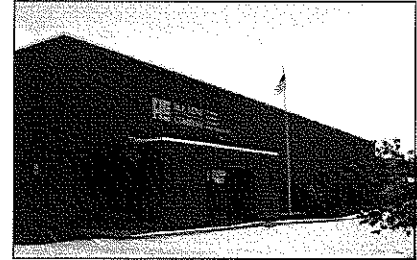
## **WVU Transportation Center & Parking Garage** **Morgantown, WV**

ADS was a sub-consultant to Paradigm Architecture for the WVU Transportation Center & Parking Garage. The \$17 Million facility contains a 500 car parking garage, offices, public space, and retail space. It was completed in 2009.



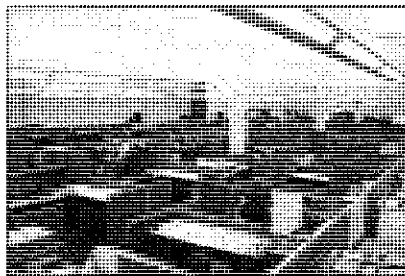


Currently in its 64th year, the H.F. Lenz Company is a Pennsylvania-based firm offering a full range of engineering services for building systems, infrastructure, and industry. Our projects span the nation, with the heaviest concentration in the Northeast, and exceed \$530 million in MEP, Civil and Structural construction annually. Each market sector—corporate, government, health care, education, and industry—is served by a team of specialists who understand the unique needs of the clients they serve. Our 44 professional engineers are registered in all 50 states and the District of Columbia.



Services offered include:

- |   |                               |
|---|-------------------------------|
| ➤ Mechanical Engineering                    | ➤ Civil Engineering           |
| ➤ Electrical Engineering                    | ➤ Structural Engineering      |
| ➤ Plumbing Engineering                      | ➤ Industrial Engineering      |
| ➤ Life Safety / Fire Protection Engineering | ➤ Surveying                   |
| ➤ Communications Engineering                | ➤ Construction Phase Services |
| ➤ Energy Management                         | ➤ Commissioning               |



Two essential prerequisites lay the foundation for every H.F. Lenz Company project. First, we take the time to understand the client's business and how it operates. Second, we proactively involve the client in the development of appropriate solutions. In our role as partner, we help the client understand how well the available alternatives satisfy the project's own unique, prioritized set of objectives.

A remarkable 85 percent of our work consists of repeat commissions from clients who appreciate our responsive, value-added service. We've earned their trust by:

- Designing well-functioning systems that work *with* a building's architecture rather than being constrained by it.
- Achieving the optimal balance of system performance with the client's budget through value engineering.
- Designing system infrastructures—including communications—that accommodate growth and changing technology.
- Phasing installations to avoid disrupting normal and critical operations.
- Keeping construction cost and schedule on track with enhanced construction-phase services.
- Commissioning new systems to assure that they function as intended.

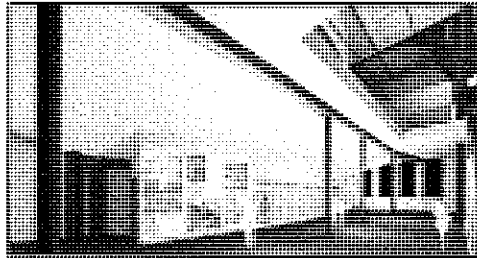


The H.F. Lenz Company employs 169 people in our Johnstown, Pennsylvania headquarters and satellite offices in Pittsburgh and Erie, Pennsylvania.



**Temple University  
Historic Renovation of The Events Center at the Baptist Temple  
Philadelphia, Pennsylvania**

The Baptist Temple is certified as a historical structure by the Philadelphia Historical Commission, and has played a significant role in the history of Temple University. H.F. Lenz Company provided the mechanical, electrical, plumbing, and fire protection engineering services for the restoration of this important historic structure for use as an Events Center.



The renovated building provides a much needed performance venue for Temple's Esther Boyer College of Music and Temple University Dance Department, and will also house large symposia. The Project included an acoustically isolated, modern, state of the art performance facility for orchestral, choral, and dance performances, and includes amplification for speakers and symposia.

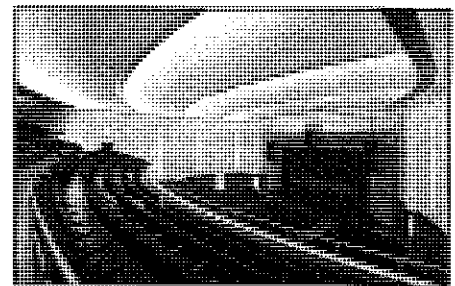
The new interior makes a strong statement about the importance of the performance space while retaining architectural and decorative elements from the original building. Due to the nature of the spaces in the building a specialized HVAC system, ventilation, and acoustics were extremely important. The building is fully air conditioned. The design emphasizes energy savings through life cycle cost analysis.

The major functional units to be housed in the Baptist Temple Performance Hall are:

- 1,000 to 1,500 seat performance hall
- Thrust stage
- Instrument Storage
- Music Library
- Pre-Function Space
- Prep Kitchen
- Dressing Rooms/Changing Rooms

**Indiana University of Pennsylvania  
Renovation and Addition to Fisher Auditorium  
Indiana, Pennsylvania**

H.F. Lenz Company provided mechanical, electrical and plumbing engineering services for the addition to/renovation of IUP's Fisher Auditorium. Fisher Auditorium is the main assembly and performance space on the IUP campus providing seating for 1,600. The building is a three story, steel and reinforced concrete structure with a brick and stone facade constructed in 1939. No major renovations had been undertaken since the original construction of the building. The project addressed three major initiatives:

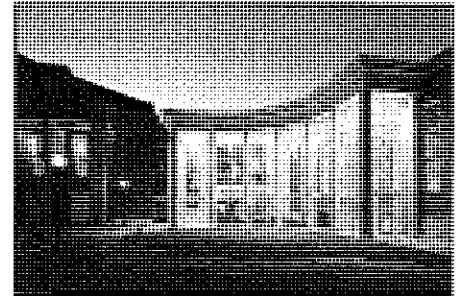


The primary focus of the renovation of Fisher included the rehabilitation of the existing heating system and the addition of air conditioning. The existing facility was not air conditioned. The air conditioning



system was tied into the University's upgraded chilled water system and is controlled by the existing energy management system.

The second component of the project consisted of the construction of an addition to the existing boiler/chiller plant of approximately 3,700 gross sq.ft. to accommodate three 1,000-ton variable speed centrifugal chillers required to meet the existing and immediate planned needs of authorized projects. The project included three new cooling towers, associated pumps, piping and controls system.



The Central Chiller Project provided chilled water for 11 buildings, including Fisher Auditorium, and will eventually serve the entire campus.

The third piece of the project consisted of the construction of an addition/infill building of approximately 20,500 gross sq.ft. between Fisher Auditorium and Waller Halls. The building houses:

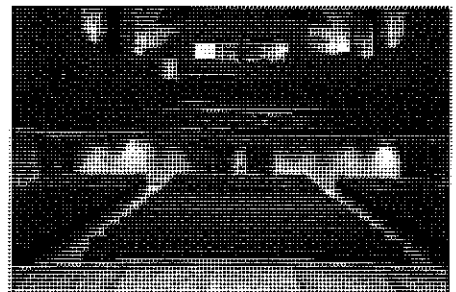
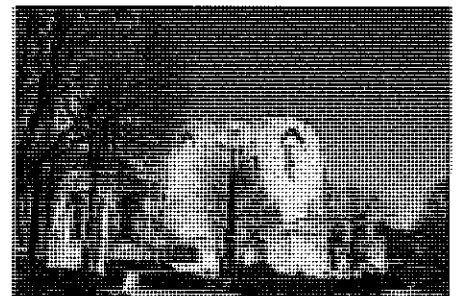
- New audience entry
- Ticket station
- Reception area
- Access corridors
- Public spaces for the presentation of materials and/or displays of the University Museum's Collection and special exhibits
- Dressing rooms with showers
- Locker area
- Warm-up rehearsal spaces
- Equipment storage areas
- Administrative and technical offices
- Tour production office
- Locker area
- "Green room/area"
- Vending/food service area/kitchen/eating area
- Press release area
- Wardrobe area with laundry facilities

**University of Pittsburgh  
Renovation and Addition to Stephen Foster Memorial Auditorium  
Pittsburgh, Pennsylvania**

The Stephen Foster Memorial Auditorium is a 7,000 sq.ft. building and was constructed in 1937 to serve as a performance hall dedicated to Stephen Collins Foster, the first authentically American composer. The existing structure was not up to code and contained numerous violations and hazards.

H.F. Lenz Company provided mechanical, electrical, plumbing/fire protection engineering services for the \$2 million renovation of the historic, 478-seat auditorium. The renovation was designed to provide the public with an enjoyable theatre-going experience, and give theatre art students a state-of-the-art facility in which to learn acting, directing, scenic design, and other aspects of stage production.

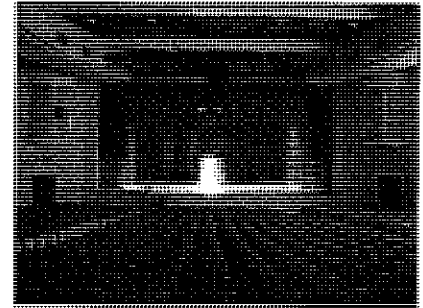
A new control booth, equipped with computer-controlled lighting and new surround-sound equipment, was designed to support more professional productions and training. New lighting was also designed to better define the historic vaulted ceilings.





**Edinboro University of Pennsylvania  
Memorial Auditorium Renovation and Addition  
Edinboro, Pennsylvania**

Memorial Auditorium (recently renamed the Louis C. Cole Auditorium in Memorial Hall), was originally constructed in 1937, was named in recognition of the men and women who served the country in times of war. The auditorium, with its mural-covered ceiling, serves as the University's main auditorium facility. It has been host to such activities as plays, concerts, movies, and debates. The existing 16,678 sq.ft. facility, considered to be a historical in nature, included a 1,716 sq.ft. stage area, 800 seat auditorium area, and various dressing rooms and preparation areas.



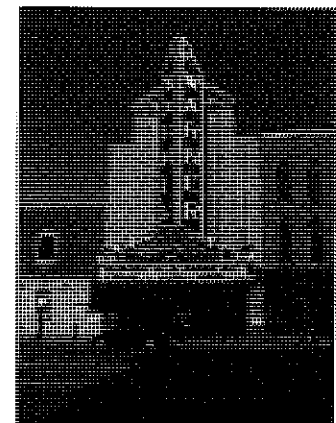
H.F. Lenz Company provided mechanical, electrical, plumbing/fire protection engineering services for the partial renovation of the existing facility and the addition of a new 3,653 sq.ft. rehearsal hall. During the design, the University indicated that the primary function of the facility would be for concert performances, but that they also desired to utilize the facility for theatrical performances. H.F. Lenz Company upgraded the existing theatrical dimming system and sound systems, which were not operational prior to the renovation.

The existing mechanical and electrical systems dated back to the original building construction and were in need of replacement. The existing building did not contain air conditioning and the heating/ventilating systems did not comply with the current ASHRAE requirements for energy efficiency or outdoor air quantities. Due to the historical significance of this structure and the features located within its walls, special care was taken to minimize disturbance to the original fixtures and to ensure that the guidelines for restoring historic places were met. The existing electric heating system and ventilation fans were demolished and a new packaged rooftop air-handling unit with gas heat and DX cooling was installed. The existing electric hot water heater was replaced with a gas-fired model; all new sprinklers were installed to meet life safety requirements. The design also included the replacement of the entire fire alarm system, and a new distributed data system which was connected to the existing campus wide energy management system.

H.F. Lenz Company was able to incorporate modern mechanical and electrical systems into the existing facility without compromising the historical element of the building, while allowing for a multi-functional facility as desired by the University.

**Erie Civic Center  
Warner Theatre  
Erie Pennsylvania**

In 1929, the Warner Brothers commissioned the design of the elaborate, art-deco style Warner Theatre in Erie, Pennsylvania. The 2,200-seat, \$1.5 million structure proved to be the major cultural center of the region. The theatre, completed in 1931, flourished throughout the next three decades before running into disrepair in the mid-70's. With assistance from the Commonwealth of Pennsylvania, the building was purchased by the late Mayor Louis J. Tullio, who envisioned the structure as part of a multiuse civic complex in Erie's Central Business District.



The "Erie Civic Center" was a combination of three buildings - the Warner Theatre, an empty 36,500 sq.ft. store, and the 7,000-seat Louis J. Tullio Convention Center. H.F. Lenz Company provided mechanical

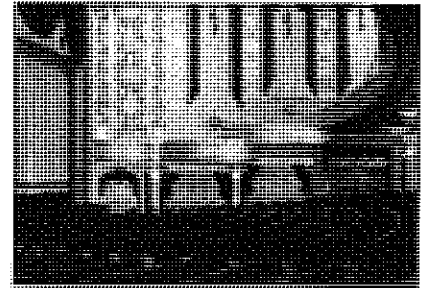




and electrical engineering services for the \$12,160,000 renovation project, which boasted a performing arts center, an exhibit hall, and 30,000 sq. ft. arena.

H.F. Lenz Company's design services for the major addition/restoration project involves mechanical, electrical, plumbing/fire protection, and structural engineering disciplines.

The theatre addition included a 15-foot stage expansion, new dressing rooms and practice rooms, men's and women's rest rooms, a rehearsal hall and meeting facilities, storage areas, and a loading dock.

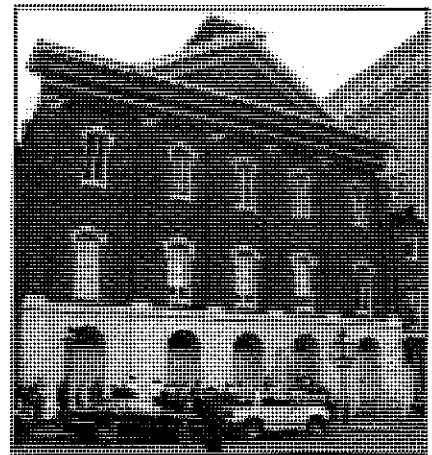


The renovation project included:

- New HVAC system reusing existing ductwork
- Underfloor air distribution system
- New lighting throughout the building
- Stage lighting
- A new state-of-the-art audio/visual system
- Major rest room expansions and updating
- Addition of sprinklers
- New electric service

#### **Ford's Theatre National Historic Site Washington, DC**

Ford's Theatre, a Registered Historic Landmark structure, occupies three stories and almost 25,000 sq. ft. The building was originally constructed as the First Baptist Church. John T. Ford leased it and converted it into a music hall until the building was destroyed in 1861. It was immediately reconstructed and opened as a theatre. During its long, rich history, the building has also served as an office building, warehouse, and other miscellaneous uses. It was reconstructed in the 1960s after President Dwight D. Eisenhower signed a Congressional act for its restoration; the building was returned to its 19th century appearance.



Under an IDIQ contract with the National Park Service, H.F. Lenz Company designed new HVAC, fire protection, and electrical systems for the restoration of this active theater, museum, and historic site. The project consisted of upgrading and/or installing a new fire suppression, fire detection, and climate control system for the protection of the buildings and their contents, and the health, safety, and comfort of the buildings' occupants. The project also consisted of the installation of new intrusion detection and alarm systems and improvements to the power distribution network that serves the theatre's production lighting systems.

The lower level of Ford's Theatre consists of a 5,200 sq. ft. museum. The museum's HVAC and lighting systems had been upgraded in 1989, unfortunately, the installed system did not provide conditions suitable for a museum environment. H.F. Lenz Company completed the design modifications to the existing environmental control systems.



**Pennsylvania State University  
Feasibility Study and Schematic Design for the Community Arts Center Addition  
Misciagna Family Center for Performing Arts  
Altoona, Pennsylvania**

H.F. Lenz Company provided the mechanical, electrical, plumbing, and fire protection engineering services for a feasibility study and schematic design of a 15,000 sq.ft. addition to the existing 17,000 sq.ft. Community Arts Center. The addition is designed to feature a new dance studio, theatrical studio, enlargement of the theatre space and a new Performing Arts and Communications Suite that creates space for technical and production facilities and faculty offices. The project was necessary to support the growth and development of the communications, integrative arts and performing arts programs.

The facilities in the expanded Community Arts Center also allow communications majors to work in television and audio studios in which control of sound, lighting and climate will afford opportunities to learn professional techniques as well as produce quality portfolio material that is required for positions in communications fields. Communications production classes and students engaged in a variety of media endeavors (newspaper, online magazine, internet radio) also will utilize the facility.

**Pennsylvania State University  
Renovations to the Arts Building  
University Park, Pennsylvania**

H.F. Lenz Company was retained to provide engineering services for renovations to the Arts Building, which included the stage area, classrooms, and offices.

A new theatrical dimming system was designed, which included two new distribution switchboards, five dimming racks, a relay panel and an emergency lighting transfer system. Theatrical devices were placed at several areas of the theatre including the catwalks, fly floors, penthouse area, both sides of the stage and behind the proscenium wall. Equipment racks were located in the penthouse, stage right prop area, and the control room.

The building electrical service and distribution system were replaced with new. The existing indoor substation and 208V/120Y - 3 phase - 4 wire service entrance switchboard were replaced with a 500KVA outdoor pad-mount transformer and 2000 Ampere service entrance switchgear and distribution switchboards. Because of site constraints a below grade vault was designed to house the new transformer. The new switchgear was configured to feed existing building loads, the new theatrical lighting package, and new feed to the Forum Building.

Fire alarm system upgrades for the entire building, including new fire alarm control panel, annunciator panel, and building notification and initiation devices.

Renovation of five offices which included new lighting with dual switching and occupancy sensor override, and new receptacle and telecom locations.

Two classrooms were renovated, which included new lighting with dual switching with occupancy sensor override, new overhead projectors and locations for computer internet access. The classroom renovations included seven studio offices which were fitted with power and telecommunications outlets.