



**State of West Virginia
Department of Administration
Purchasing Division**

NOTICE

Due to the size of this bid, it was impractical to scan every page for online viewing. We have made an attempt to scan and publish all pertinent bid information. However, it is important to note that some pages were necessarily omitted.

If you would like to review the bid in its entirety, please contact the buyer. Thank you.



14 September 2010

Ms. Krista Ferrell
WV Department of Administration
Purchasing Division, Building 15
2019 Washington Street
Charleston, WV 25305-0130

RE: **EOI for Space Planning and Renovation Services
WV Rehabilitation Center
RFP Number GSD116409**

Dear Ms. Ferrell:

First, we would like to thank you for the opportunity to submit a proposal for architectural and engineering services for this project. We have assembled a highly qualified team of professionals from West Virginia. In this proposal, we will provide our firm description, experience, and reasons why we are uniquely positioned to serve the State of West Virginia and West Virginia Rehabilitation Center.

Located in Morgantown, West Virginia, **Paradigm Architecture** is a Small Business, Subchapter S Corporation. We have successfully completed many Institutional, Corporate, and Renovation projects, including currently active projects on Open End Contracts. These include projects for West Virginia University, Russell Medical Center, and Lanier Memorial Hospital. We have been working with these clients for a number of years on a variety of project types, including administration, data centers, housing, major hospital expansion and renovations, athletic facilities, parking garages, and master planning. In addition we have completed several projects with the General Services Administration.

At Paradigm, we believe 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, respectively.

RECEIVED

200 SEP 15 A 10: 25

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

PURCHASING DIVISION
STATE OF WV



We have assembled a team of highly qualified consultants with appropriate project experience, technical ability, and close proximity to complete this project. We have successfully completed many projects together in north central West Virginia. **Terradon Corporation** will provide civil engineering. **Allegheny Design Services** will provide structural engineering. **ZDS Design/Consulting Services** will provide Mechanical, Electrical, and Plumbing Services. Our team shares our commitment to service and quality and is excited about this project!

Finally, we would like to illustrate the range of scope of the projects with which we have been involved. Currently, we are completing historic renovation/restoration to Fairmont State's Hardway Hall. The budget for this work is \$350,000. We have also just completed the Morgantown Event Center & Parking Garage on the Waterfront which cost \$30 million. Our work for West Virginia University has spanned from \$100,000 to \$20 million. We believe that each project is meaningful no matter how large or small.

We are looking forward to starting a new relationship with the WV Department of Administration and WV Rehabilitation Center, and welcome the opportunity to work with you! Please feel free to contact me with any further questions.

Best regards,

A handwritten signature in black ink, appearing to read "Paul A. Walker". The signature is stylized with a large initial "P" and "W".

Paul A. Walker, AIA
President, Paradigm Architecture

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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
 GSD116409

PAGE
 1

ADDRESS CORRESPONDENCE TO ATTENTION OF
 KRISTA FERRELL
 304-558-2596

RFQ COPY

TYPE NAME/ADDRESS HERE

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

DEPARTMENT OF ADMINISTRATION
 GENERAL SERVICES
 BUILDING 1 ROOM MB60
 1900 KANAWHA BOULEVARD, EAST
 CHARLESTON, WV
 25305-0123 304-558-2317

DATE PRINTED	TERMS OF SALE	SHIP VIA	FOB	FREIGHT TERMS
08/19/2010				

BID OPENING DATE: 09/15/2010 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
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0001	1	LS		906-07		
A&E SERVICES: WV REHAB CENTER RENOVATIONS						

EXPRESSION OF INTEREST (EOI)

THE WEST VIRGINIA STATE PURCHASING DIVISION FOR THE AGENCY, THE WEST VIRGINIA DIVISION OF GENERAL SERVICES, IS SOLICITING EXPRESSIONS OF INTEREST FOR ARCHITECTURAL AND ENGINEERING SERVICES FOR RENOVATIONS TO THE WEST VIRGINIA REHABILITATION CENTER LOCATED AT INSTITUTE, WEST VIRGINIA PER THE ATTACHED SPECIFICATIONS.

TECHNICAL QUESTIONS CONCERNING THIS SOLICITATION MUST BE SUBMITTED IN WRITING TO KRISTA FERRELL IN THE WEST VIRGINIA STATE PURCHASING DIVISION VIA MAIL AT THE ADDRESS SHOWN IN THE BODY OF THIS EOI, VIA FAX AT 304-558-4115, OR VIA EMAIL AT KRISTA.S.FERRELL@WV.GOV. DEADLINE FOR ALL TECHNICAL QUESTION SUBMISSIONS IS 08/31/2010 AT THE CLOSE OF BUSINESS. ANY TECHNICAL QUESTIONS RECEIVED WILL BE ANSWERED BY FORMAL ADDENDUM ISSUED BY THE PURCHASING DIVISION AFTER THE DEADLINE HAS LAPSED.

EXHIBIT 10

REQUISITION NO.:

ADDENDUM ACKNOWLEDGEMENT

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE 	TELEPHONE 304.284.5015	DATE September 14, 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'

GENERAL TERMS & CONDITIONS
REQUEST FOR QUOTATION (RFQ) AND REQUEST FOR PROPOSAL (RFP)

1. Awards will be made in the best interest of the State of West Virginia.
2. The State may accept or reject in part, or in whole, any bid.
3. Prior to any award, the apparent successful vendor must be properly registered with the Purchasing Division and have paid the required \$125 fee.
4. All services performed or goods delivered under State Purchase Order/Contracts are to be continued for the term of the Purchase Order/Contracts, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise available for these services or goods this Purchase Order/Contract becomes void and of no effect after June 30.
5. Payment may only be made after the delivery and acceptance of goods or services.
6. Interest may be paid for late payment in accordance with the *West Virginia Code*.
7. Vendor preference will be granted upon written request in accordance with the *West Virginia Code*.
8. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.
9. The Director of Purchasing may cancel any Purchase Order/Contract upon 30 days written notice to the seller.
10. The laws of the State of West Virginia and the *Legislative Rules* of the Purchasing Division shall govern the purchasing process.
11. Any reference to automatic renewal is hereby deleted. The Contract may be renewed only upon mutual written agreement of the parties.
12. **BANKRUPTCY:** In the event the vendor/contractor files for bankruptcy protection, the State may deem this contract null and void, and terminate such contract without further order.
13. **HIPAA BUSINESS ASSOCIATE ADDENDUM:** The West Virginia State Government HIPAA Business Associate Addendum (BAA), approved by the Attorney General, is available online at www.state.wv.us/admin/purchase/vrc/hipaa.htm and is hereby made part of the agreement. Provided that the Agency meets the definition of a Cover Entity (45 CFR §160.103) and will be disclosing Protected Health Information (45 CFR §160.103) to the vendor.
14. **CONFIDENTIALITY:** The vendor agrees that he or she will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in <http://www.state.wv.us/admin/purchase/privacy/noticeConfidentiality.pdf>.
15. **LICENSING:** Vendors must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, and the West Virginia Insurance Commission. The vendor must provide all necessary releases to obtain information to enable the director or spending unit to verify that the vendor is licensed and in good standing with the above entities.
16. **ANTITRUST:** In submitting a bid to any agency for the State of West Virginia, the bidder offers and agrees that if the bid is accepted the bidder will convey, sell, assign or transfer to the State of West Virginia all rights, title and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to the bidder.

I certify that this bid is made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, or person or entity submitting a bid for the same material, supplies, equipment or services and is in all respects fair and without collusion or fraud. I further certify that I am authorized to sign the certification on behalf of the bidder or this bid.

INSTRUCTIONS TO BIDDERS

1. Use the quotation forms provided by the Purchasing Division. Complete all sections of the quotation form.
2. Items offered must be in compliance with the specifications. Any deviation from the specifications must be clearly indicated by the bidder. Alternates offered by the bidder as **EQUAL** to the specifications must be clearly defined. A bidder offering an alternate should attach complete specifications and literature to the bid. The Purchasing Division may waive minor deviations to specifications.
3. Unit prices shall prevail in case of discrepancy. All quotations are considered F.O.B. destination unless alternate shipping terms are clearly identified in the quotation.
4. All quotations must be delivered by the bidder to the office listed below prior to the date and time of the bid opening. Failure of the bidder to deliver the quotations on time will result in bid disqualifications: Department of Administration, Purchasing Division, 2019 Washington Street East, P.O. Box 50130, Charleston, WV 25305-0130
5. Communication during the solicitation, bid, evaluation or award periods, except through the Purchasing Division, is strictly prohibited (W.Va. C.S.R. §148-1-6.6).



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
GSD116409

PAGE
2

ADDRESS CORRESPONDENCE TO ATTENTION OF
KRISTA FERRELL 304-558-2596

VENDOR

RFQ COPY
 TYPE NAME/ADDRESS HERE

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

SHIP TO

DEPARTMENT OF ADMINISTRATION
 GENERAL SERVICES
 BUILDING 1 ROOM MB60
 1900 KANAWHA BOULEVARD, EAST
 CHARLESTON, WV
 25305-0123 304-558-2317

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
08/19/2010				

BID OPENING DATE: 09/15/2010 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
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I HEREBY ACKNOWLEDGE RECEIPT OF THE FOLLOWING CHECKED ADDENDUM(S) AND HAVE MADE THE NECESSARY REVISIONS TO MY PROPOSAL, PLANS AND/OR SPECIFICATION, ETC.

ADDENDUM NO. S:

- NO. 1
- NO. 2
- NO. 3
- NO. 4
- NO. 5

I UNDERSTAND THAT FAILURE TO CONFIRM THE RECEIPT OF THE ADDENDUM(S) MAY BE CAUSE FOR REJECTION OF EOIS.

VENDOR MUST CLEARLY UNDERSTAND THAT ANY VERBAL REPRESENTATION MADE OR ASSUMED TO BE MADE DURING ANY ORAL DISCUSSION HELD BETWEEN VENDOR'S REPRESENTATIVES AND ANY STATE PERSONNEL IS NOT BINDING. ONLY THE INFORMATION ISSUED IN WRITING AND ADDED TO THE SPECIFICATIONS BY AN OFFICIAL ADDENDUM IS BINDING.

[Handwritten Signature]

 SIGNATURE

Paradigm Architecture, Inc.

 COMPANY

September 14, 2010

 DATE

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>[Signature]</i>	TELEPHONE 304.284.5015	DATE September 14, 2010
TITLE President	FEBN 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
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<p>NOTE: THIS ADDENDUM ACKNOWLEDGEMENT SHOULD BE SUBMITTED WITH THE EOI.</p> <p>REV. 09/21/2009</p> <p>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.</p> <p style="text-align: center;">NOTICE</p> <p>A SIGNED EOI MUST BE SUBMITTED TO:</p> <p style="text-align: center;">DEPARTMENT OF ADMINISTRATION PURCHASING DIVISION BUILDING 15 2019 WASHINGTON STREET, EAST CHARLESTON, WV 25305-0130</p> <p>THE EOI SHOULD CONTAIN THIS INFORMATION ON THE FACE OF THE ENVELOPE OR THE EOI MAY NOT BE CONSIDERED:</p> <p>SEALED EOI</p> <p>BUYER: KRISTA FERRELL-FILE 21</p> <p>EOI. NO.: GSD116409</p> <p>EOI OPENING DATE: 09/15/2010</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE	TELEPHONE	DATE
	304.284.5015	September 14, 2010
TITLE	FEBN	ADDRESS CHANGES TO BE NOTED ABOVE
President	63-1263568	

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DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
09/07/2010				

BID OPENING DATE: 09/15/2010 BID OPENING TIME 01-30PM

LINE	QUANTITY	UOP	CAT NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
ADDENDUM NO. 1						
THIS ADDENDUM IS ISSUED TO:						
1.) PROVIDE ANSWERS TO ALL TECHNICAL QUESTIONS SUBMITTED IN ACCORDANCE WITH THE PROVISIONS OF THE ORIGINAL EXPRESSION OF INTEREST (GSD116409), AND						
2.) ADD BUILDING LAYOUT DRAWING						
EOI OPENING DATE REMAINS: 09/15/2010						
EOI OPENING TIME REMAINS: 1:30 PM						
***** END ADDENDUM NO. 1 *****						
0001	1	LS		906-07		
A&E SERVICES: WV REHAB CENTER RENOVATIONS						
***** THIS IS THE END OF RFQ GSD116409 ***** TOTAL:						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>[Signature]</i>	TELEPHONE 304.284.5015	DATE September 14, 2010
TITLE President	FAX 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 exceeds 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: [Signature] Date: September 14, 2010

State of West Virginia

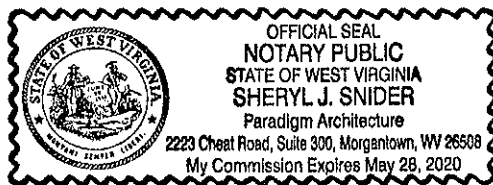
County of Monongalia, to-wit:

Taken, subscribed, and sworn to before me this 14th day of September, 2010.

My Commission expires May 28, 2020.

AFFIX SEAL HERE

NOTARY PUBLIC [Signature: Sheryl J. Snider]



Project & Design Approach



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.



Glade Springs Resort



Chestnut Ridge Church

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.

Project & Design Approach



Project Management (continued)

Paradigm Architecture has successfully delivered many complex projects with members of this team, many with repeat clients. Some of the many compliments that we receive are that "Paradigm always provides close, personal service" and is "...quick to respond." "It doesn't matter how big or small the project is, all I have to do is call Paradigm Architecture and they will be there." We are excited about the opportunity to start a new relationship and working closely with you! Below is a brief outline of our team's steps that will be involved:



Glade Springs Resort



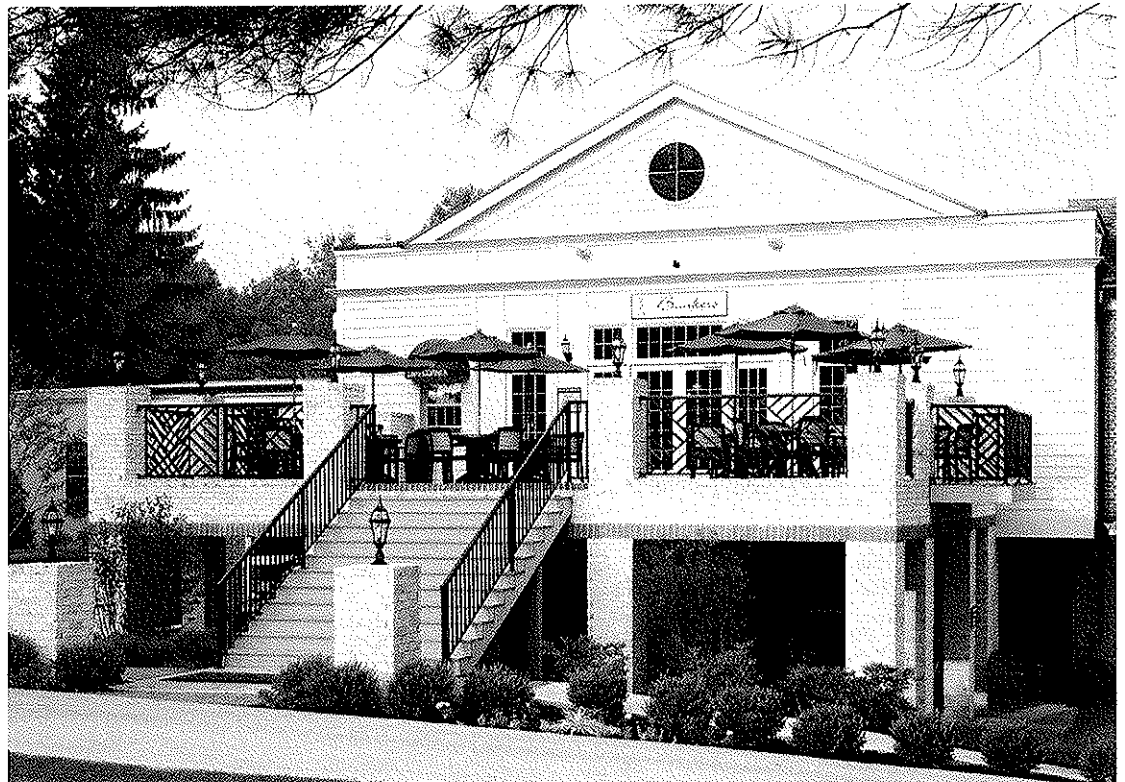
Glade Springs Resort

Basic Information Gathering & Assessment of Existing Conditions

Initially, a great deal of time will be spent by the entire design team in an information gathering phase. This will include "on site" time by most members of our team. Based on available information, this will include but not be limited to:

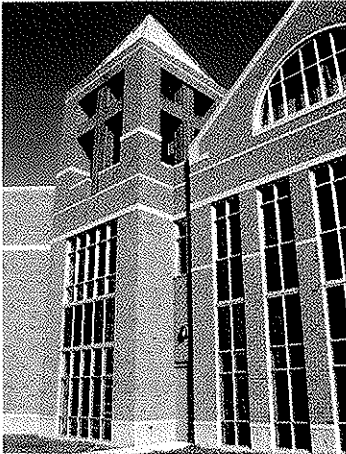
- Review of existing drawings
- Verification of existing conditions
- Existing Facility Assessment
- Interviews with applicable staff to develop facility program
- Review established project goals/ parameters, including preliminary program, budget, schedule, and design goals.

Glade Springs Clubhouse



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

Project & Design Approach



Chestnut Ridge Church

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 3-dimensional 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.

Procurement

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 previously.

*Glade
Springs
Resort*



Project & Design Approach



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 RFIs 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.

Project Similarity / Issues Resolved—See Project Narratives—Tab 5



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.

Quality Control & Management

Project 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

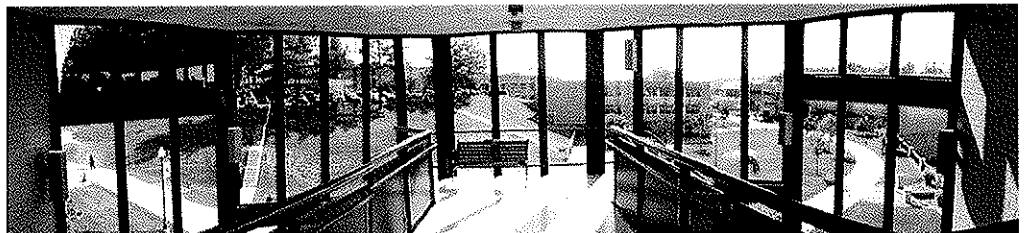


Fairmont State University
Classroom

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



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

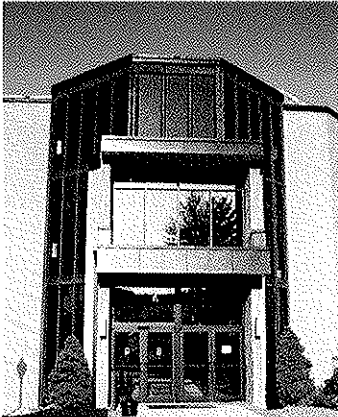
Quality Control & Management

Project Management



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.



Fairmont State University
Hunt Haught Hall

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.

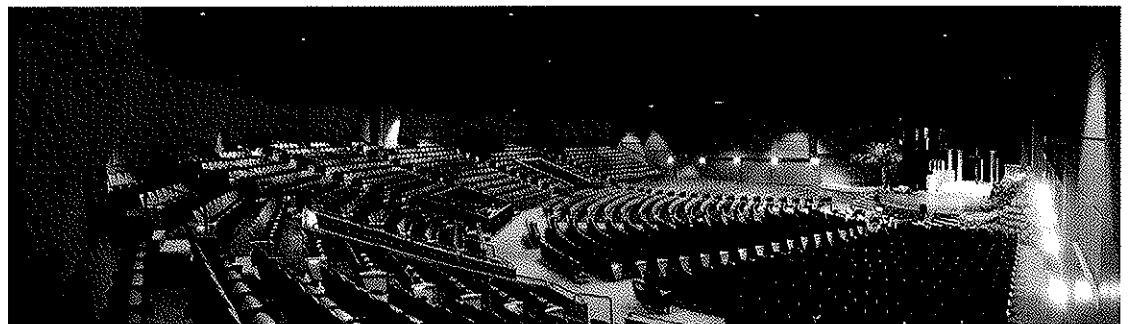


Fairmont State University
Hunt Haught Hall

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.

Chestnut
Ridge
Church



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

Quality Control & Management

Project Management

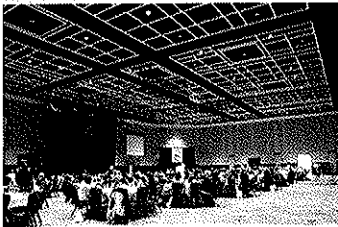


Document Review and Coordination

In addition to using BIM, Paradigm has a tested methodology of coordination reviews and “check set” submissions throughout various stages of the project. These typically fall at the conclusion of Schematic Design, Design Development, 50% Construction Documents, and 95% Construction Documents. The Project Manager will carefully review and coordinate the documents from all disciplines and issue markups back to the team for incorporation. These checks will include (but are not limited to) coordination of utility layouts above ceiling with the structural systems, all vertical risers, life safety and code reviews, building program backchecks, specifications, and incorporation of the Owner's **Design Guidelines and Standards**. The Owner will be given an identical “check set” at each submission for review and comment. In addition to Paradigm's existing coordination methodology, we have adopted and are incorporating the RediCheck Review System. “. . . Proven to reduce costs and avoid unnecessary delays . . . RediCheck is the only coordination review system recognized by both the American Institute of Architects and the American Consulting Engineers Council.” At the Owner's request, an independent Quality Control Review can be conducted by RediCheck Associates.



Morgantown Event Center



Morgantown Event Center

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



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

Quality Control & Management

Schedule / Costs



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 immediately be taken as necessary.



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.

Two
Waterfront
Place
Hotel &
Conference
Center



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

Quality Control & Management

Schedule / Costs



Cost Control



Glade Springs Clubhouse

Paradigm Architecture understands the importance of the project budget and takes great pride in being able to meet these budgets. Project budget is not just the construction budget. We assist the owner in reviewing all aspects of the total project budget, including pre-design services, such as surveys, field investigations and geotechnical explorations, furniture, fixtures, and equipment (FFE) packages, and project closeout. Due to our vast experience with multiple project delivery types, include design-build and construction management, we have firsthand experience with monitoring costs throughout the entire project. In our nearly ten years of operations, we have never had an Owner "reject all bids" due to cost overruns. Many times, to help control costs on the project, we will work with the Owner early on to establish a base bid package that will deliver within budget. We will then establish a series of alternate packages that can be selected from once bids are received. We will also work with the Owner to establish an Owner's contingency allowance for those unforeseen issues that may arise.

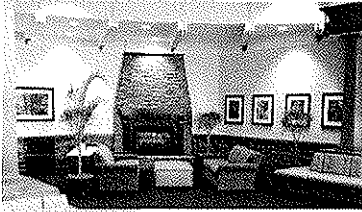
Using internal cost data, and national databases, we are able to provide the Owner rough order of magnitude and schematic cost estimating for initial project development. We often conduct feasibility studies for clients to help them with initial project evaluations. For projects under \$1 million, we 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.

*Two
Waterfront
Place
Hotel &
Conference
Center*



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

Firm / Team Qualifications



Two Waterfront Place
Hotel & Conference Center

- A. Name: Paul A. Walker, AIA
Address: Paradigm Architecture, Inc.
2223 Cheat Road, Suite 300
Morgantown, WV 26508
Phone: 304.284.5015 ext. 1
Email: pwalker@paradigm-arch.com

Signature: _____

A handwritten signature in dark ink, appearing to read "Paul A. Walker", written over a horizontal line.

- B. Resumes—See following resumes for Paradigm Architecture.
- C. Design Team—See Tab 4 for Project Team and Tabs 7, 8, and 9 for Consultant Experience
- D. Firm's Ability: 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.



Two Waterfront Place
Hotel & Conference Center

Firm / Team Qualifications



*Two Waterfront Place
Hotel & Conference Center*

E. Firm's Acceptance: Paradigm Architecture understands and accepts that any and all work produced as a result of the contract will become the property of the Agency and can be used or shared by the Agency as deemed appropriate.

F. Design Conformance: Paradigm Architecture designs in conformance with all local, State, and Federal regulations applicable to the project. We have longstanding relationships with code officials and work closely with them throughout the life of the project. 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 LEED Certified. 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.

G. Litigation: Paradigm Architecture has filed a formal complaint in Jefferson County, Alabama, for nonpayment for services rendered on one project. Otherwise, Paradigm Architecture and its staff have not been involved in any litigation or arbitration. Our firm and its staff are free from all obligations; interest and regulatory problems that might be or appear to give rise to any conflicts of interest.

Insurance Coverage

Commercial General Liability—\$1 million per occurrence; \$2 million aggregate

Auto Liability—\$1 million combined single limit

Excess Umbrella—\$1 million per occurrence; \$1 million aggregate

Professional Liability—\$1 million per occurrence

*Two Waterfront
Place
Hotel &
Conference
Center*



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

Paul A. Walker, AIA

President, 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

WV / 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

The Jackson Kelly Office Building
Morgantown, West Virginia
Completed: Summer 2002
Cost: \$4.5 Million (shell)

Fairmont State University
Hardway Hall
Fairmont, West Virginia
Completed: Fall 2010
Cost: \$50,000

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

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

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

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

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

Grant T. Gramstad, AIA

Project Manager



Mr. Gramstad has sixteen years of experience in the design industry as an intern and registered architect. He has been with Paradigm Architecture since its inception in November 2000. His roles have included project management, design, and supervision of small to mid-sized architectural projects. Project experience includes commercial, corporate, educational, governmental, healthcare, industrial, institutional, recreational, and residential.

Architectural Registration

Alabama

**The Jackson Kelly Office Building
Morgantown, West Virginia**
Completed: Summer 2002
Cost: \$4.5 Million (shell)

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

Education

Tulane University
New Orleans, Louisiana
Master of Architecture
2004

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

**Russell Medical Center
Additions and Alterations
Alexander City, Alabama**
Completed: Ongoing
Cost: Ranges from \$200,000 to \$4.1 Million

Tulane University
New Orleans, Louisiana
Bachelor of Architecture
Salutatorian, 1993

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

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

University of Bath
Bath, England
Junior Year Abroad
1991-1992

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

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

Professional, Civic and Other Activities

American Institute
of Architects

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

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

Certified Construction
Contract Administrator

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

**George H. Lanier Memorial Hospital
Additions and Renovations
Valley, Alabama**
Completed: Ongoing
Cost: \$8.1 Million

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

**Birmingham Coca-Cola
Bottling Company
Miscellaneous Renovations and Additions
Birmingham, Alabama**
Completed: 2001 thru 2007
Cost (cumulative): \$1.5 Million

**The View at the Park
Morgantown, West Virginia**
Completed: Summer 2004
Cost: \$6 Million

**The Suncrest Corporate Center
Morgantown, West Virginia**
Completed: Spring 2001
Cost: \$1.1 Million

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 Masterplan
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 and Renovations
Hickory, North Carolina**
Estimated Completion: Spring 2012
Cost: \$79 Million

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

**University of South Carolina*
Discovery I Biomedical Research Facility
Columbia, South Carolina**
Completed: Winter 2008
Cost: \$12 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'ē-dīm') n. An example that serves as pattern or model.

Steve Konya II

Construction Administrator



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

WVU Stewart Hall
Morgantown, West Virginia
Completed: Winter 2008
Cost: \$250,000

**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

Tygar's Valley Middle/High School*
Morgantown, West Virginia
Completed: Fall 2001
Cost: \$3.6 Million

Hampshire High School*
Additions and Renovations
Romney, West Virginia
Completed: 1997
Cost: \$4.8 Million

Tucker County High School*
Thomas, West Virginia
Completed: 2008
Cost: \$1.2 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

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

WV Veterans Nursing Facility*
Clarksburg, West Virginia
Completed: 2008
Cost: \$21.8 Million

**William R. Sharpe Jr. Hospital
New Transitional Facility***
Weston, West Virginia
Completed: 2006
Cost: \$2 Million

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

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

Project Organization



A. Office Locations: Location where work will be performed and managed is in green. Organizational chart is on the following page.



*Two Waterfront Place
Condominiums*

Paradigm Architecture, Inc. – 2223 Cheat Rd., Ste. 300, Morgantown, WV 26508
2450 Valleydale Road, Suite 150, Birmingham, AL 35244

Terradon Corporation – 401 Jacobson Drive, Poca, WV 25159
PO Box 519, Nitro, WV 25143
425 N. Jefferson Street, PO Box 1635, Lewisburg, WV 24901
5310 Markel Road, Suite 102, Richmond, VA 23230

Allegheny Design Services – 102 Leeway Street, Morgantown, WV 26505

ZDS Design/Consulting Services – 91 Smiley Drive – St. Albans, WV 25177

Team Assignments:



*Two Waterfront Place
Hotel & Conference Center*

Paradigm Architecture, Inc.

Paul A. Walker, AIA – Principal-in-Charge
Grant Gramstad, AIA – Project Manager
Todd G. Christopher, AIA – Project Architect
Steve Konya – Contract Administrator

Terradon Corporation

Greg Fox, ASLA, LEED^{AP} – Department Head, Land Development
Pete Williams, ASLA – Landscape Architect

Allegheny Design Services

David R. Simpson, PE
Michael L. Sipe, EI
Jason D. Robinson, EI

ZDS Design/Consulting Services

Todd A. Zackwieja, PE, CFM, LEED^{AP} – Principal-in-Charge
Ted T. Zachwieja – Principal-in-Charge, Construction Administration
Daniel H. Kim, PhD – Principal, Management Services
James E. Watters – Project Manager, Production Manager
Mark A. Moore, PE – Project Manager, Electrical/Mechanical/Plumbing
David G. Dial, PE – Senior MEP Engineer
James W. Lowry, EI – HVAC, Plumbing, and Fire Protection Designer
Marshall Cochran – MEP CAD Designer/Technical Analyst

Project Organization



B. Team's Ability to Provide Services Within the Project Time Frame:

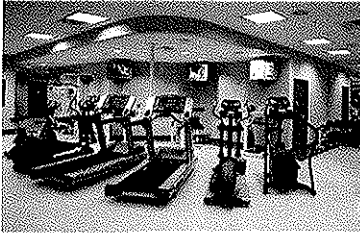
Paradigm Architecture is confident that we can provide a high level of service in a timely manner. We have historically managed multiple complex projects with significant construction budgets.

SUGGESTED PROJECT SCHEDULE:

Award/Negotiations	2 Weeks
Review of Project Program/Site Investigation	2 Weeks
Schematic Design	6 Weeks
Cost and Design Review with Owner	2 Weeks
Design Development	8 Weeks
Cost and Design Review with Owner	2 Weeks
Construction Documents	10 Weeks
Final Cost and Review with Owner	2 Weeks
Advertisement for Bids/Bid Phase	5 Weeks
Award Contract for Construction/Negotiations	2 Weeks
Construction Administration	52 Weeks
Final Inspection/Occupancy	2 Weeks

TOTAL PROJECT DURATION IS ROUGHLY TWO YEARS

One year Warranty Inspection

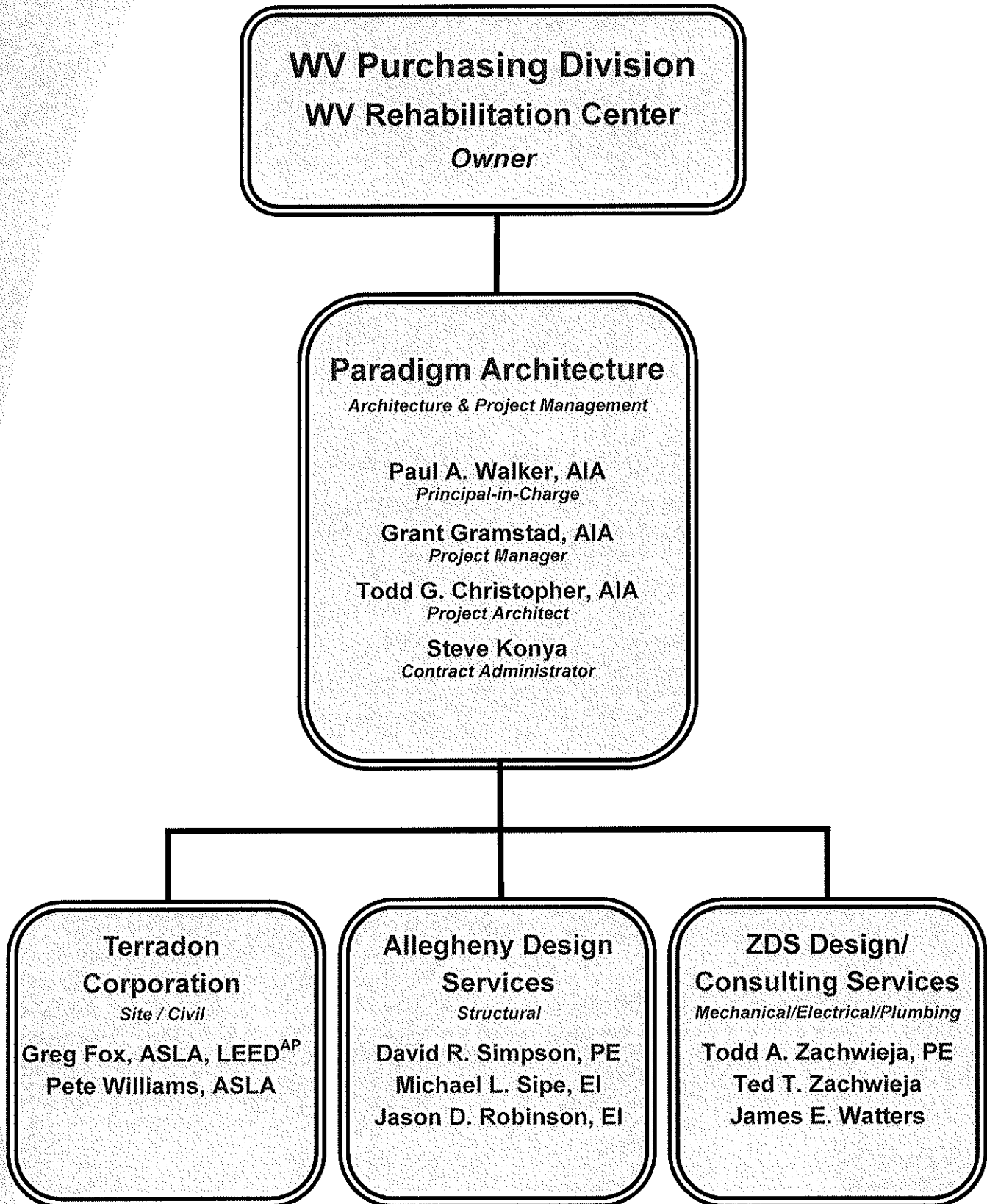


*Two Waterfront Place
Hotel & Conference Center*



*Two Waterfront
Place
Hotel &
Conference
Center*

Organization Chart



Paul A. Walker, AIA

President, 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.

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Knoxville, TN

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1982

Professional, Civic and Other Activities

American Institute
of Architects

Board Member
Chestnut Ridge Church

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Morgantown, West Virginia
Completed: Summer 2002
Cost: \$4.5 Million (shell)

Fairmont State University
Hardway Hall
Fairmont, West Virginia
Completed: Fall 2010
Cost: \$50,000

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
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and Parking Garage
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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

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

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

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

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

Grant T. Gramstad, AIA

Project Manager



Mr. Gramstad has sixteen years of experience in the design industry as an intern and registered architect. He has been with Paradigm Architecture since its inception in November 2000. His roles have included project management, design, and supervision of small to mid-sized architectural projects. Project experience includes commercial, corporate, educational, governmental, healthcare, industrial, institutional, recreational, and residential.

Architectural Registration

Alabama

**The Jackson Kelly Office Building
Morgantown, West Virginia**
Completed: Summer 2002
Cost: \$4.5 Million (shell)

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

Education

Tulane University
New Orleans, Louisiana
Master of Architecture
2004

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

**Russell Medical Center
Additions and Alterations
Alexander City, Alabama**
Completed: Ongoing
Cost: Ranges from \$200,000 to \$4.1 Million

Tulane University
New Orleans, Louisiana
Bachelor of Architecture
Salutatorian, 1993

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

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

University of Bath
Bath, England
Junior Year Abroad
1991-1992

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

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

Professional, Civic and Other Activities

American Institute
of Architects

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

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

Certified Construction
Contract Administrator

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

**George H. Lanier Memorial Hospital
Additions and Renovations
Valley, Alabama**
Completed: Ongoing
Cost: \$8.1 Million

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

**Birmingham Coca-Cola
Bottling Company
Miscellaneous Renovations and Additions
Birmingham, Alabama**
Completed: 2001 thru 2007
Cost (cumulative): \$1.5 Million

**The View at the Park
Morgantown, West Virginia**
Completed: Summer 2004
Cost: \$6 Million

**The Suncrest Corporate Center
Morgantown, West Virginia**
Completed: Spring 2001
Cost: \$1.1 Million

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 Masterplan
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 and Renovations**
Hickory, North Carolina
Estimated Completion: Spring 2012
Cost: \$79 Million

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

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

Construction Administrator



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

WVU Stewart Hall
Morgantown, West Virginia
Completed: Winter 2008
Cost: \$250,000

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

Tygarts Valley Middle/High School*
Morgantown, West Virginia
Completed: Fall 2001
Cost: \$3.6 Million

Hampshire High School*
Additions and Renovations
Romney, West Virginia
Completed: 1997
Cost: \$4.8 Million

Tucker County High School*
Thomas, West Virginia
Completed: 2008
Cost: \$1.2 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

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

WV Veterans Nursing Facility*
Clarksburg, West Virginia
Completed: 2008
Cost: \$21.8 Million

William R. Sharpe Jr. Hospital
New Transitional Facility*
Weston, West Virginia
Completed: 2006
Cost: \$2 Million

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

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

Key Personnel

Greg Fox, ASLA, LEED

Department Head—Land Development



TERRADON'S Landscape Architect services are managed by Gregory D. Fox, ASLA, LEED. Mr. Fox, a native of West Virginia and a graduate of West Virginia University with a Bachelor of Science in Landscape Architecture and a Bachelor of Arts in Geography (Planning) has gained a wide range of experience with a variety of project types.

Education

- » B.S. Landscape Architecture, West Virginia University
- » B.A. Geography (Planning) West Virginia University

Work Experience

- » 2000 - Present
TERRADON Corporation
- » 1996-2000
Martin Boal Anthony & Johnson Architects
- » 1993-1996
Site Design
- » 1989-1993
E.G. & G. Inc., OH
- » 1988-1989
PSC Engineers, PA

Certifications

- » Landscape Architect: West Virginia, Ohio, North Carolina, South Carolina, Pennsylvania, Virginia

Project Experience

Mr. Fox has been responsible for a number of notable recreation, commercial and educational site development projects since joining TERRADON in February of 2000. His group earned a 2001 Engineering Excellence Award from the West Virginia Association of Consulting Engineers for the master planning of an extreme sports park at WVUIT in Montgomery.

They also earned a 2002 Engineering Excellence Award from the West Virginia Association of Consulting Engineers and a 2002 Merit Award from the American Society of Landscape Architects for the City of Fairmont Riverfront Master plan project. Most recently, the 2005 Gold Award from the American Council of Engineering Companies was presented to the firm for the site design of the new West Virginia Division of Environmental Protection Headquarters Building.

Other notable projects include the Marshall University Parking Garage, the West Virginia Public Service Commission Parking Facility, the Home Depot development at Southridge Center, and over 25 new schools located throughout West Virginia.

Mr. Fox has managed over 30 West Virginia park and recreation projects since joining TERRADON in 2000.

Key Personnel

Pete Williams, ASLA

Landscape Architect



Mr. Williams is a native of West Virginia and a graduate of West Virginia University with a Bachelor of Science in Landscape Architecture. His responsibilities include landscape architectural design, grading and storm water drainage design, the design of pedestrian circulation systems and related amenities, roadway design, site planning, and quality control. Mr. Williams is registered as a professional Landscape Architect in West Virginia (#226) with more than 11 years of experience.

Education

- » B.S Landscape Architecture, West Virginia University

Work Experience

- » 2000 - Present
TERRADON Corporation
- » 1993-2000
Chapman Technical Group

Certifications

- » Landscape Architect: West Virginia, Ohio,

Project Experience

Mr. Williams has been responsible for a number of notable recreation, commercial, and educational site development projects since joining TERRADON in July of 2000.

He was project manager for the master planning of an extreme sports park at WVUIT in Montgomery which earned a 2001 Engineering Excellence Award from the West Virginia Association of Consulting Engineers.

Other notable projects include the new West Virginia Division of Environmental Protection office building in Kanawha City, the West Virginia Public Service Commission Parking Garage and Plaza, the Marshall University Parking Garage, and numerous new parks and schools located throughout West Virginia.



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

Web: 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
Ohio
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
Peter Vallas Associates, Inc. “Fire Investigation Certification” – July 16, 2010 – Ft. Lauderdale, FL

Professional Experience:

Responsible for project management and design at Allegheny Design Services. Experience includes over 30 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
Morgantown Event and Conference Center, Morgantown, WV
Allegheny Energy Transmission Center, Fairmont 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
Respironics 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.



Allegheny Design Services

Structural & MEP Engineering

102 Leeway Street
Morgantown, WV 26505
Phone: (304)599-0771
Fax: (304)599-0772

E-mail: Mike@AlleghenyDesign.com
Web: 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:

Allegheny Energy, Fairmont, 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
GSA Sabraton (USDA), 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 27, 2006
ASCE - Steel Framed Buildings – May 11, 2007
AISC - Façade Attachments to Steel Frames – September 20, 2007
ASCE - Reinforced Masonry: Design and Construction – November 8, 2007
Lincoln Electric Company – Blodgett's Welding Design Seminar – June 17-20, 2008
ASCE – Earth Retaining Structures, Selection, Design, Construction and Inspection – October 22-23, 2009



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Morgantown, WV 26505

Phone: (304)599-0771

Fax: (304)599-0772

E-mail: Jason@AlleghenyDesign.com

Web: 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
Fairmont AFRC, Fairmont, 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
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 20, 2007
ASCE - Reinforced Masonry: Design and Construction - November 8, 2007
TSN - Cold-Formed Steel Seminar – Load Bearing and Curtain Wall Systems - December 4, 2008
Lincoln Electric Co. - Blodgett's Welding Design Seminar - October 13-16, 2009

Primary MEP Contact

Todd Zachwieja, Principal

Mobile phone (304) 545-4550

Secondary MEP Contact

Ted T. Zachwieja, Principal

Mobile phone (304) 552-5724

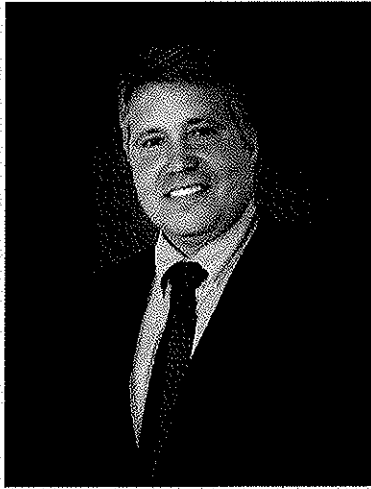
ZDS was formed to provide quality engineering and consulting services specializing in:

- Design of mechanical systems and electrical systems.
- Building indoor air quality survey and analysis.
- Energy management and conservation services.
- Commissioning for new and renovated systems in commercial, educational, industrial and health care facilities.

ZDS approaches engineered systems improvements from the building owner operator's perspective, focusing on practicality, cost effectiveness, energy efficiency, reliability, operability, maintainability of the systems and timely implementation of projects to minimize disruption on existing facilities. We concentrate on optimizing and utilizing the existing systems prior to recommending the purchase of new equipment when upgrading a facility. Actual requirements of existing systems are analyzed and considered in addition to the "design" requirements. Our staff listens to their clients needs through their extensive interaction with the facility operators and the key decision-makers. We believe this approach enhances the design of new systems and ensures that the systems will be practical and functional.

ZDS is a team of professionals capable of meeting a diverse range of needs of facility professionals in the building design, construction and operations. The principals each have specialties in certain aspects that relate to meeting the needs of the building owners and operators. Mr. Ted T. Zachwieja's over 45 years of experience in mechanical and electrical design bring the depth of skills necessary to make the construction and design process operate effectively. Mr. Todd A. Zachwieja's project management skills with his extensive technical strengths in mechanical/electrical engineering and experience in indoor air quality, energy management and commissioning complement the traditional design needs. Mr. Daniel H. Kim's extensive management experience with some of the nation's largest companies provides us with important conceptual planning and organizational understanding. Ms. Lori Zachwieja's accounting and financial management skills provide the in house experience to operate an efficient and effective company to better serve our clients.

ZDS continues to grow and is in the process of opening a Morgantown Office with a Professional Engineer heading that office. Our current project team includes the following to meet the challenges of our client's building design and operating needs.



Todd (Ted) A. Zachwieja
PE, C.E.M., LEED AP

Chief Executive Officer
Principal-in-Charge
M/E/P Design Project Manager

Qualifications

Todd has more than 28 years of experience in the design, construction management, and specifications for mechanical engineering, heating, ventilating, air conditioning, plumbing, electrical, and lighting, as well as indoor air quality analysis and building system commissioning for educational, commercial, industrial and health care facilities. His specialties include mechanical engineering, HVAC systems master planning, conceptual design, energy conservation program development, commissioning and IAQ analysis relating to HVAC systems. He has extensive experience in industrial, commercial, hospitals and educational design. Some of his project experience includes new Mercer County Courthouse – Princeton, Kanawha County Commission – 120,000 sf additions/renovations for the Judicial Annex/Kanawha County Courthouse – Charleston, Laidley Towers – Charleston, renovations to the WV State Capitol Complex, Cultural Center HVAC renovations, Union Carbide, United Center – Charleston, Phillip Morris USA, Rhone-Poulenc, Toyota, Olin Corporation, Walker Machinery, West Virginia Air & Army National Guard, Bank One – WV, Kohl's, Sears, West Virginia Public Service Commission Headquarters, and Yeager Airport. He also designed one of the largest geothermal heat pump applications in the mid-Atlantic region, and commissioned HVAC systems and mechanical engineering at many General Motors' facilities in North America.

Some of his health care experience includes millions in renovation and new construction design for Charleston Area Medical Center, including commissioning of Charleston Area Medical Center's \$41 million Surgery Replacement Center and many projects at General Division, Memorial Division, and Women & Children's Hospital. Other health care experience includes Bluefield Regional Medical Center, Hopemont Hospital, Monongalia General Hospital, Montgomery General Hospital, United Hospital Center, St. Mary's Hospital, Summersville Memorial Hospital, Thomas Memorial Hospital, Webster Memorial Hospital, Cabell Huntington Hospital, Welch Emergency Hospital, Surgicare Center, VA Hospital - Clarksburg, VA Hospital - Huntington, Mercy Medical Center, Wayne Memorial Hospital, and Webster Memorial Hospital.

Todd also has experience in providing M/E design for the following colleges and universities including Alderson Broadus College, Bluefield State College, Concord University, Fairmont State College, Harvard University, Marshall University, Ohio University's Athens & Chillicothe campuses, Southern West Virginia Community & Technical College, University of California-Davis, University of Charleston, Washington & Lee University, West Virginia Wesleyan College, and West Virginia University. He was recognized nationally for his work with Ohio University in development of a performance contracting program that is anticipated to save \$2.5 million annually in energy and operating costs.

Other experience includes providing M/E/P design for schools in the following counties: Calhoun, Clay, Grant, Greenbrier, Hardy, Harrison, Jackson, Kanawha, Lewis, Logan, Marion, McDowell, Mercer, Mingo, Monroe, Ohio, Pocahontas, Putnam, Raleigh, Randolph, Ritchie, Summers, Taylor, Tucker, Upshur, Webster, and Wyoming. Some of his project experience includes the development and design of a pilot geothermal heat pump HVAC with variable speed pumping system at Webster County High School, which reduced electric bills by more than 40% while meeting IAQ requirements.

Prior to joining ZDS, Todd Zachwieja coordinated millions in comprehensive energy conservation programs resulting in annual energy savings of millions per year and managed a profitable regional office for one of the country's largest energy service companies. He also developed computer programs for building energy analysis and monitoring and presented technical papers at regional and national conferences.

Education

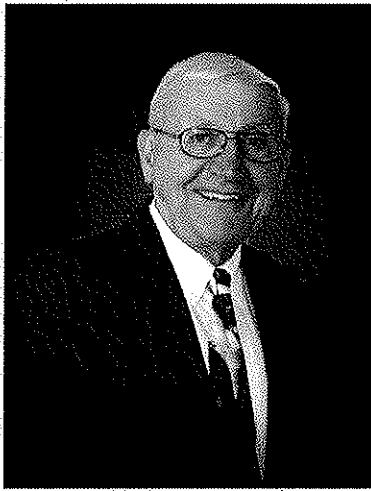
Bachelor of Science in Mechanical Engineering from West Virginia Institute of Technology in 1982
Masters of Science in Engineering Management from the University of West Virginia College of Graduate Studies in 1989

Registrations

Professional Engineer, West Virginia, No. 10,127
Certified Energy Manager (C.E.M.), National Certification
LEED® Accredited Professional, National Certification through USGBC
Professional Engineer, Georgia, No. 18253
Professional Engineer, Kentucky, No. PE-17961
Professional Engineer, North Carolina, No. PE-017445
Professional Engineer, Ohio, No. E-53587
Professional Engineer, Pennsylvania, No. PE-040929-R
Professional Engineer, South Carolina, No. 25985
Professional Engineer, Virginia, No. 0402 025427

Professional Affiliations

Charter member Mountaineer Chapter of American Society of Heating Refrigeration and Air Conditioning Engineers (ASHRAE)
Served as ASHRAE's Energy and Technical Affairs Chairman for 6 years
Recognized by the International Who's Who of Professionals
Recognized nationally as West Virginia's Business Man of the Year
Recognized nationally in 2007 as a "Legend in Energy"
Recognized nationally in 2008 as a "Charter Legend in Energy"
Charter life member of the Association of Energy Engineers
Professional Affiliate Member of the American Institute of Architecture
Member of the American Association of Hospital Engineers
Member of the National Society of Professional Engineers
Member of the National Society of Plumbing Engineers
Member of the International Code Council
Contributing editor and served on the Editorial Review Panel for "The Handbook of Building Management and Indoor Air Quality," "Ventilation for a Quality Dining Experience," INvironment Professional, Power Prescriptions and other publications and articles dealing with Indoor Air Quality (IAQ) and MEP engineering systems
Presented at regional and national conferences including the National System Commissioning Conference



Ted T. Zachwieja

**Principal-in-Charge
Construction Administration**

Qualifications

Ted's responsibilities include over 45 years of experience in mechanical and electrical systems design and construction administration. His specialties include the design and development of mechanical and electrical systems, master planning and budgeting for mechanical and electrical systems, and management of complex design and construction projects. He is also a Codes and Standards Specialist.

Ted has been involved in all aspects of mechanical and electrical design and construction since 1958, including machine design, structural design and design of heating, ventilating, air conditioning, plumbing, fire protection and electrical systems. His experience includes work for U.S. Steel, Union Carbide, Rhone-Poulenc, Bluefield Regional Medical Center, Charleston Area Medical Center, United Hospital Center, Kanawha County Schools, Marshall University, West Virginia Capitol Complex, West Virginia Institute of Technology, West Virginia University, Bank One and many others in the private sector. Ted's design regarding Chase Towers – Charleston included conducting a comprehensive energy audit, design of a Building Automation Energy Management System, HVAC renovations, design of flat plate heat exchanger system for the perimeter fan coil units and design of the boiler replacement.

Ted has been involved in the planning, design and construction administration of Concord University's Technology Center and Concord's campus medium voltage upgrades, Marshall University's Harris Hall renovations, Southern West Virginia Community & Technical College's renovations, West Virginia University's (WVU) White Hall and Armstrong Hall, WVU's Wise Library Sprinkler System, WVU's Chilled Water Loop Interconnect – Morgantown, Charleston Area Medical Center (CAMC), Memorial Division Chiller Replacement, CAMC's General Division Chiller Replacement, Variable Pumping System and Chillers Interconnect – Charleston, and many others. Throughout the years, Ted has worked on new and renovation projects such as West Virginia University Stadium and Forestry Building – Morgantown, addition and renovation of the air conditioning system for the West Virginia State Capitol Building – Charleston, Conley Hall and Science Building HVAC renovations and additions, West Virginia Institute of Technology - Montgomery, Indoor air quality (IAQ) and HVAC renovations of Andrew Jackson Junior High School for Kanawha County School Systems, Fume Hood Design and HVAC additions and renovations for Union Carbide - Charleston, and Rhone Poulenc - Institute, HVAC renovations for the Benedum Student Center at West Virginia Wesleyan College - Buchannon, Greenbrier East and Greenbrier West Schools, Mingo County Schools, Raleigh County Schools including new Shady Springs Middle School, new Trap Hill Junior High School, Academy of Career and Technology Center HVAC renovations, Marsh Fork Elementary renovations, Park Middle School renovations, Woodrow Wilson High School renovations, Randolph County's Elkins Middle School renovations, Pocahontas County High School (Geothermal) renovations, Wyoming County Schools, Tucker County Schools, Webster County High School, Glade Elementary/Middle School and Webster Springs Elementary School HVAC renovations (Geothermal) and exterior renovations, and various other secondary schools.

Ted was involved with the mechanical and electrical renovations for the State of West Virginia Library Commission Cultural Center as part of a total \$4.5 million project. The indoor air quality, temperature and humidity each were not in accordance with good design practices for this type of structure. ZDS was commissioned to correct these deficiencies while conserving energy.

Ted was selected as one of three engineers to train and teach a course designed by the Department of Energy and American Society of Heating, Refrigeration and Air Conditioning Engineers for emergency building temperature restrictions.

Prior to forming ZDS, Ted was regional manager for a hospital design firm and responsible for designing, construction management and project management for over \$200 million in hospital and health care facilities. The facilities were located over eastern United States. Some of his health care experience includes millions in renovation and new construction design for Charleston Area Medical Center's Special Care Facility. Other local health care experience includes Bluefield Regional Medical Center, Hopemont Hospital, Monongalia General Hospital, Montgomery General Hospital, United Hospital Center, St. Mary's Hospital, Summersville Memorial Hospital, Thomas Memorial Hospital, Webster Memorial Hospital, Cabell Huntington Hospital, Welch Emergency Hospital Surgicare Center, VA Hospital - Clarksburg, VA Hospital - Huntington, Mercy Medical Center, and Webster Memorial Hospital.

Professional Affiliations

Construction Specifications Institute (Charter Member)

American Society of Mechanical Engineers

American Society of Heating, Refrigeration & Air Conditioning Engineers

WV Mountaineer Chapter ASHRAE Past President and Charter Member

Association of Energy Engineers

Association of Hospital Engineers

WV Society of Hospital Engineers

Professional Affiliate Member of AIA

WV Association of Physical Plant Administrators



The Jackson Kelly Building

Location: Morgantown, WV

Description:

Designed to fit its historic context in the Wharf District, this office building houses multiple business tenants, including Jackson Kelly PLLC, DMJM Harris, Simpson & Osborne, MetLife, Luttner Financial, and National Biometric Security Project, with restaurant functions on the first floor.

Category(ies): New Construction in an historic Wharf district.

Construction Cost: \$4.5 Million (Shell) **Square Footage:** 50,000

Relevant Information: 2003 Excellence in Construction Award from the Associated Builders & Contractors, Inc.

Project Owner:

Platinum Properties, LLC
G. Richard Lane II, AICP
Morgantown, WV 26501
Phone: 304.284.5000

Prime General Contractor: The March-Westin Company

Completion Date: Spring 2002 **Percentage of Work Completed:** 100%

Successful Project Features/ Processes/Outcomes:

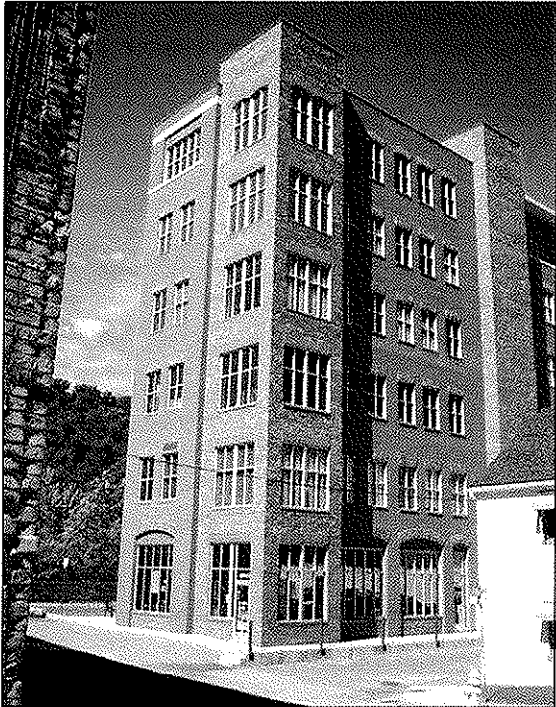
Program/Goals: Provide lease office space within the historic Wharf District within the city limits of Morgantown, WV. The Owner's wish to respect the historic character of the area created a need for a palette of materials; fenestration along with building massing that complimented the existing structures.

Site: The site is a triangular-shaped lot within the Wharf District. Site limitations included the unusual shaped lot along a formal street and a rail trail which runs along the Monongahela River. The formal street includes street design features established for the District by the City of Morgantown, WV.

Solution: Off-street parking on-site was not possible due the geometry of the lot. Therefore, the solution used an existing adjacent parking deck owned by the same Owner. The building design solution started with a zero lot line concept common in the district. This approach maximizes the available lease space with a limited site. The building exterior uses brick details and 2 different brick colors which are complimentary to surrounding structures. Fenestration size, shape, and placement mirror existing buildings. Views to Monongahela River and City are spectacular from within the building and from the rooftop terrace. While the final design solution fits the contexts of its historic roots and surroundings, this project starts a new dialogue for future projects.

The Jackson Kelly Building

Morgantown, West Virginia



Designed to fit its historic context in the Wharf District, this office building houses multiple business tenants, including Jackson Kelly PLLC, DMJM Harris, Simpson & Osborne, MetLife, Luttner Financial, and National Biometric Security Project, with restaurant functions on the first floor.

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

Owner: Platinum Properties, LLC

Design Architect: Paul A. Walker, AIA

Project Manager: David H. Snider, AIA

Project Architect: Grant T. Gramstad, AIA

Completed: Spring 2002

Cost: \$4.5 Million (Shell)

Size: 50,000 Square Feet

Delivery Type: Design-Build-Negotiated

Contractor: The March-Westin Company





Hardway Hall Fairmont State University

Location: Fairmont, WV

Description:

Various structural, waterproofing, and exterior improvements and/or repairs to the existing Hardway Hall Front Portico and steps on Fairmont State University's main campus.

Category(ies): Exterior Façade, Repair, Life Safety Compliance, Building Renovation

Construction Cost: \$350,000.00 **Square Footage:** 3,000

Relevant Information: Hardway Hall is listed on the National Register of Historic Places.

Project Owner:
Fairmont State Board of Governors
Rick Porto, VP
Administration and Fiscal Affairs
1201 Locust Avenue
Fairmont, WV 26554
Phone: 304.367.4100

Owner's Project Manager:
Jim Decker, Assistant VP
Physical Plant Director
Fairmont State University
1201 Locust Avenue
Fairmont, WV 26554
Phone: 304.367.4861

Prime General Contractor: Lombardi Development Company
Paul Lombardi
820 Donegal Drive East
Follansbee, WV 26037

Completion Date: Fall 2010 **Percentage of Work Completed:** 99%

Successful Project Features/ Processes/Outcomes:

Program/Goals: 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. All work will be carried out in accordance with the Secretary of Interior's Standards for the Rehabilitation of Historic Properties. Paradigm Architecture is coordinating with the State Historic Preservation Office throughout the duration of the project.

Site: Hardway Hall (formerly known as the Fairmont Normal School Administration Building) is located on the main campus of Fairmont State University in Fairmont (Marion County), WV. The original building was constructed in 1915 and was listed on the National Register of Historic Places in 1994.

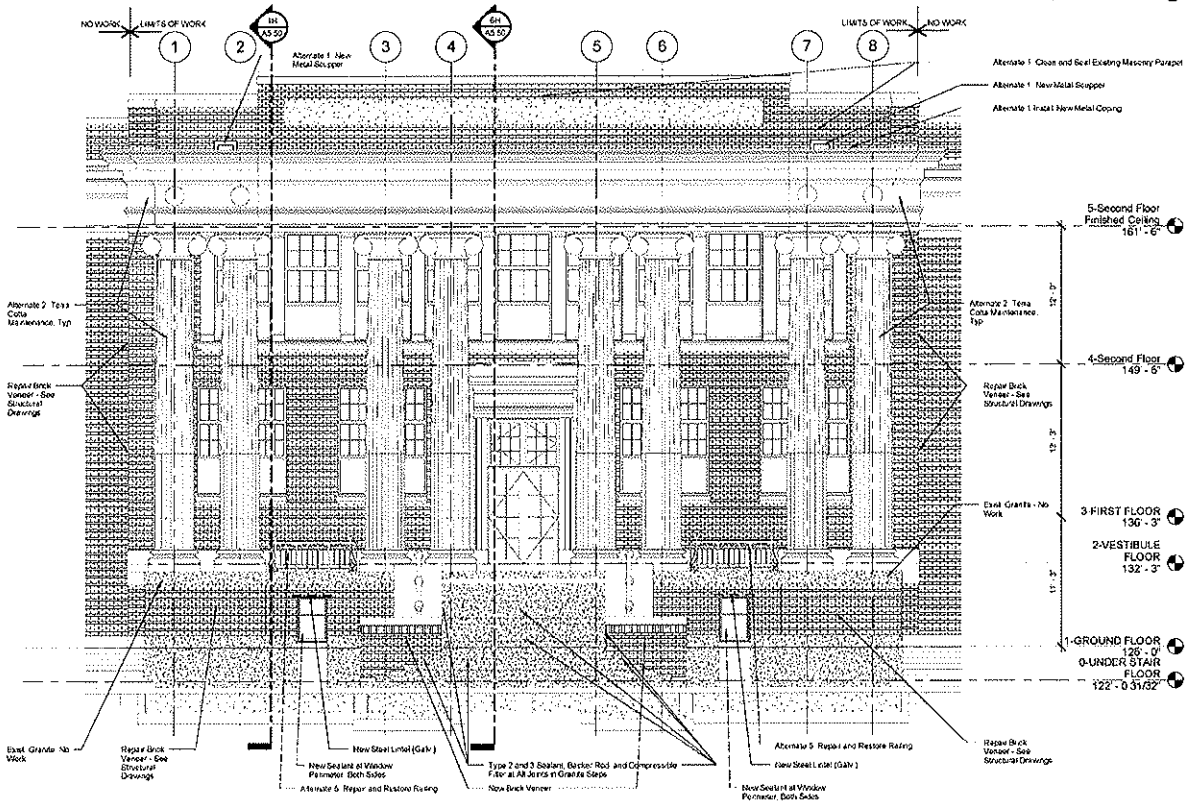
Solution: Due to limited funding, the design team had to assess the current conditions of the building and establish a priority list of solutions. The list in descending order was to repair structural damage, prevent future damage, and rehabilitate deteriorating features. Of utmost importance was correcting potential hazardous conditions by replacing the main portico floor and corroded structural supports of the granite slabs and steps. The Owner had already provided temporary shoring. Although foundation settlement was a possible contributing factor, investigations revealed that the majority of the building damage is due to water intrusion. Secondly, the design team addressed preventative maintenance issues so that the potential for further damage would be reduced. This involved replacing damaged brick veneer systems, various waterproofing techniques, and providing new drainage systems. Lastly, as budget allows, the design team will rehabilitate distinguishing features of the portico and façade. Exterior masonry (granite, brick, stone, and terra cotta) will be repaired, cleaned, and sealed (as appropriate for each material). Decorative iron railings will be refurbished. Doors will be replaced to match original historic character of the building.

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



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

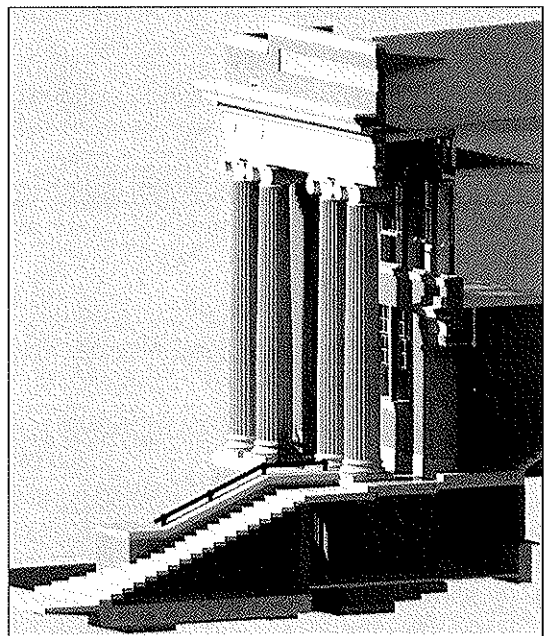
Project Manager: Jonathan Perry, AIA, LEED AP
Construction Administration: Steve Konya, II

Completion: Fall 2010

Cost: \$333,200

Delivery Type: Design-Bid-Build

Contractor: Lombardi Development





Russell Medical Center Additions and Alterations

Location: Alexander City, AL

Description:

Working under an open end contract, various renovations and additions to Russell Medical Center have been ongoing. These projects involved redesigning all major departments and services including: various doctors' suites, physical therapy, lab, open MRI addition, emergency department, sleep lab, pre-admit testing and satellite lab, women's center, hospice, PET scan, pharmacy, site improvements for new roads, parking, and landscaping.

Category(ies): Medical and Specialized, Life Safety Compliance, Building Renovation & New Construction

Construction Cost: Ranges from \$200,000 to \$4.1M **Square Footage:** 145,787

Relevant Information: Medical Office Building received 2002 Excellence in Construction Award from the Associated Builders & Contractors, Inc.

Project Owner:
Russell Medical Center
Mr. Jim Peace, CEO
3316 Highway 280
Alexander City, AL 35010
Phone: 256.329.7100

Owner's Project Manager:
Mr. Mike McCaleb
Russell Medical Center
3316 Highway 280
Alexander City, AL 35010
Phone: 256.329.7176

Prime General Contractor: Various

Completion Date: Varies from 2000 to current **Percentage of Work Completed:** 100%

Successful Project Features/ Processes/Outcomes:

Program/Goals: The hospital was totally renovated in 1998 including a major addition on the front which updated the character of the facility. All new additions reinforce this new design theme. Other improvements included new mechanical, plumbing, medical gas, and electrical systems. All departments have seen growth since the major renovation. Individual department goals have been to provide the "highest" patient service possible and meet administration's financial goals for that department.

Site: Existing site is approximately 30 acres. Master plan includes future assisted-living facility and additional medical office buildings.

Solution: Teamwork with Administration and Department Managers has been very important. The design process includes Owner sign-off on the drawings and budgets before final construction documents begin. The sign-off process helps to eliminate misunderstandings and clarifies goals.



Russell Medical Center Additions and Alterations

Alexander City, Alabama



Working under an open end contract, various renovations to Russell Medical Center have been ongoing. These projects involved redesigning all major departments and services including: various doctor's suites, physical therapy, lab, open MRI addition, emergency department, sleep lab, pre-admit testing and satellite lab, women's center, hospice, PET scan, pharmacy, and site renovations.

Owner: Russell Medical Center

Project Manager: David H. Snider, AIA

Project Architect: Grant T. Gramstad, AIA

Completed: Varies from 1999 to current

Cost: ranges from \$200,000 to \$2.5 million

Size: 145,787 Square Feet

Delivery Type: Negotiated Single Prime Contractor

Contractor: Various





George H. Lanier Memorial Hospital

Location: Valley, AL

Description:

Various ongoing renovations to the existing hospital since 2003 under a currently managed Open-End Contract. Projects include a \$4.2 million Surgery Addition completed in 2006, \$1.2 million Cardio-pulmonary / Pharmacy Renovations completed in 2008, \$1.6 million ICU Renovations completed in 2008, and \$1.1 million Emergency Department Renovations estimated to be completed in 2011.

Category(ies): Medical and Specialized, Life Safety Compliance, New Construction and Building Renovation

Construction Cost: \$8.1M **Square Footage:** 32,952

Relevant Information: Existing hospital was constructed under the Hill Burton Act circa 1948. Working within an existing hospital and knowing the limitations of building systems is important. Most renovations projects included detailed analysis of existing mechanical, plumbing, medical gases and electrical to determine service life. Due to budgets limitations, projects included strategies for replacement of these systems when funding was available.

Project Owner:
George H. Lanier Memorial Hospital
Mr. Doug Dewberry, CEO
4800 48th Street
Valley, AL 36854
Phone: 334.756.1428

Owner's Project Manager:
Mr. Doug Dewberry, CEO
George H. Lanier Memorial Hospital
4800 48th Street
Valley, AL 36854
Phone: 304.367.4861

Prime General Contractor: Batson-Cook Construction
Mr. Chunk Newman
PO Box 554
West Point, GA 31833
Phone: 706.643.2500

Completion Date: Open End **Percentage of Work Completed:** 100%

Successful Project Features/ Processes/Outcomes:

Program/Goals: Design-Build-Negotiated project approach allowed the development of a solid design/construction team. Combining team experience with good communication created an environment for successful and cost effective design solutions.

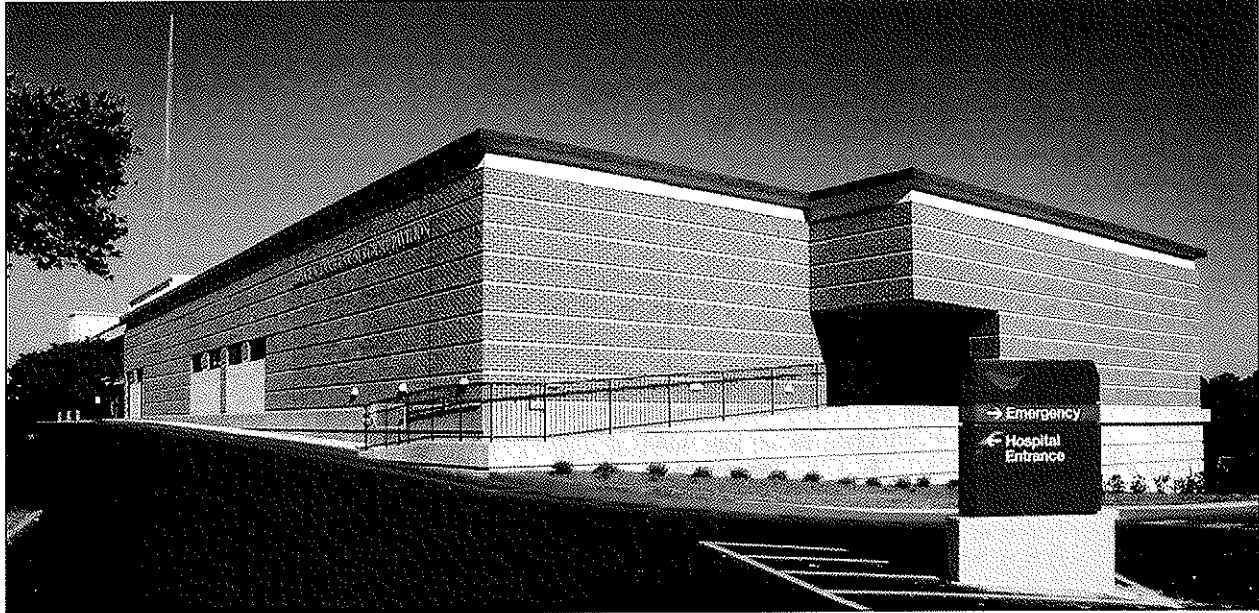
Site: Existing site is a hillside overlooking the Chattahoochee River. Available site for new construction is very limited.

Solution: Create an environment for a successful project by planning. Due to the complex nature of healthcare, the Owner and Design/Construction team must work through all the issues. The teams must understand the Owner's and construction limitations.



Additions and Alterations to George H. Lanier Memorial Hospital

Valley, Alabama



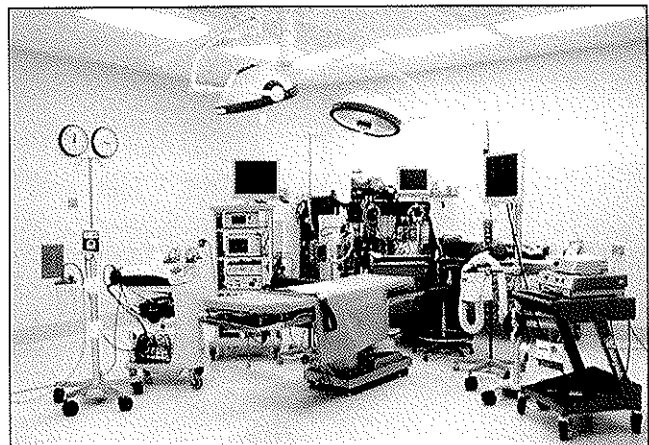
Various ongoing renovations to the existing hospital since 2003 under a currently managed Open-End Contract. Projects include a \$4.2 million Surgery Addition completed in 2006, \$1.2 million Cardiopulmonary / Pharmacy Renovations completed in 2008, \$1.6 million ICU Renovations completed in 2008, and \$1.1 million Emergency Department Renovations estimated to be completed in 2010.

Owner: George H. Lanier Memorial Hospital

Project Manager: David H. Snider, AIA
Project Architect: Grant T. Gramstad, AIA

Estimated Completion: Ongoing
Cost: \$8.1 Million
Size: 32,952 Square Feet
Delivery Type: Design-Build-Negotiated

Contractor: Batson-Cook Construction





Conference Center and Classroom Fitup Fairmont State University

Location: Fairmont, WV

Description:

This fit up to the existing Falcon Center provides the University with a much needed Conference Center, Board Room, and Computer Lab Space. The Conference Center, with its operable partitions and flexible space, is used at times for additional classroom space. All rooms feature state of the art audio/visual systems.

Category(ies): Classroom, New Construction

Construction Cost: \$770,000.00 **Square Footage:** 9,200

Relevant Information: Besides serving the student body, the Conference Center is often a host to many organizations in the surrounding community and state.

Project Owner:
Fairmont State Board of Governors
Rick Porto, VP
Administration and Fiscal Affairs
1201 Locust Avenue
Fairmont, WV 26554
Phone: 304.367.4100

Owner's Project Manager:
Jim Decker, Assistant VP
Physical Plant Director
Fairmont State University
1201 Locust Avenue
Fairmont, WV 26554
Phone: 304.367.4861

Prime General Contractor:

Tmaro Corporation
Scott Owen
PO Box 580
Bridgeport, WV 26330
304.842.6926

Completion Date: Fall 2006 **Percentage of Work Completed:** 100%

Successful Project Features/ Processes/Outcomes:

Program/Goals: Once funding became available, Fairmont State quickly wanted to complete this very important component to the new Falcon Center. With much anticipated use come from the surrounding community, FSU wanted a state of the art conference center with flexible space that could be used to host a variety of functions on their main campus.

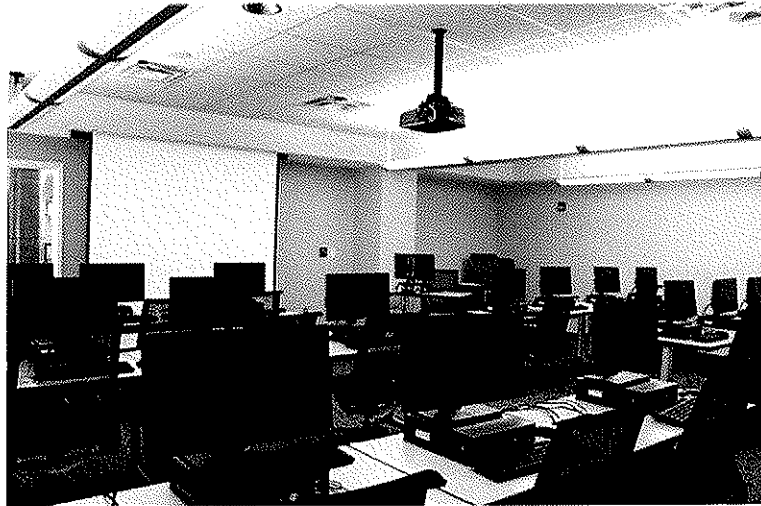
Site: The Falcon Center, centrally located on Fairmont State University's main campus, provides an environment where students and employees can comfortably interact with one another. Existing amenities included fitness and wellness areas, dining, bookstore, and study lounges.

Solution: The Conference Center offers 2,300 square feet of meeting space. It can be split up into three different smaller rooms using acoustically rated, operable partitions. In addition, two computer lab spaces are located opposite the conference center, which can be used for both classroom teaching and after hours studying. The project also added a 1,200 square foot Board Room for private meetings. All spaces in the project incorporate state of the art audio / video systems, including hidden motorized project screens and user-friendly touch screen programming.



Fairmont State University Conference Center and Classroom Fitup

Fairmont, West Virginia



This fit up to the existing Falcon Center provides the University with a much needed Conference Center, Board Room, and Computer Lab Space. The Conference Center, with its operable partitions and flexible space, is also used for additional classroom space. All rooms feature state of the art audio/video systems.

Owner: Fairmont State University

Project Manager: Jonathan Perry, AIA, LEED AP

Completion: Fall 2006

Estimated Cost: \$770,000

Delivery Type: Design-Bid-Build

Contractor: Tmaro Corporation





General Services Administration U.S. Department of Agriculture

Location: Morgantown, WV

Description:

The USDA project was awarded through a Federal 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. The project has served as model for development in the Sabraton area.

Category(ies): LEED Certified, Office Building, Life Safety Compliance, New Construction

Construction Cost: \$7.5M **Square Footage:** 36,000 (Two Stories)

Relevant Information: This project is LEED Certified.

Project Owner:
Glenmark Holdings, LLC
Mark Nesselroad/Glenn Adrian
6 Canyon Road, Suite 300
Morgantown, WV 26508
Phone: 304.599.3369

Owner's Project Manager:
Nick Colosante
Glenmark Holdings, LLC
6 Canyon Road, Suite 300
Morgantown, WV 26508
Phone: 304.599.3369

Prime General Contractor:

The March Westin Company
Earl Miller
360 Frontier Street
Morgantown, WV 26505
Phone: 304.599.4880

Completion Date: 2009

Percentage of Work Completed: 100%

Successful Project Features/ Processes/Outcomes:

Program/Goals: Provide a new facility to house the various agencies of the United States Department of Agriculture housed in the Federal Building in downtown Morgantown. Support groups such and Information Technology and the Tri-Ag Federal Credit Union will be located in the new facility as well. The program required Federal security standards related to the building, roads, and parking area. Common areas were required for conference/training rooms, break room, mail room and fitness center. In addition, the project was required to achieve LEED Certification.

Site: The project site was a relatively flat rectangular parcel along the commercial section of Earl Core Road in Sabraton. The property was a former "Brown Field" site owned by the WV Department of Highways. A portion of the land was within the 100-year floodplain of Deckers Creek which limited the positioning of the building.

Solution: The security standards established the perimeter setbacks and the limitations in property width dictated that only visitor parking could be located in front of the building with employee and secured parking in the rear. This functions well because the Tri- Ag Credit Union requires public access and visibility. The remaining agencies generally function as traditional office environments. The southern and western faces of the building are defined by larger window sections which are screened from harsh summer sunlight by an architectural colonnade and continuous sun screens. These treatments in conjunction with the use of three distinct masonry veneer materials add visual interest to a building that is basically a two-story rectangle.



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. Coordinated the two driveway entrances onto Route 7 in Sabraton with the WVDOT District 4 office to ensure setbacks, site distance, and configuration complied with WVDOT standards. An entrance permit was completed and submitted to the district office.

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





U. S. Department of Energy Office of Legacy Management

Location: West Virginia University Research Park, Morgantown, WV

Description:

A new sustainable office and record storage facility for the United States Department of Energy (DOE) Office of Legacy Management (LM) that was awarded through a design-build competition sponsored by the General Services Administration (GSA). This one-story building includes 37,000 square feet of NARA Certified Records Storage space and 23,000 square feet for Administration. The record storage space is conditioned and humidity controlled and includes a 1,200 square foot cold room for microfilm storage. In addition, the security systems are designed and operated to meet the Minimum Security Standards for Level III Federal Facilities and are in compliance with Homeland Security Presidential Directive 12.

Category(ies): LEED Certified, Office Building, Life Safety Compliance, New Construction

Construction Cost: \$10.7M **Square Footage:** approximately 60,000

Relevant Information: This project is registered as a LEED Gold for the Core & Shell and for the Commercial Interiors and will be NARA Certified.

Project Owner:
FD Partners, LLC
Claiborne Williams
1300 Wilson Boulevard, Suite 910
Arlington, VA 22209
Phone: 571.451.0015

Owner's Project Manager:
Petroplus Lane, LLC
Rich Lane
Two Waterfront Place, Suite 1201
Morgantown, WV 26501
Phone: 304.284.5013

Prime General Contractor:
dck North America, LLC
Henry Holmes
PO Box 18505
Pittsburgh, PA 15236
Phone: 412.384.1000

Completion Date: 2009 **Percentage of Work Completed:** 100%

Successful Project Features/ Processes/Outcomes:

Program/Goals: One of the themes of the new DOE mission statement is "Environmental Responsibility." They want to incorporate this theme into their goal of preserving and protecting legacy records and information. The DOE identified that the best way to accomplish these goals was to realign their resources and create a sustainable, stand-alone Office of Legacy Management whose mission is to effectively and efficiently manage the environmental and human legacy issues for current and future generations.

Site: The facility is located on a ten-acre site on the newly opened West Virginia University Research Park off of WV Highway 705.

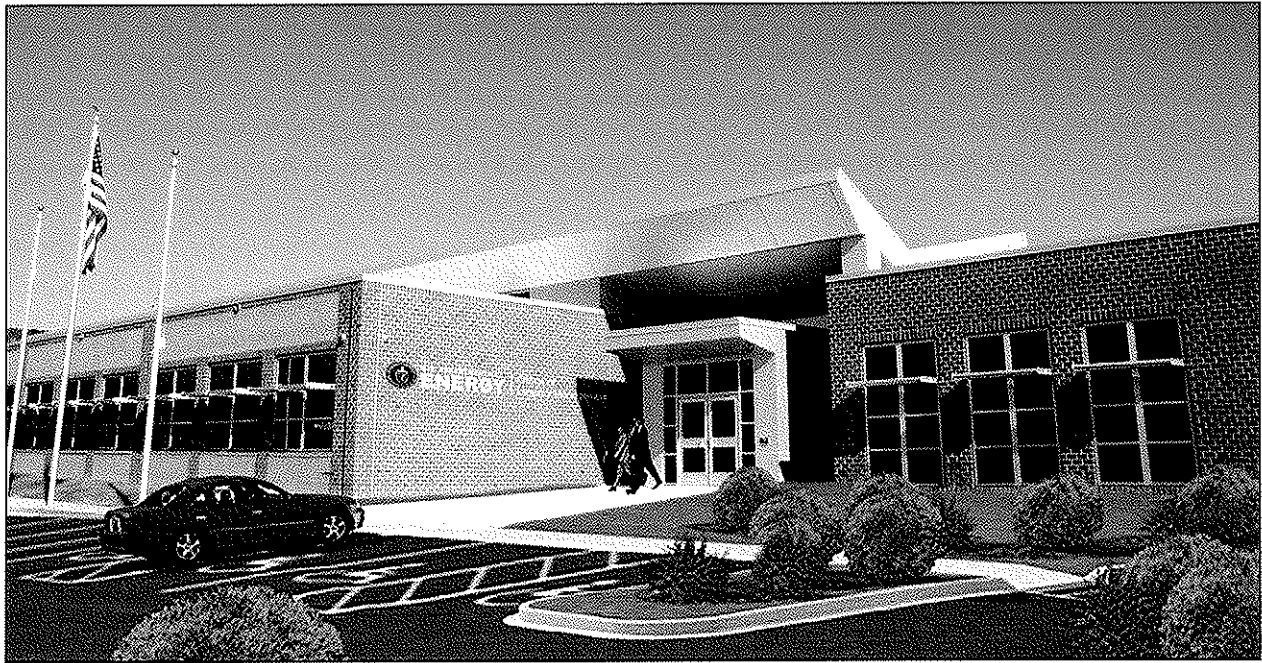
Solution: Because sustainability and environmental responsibility were of utmost importance, the design solution concentrated on limiting energy and natural resources. The use of natural light was prioritized throughout the Administration wing. The building not only gathers indirect natural light through clerestory windows, but also light shelves were installed to bring light deeper into the space. Each room has daylight and occupancy sensors so that the artificial lighting can adjust to amount of natural light or turn off if there is no occupant in the room. The restrooms include waterless urinals and low-flow toilets to limit water consumption. The air conditioning and heating loads were reduced by using high performance glass, an exterior sunshade, and heavily insulating the walls and roof.

Paradigm - (pă'r'e-dim') n. An example that serves as pattern or model.



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





Morgantown Event Center and Parking Garage

Location: Morgantown, WV

Description:

The Morgantown Event Center and 300-space Parking Garage will be 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 up to 2,000 patrons for a variety of event types including concerts, plays, boxing matches, banquets, and conventions. The facility also features a full catering kitchen and support spaces. This will be the home of the West Virginia Public Theater, a summer stock musical theater group.

Category(ies): Dining Facility, Life Safety Compliance, New Construction, Parking Garage

Construction Cost: \$30M **Square Footage:** 159,000 (Two Stories)

Relevant Information: Design-Build-Competition based on State of West Virginia Guidelines

Event Center Project Owner:

City of Morgantown
Dan Boroff, City Manager
389 Spruce Street
Morgantown, WV 26505
Phone: 304.284.7405

Parking Garage Project Owner:

Platinum Properties, LLC
Parry Petroplus
Two Waterfront Place, Suite 1201
Morgantown, WV 26501
Phone: 304.284.5000

Event Center/Parking Garage

Project Manager:

Rich Lane
Platinum Properties, LLC
Two Waterfront Place, Suite 1201
Morgantown, WV 26501
Phone: 304.284.5013

Prime General Contractor:

The March Westin Company
Jamie Ridgeway
360 Frontier Street
Morgantown, WV 26505
Phone: 304.599.4880

Completion Date: March 2010

Percentage of Work Completed: 100%

Successful Project Features/ Processes/Outcomes:

Program/Goals: Funded through monies provided by a West Virginia Economic Development Grant, Tax Increment Financing, and private investment, the Event Center and Garage is intended to provide a multi-purpose facility to accommodate a variety of activities ranging from banquets, concerts, conventions, lectures, to boxing and other sporting events. The facility will house the West Virginia Public Theater, a summer stock musical theater group. The space must provide full audiovisual, theatrical lighting, stage and rigging as well as portable seating risers to facilitate performing arts.

Site: The property for the project physically connects to the existing Two Waterfront Place Conference Center in the Waterfront District of Morgantown. It is situated adjacent to the Caperton Rail Trail and the Monongahela River. The slope across the site requires that the building be two stories at the river elevation and one level at the road side.

Solution: The design solution positioned common lobby spaces on the upper and lower floors immediately adjacent to the existing Conference Center. Vertical circulation via a grand staircase and elevators provide access to the 23,000 SF event space. The garage is positioned on the end of the development and a concourse provides patrons and visitors direct access to the Event Center and Hotel. Outdoor terraces on the upper and lower levels provide gathering areas to view the river. Back of house areas connect directly to the main event space and include the commercial kitchen, service corridors, storage and loading docks. A "Green Room" with private kitchen for use by performers is also provided. A decorative grid ceiling provides visual interest and allows for access to a sophisticated system of hoists for truss rigging, speaker clusters, lighting positions, and smoke management. The flexibility of the building infrastructure will accommodate banquets to boxing and is specially configured for the performing arts function required by the West Virginia Public Theater.

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



Morgantown Event Center and Parking Garage

Morgantown, West Virginia



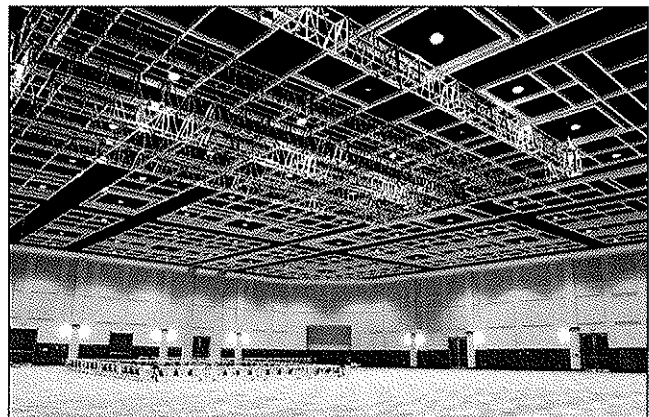
The Morgantown Event Center and 214-space Parking Garage is located adjacent to the Waterfront Place Hotel and Conference Center along the Monongahela River in Morgantown. The large main event room is designed to accommodate a variety of event types including concerts, plays, boxing matches, banquets, and conventions. The facility features a full catering kitchen and support spaces. Coordinated the access road design and the driveway entrance onto Don Knotts Boulevard with the WVDOT Headquarters office of Economic Development and the Right-of-Way Division and the District 4 office. This involved designing an access road and drainage structures on WVDOT right-of-way. Coordinated legal responsibility of the road improvements with WVDOT and the City of Morgantown. Review meetings were held with the District Office to ensure proper design setbacks, site distance, and configuration complied with WVDOT standards. An entrance permit was completed and submitted to the District Office.

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





Two Waterfront Place Hotel and Conference Center

Location: Morgantown, WV

Description:

A 17-story hotel, conference center, retail, dining, and residential mixed-use facility in the Waterfront District. The second floor features a 3,500 sf Fitness Center and 2,000 sf Day Spa. The ground level pool includes a hot tub feature and outdoor terrace facing the Monongalia River.

Category(ies): Classroom Building, Dining Facility, Life Safety Compliance, New Construction, Parking Garage

Construction Cost: \$35M **Square Footage:** 296,427

Relevant Information: 2003 Excellence in Construction Award from the Associated Builders & Contractors, Inc.

Project Owner:
Mermaid, LLC
Parry Petroplus
Two Waterfront Place, Suite 1201
Morgantown, WV 26501
Phone: 304.284.5000

Owner's Project Manager:
Mermaid, LLC
Laury Podolinski
Two Waterfront Place, Suite 1201
Morgantown, WV 26501
Phone: 304.284.5011

Prime General Contractor:

The March Westin Company
Jamie Ridgeway
360 Frontier Street
Morgantown, WV 26505
Phone: 304.599.4880

Completion Date: 2003

Percentage of Work Completed: 100%

Successful Project Features/ Processes/Outcomes:

Program/Goals: As part of the Morgantown Waterfront redevelopment, this project is planned to add housing, lodging, dining, recreation, conference/meeting opportunities to the area. The program includes 205 hotel rooms and suites, a kitchen facility to serve the restaurant and private dining as well as the 20,000 SF Conference Center, swimming pool and fully equipped fitness center, a day spa, structured parking, and six floors of privately owned condominiums. Given the site limitations, the project had to be a high-rise structure.

Site: The property for the project is adjacent to One Waterfront Place in the Waterfront District of Morgantown. It is situated adjacent to the Caperton Rail Trail and the Monongahela River. The slope across the site requires that a portion of the building will be underground. A courtyard space allows for vehicular access to covered entrance.

Solution: The program demanded that the project would be a 17- story structure. Service functions and parking are positioned on the lowest level with the indoor swimming pool and terrace accessible to the rail trail. The main level of the facility houses the lobby, restaurant, private dining, kitchen, administrative offices, and conference center. The second floor has public retail functions such as the Day Spa and Fitness Center and additional meeting rooms and offices. Floors 3 through 11 are hotel floors with a Presidential Suite on the 11th floor. Private, residential condominiums occupy the remaining floors. The building required the High-Rise Code Life Safety features including smoke management, emergency generator, and fire command center as well as the traditional code elements.



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





WVU Intermodal Garage

Location: Morgantown, WV

Description:

A State of West Virginia Design-Build Competition featuring a 500-car parking garage, bus drop-off area/lounge and toilets, retail space, and office areas for the West Virginia University Parking Authority. The facility is designed to connect to the Public Rapid Transit Station and can be expanded both vertically and horizontally to accommodate a total of 1,500 vehicles.

Category(ies): Office Building, Life Safety Compliance, New Construction, Parking Structure

Construction Cost: \$14.9M

Parking Spaces: 500

Relevant Information: 2010 Merit Award, West Virginia American Institute of Architects

Project Owner:

WVU Transportation and Parking
Hugh E. Kierig, AICP, Director
PO Box 6561
Morgantown, WV 26506-6561
Phone: 304.293.9095

Owner's Project Manager:

David Smith
WVU Design & Construction
PO Box 6572
Morgantown, WV 26506-6572
Phone: 304.293.2863

Prime General Contractor:

The March Westin Company
Dave Dowling
360 Frontier Street
Morgantown, WV 26505
Phone: 304.599.4880

Completion Date: 2009

Percentage of Work Completed: 100%

Successful Project Features/ Processes/Outcomes:

Program/Goals: Create a center for various modes of transportation and expand the use of the existing campus Personal Rapid Transportation (PRT) mass transit system. Key elements include: parking for 500 vehicles with plans to expand vertically and horizontally to 1,500 spaces, bus stops for community and campus lines, bicycle storage and showers, lobby/lounges for commuter students, retail, and Administration Offices for the WVU Parking Authority. The facility must provide ADA accessible access to the PRT Station by way of stairs, elevators, and pedestrian bridge.

Site: A roughly two-acre hillside site on the Evansdale Campus of West Virginia University. The site is defined by the Personal Rapid Transit (PRT) Station and associated tracks to the east and an irregular boundary established by the campus steamline right-of-way to the west.

Solution: Establish an axis in line with the PRT. This serves as the pedestrian connection from entrance to the PRT Station via monumental stair and elevator. The five-story parking garage is situated in the hillside parallel to the PRT tracks. The remaining program functions are organized in a building which is rotated to align with the angle of the right-of-way boundary. This arrangement provides for the addition of a future parking structure to the north. Building components are further defined by different brick colors. Glass curtainwall tower defines entrance and emphasizes the pedestrian pathway through the facility.



West Virginia University Intermodal Garage

Morgantown, West Virginia



Intermodal Transportation Center and Parking Garage. A State of West Virginia Design-Build Competition featuring a 500-car parking garage, bus drop-off area/lounge and toilets, retail space, and office areas for the West Virginia University Parking Authority. The facility is designed to connect to the Public Rapid Transit Station and can be expanded both vertically and horizontally to accommodate a total of 1,500 vehicles.

West Virginia AIA 'Merit Award' Winner 2010

Owner: West Virginia University

Design Architect: Paul A. Walker, AIA

Project Manager: David H. Snider, AIA

Project Architect: Jonathan L. Perry, AIA

Completed: Fall 2009

Cost: \$14.5 Million

Size: 500 Parking Spaces

Delivery Type: Design-Build Competition

Contractor: The March-Westin Company



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*



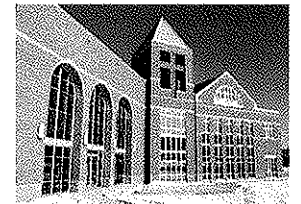
Mr. Brian Johnson
Bright Enterprises
for Glade Springs Resort
PO Box 460
Summersville, WV 26651-0460
(304) 872-3000 Ext. 219

*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-dīm') n. An example that serves

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:

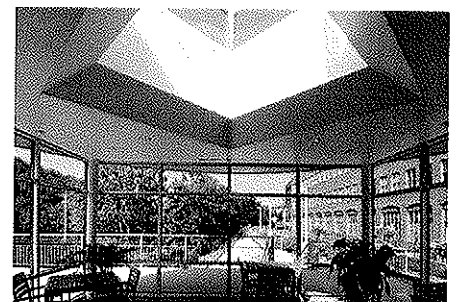
This represents our highest ideals...
that our architecture would serve as an example
that our client service would serve as an example
that our service to our God would serve as an example.

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.

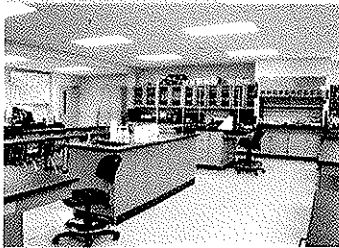


Waterfront Marina



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

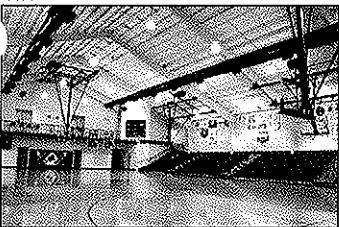
Firm Profile



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



Russell Medical Center



Glenmark Office Building

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

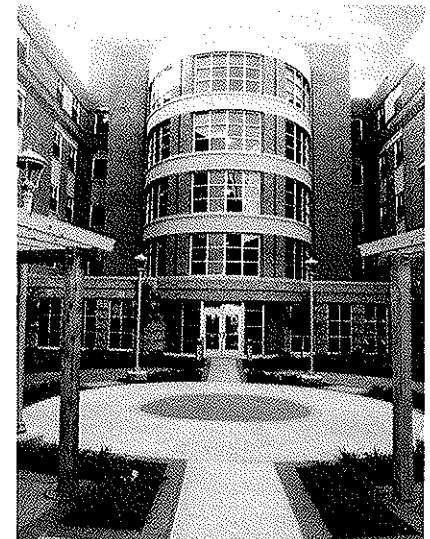
Paradigm's residential experience spans a variety of client types. Student Housing/dormitory facilities for higher education, hotel projects, elderly housing, and private residential that includes single family homes, townhouses, and high end condominium units.

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.



*WVU
Downtown
Student
Housing*



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

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

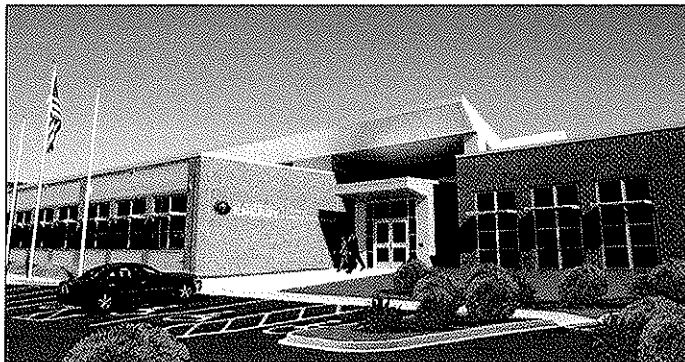
U.S. Department of Agriculture Office Building, Morgantown, WV
LEED Certified



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

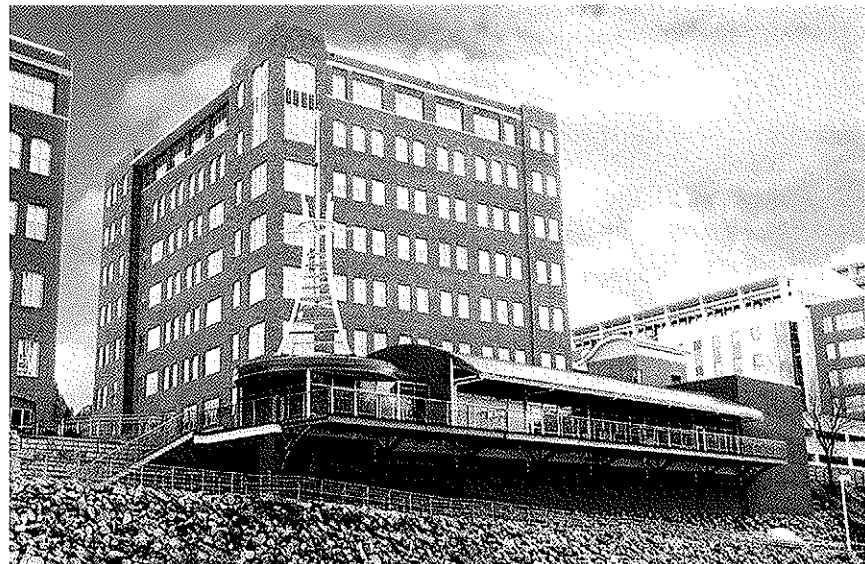
Honors & Awards



*WVU Transportation Center
& Garage*



*Upper Monongahela
River Center*



*Upper
Monongahela
River
Center*

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

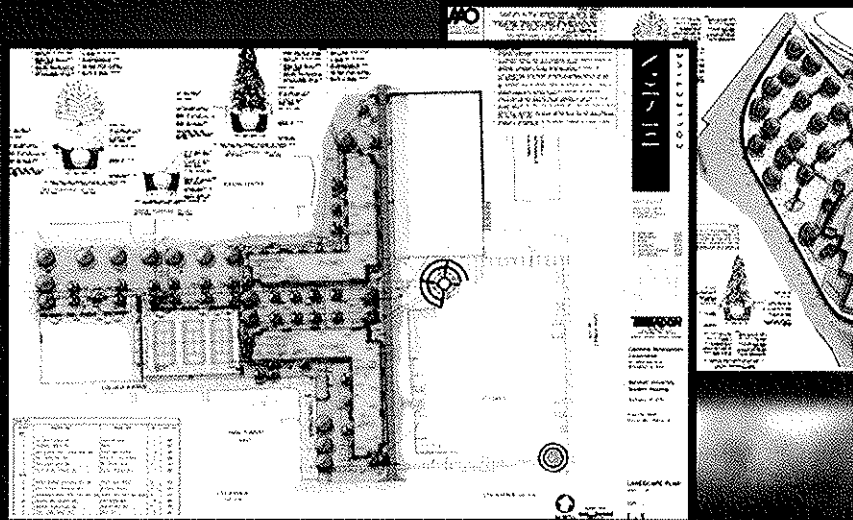
West Virginia American Institute of Architects

- 2010 – Honor Award – Upper Monongahela River Center,
Morgantown, WV
- 2010 – Merit Award – West Virginia University Transportation Center and Garage,
Morgantown, WV

Executive Summary

LAND DEVELOPMENT

TERRADON is recognized as a leader in providing site design and land planning services. The firm's professional landscape architects work closely with the client from the project's initial phase through schematic design, construction documents, and project delivery.



About TERRADON Corporation

TERRADON CORPORATION offers a wide range of engineering and environmental services, and is particularly suited to land and infrastructure design and development in the mountainous areas of West Virginia and the Eastern United States. The company was formed in 1989, and its staff includes engineers, landscape architects, surveyors, planners, real estate specialists, environmental scientists, designers, and technicians. TERRADON's services are organized into the following seven service areas that work together or independently, depending on client needs and the scope of the project.

Due to the breadth of services offered, TERRADON is regarded as one of the region's leading land and infrastructure planning and design firms. The firm has built its reputation by providing cost effective design solutions and maintaining the highest level of customer service.

SERVICE OFFERINGS

CIVIL ENGINEERING

LAND PLANNING &
SITE DESIGN

SURVEYING &
MAPPING

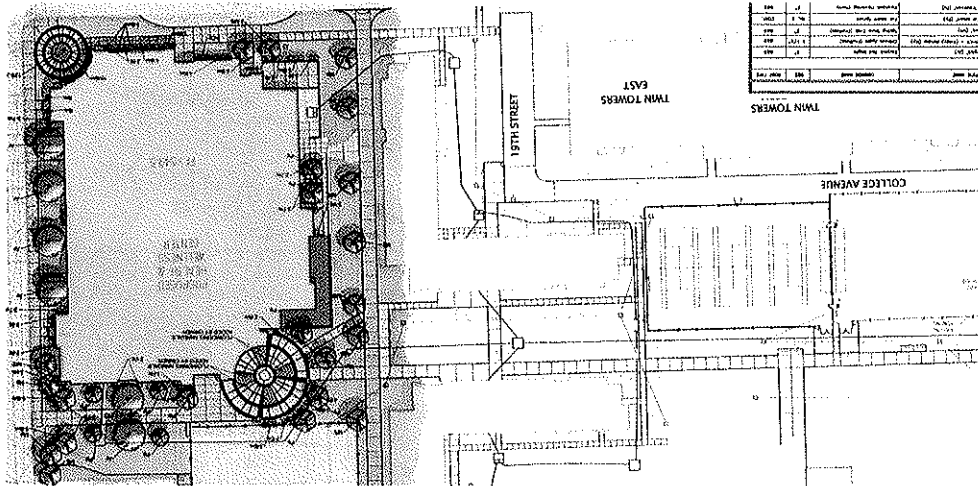
GEOTECHNICAL
INVESTIGATIONS

MATERIALS
TESTING &
CONSTRUCTION
MONITORING

ENVIRONMENTAL

ROADWAY &
STRUCTURAL
DESIGN

Land Development

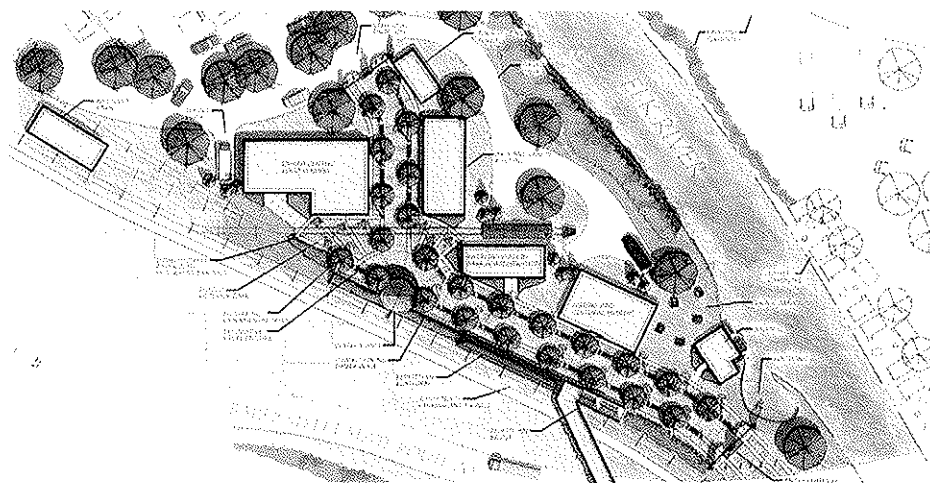


TERRADON is recognized as a leader in providing site design and land planning services. The firm's professional landscape architects work closely with the client from the project's initial phase, through schematic design, construction documents, and project delivery. Services provided include master planning, the feasibility studies, schematic design, layout plans, grading plans, storm-water management plans, erosion control plans, planting plans, presentation drawings/renderings, graphic design, and construction observation.

TERRADON is experienced in providing a wide variety of engineering, environmental, and surveying services required for your project. These related services enhance and integrate with Landscape Architecture. This provides TERRADON with the opportunity to provide clients across the region with the highest level of quality site design and landscape architecture available. The engineering and environmental services include identifying site constraints and conditions that could have an impact on the feasibility of a site.

Site design and land planning services are provided for a wide range of project types including:

- » Recreation facilities
- » Education institutions
- » Commercial Developments
- » Government entities
- » Residential Development
- » Environmental elements
- » Medical facilities
- » Riverfront enhancement
- » Greenway/greenspace projects
- » Vehicular/Pedestrian circulation and storage facilities



EXPERT PERSONNEL

Greg Fox, ASLA, LEED
Department Head
Land Development

TERRADON's Land Development Services are managed by Gregory D. Fox, ASLA, LEED. Mr. Fox, a native of West Virginia, has been responsible for a number of notable recreation, commercial, and educational site development projects since joining TERRADON in February of 2000.

His group earned a 2002 Engineering Excellence Award from the West Virginia Association of Consulting Engineers and a 2002 Merit Award from the American Society of Landscape Architects for the City of Fairmont Riverfront Master Plan project. Most recently, the 2005 Gold Award from the American Council of Engineering Companies and a 2005 Honor Award from the American Society of Landscape Architects was presented to the firm for the site design of the new West Virginia Division of Environmental Protection Headquarters Building.

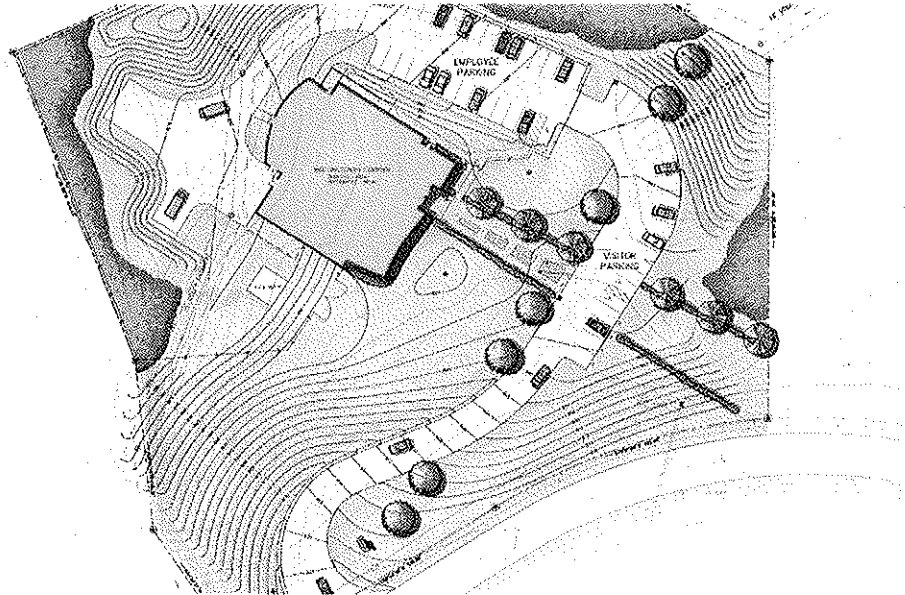
PROJECT EXPERIENCE

KANAWHA COUNTY 911 CALL CENTER
CHARLESTON, WV

OWNER:
KANAWHA COUNTY COMMISSION

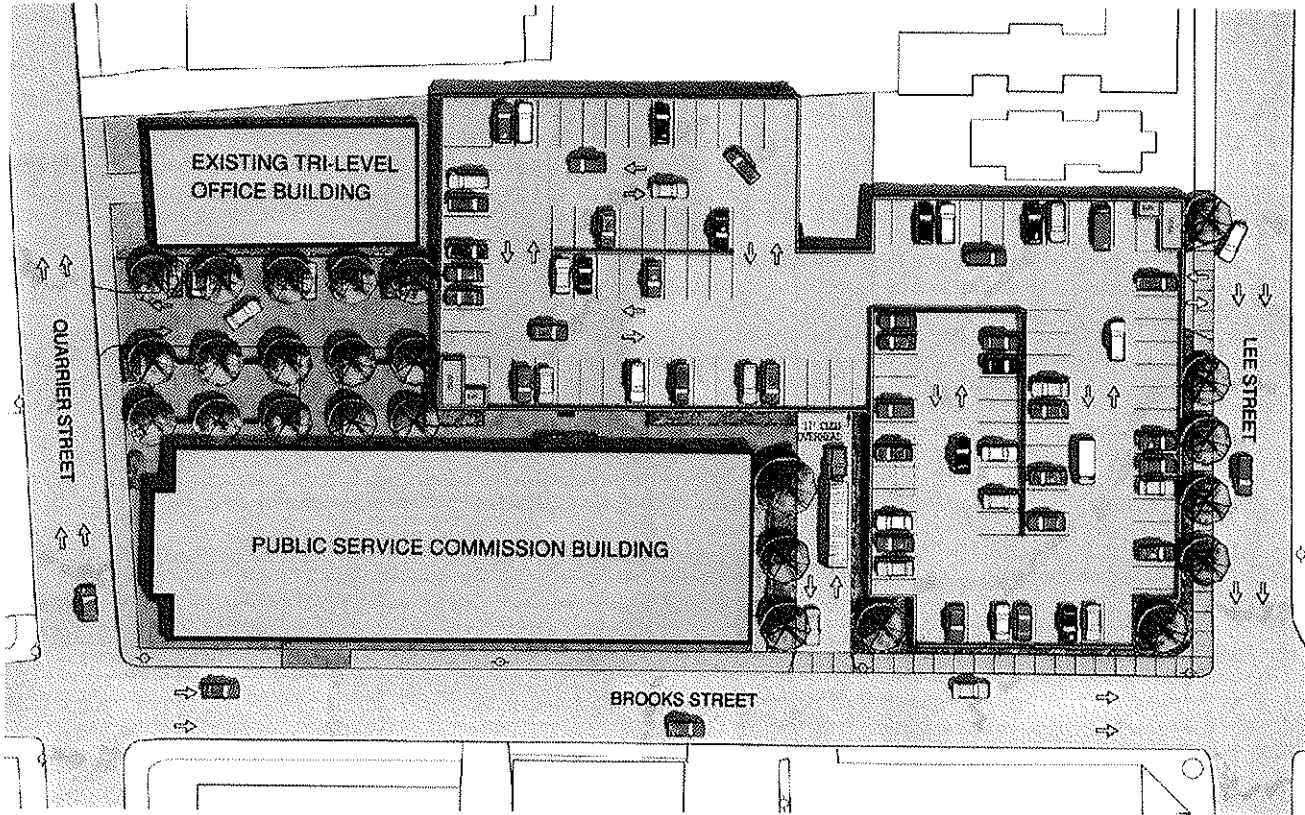
FIRMS ROLE:
DESIGN AND BOUNDARY
SURVEY, FULL SITE
ENGINEERING, DRAWINGS
- INCLUDING LAYOUT,
GRADING, DRAINING AND
EROSION CONTROL AS A
SUBCONSULTANT TO THE
ARCHITECT

CONTRACT
INFORMATION:
DESIGN COMPLETED 2005
ON SCHEDULE, ON BUDGET



PROJECT EXPERIENCE

NEW PARKING GARAGE
WEST VIRGINIA PUBLIC SERVICE COMMISSION
CHARLESTON, WV



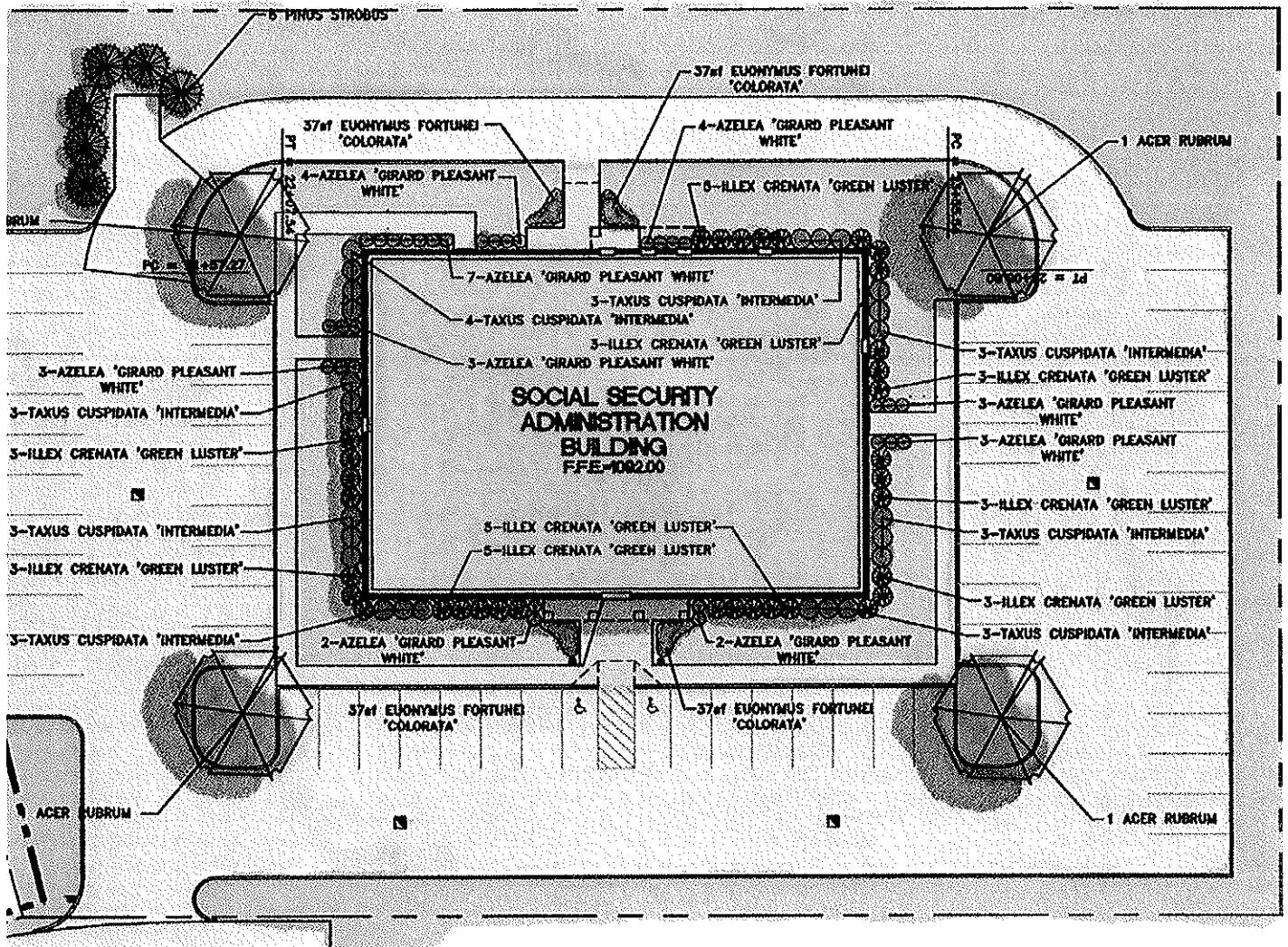
OWNER:
WEST VIRGINIA PUBLIC SERVICE COMMISSION

FIRMS ROLE:
GEOTECHNICAL SURVEY, DESIGN AND BOUNDARY SURVEY, FULL SITE
ENGINEERING, DRAWINGS - INCLUDING LAYOUT, GRADING, DRAINING AND
EROSION CONTROL AS A SUBCONSULTANT TO THE ARCHITECT

CONTRACT
INFORMATION:
DESIGN COMPLETED 2004
ON SCHEDULE, ON BUDGET

PROJECT EXPERIENCE

SOCIAL SECURITY ADMINISTRATION BUILDING
LOGAN, WV



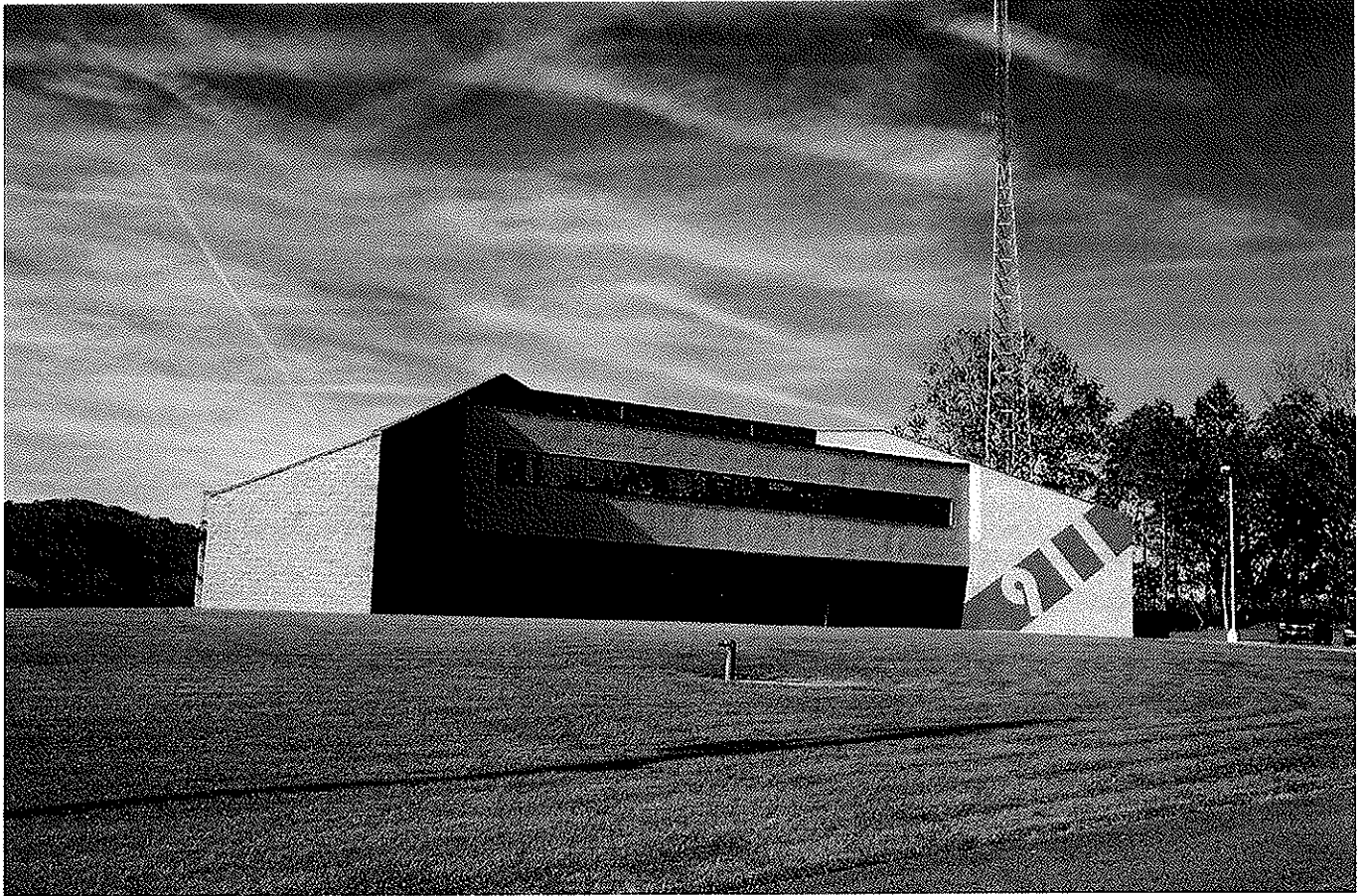
OWNER:
SOCIAL SECURITY ADMINISTRATION

FIRMS ROLE:
DESIGN AND BOUNDARY SURVEY, FULL SITE ENGINEERING, DRAWINGS - INCLUDING LAYOUT, GRADING, DRAINING AND EROSION CONTROL AS A SUBCONSULTANT TO THE ARCHITECT

CONTRACT
INFORMATION:
DESIGN COMPLETED 2006
ON SCHEDULE, ON BUDGET

PROJECT EXPERIENCE

LINCOLN COUNTY 911 CALL CENTER
LINCOLN COUNTY, WV



OWNER:
LINCOLN COUNTY COMMISSION

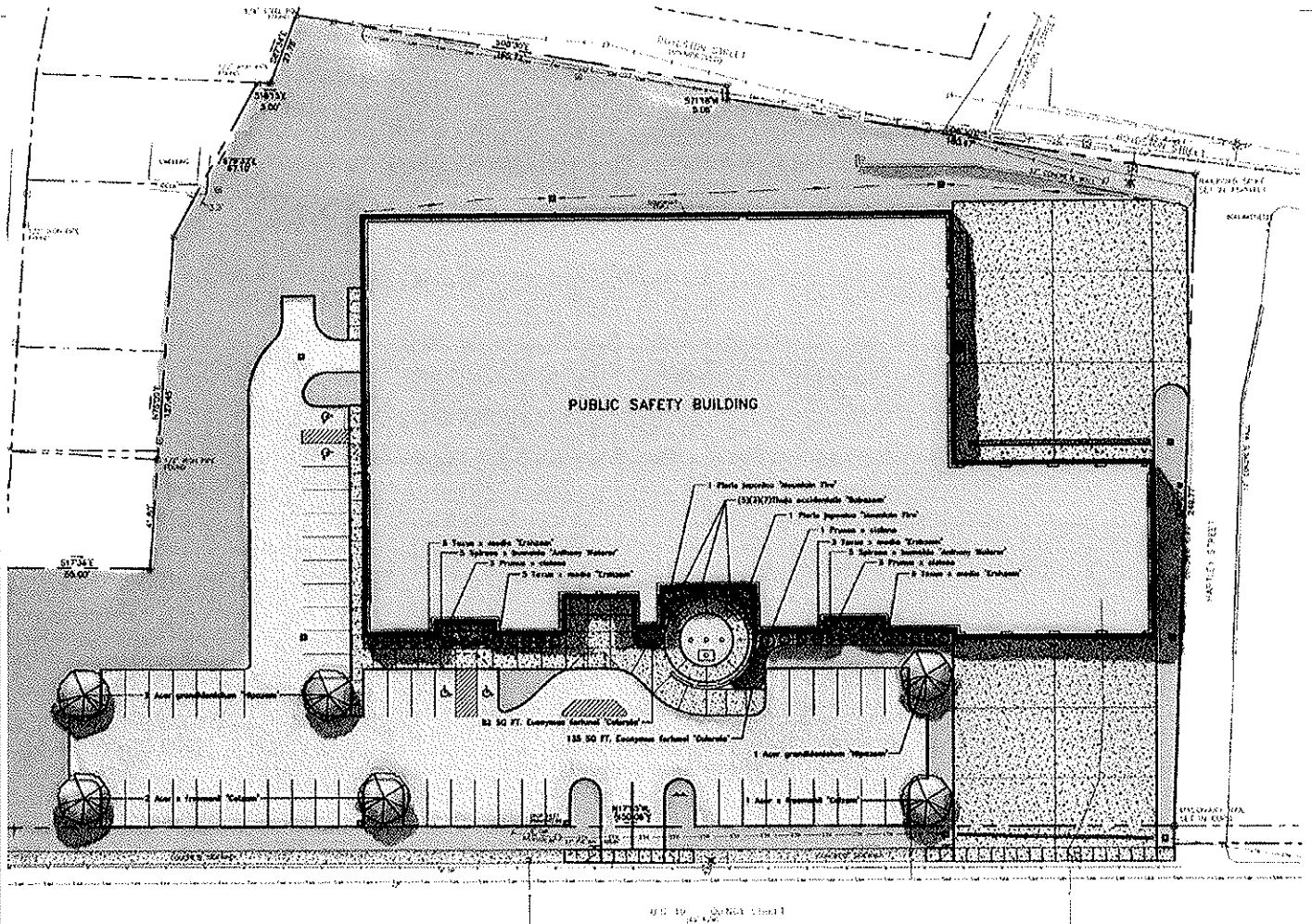
FIRMS ROLE:
DESIGN AND BOUNDARY SURVEY, FULL SITE ENGINEERING, DRAWINGS - INCLUDING LAYOUT, GRADING, DRAINING AND EROSION CONTROL AS A SUBCONSULTANT TO THE ARCHITECT

CONTRACT
INFORMATION:
DESIGN COMPLETED 2005
ON SCHEDULE, ON BUDGET

CORPORATION
TERRADON

PROJECT EXPERIENCE

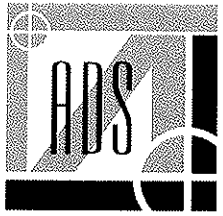
FAIRMONT PUBLIC SAFETY BUILDING
FAIRMONT, WV



CONTRACT
INFORMATION:
DESIGN COMPLETED 2006
ON SCHEDULE, ON BUDGET

FIRMS ROLE:
GEOTECHNICAL ENGINEERING, INVESTIGATION AND RECOMENDATIONS, DESIGN AND BOUNDARY SURVEY, COMPLETE SITE ENGINEERING AND DESIGN FOR NEW PUBLIC SAFETY BUILDING WHICH HOUSES THE FAIRMONT PUBLIC WORKS DEPARTMENT, FIRE DEPARTMENT, AND POLICE DEPARTMENT.

OWNER:
CITY OF FAIRMONT
CONTACT: JAY ROGERS, CITY MANAGER



CONSULTING ENGINEERING FIRM
SPECIALIZING IN STRUCTURAL BUILDING
DESIGN AND BUILDING ANALYSIS



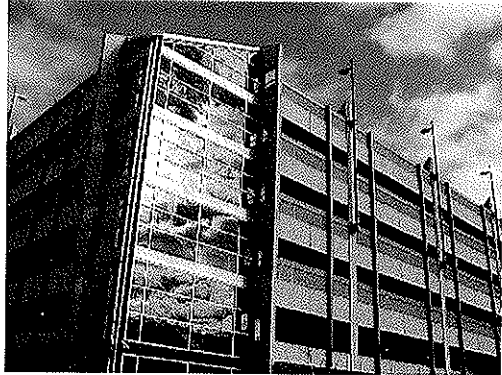
OFFICE BUILDINGS

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.



MIXED USE



PARKING GARAGES



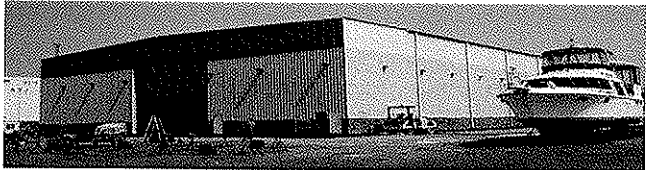
**HOTEL
 CONFERENCE CENTERS**



ATHLETIC FACILITIES



SECONDARY EDUCATION



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
Web: 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.

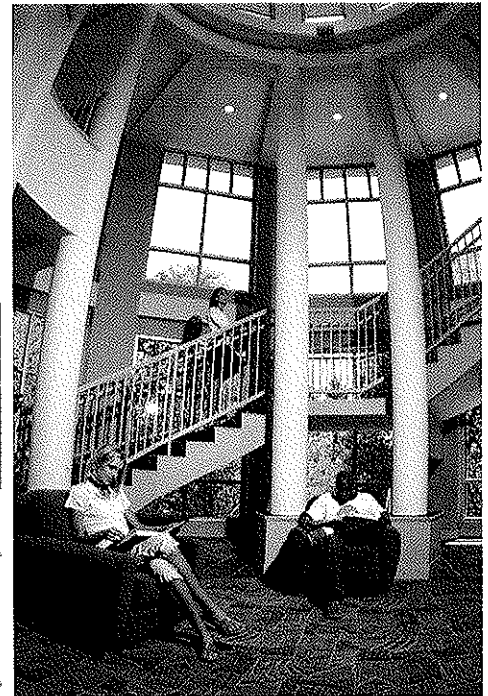
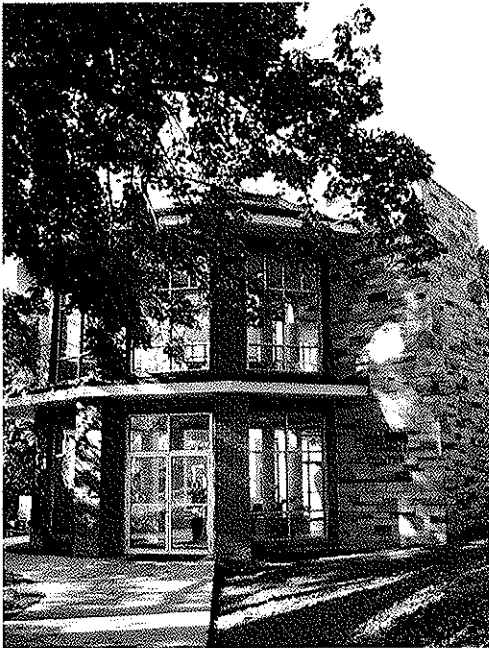
ADS is covered under a \$2 million liability policy for errors and omissions through Travelers C & S Co. of America.



Allegheny
Design Services
Structural & MEP Engineering

PROJECT PROFILE

Davis & Elkins College Benedum Hall Renovation Elkins, WV



PROJECT ARCHITECT:
STRUCTURAL ENGINEER:
CONTRACTOR:

Paradigm Architecture, Morgantown, WV
Allegheny Design Services, Morgantown, WV
March-Westin Company, Inc., Morgantown, WV

PROJECT SCOPE:

A 16,000 sq. ft. renovation of the existing Benedum Hall which included the addition of a rotunda as a vertical transition element.

PROJECT VALUE:

\$1.5 Million

PROJECT COMPLETION:

Summer 2003

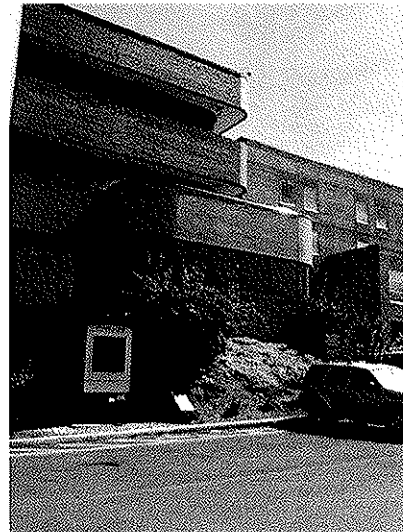
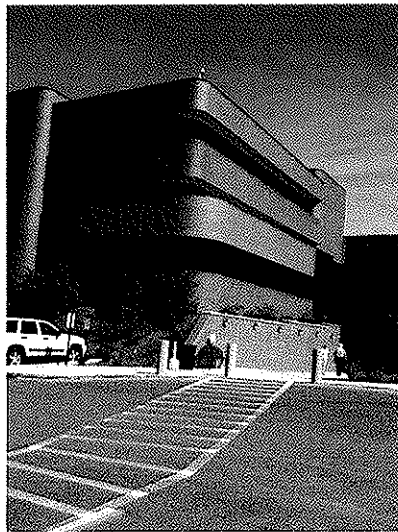
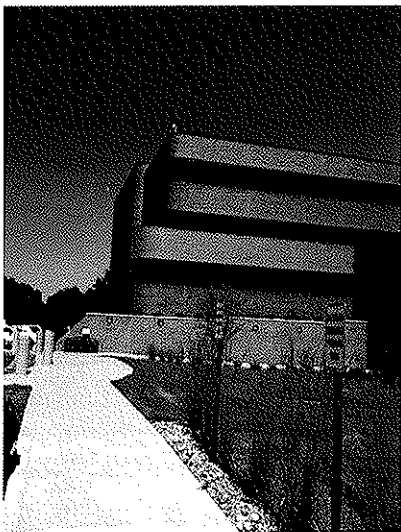


Allegheny
Design Services

Structural & MEP Engineering

PROJECT PROFILE

Monongalia General Hospital Ambulatory Care Center, Morgantown, WV



PROJECT ARCHITECT:
STRUCTURAL ENGINEER:

IKM Inc., Pittsburgh, PA
David Simpson, P.E. of Allegheny Design Services, Morgantown,
WV with R.M. Gensert Associates, Pittsburgh, PA

CONTRACTOR:
OWNER:

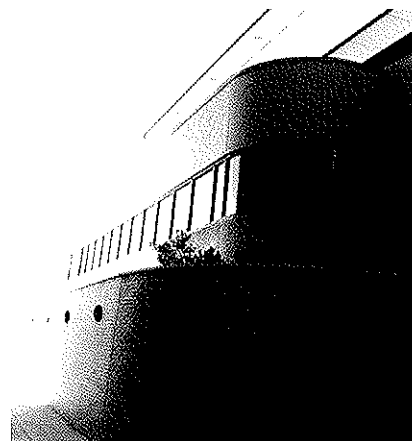
John Deklewa & Sons, Bridgeville, PA
Monongalia General Hospital, Morgantown, WV

PROJECT SCOPE:

Renovation & Expansion to Existing facility for new Ambulatory Care Center.

PROJECT VALUE: \$3 Million

PROJECT COMPLETION: 1999

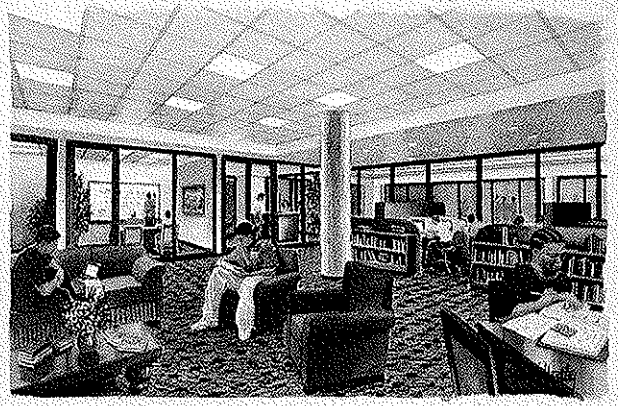
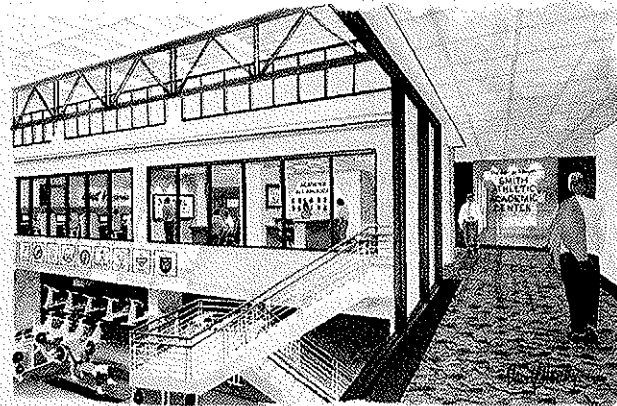
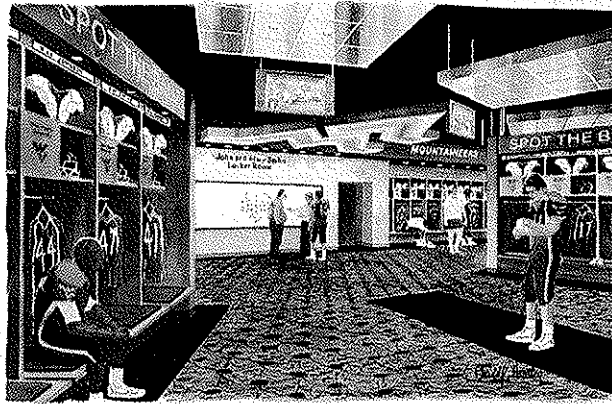




Allegheny
Design Services
Structural & MEP Engineering

PROJECT PROFILE

Puskar Academic Center and Locker Room Renovations West Virginia University



PROJECT ARCHITECT:
STRUCTURAL ENGINEER:
CONTRACTORS:

Heery International, Inc., Atlanta, GA
Allegheny Design Services, Morgantown, WV
March-Westin Company, Inc., Morgantown, WV and
JD&E, Inc., Wheeling, WV

PROJECT SCOPE:

- Additional Stadium Seating Design
- Locker Room Slab and Masonry Design
- Mechanical Addition, Elevator Shaft, and Loading Dock Design

PROJECT VALUE: \$5 Million

PROJECT COMPLETION: 2008



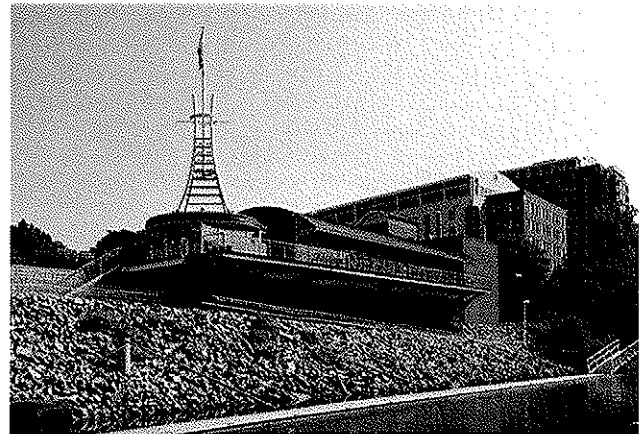
Allegheny
Design Services

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.





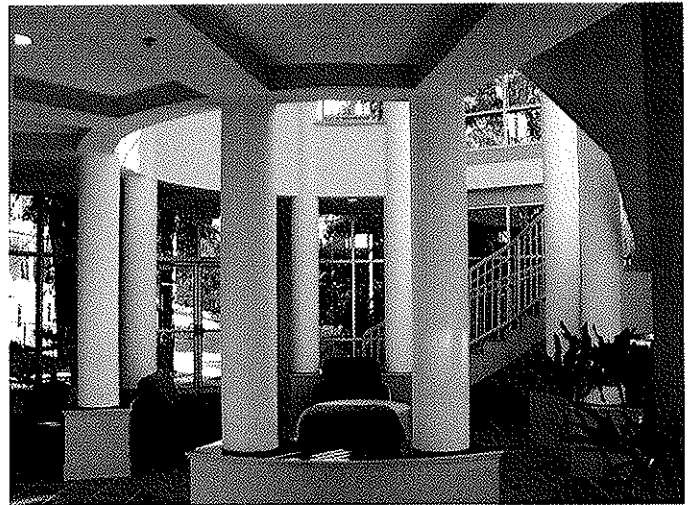
Davis & Elkins College Athletic Center
Elkins, WV

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

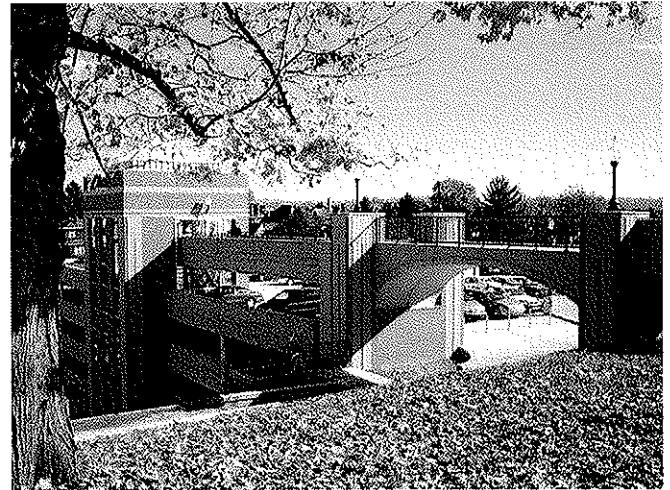
ADS was a sub-consultant to Paradigm Architecture for The Dayton. The Dayton is a 3 story modular building located at the corners of Ridgeway Avenue, Dayton Street and Richwood Avenue in Morgantown, WV. The building is a mixed used residential housing project with parking garage and retail space located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





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.



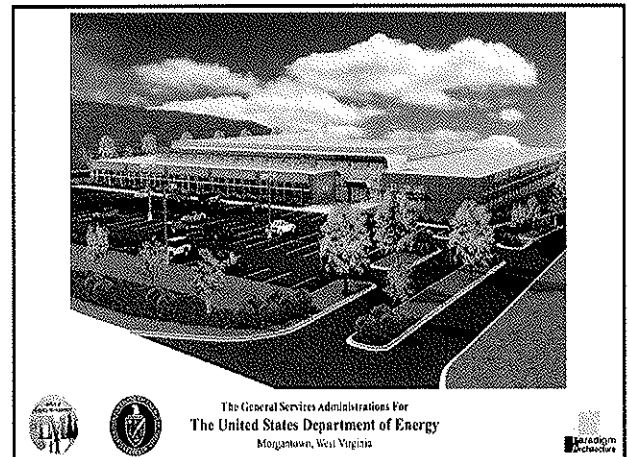
Glade Springs Hotel & Conference Center
Daniels, WV

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

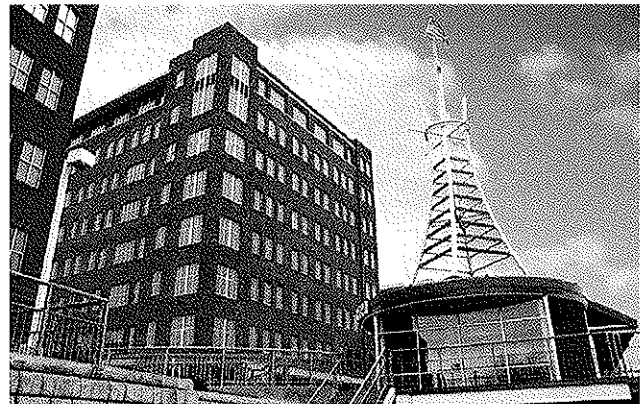
GSA/USDA Building Sabraton, WV

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

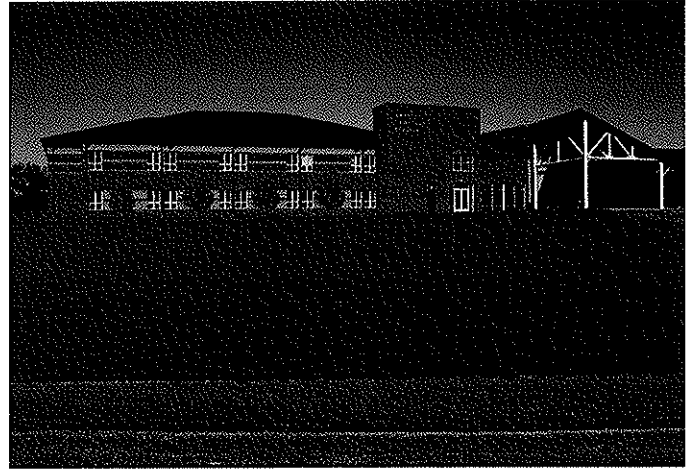
ADS is a sub-consultant to Paradigm Architecture for the new Morgantown Event Center and Parking Garage, located in the Wharf District of Morgantown, WV. ADS is providing foundation and structural system design.





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.



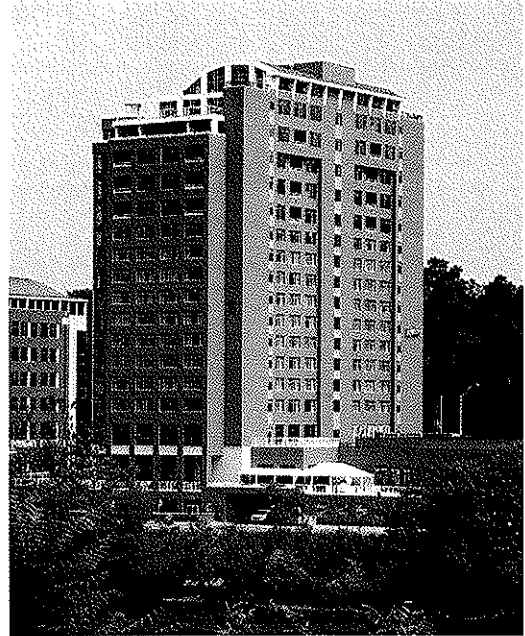


Allegheny Design Services

Structural & MEP Engineering

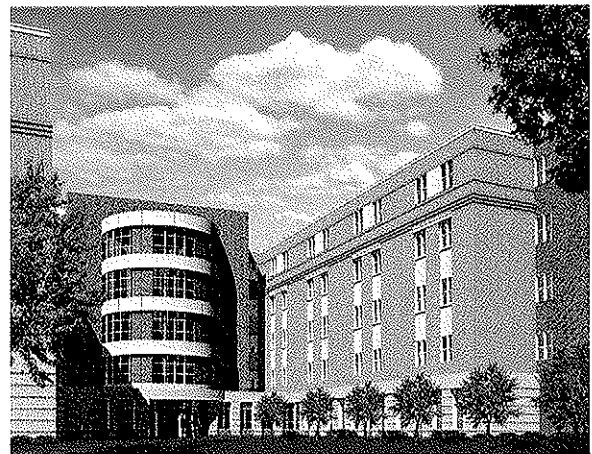
Waterfront Place Hotel & Conference Center Morgantown, WV

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.



ZDS offers an effective organizational structure; one that takes each project from inception through completion, working as an extension of the *Client* every step of the way.

In 1983, Todd A. Zachwieja founded ZECO Consultants. In 1994 ZDS Limited Liability Company was incorporated in WV using dba **ZDS Design/Consulting Services**. This company was founded to provide design and consulting services. Today there are four principals with over 100 years of technical expertise:

- Todd A. Zachwieja, PE, C.E.M., LEED AP, Chief Executive Officer, brings with him over 28 years in the design and consulting business.
- Ted T. Zachwieja, Principal over Construction Administration services with over 45 years experience in the design and consulting business, was owner of Ted T. Zachwieja & Company from 1962 to 1982.
- Daniel H. Kim, Ph.D., Manager of Strategic Planning, brings with him over 22 years in the design and consulting business and is one of the nation's leading experts in organizational management. He is also owner/founder of Pegasus Communications, Inc. from 1991 to present.
- Lori Zachwieja, CPA, Chief Financial Officer and cofounder of ZECO Consultants.

ZDS is a consulting engineering firm specializing in the following areas:

MECHANICAL
ELECTRICAL
INDOOR AIR QUALITY
COMMISSIONING
ENERGY

Each new project is assigned to a principal in-charge who will follow the project from inception through commissioning.

We assign the production staff according to the nature of the project and the work force necessary to meet the schedule. The Principal in charge of that project determines if consultants are needed and coordinates all areas. After bidding, a Principal of ZDS coordinates visits to the job site regularly, all the way through the post-warranty inspection.

“Excellent mechanical and electrical design results from an experienced team, as well as listening to the needs of the Client.”

ZDS believes in the team approach when providing engineering design and consulting services. We start with *our client* as the number one member on our team. We listen to the **needs** and **concerns** of our client and that becomes the basis for our design. Our design expertise includes:

MECHANICAL DESIGN

- Heating & Ventilation
- Air Conditioning
- Piping
- Environmental Controls
- Process Controls
- Refrigeration
- Plumbing
- Medical Gases
- Sprinkler-Fire Protection
- Master Planning

ELECTRICAL DESIGN

- Power Distribution
- Interior Lighting
- Exterior Lighting
- Emergency Power
- Communications
- Technology
- Fire Alarm
- Security
- Life Safety
- Master Planning

ZDS provides comprehensive design services. We have experience and specialties in indoor air quality, energy management and commissioning, along with traditional mechanical and electrical design experience dating back as far as 1958. We offer a complete package.

We work with all levels of the client’s staff: the building owner, the budget supervisor, the operating and maintenance staff and others impacted by the project. We recognize the maintenance and operating staff live with the design long after the project’s completion. We listen to and work with those who will continue to operate and maintain the equipment. We find that proper communication benefits the client throughout the design process and beyond.

ZDS design team provides a total system evaluation for cost-effective selection, installation, and ease of maintenance for both new systems and retrofit of in-place systems.

Design begins with *our client*. Our staff meets with our client to review their concerns, budgets and schedules. The ZDS design team reviews the *entire* picture, and ends with “A Total Design.”

ZDS provides consulting engineering services for the indoor air quality (IAQ) environment. These services include; strategic planning for renovation and new construction projects; technical research and writing; specialized applications software development; corporate and professional training programs; publications support and fulfillment; and site-specific engineering and scientific consultation.

Todd Zachwieja, ZDS Principal, is contributing editor for the following IAQ publications:

- Contributing Editor and Technical Review Panel for the publication of the *ENVIRONMENTTM Handbook of Building Management and Indoor Air Quality*, by Chelsea Group and published for Powers Educational Services.
- Technical Review Panel for the Quarterly publication of the *ENVIRONMENTTM Newsletter*, by Chelsea Group for Powers Educational Services.
- *Ventilation for a Quality Dining Experience: a Technical Bulletin for Restaurant Owners and Managers*, released in January 1993.
- *The New Horizon: Indoor Environmental Quality*, published as a supplement to the June 1993, issue of *Consulting Specifying Engineer* magazine, a trade magazine distributed to roughly 50,000 engineers.
- Editorial Advisory Board member reviewing the articles of the monthly publication *ENVIRONMENTTM Professional*
- Editorial Advisory Board member of *POWER PRESCRIPTIONSTM Indoor Air Quality Publication* by *Electric Power Research Institute*.

ZDS provides IAQ services for major corporations, government organization, and property owners to resolve their specific facility problems:

- Resolve the building's "sick building syndrome" complaints.
- Identify solutions to extensive biological contamination building related illnesses in renovated office buildings.
- Develop solutions for HVAC systems, temperature controls, equipment, operating and maintenance practices causing IAQ problems in schools and commercial buildings.
- Commission new and renovated facilities to minimize or eliminate IAQ issues before they become problems.
- Develop and establish master plans as well as conduct training seminars for IAQ of schools and commercial buildings.

As one of the Nation's leaders in Indoor Air Quality, ZDS produces sophisticated technical expertise that enables *Our Client* to be proactive in solving and preventing indoor environmental problems.

At ZDS, our engineering staff integrates energy efficiency into each project design to provide you, our client, with the added value that you expect and deserve. The ZDS team approach represents a tremendous amount of experience in designing energy efficient facilities. ZDS offers a comprehensive range of energy management services that includes:

- Providing detailed analysis of facilities.
- Recommending sound and proven energy saving solutions.
- Implementing energy management improvements
- Determining, quantifying and assisting in securing available Utility & Government grants.
- Evaluating and documenting utility savings.

Todd Zachwieja received *AEE's LEGENDS IN ENERGY AWARD* in 2007 and 2008 for lifetime achievements in energy. The ZDS team members take pride in the quality of their projects and have been responsible for designing and implementing numerous energy management programs. These programs are providing significant energy improvements and include optimizing, central utility plant equipment, control systems, air handling systems, lighting systems, and other energy consuming equipment. Recent projects include:

- Interconnecting boilers and chiller plant systems.
- Designing Geothermal HVAC systems.
- Optimizing HVAC equipment and operating sequences.
- Installing Direct Digital Control (DDC) Energy Management Systems.
- Replacing inefficient lighting equipment with energy efficient ones.
- Converting constant speed air handling equipment and pumping systems to variable speed operation.
- Modifying air handling equipment from 100% outside air to return air operation.
- Implementing heat recovery units into HVAC equipment.
- Improving laundry, kitchen and other process application efficiencies.

In addition to the energy management projects outlined above, the ZDS team members have extensive experience in identifying and implementing energy efficient operating and maintenance measures. These are typically low cost or no cost measures that include:

- Inspecting, calibrating temperature controls and adjusting outdoor air dampers.
- Commissioning economizer cycle operation.
- Testing steam traps and pressure relief equipment operation.
- Enabling heating and cooling equipment only when required.

The ZDS team is trained and experienced in advising you of program options to incorporate energy efficiency and operational saving features into the design of your new construction and renovation projects. At ZDS, we view our role as helping you to define your own energy efficiency needs and goals through identifying energy saving options and providing supporting financial information. We then help you to fit your energy efficiency needs and goals into a workable budget and schedule, and then design a program to fill those needs.

Sustainable "Green Building" design, including LEED's certification, recognizes the importance of commissioning. The design and construction industry have had start-up problems when a facility is occupied and constructions' deficiencies that were not discovered until the contractor's traditional one-year warranty period expires. The mechanical and electrical systems have continued to become more complex with sophisticated control systems and equipment, and a mountainous amount of changing technology. If not properly addressed, building Owners could face numerous operational problems from "Sick Building Syndrome," excessive energy costs, and uncomfortable indoor environments. Commissioning is the missing link between design and implementation.

Subsequent to joining ZDS, Todd Zachwieja established commissioning services for one of the nation's largest energy service companies. He is also a *LEED's Accredited Professional*. Many utility companies and building Owners now require commissioning for the new or renovated facilities in order to maximize the use of their investments in their facilities and to obtain LEED's certification. The commissioning process offers the following benefits:

- Improved comfort, serviceability and Owner understanding of systems and design intent.
- Added technical support for the Owner and being proactive in preventing new problems.
- Reduced maintenance and decreased expenses related to operating deficiencies.
- Early identification and resolution of system discrepancies while designers and contractors are still under contract and on the job.
- Verification of system performance while meeting financial restraints.
- Commission new and renovated facilities to minimize or eliminate IAQ issues before they become problems.

ZDS and its consultants offer commissioning services for their commercial and institutional clients, including meeting LEED's enhanced commissioning requirements. These services include strategic planning operations assistance for renovation and new construction projects. Commissioning services consists of construction document review, equipment performance testing, documentation of design criteria, value engineering, operational fine tuning, professional operations training programs and site-specific engineering consultation. Our project team has the unique experience of in-depth design knowledge and hands-on operations knowledge that fills in the gap between traditional design services and the building Owner's operational needs.

NATIONAL RECOGNITION

The National Conference on Building Commissioning invited Todd Zachwieja, ZDS's owner, to speak. He jointly presented a paper with the Director of Maintenance of Charleston Area Medical Center's Memorial Division. The Tampa, Florida Conference involved experts nationwide.

The principal owners of ZDS and their consultants have extensive experience in building commissioning and have saved their customers hundreds of thousands of dollars in construction costs and operating costs through their efforts.

The design team at **ZDS Design/Consulting Services** is the best to provide engineering services for **your** project. Satisfying *our Client's* individual needs and distinct requirements is the foremost concern of ZDS.

The most important member of the design team is the client. We make every effort to involve our clients throughout the entire process, from the planning through the construction and beyond.

The ZDS design staff continuously provides engineering design services value well into the millions of dollars on a variety of project types. Designing expertise goes as far back as 1958. Through the efforts of our staff, project locations include:

West Virginia	Virginia	North Carolina	Georgia
Kentucky	Ohio	Pennsylvania	Florida
Illinois	Connecticut	Texas	Michigan
New York	Wisconsin	Massachusetts	Indiana
Colorado	Tennessee	Maryland	Washington, DC
California	Hawaii	South Carolina	

Our clients can rest assured that the design team will be available. Not just for the year or two that we are involved in the initial design and construction, but also for years that follow as questions arise about your facility. A good-engineered system and its equipment should last 15 to 40 years. Why not select a design firm with experienced staff committed to their projects with a comparable track record.

Our design team will provide comprehensive services utilizing experienced staff through planning, cost estimating, engineering, coordination of bidding, regular site visitation during construction and specifications for equipment. You, *our Client*, will greatly benefit from a *single point of responsibility* for every need your project may have.

Our staff has the expertise with codes and standards. We have extensive experience in conducting engineering code surveys of existing facilities. Our staff has excellent working relationships with the West Virginia Fire Marshal's Office and the West Virginia Department of Health.

In addition to comprehensive Engineering services from an experienced design team, another major consideration in the selection of your engineer and design staff should be their track record. ZDS organization has an unbeatable, long running, and well-known track record for meeting *our Client's* needs, on time and within budget with outstanding quality.

We view these characteristics as the foundation of Quality. We look forward to the opportunity to discuss our ideas with you and assist you by providing solutions for your needs with a full range of services from Planning to Commissioning.

Daniel H. Kim, PH.D.
Principal, Management Services

Qualifications

Daniel brings with him strong design and management skills with over 24 years of experience in consulting ranging from traditional electrical and mechanical systems design to being one of the nation's leading experts in organizational issues including Total Quality Management and Systems Thinking.

His specialties include the management and design of HVAC systems for new building construction in the \$50 - 150 million range including the One Hundred and Fifty, Federal Streets, Boston, MA; the Becton Dickinson World Headquarters, NJ; Marketplace Center, Boston, MA.

Daniel has been an organizational consultant and public speaker who is committed to helping problem-solving organizations transform into learning organizations. He has worked with numerous companies including DuPont, Ford Motor, Harley Davidson, Hanover Insurance, Healthcare Forum, CIGNA, Life Technologies, Ameritech Services, Brigham & Women's Hospital and General Electric, among others.

Education

Ph.D. in Management from Massachusetts Institute of Technology Sloan School of Management in 1993
Bachelor of Science in Electrical Engineering from Massachusetts Institute of Technology in 1987

Publications

- "Learning Laboratories: Designing Reflective Learning Environments," *Proceedings of 1989 International System Dynamics Conference*, Stuttgart
- "Experimentation in Learning Organizations: A Management Flight Simulator Approach," *European Journal of Operations Research*, May 1992
- "Systems Archetypes: Diagnosing Systemic Issues and Designing High-Leverage Interventions" 1992, Cambridge, MA: Pegasus Communications
- "Toward Learning Organizations: Integrating TQC and Systems Thinking," *Special Report Series*, Cambridge, MA: Pegasus Communications
- "The Leader with the Beginner's Mind," *Healthcare Forum Journal*, July/August 1993

Lectures

Keynote speaker and/or concurrent session at several conferences, including those hosted by The Planning Forum, The Healthcare Forum, Institute for Healthcare Improvement, The Conference Board. Speaker at Hofstra University, Monmouth College, University of Houston, and U.C. Berkeley.

Mark A. Moore, P.E.
Project Manager
Electrical, Mechanical and Plumbing

Qualifications

Mark has more than 8 years of experience in electrical engineering, lighting, plumbing, technology, mechanical engineering, heating, ventilating and air conditioning, for educational, commercial and health care facilities. He researches and applies, International Building Codes, NFPA, Illuminating Engineers Society standards and National Electric Code in design. Mark has a strong background in microprocessor and microcomputer design. He is also responsible for Information Technology functions for ZDS and our customers.

Mark is an information systems and technology specialist and provides networking solutions and Windows based programming system solutions. He specializes in electrical power, security, fire alarm, lighting, plumbing, HVAC piping, and fire protection. Some of his educational and health care project experience includes Charleston Area Medical Center, Bluefield High School/Performing Art Center, Clay Elementary School, Concord University Technology Center, Elkins Middle School, H. J. Keiser Elementary, Hopemont State Hospital Fire Alarm renovations, James Monroe High School, Ohio University Bennett Hall mechanical and electrical renovations, Park Middle School, Ravenswood High, Ritchie Middle/High School, Tucker County High/Career Center, Webster Springs Elementary School geothermal heat pump system, Winfield High School HVAC/Electrical renovations, Pocahontas Co High School Renovations/Science Center additions, new McDowell County Southside K-8 School, Woodrow Wilson High School HVAC/Electrical renovations, United Hospital Wound Center and others.

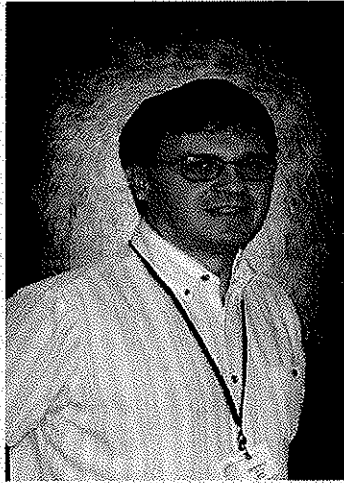
His commercial experience includes Cass Railroad Clubhouse renovations, DOT Rest Area and Welcome Center prototypes for the WV Department of Transportation, 4-H Camp Muffly Training/Dining facility, Hardy County Daycare facility, Jackson County Courthouse Annex, Kanawha County Judicial Annex, Mason County Courthouse, new Mercer County Courthouse Annex, multiple branch bank facilities, Camp Dawson Barracks security renovations, award winning Webster County IMC office facilities, Pendleton County Courthouse additions/renovations, new Webster County Multi-tenant Building, West Virginia Capitol Complex Performance Contracting HVAC retrofits, West Virginia Capitol Complex Master Planning for Security/Fire Alarm/Life Safety systems, and others.

Education

BS in Electrical Engineering from West Virginia University Institute of Technology, Montgomery, WV in 2001

Registration

Professional Engineer, West Virginia, No. 17286



David G. Dial, P.E.

Senior MEP Engineer

Qualifications

David has over twenty-eight years of experience in the design and commissioning of mechanical and electrical systems. He provides HVAC, electrical and plumbing design services for a variety of clients in West Virginia. His background includes managing operating and maintenance repair and construction services for HVAC, plumbing, electrical and maintenance. He has managed grounds maintenance, security staff, information technology, IT NASA network, video surveillance and telephone systems.

David has experience in Maintenance Engineering in plumbing, HVAC, clean room design, dust collector selections, steam and condensate flow measurement, transfer of steam production from in-house to private contractor, athletic field lighting design, and farm pump water design. He has even completed a successful energy grant application from the U.S. Department of Energy. His Environmental Design experience includes PCB remediation, Air Pollution Control Commission annual reporting, removal of underground fuel storage tanks/pumps, installation and testing for radioactive material, conversion of a fleet of vehicles to operated dual fuel (gasoline and natural gas) including training, designing a filling

station, custom built compressor station, cylinder operations area, filling post and monitoring of natural gas usage.

David has been involved in the design, document development, contract administration and recommissioning of the structural, mechanical and electrical disciplines of several WVU projects including Downtown Steam Tunnel Assessment, Coliseum Tunnel Redesign, Towers Exercise Room, Brooks Clean Room, lighting retrofits at Brooks Hall, exterior lighting for Mountainlair Parking Garage, cooling towers replacement at the Chemistry Annex, replacement of electric hot water boilers with natural gas pulse steam boilers, HVAC controls for Allen Hall, measure flow for sub metering/billing for campus steam/condensate systems, PCB removal from electrical equipment on campus, and power/cooling for a data Center at the WVU/NASA facility.

Other project experience includes design for Trinity High School's HVAC, plumbing and electrical system, industrial dust collector system for the Percival Dust Collector and replacement of rigging of a 2500 seat auditorium. As a production engineer, David optimized design of medical quality cryogenic freezers, incubator and shaker including scheduling the freight trucks, quality assurance of sheet metal shipments, writing repair manuals and setting up insulation.

Education

Bachelor of Science Mechanical Engineering, West Virginia University, 1978

Masters of Science Environmental Engineering, West Virginia University, 1980

Registration

Professional Engineer, West Virginia, No. 11692



James W. Lowry, E.I.

**HVAC, Plumbing and
Fire Protection Designer**

Qualifications

James has over approximately 6 years of experience and has completed extensive HVAC design training at Carrier Training Center, Syracuse, NY and hydronic design/applications at the B&G training center, Chicago, IL. He also had special courses in Finite Element Analysis, Vibration Analysis, Fluid Power, Automatic Controls, Industrial Instrumentation, and Programmable Logic Controllers (PLCs).

James' experience includes the design for mechanical engineering, heating, ventilating, air conditioning, plumbing, electrical and lighting for educational, health care and commercial facilities. He specializes in HVAC, fire protection & plumbing design and commissioning. He researches and applies International Building Codes, NFPA, ASHRAE standards and the AIA Guidelines for Design and Construction of Health Care Facilities in design.

Some of James' educational project experience includes Concord University Technology Center, Davis Thomas Elementary/Middle School, Elkins Middle School HVAC/electrical renovations, Eastern Greenbrier Middle School addition, Glade Elementary/Middle School renovations, Greenbrier West High School additions/renovations, Jaeger/Panther Elementary School, James Monroe High School HVAC renovations, Man/Central Elementary addition, Park Middle School HVAC renovations, Pleasant Hill Elementary renovations, Smithville Elementary School additions/renovations, Ritchie County Middle/High School HVAC/plumbing renovations, Tucker County High/Career Center HVAC renovations, new McDowell County Southside K-8 School, and Woodrow Wilson High School HVAC/electrical renovations.

James' health care experience includes Charleston Area Medical Center (Wound Center), Charleston Surgical Center, VA – Huntington steam replacement, VA – Huntington water line replacement, and VA – Huntington CT Scan renovations.

His commercial experience includes Commissioning West Virginia Air National Guard's \$43 million maintenance and fuel cell hangars, Cass Railroad Clubhouse renovations, Burnsville Rest Areas, Morgantown Welcome Center, I-70 Welcome Center, DOT Rest Area prototype, DOT Welcome Center prototype, 4-H Camp Muffly Training/Dining facility, Kanawha County Judicial Annex, Jackson County Courthouse Annex, Mason County Courthouse, Pendleton County Courthouse additions/renovations, Tucker County Courthouse renovations, Point Pleasant River Museum addition, Hardy County Daycare Center, West Union Bank Award Winning new facility, multiple branch banking facilities, Webster County Multi-tenant build-out, West Virginia Capitol Complex Performance Contracting HVAC retrofits and Master Planning for Security/Fire Alarm/Life Safety systems.

Education

BS in Mechanical Engineering from West Virginia University Institute of Technology, Montgomery, WV in 2004

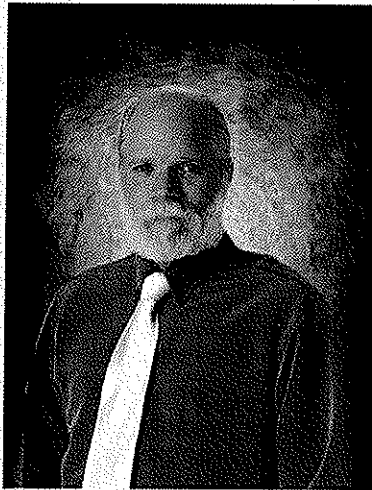
Registrations

E.I. West Virginia No. 8376

West Virginia State Board of Registration for Professional Engineers

Professional Affiliations

American Society of Mechanical Engineers



Marshall Cochran

**MEP CAD Designer
Technical Analyst**

Qualifications

Marshall has approximately 20 years experience specializing in Computer-Aided Drafting and design and is presently working with AutoCAD 2008 and Revit 2011. He has a comprehensive knowledge of AutoCAD and Integraph.

Marshall has been involved in the design and production of mechanical, electrical, fire protection, plumbing, process piping, structural and civil schematic design, design development and construction documents for colleges and universities, schools, health care, industrial and civil organizations in the states of Utah, Nevada, West Virginia, Virginia, Ohio and Pennsylvania. Marshall has developed site utility drawings, plan views, isometric views, elevation, flow diagrams, riser diagrams, details and schedules, for a complete set of working documents.

Some of his college and university experience includes Bluefield College, Bluefield State College, Concord University, Marshall University, Ohio University, Southern West Virginia Community and Technical College, West Virginia Wesleyan College, Washington and Lee University, and West Virginia University. His educational

experience also includes mechanical, electrical and plumbing renovations for schools in the following counties in West Virginia: Calhoun, Clay, Grant, Greenbrier, Hardy, Harrison, Jackson, Kanawha, Lewis, Logan, Marion, McDowell, Mercer, Mingo, Monroe, Raleigh, Randolph, Ritchie, Putnam, Pocahontas, Summers, Taylor, Tucker, Upshur, Wayne, Webster and Wyoming.

Marshall's health care experience includes Charleston Area Medical Center (CAMC), CAMC Wound Care Center, Hopemont State Hospital, Montgomery General Hospital, St. Joseph's Hospital, United Hospital Center, Webster Memorial Hospital, and Outpatient Surgery Facility of Pennsylvania.

Some of his commercial project experience includes Kanawha County Judicial Annex HVAC renovations, West Virginia Department of Transportation (DOT) boiler and chiller replacement, Morgantown Welcome Center, I-70 Welcome Center, DOT Welcome and Rest Area Prototypes, West Virginia Cultural Center HVAC renovations, Clubhouse renovations for Cass Scenic Railroad, Bluefield Area Transit Authority Administration and Maintenance facility, Jackson County Libraries, Point Pleasant River Museum, Dudley Public Safety Center Fire Station, Hardy County Daycare Center, United States Department of Agriculture – Forest Products Marketing Laboratory, Hart Field Maintenance Building, Bank One of Charleston, General Motors, Toyota, West Virginia Public Service Commission Headquarters Building, West Virginia Capitol Complex Central Boiler Plant, Kanawha County Circuit Court Room, and Fairmont Boys Home.

Education

Associate Degree in Computer-Aided Drafting, ITT Technical Institute, Murray, Utah, 1990

Has completed various courses at Parkersburg Community College, Parkersburg, West Virginia and Arch Moore Vo-Tech, Frozen Camp, West Virginia

ZDS Design/Consulting Services

Project Name: *Harris Hall - HVAC and Electrical Retrofits*
Client/Location: *Marshall University, Huntington, WV*



Client Contact: Mr. Tony Crislip,
Project Manager,
Mechanical/ Electrical Trades
One John Marshall Drive
Huntington, WV 25755-2450
Phone (304)-696-6241

Services: Engineering planning, design, bidding and construction administration services HVAC, Plumbing & Electrical retrofits, DDC Controls, AHU's replacement, chiller replacement, VVW pumping, new electrical service, switchgear and fire alarm systems.



Project Description

Harris Hall, on Third Avenue, was originally constructed in 1976. The four-story building houses the departments of classical studies, geography, history, religious studies, philosophy, psychology, counseling and rehabilitation, adult and technical education, and administrative education. Marshall University recognized that the HVAC and electrical systems were at the end of their expected service life and were experiencing frequent equipment failures, power outages and numerous complaints on comfort and “stuffy air”. The plumbing was also wasteful with an opportunity to incorporate water saving features into the existing plumbing systems.

PROJECT EXPERIENCE

Marshall University initially contracted ZDS to evaluate Harris Hall's existing mechanical/electrical/plumbing systems and prepare an extensive report. ZDS's cost estimates showed it would take \$3 million to meet their needs. The planning document covered multiple HVAC approaches with advantages and disadvantages for each to provide a comfortable environment while addressing Indoor Air Quality, energy efficiency, operating costs and meeting the Owner's goals. The report also covered related work including roof replacement, lighting upgrades, and energy/operating conservation measures.

We worked with the University on different approaches to fit the project within available funding while defining alternates that would permit the Owner to complete the HVAC/Electrical/Plumbing retrofits if more funding could be found or to phase the work as funding was found. With the aid of ZDS's planning, Marshall University was able to phase the project. The facility was vacated for less than 60 days in the summer of 2006 to allow the contractor to perform the major construction efforts without working around the occupants. The project was successful through careful planning and coordinating construction efforts between the University, the design and the installation.

The HVAC system had a direct impact on the health and safety of the college students and staff. Previously, occupant comfort was not being maintained and recommended levels of outside ventilation air were not being introduced to the classrooms. ZDS designed a VAV air handling system with reheat HVAC system to address health, safety, and IAQ issues by increasing outdoor ventilation air rates, higher filtration, strict humidity control, DDC monitoring/control, carbon monoxide demand control ventilation, outside air measuring/monitoring and other design strategies. Multiple HVAC options with their associated opinion of costs for modifying, updating and replacing the existing equipment were reviewed with the Owner for their preferences to find the best fit with the existing maintenance staff. A ground mounted air cooled chiller with antifreeze and variable water volume pumping was also designed. All HVAC equipment was designed for full DDC controls for remote monitoring, trouble shooting and energy efficiency. Plumbing fixtures were upgraded with water conserving low flow auto flushing devices to reduce water/sewer costs.

A new addressable fire alarm system, electrical service, electrical switchgear and additional panelboards were also included in the design. A section of the original aluminum bussed switchgear had previously "melted" which caused an extensive outage while a custom replacement part could be manufactured. The electrical retrofits addressed this & energy efficient lighting with motion detectors were also incorporated into the building.

Tony Crislip, Manager, Marshall University stated "*This building serves as a pilot for how all our buildings should be constructed. This building is the most comfortable one on campus!*"

MEP Project Cost:	\$2,856,000
Project Size:	56,680 square-feet
Completion Date:	Completion fall 2006

ZDS Project Experience — LEED



West Virginia Capitol Complex Project

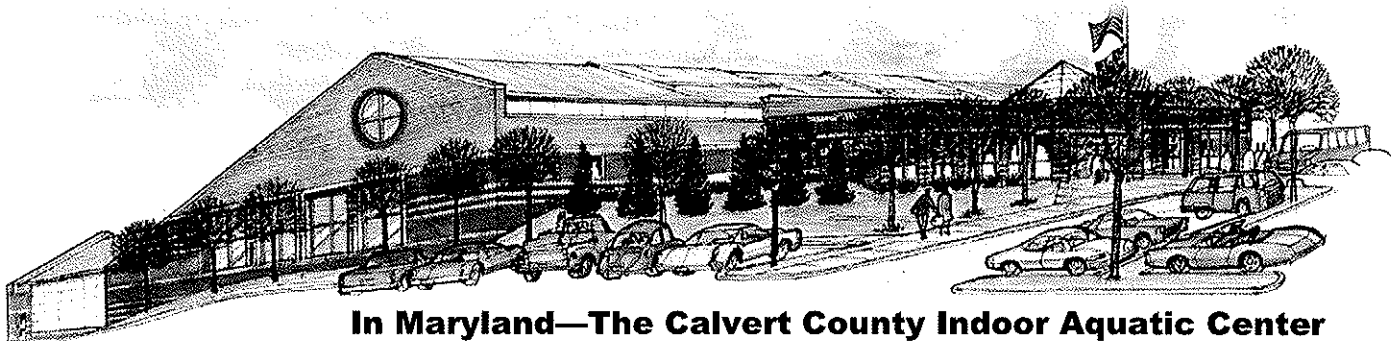
An integration of nine buildings involving over 1.6 million square feet including the Capitol, Governor's Mansion, The Center for Culture and History, plus six other administration facilities.

LEED Certified Candidate



ZDS Projects with Adapted LEED Principles including Commissioning

University of California Davis Campus Veterinarian Facility



In Maryland—The Calvert County Indoor Aquatic Center The largest capital project facility the county has ever undertaken