



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

# Request for Quotation

REQ NUMBER  
 PTR10011

PAGE  
 1

ADDRESS CORRESPONDENCE TO ATTENTION OF  
 FRANK WHITTAKER  
 304-558-2316

RFQ COPY  
 TYPE NAME/ADDRESS HERE

DIVISION OF PUBLIC TRANSIT  
 BUILDING 5, ROOM 906  
 1900 KANAWHA BOULEVARD, EAST  
 CHARLESTON, WV  
 25305-0432 304-558-0428

DATE PRINTED 09/17/2009	TERMS OF SALE	SHIP VIA	FOB	FREIGHT TERMS
----------------------------	---------------	----------	-----	---------------

BID OPENING DATE: 10/07/2009 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	JB		906-00-00-001		
ARCHITECT/ENGINEERING SERVICES, PROFESSIONAL .  THE WEST VIRGINIA PURCHASING DIVISION, FOR THE AGENCY, THE WEST VIRGINIA DIVISION OF PUBLIC TRANSIT IS SOLICITING EXPRESSIONS OF INTEREST FOR ARCHITECTURAL AND ENGINEERING SERVICES FOR THE CONSTRUCTION FO A LEED CERTIFIED PRE-ENGINEERED METAL AND BRICK CONSTRUCTION ADMINISTRATIVE OFFICE AND MANITENANCE FACILITY NEAR GRANTSVILLE, WV.  EXHIBIT 10  REQUISITION NO.: .....  ADDENDUM ACKNOWLEDGEMENT  I HEREBY ACKNOWLEDGE RECEIPT OF THE FOLLOWING CHECKED ADDENDUM(S) AND HAVE MADE THE NECESSARY REVISIONS TO M PROPOSAL, PLANS AND/OR SPECIFICATION, ETC.  ADDENDUM NO.'S:  NO. 1 .....  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. NO. 2 .....						

RECEIVED

2009 OCT -7 AM 8:48

WV PURCHASING DIVISION

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE	TELEPHONE	DATE
TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE

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



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

# Request for Quotation

RFQ NUMBER  
**PTR10011**

PAGE  
**2**

ADDRESS CORRESPONDENCE TO ATTENTION OF:  
**FRANK WHITTAKER**  
**304-558-2316**

PROPERTY

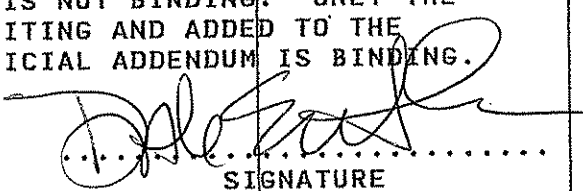
RFQ COPY  
 TYPE NAME/ADDRESS HERE

SHIP TO

DIVISION OF PUBLIC TRANSIT  
 BUILDING 5, ROOM 906  
 1900 KANAWHA BOULEVARD, EAST  
 CHARLESTON, WV  
 25305-0432 304-558-0428

DATE PRINTED <b>09/17/2009</b>	TERMS OF SALE	SHIP VIA	FOB	FREIGHT TERMS
-----------------------------------	---------------	----------	-----	---------------

BID OPENING DATE: **10/07/2009** BID OPENING TIME **01:30PM**

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
	NO. 3 .....					
	NO. 4 .....					
	NO. 5 .....					
<p>I UNDERSTAND THAT FAILURE TO CONFIRM THE RECEIPT OF THE ADDENDUM(S) MAY BE CAUSE FOR REJECTION OF BIDS.</p> <p>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.</p> <p style="text-align: center;">             .....            SIGNATURE            .....            Chapman Technical Group            .....            COMPANY            .....            October 7, 2009            .....            DATE         </p> <p>REV. 11/96</p> <p style="text-align: center;">NOTICE</p> <p>A SIGNED BID MUST BE SUBMITTED TO:</p> <p style="text-align: center;">DEPARTMENT OF ADMINISTRATION          PURCHASING DIVISION          BUILDING 15          2019 WASHINGTON STREET, EAST</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE	TELEPHONE	DATE
TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE

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



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

# Request for Quotation

RFQ NUMBER  
**PTR10011**

PAGE  
**3**

ADDRESS CORRESPONDENCE TO ATTENTION OF  
**FRANK WHITTAKER  
 304-558-2316**

RFQ COPY  
 TYPE NAME/ADDRESS HERE

VENDOR

SHIP TO

**DIVISION OF PUBLIC TRANSIT  
 BUILDING 5, ROOM 906  
 1900 KANAWHA BOULEVARD, EAST  
 CHARLESTON, WV  
 25305-0432 304-558-0428**

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
09/17/2009				

BID OPENING DATE: **10/07/2009** BID OPENING TIME **01:30PM**

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
				CHARLESTON, WV 25305-0130		
<p>THE BID SHOULD CONTAIN THIS INFORMATION ON THE FACE OF THE ENVELOPE OR THE BID MAY NOT BE CONSIDERED:</p> <p>SEALED BID</p> <p>BUYER: 44</p> <p>RFQ. NO.: PTR10011</p> <p>BID OPENING DATE: 10/07/09</p> <p>BID OPENING TIME: 1:30 PM</p> <p>PLEASE PROVIDE A FAX NUMBER IN CASE IT IS NECESSARY TO CONTACT YOU REGARDING YOUR BID:            -----            304-727-5580            -----</p> <p>CONTACT PERSON (PLEASE PRINT CLEARLY):            -----            Dale Withrow            -----</p>						

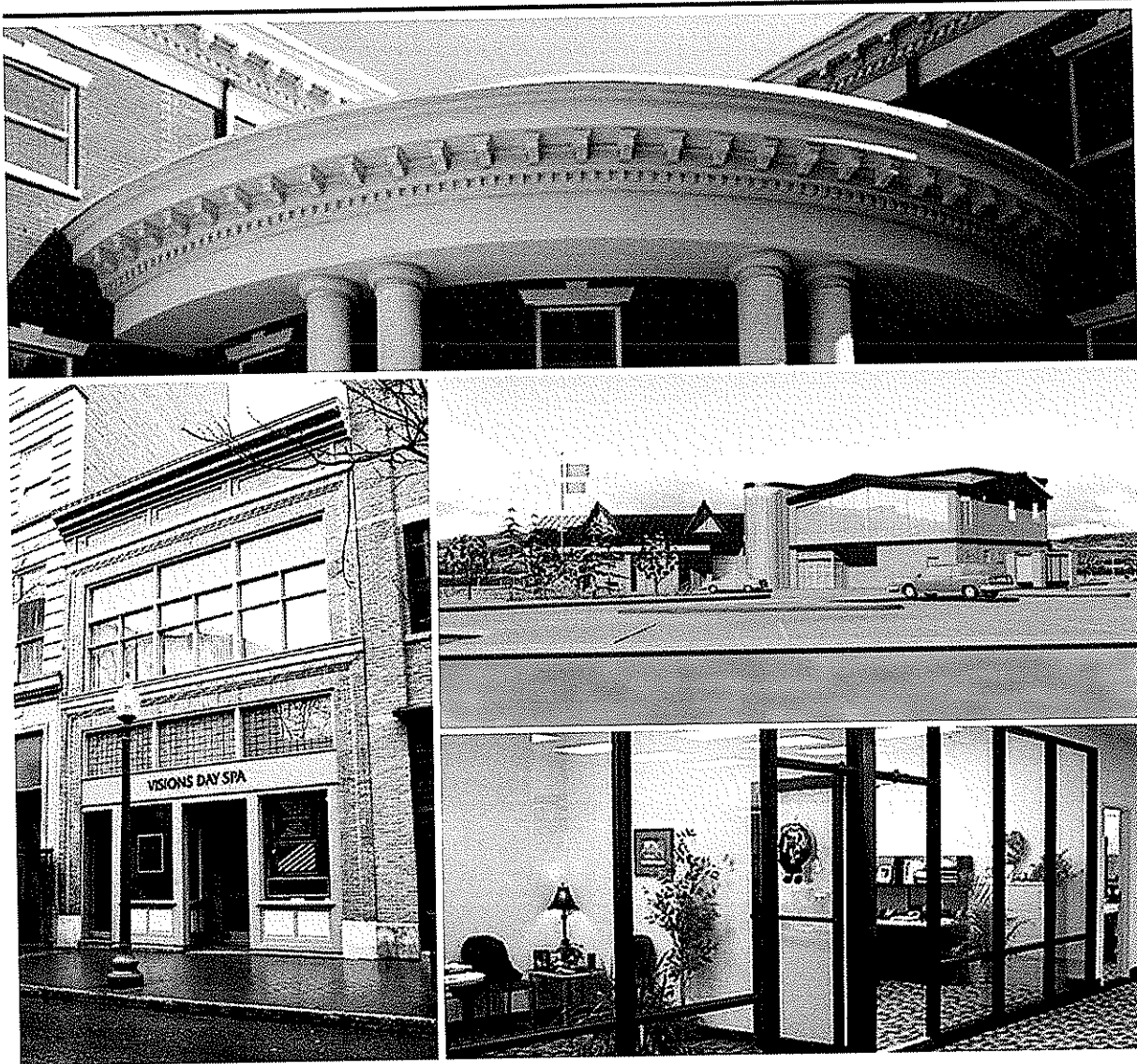
SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE	TELEPHONE	DATE
TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE

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

**Expression of Interest for A/E Services  
to the West Virginia Division of Public Transit  
Administrative Office and Maintenance Facility  
RFQ PTR10011**

October 7, 2009





October 7, 2009

Department of Administration  
Purchasing Division  
Building 15  
2019 Washington Street, East  
Post Office Box 50130  
Charleston, West Virginia 25305-0130

**Re: A/E Services for the  
Little Kanawha Transit Authority-  
Grantsville  
RFQ PTR10011**

To the Selection Committee:

Chapman Technical Group is most interested in providing the architectural and engineering services for the design of a pre-engineered administrative and maintenance facility in Grantsville, West Virginia. As you will see upon reviewing our submittal, we have a great deal of experience with pre-engineered buildings throughout West Virginia. We have designed buildings as large as the 50,000 square-foot multi-tenant building in Philippi as well as several small vehicle storage and maintenance facilities.

Our current workload is such that would allow us to start on your project immediately. The key personnel that would be involved are indicated in the Project Team part of this submittal. I will serve as the Project Manager and Mr. Phill Warnock will serve as the Project Architect. All of the work would be performed out of our St. Albans office. Geotechnical engineering (representing about 5% of the total work) will be subcontracted to a geotechnical engineering firm and the electrical/mechanical design would be subcontracted to ZDS Engineers (representing about 20% of the total work). To meet our DBE goals we will use CAS Structural Engineering for at least 5.3% of the work. Chapman Technical Group maintains a cost accounting system capable of segregating and identifying accumulating costs for each job.

We would very much appreciate the opportunity to present our project team and further discuss your project. In the meantime, if you have any questions or need additional information, please contact me.

Sincerely,

**CHAPMAN TECHNICAL GROUP**

Dale E. Withrow, Manager Architecture

200 Sixth Avenue  
St. Albans, WV 25177

304.727.5501  
FAX 304.727.5580

Buckhannon, WV  
Martinsburg, WV

[www.chaptech.com](http://www.chaptech.com)

[m:/proposals/ar/transitauthoritygrantsville10.7.09/letter](mailto:m:/proposals/ar/transitauthoritygrantsville10.7.09/letter)



Chapman  
Technical  
Group

**1**

**Overview of  
Chapman Technical Group**

**2**

**Required Bid Forms**

**3**

**Relevant Project Experience**

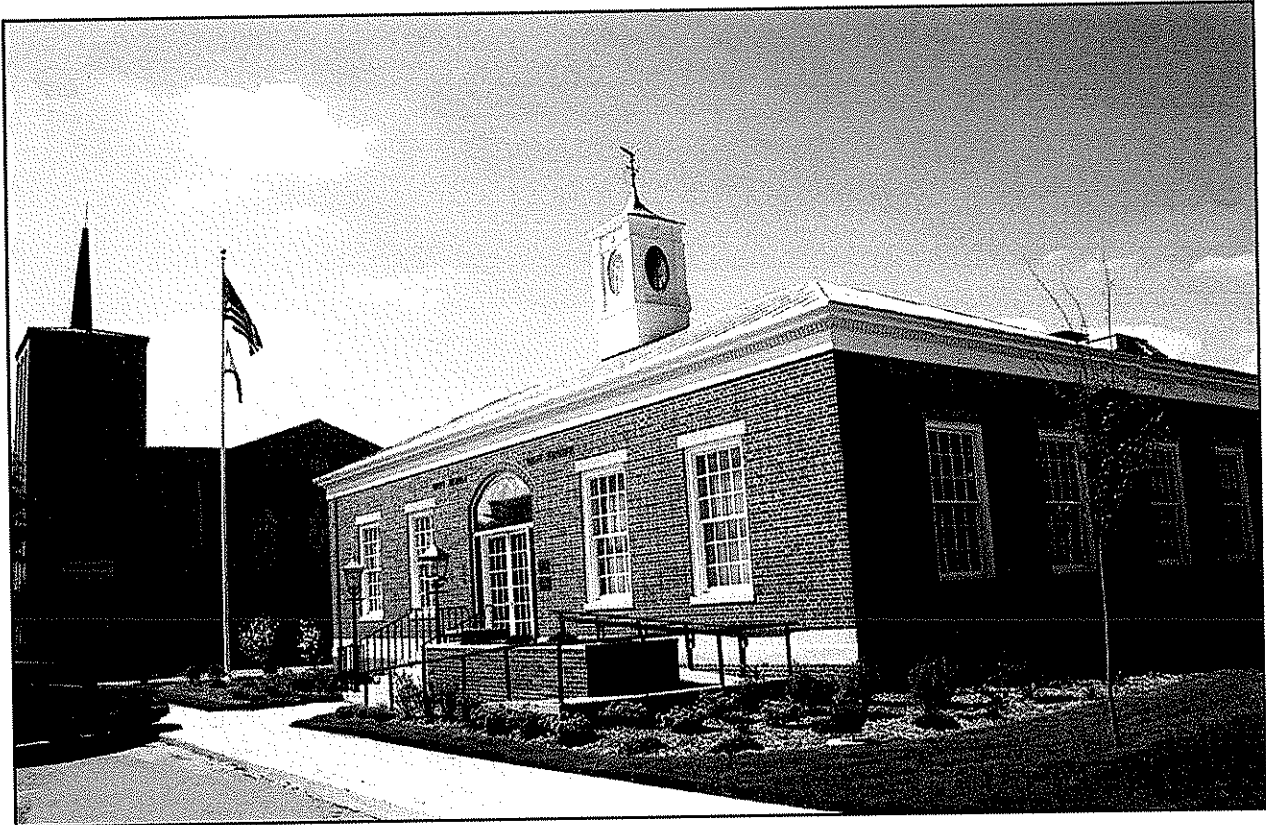
**4**

**Project Team Resumes**

**5**

**References**

## Company Overview



*Chapman Technical Group's St. Albans Office*

Chapman Technical Group is a full-service consulting firm with offices in St. Albans, Buckhannon, and Martinsburg, West Virginia offering an extensive range of professional architectural, engineering, interior design and landscape architectural services. Established in 1984, Chapman Technical Group has steadily grown to a diverse firm of professionals, many of whom were educated in West Virginia colleges and universities. We have achieved an outstanding reputation for providing high-quality design projects, while meeting client schedules and budgets and have received numerous awards for our work.

Our facilities are both state-of-the-art and architecturally significant. Our St. Albans office is a former post office and is now on the National Register of Historic Places. We also have a corporate airplane to better access our project sites.

***Chapman Technical Group offers a broad range of professional services.***

- Airport Design
- Architecture
- Civil Engineering
- Fire Puming & Protection
- Interior Design
- Landscape Architecture
- Recreational Facilities
- Roads, Highways, & Bridges
- Site Development
- Space Planning
- Surveying
- Water & Wastewater Systems

# Awards



**AMERICAN INSTITUTE OF ARCHITECTS - HONOR AWARD FOR EXCELLENCE IN ARCHITECTURE**, 2008 - Upshur County Courthouse Restoration and Renovations.

**AMERICAN COUNCIL OF ENGINEERING COMPANIES-WV - ENGINEERING EXCELLENCE AWARD**, 2008, Bronze Award - Wastewater Category for Spring Run State Fish Hatchery Improvements.

**AMERICAN COUNCIL OF ENGINEERING COMPANIES-WV - ENGINEERING EXCELLENCE AWARD**, 2007, Silver Award - Structures Category for the Mercer County Airport Runway Safety Area Project.

**GARY KING COMMUNITY SERVICE AWARD**, 2006.

**GOOD SCOUT RECIPIENT**, 2005.

**AMERICAN COUNCIL OF ENGINEERING COMPANIES-WV - ENGINEERING EXCELLENCE AWARD**, 2003, Gold Award - Water Treatment Category for the City of Fairmont Water Treatment Plant Project.

**AMERICAN COUNCIL OF ENGINEERING COMPANIES-WV - ENGINEERING EXCELLENCE AWARD**, 2002, Gold Award - Transportation Category for the Raleigh County Memorial Airport Runway Rehabilitation Project.

**WINNER - "COMMISSIONER'S ENGINEERING ACHIEVEMENT AWARD"**, 2000, The WVDOT - Division of Highways - Large Bridge Category for WV10 Buffalo Creek Bridge, Logan County, West Virginia.

**FINALIST - "COMMISSIONER'S ENGINEERING ACHIEVEMENT AWARD"**, 1999, The WVDOT - Division of Highways - Large Roadway Category for WV10 Buffalo Creek - Taplin Project and 2000 for WV10 Buffalo Creek - Huff Junction Project, both in Logan County, West Virginia.

**AMERICAN COUNCIL OF ENGINEERING COMPANIES-WV - ENGINEERING EXCELLENCE AWARD**, 1999, Silver Award - Water and Wastewater Category, for the City of Beckley Piney Creek Wastewater Treatment Plant Project.

**ENTREPRENEUR OF THE YEAR AWARD - FINALIST**, 1999 and 2000, Sharon L. Chapman, President, was named one of twenty finalists in the West Virginia Area Entrepreneur of the Year Award. Sharon was recognized for leading Chapman Technical Group to become one of the most highly regarded engineering firms in the state after the death of her husband and company founder, Harvey R. Chapman.

**"EXPECT THE BEST FROM WEST VIRGINIA AWARD"**, 1998, Charleston Regional Chamber of Commerce. The Expect the Best program was created to recognize West Virginia businesses and organizations that promote quality of life at home, work, and in the community so that individuals and organizations will implement quality principles and practices leading to unprecedented pride and economic growth in West Virginia.

**HONOR AWARD**, West Virginia Chapter of the American Society of Landscape Architects, 1994, Shrewsbury Street Area Redevelopment Plan, for excellence in planning and design projects. Joseph E. Bird, ASLA, Project Manager.

**"GOVERNOR'S AWARD FOR ENGINEERING EXCELLENCE"**, 1990, The West Virginia Chapter of the American Public Works Association, in recognition of outstanding Public Works Engineering and Design of Projects within West Virginia.

**DUNDEE CEMENT COMPANY ANNUAL DESIGN AWARD**, 1988, Yeager Airport Taxiway Overlay Project. Harvey R. Chapman, P.E., Project Manager.

**AUSTIN C. PALMER "OUTSTANDING FACILITY DESIGN AWARD"**, 1988, City of Bridgeport Swimming Pool Complex. Harvey R. Chapman, P.E., Project Manager.

**"GEORGE WARREN FULLER AWARD"**, Harvey R. Chapman, 1984, Robert G. Belcher, P.E., 2001, and Sharon L. Chapman, 2005, American Water Works Association, for distinguished service in the water supply field in the State of West Virginia.



Buyer: FW-44 Page: \_\_\_\_\_ PO# PTR10011  
Spending Unit: Division of Public Transit  
Department of Transportation

**BID FORM # 1: Letter of Intent**

Name of Bidder/Offeror's firm: Chapman Technical Group

Address: 200 Sixth Avenue

City: St. Albans State: WV Zip Code: 25177

Name of DBE firm: CAS Structural Engineering, Inc.

Address: P.O. Box 469

City: Alum Creek State: WV Zip Code: 25003

Telephone: 304-756-2564

Description of work to be performed by the DBE firm:

Structural Engineering

By: Shawn L. Chapman President  
(Signature) (Title)

If the Bidder/Offeror does not receive award of the prime contract, any and all representations in this Letter of Intent and Affirmation shall be null and void.

(Submit this page for each DBE subcontractor.)

Buyer: FW-44 Page: \_\_\_\_\_ PO# PTR10011  
Spending Unit: Division of Public Transit  
Department of Transportation

**BID FORM #2: DISADVANTAGED BUSINESS ENTERPRISE (DBE)  
UTILIZATION**

The undersigned Bidder/Offeror has satisfied the requirements of the bid specification in the following manner (please check the appropriate space):

The Bidder/Offeror is committed to a minimum of 5.3% DBE utilization on this contract.

The Bidder/Offeror (if unable to meet the DBE goal of 5.3%) is committed to a minimum of 5.3% DBE utilization of this contract and submits documentation demonstrating good faith efforts.

Name of Bidder/Offeror's firm: Chapman Technical Group

By: Shawn L. Chapman President  
(Signature) (Title)

**BID FORM#3**

Chapman Technical Group hereby certifies that it IS or IS NOT (specify one) included on the U.S. Comptroller General's Consolidated List of Persons or Firms Currently Debarred for violations of Various Public Contracts Incorporating Labor Standards Provisions.

October 7, 2009  
Date

Shawn L. Chapman  
Authorized Signature

President  
Title

Chapman Technical Group  
Company Name

**BID FORM #4**

**CERTIFICATION OF PRIMARY PARTICIPANT REGARDING  
DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS**

The Primary Participant (applicant for an FTA grant or cooperative agreement, or potential contractor for a major third party contract),

Chapman Technical Group (COMPANY NAME) certifies to the best of its knowledge and belief, that it and its principals:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
2. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (2) of this certification; and
4. Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

(If the primary participant (applicant for an FTA grant, or cooperative agreement, or potential third party contractor) is unable to certify to any of the statements in this certification, the participant shall attach an explanation to this certification.)

THE PRIMARY PARTICIPANT (APPLICANT FOR AN FTA GRANT OR COOPERATIVE AGREEMENT, OR POTENTIAL CONTRACTOR FOR A MAJOR THIRD PARTY CONTRACT),

Chapman Technical Group, CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF THE CONTENTS OF THE STATEMENTS SUBMITTED ON OR WITH THIS CERTIFICATION AND UNDERSTANDS THAT THE PROVISIONS OF 31 U.S.C. SECTIONS 3801 ET SEQ. ARE APPLICABLE THERETO.

Sharon L. Chapman  
Signature and Title of Authorized Official

**BID FORM #5**

**CERTIFICATION OF RESTRICTIONS ON LOBBYING**

The undersigned (Vendor, Contractor) certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for making lobbying contacts to an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions. [as amended by "Government Wide Guidance for New Restrictions on Lobbying," 61 Fed. Reg. 1413 (1/19/96). Note: Language in paragraph (2) herein has been modified in accordance with Section 10 of the Lobbying Disclosure Act of 1995 (P.L. 104-65, to be codified at 2 U.S.C. 1601, et seq.)]
3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure. [Note: Pursuant to 31 U.S.C. § 1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such expenditure or failure.]

The Vendor, Chapman Technical Group, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Vendor understands and agrees that the provisions of 31 U.S.C. § 3801, et seq., apply to this certification and disclosure, if any.

October 7, 2009  
Date

Sharon L. Chapman  
Authorized Signature

President  
Title

**BID FORM#6**

RFQ No. PTR10011

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.

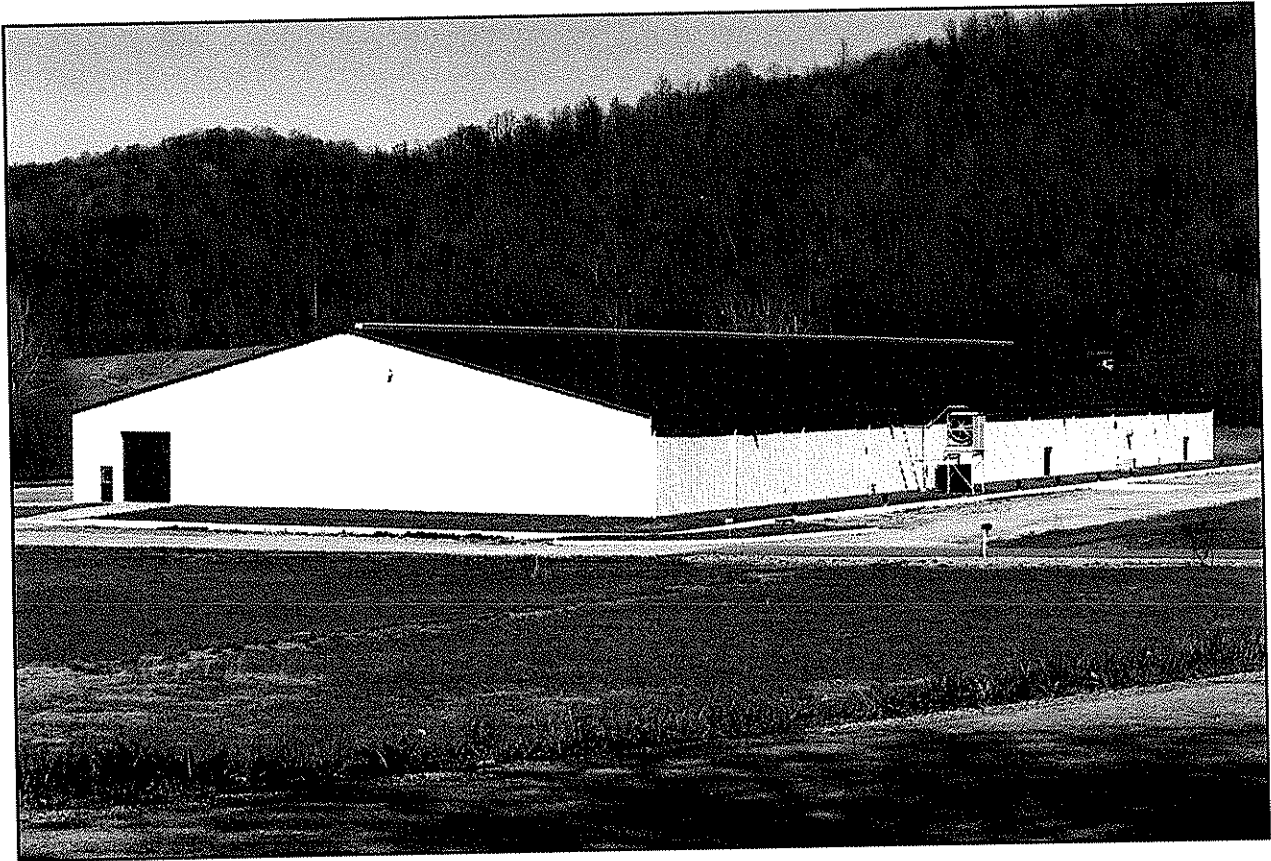
**LICENSING:** Vendors must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agencies or political subdivision. Furthermore, 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.

**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. Vendors should visit [www.state.wv.us/admin/purchase/privacy](http://www.state.wv.us/admin/purchase/privacy) for the Notice of Agency Confidentiality Policies.

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

Vendor's Name: Chapman Technical Group

Authorized Signature: Sharon L. Chapman Date: October 7, 2009



### **Philippi Board of Trade**

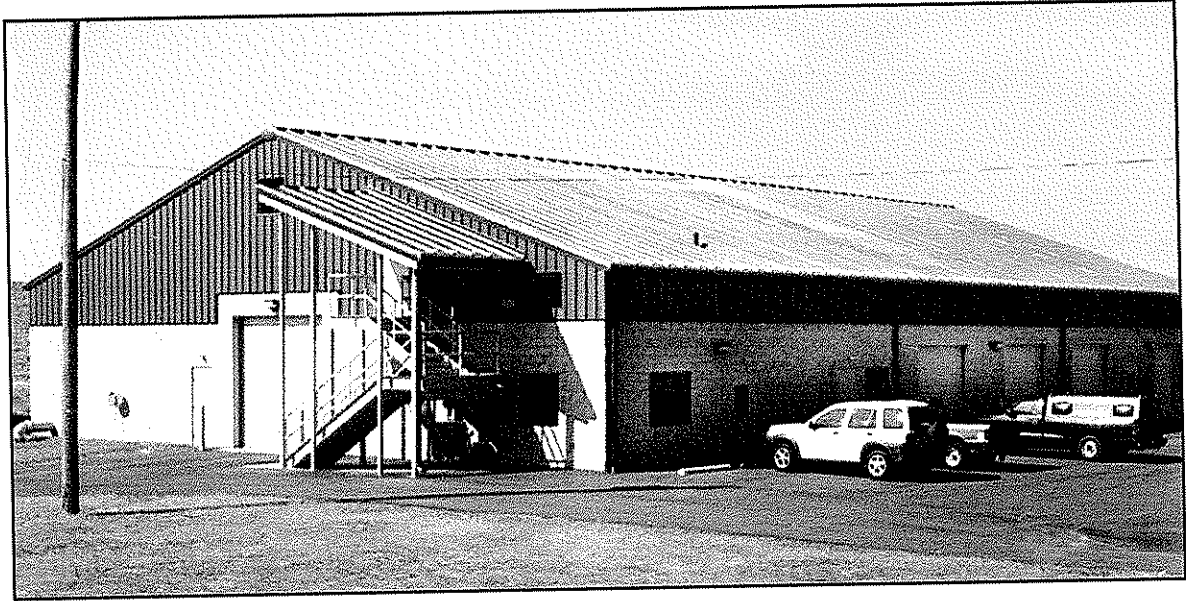
124 North Main Street  
Philippi, West Virginia 26416

Project involved the design, including structural, mechanical, and electrical engineering of a 50,000 square-foot, one-story, multi-purpose/multi-tenant office and industrial facility. Also included was the development of a 35-acre site involving roads and parking areas, electrical and power requirements, and storm, sewer and water systems, as well as all landscaping. Space planning is being performed for individual clients under separate contract.



## Mason County Fish Hatchery

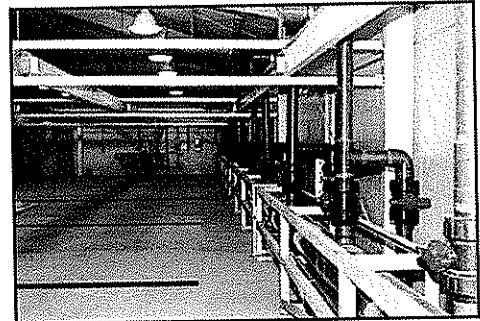
00010



*Above: The Mason County Fish Hatchery building houses fish rearing facilities as part of WVDNR's hatchery operations at the Robert C. Byrd Locks and Dam. Right: Piping manifolds will distribute both well water and reservoir water to a variety of fish tanks.*

### West Virginia Division of Natural Resources

Capitol Complex, Building 3, Room 669  
1900 Kanawha Boulevard, East  
Charleston, West Virginia 25305



Located at the Robert C. Byrd Locks and Dam at Apple Grove, West Virginia, the Mason County fish hatchery building is the final component to the hatchery complex that also includes a series of fish rearing ponds and a reservoir to supply the ponds. The project also included the design and construction of two residences to be used by hatchery personnel.

The 9,200 square-foot fish hatchery building is a masonry and steel structure housing the actual hatching components, as well as offices and other support facilities. More than half of the building is open space to accommodate the fish hatching egg rack and a variety of rearing tanks that hold the fish until they are mature enough to be transferred

to ponds. The tanks are fed from either reservoir water or directly from well water which first passes through a degassing head tank. As water flows continuously through the tanks from an overhead distribution system, it is collected in a series of trench drains in the hatchery floor and eventually makes its way back to the Ohio River.

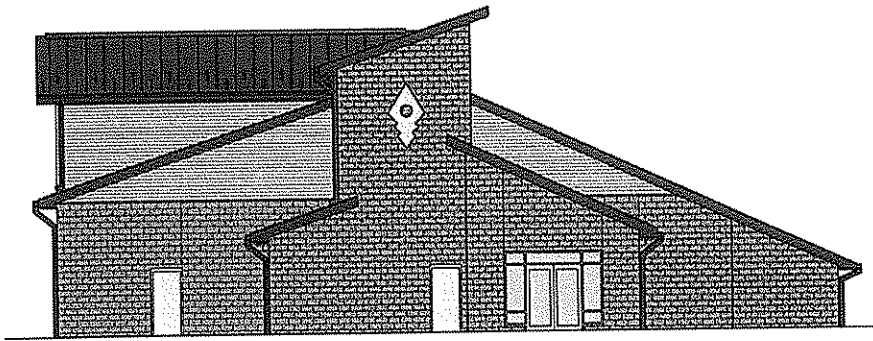
The hatchery also includes an office, a bunk room and kitchen for seasonal employees, a brine/shrimp room, and storage and maintenance garages. A mezzanine above the office area provides for additional storage.



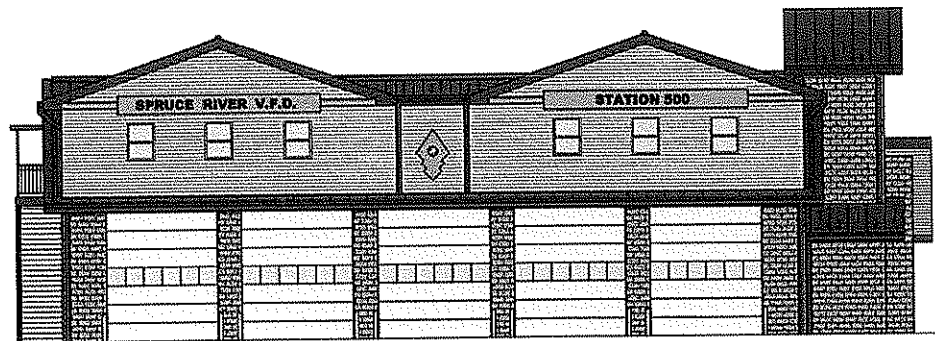


## Spruce River Volunteer Fire Department

06033



EAST ELEVATION



SOUTH ELEVATION

### Spruce River Volunteer Fire Department

Post Office Box 99

Jeffery, West Virginia 25114

Chapman Technical Group Designed renovations to the Spruce River Volunteer Fire Department to expand and upgrade their current facility. The new apparatus bay, nearly twice the size of the original, provides for more efficient movement around the vehicles for cleaning and maintenance, as well as more direct movement of the vehicles. The existing apparatus bay is being converted to a fully accessible meeting room, including toilets and showers, which will be available for public functions and emergency sheltering.

A second floor will be constructed over the new bay to serve as a dayroom for the fire fighters. The site is being developed to provide parking, and landscape features which enhance the appearance of the facility while increasing accessibility and security around the building. The total renovation and addition will result in nearly 10,000 square-foot of space.



## New Haven Elementary Addition

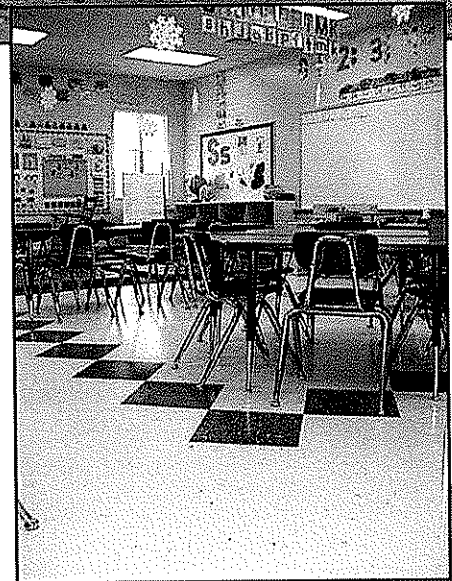
00007



### Mason County Schools

1200 Main Street  
Point Pleasant, West Virginia 25550

The project consisted of a 10,000 square-foot addition that included four classrooms, a multi-purpose room, and renovations to the cafeteria. A "pre-engineered" metal building structural system provided an economical solution for the height and clear floor space needed for the multi-purpose room which houses a stage, offices, accessible restrooms, and storage mezzanine, in addition to the basketball/play court. Colored/textured block and pre-finished metal siding and roofing made a durable and attractive facade. Simple yet colorful materials brighten the classrooms.





## Upshur County Snow Removal Equipment Building

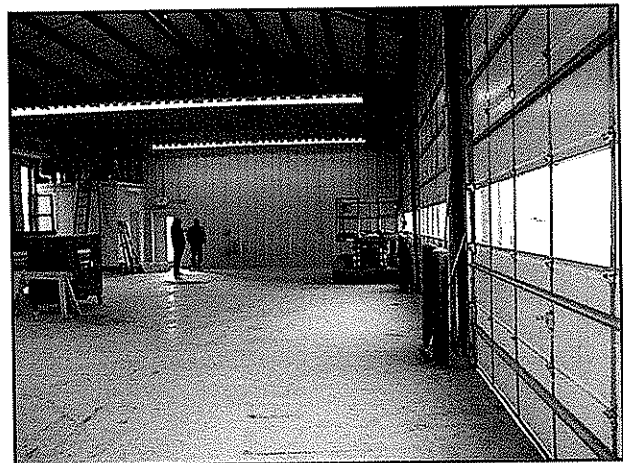
00037



### **Buckhannon-Upshur Airport Authority**

38 West Main Street  
Buckhannon, West Virginia 26201

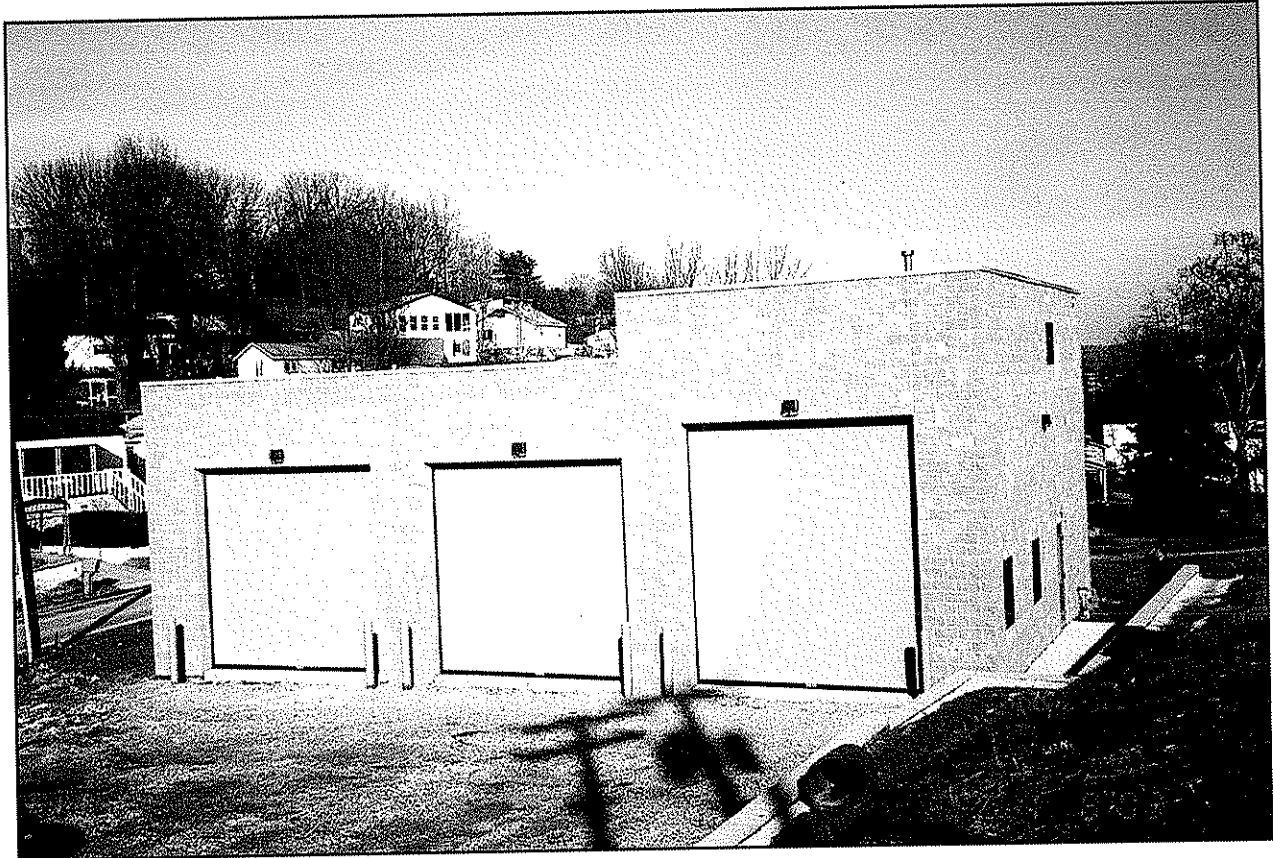
As part of the continuing expansion of the Upshur County Airport, Chapman Technical Group provided design and construction administration services for the three-bay Removal Equipment building. The building and the site were designed to easily accommodate future expansions. The 3,200 square-foot facility was completed in 2002 at an approximate cost of \$300,000.





## South Charleston Sanitary Board Garage

01013



### South Charleston Sanitary Board

114 Monongalia Street  
South Charleston, West Virginia 25302

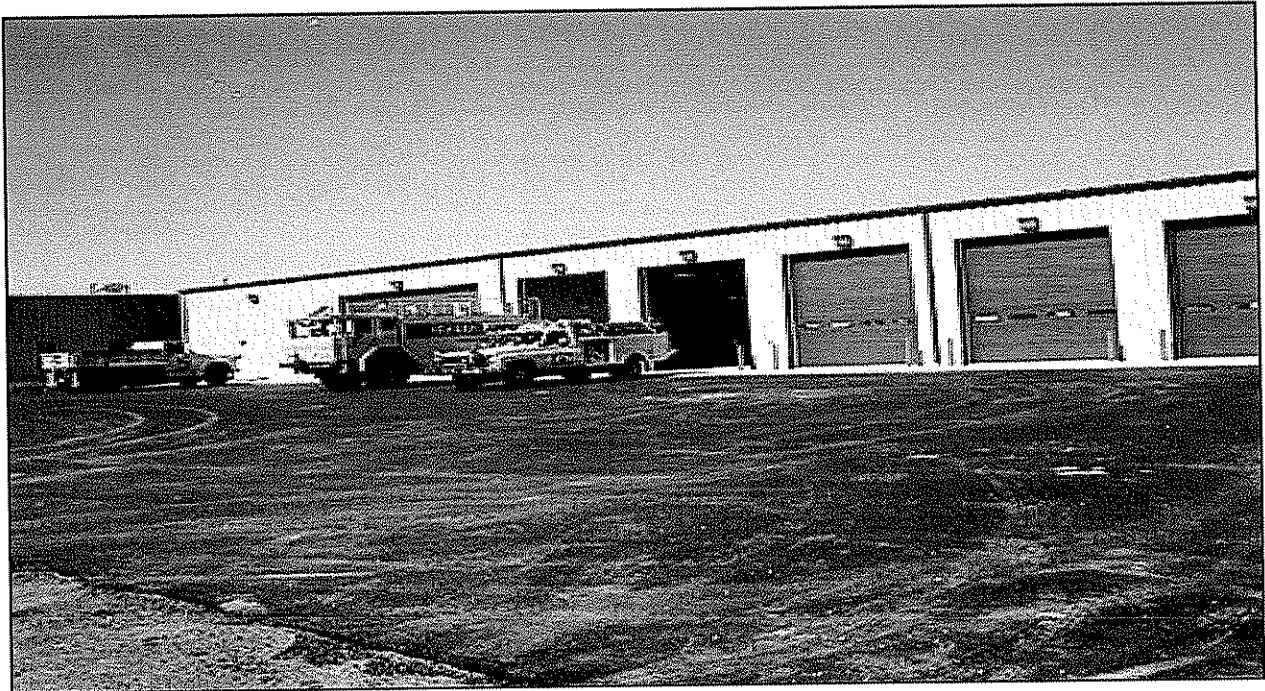
This building is a three-bay garage for large construction equipment. The area of this building is 2,320 square feet. The height of the single bay is 24 feet and the height of the double bay is 20 feet. Three skylights illuminate the interior of the building. This building also has two small storage rooms and a mezzanine for storage. For heat, two radiant tube heaters are suspended from the ceiling.

## Airports - Buildings & Facilities



### Crash/Fire/Rescue Building

88001



**Central West Virginia Regional Airport Authority**  
Yeager Airport  
Charleston, West Virginia 25311

Design and construction inspection services for a 6,440 square-foot facility to adjoin the architecturally compatible Maintenance and Storage Building that houses the large airfield fire protection equipment. Additionally, there are designated office, training, and kitchen areas, a 1,400 square-foot storage space

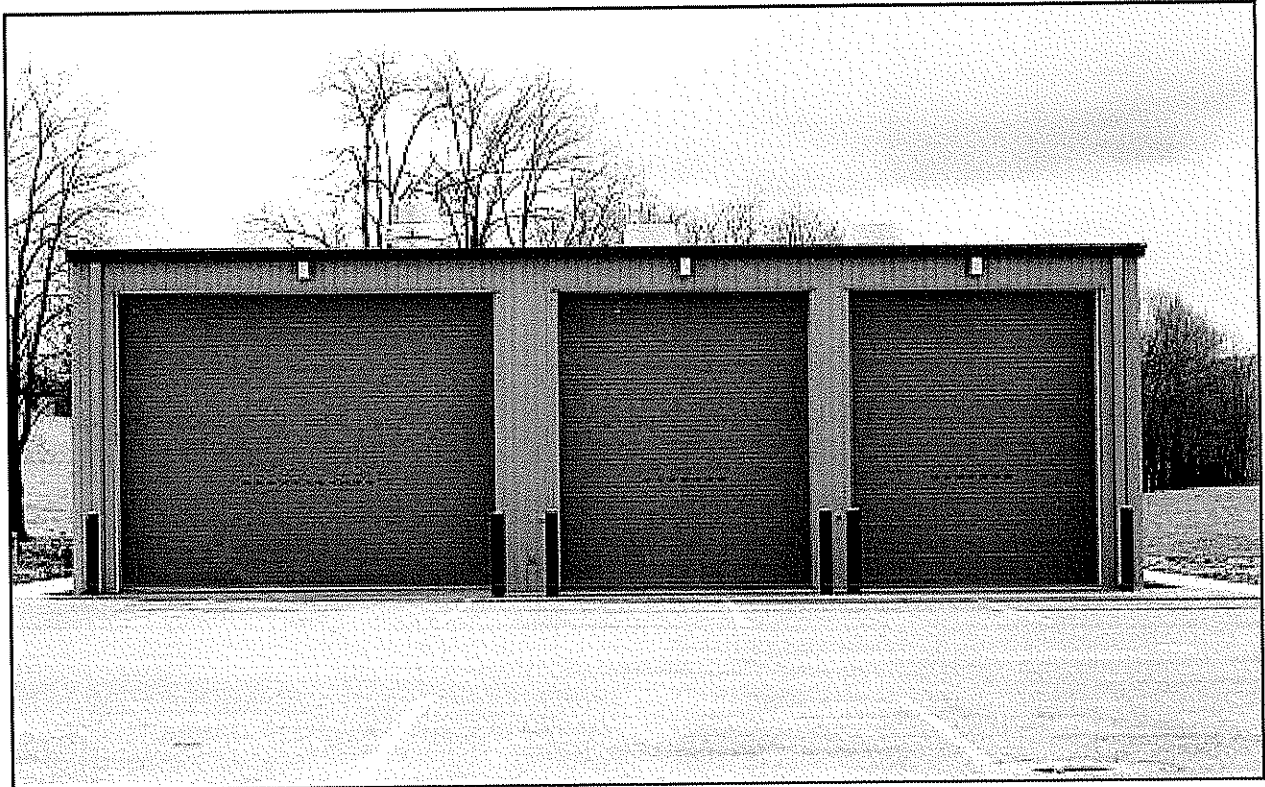
provided by a second floor loft, and a 1,200 square-foot vehicle maintenance bay. Also included in this project was the design of a new maintenance vehicle fuel farm. The dilapidated Fire Garage and Maintenance Building was removed after the erection of this facility which completed the maintenance modernization at Yeager Airport.

### Snow Removal/Maintenance Building

91066

**Elkins-Randolph County Airport Authority**  
Route 1, Box 271-1  
Elkins, West Virginia 26241

Design and construction inspection services for a 3-bay, 2,000 square foot pre-engineered Snow Removal and Maintenance Building. This facility features gas-fired infrared heaters, skylights and a restroom/locker room area.



**Elkins-Randolph County Airport Authority**  
Route 1, Box 271-1  
Elkins, West Virginia 26241

Design and construction inspection services for a 3-bay pre-engineered Snow Removal and Maintenance Building, perimeter security fencing and gates along the airport property line, specification for snow removal equipment and replacement of airfield lighting regulators



**Maintenance and Storage Building**

**84001**



*The 7 bay facility was Chapman Technical Group's first project for Yeager Airport.*

**Central West Virginia Regional Airport Authority**  
Yeager Airport  
Charleston, West Virginia 25311

This project began the first phase of maintenance modernization at Yeager Airport. This project scope called for the design and construction of a 7,200 square-foot structural steel facility on concrete piers and spread footings and structural concrete floor slabs. Two archaic T-hangars were dismantled and removed to make room for the new building which houses the airport's large snow removal equipment and maintenance vehicles.

**Snow Removal Equipment Storage Building**

**94002**

**Raleigh County Airport Authority**  
469 Airport Circle, Room 105  
Beaver, West Virginia 25813

Design and construction inspection services for a 2,000 square foot, 3 bay, pre-engineered Snow Removal Equipment Storage Building. This facility features a locking seam roof with sky lights.



**JOSEPH E. BIRD, ASLA**  
**Senior Vice President**  
**Project Manager**

**EDUCATION**

West Virginia University, BSLA, 1978

**REGISTRATION**

Landscape Architect, West Virginia, 1981

**PROFESSIONAL  
HISTORY**

**August 1985 to Present: Chapman Technical Group**  
Senior Vice President and Project Manager.

**May 1978 to August 1985: Kelley, Gidley, Blair & Wolfe, Inc.**  
Landscape Architect and Project Manager.

Mr. Bird is a project manager and registered landscape architect. His experience ranges from large site development projects to the management of multi-discipline and architectural projects.

30 years professional experience.

**PROJECT  
EXPERIENCE**

**Site Development:** Site planning and project management for numerous projects throughout West Virginia ranging from small campus sites to large sites for commercial, government, industrial, and institutional development. Projects include military complexes, campuses, public housing developments and other public facilities.

**Parks and Recreation:** Projects include swimming pools, bathhouses, cabins and support facilities for the West Virginia Division of Natural Resources and similar facilities for county and municipal park systems. Also involved in the design of facilities such as softball fields, fishing access facilities, recreation facilities for prisons, as well as passive recreation areas for public and private clients.

**Miscellaneous:** Other project experience includes the urban planning and development, streetscape design, roadway and storm drainage projects, as well as the project management of numerous major architectural projects throughout West Virginia.

**AFFILIATIONS**

West Virginia Chapter of the American Society of Landscape Architects  
Board of Trustees, Huntington Museum of Art

**AWARDS**

Honor Award for Shrewsbury St. Redevelopment Plan  
West Virginia Chapter of American Society of Landscape Architects





**DALE E. WITHROW, AIT**  
**Project Coordinator, Department Manager**  
**Architecture**

**EDUCATION**

West Virginia Institute of Technology, AS, Drafting and Design, 1975.

**PROFESSIONAL HISTORY**

**November 2000 to Present: Chapman Technical Group**  
Project Coordinator/Department Manager.

**March 1993 to August 2000: The HDMR Group, Inc.**  
Project Coordinator.

**February 1990 to March 1993: AFAB Services**  
Owner - Designer/Drafter.

Prior to 1990 Mr. Withrow worked with several architectural and engineering firms as an employee and independent consultant.

From 1978 to 1987 he was a Facilities Planner for the Kanawha County Board of Education.

Mr. Withrow is a Project Coordinator involved in all aspects of a wide variety of architectural projects. He is also Manager of the Architecture Group.

35 years professional experience.

**PROJECT EXPERIENCE**

**Project Design and Management:** Experience ranges from drafting, detailing and design through construction observation and project management of numerous building projects in West Virginia, Kentucky and North Carolina including:

- Residential/Housing
- Governmental Facilities
- Hospital/Healthcare Facilities
- Public School Facilities
- College Athletic Facilities
- Hotel/Hospitality Facilities
- Airport Support Facilities
- Historic Preservation
- Military Support Facilities/Armories
- Grocery and Drug Chain Stores
- Industrial Plant/Laboratory Facilities
- Office Buildings
- Banking Facilities
- Americans with Disabilities Act Assessment and Implementation
- Public Safety Facilities

**AFFILIATIONS**

Certified Architect-in-Training, State of Arizona  
President, St. Albans Business and Community Development Group  
Vice Chair, Friends of the Alban Theatre  
Board Member - St. Albans Chamber of Commerce



**PHILLIP A. WARNOCK, NCARB, AIA**  
**Project Architect**

**EDUCATION**

The University of Tennessee, BArch, 1995

**REGISTRATION**

Architect, West Virginia, 2003  
Architect, Tennessee, 2002

**PROFESSIONAL HISTORY**

**September 2003 to Present: Chapman Technical Group**  
Project Architect.

**June 2002 to July 2003: ZMM**  
Architect.

**June 1995 to May 2002: Lockwood Greene**  
Intern Architect.

**August 1991 to July 1993: Omni Associates**  
Architectural Draftsman.

16 years professional experience with additional experience in construction, interior design and developing.

AIA Honor Award for Excellence in Architecture for the historic preservation of the Upshur County Courthouse.

**PROJECT EXPERIENCE**

**Project Participation and Design:** Experience ranges from design, detailing and drafting through project management and construction administration of building projects in various states, including West Virginia, Tennessee, Kentucky and South Carolina. Project experience includes:

- Public School Facilities
- Community Centers
- Recreational Facilities
- Aviation Facilities
- Health Care/Hospice Facilities
- Medical and Psychiatric Clinics
- Pharmaceutical Facilities
- Research and Development Labs
- Office Buildings
- Rest Areas and Welcome Centers
- Public Transit Facilities
- Historic Preservation
- Historic Renovation/Additions
- Adaptive Reuse
- Governmental Facilities
- Military Support Facilities/Armories
- Multi-Family Housing
- ADA Assessments
- HUD 811, 202 and ECHO Facilities
- Small Cities Block Grant Developments
- Public Safety Facilities

**AFFILIATIONS**

National Council of Architectural Registration Boards (NCARB)  
American Institute of Architects (AIA)



**W. THOMAS CLOER, III, NCARB, AIA**  
**Project Architect**

**EDUCATION**

University of Tennessee, BArch, 2001

**REGISTRATION**

Intern Development Program completed.  
ARE exam completed.  
NCARB registration in progress.

**PROFESSIONAL  
HISTORY**

**October 2006 to Present: Chapman Technical Group**  
Architectural Designer

**2001-2006: N Visions Architect**  
Architect Intern

8 years professional experience.

**PROJECT  
EXPERIENCE**

Experience ranges from design, detailing and drafting through project management and construction administration of building projects throughout West Virginia including the following project types:

- Public School Facilities
- Government Facilities
- Office Buildings
- Medical Office Facilities
- Residential Housing
- Multi-family Housing
- Recreational Facilities
- ADA Assessments
- Site Planning

**AFFILIATIONS**

American Institute of Architects Associate Member  
St. Albans Renaissance Group, Design Committee, Past Member  
Boy Scouts of America Troop 250 Committee  
City of St. Albans Property and Maintenance Board, Member  
City of St. Albans Historic District Committee, Member



**ROBERT G. BELCHER, P.E.**  
**Senior Vice President, Engineering**  
**and Project Officer**

**EDUCATION**

West Virginia Institute of Technology, BSCE, 1983

**REGISTRATION**

Civil Engineering, West Virginia, 1996

Civil Engineering, Ohio, 2006

**PROFESSIONAL  
HISTORY**

**January 1987 to Present: Chapman Technical Group**  
Senior Vice President and Project Officer.

**June 1984 to January 1987: Regional Intergovernmental Council**  
Planning and Development Council for West Virginia Region III - Metropolitan  
Planning Organization for Charleston, WV, MSA.

25 years professional experience.

**PROJECT  
EXPERIENCE**

**Water Systems:** Design and project management for numerous water systems for both public and private water companies. Projects include new water treatment plants as large as 10 MGD, improvements to existing plants, water mains and distribution systems. Water storage projects include glass-lined steel tanks, welded high-strength steel tanks, and elevated pedestal tanks.

**Wastewater Systems:** Design and project management for numerous wastewater systems throughout West Virginia. Projects include new, secondary and tertiary wastewater treatment plants as large as 4.5 MGD, improvements to existing plants, small-flow treatment plants, new and rehabilitation of wastewater collection systems, and facility plan updates.

**Miscellaneous:** Design and project management for large highway and bridge projects, airport improvements projects, large stormwater management projects, as well as potable water and wastewater system design for site development projects throughout West Virginia.

**AFFILIATIONS**

Water Environment Association - WV Section  
Contractor's Association of West Virginia - Associate Member  
American Water Works Association - WV Section  
WV Society of Professional Engineers  
American Council of Engineering Companies - ACEC/WV  
WVUIT Civil Engineering Advisory Board

**AWARDS**

George Warren Fuller Award, 2001



**DAVID C. HOY, E.I.**  
**Civil/Structural Engineer**

**EDUCATION**

West Virginia University, BSCE, 2006

**REGISTRATION**

E.I., West Virginia, 2006

**PROFESSIONAL  
HISTORY**

**January 2007 to Present: Chapman Technical Group**  
Civil Engineer

**Summer 2005: Advantage Home and Environment**

Assisted structural engineer with home inspections, and report preparation.

1 year professional experience.

**PROJECT  
EXPERIENCE**

**Structural:** Investigation, analysis, and design of various building structural systems, including foundation design. Review shop drawings and performs periodic site visits.

**Civil:** Design of highways, bridges, and airport improvements projects throughout West Virginia.

**AFFILIATIONS**

Chi Epsilon, National Civil Engineering Honor Society

# **CAS** **Structural Engineering, Inc.**

---

## **Firm Profile**

**CAS Structural Engineering, Inc.** – CAS Structural Engineering, Inc. is a West Virginia Certified Disadvantaged Business Enterprise structural engineering firm located in the Charleston, West Virginia area.

Providing structural engineering design and/or analysis on a variety of projects throughout the state of West Virginia, CAS Structural Engineering has experience in excess of 20 years on the following types of building structures:

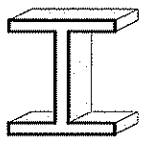
- Governmental Facilities (including Institutional and Educational Facilities)
- Industrial Facilities
- Commercial Facilities

Projects range from new design and construction, additions, renovation, adaptive reuse and historic preservation (including use of The Secretary of the Interior's Standards for Rehabilitation) to evaluation studies/reports and analysis.

CAS Structural Engineering utilizes AutoCAD for drawing production and Enercalc and RISA 3D engineering software programs for design and analysis. Structural systems designed and analyzed have included reinforced concrete, masonry, structural steel, light gauge steel and timber.

Carol A. Stevens, PE is the firm President and will be the individual responsible for, as well as reviewing, the structural engineering design work on this project. While CAS Structural Engineering, Inc. has only been in business for seven years, Carol has over 20 years of experience in the building structures field, working both here in West Virginia and in the York, Pennsylvania vicinity. Her experience has included a number of building structures evaluation and repair projects, in West Virginia, Pennsylvania and Ohio.

CAS Structural Engineering, Inc. is covered by a \$1 million errors and omissions liability policy.

**CAS**

# Structural Engineering, Inc.

**Carol A. Stevens, P.E.**  
**Structural Engineer**

### EDUCATION

West Virginia University, BSCE, 1984  
 Chi Epsilon National Civil Engineering Honorary  
 The Pennsylvania State University, ME Eng Sci, 1989

### PROFESSIONAL REGISTRATION

P.E.	1990	Pennsylvania
P.E.	1991	West Virginia
P.E.	1994	Maryland
P.E.	2008	Ohio

### BACKGROUND SUMMARY

2001 – Present	President, Structural Engineer CAS Structural Engineering, Inc.
1999 – 2001	Structural Engineer Clingenpeel/McBrayer & Assoc, Inc.
1996 – 1999	Transportation Department Manager Structural Engineer Chapman Technical Group, Inc.
1995 – 1996	Structural Engineer Alpha Associates, Inc.
1988 – 1995	Structural Department Manager Structural Engineer NuTec Design Associates, Inc.
1982 – 1988	Engineer AAI Corporation, Inc.

### PROFESSIONAL ASSOCIATIONS

American Society of Civil Engineers, WV Section  
 Past President  
 National Society of Professional Engineers  
 American Concrete Institute  
 American Institute of Steel Construction  
 West Virginia University Department of Civil and  
 Environmental Engineering Advisory Committee  
 West Virginia University Institute of Technology  
 Department of Civil Engineering Advisory Comm

### CIVIC INVOLVEMENT

ASCE Christmas in April Project

### EXPERIENCE

**West Virginia, State Capitol Complex, Dome Structure:**  
 Exploratory investigation and preparation of construction documents for repairs to structural steel in Capitol Dome.

**West Virginia, State Capitol Complex, Building 3:**  
 Structural design and construction administration of repairs and renovations to limestone canopy.

**West Virginia, State Capitol Complex, Main Capitol Building Parapet:** Exploratory investigation of limestone/brick parapet/balustrade of Main Capitol Building to determine cause of movement/cracking/leaks. Construction contract for repairs has recently been completed. Building is on State Historic Register.

**West Virginia, Calvary Assembly of God Church:**  
 Designed structural repairs to existing roof and replacement of skylights.

**West Virginia, Upshur County Courthouse:** Developed construction documents for structural repairs to main entrance, dome, and stone columns of 1899 structure.

**West Virginia, Westmoreland Apartments:** Designed structural additions and renovations to existing closed multi-story school for use as elderly apartments. Work included restoration of exterior masonry components.

**West Virginia, State Capitol Complex, Governor's Mansion:** Structural analysis and design in addition to evaluation report for modifications and renovations to several areas of mansion. Building is on State Historic Register.

**West Virginia, State Capitol Complex, Holly Grove Mansion:** Structural evaluation report for preliminary condition assessment of building structure. Building is on State Historic Register.

**West Virginia, State of West Virginia Office Building #21, Fairmont, WV:** Preliminary structural observation report for condition assessment of building structure.

**West Virginia, Kanawha County Schools:** Structural design of additions and renovations to George Washington, Sissonville, Herbert Hoover, South Charleston and Nitro High Schools.

P.O. Box 469

Alum Creek, WV 25003-0469

(304) 756-2564 (voice)

(304) 756-2565 (fax)

A West Virginia Certified DBE Consultant  
 Certified in the Practice of Structural Engineering

**West Virginia, Mt. Calvary Baptist Church:** Designed foundations and floor framing for new activities building.

### **PREVIOUS EXPERIENCE**

**West Virginia, Huntington TTA Bus Garage:** Designed repairs to existing building foundation and floor slab in office area for project including renovations of offices, driver's and mechanic's area and locker room recreations room/break room.

**West Virginia, State Capitol Building:** Designed structural system to replace deteriorated reinforced concrete slab at landing on north side of Capitol steps.

**West Virginia, Farrell Law Building:** Performed analysis of existing deteriorated structural sidewalk over parking area. Recommended repair solutions for reinforced concrete and aged terra cotta façade of 1920's building.

**West Virginia, Upshur County Courthouse Annex:** Performed structural evaluation and design for repairs to existing multi-story Annex addition.

**West Virginia, Sissonville Library:** Structural design of new 7,000 SF branch library. Structure consisted of wood framing.

**West Virginia, Cabell Huntington Hospital Boiler Mezzanine:** Structural analysis and testing of existing reinforced concrete mezzanine with significant degradation from brine tank leakage. Developed new structural system to replace existing concrete mezzanine utilizing steel framing and steel grating.

**West Virginia, Beckley Wastewater Treatment Plant:** Designed reinforced concrete tanks and masonry support structures for new wastewater treatment plant.

**West Virginia, Morgantown High School Additions:** Designed steel framing and foundations for science classroom, cafeteria and gymnasium additions to existing education complex.

**West Virginia, Grafton High School Addition:** Designed steel framing and foundations for new science classroom addition to existing high school.

**Pennsylvania, Metropolitan Edison Company, Headquarters:** New 80,000 SF two-story office addition to existing complex.

**Pennsylvania, Defense Distribution Region East:** Structural engineering and design for a 33,000 SF Hazardous Materials Storage Warehouse.

**Pennsylvania, Glatfelter Insurance:** Design of steel framing and foundations for new 30,200 SF building.  
**Maryland, U.S. Army Corps of Engineers, Baltimore District, Administration Building:** Seismic design of new 10,000 SF masonry building.

**Pennsylvania, Carlisle Syntec:** Design of foundation supports for 800,000 lb rubber vulcanizing machine; enlargement of foreman's office including new framing to support mechanical equipment on roof; new monorail installation; extension of existing gantry rail.

**Pennsylvania, Engel Worldwide:** Steel framing and foundations for new 12,000 SF two-story office building; design of crane beams and columns for adjacent 60,000 SF crane building.

**Pennsylvania, AMP IMF:** Structural design for the renovation and conversion of a stamping facility into an integrated manufacturing facility (IMF) housing operations for stamping as well as blow molding processes.

**Texas, York International:** Structural survey of existing building structure for modifications to incorporate large testing and manufacturing areas for mechanical equipment.

**Maryland, Columbia 100:** Design of structural steel framing for new two-story 43,000 SF office building.

**Pennsylvania, York Federal Savings and Loan Association/New Service Corporation:** Design of steel framing, reinforced concrete retaining wall and foundations for new 14,400 SF two-story office building.

**Pennsylvania, Yorktowne Parking Garage:** Study of reinforced concrete/steel framed parking garage.

**Pennsylvania, Blakey Yost Bupp & Schaumann:** Re-construction of a 3-story 10,200 SF, fire damaged urban building and conversion into law offices.

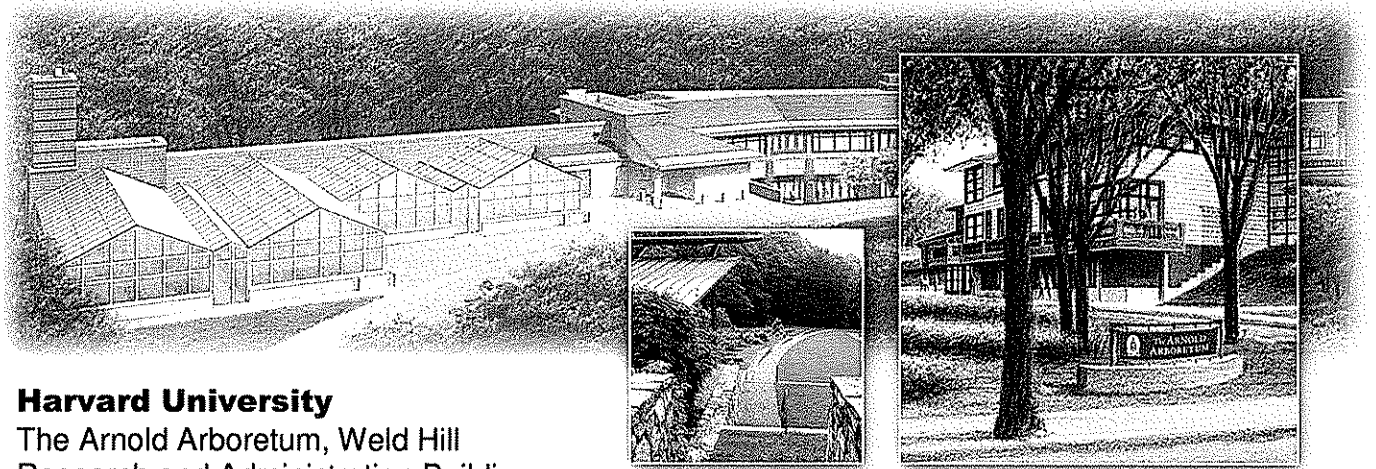
**Pennsylvania, Queensgate Theaters:** Structural analysis of existing mall area for conversion to movie theaters.

**Pennsylvania, College Misericordia:** Structural design of new 50,000 SF student resident hall utilizing precast concrete planks and masonry bearing walls.

**Pennsylvania, Homewood Suites:** Structural and foundation design for new two-story hotel.

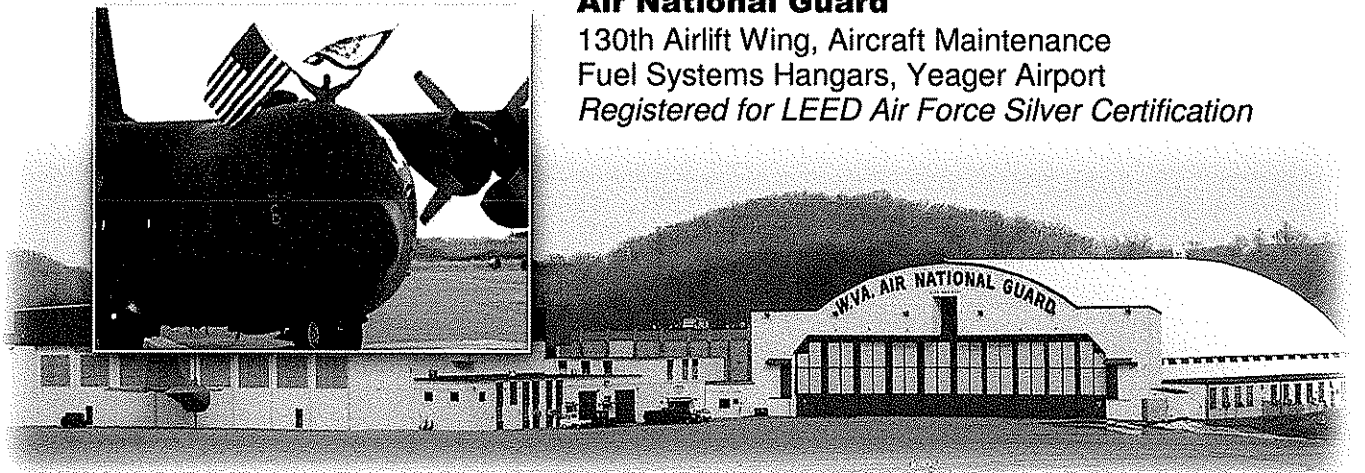


# ZDS Project Experience — LEED

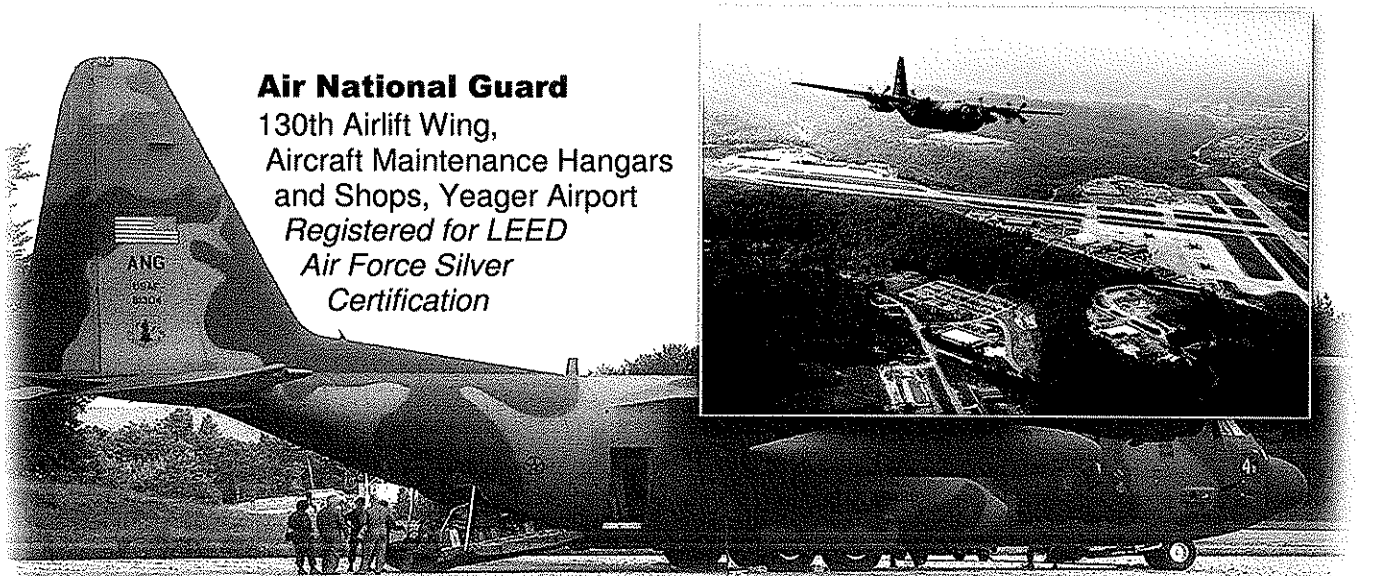


**Harvard University**  
The Arnold Arboretum, Weld Hill  
Research and Administration Building  
*LEED Gold Candidate*

**Air National Guard**  
130th Airlift Wing, Aircraft Maintenance  
Fuel Systems Hangars, Yeager Airport  
*Registered for LEED Air Force Silver Certification*



**Air National Guard**  
130th Airlift Wing,  
Aircraft Maintenance Hangars  
and Shops, Yeager Airport  
*Registered for LEED  
Air Force Silver  
Certification*



# ZDS Project Experience — LEED



## West Virginia Capitol Complex Project

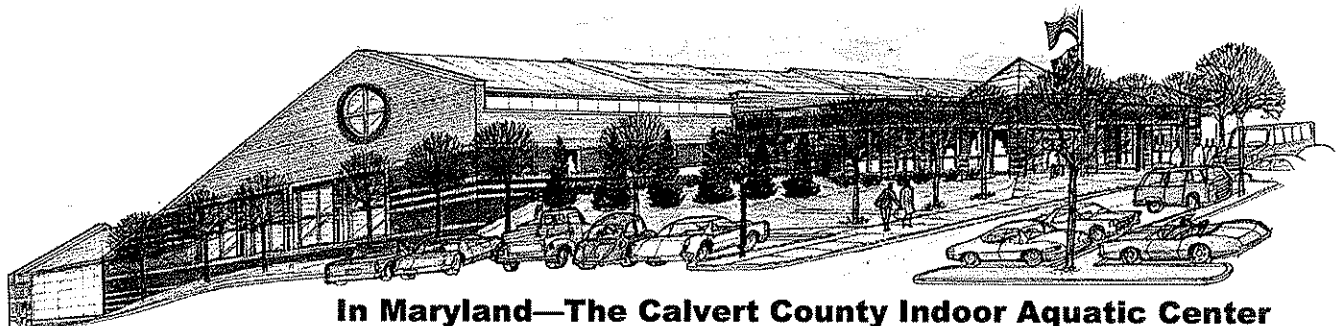
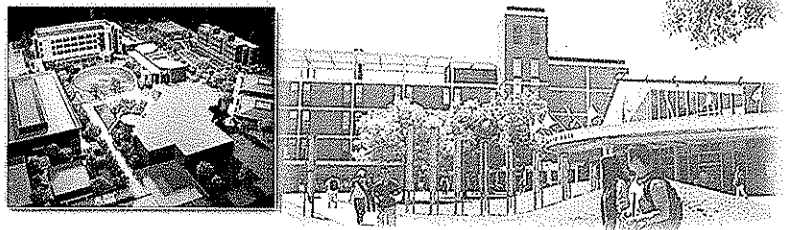
An integration of nine buildings involving over 1.6 million square feet including the Capitol, Governor's Mansion, The Center for Culture and History, plus six other administration facilities.

*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

**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 27 years in the design and consulting business.
- **Ted T. Zachwieja, Principal over Construction Administration services** with over 40 years experience in the design and consulting business. He was owner of Ted T. Zachwieja & Company from 1962 to 1982.
- **Daniel H. Kim, Ph.D., Manager of Strategic Planning**, brings with him over 20 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 *ENVIRONMENT<sup>o</sup> 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 *ENVIRONMENT<sup>™</sup> 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 *ENVIRONMENT<sup>™</sup> Professional*
- Editorial Advisory Board member of *POWER PRESCRIPTIONS<sup>™</sup> 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
- Determine, quantify and assist in securing available Utility & Government grants.
- Evaluating and documenting utility savings.

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 contractors 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 Owners operational needs.

#### **NATIONAL RECOGNITION**

The Second 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 was held in May 1994.

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.



**Primary MEP Contact: Todd A. 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's** also has a Professional Engineer working out of Morgantown that helps us reach our customers easily in the northern part of WV. 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**

**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

**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; indoor air quality analysis and building system commissioning for educational, commercial, industrial and health care facilities. His specialties include mechanical engineering, HVAC/Plumbing systems master planning, conceptual design, energy conservation program development, commissioning and IAQ analysis relating to HVAC systems. He has extensive experience in industrial, commercial facilities, hospitals and educational design including preparation of construction documents for millions in renovations and additions to facilities. Some of his project experience includes projects new Mercer County Courthouse, Princeton, WV, Kanawha County Commission – 120,000 sf additions/renovations for the Judicial Annex/Kanawha County Courthouse Charleston WV, Laidley Towers – Charleston WV, Renovations to Buildings #1, #3, #4, #5, #5, #7, #8, #9, #10 at the WV State Capitol complex, Cultural Center HVAC Renovation, Union Carbide, United Center - Charleston WV, Phillip Morris USA, Rhone-Poulenc, Toyota, Olin Corporation, Walker Machinery, WV Air & Army National Guard, Bank One, WV; Kohl's, Sears, WV Public Service Commission Headquarters, and Yeager Airport. He also designed one of the largest geothermal heat pump applications in the mid Atlantic region, 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, Mercy Medical Center, Wayne Memorial and Webster Memorial Hospital.

He also has experience in providing M/E/P design for the following higher education facilities including: Alderson Broadus College, Bluefield State College, Concord University, Fairmont State, Harvard University – LEEDS Silver certification project, Marshall University, Ohio University's Athens & Chillicothe campuses, Southern WV Community & Technical College, University of California-Davis, University of Charleston, Washington & Lee University, WV 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.

He also has experience in providing M/E/P design for the following schools: Clay, Calhoun, Grant, Hardy, Harrison, Jackson, Kanawha, Logan, Marion, McDowell, Mercer, Mingo, Monroe, Ohio, Pocahontas, Putnam, Raleigh, Randolph, Ritchie, Summers, Taylor, Tucker, Upshur, Webster, and Wyoming County Schools. He also developed and designed 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 saving millions per year and managed a profitable regional office for one of the countries largest energy service companies. He also developed computer programs for building energy analysis and monitoring and presented technical papers at regional and national conferences.

**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" by AEE  
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 National Society of Plumbing Engineers  
Member of the International Code Council  
Contributing editor and on the Editorial Review Panel for "The Handbook of Building Management and IAQ", "Ventilation for a Quality Dining Experience", INvironment Professional, Power Prescriptions and other publications on Indoor Air Quality and MEP engineering systems.  
Presented at regional and national conferences including the National System Commissioning Conference

## References



1. Honorable David Nohe  
Mayor  
City of Vienna  
Vienna City Building  
609 29th Street  
Vienna, WV 26105  
(304) 295-6081
2. Mr. Dennis Kincer, P.E.  
WV Division of Natural Resources  
Wildlife Resources  
State Capital Complex, Building 3  
1900 Kanawha Boulevard, East  
Charleston, WV 25305  
(304) 558-2771
3. Mr. William "Willie" Parker  
County Administrator  
Upshur County Commission  
38 Main Street, Room 302  
Buckhannon, WV 26201  
(304) 472-0535
4. Honorable Damron Bradshaw  
Mayor  
City of Chesapeake  
12404 MacCorkle Avenue  
Chesapeake, WV 25315  
(304) 949-1496
5. Mr. John Morrison, PE  
Acting Section Head  
Engineering Design Division  
WVDOT - Division of Highways  
Building Five, Room A-317  
1900 Kanawha Boulevard, East  
Charleston, WV 25305  
(304) 558-2838
6. Mr. Bill Wellings  
Airport Manager  
Buckhannon-Upshur County Airport Authority  
38 West Main Street  
Buckhannon, WV 26201  
(304) 472-0535