



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

Header 1

List View

General Information | Contact | Default Values | Discount | Document Information | Clarification Request

Procurement Folder: 1039904

Procurement Type: Central Purchase Order

Vendor ID:

Legal Name: ZDS LIMITED LIABILITY COMPANY

Alias/DBA:

Total Bid: \$0.00

Response Date:

Response Time:

Responded By User ID:

First Name:

Last Name:

Email:

Phone:

SO Doc Code: CEOI

SO Dept: 0603

SO Doc ID: ADJ2200000014

Published Date: 5/4/22

Close Date: 5/17/22

Close Time: 13:30

Status: Closed

Solicitation Description:

Total of Header Attachments: 1

Total of All Attachments: 1



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

State of West Virginia
Solicitation Response

Proc Folder: 1039904
Solicitation Description: Huntington Tri-State Armory HVAC Renovation Design
Proc Type: Central Purchase Order

Solicitation Closes	Solicitation Response	Version
2022-05-17 13:30	SR 0603 ESR05162200000007153	1

VENDOR
000000208495
ZDS LIMITED LIABILITY COMPANY

Solicitation Number: CEOI 0603 ADJ2200000014

Total Bid: 0 **Response Date:** 2022-05-16 **Response Time:** 10:09:25

Comments:

FOR INFORMATION CONTACT THE BUYER

David H Pauline
304-558-0067
david.h.pauline@wv.gov

Vendor Signature X	FEIN#	DATE
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All offers subject to all terms and conditions contained in this solicitation

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Huntington Tri-State Armory HVAC Renovation Design				0.00

Comm Code	Manufacturer	Specification	Model #
81101508			

Commodity Line Comments: Contract Amount TBD

Extended Description:

Provide professional architectural and engineering design services per the attached documentation.

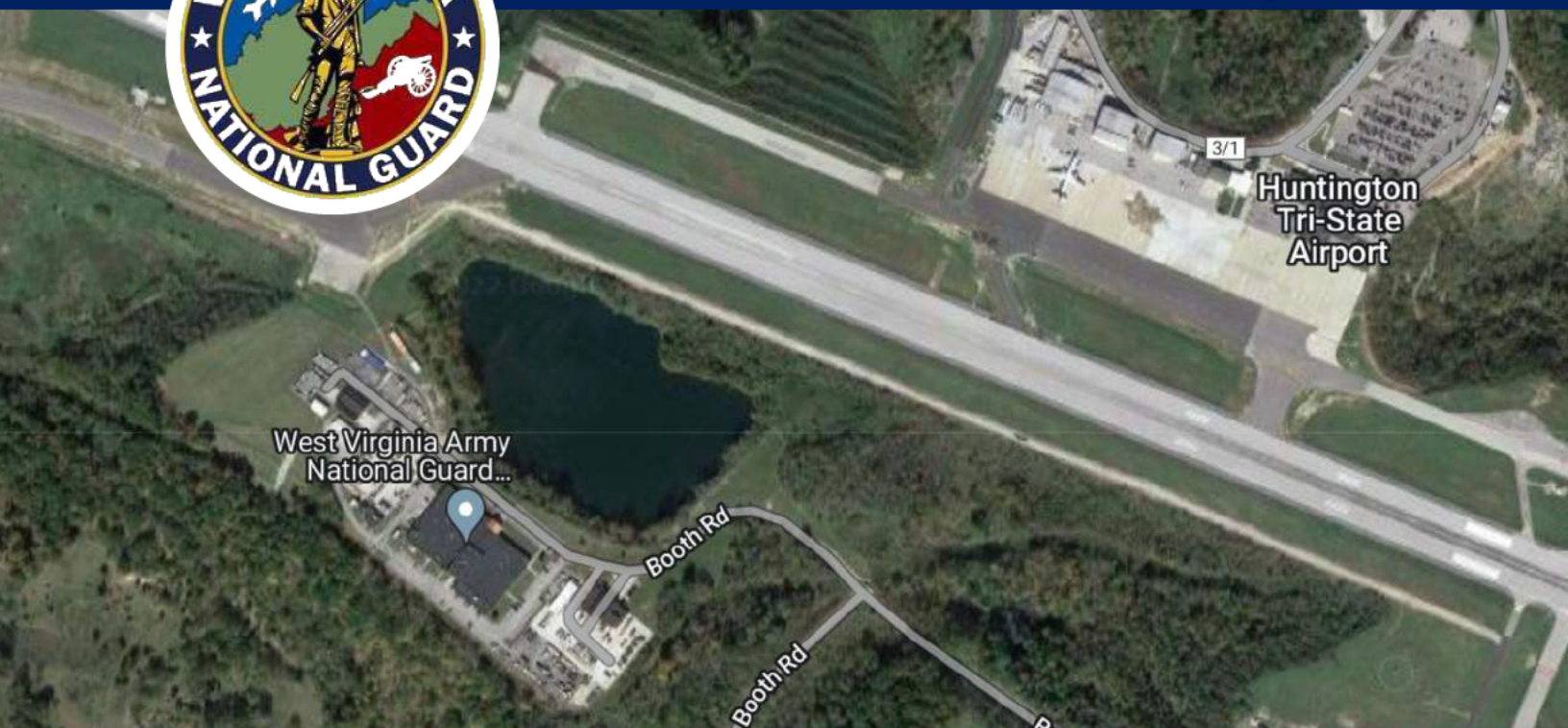
STATE OF WEST VIRGINIA

West Virginia Army National Guard Huntington Tri-State Armory HVAC Renovations

CEOI 0603 ADJ220000014

Expression of Interest to Provide Engineering Design Services

May 17, 2022



28⁺
Years
of Service

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State of WV Centralized Expression of Interest

State of WV Purchasing Affidavit

Designated Contact & Certification Form



SECTION I.

**Executive Summary Letter
Project Goals & Objectives**





Design/Consulting Services
135 Corporate Center Drive / Suite 532 / Scott Depot, WV 25560
(304) 755-0075 / www.ZDSDesign.com

28⁺
Years
of Service

MECHANICAL • ELECTRICAL • INDOOR AIR QUALITY • ENERGY • COMMISSIONING • FORENSIC

May 17, 2022



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

Please accept our Expression of Interest to provide Professional Engineering Services for the **Huntington Tri-State Armory HVAC Renovations**.

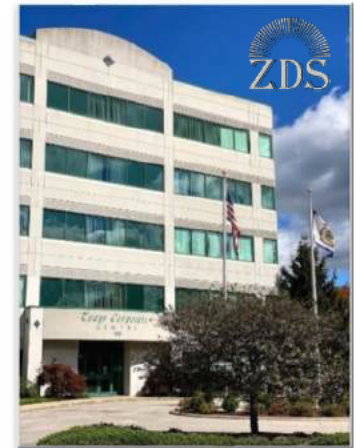
ZDS Design/Consulting Services was founded in 1994 and is in Scott Depot, WV only minutes from the project. The project will be assigned to **ZDS'** principal-in-charge of planning/design who will follow the project from inception through Construction Administration and has full authority to execute a binding contract on behalf of **ZDS**:

Todd A. Zachwieja, PE, CEM, LEED AP – Principal and CEO of ZDS Design/Consulting Services; Telephone: 304-755-0075; Fax: 304-755-0076; Mobile: 304-545-4550; Todd.Zachwieja@ZDSDesign.com; www.ZDSDesign.com.

ZDS will provide comprehensive MEP engineering support for the proposed HVAC renovations on this Project. We have had numerous successful projects throughout the State including the WVARNG, WVANG, WV General Services, WV DHHR facilities, WVU, and others. **ZDS** provided HVAC design, prepared the bidding documents and are currently in the latter stage of Construction Administration for the Brushfork Armory renovations. Project bids were within the allocated budget and the construction is on schedule.

We have **extensive HVAC renovation** experience, including phasing construction, to reduce potential disruptions. Our approach is different than the traditional role; **we have actual operational and design experience** and can design and commission the Mechanical systems. By commissioning the systems, we fine-tune them to actual conditions and assist the Owner's personnel after occupancy to improve comfort, provide training and reduce operating costs.

We believe our company is the right size to provide the level of service necessary and small enough to listen and care about your needs. **ZDS** is very active in keeping current with all applicable Codes and specifically with ASHRAE and energy efficiency standards. **ZDS** team members have held or currently hold officer positions in the West Virginia ASHRAE Chapter including Todd Zachwieja, Ted Zachwieja and David Cotton serving as President. We pride ourselves on being viewed as an extension of the client's staff and successfully incorporating pertinent information about their facility into any proposed solution.





ZDS engineering designs have received the EPA's Energy Star® Certification. These buildings perform in the top 25 percent of similar facilities nationwide for energy efficiency while meeting stringent ASHRAE standards. We met the facility requirements while providing energy efficient HVAC, lighting, and power systems.

Our corporate offices in Scott Depot, West Virginia are a short drive to the Project site and each member of our staff brings unique strengths to the Project. We have the personnel and experience to provide the necessary services and, realizing the similarity of mission and the desire to serve West Virginia clients, we will be honored to work with you.

Project Goals & Objectives

- 2.1 Provide a complete design including all engineering and architectural disciplines and supervision thereof to prepare construction bid documents for advertising and awarding a construction contract using West Virginia State Purchasing procedures. Key design elements include utilizing energy-efficient, economically sustainable and maintenance friendly equipment.

Response: **ZDS** and our Team have designed and coordinated upgrades for many projects of all types, sizes, budgets, and schedules. We have been successful on renovation projects through dialogue and proper planning with the Owners and Contractors for phasing the work successfully and minimizing the impact on the daily activities of the occupants. We will communicate closely with the appropriate personnel to ensure that our approach to the Project will address the needs and concerns. **ZDS** has successfully worked with the WV State Purchasing Division in the preparation of documents to procure competitive bids from potential contractors and provided Construction Administration services through the completion of the projects.

- 2.2 Designer shall be responsible for researching and investigating the location of existing utilities as applicable, and to provide drawings and specifications of any and all utilities as needed and directed by the owner and/or state agency, utility company or other utility approval authority for Kenova, West Virginia.

Response: We have had past success through communication with utility companies and local authorities. If it is deemed necessary, we have a good working relationship with a reputable civil engineering group that will be utilized to assist with the coordination efforts and identification of existing utilities at the Project site.

- 2.3 Drawings, specifications, and cost estimates are to be submitted at 35%, 65%, 95%, and 100% design milestones, and cost estimates are to be revised and submitted with each submittal at 35%, 65%, 95%, and 100%.

Response: When scope has been determined, and as directed by the Owner, we will proceed with drawings and specifications to be reviewed with the Owner at 35%, 65%, 95%, and ultimately at 100% for final Bidding documents. The budgetary construction cost estimates will be updated at each review phase for review and acceptance by the Owner.

2.4 Provide construction administration and bidding services to the Owner.

Response: We have extensive experience working with West Virginia State Purchasing procedures related to Bidding and Construction Administration services. **ZDS** will assist the Owner as requested, or necessary, during the Bidding process. We have excellent working relationships with competent mechanical and electrical contractors and will encourage them to bid on the project if consistent with their strengths. We will be available to help the Owner evaluate the Bids received with the goal of having the construction performed by the contractor that best fits the Owner's interests. During the construction phase of the Project, we will review and process submittals, RFIs, payment applications and field observation reports, when necessary. **ZDS** will make routine site visits and attend meetings to stay familiar with the progress of the Work and to determine, in general, that the construction is being implemented in accordance with the Construction Documents.

ZDS has teamed with several Architectural, Structural Engineering, and Civil Engineering firms and will utilize their services as necessary for the **Huntington Tri-State Armory HVAC Renovations**. If hazardous materials are discovered, we will work with the Owner for the assessment and resolution of any suspected issues.

ZDS Design/Consulting Services has registered professionals in all the required disciplines to effectively execute the requirements of an extensive variety of projects. We believe that our specialties in commissioning/design of HVAC systems, Electrical Systems, Energy Management, Planning, and Codes compliance make us most qualified to work on your facilities. We continue to have an excellent working relationship with the West Virginia State Fire Marshal and other agencies within the State of West Virginia.

ZDS has an excellent track record of completing projects on time and within budget. We are ready and willing to start immediately on your project and feel confident that our specialties will provide you with the best expertise for economical solutions in your facility. We look forward to discussing our qualifications. If there are any questions, please do not hesitate to call.

Sincerely,



Todd A. Zachwieja, P.E., CEM, LEED AP
Principal, Chief Executive Officer

SECTION II.

Firm Overview



ABOUT **ZDS** DESIGN/CONSULTING SERVICES

In 1983, Todd A. Zachwieja founded ZECO Consultants. In 1994 **ZDS** Limited Liability Company was incorporated in West Virginia using dba **ZDS** Design/Consulting Services, and was founded to provide design and consulting services.

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

COMPANY LEGAL NAME

ZDS Limited Liability; Company dba **ZDS** Design/Consulting Services

LOCATION OF INCORPORATION West Virginia

FOUNDERS

Todd A. Zachwieja, P.E., C.E.O.

Lori L. Zachwieja, C.P.A., C.F.O.

Daniel H. Kim, Ph.D.

FIRM HEADQUARTERS

135 Corporate Center Drive, Suite 532
Scott Depot, WV 25560

SATELLITE OFFICES

Morgantown Area, West Virginia

EMPLOYEES

ZDS currently employs design professionals covering all aspects of our services.





CLIENTS & EXPERIENCE

- ◆ Charleston Area Medical Center
- ◆ Charleston National Bank/Chase
- ◆ Coal Heritage Discovery Center
- ◆ Concord University Nick J. Rahall II Technology Ctr.
- ◆ District 2 Headquarters' Building HVAC Renovations
- ◆ General Motors North America Operations
- ◆ Harvard University Arboretum
- ◆ Hopemont Hospital, WVDHHR
- ◆ IMC Data Center
- ◆ Jackie Withrow Hospital, WVDHHR
- ◆ Kanawha County Commission Courthouse & Judicial Annex
- ◆ Kanawha County Metro 911
- ◆ Laidley Towers
- ◆ Marshall University Harris Hall & Smith Hall
- ◆ Meadowbrook & Burnsville Rest Areas, WVDOT
- ◆ Mercer County Courthouse
- ◆ Pendleton County Courthouse & Annex
- ◆ Pocahontas County Community Center
- ◆ Robinson Grand Performing Arts Theatre
- ◆ Redmond House, WVDOT
- ◆ St. Patrick Church Renovations
- ◆ Tyler County Commission Courthouse
- ◆ Tucker County Courthouse
- ◆ University of Charleston Innovation Center
- ◆ Veterans Administration
- ◆ Webster County Development Authority
- ◆ White Sulphur Springs Welcome Center
- ◆ William R. Sharpe, Jr. Hospital, WVDHHR
- ◆ World Trade Center, MD
- ◆ WV Air National Guard
- ◆ WV Army National Guard
- ◆ WV Children's Home, WVDHHR
- ◆ WV Dept. of Education - State wide PreK-12 Schools
- ◆ WV Division of Energy
- ◆ WV Dept. of Transportation
- ◆ WV Dept. of Health & Human Resources
- ◆ WV Division of Culture and History Renovations
- ◆ WV Division of Protective Services
- ◆ WV General Services Division
- ◆ WV Higher Education Policy Commission
- ◆ WV Parkways Authority HVAC Renovations
- ◆ WVU Stewart Hall & Wise Library
- ◆ WVU Tech (Montgomery Campus) Engineer Bldg.
- ◆ WVU Davis Hall
- ◆ Yeager Airport

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. **ZDS** works with all levels of the client's staff: the building owner, budget supervisor, operating and maintenance staff and others impacted by the project. We recognize that 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.

The **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."

The **ZDS** 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, West Virginia Department of Education and the West Virginia School Building Authority. 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 clients' needs, on time and within budget, with outstanding quality. **ZDS** views 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.

INDOOR AIR QUALITY SERVICES

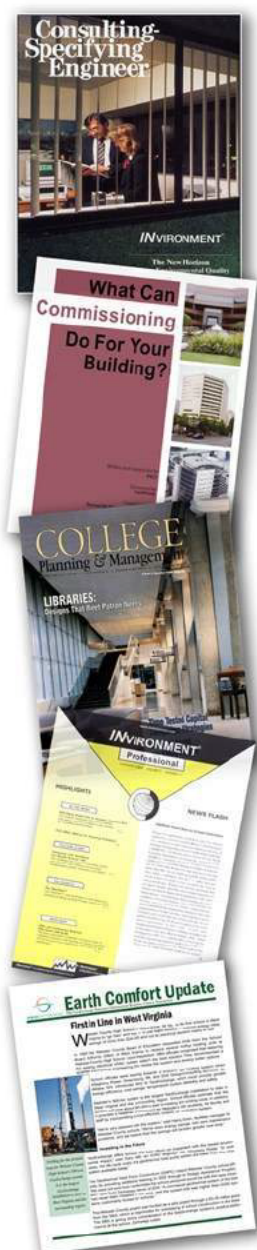
ZDS provides consulting engineering services for the indoor air quality (IAQ) environment. These services include: strategic planning for renovation and new construction projects; technical research and writing; specialized applications software development; corporate and professional training programs;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

- Technical Review Panel for the publication of the *INvironment™ 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 *INvironment™ 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 an 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 *INvironment™ Professional*
- Editorial Advisory Board member of *POWER PRESCRIPTIONS™ Indoor Air Quality Publication* by Electric Power Research Institute

ZDS provides Indoor Air Quality (IAQ) services for major corporations, government organizations and property owners to resolve their specific facility problems:

- Resolve “sick building syndrome”
- Identify solutions to building-related illnesses due to extensive biological contamination
- Develop solutions for HVAC systems, temperature controls, equipment, operating and maintenance practices for indoor air quality
- Commission new and renovated facilities to minimize or eliminate IAQ issues before problems arise
- 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 (IAQ), **ZDS** provides sophisticated technical expertise that enables our client to be proactive in solving and preventing indoor environmental problems.

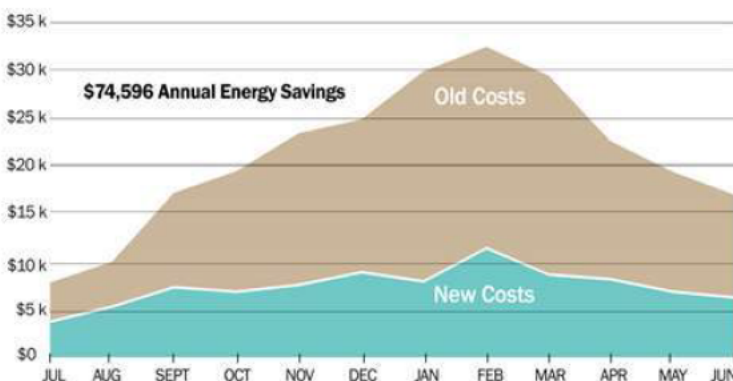


At **ZDS**, our engineering staff integrates energy efficiency into each project design to provide you, our client, with the added value that you expect and deserve. The

ZDS team approach represents a tremendous amount of experience in designing energy efficient facilities. **ZDS** offers a comprehensive range of energy management services including:

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

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, including upgrades to variable speed operation
- Installing Direct Digital Control (DDC) Energy Management Systems
- Replacing inefficient lighting equipment with energy efficient systems
- 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

ABOVE: ZDS designed and implemented the region's first and largest commercial geothermal system saving Webster County High School over \$74,596 in energy savings.



The **ZDS** team is trained and experienced in advising you of program options to incorporate energy efficiency and operational savings 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 savings options and providing supporting financial information. We then help you 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 certification, recognizes the importance of commissioning. The design and construction industry have had start-up problems when a facility is occupied and construction deficiencies were not discovered until the contractor’s traditional one-year warranty period expired. 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. Prior to joining **ZDS**, Todd Zachwieja established commissioning services for one of the nation’s largest energy service companies. He is also a LEED Accredited Professional. Many utility companies and building owners now require commissioning for new or renovated facilities in order to maximize the use of their investments in their facilities and to obtain LEED certification.

ZDS offers commissioning services for their clients, including meeting LEED enhanced commissioning requirements. These services include strategic planning and operations assistance for renovation and new construction projects. Commissioning services consist of construction document review, equipment performance testing, documentation of design criteria, value engineering, operational fine tuning, coordination of 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.

The commissioning process now required by ASHRAE 90.1 Energy Code and 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

The National Conference on Building Commissioning invited Todd Zachwieja to speak and 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.

Since 1958, the **ZDS** design staff has provided millions of dollars of engineering design services on a variety of project types. The **ZDS** 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.

SECTION III.

Description of Project Experience

Additional Project Experience Brochures



Engineering for State & Local Government Facilities



ZDS worked with the West Virginia Air National Guard on the Commissioning for their new Replacement Aircraft Maintenance Hangar and Shops plus a new Fuel Cell Hangar. This facility included a larger maintenance hangar, miscellaneous maintenance shops, central boiler plant and chiller plant. The project successfully achieved LEED Silver Certification with commissioning being an integral part of that certification.

"ZDS's commissioning services were invaluable in helping us understand our facility and ensure the systems were installed as intended and optimized for long-term operating benefits. We would recommend them again!" - Captain Harry Netzer, WVANG Project Manager

130th Airlift Wing at Yeager Airport,
Phase I and Phase II
Aircraft Maintenance Fuel Systems
Hangars and Shops
Awarded LEED Silver Certification

Construction Costs:	\$43,000,000
Project Size:	128,715 ft²



Design/Consulting Services

Engineering for State & Local Government Facilities



Governor's Mansion

Engineering planning and design for central heating plant, DDC controls, Air Handling Unit replacements and retrofits, operating and maintenance, training, heat recovery, fuel conversion, VFD's, variable water volume pumping, steam/heating hot water and chiller optimization.

Renovations included HVAC, fire safety, lighting, plumbing, indoor air quality and electrical power engineering.



Building #3



State Capitol



LEED Certified Candidate



Design/Consulting Services

Engineering for State & Local Government Facilities

Welcome Center and Rest Area



ZDS engineered the prototype for several Welcome Centers and Rest Areas.

ZDS provided engineering planning, design, bidding and construction admin services for M/E, Plumbing and Fire Protection.

ZDS also evaluated the existing courthouse's potential power needs and incorporated those in the new Judicial Annex's electrical systems while providing emergency power.

Mercer County Annex



Division of Culture and History

A 228,500 ft² Facility



Emergency Power Generator

Renovations save the Museum nearly \$153,000 in annual energy costs while preserving the State's priceless collection with proper HVAC, humidification, lighting, electrical and power generator systems.



Design/Consulting Services

WV Army National Guard Brushfork Armory HVAC Renovations, Bluefield, WV

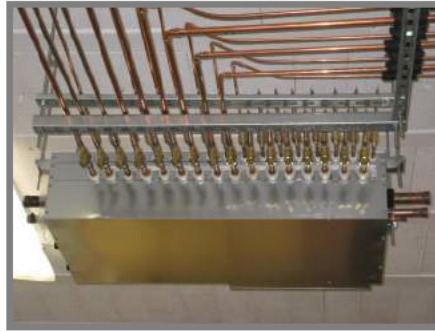
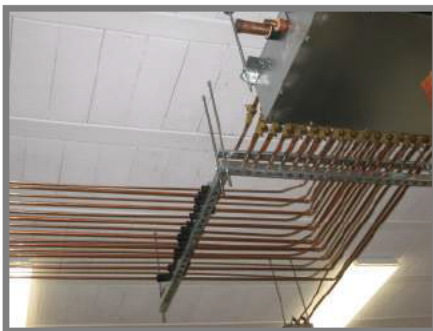


Project Cost: \$1,398,100 **Size:** 41,300 ft² **Date Complete:** 2022

Study/Evaluation, HVAC Renovations, Lighting Upgrades, Fire Protection, Electrical Renovations, 3D Scanning

Client Reference: Kenneth Goodson; (304) 561-6337

ZDS provided comprehensive professional engineering services for HVAC renovations at the Brushfork Armory located at 2915 Old Bramwell Road near Bluefield, West Virginia. Project included providing Variable Refrigerant Flow (VRF) systems for administration, offices, and other selected areas. Systems were comprised of indoor VRF cassette units, outdoor condensing units and a roof mounted DOAS unit to provide Code required ventilation air. The twinned condensing units were provided to reduce issues when in defrost cycle by allowing one side at a time to be in defrost mode. Our services included preparation of Construction Bid Documents, assistance with Bidding and Construction Administration through completion of the contract.



WV Army National Guard Headquarters & Annex Building

ZDS Design/Consulting Services and its principals Ted and Todd Zachwieja were involved in many mechanical, electrical, and plumbing design projects for the WV Army and Air National Guard. ZDS projects with the Army National Guard include providing electrical Design/Build engineering and project management for emergency power for the Army Headquarters Building and Annex Building in Charleston, WV. This project was completed ahead of schedule and within budget to provide emergency power needs for the Coonskin Army National Guard campus as part of their overall homeland security strategy. ZDS also evaluated and designed HVAC renovations to restore four indoor firing ranges to meet current compliance with Army Standards.



Total MEP Cost: Over \$4,000,000

Contact: Lt. Co. Todd Justice, Deputy Director of Joint Operations: anthony.t.justice.mil@mail.mil



WV Army National Guard Dunbar Armory



ZDS provided comprehensive MEP engineering support for HVAC/partial lighting renovations at the Dunbar Armory. Our professional services included preparation of the Construction Bid Documents and continued through bidding, negotiation and construction administration of the Contract.

Renovations resulted in a **61% reduction** in energy for lighting and **41% reduction** in energy for HVAC renovations over ASHRAE 90.1-2007 standards qualifying the project for EPart.



Total Project Cost: \$1,000,000 (completed under budget)

Contact: SGM Kenny Goodson: kenneth.c.goodson.mil@mail.mil



Design/Consulting Services

Size: 219,754 ft² plus 33,000 ft² Addition

Date Complete: 2017

219,754 ft² Renovation plus 33,000 ft² New Construction

Prime for Engineering Master Planning, HVAC Renovations, Lighting Upgrades, Emergency Generator, Fire Protection, Electrical Renovations, Roof Replacement, Commissioning, 3D Scanning.
Consultant for all MEP engineering through IKM, Inc. for the addition.

MEP Engineering design and Commissioning services for both the HVAC/lighting/roof Renovation project retrofitting Hospital and the patient wing addition. Comprehensive MEP engineering and commissioning services for a central domestic hot water services, central boiler/chiller plant and 1.8 MW bi-fuel emergency generator system. Central heating plant with three 10.5 Million BTU heating hot water boilers with low NOx burners to meet DEP emission requirements. WV Pumping for heating, cooling and domestic hot water. Integrated DDC controls for central monitoring, troubleshooting and control including demand control ventilation and outside air measuring/monitoring. The HVAC system is also an integral part of the smoke control system. Lighting systems upgraded to LED and controlled to minimize energy. IAQ enhancements were incorporated into the high performance HVAC systems. Careful phasing, and the need to disrupt only small portions of the Hospital at a time, resulted in an extended construction period.

“The **ZDS** staff are great planners and designers! They help us make the best decisions for the long term. We would recommend them to anyone!”
former Chief Operations Officer



Renovations resulted in a 48% reduction in lighting and 28.8% reduction in energy for HVAC renovations over ASHRAE 90.1-2001 standards qualifying the project for EPC.

Construction Costs:	Phase I HVAC Cost	\$ 1,403,000	Completed in 2011
	ARRA Funded Lighting Upgrade Costs	\$ 618,700	Completed in 2011
	Comprehensive Renovation Cost	\$30,000,000	Completed in 2017
	Addition Project Cost	\$13,500,000	Completed in 2014

Kanawha County Courthouse & Judicial Building

Charleston, WV



The Kanawha County Commission hired **ZDS** to provide HVAC/Roof Replacement engineering planning, design, bidding and construction administration services for the renovation of the 95,400 ft² Judicial Building and a 23,000 ft² addition using the ground floor of the parking garage connected to the Judicial Building. The facility includes circuit courtrooms, jury deliberation, attorney conferencing, witnessing, court clerical staff, public research, adult probation, prosecuting, maintenance, voter registration, court administration, and all public areas. The addition included a new entrance, security checkpoint, and lobby to accommodate a building expansion for Juvenile Probation and Family Court. Replacing the roof of the original building is being done concurrently with HVAC renovations for a coordinated effort.

ZDS assisted in identifying a phased approach to addressing and defining Indoor Environmental Quality (IEQ) issues and modifications for the Kanawha County Courthouse.

Total Judicial Bldg. Project Costs: \$13,807,000

ZDS Team Project Cost: \$6,737,000

Annex Project Size: Renovations 95,400 ft² plus 23,000 ft² addition

“No one else could identify the MEP problems even though many had tried. Yet, ZDS provided an excellent evaluation while working well with our Judges and staff for a very successful project. We use them for all our challenging work.”

- Kanawha County Commissioner

Project Cost: \$4,090,000.00

Size: 4,260 ft²

Date Complete: 2021

HVAC, Plumbing, Fire Protection, Lighting, Electrical and LV Systems

Client Reference:

WYK Associates, James Swiger, President; (304) 624-6326, james@wykassociates.com



Tyler County 911 Center



ZDS provided professional MEP engineering services for the preparation of construction documents on the new Tyler County 911 Center. Stringent Codes and standards for 911 facilities were researched and implemented into the MEP systems for the new facility. We designed a high performance geothermal well field that will serve the HVAC systems' equipment as well as a solar power panel array with equipment and components that is intended to provide all necessary electric power to the building. The electricity generated by the PV panels will exceed the needs of the facility and with the installation of an interconnecting system coordinated with the local utility the excess power will feed back into the utility grid for the County's use at the local Courthouse. The installation of the geothermal system coupled with the solar power generated will result in a significant overall reduction in energy costs to the Owner. The facility also has a propane-fired emergency generator to provide 100% backup for electrical needs in the event of a utility failure and an Uninterruptible Power Supply (UPS) system sized for all critical loads in the Operations Center. State of the art systems incorporated in our design included fire alarm, security, door access and vehicle entry gate openers. The building has a complete fire protection wet-pipe sprinkler system with the exception of clean agent dry suppression systems for the Server room and the Operations Center where sensitive electronic/data equipment is located.

State of West Virginia Capitol Complex

Charleston, WV



State of West Virginia Capitol Complex Charleston, WV

Project Cost: \$26,500,000

Size: 1,900,000 ft² covering 9 buildings

Date Complete: 2019 for latest project

**HVAC Renovations, Fire Protection,
Electrical Renovations, Consultant for Performance Contracting**

Client Reference:

Mark Lynch, Mgr. Facility Operations; mark.w.lynch@wv.gov
Patrick O'Neil, Project Manager; Patrick.S.ONeill@wv.gov

Builder Reference: Constellation Energy; Chuck Moeller
(previously with Johnson Controls; (724) 584-3331



Numerous design and renovation projects for the WV State Capitol Complex including engineering planning, design, supervision, preparation of construction documents, specifications, construction administration, and commissioning of HVAC systems, sprinkler systems, plumbing systems, electrical power, lighting, fire alarm, security, technology and communications for many facilities on the WV Capitol Complex: **WV Division of Protective Services:** Engineering master planning & design for specific life safety issues involving homeland security, fire alarm, sprinklers, emergency power, CCTV, intercom, mass notification and "giant voice" system for all State facilities on the Capitol Complex under a 10-year open-end contract. **WV Division of Culture and History Library** renovations addressing long-term HVAC and IAQ problems including fire alarm and fire protection upgrades completed in 2011. Renovations conserved energy without sacrificing comfort or indoor air quality. **District Heating System:** As a consultant to Johnson Controls under a Performance Contracting program to provide master planning and design for the district heating system for the **WV Capitol Complex**. The project included the Master Planning, IAQ evaluation, energy analysis, code analysis and Mechanical design involving more than 1,900,000 ft² of facilities including the Capitol Building, Building's #3, #4, #5, #6, #7, Holley Grove, Governor's Mansion and the Culture Center.

Master planning & design for central heating plant, DDC controls, Air Handling Unit replacements and retrofits, operating and maintenance, training, heat recovery, fuel conversion, VFD's, variable water



The Capitol Complex renovations are estimated to save nearly \$2,000,000 annually over the costs of operating the old systems.

Robinson Grand Performing Arts Center

Clarksburg, WV



Project Cost: \$17,000,000, **Size:** 45,000 ft² **Date Complete:** 2018

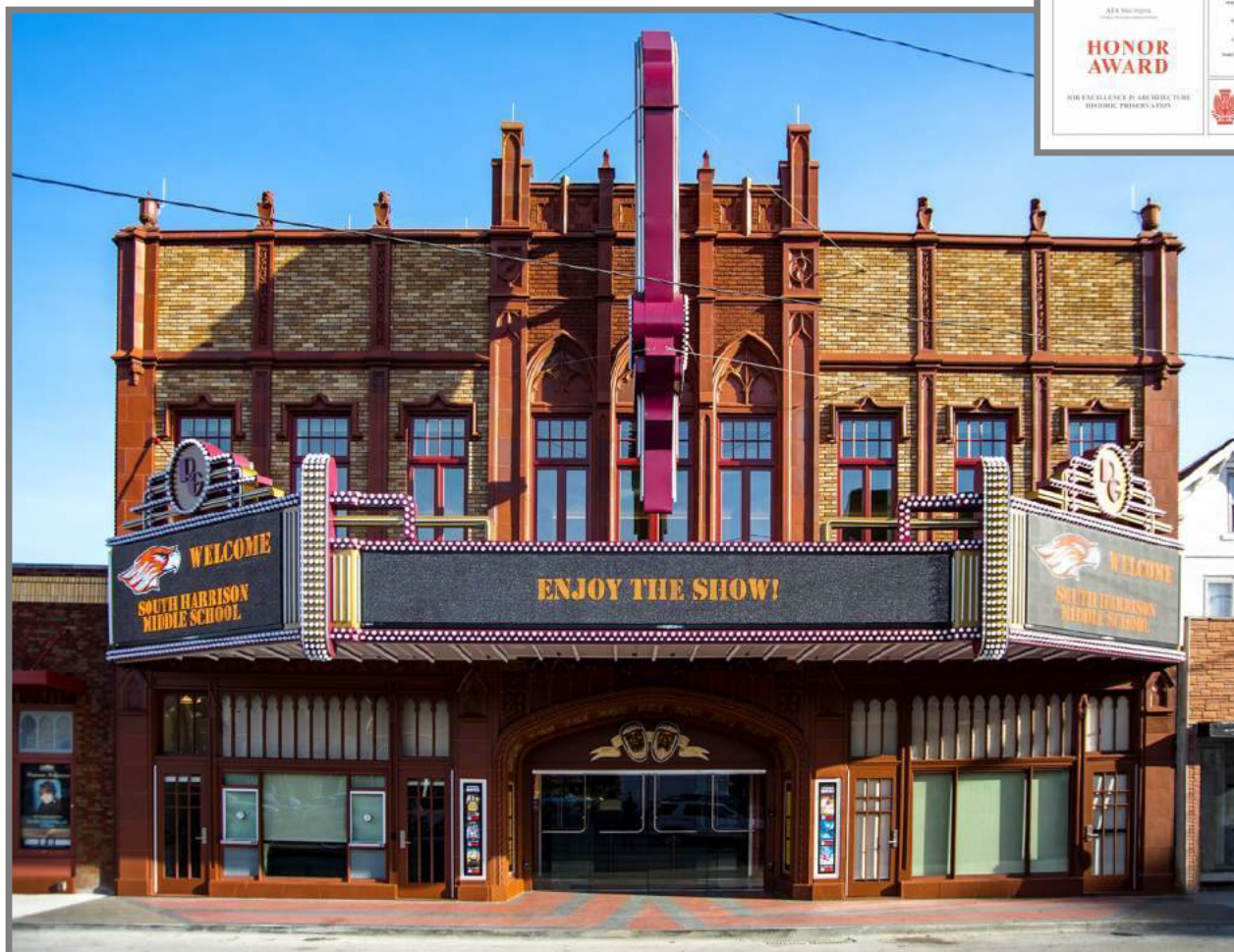
Study/Evaluation, HVAC Renovations, Fire Protection, Electrical Renovations, Emergency Generator, Lighting Upgrades, 3D Scanning

Client Reference:

WYK Associates, James Swiger, President; (304) 624-6326, james@wykassociates.com

High performance sustainable HVAC/Electrical/Plumbing/FP upgrades. Condensing heating hot boilers water system with variable water volume pumping. Quiet HVAC system meeting stringent acoustical performance requirements for Performing Art. 3D-Scan-to-BIM of the existing facility was invaluable to develop the comprehensive existing conditions. Built in 1913, this beautiful award winning historic theatre has come back to life!

*Renovations resulted in a **50.8% reduction in energy** over ASHRAE 90.1-2007 standards qualifying the project for EPA Act.*

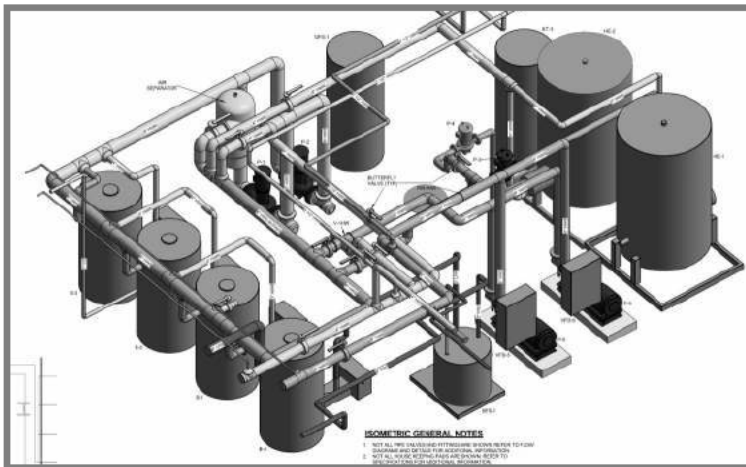


Project Cost: \$17,000,000, **Size:** 117,500 ft², **Date Complete:** 2017

Study/Evaluation, HVAC Renovations, Lighting Upgrades, Fire Protection, Electrical Renovations, 3D Scanning

Client Reference: Gary Boyd, Director of Facilities; (304) 357-4871

The facility consists of classrooms, offices, flexible meeting areas and a large two-story Innovation Center space. Mechanical and Electrical work includes new chiller and three heating hot water boilers with a steam boiler for the central boiler plants with pumps and accessories, HVAC air handling units, DDC Controls, new domestic and fire protection water services, new gas service, domestic water heating equipment, extensive plumbing fixtures/showers/lockers, new electrical service from the campus 12.5 kv distribution loop, switchgear, distribution and branch panel boards, and new state-of-the-art energy efficient LED lighting systems.



Renovations resulted in over a 50% reduction in energy over ASHRAE 90.1-2007 standards.



The Prince Jonah Kūhiō Kalanianaʻole (PJKK)
Federal Building and
United States Courthouse
Honolulu, Hawaii



130th Airlift Wing at Yeager Airport, Phase I
and Phase II: Aircraft Maintenance Fuel
Systems Hangars and Shops

Awarded a **LEED Silver Certification** for
each of the two phases

“ZDS’s commissioning services were invaluable in helping us understand our facility and ensure the systems were installed as intended and optimized for long-term operating benefits. We would recommend them again!” - **Captain Harry Netzer, WVANG Project Manager**



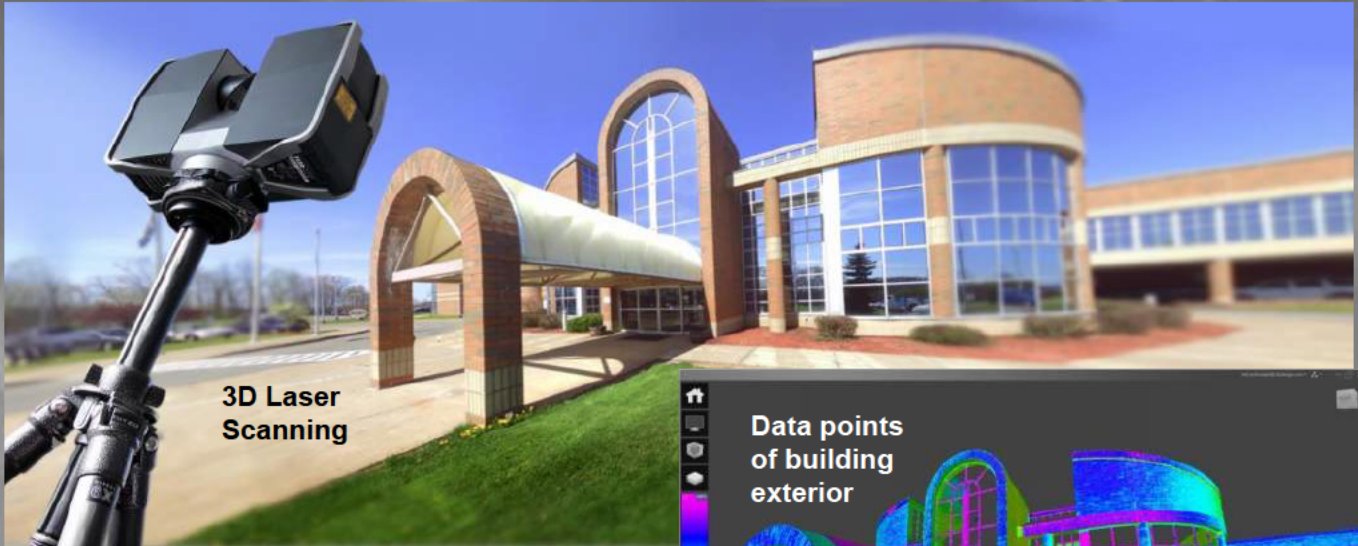
Harvard University
Arnold Arboretum Weld Hill
Research and Administration Building

LEED Gold Certified

- CAMC General Division, Memorial Division & Women & Children’s Hospital
- General Motors (GM) of North America
- Maryland – Calvert County Indoor Aquatic Center
- Montgomery County Departments of Correction and Police
- Roane General Hospital, WV
- Ohio University – Chillicothe Campus, Stevenson Library and Bennett Hall
- Santa Ana Federal Building Renovations
- University of California, Davis School of Veterinary Medicine Instructional Facility
- Washington & Lee University
- William R. Sharpe Jr. Hospital
- WV Museum of Culture and Natural History
- WV State Capitol Complex
- WVU—Downtown Campus
- United Hospital Center

BIM - 3D Digital Imaging

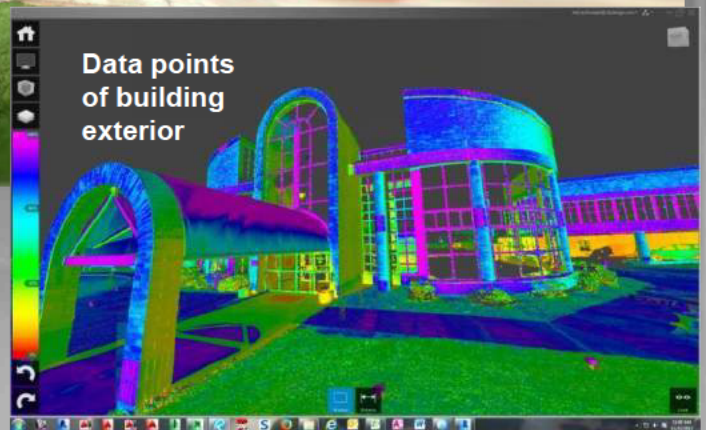
Our 3D Laser Scanning Services helped William R. Sharpe, Jr. Hospital document existing conditions and integrate their 50-bed addition.



Why 3D Laser Scanning is better:

3D laser scans reveal significant differences between existing conditions and the original drawings.

3D laser scans also provide superior details by capturing data that is more comprehensive and precise than conventional methods.



“With the 3D laser scanning service, ZDS saved us countless hours communicating to all project team members, even to those who work or live far away.

Also, we now have an accurate record of the existing conditions that DHHR can easily access now and into the future.”

former Chief Operations Officer



Web Share:

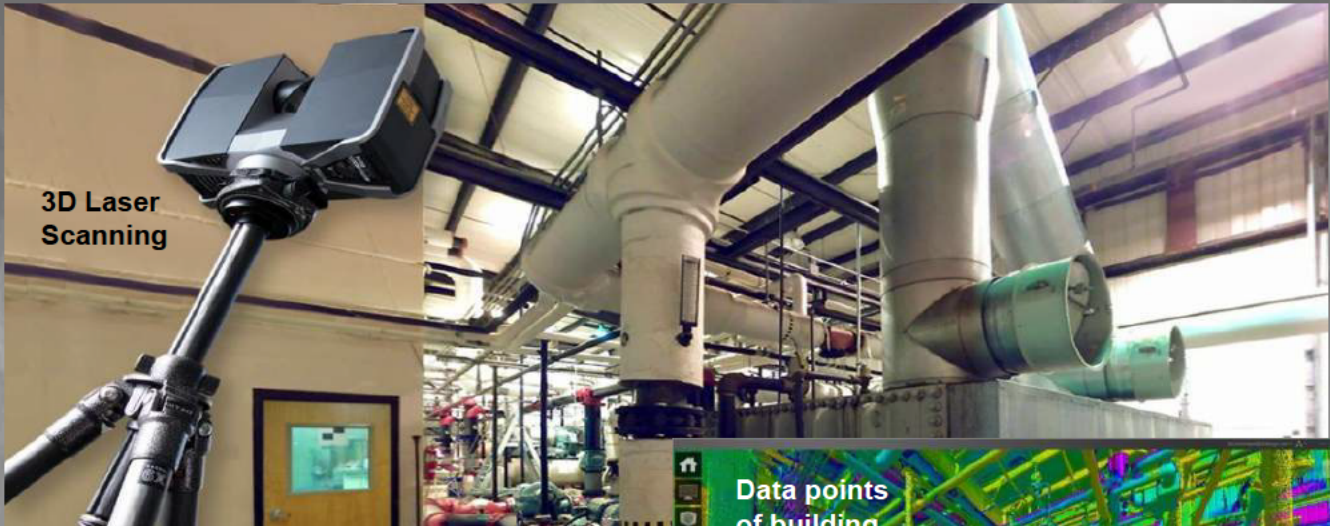
3D laser Scanning allows facility owners to view and measure areas with others on their planning and construction team.



BIM - 3D Digital Imaging

“The 3D laser imaging improves quality, saves time and money while providing a valuable resource now and into the future.”

DHHR



“The 3D laser scans safely document hard-to-reach interior areas — this greatly reduces our risk for liability.

Also, the excellent details of the laser scans convert to accurate construction drawings, both architectural and engineering.”

*DHHR Director of
Construction & Project Management*



3D Engineering Drawing:
Sample of 3D mechanical drawing converted from 3D laser scan data points.

Web Share: Helps construction team members integrate existing conditions into BIM models.



SECTION IV.

Proposed Staffing Plan

Certifications

Resumes



Team Staffing Plan



ZDS Management Team



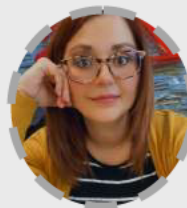
Ted Zachwieja III, PE, CEM
CTO/BIM Manager
MEP Engineer-of-Record



Todd Zachwieja
PE, CEM, LEED AP
Principal-in-Charge



Jim Watters
Associate, MEP Design
Cost Estimating/CA



Lauren Headley
Marketing Coordinator/CA



David Cotton, PE, LEED AP BD+C
MEP Engineer



Mark Estep, PE
MEP Engineer



Paul O'Dell, PE
MEP Engineer



Vineel Busa, MSME, EI
MEP Designer

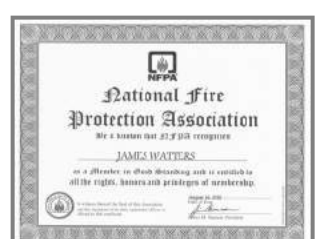
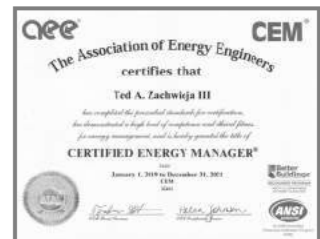
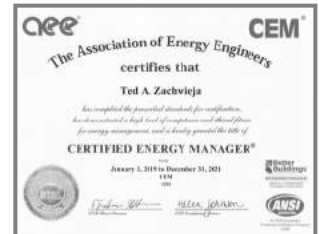
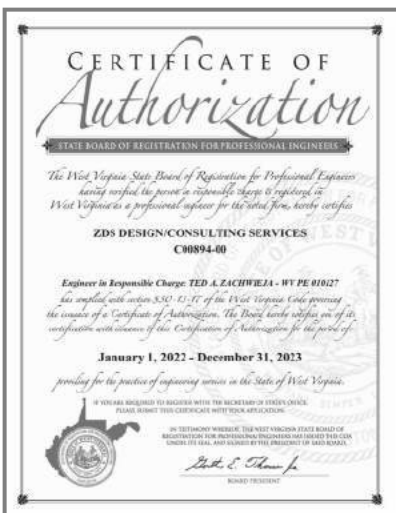
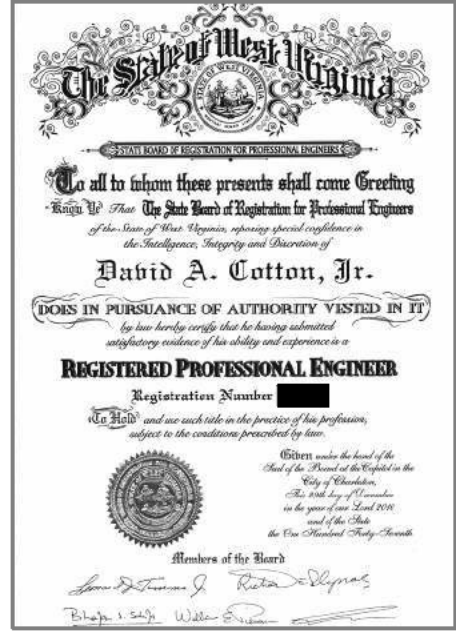
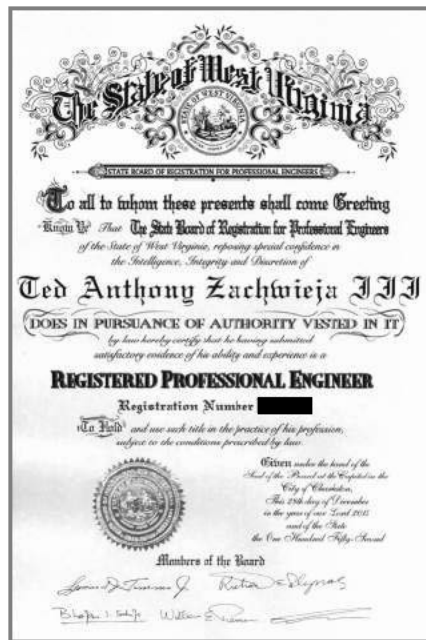
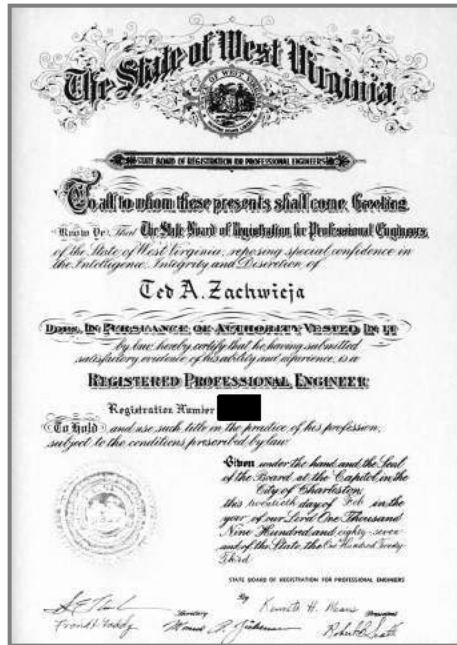


Meher Meka, MSEE, EI
MEP Designer



Billy Smith, BSME
MEP Designer

Certifications



Todd has over 40 years of experience involving the analysis, design, construction management and specifications for mechanical engineering, heating, ventilating, air conditioning, plumbing, fire protection, electrical and lighting, as well as indoor environmental quality analysis, building system commissioning and forensic engineering for educational, governmental, military, commercial, industrial and health care clients. He is also recognized as a campus master planner for utility infrastructure providing master planning at many Universities, hospitals and the State of WV Capitol Complex.

Prior to starting a consulting engineering firm, Todd Zachwieja coordinated comprehensive energy conservation programs resulting in annual energy savings of millions of dollars. He has managed a profitable regional office for one of the country's largest energy companies that service the southeastern United States. Todd also developed computer modeling programs for building energy analysis and monitoring. He has been invited as an industry leader to present technical papers and speak at professional conferences both regionally and nationally.

Todd selected and designed the pilot project for one of the largest geothermal heat pump applications in the Eastern US including designing custom geothermal rooftop AHU's. He has retro-commissioned HVAC systems for millions of square-feet for facilities located in 10 states. He has been involved with many commercial structures including high-rise commercial building renovations. Todd designed renovations to many existing schools which received **Energy Star Certifications** placing them in the nation's top 25% of energy efficiency schools. *The College Planning and Management Magazine* featured Todd and his work with a major University for the performance contracting programs that save millions of dollars in energy and operating costs. Most projects also qualified for EPA's Act which requires buildings use over 50% less energy than buildings designed using ASHRAE 90.1.

GOVERNMENT/HISTORIC/COMMERCIAL PROJECT EXPERIENCE

- Bank One
- Bayer Material Science
- Calvert County Aquatic Center, MD
- Charleston Area Medical Center
- Cass Scenic Railroad Clubhouse, WVDNR
- Coal Heritage Discovery Center
- Culture Center, HVAC & Fire Protection, WV State Capitol Complex
- General Motors Corp. Re-commissioning
- Hopemont Hospital, WVDHHR
- Jackie Withrow Hospital, WVDHHR
- Jackson County Courthouse Annex
- Kanawha County Commission: 120,000 sf Judicial Annex additions/renovations
- Kanawha County Courthouse
- Kanawha County Metro 911
- Kanawha County Public Library
- Kanawha County Schools
- Kohl's
- Laidley Towers
- Marshall University
- Mercer County Courthouse Annex
- Olin Corporation
- Phillip Morris USA
- Public Service Commission of WV
- Redmond House, WVDOT
- Rhone-Poulenc
- Robinson Grand Performing Arts Theatre
- Santa Anna Federal Building, CA
- St. Patrick's Church
- Tyler County Courthouse
- Tyler County Schools
- Toyota Motor Manufacturer, WV Inc.
- Union Carbide/DOW
- United Center
- University of Charleston Innovation Ctr
- William R. Sharpe, Jr. Hospital, WVDHHR
- Word Trade Center, MD
- WV Air National Guard including Cx \$45M Fuel Cell/ Maintenance Hangars at Yeager Airport – **LEED Silver Certified**
- WV Army National Guard
- WV Capitol Complex Central Heating Plant
- WV Children's Home, WVDHHR
- WV Department of Transportation/DOH
- WV Division of Protective Services
- WV Higher Education Authority
- WV General Services Division
- WV State Capitol Complex renovations
- WVU Stewart Hall & Wise Library
- Yeager Airport



PROFESSIONAL REGISTRATIONS

Professional Engineer:

Florida

Georgia

Kentucky

Maryland

North Carolina

Ohio

Pennsylvania

South Carolina

Virginia

West Virginia

Fire Investigation Certification under the direction of Peter Vallas, Sr.



Certified Energy Manager

(C.E.M.) National

Certification No. [REDACTED]



LEED Accredited Professional,
National Certification through

USGBC No. [REDACTED]

EDUCATION

Masters of Science in Engineering
Management from West Virginia University
College of Graduate Studies.

Bachelor of Science in Mechanical
Engineering from West Virginia
Institute of Technology.

Todd Zachwieja, PE, CEM, LEED AP

PROFESSIONAL AND COMMUNITY AFFILIATIONS

Past President 2013-14, current Governor - WV ASHRAE Chapter, Served as ASHRAE's Energy and Technical Affairs Chairman for six years. Recognized by ASHRAE Region VII in 2014 with the David Levine Award of Excellence, Presidential Award of Excellence,

Recognized by the International Who's Who of Professionals

Recognized nationally as West Virginia's Business Man of the Year

Recognized by AEE nationally in 2007 as a Legend in Energy

Recognized by AEE 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

Associate Member West Virginia Society for Healthcare Engineering

Member of the International Code Council

Member of the National Society of Professional Engineers



OTHER RECOGNITIONS

Selected by WVU and the WV Division of Energy to train Code officials and the design community on ASHRAE 90.1 State Energy Code

Presented at regional and national conferences including the annual National System Commissioning Conference

Contributing editor and served on the Editorial Review Panel for *"The Handbook of Building Management and Indoor Air Quality"*

Contributing editor *"Ventilation for a Quality Dining Experience"*

Contributing editor and served on the Editorial Review Panel for *INvironment Professional, Power Prescriptions* and other publications and articles featuring Indoor Air Quality (IAQ) and MEP engineering systems

Energy Star Certified for facilities in the nation's top 25% of energy efficiency

1st Place 2014 ASHRAE Technology Award, Region VII

LEED Silver Certified WVANG Fuel Cell/Maintenance Hangar, Charleston, WV

LEED Gold Certified Harvard Arboretum, Boston, MA

First ASHRAE bEQ certified building in West Virginia, 2015

Ted Zachwieja III, PE, CEM

Ted has over 16 years of experience in building construction design industry. His strategic thinking and development of technical resources at ZDS has helped streamline design processes and improve quality of work office wide. Ted is an innovative problem solver in engineering design, communication methods and management of BIM models between stakeholders during a design project. As a pioneer and a believer in technological processes Ted has championed Integrated Design Practices that has become the fabric of ZDS's day to day operations.

Ted developed ZDS's 3D Scanning services which have assisted in collecting key existing conditions for renovation projects, forensic engineering, historical preservation, and high definition reality capture. Ted has in depth experience on collection, registration, and scan to BIM processes. He has provided training and developed materials for best practices when using 3D scan data. Ted's 3D scanning experience includes governmental, educational, health care, industrial, and commercial facilities. He also has experience in speaking on how 3D laser scanning impacts our industry today.

Ted develops, designs and manages the IT systems. The experience encompasses development and deployment of central server systems to networked client computer systems, strategic development for ZDS' Integrated Design Processes, and research and development into new technologies to continue staying on the cutting edge for ZDS and others.

Ted's project experience includes design and commissioning for heating, ventilating, air conditioning, plumbing, fire protection, electrical and lighting systems for educational, health care, industrial and commercial facilities. His experience encompasses working both on new construction and renovation projects. He also is experienced in historical facilities including theatrical.

Ted maintains an active membership to the ASHRAE professional society and also has a lifetime membership to the Association of Energy Engineers. He maintains an active continuing education towards today's standards and codes as well as participates in ASHRAE at both a local and society level. He was recently appointed to the Electronic Communications Standing Committee with ASHRAE. Ted has designed renovations to existing K-12 schools which received **Energy Star Certifications** placing them in the nation's top 25% of energy efficiency schools.

GOVERNMENT/HISTORIC/COMMERCIAL PROJECT EXPERIENCE

- WV Air National Guard Maintenance Hangar and Fuel Cell Hangar, Charleston, WV – **LEED Silver Certified**
- Adams Morgan Historic Hotel, DC
- Bayer Material Science
- Catholic Church of Ascension, Parish Hall Renovations
- Coal Heritage Discovery Center
- Culture Center, WV State Capitol Complex
- Highland Museum, KY
- Hopemont Hospital, WVDHHR
- Jackie Withrow Hospital, WVDHHR
- Kanawha County Judicial Annex HVAC Renovations
- Laidley Towers
- Meadowbrook Rest Areas
- I-70 Welcome Center
- CASCI Building, Charleston WV
- Morgantown Welcome Center
- Pocahontas County Community Center
- Redmond House, WVDOT
- Robinson Grand Performing Arts Theatre
- Servia Rest Areas
- St. Patrick's Church, Weston WV
- Stonewall Jackson Marina
- Tyler County Courthouse
- University of Charleston Innovation Center Additions/Renovations
- William R. Sharpe, Jr. Hospital Additions/Renovations, WVDHHR
- World Trade Center, Renovations, MD
- WV Children's Home, WVDHHR
- WV Parkways Authority, Toll Booth Plazas
- WV State Capital Complex Central Heating Plant
- WVU Wise Library
- White Sulfur Springs Rest Area
- Numerous K-12 School Renovations



PROFESSIONAL REGISTRATIONS

Professional Engineer:

Florida
West Virginia

Certified Energy Manager (C.E.M.)

National Certificate

No. [REDACTED]



EDUCATION

Bachelor of Science in Mechanical Engineering from Rochester Institute of Technology, Rochester, NY

AWARDS AND RECOGNITIONS

Awarded 2012 Legend in Energy by the Association of Energy Engineers

Awarded acceptance into ASHRAE's 2015 Leadership University

ASHRAE Blue Ribbon Award of Excellence
Co-Author at Autodesk University



Star Certified for facilities in the nation's top 25% of energy efficiency

Jim has over 40 years' experience in design and implementation of lighting, HVAC, plumbing and electrical systems including nine years in the construction industry. He has a comprehensive knowledge of construction documents, contracts, and development of cost estimates, budgets and schedules. Jim's strengths reside in his ability to manage projects and people in an organized and cost-effective manner. Jim has been involved with the design and production of mechanical and electrical drawings including HVAC, plumbing, fire protection, lighting, electrical power, fire alarm and specialized systems. He has worked with and managed engineers in projects for health care, educational and commercial buildings in the states of West Virginia, Florida, Maryland, Pennsylvania, Ohio, Kentucky, Virginia, Georgia, New York, Arizona, Illinois and Massachusetts.

Jim has extensive experience in energy savings' programs for lighting, HVAC, plumbing and electrical systems in hospitals, state and government office buildings, school systems, and manufacturing facilities, as well as managing performance contracts for a large facility's campus totaling \$10,000,000 in construction costs on various projects, including the conception, design and construction administration for the installation of a 1.5 Megawatt emergency generator. The propane-fired generator and associated switchgear in conjunction with 60,000 gallons of propane fuel storage served to provide peak shaving/load shedding to save on the campus utility costs as well as emergency power functions. Through the years, Jim has researched and implemented into practice International Building Codes, NFPA Codes, National Electrical Codes, Life Safety Codes, IES standards, AIA Guidelines for Design and Construction, and ADA guidelines. His involvement in construction through the years has been mainly from the design side of the industry with a 9 year stint working for a contracting firm at the turn of this century. His experience includes coordinating with Architects, Owners and Agencies including an excellent relationship with the office of State Fire Marshal.



PROFESSIONAL AFFILIATIONS

Member of the National
Fire Protection Association (NFPA)



Member of the Health
Care Section of the NFPA

Past Member of the Illuminating
Engineering Society (IES)

Past member of the American Society
of Plumbing Engineers (ASPE)

Past member of the Institute of
Electrical Engineers (IEE)

OTHER RECOGNITIONS

Energy Star Certified
for facilities in the Nation's top 25% of
energy efficiency



GOVERNMENT/HISTORIC/COMMERCIAL PROJECT EXPERIENCE

- Bluefield Area Transit Authority Administration and Maintenance Facility
- Kentucky Judicial Center, Boyd County
- Coal Heritage Highway Authority
- Chase Towers (formally Charleston National Bank)
- Culture Center Fire Alarm/Sprinklers, WV State Capitol Complex
- Department of Transportation Rest Area prototype
- Department of Transportation Welcome Center prototype
- Fenway Park Lightning Protection/ Grounding Study, Boston
- Glenville State College
- Hopemont Hospital, WVDHHR
- I-70 Welcome Center
- Jackie Withrow Hospital, WVDHHR
- Jackson County Libraries Renovations
- Kanawha County Commission Judicial Annex Renovations
- Laidley Towers
- Meadowbrook Rest Areas
- Morgantown Welcome Center
- Redmond House, WVDOT
- Rhone-Poulenc New Admin. offices
- Robinson Grand Performing Arts Theatre
- Sacred Heart Pavilion and Daycare Ctr
- St. Patrick's Church
- Shawnee Park Clubhouse
- Stonewall Jackson Marina Renovations
- Tucker County Board Office Boiler Retrofit
- Tucker County Courthouse
- Tyler County Courthouse
- University of Charleston Innovation Ctr
- William R. Sharpe, Jr. Hospital, WVDHHR
- World Trade Center, MD
- WV Air National Guard including Cx \$45M Fuel Cell/ Maintenance Hangars at Yeager Airport — **LEED Silver Certified**
- WV Children's Home, WVDHHR
- WV Department of Military Affairs, Public Safety Maintenance Facility, Eleanor
- WV Department of Transportation Burnsville Rest Area and Domestic Water Pumping Station — **AIA Merit Award Recipient**
- WV State Capitol Complex Renovations to Buildings 1, 3, 4, 5 & 7
- White Sulphur Springs Welcome Center

Lauren has been with ZDS for nearly seven years, in the engineering design industry for over 18 years and is extremely familiar with the design process of a successful project from start to finish. She is in charge of our marketing which starts with researching upcoming projects ZDS may be a good fit for, and prepares our Statement of Qualifications for each unique opportunity. She also prepares extensive Power Point presentations for potential interviews, and as our marketing coordinator, keeps our marketing materials fresh and up to date with each new job obtained or employee added to our team. Most recently Lauren played a big part in updating our new company website using WordPress.

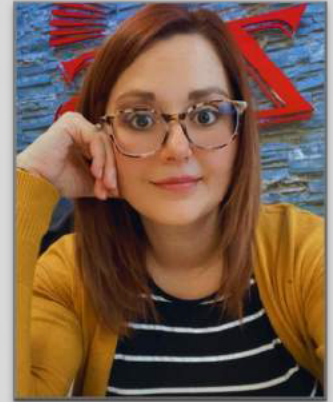
Lauren also oversees many administrative tasks throughout our office. She prepares AIA documents as needed such as change orders, applications for payments, Standard form of Agreements as well as all contract documents for Specifications. She has many years of experience editing and formatting Masterspec documents and most recently assisted ZDS in making the switch to SpecBuilder to make the process easier and more organized. When a project is out to bid she proofs drawings/specifications, creates a plan holders list, issues Addenda and corresponds with Contractors through the bidding process. She also assists with Construction Administration by preparing meeting agendas, minutes and construction reports.

Additionally Lauren maintains our client database, handles all shipping needs, coordinates all internal meetings, schedules lunch n learns, maintains our publications library and proofreads important outgoing documents. She wears many hats in our office while working to complete her Bachelor's degree.

Lauren has worked on an extensive amount of projects through the years for: K-12 Schools, Colleges/Universities, Healthcare facilities, Commercial facilities and Government facilities.

PROFICIENT IN THE FOLLOWING PROGRAMS:

- Microsoft Office Software: Word, Excel, Publisher, PowerPoint, Outlook
- Adobe Software: Photoshop, Pagemaker, InDesign, Premier Rush
- Bluebeam Revu
- Deltek Vision Accounting Software
- AIA Contract Documents
- Masterspec Software/SpecBuilder
- Engineer Office Software
- WordPress
- Office 365 Software: CRM, OneNote, Planner
- Energy Star



EDUCATION

Associates Degree in Marketing
Strayer University

Bachelors Degree in
Business Administration
Strayer University
2021—Present

PROFESSIONAL REGISTRATIONS

Official State of West Virginia Notary

AFFILIATIONS

Current President Emeritus
Itty Bitty Kitty Committee, Inc.
(animal rescue)

Former Red Cross
Blood Drive Coordinator

David is a professional Mechanical Engineer with over 16 years of experience in the design and construction of over 500 projects having construction values up to \$35 million. His design experience ranges from commercial, industrial, institutional, healthcare, education, restaurant, retail, government, airport, and recreational facilities.

David collaborates well with fellow engineers, architects, owners, commissioning agents, contractors, and vendors to define project scope and develop conceptual designs. As a project manager he successfully manages projects from start to finish in design, bidding, and construction administration.

PERSONAL PROJECT EXPERIENCE

- Dominion Office Building—LEED Gold, Bridgeport, WV
- Mon General Hospital Echo Renovations, Morgantown, WV
- Mon Health LTAC for Acuity, Morgantown, WV
- UHC POB 4th Floor Fitout, Clarksburg, WV
- Clarksburg Comprehensive Care Clinic Renovations, Clarksburg, WV
- Jerry Dove Medical Office Building, Bridgeport, WV
- Medbrook Building HVAC Replacement, Bridgeport, WV
- Mylan Pharmaceuticals, Morgantown, WV
- Total Dental, New Multi-Tenant Building for PCE, LLC, Bridgeport, WV
- Beckley Police Station, Beckley, WV
- Doddridge County Athletic Complex, Doddridge County, WV
- Boy Scouts of America, Rex W. Tillerson Leadership Center, Fayette County, WV
- White Hall Public Safety Building, White Hall, WV
- Beitzel/Pillar Innovations Office Building, Garrett County, MD
- Percival Hall Absorption Chiller and Cooling Tower Replacement, Morgantown, WV
- Thrasher Engineering Office Building, Bridgeport, WV
- WVU Creative Arts Center Rehearsal Hall, Morgantown, WV
- WVU Towers Dining Hall Renovations, Morgantown, WV
- WVU Athletic Performance Center, Morgantown, WV
- HP Hood Addition/Renovations, Winchester, VA
- Dominion Office Building, Delmont, PA
- University of Pittsburgh Softball Practice Facility, Pittsburgh, PA
- Westmoreland Community and Technical College, Indiana, PA
- WVU Alumni Center, Morgantown, WV
- WVU Biomedical Research Facility, Morgantown, WV
- WVU Milan Puskar Locker Room Renovations, Morgantown, WV
- NOAA GOES-R Supercomputing Center, Fairmont, WV
- Columbia Gas Transmission Compressor Station, Mathias, WV



PROFESSIONAL REGISTRATIONS

Professional Engineer:

West Virginia

Maryland

Virginia

North Carolina

Ohio

Pennsylvania

LEED AP BD+C Professional Accreditation

NCEES Record Certificate

EDUCATION

Bachelor of Science

Mechanical Engineering

WV Institute of Technology

MEMBERSHIPS

WV ASHRAE, Current President

National Fire Protection Association

WV Society of Healthcare Engineers

Mark has over 18 years of experience and is responsible for the design of commercial, institutional, and industrial mechanical and electric projects. He works with architects, civil and structural engineers to coordinate design and construction documents. He is responsible for project specifications and submittal review. Mark holds Degrees in Engineering and Architectural Technology which provide more than engineered solutions. He designs solutions that incorporate essential and functional needs, as well as aesthetic, life-safety, and constructability considerations.

Before joining ZDS, Mark was the President and Principal Engineer of another firm where he provided mechanical and electrical engineering design and analysis for commercial construction projects and was responsible for acquiring new projects.

He analyzes systems to determine best value solutions. He evaluates contractor equipment and material submittals as well as conduct on-site review of construction progress and quality.

PERSONAL COMMERCIAL/GOVERNMENTAL PROJECT EXPERIENCE

- General Motors Dealerships; Lewisburg, Charleston & Beckley.
- Toyota Manufacturing Facility; multi-purpose addition containing office spaces, medical treatment area, and weight room.
- Berkeley County EMS; New Facility.
- Buzz Food Processing Facility; New 12,000 sf processing facility includes offices, refrigeration, and abattoir spaces.
- Princeton War Memorial; HVAC Renovations.
- Brickstreet Insurance Headquarters; 86,100 sf renovation.
- Beckley PSD; 3 Water Storage Tanks; Sweeneysburg Water Treatment Plant.
- Shops at Kanawha Plaza; extensive renovation and tenant fit-up project of 195,000 sf shopping center.
- Huntington Museum of Art; HVAC Renovations.
- New Automobile Showrooms; two new showrooms with office and/or repair facilities.
- First Bank of Charleston; New Building.
- Hargis Laundry Facilities; laundry facility renovations.
- Harley Davidson; Store Renovations.
- Shawnee Sports Complex; Six multi-purpose fields and four baseball field complex with amenities.
- Charleston Housing Authority; Lee Terrace Boiler; Jarrett Terrace HVAC; Lee Terrace HVAC; Carroll Terrace Boiler; Little Page Boiler; Washington Manor Boiler; Switzer Center.
- Clay County PSD; Water Storage Tank; Water Treatment Plant.
- Putnam County Courthouse Complex; HVAC Replacement at the Sherriff's Office Building and the Main Courthouse Building.
- Trans Canada; New Control Building.
- Willow I & II and Elk Village Senior Centers; Three new two-story senior apartment buildings in multiple locations.
- Raleigh County Airport; Runway Lighting Upgrade.
- Yeager Airport; Runway & Tarmac Repairs.
- Upshur County Commission; Upshur County Courthouse Addition.
- Huntington Housing Authority; New 50 Unit Apartment Building; Administration Building Renovations.
- Maranatha Fellowship Church; New Annex Building.
- Mount Olive Correctional Facility; Foundation Verification.
- State of West Virginia Bioterrorism Lab; Upgraded existing mechanical and electrical systems to Bioterrorism facility to current federal standards.
- WV Department of Transportation; Kelly Creek Bridge; Marmet Bridge.
- WV Water Development Authority; New Facility.
- Dunbar Housing Authority; Dutch Hollow HVAC Replacement.
- WV Hygienic Lab; HVAC & Electrical Upgrades.
- WV Division of Motor Vehicles; Kanawha City.



PROFESSIONAL REGISTRATIONS

Professional Engineer:

West Virginia

Maryland

Virginia

Kentucky

Ohio

EDUCATION

Bachelor of Science

Mechanical Engineering

WV Institute of Technology

Bachelor of Science

Architectural Engineering Technology

Associates of Science

Mechanical Engineering Technology

Fairmont State College



Paul has 30 years of engineering experience involving the analysis, design, project management, specifications' writing and construction management on many projects throughout the region. This experience includes heating, ventilation, air conditioning (HVAC), plumbing, electrical systems and lighting for governmental, commercial, educational, healthcare, industrial and military facilities. He also has knowledge and experience with indoor environmental quality assessment, recommended remedial work and design of the necessary modifications in various types of buildings.

Paul assisted in the design and implementation of the pilot project for one of the largest geothermal heat pump systems in the mid-Atlantic region. He has also been involved in the design of facilities that have received the Energy Star Certification placing them in the nation's top 25% in energy savings for similar buildings and systems as well as his contribution as part of a large team effort performing mechanical systems' retro-commissioning at numerous automotive manufacturing facilities in North America.

His project experience is wide-ranging and includes the development of scope, design criteria and budget conscious designs. Working with other design professionals and through rapport with the clients he has conducted design peer reviews, construction budget and project schedule overview, Construction Administration and closeout of projects.

GOVERNMENT/HISTORIC/COMMERCIAL PROJECT EXPERIENCE

- WVARNG Armory/Annex
- Bruceton Bank
- Bank One
- Culture Center, WV State Capitol Complex
- Cuissets Residence
- Camp Dawson barrack/mess hall
- DOT Huntington District II Headquarters Renovations
- Yeager Airport Terminal Expansion/Renovation
- DOH Testing Lab
- GMC Lordstown Assembly Plant
- GMC Janesville Assembly Plant
- GMC Pontiac East Assembly Plant
- GMC Bowling green Assembly Plant
- GMC Arlington Assembly Plant
- Harrison County Bank
- IMC Office Bldg.
- Kanawha County Commission, Judicial Annex
- WV Capitol Complex Central Boiler Plant
- Appalachian Tire
- Laidley Towers
- Robinson Grand Performing Arts Theatre
- USDA Forestry Building
- University of Charleston Innovation Center Additions/Renovations
- World Trade Center, MD
- William R. Sharpe, Jr. Hospital Additions/Renovations, WVDHHR
- Numerous K-12 School Renovations



PROFESSIONAL REGISTRATIONS

Professional Engineer:
West Virginia [REDACTED]

EDUCATION

Bachelor of Science in Mechanical Engineering from WV Institute of Technology, Montgomery, WV
(Graduated Cum Laude)

PROFESSIONAL AFFILIATIONS

Member American Society
of Mechanical Engineers

Member ASHRAE

Vineel is a graduate Mechanical Engineer with a Masters Degree in Mechanical Engineering and nearly 5 years experience in HVAC & Refrigeration. Technically sophisticated engineering professional with solid history of effective integration, qualification and deployment of HVAC systems. Significant experience in designing, commissioning and implementing efficient HVAC systems for various commercial, healthcare and educational facilities.

Vineel is knowledgeable on HVAC systems, Heat Transfer, Refrigeration and Thermodynamic specializing in HVAC heating and cooling load calculations, Psychrometric and hydronic analyses and Energy modeling. He has applied that foundation in the manufacturing industry and the commercial industry. Vineel has a comprehensive knowledge of mechanical principles and drafting techniques.

He is experienced hands-on in designing Variable Refrigerant Flow systems, Steam Systems, hydronic systems, Geothermal systems and Building Automation System. He is also proficient in Revit, AutoCAD, IESVE, Navisworks, and Autodesk Recap. Vineel is experienced in utilizing point clouds in the development of Scan to Building Information Modeling (BIM) and performing 3D scanning. Vineel is well-versed in technical specification writings and development of construction drawings. He has hands-on experience in performing Functional Performance Testing in leading Commissioning projects.

PROJECT EXPERIENCE

- St. Marys High School
- New Bluefield Elementary School Commissioning
- Clay County High School Commissioning
- North Fork Elementary School HVAC/Roof Renovations, 3D Scanning, Scan-to-BIM and Commissioning
- Pendleton County Middle/High School HVAC/Roof Renovations, 3D Scanning, Scan-to-BIM and Commissioning
- New 911 Center high performance "Net Zero" facility and Commissioning
- Tyler County Courthouse Additions/Renovations and Commissioning
- Riverside High School HVAC/Lighting Renovations
- Roane General Hospital Commissioning
- Kanawha County Judicial Building Renovations & Commissioning
- New Clendenin Elementary School Commissioning
- Marshall University—Jomie Jazz HVAC Renovations
- Veteran Administration Clarksburg Hospital Mechanical BIM
- Veteran Administration Huntington Hospital Mechanical-Electrical BIM
- WV Capitol Complex Campus Heating System Renovations Buildings #1, #3, #4, #5 and #7 over multiple phases



PROFESSIONAL REGISTRATIONS

Engineer Intern:
Indiana [REDACTED]

EDUCATION

VIT University
Bachelor of Science
in Mechanical Engineering

Southern Illinois University Edwardsville
Master of Science
in Mechanical Engineering

University of Cumberland
Working on PhD in Project Management

AWARDS AND RECOGNITIONS

Certified by ASHRAE in
HVAC Design Essentials & Applications

Certified Engineer in Training (E.I.T)
Fundamentals of Engineering (F.E)

Meher Meka, MSEE, E.I.

Meher is a graduate Electrical Engineer with a Masters Degree in Electrical Engineering and nearly 5 years of experience in Power Distribution & Protection, Lighting design, Lightning protection, Fire Alarm, Communications and Schematics. He also is experienced in plumbing design for educational, commercial and governmental facilities.

He leads solar power applications including WV's first net zero 911 Center involving aggregate net metering where the additional solar power generated at a new 911 Center is credited towards the County's Courthouse. Knowledgeable in High performance building design.

PROJECT EXPERIENCE

- St. Marys High School
- CEA office
- Blennerhassett Island Dock Study
- Coney Island Hot Dogs Central Kitchen
- C.R. Hipp Industrial Warehouse
- Eucalyptus Wellness Company
- Ed Harleys Private Garage
- High Wire Distillery
- Kanawha County Judicial Bldg.
- Jones Trading Upfit office space
- Kimley Horne Charleston Buildout
- HSGS Solar Office Space
- IX Artistry Salon
- JW Aluminum upfit office space
- J McLaughlin Upfit Retail Outlet
- Maple Street Office Building
- North Fork Elementary Retrofit
- Northwood Middle School
- River Oaks Storage
- Riverside High School Renovations
- Orange Theory Fitness, Acworth
- Orange Theory Fitness, Milton GA
- Pack Rat Storage Bees Ferry road
- Pendleton County Middle/High School Renovations
- Sherwin Williams
- South State Bank Renovations
- Steel City Pizza Cranes
- Stella Nova Cigar Factory
- Trimnal Mayers Law office
- Tyler County 911 Center
- Tyler County Courthouse Retrofit
- VA Hospital - Clarksburg
- VA Hospital - Huntington
- WV Capitol Complex Renovations Bldg. #1, #3, #4, #5 and #7
- Airforce Base Clinic
- Canadian Consulate office
- JBL Harman office space



PROFESSIONAL REGISTRATIONS

Engineer in Training (E.I.T)
Fundamentals of Engineering (F.E)

EDUCATION

Bachelor of Technology, Electrical and
Electronics Engineering

UNC Charlotte
Master of Science
Electrical & Computer Engineering

Billy provides design, bidding, construction administration and Commissioning support for mechanical, plumbing, fire protection and electrical systems. His experience encompasses a broad range of Projects including, but not limited to Commercial, Government, Healthcare, Educational and Industrial facilities. Billy also has experience designing multiple building HVAC systems intended to meet high performance criteria, including one that will achieve net zero energy consumption. Knowledgeable with ASHRAE codes and Standards.

Experience includes 3D Scanning, high definition reality capture and Scan-to-BIM which is invaluable for renovation projects and to assist in the development of "Built" conditions in 3D space for Revit. Proficient in Revit, HVAC load programs and air side HVAC equipment selection. Experience in steam heating and distribution systems, hydronic piping/pumping, geothermal, commissioning, custom air handling unit design and HVAC equipment selection and specifications.

Billy is an active ASHRAE professional society member, serving on committee chairs for the WV ASHRAE Chapter. He regularly participates in chapter activities and works to maintain an active continuing education towards today's standards, codes, and technology.



EDUCATION

West Virginia University
Bachelor of Science
in Mechanical Engineering

PROJECT EXPERIENCE

- St. Marys High School HVAC Renovations, 3D Scanning
- North Fork Elementary HVAC/Roof Renovations, Commissioning and 3D Scan-to-BIM
- Pendleton County Middle/High School HVAC/Roof Renovations, Commissioning and 3D Scan-to-BIM
- Historical Tyler County Courthouse Additions/Renovations
- New Tyler County 911 Center, projected Net Zero high performance facility
- WV Capitol Complex Campus Heating System Renovations for Buildings #1, #3, #4, #5 and #7 over multiple phases
- Marshall University, Jomie Jazz Center HVAC Renovations and 3D Scan-to-BIM
- Riverside High School HVAC Renovations including geothermal closed loop HVAC system designed to reduce HVAC Energy by 50% over previous system
- Kanawha County Judicial Building HVAC Renovations, Commissioning, 3D scanning
- Veteran Administration Clarksburg Hospital Mechanical-Electrical BIM

RECOGNITIONS

WVU Valedictorian Scholarship
Promise Scholarship
WVU Honors Program
Presidential Scholarship
WV Engineering,
Science & Tech. Scholarship
WVU Deans list:
Fall 2016, Fall 2017, Spring 2018

SECTION V.

References

Client Testimonial Letters



References

ZDS has worked on hundreds of projects in West Virginia. We encourage you to call the references listed below:

Mike Pickens, Executive Director, National Council for School Facilities: (304) 400-9993.



Chuck Smith, Kanawha County Schools: (304) 348-6148, or (304) 395-9352.



Gary Boyd, Director of Facility Services, University of Charleston & WVU: (304) 357-4871, garyboyd@ucwv.edu; worked on projects at both WVU and University of Charleston involving MEP systems since 1990's.

Greg Nicholson, Retired COO, WV DHHR: (304) 552-0101, gregcnicholson@suddenlink.net.



Amanda Kimble, Tyler County Schools: (304) 758-2145, akimble@k12.wv.us; for renovations to Tyler Consolidated Middle/High School.



Dale Freeman, Director of Facilities, Roane General Hospital: (304) 927-6345, dafreeman@rghwv.org.



Tyler County Schools

P.O. Box 25
Middlebourne, WV 26149
(304) 758-2145
Fax (304) 758-4566

A. Shane Highley, Superintendent

Linda Hoover, President
Katrina Byers, Vice-President
Dave Roberts, Member
Larry Thomas, Member
P.J. Wells, Member

February 4, 2020

To Whom It May Concern:

This letter is to recognize the outstanding performance of ZDS Design/Consulting Services regarding their team and services rendered to Tyler County Schools. ZDS worked with Tyler County Schools on the Tyler Consolidated Middle/High School HVAC Equipment Replacement Project.

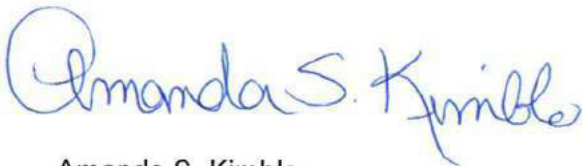
ZDS Design/Consulting Services are to be commended for their patience, diligence, and HVAC engineering expertise with our recent project. The project was complicated with funding and scheduling issues, and ZDS was able to overcome these hurdles and deliver a construction project that had very little issues. Their knowledge of the building systems and project construction administration were key.

From initial project planning, design development, bidding, construction administration, and closeout, ZDS was beside Tyler County Schools to provide any necessary support needed to make this project successful. Their professional team worked closely with our staff to ensure the design accommodated all of the needs for our students and staff.

It has been a pleasure working with the staff at ZDS. I wholeheartedly recommend ZDS Design/Consulting Services for projects similar to the scope of this one.

Please feel free to contact me if you may have any questions or comments.

Sincerely,



Amanda S. Kimble
Director of Support Services and Facilities
Email - akimble@k12.wv.us Office - # 304-758-2145



Michael Pickens

172 Oak Street

Dunbar, WV 25064

(304) 400-9993

RE: ZDS Design/Consulting Services

I have had the privilege to work with ZDS Design/Consulting Services' principals and many of their staff since working at the School Building Authority in the 1990's in my roles at the School Building Authority to my current role as Executive Director of the Office of School Facilities at the West Virginia Department of Education.

When an emergency issue arose, they would immediately make themselves available to help. ZDS's principal, Todd Zachwieja, did not hesitate to board a helicopter during a weekend to help assess the damage to the State's school facilities when damaging floods occurred. Helicopters were the only way to reach many of the facilities because the roads had been washed away or were impassible. Anytime a challenging issue has arisen that no one knew how to resolve, ZDS has stepped up to solve the challenges. Their extensive engineering knowledge of energy efficient systems, HVAC, controls, lighting, power and plumbing systems has always been at the leading edge in the industry, providing innovative solutions that also minimize energy and operating costs. I have always considered their approach in engineering design and commissioning for buildings to be the best and would highly recommend them to anyone.

Their ability to work with the State Fire Marshal and other agencies – while guiding everyone to a practical design approach – always provided each project with the best value. They are much more than excellent design engineers; they also understand the importance of operating and maintaining equipment and have hands-on knowledge to troubleshoot and also commission to ensure our projects were a great success. Their combined engineering design and commission skills prove to be invaluable.

ZDS Design/Consulting Services was also selected to help the WV Department of Education and the School Building Authority in writing new codes and standards to raise the bar for the entire State. They were chosen because their projects were a success while we were having challenges with others. Todd Zachwieja was also asked to teach school facility staff members, and his reference books continue to be used today. I would always think of ZDS first whenever a challenge would occur, knowing I would get the best results possible.

I trust ZDS's staff in their technical expertise and their approach in solving challenging engineering issues and believe that anyone who uses them will be as satisfied as I have been. They are worth it!

Sincerely,

A handwritten signature in blue ink that reads "Michael E. Pickens". The signature is fluid and cursive, with the first name "Michael" being more prominent.

Michael E. Pickens



ELSWICK & ASSOCIATES, LLC

To Whom It May Concern:

I am distinctly honored to provide this letter of recommendation for ZDS Design/Consulting Services to your organization. I have known ZDS's principals and many of their staff since working with Ted and Todd Zachwieja at West Virginia Institute of Technology located in Montgomery, WV, from the 1970's, while I was the Physical Plant Director there. That relationship continues through today. Their knowledge of energy efficient systems related to Heating, Ventilating, and Air-Conditioning (HVAC), Building Automation Systems (BAS), lighting, power distribution, and plumbing systems has always been at the cutting edge of the industry. They have routinely provided innovative solutions to complex design challenges while minimizing energy and operating costs and enhancing maintenance efficiency. I have always considered their approach to engineering design and commissioning systems first for higher education, hospitals and schools to be superior and I would recommend them to anyone.

Throughout my career I have continued my working relationship with Ted and Todd Zachwieja and Jim Watters while I was Director of Facilities Management at Charleston Area Medical Center (CAMC), General Division, located in Charleston, WV. During that time, they provided mechanical, electrical, and plumbing (MEP), engineering, and construction administration services for all areas of CAMC's facilities. Their knowledge of health care code and practical design approach always provided the uniqueness required for the scope of the work. They understood the importance of operating and maintaining equipment and used their hands-on knowledge to ensure all our projects were on schedule and within budget. As a matter of fact, Todd led the first energy services performance contract in West Virginia. Through Todd's leadership, CAMC saved in excess of \$800,000.00 annually in energy costs and those savings were used for mechanical, electrical, and infrastructure upgrades at all three CAMC divisions. Ted, Todd, and Jim also assisted in many other projects at all CAMC divisions, including commissioning the work implemented as part of the energy savings program. Their combined engineering design and commissioning skills proved to be invaluable.

I also worked with ZDS Design/Consulting Services while I was Director of Facilities, Planning and Management at Washington & Lee University in the 1990's. They designed, acted as the construction project manager and commissioned the campus chilled water plant and distribution system to address the needs of the growing campus while fast tracking the project from start to finish in just nine months. I would always think of ZDS first whenever I was faced with a challenge, knowing that I would get the best technical expertise available.

513 Havana Dr.
Charleston, WV 25311
304.542.8877

Likewise, ZDS helped establish one of the first performance contracting programs in the State of Ohio's higher education system for Ohio University, saving the Athens campus millions annually while the savings were used for the mechanical, electrical and building automation improvements to generate the savings.

I have the utmost confidence in the technical expertise, the collaborative approach and ethical standards of ZDS Design/Consulting Services. Furthermore, these individuals are truly honorable professionals. In this regard, if you have questions or need additional information, please don't hesitate to contact me.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Bill Elswick', with a stylized flourish extending to the right.

Bill Elswick, MBA, CEO

Boyd, Gary MA, CFP

2300 MacCorkle Ave. SE | 304 357-4871 | garyboyd@ucwv.edu

To Whom It May Concern

With well earned respect I would like to recommend ZDS as a high quality MEP design firm.

I have had multiple opportunities to work on highly technical projects with Todd Zachwieja and his team of skilled engineers. The first project that I had the opportunity to work with ZDS was a WVU project that connected several older chillers to develop a chilled water loop on the downtown campus. The project included piping through congested areas, load calculations, differential pressure and pump control, and load balancing. This project was designed to become a phased approach to a central chiller plant which is now in operation. The project was efficiently managed and the performance exceeded expectations. As the system changed and older chillers were removed from the loop, Todd always responded to questions and concerns to insure a positive outcome for the overall objective.

At present I am working with ZDS on a University of Charleston project constructing a new Innovation Center and Athletic Complex. ZDS has accommodated many twist and changes to this project. We are on track to open the new facility in December of this year. I have found Todd and his team to be highly responsive and professional.

Sincerely,

A handwritten signature in blue ink that reads "Gary L. Boyd". The signature is fluid and cursive, with the first name "Gary" being the most prominent.

Boyd, Gary MA, CFP
Director of Facilities
University of Charleston

SECTION VI.

Attachments

**State of WV Centralized
Expression of Interest**

**State of WV Purchasing Affidavit
Designated Contact & Certification Form**





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

State of West Virginia
Centralized Expression of Interest

Proc Folder: 1039904

Doc Description: Huntington Tri-State Armory HVAC Renovation Design

Reason for Modification:

Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No	Version
2022-05-04	2022-05-17 13:30	CEOI 0603 ADJ2200000014	1

BID RECEIVING LOCATION

BID CLERK
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
2019 WASHINGTON ST E
CHARLESTON WV 25305
US

VENDOR

Vendor Customer Code: 000000208495

Vendor Name :



Address :

Street : 135 Corporate Center Drive, Suite 532

City : Scott Depot

State : West Virginia

Country : USA

Zip : 25560

Principal Contact : Todd A. Zachwieja

Vendor Contact Phone: 304-755-0075

Extension: 1001

FOR INFORMATION CONTACT THE BUYER

David H Pauline
304-558-0067
david.h.pauline@wv.gov

Vendor Signature X  FEIN# 550735995 DATE 05/17/2022

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

ADDITIONAL INFORMATION

The West Virginia Purchasing Division, for the agency, the West Virginia Army National Guard, Construction and Facilities Management Office, is soliciting Expressions of Interest from qualified firms to provide professional engineering design services to develop construction documents to renovate all HVAC systems for the Huntington Tri-State Armory in Kenova, WV, per the attached documentation.

INVOICE TO

ADJUTANT GENERALS OFFICE
1707 COONSKIN DR

CHARLESTON WV 25311
US

SHIP TO

KENOVA ARMED FORCES RESERVE CENTER
2194 BOOTH RD

KENOVA WV 25530
US

Line	Comm Ln Desc	Qty	Unit Issue
1	Huntington Tri-State Armory HVAC Renovation Design		

Comm Code	Manufacturer	Specification	Model #
81101508			

Extended Description:

Provide professional architectural and engineering design services per the attached documentation.

SCHEDULE OF EVENTS

<u>Line</u>	<u>Event</u>	<u>Event Date</u>
-------------	--------------	-------------------

	Document Phase	Document Description	Page 3
ADJ2200000014	Draft	Huntington Tri-State Armory HVAC Renovation Design	

ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

CONSTRUCTION CONTRACTS: Under W. Va. Code § 5-22-1(i), the contracting public entity shall not award a construction contract to any bidder that is known to be in default on any monetary obligation owed to the state or a political subdivision of the state, including, but not limited to, obligations related to payroll taxes, property taxes, sales and use taxes, fire service fees, or other fines or fees.

ALL CONTRACTS: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceeds five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that: (1) for construction contracts, the vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: ZDS Design/Consulting Services

Authorized Signature: *Joshua Q. Zochring* Date: 05/17/2022

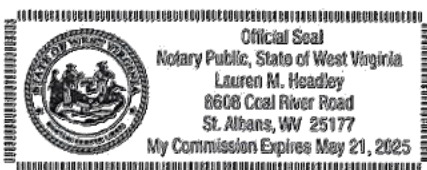
State of West Virginia

County of Kanawha, to-wit:

Taken, subscribed, and sworn to before me this 17th day of May, 2022.

My Commission expires May 21, 2025.

AFFIX SEAL HERE



NOTARY PUBLIC

Lauren M. Headley

Purchasing Affidavit (Revised 01/19/2018)

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

(Name, Title) ZDS Design/Consulting Services

(Printed Name and Title) Todd Zachwieja, CEO, Principal

(Address) 135 Corporate Center Drive, Suite 532, Scott Depot, WV 25560

(Phone Number) / (Fax Number) 304-755-0075, 304-755-0076

(email address) todd.zachwieja@zdsdesign.com

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that: I have reviewed this Solicitation/Contract in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation/Contract for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

By signing below, I further certify that I understand this Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law; and that pursuant to W. Va. Code 5A-3-63, the entity entering into this contract is prohibited from engaging in a boycott against Israel.

ZDS Design/Consulting Services

(Company)


(Authorized Signature) (Representative Name, Title)

Todd Zachwieja, CEO, Principal

(Printed Name and Title of Authorized Representative) (Date)

304-755-0075, 304-755-0076

(Phone Number) (Fax Number)

todd.zachwieja@zdsdesign.com

(Email Address)