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Header 1

List View

General Information | [Contact](#) | [Default Values](#) | [Discount](#) | [Document Information](#) | [Clarification Request](#)
Procurement Folder: 853816

SO Doc Code: CEOI

Procurement Type: Central Purchase Order

SO Dept: 0603

Vendor ID: 000000208495

SO Doc ID: ADJ2100000008

Legal Name: ZDS LIMITED LIABILITY COMPANY

Published Date: 3/8/21

Alias/DBA:
Close Date: 3/24/21

Total Bid: \$0.00

Close Time: 13:30

Response Date: 03/22/2021

Status: Closed

Response Time: 14:45

Solicitation Description: EOI- Brushfork Armory HVAC Design

Responded By User ID: Zachwieja

Total of Header Attachments: 1

First Name: Lauren

Total of All Attachments: 1

Last Name: Headley

Email: lauren.headley@zdsdesi

Phone: 304-755-0075



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: 853816
Solicitation Description: EOI- Brushfork Armory HVAC Design
Proc Type: Central Purchase Order

Solicitation Closes	Solicitation Response	Version
2021-03-24 13:30	SR 0603 ESR03222100000006456	1

VENDOR
000000208495
ZDS LIMITED LIABILITY COMPANY

Solicitation Number: CEOI 0603 ADJ2100000008
Total Bid: 0
Response Date: 2021-03-22
Response Time: 14:45:28
Comments:

FOR INFORMATION CONTACT THE BUYER
Tara Lyle
(304) 558-2544
tara.l.lyle@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	EOI- Brushfork Armory HVAC Design				0.00

Comm Code	Manufacturer	Specification	Model #
81101508			

Commodity Line Comments: Contract amount TBD if selected

Extended Description:

EOI- Brushfork Armory HVAC Upgrades Design per the attached documentation.



Expression of Interest to Provide Professional Engineering Design Services

Brushfork Armory HVAC Renovations

CEOI 0603 ADJ2100000008

March 24, 2021



DESIGN/CONSULTING SERVICES

WWW.ZDSDESIGN.COM

MECHANICAL / ELECTRICAL / IAQ / ENERGY / COMMISSIONING

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State of WV Centralized Expression of Interest

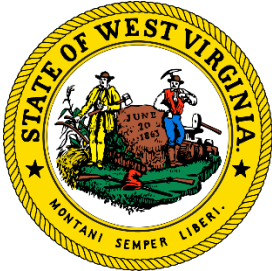
Designated Contact Form

State of WV Purchasing Affidavit

SECTION I.

**Executive Summary Letter
Project Goals & Objectives**

March 24, 2021



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

Please accept our Expression of Interest to provide Professional Engineering Design Services for the **Brushfork Armory HVAC Renovations**.

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

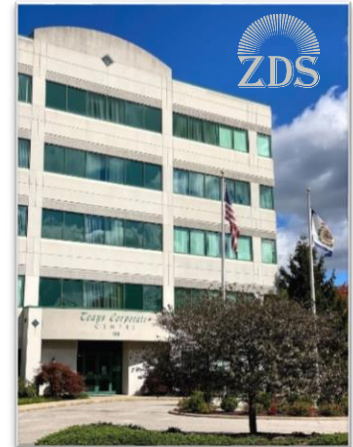
Todd A. Zachwieja, PE, CEM, LEED AP – Principal, CEO

ZDS Design/Consulting Services

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

Office: 304-755-0075; Mobile: 304-545-4550

Todd.Zachwieja@ZDSDesign.com; www.ZDSDesign.com.



ZDS will provide comprehensive MEP engineering support for the proposed HVAC renovations. We are known as the region's best for HVAC renovations including successful projects with the WVARNG, State of West Virginia DHHR Hospitals, WVU, Ohio University, Marshall University, the West Virginia Capitol Complex and many others. We understand this Project's needs and have the personnel and experience to provide the necessary services. Each member of our staff brings unique strengths to the Project. Realizing the similarity of mission and the desire to serve West Virginia clients, we will be honored to work with you.

Replacement of the existing HVAC system may require upgrades in other infrastructure elements that must be taken into consideration during the design document preparation stage. Phasing of the work as necessary will be addressed in a manner to reduce disruptions.

ZDS has designed and coordinated upgrades for HVAC systems on many projects of all types and sizes. We have successfully phased construction activities and know we can successfully coordinate the phasing of the proposed work. We will communicate closely with the client's personnel, so their needs are addressed.

ZDS has teamed with several West Virginia Architectural and Structural Engineering firms and would utilize their services as necessary for the development of the **Brushfork Armory HVAC Renovations**. If hazardous materials are suspected, or discovered, we work with an excellent and reputable environmental consultant on an “as-needed” basis in assessment and resolution of the issue.

We are recognized for our specialties in HVAC design, electrical design, indoor air quality services, energy conservation/performance contracting and commissioning services for Governmental, Commercial, Educational, and Health Care facilities. **ZDS** founder Todd Zachwieja specialized in energy conservation design and was involved in hundreds of millions of dollars in renovations, new construction, and Performance Contracting heavily involving MEP systems. Some projects include the \$43 million West Virginia Air National Guard Fuel Cell/Maintenance Hangars at the Yeager Airport in Charleston, Ohio University’s Athens and Chillicothe campuses, and Harvard University’s new LEED Gold Arboretum. We work in 24 states, but our home and corporate offices are in Scott Depot, West Virginia.



ZDS is very active in keeping current with all applicable Codes, 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, serving as the Chapter President.



We have registered professionals in all the required disciplines to effectively execute the requirements of MEP projects. We believe that our specialties in design and commissioning 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.

Project Goals & Objectives

Renovations to the existing HVAC systems and replacement, or modifications, of the related facility controls on this Project may require upgrades in other infrastructure elements that must be taken into consideration during the design document preparation stage. We will perform field investigations to gather information on the existing systems, discuss concerns with onsite personnel, and review all available drawings and documentation that can be provided by the Owner. **ZDS** offers 3D Scan-to-BIM that has proven to be extremely effective for renovation projects in capturing built conditions that commonly don’t show on original construction drawings. This process was successfully used on the recent Dunbar Armory HVAC renovations. Evaluation of the information will assist us in preparing a list of recommendations, including preliminary budgetary construction costs, to discuss with the WVArNG for the purpose of establishing the scope of the Project.

ZDS’ hands on experience and operational knowledge of Building DDC controls systems will provide the expertise the WVArNG needs for a successful HVAC renovation/controls upgrade.

Our proven experience in energy efficient renovations will bring options that improve comfort and provide long-term energy efficient solutions.

ZDS has a good working relationship with a local civil engineering firm that will assist, as requested by the Owner, with research and investigation of existing underground and above ground utilities as well as other infrastructure that may impact the proposed work. The civil engineers will work as a sub-consultant to **ZDS** and provide any necessary drawings and specifications to be incorporated into the Bid package.

Different ideas for phasing of the construction will be discussed with the goal of minimizing disruptions to the daily operations of the facility. When scope has been determined, we will proceed with drawings and specifications to be reviewed with the Owner at 35%, 65%, 95% and ultimately at 100% for final Bid documents. The budgetary construction cost estimates will be updated at each review phase.

We have extensive experience preparing Bid documents in accordance with the State of West Virginia Purchasing requirements and will coordinate closely with the Purchasing personnel to assure that the Bid package complies with their standards. Our services will include assistance with Bidding and Negotiations as needed and Construction Administration throughout the construction period. **ZDS** has designed and coordinated upgrades for HVAC systems on many projects of all types and sizes including successfully phased construction activities in governmental facilities, hospitals and schools while occupied. We have the personnel and experience to provide the best services for design and coordination of difficult construction upgrades that require phasing activities.

ZDS has an excellent track record of completing projects on time and in budget. We are ready and willing to start immediately on your project and are confident that our specialties will provide you with the best expertise to provide economical solutions for your facilities. 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

FIRM OVERVIEW

Founded in 1994, celebrating 26+ years!

ZDS Design/Consulting Services is a three-generation family owned MEP/Commissioning Engineering Firm located near Charleston, West Virginia. ZDS provides comprehensive professional services for Master Planning/Feasibility Studies, HVAC, Plumbing, Electrical, Indoor Environmental Quality, Energy Engineering, Forensic Engineering and Commissioning. ZDS has extensive proven high performance building design experience for commercial, governmental, educational facilities, and healthcare experience in 24 states across the country, the State of West Virginia, local government and Federal agencies. Specializing in renovation projects with **proven results of from 30% to over 50% reduction in energy/operating costs** earning Energy Star Certification and EPAAct qualified on government renovation projects!

- ♦ Mechanical
- ♦ Electrical
- ♦ Plumbing
- ♦ Forensic
- ♦ Energy
- ♦ Commissioning
- ♦ Indoor Environmental Quality (IAQ/IEQ)
- ♦ High Performance Sustainable Buildings

The ZDS team is made up of **seasoned professionals** who have dedicated their careers to engineering design excellence and quality. A strong foundation in Performance Contracting is incorporated into design and commissioning with an appreciation for the maintenance staff to be able to operate the systems over the life of the facility. We pride ourselves in having the most up to date state of the art technology to provide our clients the very best possible services. We offer **comprehensive** practical solutions to our clients with proven World Class results.



COMPANY LEGAL NAME

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

OFFICE LOCATION

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

FOUNDERS

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

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

Daniel H. Kim, Ph.D.



**“Family Owned & Operated Engineering Firm
providing Professional Design Services for over 25 years”**

FIRM OVERVIEW



ZDS provides forensic engineering services for the Indoor Environmental Quality (IEQ) including "Indoor Air Quality (IAQ). 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 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*
- *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*

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.



SECTION III.

Description of Project Experience

Additional Project Experience Brochures

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

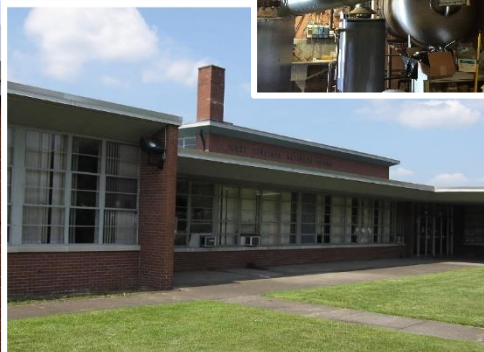
Contact: Lt. Co. Todd Justice, Deputy Director of Joint Operations: anthony.t.justice.mil@mail.mil



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 EPA Act.



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

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



Design/Consulting Services

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



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.

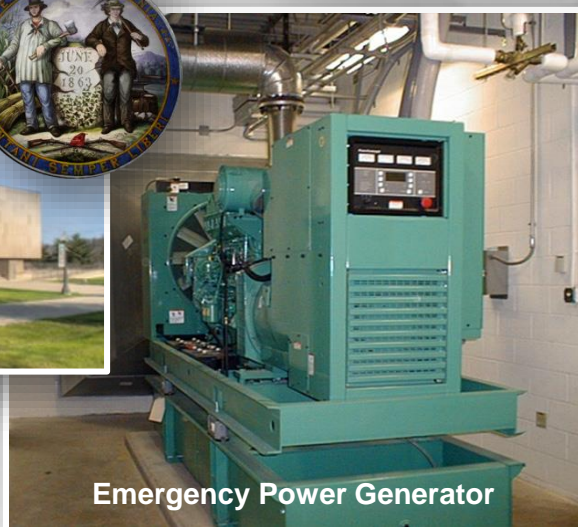
ZDS also evaluated the existing courthouse's potential power needs and incorporated those in the new Judicial Annex's electrical systems while providing emergency power.

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

Engineering for State & Local Government Facilities

ZDS engineering project experience includes facilities registered as official Historic Buildings



Jackie Withrow State Hospital

WVDHHR hired ZDS to engineer the upgrades for three historic hospital facilities in three separate locations. ZDS successfully completed the projects while meeting the requirements of the State Historic Preservation Office (SHPO).

Hopemont State Hospital



Mildred Mitchell-Bateman State Hospital

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

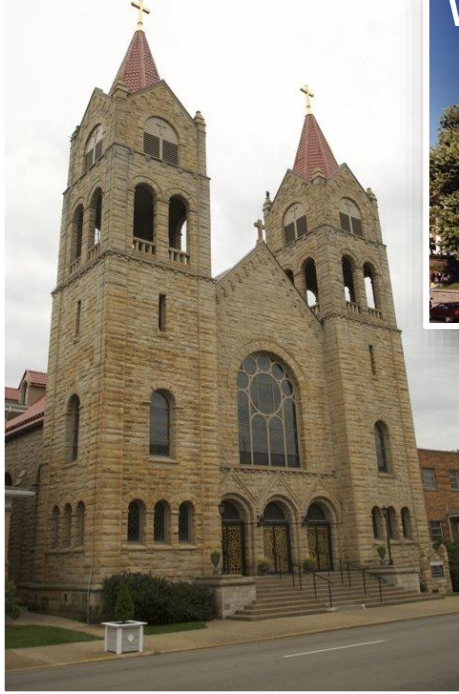


Design/Consulting Services

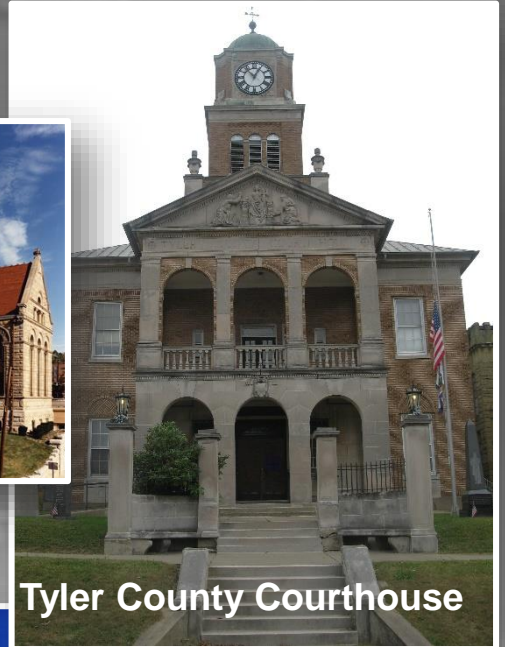
Engineering for State & Local Government Facilities

ZDS project experience includes historical facilities sensitive to finding solutions that address IEQ which includes acoustics, lighting, Indoor Air Quality and comfortable energy-efficient HVAC systems.

St. Patrick's Church

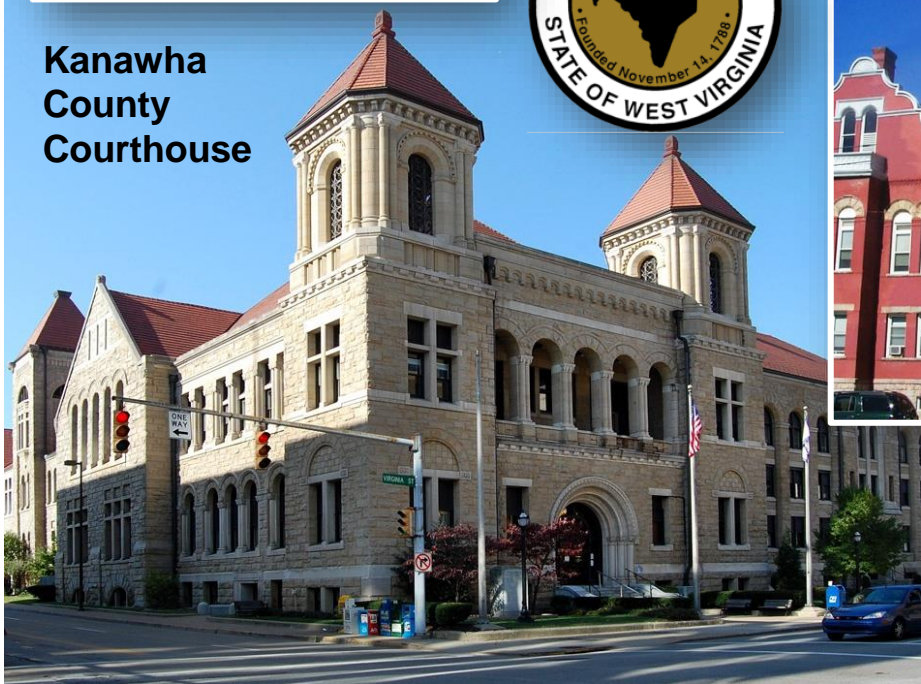


WVU Stewart Hall

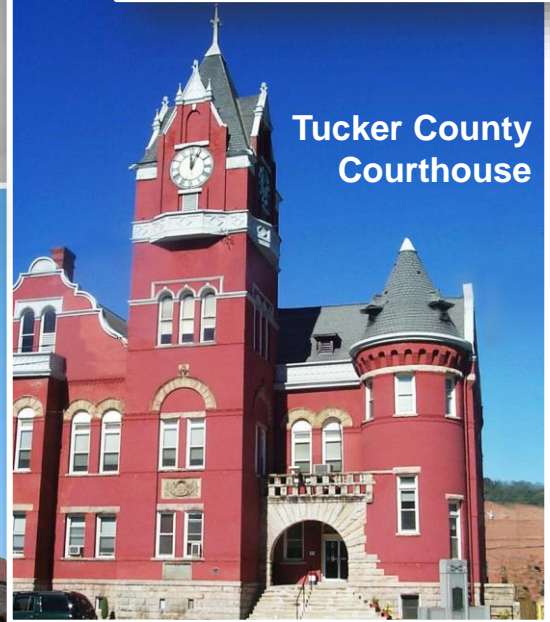


Tyler County Courthouse

Kanawha County Courthouse



Tucker County Courthouse



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. VVW 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 EAct.

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

State of West Virginia Capitol Complex Charleston, WV

Project Cost: \$20,000,000

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

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 Cultural 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 volume pumping, steam/heating hot water & chiller optimization.



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

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. 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.*



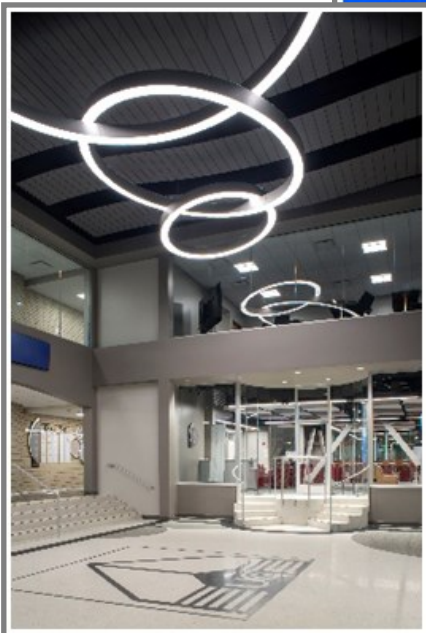
Project Cost: \$17,000,000, **Size:** 117,500 ft², **Date Complete:** 2017

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 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



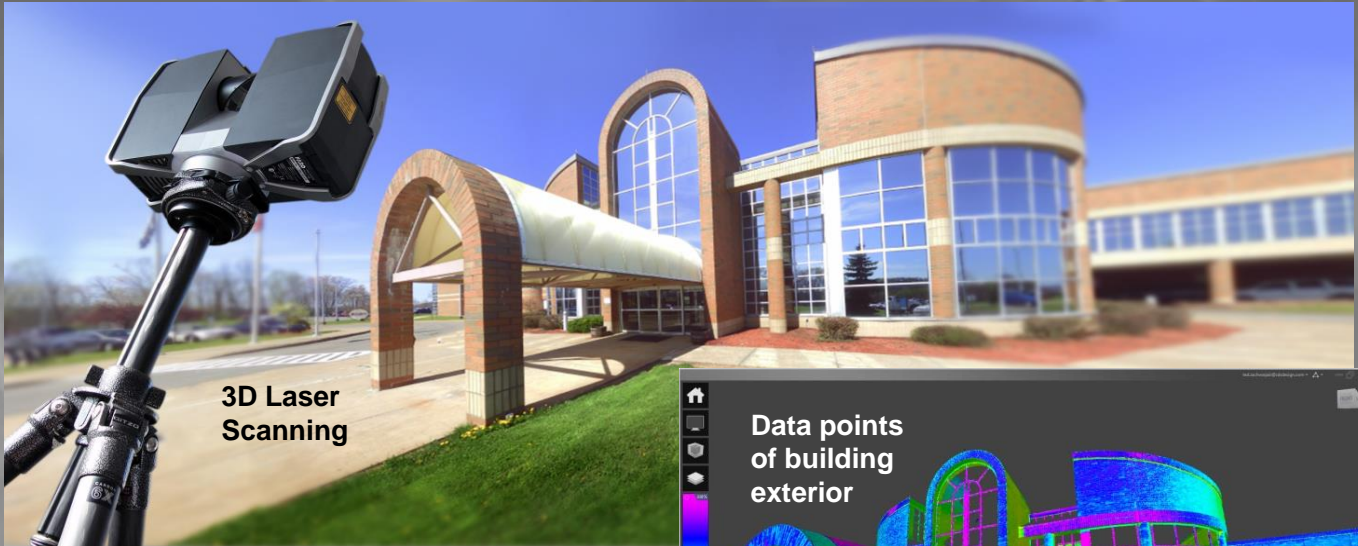
**Harvard University
Arnold Arboretum Weld Hill
Research and Administration Building**

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

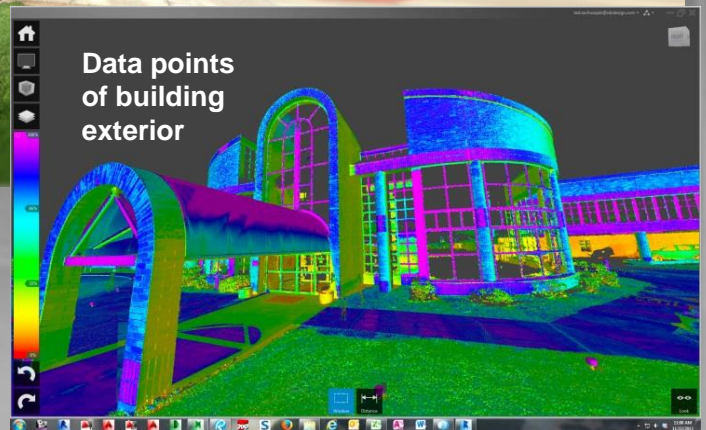
Our 3D Laser Scanning Services helped William R. Sharpe, Jr. Hospital document existing conditions and integrate their 50-bed addition.



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."

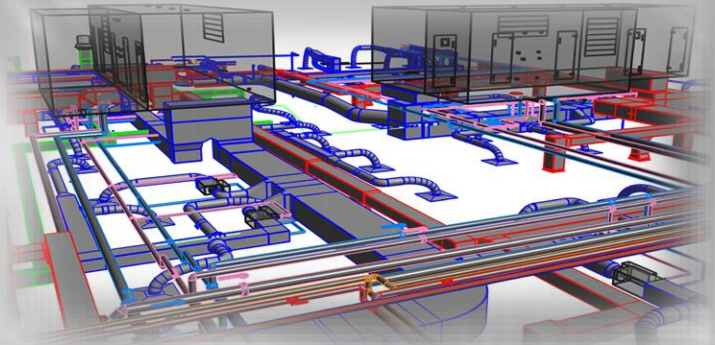
DHHR



"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 Team Staffing Plan

Team Certifications

Team Resumes

Brushfork Armory HVAC Renovations



ZDS Management Team

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



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



Jim Watters
Associate, MEP Design
Cost Estimating/Construction Admin



Vineel Busa, MSME, EI
MEP Designer

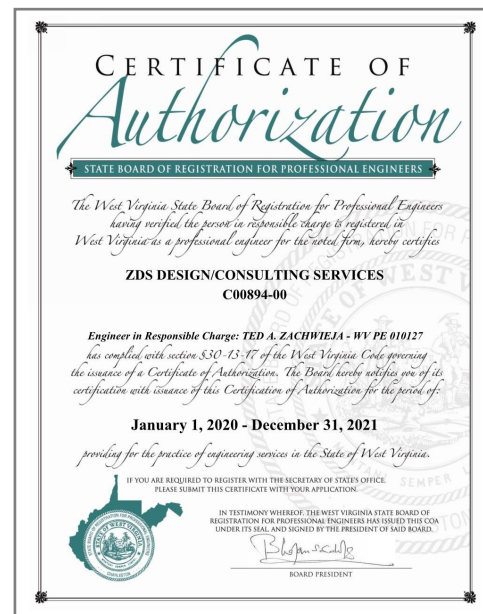
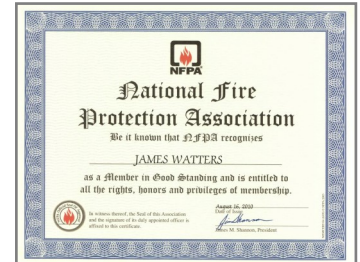
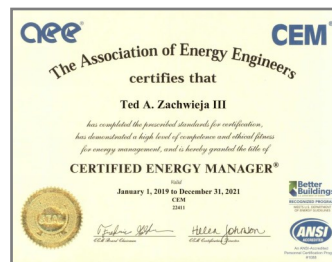
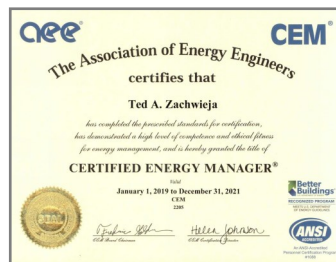
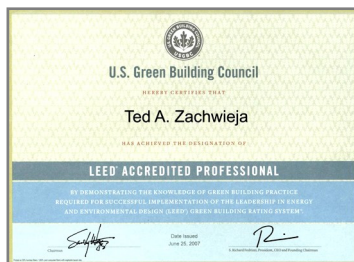
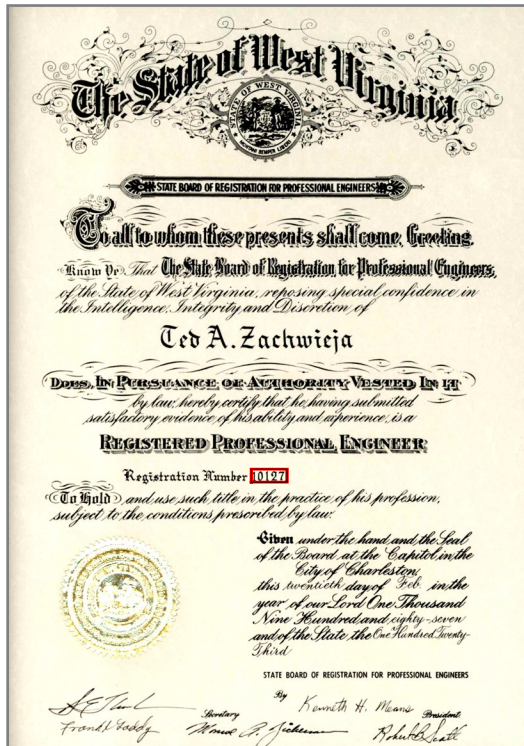


Meher Meka, MSEE, EI
MEP Designer



Billy Smith, BSME
MEP Designer

TEAM CERTIFICATIONS



Todd Zachwieja, PE, CEM, LEED AP

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 80814

Georgia 18253

Kentucky 17961

Maryland 47188

North Carolina 017445

Ohio 53587

Pennsylvania 040929-R

South Carolina 25985

Virginia 0402 025427

West Virginia 10127

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



Certified Energy Manager

(C.E.M.) National

Certification No. 2205



LEED Accredited Professional,

National Certification through

USGBC No. 10083891

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.

PROFESSIONAL AND COMMUNITY AFFILIATIONS

Member of Investigative Engineers Association (I-ENG-A) and founder of I-ENG-A of the Tri-State Region

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

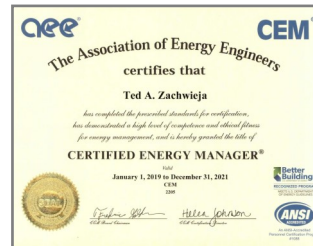
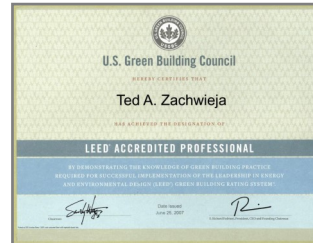
Charter Life Member of the Association of Energy Engineers

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 **81011**

West Virginia **21677**

Certified Energy Manager (C.E.M.)

National Certificate

No. **22411**



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



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



Member & Co-Founder
I-ENG-A of the Tri-State Region

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.

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

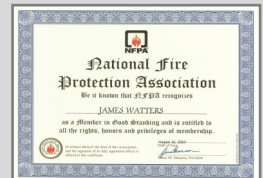


PROFESSIONAL AFFILIATIONS

Member of Investigative
Engineers Association (I-ENG-A)
of the Tri-State Region



Member of the National
Fire Protection
Association (NFPA)



Member of the Health
Care Section of the NFPA

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 (IEEE)

OTHER RECOGNITIONS

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



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

- 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 **ET31800200**

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 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.



PERSONAL PROJECT EXPERIENCE

- 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
- HP 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 Smith, MEP Designer



ZDS 26+
Design/
Consulting
Services

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

- 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 including many with Governmental agencies.

We encourage you to call the references listed below:

1. **Greg Nicholson**, Retired Chief Operations Officer, WV DHHR: (304) 552-0101; many projects with WVDHHR as well as William R. Sharpe Jr. Hospital additions, renovations and commissioning.
2. **Ron Adkins**, Construction Manager, WV Air National Guard & WVDHHR: (304) 957-0205, or (304) 634-9379; former Project Manager for WVANG and current Construction Mgr. for many projects with WV DHHR as well as William R. Sharpe Jr. Hospital additions, renovations and commissioning.
3. **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.
4. **Amanda Washington**, Executive Director of Facilities Operation, Monongalia County Schools: (304) 291-9210, or (304) 276-2373, amanda.washington@k12.wv.us; for projects with Kanawha County Schools.
5. **Amanda Kimble**, Director of Child Nutrition and Support Services, Tyler County Schools: (304) 758-2145, akimble@k12.wv.us; for renovations to Tyler Consolidated Middle/High School.



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.

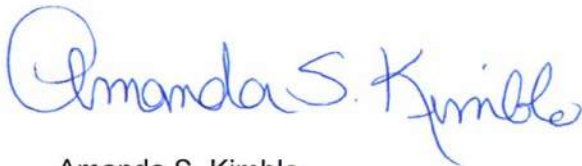
ZDS Design/Consulting Services are to be commended for their patience, diligence, and HVAC engineering expertise with our recent project. The project was complicated with funding and scheduling issues, and ZDS was able to overcome these hurdles and deliver a construction project that had very little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

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

SECTION VI.

Attachments

State of WV Centralized Expression of Interest

Designated Contact Form

State of WV Purchasing Affidavit



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
Architect/Engr

Proc Folder: 853816			Reason for Modification:
Doc Description: EOI- Brushfork Armory HVAC Design			
Proc Type: Central Purchase Order			
Date Issued	Solicitation Closes	Solicitation No	Version
2021-03-08	2021-03-24 13:30	CEOI 0603 ADJ2100000008	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 :** DESIGN/CONSULTING SERVICES

Street : 135 Corporate Center Drive, Suite 532

City : Scott Depot

State : West Virginia **Country :** USA **Zip :** 25560

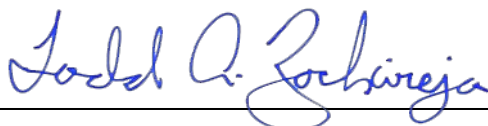
Principal Contact : Todd A. Zachwieja

Vendor Contact Phone: 304-755-0075 **Extension:** 1001

FOR INFORMATION CONTACT THE BUYER

Tara Lyle
(304) 558-2544
tara.l.lyle@wv.gov

**Vendor
Signature X**



FEIN# 550735995

DATE 03/24/2021

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 for the Brushfork Armory HVAC Renovation at the Brushfork Armory Facility located in Bluefield, WV, per the attached documentation.

INVOICE TO	SHIP TO
ADJUTANT GENERALS OFFICE 1707 COONSKIN DR CHARLESTON WV 25311 US	ADJUTANT GENERALS OFFICE 305 FAYETTE PIKE MONTGOMERY WV 25136 US

Line	Comm Ln Desc	Qty	Unit Issue
1	EOI- Brushfork Armory HVAC Design		

Comm Code	Manufacturer	Specification	Model #
81101508			

Extended Description:

EOI- Brushfork Armory HVAC Upgrades Design per the attached documentation.

SCHEDULE OF EVENTS

<u>Line</u>	<u>Event</u>	<u>Event Date</u>
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	Document Phase	Document Description	Page 3
ADJ2100000008	Final	EOI- Brushfork Armory HVAC Design	

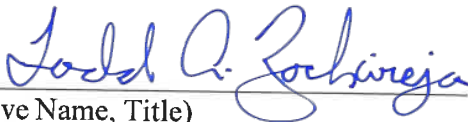
ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

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.

ZDS Design/Consulting Services
(Name, Title)
Todd A. Zachwieja, Principal/CEO
(Printed Name and Title)
135 Corporate Center Drive, Suite 532, Scott Depot, WV 25560
(Address)
(304)755-0075 / (304)755-0076
(Phone Number) / (Fax Number)
todd.zachwieja@zdsdesign.com
(email address)

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation 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 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.

ZDS Design/Consulting Services
(Company)

(Authorized Signature) (Representative Name, Title)
Todd A. Zachwieja, Principal/CEO
(Printed Name and Title of Authorized Representative)
03/24/2021
(Date)
(304)755-0075 / (304)755-0076
(Phone Number) (Fax Number)

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: *Joseph Q. Zochiraja* Date: 03/24/2021

State of West Virginia

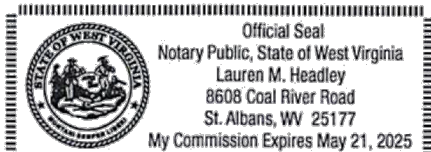
County of Kanawha, to-wit:

Taken, subscribed, and sworn to before me this 24th day of March, 2021.

My Commission expires May 21, 2025.

AFFIX SEAL HERE

NOTARY PUBLIC



Lauren M. Headley

Purchasing Affidavit (Revised 01/19/2018)