

STATE OF WEST VIRGINIA CAPITOL
CAMPUS EXTERIOR LIGHTING
UPGRADES

Expression of Interest To Provide
Professional Architectural &
Engineering Services

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June 6, 2018



ARCHITECTURE INSPIRED

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WV Purchasing Division

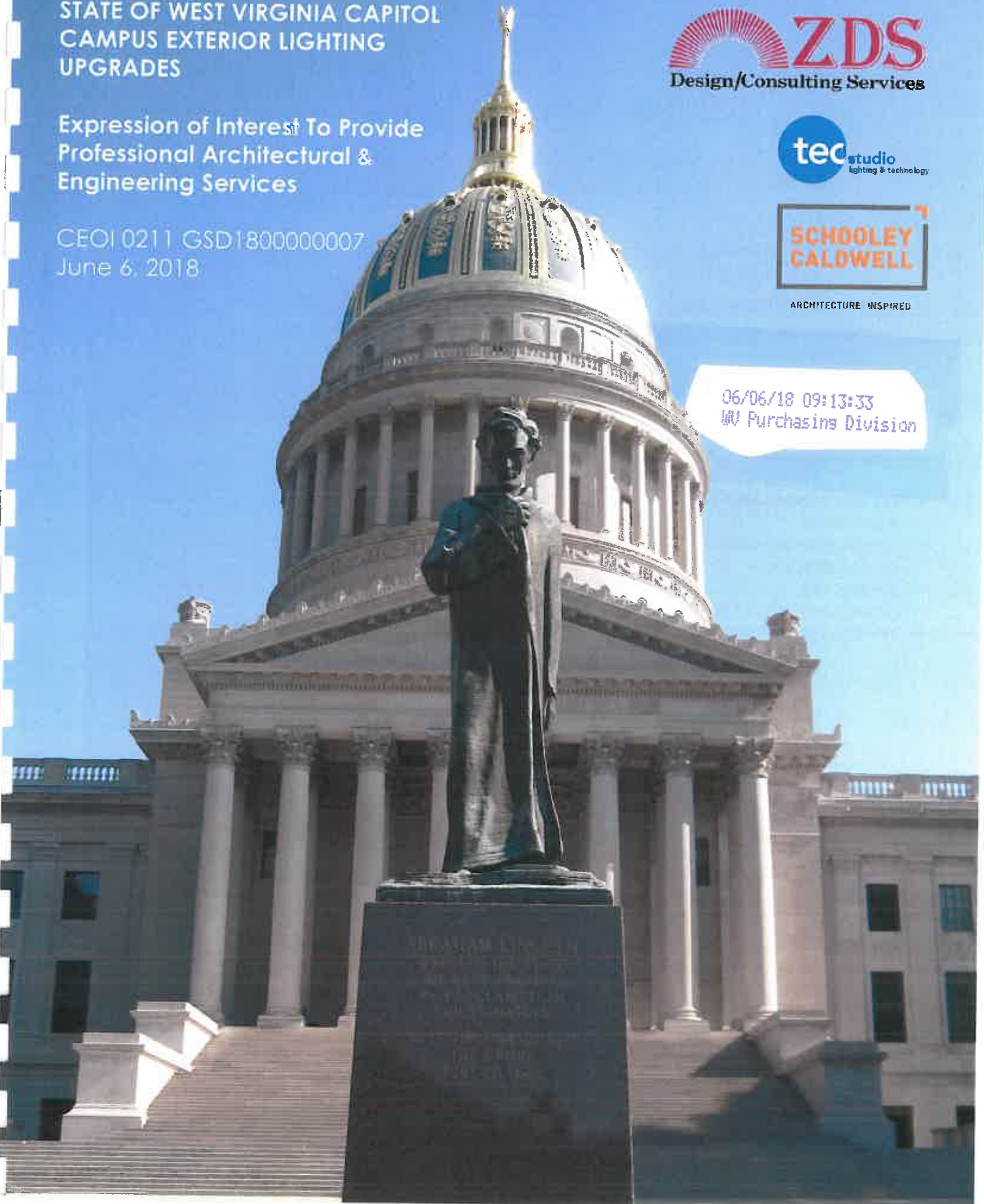


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Design/Consulting Services
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MECHANICAL • ELECTRICAL • INDOOR AIR QUALITY • ENERGY • COMMISSIONING • FORENSIC

June 6, 2018

Department of Administration, Purchasing Division
2019 Washington St. East
Charleston, WV 25305-1030

Dear Ms. Rink and Members of the Selection Committee:

The State of West Virginia is about to undertake a challenging but vitally important task – that of upgrading the lighting of the Capitol Complex, preserving the character and history of the Capitol Cass Gilbert designed building and other assets on the site, while making it safe for everyone who works or visits, and retaining easy maintenance while improving energy efficiency. ZDS Design/Consulting Services has thoughtfully formed a team of engineers, lighting designers, and architects to assist the State in this endeavor.

Collaboratively ZDS, Tec Studio (TEC), and Schooley Caldwell of Columbus will contribute unique benefits to the exterior lighting upgrades project. ZDS is well known in Charleston for successful engineering services on complex public projects, many for the State of West Virginia; and Tec Studio with Schooley Caldwell has a decades-long collaborative relationship concentrating on historic preservation design in public structures. Schooley Caldwell has completed design work for restoration of four state capitols (Ohio, Kansas, Utah and Minnesota). We offer you the combination of a strong, experienced local firm, an award-winning lighting design firm, and an architecture firm with specialized historic preservation and restoration knowledge. We believe that the team presented here will exceed all the State's requirements for qualifications, experience and service.

We understand about your priorities for this project and our team is best-suited to deliver on them for the following reasons:

Best of the Best - The ZDS team is made up of seasoned professionals who have dedicated their careers to engineering design excellence. The team has done significant work for the State of West Virginia working on the capitol campus for over 23 years. Nationally recognized, specialty lighting consultant, Ardra Zinkon of Tec Studio, was specifically chosen for her expertise in lighting design, campus lighting, and historic lighting experience. Finally, Schooley Caldwell brings an unparalleled national perspective on the unique nature of American capitol buildings.

Experienced in Phased Construction - ZDS's experience also extends into hospitals where patients' lives could be impacted if the design and phased construction are not carefully considered. We successfully navigate those challenges even when renovating entire hospitals and will meet your needs for any proposed phased work.

Proven Capitol Complex Experience - ZDS principals and personnel have been involved in numerous design and recommissioning projects for the West Virginia State Capitol Complex while at ZDS and through other employment throughout their careers since the 1960's. Our team offers proven expertise. Over the years, ZDS has been involved in evaluation and/or design, including construction activities, for 2,137,400 square-feet involving fifteen (15) buildings at the State Capitol campus. These projects required the 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. Our team brings a wealth of knowledge gained from our work at the Capitol Complex and this campus knowledge will benefit you greatly.

Safety for Employees and Visitors - We understand that the lighting upgrade was initiated over 5 years ago. LED lighting technology and controls have progressed significantly since then and our team will integrate those advancements into proposed solutions while capturing the benefits of the previous work performed. The importance of maintaining the safety and operations of the Capitol is paramount to the successful completion of the exterior lighting upgrades. Our efforts will maximize the work that is completed while accommodating the occupants of building and visitors. We will work with the State to ensure all work is completed in a manner that does not interfere with legislative sessions and respects the importance of safety for all the Capitol's visitors.

Energy Efficiency and Sustainability - ZDS's experience with Capitol complex's performance contracting demonstrates our familiarity with the facilities staff to modernize and benefit the State's building with energy efficient solutions for decades. All of our firms are well-versed in designing with sustainability and efficiency at the forefront of our practices. However, we bring a much more holistic approach, not just seeking to gain points or certification. We are more focused on practical options for the complex and that will truly reduce energy consumption and environmental impact. For example, the renovation of the Ohio Statehouse, designed by Schooley Caldwell, with a subsequent lighting upgrade project by Tec Studio, was completed years before LEED existed. A recent evaluation of the building and its energy usage determined that, if the state were to pursue certification now, the Statehouse would likely achieve LEED Silver. Keep in mind, our team was not designing to achieve any form of "certification" at the time – we were simply designing the best possible solutions for the building. ZDS provided practical lighting/energy upgrades to seven WVDHHR hospital facilities including their historical facilities successfully reducing energy use over 50% from energy code required levels and receiving the State Historical Preservation Office's approvals for the renovations.

We are excited about the project, available to begin work, and anxious to discuss it with you in more detail. We look forward to the next steps of the selection process and thank you for your consideration.

Sincerely,



Todd A. Zachwieja, P.E., GEM, LEED AP

Principal, Chief Executive Officer

Todd A. Zachwieja, PE, CEM, LEED AP – Principal and CEO, will serve as ZDS' principal-in-charge and has full authority to execute a binding contract on behalf of the ZDS team. Todd will follow the Project from inception through design and construction administration. Please refer to Section 2 for a company overview and summary of services.

ZDS founding members have over six decades of engineering experience in West Virginia and are recognized for our specialties in buildings' systems evaluations and design. Our experience involves hundreds of projects, including working with many state and federal agencies, and our professionals are dedicated to performing quality services with the goal of meeting our clients' needs, scheduling and budgets. ZDS is familiar with, and understands the Capitol Complex because we have been involved in numerous projects throughout the campus. Our past projects at the Capitol Complex include multiple renovation projects in buildings #1, #3, #4, #5, #6, #7, #8, #9, and #11. ZDS is currently under contract with the General Services Division to perform extensive evaluation of the Campus steam distribution systems. We have worked in 24 states but our home and corporate offices are in West Virginia just minutes from the Capitol Complex.

Team Approach

ZDS assembled a team of professional firms that will fulfill the needs outlined in the RFQ for the project. The team is comprised of several registered professionals including, but not limited to, (4) registered engineers, (1) lighting designer, (2) registered architects and up to 10 other design team members that will support the key personnel as needed throughout the contract, all having the professional qualifications for historical properties and restoration or preservation prescribed by the Secretary of the Interior in 36 CFR 61.

ZDS will serve as the lead firm acting on behalf of the other team members during discussions and contract negotiations with the State of West Virginia. This design team has collective experience on 5 state capitols, covering the full spectrum of services that WV is seeking: full electrical and other engineering design, architectural historic preservation, and construction administration. We offer the State of West Virginia the combination of a strong, experienced local firm and consultants with specialized knowledge. This is a team made up of seasoned professionals dedicated to the preservation of significant historic and public buildings.

It's because of the uniqueness of capitol projects and the complexity of your project that our firms have joined in a collaborative effort to provide the State of West Virginia with an eminently qualified team including:

ZDS Design/Consulting Services will lead the team's efforts to upgrade the exterior lighting at the Capitol and will serve as the prime firm. ZDS Design/Consulting Services has significant experience working on important public buildings in West Virginia, including the Capitol Campus and the Governor's Mansion, and will use this expertise to guide the rest of the team.

Tec Studio led by Director of Lighting Design, Ardra Zinkon, IALD, MIES, brings a range of lighting design experience from libraries, healthcare, commercial, liturgical, and high-end residential to landscape and site illumination. Ms. Zinkon's art and theatre background has provided her with an eye for creating dramatic interest in her lighting designs. Additionally, her extensive knowledge of lighting control systems gives her a well-rounded approach to every project.

Why include a professional lighting designer?

Professional lighting designers are a tremendous resource for innovative, practical, and economically viable lighting solutions. They understand the role of lighting in architecture and interior design, relying on their extensive experience and knowledge of lighting equipment and systems to transform spaces, evoke moods, create drama, promote productivity, and improve health.

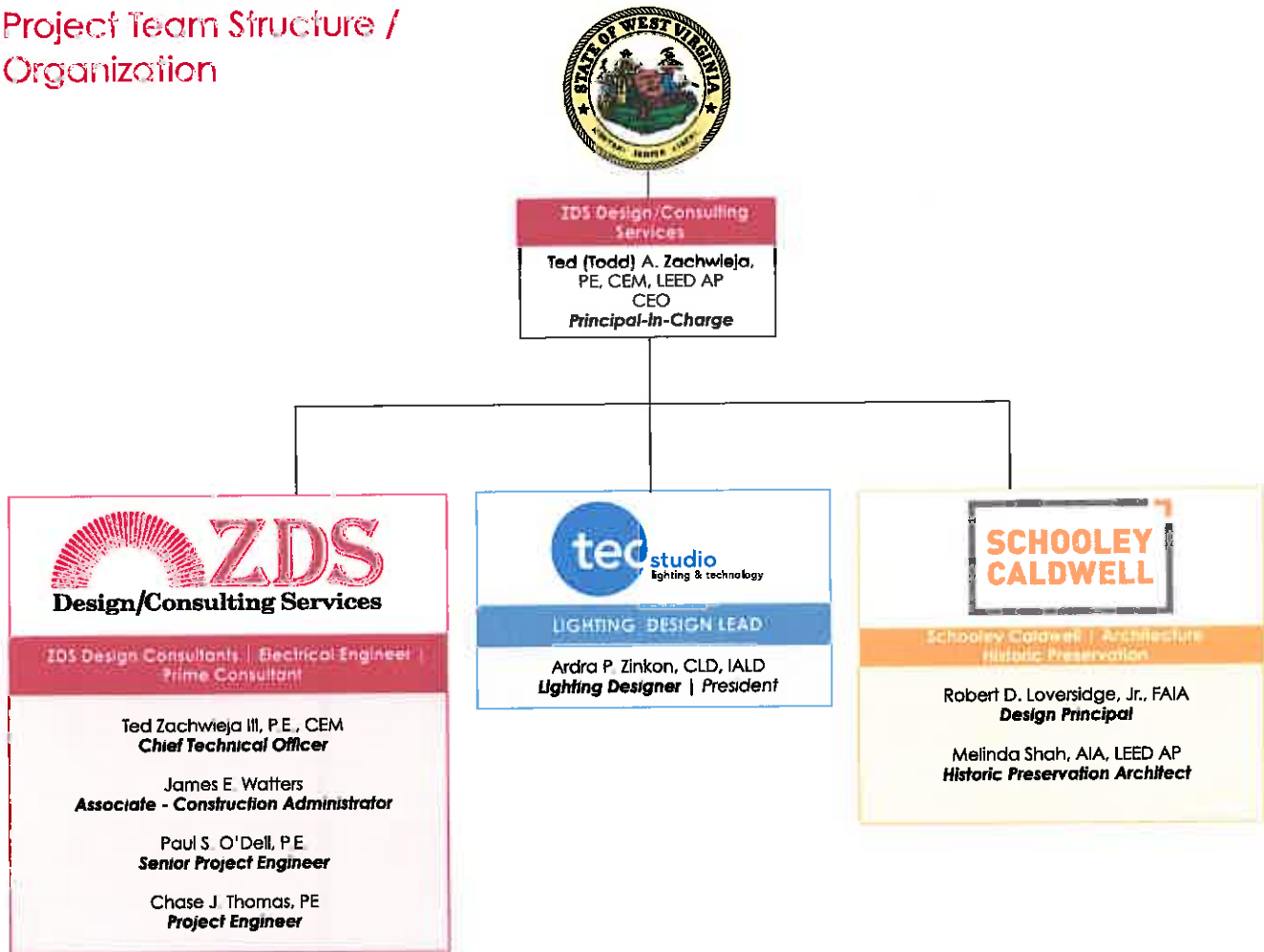
Tec's designs are considerate to human factors:

- *Our passion promotes creative solutions*
- *Our design process is focused on collaboration*
- *Our curiosity fosters our expertise, driving us as both educators and life-long learners*
- *Our designs embrace environmental responsibility*

Section 1:
Approach To Project

Schooley Caldwell has provided architectural services for the full renovations of four state capitols: Ohio, Kansas, Utah, and Minnesota. All of these projects included electrical upgrades, and an important part of their role on each project involved determining how to seamlessly incorporate modern technology into monumental historic buildings. Schooley Caldwell's historic preservation experience is a valuable asset to the team, and they will facilitate coordination and reviews with the Capitol Building Commission and the State Historic Preservation Office.

Project Team Structure / Organization



ZDS has the resources necessary to dedicate to the Capitol Campus Exterior Lighting Upgrades and provide the State of West Virginia with excellent service.

Project Understanding

Designed in the Italian Renaissance style by noted architect Cass Gilbert, the West Virginia State Capitol Building was listed in the National Register of Historic Places in recognition of its architectural and historical significance. The Indiana limestone building is dominated by its dome, which rises 292 feet above a colonnaded drum, and is embossed with gold leaf. The interior is richly detailed with Italian and Vermont marble. Ceilings are highly decorated and include plaster and carved details with coffered panels and bronze and gold leaf finishes. The West Virginia State Capitol Building equals the best of the state capitols across the country in the quality of its materials and workmanship.

The project calls for the creative and efficient integration of lighting design into a highly ornamented National Register listed historic building. Because of the uniqueness and historic significance of the building, creative ways to integrate code requirements and life safety measures that adhere to the Secretary of the Interior's Standards for Rehabilitation are necessary. Our work will identify the character defining features of the building and provide guidance to assist the project through the relevant design and preservation reviews by the West Virginia State Historic Preservation Office (SHPO). Every effort will be made to avoid and minimize impacts to historic features and richly ornamented components of the building.

Historic Preservation

We will provide historic preservation consultation to establish design parameters that are sensitive to historic preservation and SHPO requirements and are consistent with the Secretary of the Interior Standards for the Treatment of Historic Properties. Such assistance will include consultation related to the assessment of direct and indirect effects of any proposed alterations or new construction.

As such our work will include:

- Review existing conditions of the West Virginia State Capitol as necessary to verify findings of previous reports, document changes in conditions, and complete digital photographic documentation of the building for use as necessary with any issues of preservation or historic fabric.
- Review of existing documentation for the West Virginia State Capitol, including the National Register of Historic Places nomination form and the Historic American Building Survey documentation (HABS WV-217) to inform our understanding of the historic structure and better advise the team engineers regarding appropriate treatments and locations for lighting design. We will conduct additional archival research as necessary to supplement existing documentation of the State Capitol to provide sufficient background information to evaluate the impacts of any proposed work on the historic building. Character defining features and preservation zones will be identified and developed at this stage (if they have not previously been documented).
- Coordinate with The Capitol Building Commission and the SHPO, and provide advice to the team regarding the potential effect of proposed alterations on the historic integrity of the West Virginia State Capitol building. Suggest ways to avoid, minimize or mitigate adverse effects from proposed installation of the new lighting systems. Lead presentations to the CBC, SHPO, and other stakeholders as appropriate, to obtain necessary approvals for the project.



Section 1:

Approach To Project

- Review analysis and design of all alternatives leading up to decisions affecting important preservation zones (as identified in existing documentation or as developed as part of this project) of the State Capitol. Review and comment on all submissions in their entirety for impact on the preservation zones. Confirm submissions meet the Secretary of Interior's Standards.
- In Phase II (development of Construction Documents) we will provide continuing review and approvals consultation through the design completion as necessary to comply with the approvals of proposed treatments and design details.

Phased Construction Approach

This team includes consultants who have worked on very complex phased renovations (see case studies on the following page). Our approach to planning for phasing begins at the same time as the development of design concepts.

The Capitol Campus Exterior Lighting project provides the opportunity for a phased approach both with the design and the construction. We would recommend a study and evaluation of the campus as a necessary first step. The team will investigate the existing electrical infrastructure as well as familiarize themselves with the campus and current lighting schemes. A report developed by the team will be the first deliverable, with an outline of potential lighting projects based on need schedule and budget.

The team will work with the State to prioritize the scope of lighting projects. Concern will be taken to coordinate with the legislative schedule to minimize any disruption to the site and occupants.

A suggested breakdown of projects may include the following lighting opportunities and upgrades:

1. Existing pedestrian scale pole and area lighting
2. Façade illumination on the Capitol Building
3. Façade illumination on the additional buildings on campus
4. Illumination of statues (currently lit and those not lit)
5. Fountain Illumination
6. Electrical Distribution System evaluation

The varied projects listed above will be evaluated with the State to determine priority and schedule.



Section 1:
Approach to Project

In each of the examples below, planning for continuous operations took place during conceptual design as an integral design parameter. Important considerations in phasing planning include acquiring an intimate knowledge of the building and its systems, close acquaintance with key personnel, and an understanding of departmental functions and potential for flexibility. Life safety codes and maintenance of essential services and utilities are also important factors.

A number of clients have entrusted us with some of their largest, most visible projects. We are used to navigating through large and diverse stakeholder groups, large and diverse client administration, and working within large and diverse institutions.

A number of clients have entrusted us with some of their largest, most visible projects.

Case Studies:
Phased Construction Approach

GREATER COLUMBUS CONVENTION CENTER
Schooley Caldwell + Tec Studio



Working closely together, the design team handled over 1,000 submittals and 1,100 RFI's on this \$125 million project. Construction was phased to allow the Convention Center to remain operational - there were 52 phases of construction! The renovation included 800,000 SF of existing space, while the expansion consisted of a 137,000 SF addition.

THE LEVEQUE TOWER
Schooley Caldwell + Tec Studio



The single biggest challenge at The LeVeque Tower was renovating the 47-story building while it was occupied. The different blocks of program - residential, office and hotel - all had different owner entities and contractor teams who competed for limited access and staging (working in downtown Columbus meant that space was extremely tight). Construction was phased over six years, and the building remained occupied throughout.

THE OHIO STATEHOUSE
Schooley Caldwell + Tec Studio



Schooley Caldwell designed the full renovation of the Ohio Statehouse, which had to remain operational throughout the project. Ohio has a "full-time" legislature, with only short recesses for the summer and holidays (and subject to recall at any time). In addition, the capitol houses several executive functions. The renovation required minimal moves and disruption. No officeholder was required to move more than twice. This project was completed on time.

Section 1: Approach To Project

Summary of Experience with Historic Buildings and Building on the National Register

ZDS Design/Consulting Services

West Virginia State Capitol Building | Charleston, WV
Jackie Withrow State Hospital | Beckley, WV
Hopemont State Hospital | Terra Alta, WV
Mildred Mitchell-Bateman State Hospital | Huntington, WV
Robinson Grand Performing Art Center | Clarksburg, WV

Tec Studio

Cuyahoga County Courthouse Interior Lobby Illumination | Cleveland, Ohio
Logan County Courthouse Interior and Exterior Grounds Illumination | Bellefontaine, Ohio
Tuscarawas County Courthouse Exterior Façade Illumination | New Philadelphia, Ohio
James M. Ashley and Thomas W.L. Ashley Federal Courthouse Interior, Exterior and Façade Illumination | Toledo, Ohio
Ohio Statehouse Façade Illumination | Columbus, Ohio
Ohio Statehouse Member's Lounge Interior Illumination | Columbus, Ohio
Ohio Statehouse Restoration of Fountain Illumination | Columbus, Ohio
Columbus Metropolitan Library, Main Branch Interior, Exterior and Façade Illumination | Columbus, Ohio
St. Joseph Cathedral | Columbus, Ohio
St. Turibius Chapel, Josephinum Pontifical College | Columbus, Ohio
St. Mary Catholic Church, Lancaster, Ohio
LeVeque Tower | Columbus, Ohio
Worthington Grand Lodge | Worthington, Ohio

Schooley Caldwell

The Ohio Statehouse | Columbus, Ohio
The Minnesota State Capitol | Saint Paul, Minnesota
The LeVeque Tower | Columbus, Ohio
Joseph P. Kinneary U.S. Courthouse | Columbus, Ohio
James P. Ashley and Thomas W.L. Ashley U.S. Courthouse | Toledo, Ohio
OSU Orton Hall | Columbus, Ohio
Frank Lloyd Wright's Westcott House | Springfield, Ohio
Ohio Governor's Mansion | Columbus, Ohio
Kansas Statehouse | Topeka, Kansas
Utah State Capitol | Salt Lake City, Utah
Franklin Park Conservatory | Columbus, Ohio
Delaware County Courthouse | Delaware, Ohio
Delaware County Jail and Sheriff's Residence | Delaware, Ohio
Ohio Wesleyan University Stuyvesant Hall | Delaware, Ohio
NeWork Corworking | Newark, Ohio
Fort Hayes Metropolitan Educational Center | Columbus, Ohio
The Atlas Building | Columbus, Ohio
Cristo Rey Columbus High School | Columbus, Ohio
Thomas J. Moyer Ohio Judicial Center | Columbus, Ohio
Columbus Museum of Art | Columbus, Ohio

Old Montgomery County Courthouse | Dayton, Ohio
Trinity Episcopal Church | Columbus, Ohio
Butler County Courthouse | Hamilton, Ohio
Harrison County Courthouse | Cadiz, Ohio
Hancock County Courthouse | Findlay, Ohio
Columbus Cultural Arts Center | Columbus, Ohio
Worthington Lodge | Worthington, Ohio
The Carlisle Building | Chillicothe, Ohio
Green Lawn Abbey | Columbus, Ohio
East High School | Columbus, Ohio
Tuscarawas County Courthouse | New Philadelphia, Ohio
AG Grant Homestead | Grove City, Ohio
The Ridges at Ohio University | Athens, Ohio
Cutler Hall at Ohio University | Athens, Ohio
Wayne County Courthouse | Wooster, Ohio
Wyandot County Courthouse | Upper Sandusky, Ohio
Marion Palace Theater | Marion, Ohio

Design Standards

Our team is well-versed in required codes and standards impacting the renovation project. We will ensure the project meets requirements within the local jurisdiction. We will also look to industry standards by the Illuminating Engineering Society to ensure we meet industry recommended practice for High Security Buildings as well as Exterior Environments. In addition, the lighting will be reviewed to ensure compliance with State of West Virginia Energy Standard, and we can provide necessary information if the State elects to pursue any lighting utility rebates. We will also evaluate the existing electrical distribution system to identify current code issues within the infrastructure as well as determining the extent of upgrades to the capacity of the systems to carry the anticipated lighting loads.

Technology and Energy Conservation

Our lead lighting designer will offer practical and well-researched solutions for this project. Andra Zinkon actively participates within the lighting industry serving on multiple industry lighting committees for both the Illuminating Engineering Society and the International Association of Lighting Designers keeping her at the forefront of industry trends. Ms. Zinkon has served on the IES Progress Report committee for 15 years, the committee is charged with providing a yearly report on Progress and innovation to the industry, vetting up to 350 new products, tools, and publications on a yearly basis. Additionally, she also serves on the Library Lighting Committee and recently spearheaded the creation of a new working group for the Illuminating Engineering Society recognized as the IoT Connected Lighting Committee. IoT Connected Lighting has become a current trend, allowing lighting to assist in additional functions of the built environment and Smart Cities. New lighting systems can coordinate with building security. Additionally, we can assist with integrating security cameras, convenience receptacles (locked and unlocked) and even WiFi access points within lighting components if determined in the scope that is desirable or necessary.

Tec Studio has been recognized with multiple design awards in the Energy & Sustainability Category and has participated in many LEED projects. An understanding of current tools and technology enables our team to provide sound solutions that are sustainable from both an environmental impact as well as maintenance friendly.

Case Studies: Technology and Energy Conservation

**MICHAEL B. COLEMAN
GOVERNMENTAL CENTER**
Schooley Caldwell + Tec Studio



The location of this downtown site allowed the lighting design to kick-off the City's change from High Pressure Sodium Streetlights to their new City of Columbus standard of 3000K LED. The new streetscape lighting utilized the same historic teardrop luminaires, but with the efficiency of modern technology.

**CENTURY LINK
TECHNOLOGY CENTER**
Tec Studio



Tec Studio's design at CenturyLink's Center for Technology in Monroeville, Louisiana, was awarded the IES International Illumination Design Award of Merit in the Energy and Environmental Design Category. The lighting design for this corporate headquarters is 15% below ASHRAE Energy Standards.

Section 1: Approach To Project

Quality Control

The design team will specify long life products with reliable manufacturers to facilitate product maintenance in the future. Along with 5 year and 7 year warranties, we will ensure there is a clear maintenance plan past the initial install to allow the project significant longevity through the use of modular lighting arrays and drivers. We recommend and will assist the State in creating partnerships with the proposed manufacturers to ensure training is complete and the State has the ability to easily maintain the design and the design integrity.

We will develop preliminary opinion of construction cost estimates based on varying approaches to assist in developing the scope to determine if phased modifications or alternative solutions may be required to meet the goals and objectives. Throughout the evaluation/design process we will periodically update the costs to reflect any changes in direction of the project. These updates will occur as a minimum at each crucial milestone. Cost estimates will be prepared in a clear and concise method and shared with all team members for potentially necessary decisions. ZDS employs an extensive library of historical costs from past projects combined with RS Means construction cost manuals and, at times, have also reviewed the proposed work with trusted contractors/subcontractors as another method of checking our estimated costs.

We utilize quality control on every project as an effort to maintain schedules and stay within the stipulated budget. Peer review of the design process involving various members of our team is an important step in the process and coupled with our previously mentioned cost estimating resources will result in a better project for the State.



SCOPE OF SERVICES – Phase II

Additional Services

Based on the evaluations, findings and recommendations in our report(s) including the phased construction of the upgrades the Owner will determine if the ZDS Team will be retained to provide the development of Construction Documents in a multi-phased approach for the Project(s). All services performed in this Phase will be as Additional Services as mutually agreed between all parties and may be a Change Order to the original Contract for the Phase I services. Our team will prepare the bid packages, assist with the bidding and negotiations process and perform Construction Administration services. We have successfully incorporated phased construction in facilities to reduce disruptions and to allow adjacent spaces to remain occupied and functional.

Our evaluations and designs have included many projects for entire campus facilities of various occupancies in historically significant buildings so we have the experience and background to address the needs of this project. ZDS will request copies of any existing documentation available for our review and use in preparing a feasible approach to the evaluation phase of this project.

ZDS Design/Consulting Services' team has registered professionals that can effectively execute the requirements of the EOI and believe that our experience makes us the most qualified to provide the desired services and subsequent goals. Below is a listing of the proposed team for this project and organization of the proposed team.

The ZDS Team personnel have worked on many projects including many with Governmental agencies.

We encourage you to call the references listed below to establish how well we worked with their staff, our technical strengths and our ability to work with contractors to provide a quality project.

1. Mr. Mike Pickens, Executive Director, WV Dept. of Education, 1900 Kanawha Blvd. East, Bldg. 6, Room 215, Charleston, WV 25305 (304) 5582711, mepicken@k12.wv.us. Involved with dozens of MEP and Fire Protection projects in West Virginia since the 1990's.
2. Mr. Charles Moeller, Director, Project Manager for Constellation New Energy, 24 Summit Park Drive, Suite 103, Pittsburgh, PA 15275, (724) 584-3331, charles.moeller@constellation.com. Former Johnson Controls Project Manager on the Capitol Complex PC project.
3. Mr. Gary Boyd, Director of Facility Services, University of Charleston, 2300 MacCorkle Avenue S. E., Charleston, WV 25304 (304) 3574871, garyboyd@ucwv.edu. Worked on projects at both WVU and UC involving MEP and Fire Protection systems since 1990's.
4. Mr. Ron Adkins, Construction Manager for WVDHHR, One Davis Square, Suite 100, Room 103, Charleston, WV 25301 (304) 6349379, ron.adkins@wv.gov and former Project Manager for the \$43 million WV Air National Guard project that includes specialized fire protection systems. Construction Manager for DHHR facilities since 2011 including \$45.5 million addition/renovations to William R. Sharpe, Jr. Hospital, Weston, WV that involved fire protection, smoke evacuation and emergency power systems for the hospital.
5. Mr. Greg Nicholson, Retired Chief Operations Officer, WVDHHR, Charleston, WV (304) 5520101, gregnicholson@sudden-link.net. Involved with evaluation and master planning for seven hospitals involving MEP and Fire Protection systems at each facility over multiple years.

The ZDS team is the right size to provide the level of service necessary and listen and care about your needs. We have an excellent track record of evaluating, planning and completing projects on time and in budget and we are ready and willing to start on your project. We feel confident that our team specialties will provide you with the best expertise to provide economical solutions and look forward to discussing our qualifications.



Section 2: Project Team Overview

"Without Bob's initiative, his political acumen and his patience, this project never would have reached completion. It is now the jewel of downtown Columbus and the centerpiece of Ohio's government. The important points are that not only did Bob and his associates restore it to its wonderful heritage, he was able to maintain it as a working legislative building.

Time and again the roadblocks were thrown in place. Be it from the governor, from other legislators, or from the press, Bob was always there to patiently answer the questions. Each time, his explanations were able to carry the day."

—Fmr. Senator Richard H. Finan, Chairman, Capitol Square Review and Advisory Board



Section 2:
Project Team Overview

ZDS DESIGN | ENGINEER OF RECORD

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.



Location
281 Smiley Drive
St. Albans, WV 25177
† (304) 755-0075
www.zdsdesign.com

Comprehensive Design Process

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."

State of West Virginia Experience

ZDS has a long history of successful projects for the State of West Virginia and a proven record of providing a successful, fully integrated design process in collaboration with our clients. ZDS's recent State of West Virginia experience includes the State of WV Capitol Complex Central Heating Plant, Campus Steam Evaluations/Renovations, and the The Museum of Culture and History - Renovations.

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.

Office

281 Smiley Drive, St. Albans, WV 25177

Employees

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





Section 2:
Project Team Overview

TEC STUDIO | LIGHTING & TECHNOLOGY DESIGN

Firm Profile

Tec Studio Inc. is a WBENC-Certified Women Business Enterprise and State of Ohio EDGE certified firm providing lighting design and technology design services. Our studio welcomes the opportunity to collaborate with your team on your next project. We are dedicated to staff development through resources and education that will provide corporate leadership, produce community involvement and enhance industry standards.

Professional Lighting Design Services

Professional Lighting designers are a tremendous resource for innovative, practical, and economically viable lighting solutions. They understand the role of lighting in architecture and interior design, relying on their extensive experience and knowledge of lighting equipment and systems to transform spaces, evoke moods, create drama, promote productivity, and improve health.

- lighting design and application
- lighting control system design
- computer based lighting calculations
- full scale mock-ups
- final luminaire aiming and scene setting
- custom luminaire design
- coordination of emergency lighting systems
- energy code compliance
- energy studies
- design and consultation on LEED projects

Methodology

At Tec Studio Inc. we believe that light and technology can transform an environment into an experience.

- Our designs are considerate to human factors
- Our passion promotes creative solutions
- Our design process is focused on collaboration
- Our designs embrace environmental responsibility
- Our curiosity fosters our expertise, driving us as both



Location
7510 Slate Ridge Blvd.
Columbus, OH 43068
t 614.866.2868





Practices / Processes

Energy Efficient / Sustainable Design

Tec Studio has been recognized as a leader in energy efficient lighting design solutions. We have provided lighting design services for LEED, LEED Silver and LEED Gold certified projects across the United States. In addition, Ardra Zinkon has been honored with two GE Edison Awards in Environmental Design as well as several IES Design Awards of Merit in the Sustainability category. Tec Studio is committed to providing energy conscious solutions through the use of innovative technology and thoughtful design.

Our lighting design regularly falls below accepted watts per square foot allowances to meet the most stringent LEED requirements for energy consumption. Through careful calculations and thoughtful design, we are able to achieve well-lit and high performing environments that meet the needs of the people as well as the energy goals. We have experience with daylight harvesting and multi-layered control strategies that significantly reduce energy consumption.



Ashley Federal Courthouse

Women's Business Enterprise

Tec Studio Inc. is certified as a women's business enterprise by the Women's Business Enterprise National Council (WBENC), the nation's largest third-party certifier of the businesses owned and operated by women in the U.S. Tec Studio is also a Women Owned Small Business.

Cost Estimating

Assistance with preliminary cost estimates occurs during each design phase within our scope. The lead lighting designer is responsible for providing suggested contractor cost estimates to the design team for review and inclusion in the projects complete cost estimate.

During the design phases, lighting design is estimated by providing a complete luminaire schedule and counts to local sales representatives and requesting formal quotes from each agency with product listed as the basis of design. Controls are included in the estimates and may also be provided as a square foot cost (depending on the complexity of the system type). This information is shared by the Lighting Designer to the Architect in coordination with their estimates.



Saint Turibius Chapel, Worthington, Ohio

Value Engineering

Should Value Engineering be required, we can provide acceptable solutions that still meet the basic project requirements. Value engineering may

Section 2: Project Team Overview



include: changes to fixture specifications, changes to control system design or revised layouts depending on design team direction. We take significant steps to ensure our design is within the project budget to avoid re-design after bidding. We can also assist in creating deduct or add alternates as part of the original bid to allow the owner an opportunity to be part of the decision making process.

International Design Awards

- 2018 IES Illumination Award of Merit for Cleveland Botanical Garden: Glasshouse for Control Innovation and Interior Lighting
- 2018 IES Illumination Award of Merit for St Turibius Chapel mural at the Josephinum Pontifical College for Interior Lighting
- 2017 Eaton Source Awards, Winner in the Professional Category for the Columbus Metropolitan Main Library, Columbus, Ohio
- 2016 Cooper Source Award, Honorable Mention for the Ohio University, West Green Market, Athens, Ohio
- 2016 IES Illumination Design Award of Merit for the Ohio University, West Green Market, Athens, Ohio
- 2016 IES Illumination Design Award of Merit for the CenturyLink Technology Center of Excellence, Monroe, Louisiana
- 2014 IES International Design Award of Merit for Cuyahoga County Public Library Garfield Heights Branch
- 2014 Cooper Source Award of Recognition for Cuyahoga County Public Library Garfield Heights Branch
- 2013 Cooper Source Award of Recognition for the Hilton Columbus Downtown, Columbus, Ohio
- 2013 IES International Design Award of Merit for the Hilton Columbus Downtown, Columbus, Ohio
- 2012 GE Edison Award in Environmental Design for the Hilton Columbus Downtown, Columbus, Ohio
- 2011 GE Edison Award of Excellence in Environmental Design for the Farmer School of Business, Miami University
- 2010 IES International Illumination Design Award of Merit for the Cleveland Public Library, Rice Branch





Tec Studio Awards:

- Three (3) IES Illumination Design Award of Merit, Lighting Controls Innovation Category
- Six (6) IES Illumination Design Award of Merit, Energy & Environmental Design Category
- One (1) IES Illumination Design Award of Merit, Interior Lighting Category
- One (1) Eaton Source Award Winner
- Two (2) Eaton Source Award of Recognition
- Two (2) GE Edison Award of Excellence in Environmental Design
- One (1) Eaton Source Award of Merit

Section 2: Project Team Overview

Tec Studio Historic Building Experience

- Cuyahoga County Courthouse, Cleveland, Ohio- Interior Lobby Illumination
- Logan County Courthouse, Bellefontaine, Ohio- Interior and Exterior Grounds Illumination
- Tuscarawas County Courthouse, New Philadelphia, Ohio- Exterior Façade Illumination
- Ashley Federal Courthouse, Toledo, Ohio- Interior, Exterior and Façade Illumination
- Ohio Statehouse- Façade Illumination
- Ohio Statehouse- Member's Lounge- Interior Illumination
- Ohio Statehouse- Restoration of Fountain Illumination
- Columbus Metropolitan Library, Main Branch- Interior, Exterior and Façade Illumination
- St. Joseph Cathedral, Columbus, Ohio
- St. Turibius Chapel, Josephinum Pontifical College, Columbus, Ohio
- St. Mary Catholic Church, Lancaster, Ohio

Tec Studio Historic Project Philosophy

Tec Studio has experience with renovations on historic structures, both interior and exterior. We like to think of these projects as filled with opportunities rather than challenges. A thoughtful design approach is needed to ensure new lighting fits within the style of the building and the installation can leave a minimal impact at the site. Time must be spent in evaluating the existing conditions as well as identifying key opportunities to enhance the space in an appropriate manner. Most of these projects have had to occur within a tight budget and while the building is being occupied requiring strong collaboration between the design team, the contractors and the Owner.

Tec Studio Site and Campus Lighting Experience

- CenturyLink Corporate Headquarters Campus, Monroe LA- Landscape and Façade Illumination
- Greater Columbus Convention Center, Columbus Ohio- Landscape and Façade Illumination
- Mount Vernon Nazarene University Campus- Roadway and Pedestrian Area Illumination
- Case Western Reserve University, Cleveland, Ohio- Site and Pedestrian Area Illumination
- Michael B. Coleman Governmental Center, Columbus, Ohio- Site and Façade Illumination



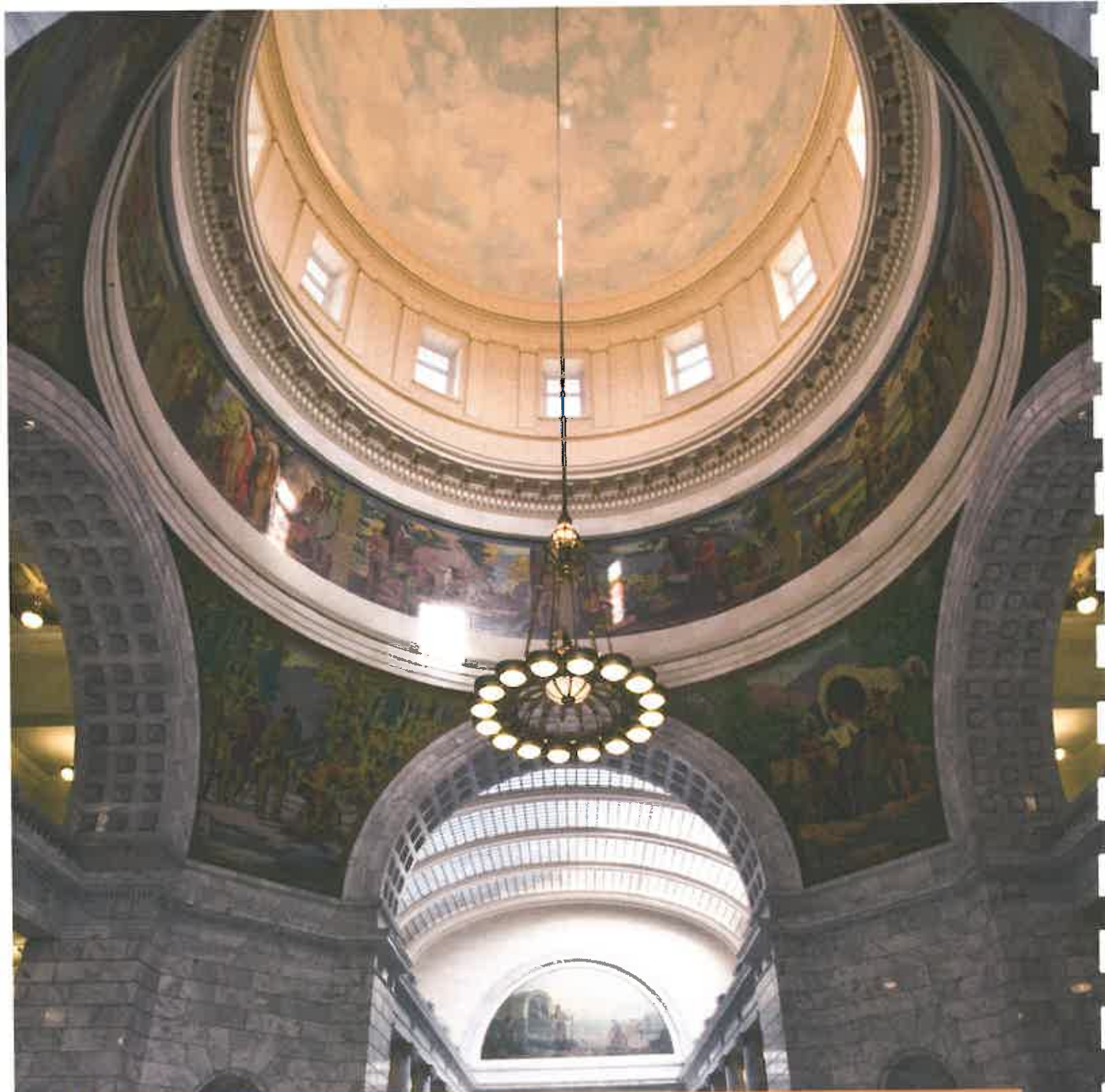
Cuyahoga County Courthouse, Cleveland, Ohio



Saint Joseph Cathedral, Columbus, Ohio



Tuscarawas County Courthouse, New Philadelphia, Ohio



"Schooley Caldwell has brought much to the table, especially their experience with large-scale, public preservation projects with complex client groups, including the state capitols in Ohio and Kansas. I have visited both of these projects with delegations from our legislature and have seen the contributions of Bob Lovensidge and their talented team of architects, interior designers and engineers.

The challenges we presented to the design team here in Salt Lake City were complex and formidable. Schooley Caldwell has made substantial and valuable contributions to the restoration design for Utah's capitol. Please give them every consideration for your project. You will be pleased."

—David Hart, FAIA, Former Executive Director and Architect of the Capitol (Utah); Vice President, MOCA Systems

Section 2:
Project Team Overview

SCHOOLEY CALDWELL | HISTORIC PRESERVATION CONSULTANT

Schooley Caldwell is an award-winning, full-service firm of architects, interior designers and planners. Our team's diverse talent, experience and passion translate into unique and enduring designs that are appreciated by owners, users and the public. Whether it's designing a new community recreation center, restoring a state capitol, finding a new use for a treasured old building, or designing innovative and energy-efficient systems, we work with our clients to discover design solutions that make their project dreams a reality.

We've also developed specific expertise in historic preservation and renovation, and have been entrusted with the sensitive renovation design of historic buildings across the country, including four state Capitols and a state Supreme Court. Giving new or continued use to an old building through high-quality design is something we are passionate about; we excel at developing design solutions for complex, iconic civic buildings.

Designing and planning a renovation, particularly for an historic building, is a very different challenge from new construction. We've built a solid reputation for success in planning cost-effective and sensitive work that preserves the character of a building while turning it into something that's modern and functional. Much of our work has involved working within historically or culturally rich building contexts, which requires us to have a particularly keen understanding of how to analyze an existing building's strengths and weaknesses. Our ability to do a meaningful assessment of an existing structure lays the groundwork for creative, budget-conscious renovation and maintenance work, in which the programs and systems must be massaged to work within the existing building envelope.

We employ architectural and design professionals who are well-versed in historic building types and who have specialized experience with period-appropriate exterior and interior materials, finishes, construction methods, and design.



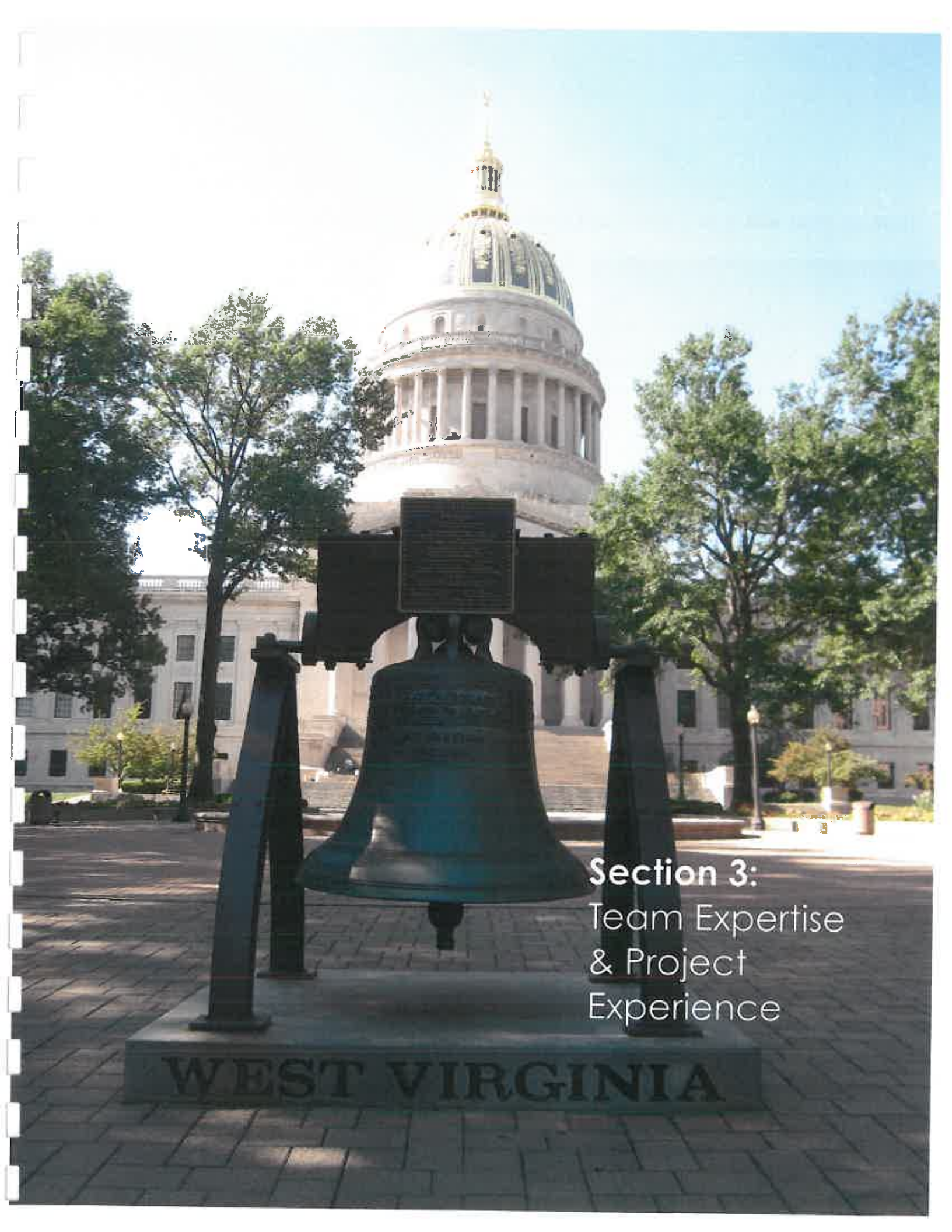
ARCHITECTURE. INSPIRED.

Location
300 Marconi Boulevard
Suite 100
Columbus, OH 43215

LOCATED IN COLUMBUS,
OHIO – OUR HISTORIC
RENOVATION AND
PRESERVATION WORK CAN
BE SEEN IN CENTRAL OHIO
AND NATIONWIDE.



Ohio Statehouse



Section 3:
Team Expertise
& Project
Experience

WEST VIRGINIA

STATE OF WEST VIRGINIA | CAPITOL COMPLEX PERFORMANCE CONTRACT | Charleston, WV



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. ZDS was a consultant, working under the direction of Johnson Controls, Inc.

The State of West Virginia was aware that their facilities at the Capitol Complex were aging and in need of significant infrastructure upgrades, but were having difficulty appropriating the necessary funding to make such improvements. Many of the existing boilers and other primary heating equipment were past their expected service life and in disrepair. The State of West Virginia passed a new bill in 2003 that permits Performance Contracting to be used as an avenue for implementing infrastructure upgrades in State facilities provided the upgrades self-fund within a 15 year time period. The State elected to solicit proposals from various Energy Service Companies (ESCO) with the intention of crafting a major improvement project that would reduce operating costs to the State as well as pay for itself over the 15 year period.

After an extensive review and selection process, the Team of Johnson Controls, Inc. and ZDS Design/Consulting Services was selected. The scope of the project included various energy conservation measures to the Capitol Building as well as Buildings #3, 4, 5, 7, 8, 9, 11, 13, 15, 16 and 17. The center piece of the program involved engineering the central heating plant and distribution system for the Capitol Building, as well as Buildings #3, 4, 5, 7, 8 (Governor's Mansion) and provisions for #10 (Holly Grove) plus additional future capacity

A central heating plant anchored the Facility Improvement Measures. It yielded the elimination of 14 failing boilers with provisions for future expansion of up to 600,000 square-foot of office space.



Section 3:
Team Expertise &
Project Experience



Governor's Mansion: Engineering planning and design for historic structures on the Capitol Complex Campus.

Client Contact:

Mr. Chuck Moeller
Constellation Energy
24 Summit Park Drive, Suite 103
Pittsburgh, PA 15275
(412) 489-9445
charles.moeller@constellation.com

Contracting Costs: \$10,108,802

Initial Year Savings: \$1,079,296

Size: 1,929,155 sq. ft.

Completion: 2008 for Construction

A centralized heating plant offers greater efficiency in overall system operation, centralized control and maintenance of primary heating equipment, with the added benefit of supplemental capacity in the event of a boiler failure. The first phase of the program began in May 2005, with the evaluation of the existing heating plants, HVAC equipment, and their subsystems to quantify deficiencies and identify potential opportunities to improve comfort, IAQ, extension of equipment life and an overall reduction in operating costs. Preliminary engineering studies reflected that millions of dollars could be saved in energy, operating costs and deferred capital costs by implementing this multi-million dollar program. The new central plant consisted of four 25,000 MBH high pressure steam boilers and retrofitting two 5,500 MBH boilers to heating hot water plus the distribution system to serve nine (9) buildings on campus.

Some typical improvements included either the replacement or retrofit of major air handling units, re-establishing proper control strategies, reducing outdoor air intake quantities when allowable, installing new building automation equipment, general HVAC equipment repairs and replacement, documentation of existing and post-construction conditions, and establishing a consistent overall operating strategy. Individual HVAC systems were

enhanced to meet applicable codes and standards. Exhaustive hours were spent with the State in assisting them with the identification and prioritization of facility improvement measures. The time spent also identified potential construction issues with an emphasis on critical phasing requirements.

Over the years, ZDS has been involved in evaluation and/or design, including construction activities, for 2,137,400 square-feet involving fifteen (15) buildings at the State Capitol campus.



*Building 3
Renovations included HVAC, fire safety, lighting, plumbing, indoor air quality and electrical power engineering.*

Section 3:
Team Expertise &
Project Experience

Historic Building Experience

ZDS engineering project experience includes facilities registered as official Historic Buildings. These project include the Jackie Withrow State Hospital, Hopemont State Hospital and Mildred Mitchell-Bateman 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). Renovations included HVAC, fire safety, energy efficient lighting, plumbing, indoor air quality and electrical power engineering.

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.

ZDS completed the engineering design for the historic Robinson Grand Theater Center scheduled for the grand opening later this year. The 1913 performing arts center will bring out the best the City of Clarksburg has to offer and help revitalize the downtown. The facility successful received historical tax credits, and approval from the National Parks Services and SHPO. The energy efficient design also qualified the facility for EAct since the building is at least 50% more efficient than a comparable building meeting ASHRAE 90.1-2001 energy code.



Robinson Grand Theatre





Tec Studio completed both interior and exterior lighting design and specifications for the gut renovations of a historical facility, major additions and atrium spaces of the Columbus Metropolitan Main Library. The Interior renovation includes lighting updates to the original Carnegie building as well as the addition.

Transformed spaces include: Interactive Children's Area, Teen Area, New Event Space, Auditorium, Main Atrium, Café and new landscaped plaza spaces. The new lighting design provides for a more energy efficient solution and includes daylight harvesting for additional savings. Automated shades were also part of the design to allow for maximum control in flexible spaces.

Total Project Cost: \$39 million

Ardra Zinkon, CLD, IALD, LEED GA | Lead Designer

Contact: Schooley Caldwell + DesignGroup

Completed: 2017

This project was recognized with:

2017 Cooper Source Award Winner, Professional Category

2017 IES Illumination Design Award of Merit, Energy & Sustainability Category





Tec Studio completed lighting design services for the Campus expansion of CenturyLink's corporate headquarters. Scope of services included Roadway lighting and illumination at all three entry points as well as additional signage illumination. Tec Studio also completed landscape lighting within the newly constructed 2 acre courtyard space as well as interior and facade illumination on the project. The lighting design is 15% below ASHRAE Energy Standards. This project has been certified as LEED Silver by the US Green Building Council.

Total Project Cost: \$150 million (including office building)

Exterior Lighting Design: \$1.5 million

Ardra P. Zinkon, CLD, IALD, LEED GA | Lead Designer

Contact: Craig Rutkowski, Project Architect
614 461-4664
CRutkowski@moodynolan.com

Completed: 2016

This project was recognized with:

- IES International Illumination Design Award of Merit in the Energy and Environmental Design Category





Tec Studio provided lighting design services for the façade illumination of the new construction garage developed for the Greater Columbus Convention Center. The eight story garage incorporates linear LED accent lighting to highlight the architectural fins, as well as dynamic color-changing lighting within the glass stair tower.

Tec Studio also provided utility rebate services for the client post construction. Additional accent lighting was provided at the lobbies for public art installations.

Total Project Cost: \$18 Million

Ardra P. Zinkon, CLD, IALD, LEED GA | Lead Designer
Architect: NBBJ

Completed: 2016





Tec Studio completed interior and exterior landscape lighting design services for this new construction property in the heart of Downtown Columbus. This 180,000 sq. ft. office space will house city's Department of Development and other departments, along with 700 space structured parking and a large landscaped green space area.

This project included a large greenspace plaza with a dry creek water feature as well as a green roof. The location of this downtown site allowed the lighting design to kick-off the City's change from High Pressure Sodium Streetlights to their new city standard of 3000K LED. The new streetscape lighting utilized the same historic teardrop luminaires, but with the efficiency of modern technology.



Total Project Cost: \$73 million

Staff: Ardra P. Zinkon, CLD, IALD, LEED GA | Lead Designer

Architect: Schooley Caldwell



Section 3:
Team Expertise &
Project Experience

STATE OF MINNESOTA | CAPITOL BUILDING | ST. PAUL, MN



Schooley Caldwell, as part of the Capitol Restoration Collaborative (CRC, a collaborative partnership between ourselves and HGA Architects), served as Design Architect for the full restoration of the 1905 Minnesota State Capitol.

The capitol is a treasured state asset. Designed by Minnesota's own nationally-acclaimed Cass Gilbert just over 100 years ago, it ranks among the most beautiful and majestic of the nation's capitol buildings. However, as is often the case with much-used historic buildings, under the surface were antiquated mechanical and electrical systems leading to poor air quality and widely varying temperatures, "dead end" corridors and other life safety code problems, inadequate office and public hearing room spaces, a lack of modern technology and security protection, places that were inaccessible to people with disabilities, and virtually no accommodation for the thousands of people who visit each year.

The Capitol Restoration Collaborative was initially hired by the State of Minnesota in 2005, and we developed the pre-design and Schematic Design for the restoration. Unfortunately, the project did not receive funding from the Legislature, and it lay dormant for several years. In the meantime, the CRC designed a series of "asset preservation" projects which included restoring the dome (the second largest stone dome in the world!), door/window replacements, and a comprehensive restoration of the marble exterior of the building.

In 2012, the state formed a bipartisan Capitol Preservation Commission, which approved initial funding. The project recently completed in 2017 involved restoring the rotunda and dome interior; interior stone preservation; providing additional office space and enhanced hearing rooms; upgrading all the building's mechanical, electrical, plumbing, and fire protection systems with new energy-efficient systems; adding new security systems; restoring public corridors; and rehabilitating interior lighting. Life safety systems and accessibility for people with disabilities were also dramatically improved.

Our design provided long-term answers and a true legacy solution – like that provided by the original design a century ago.





STATE OF OHIO | STATEHOUSE / SENATE OFFICE BUILDING | COLUMBUS, OH



The Ohio Statehouse, completed in 1861, is considered one of the nation's most important architectural gems. The Statehouse itself is centered on a 10-acre site and is complemented by the 1901 Senate Building and a parking garage beneath the Statehouse grounds. After more than a century of intense use, alteration, and neglect, the Statehouse and Senate Building were in dire need of restoration and renovation if they were to continue to meet the increasingly vigorous demands of modern governmental activity. Schooley Caldwell was selected to design this revitalization and restoration.

The client and design team established two essential criteria for the project: the buildings had to be returned to their original architectural image, and they had to be equipped for the same level of use (i.e., technology, etc.) that new buildings would provide. Also of consideration was that the Statehouse had to remain operational throughout the project; with a phasing plan in place, at least half of the building remained open and in active use at all times.

Recapturing the historic integrity of the building while at the same time providing modern conditions for its users proved to be the biggest design challenge. Other issues included space planning for the legislature, meeting life safety requirements, providing access for people with disabilities, restoring natural light to the interior, and incorporating modern HVAC, lighting, and security systems. The design is also full of functions to facilitate public participation

The Senate Chamber



Section 3:
Team Expertise &
Project Experience

in government, including a major museum and education center complete with interactive displays.

Since the completion of the full restoration, Schooley Caldwell has served as the "Architect of the Capitol" under contract with the Capitol Square Review and Advisory Board, the state entity that is the official overseer of the Statehouse. We provide on-call services for all projects that take place at the Capitol, including maintenance, repairs, technical services, and capital projects.

Most recently, we replaced all of the exterior lighting (which was previously white) with much more energy efficient, programmable LEDs. The new lights (pictured to the right) can display any color. Existing metal halide wash lights were removed and a brand new LED system was installed that could produce both white and colored scenes. The design scope also included specification for the new lighting control system and tie-in to the existing Building Management System. In addition, full construction administration services were provided to coordinate and track orders and ensure the tight time schedule could be maintained. One of the challenges on this particular project was integrating the new lighting controls with the BAS (Building Automation System). The schedule was also tight: 3 months to design, bid, and install the new lighting. However, we successfully completed the project on time.

The Statehouse and Senate Annex Building plaza (once called "Pigeon Alley") prior to construction of the Capitol Atrium.



Schooley Caldwell and Tec Studio recently designed new exterior LED lighting for the Ohio Statehouse; here it is pictured at Christmas.

The Capitol Atrium now connects the Statehouse and Senate Building, and is also a popular space for special events



TOWER 10 | THE LEVEQUE TOWER | COLUMBUS, OH



Schooley Caldwell's work at the LeVeque Tower was completed recently, and the 47-story building has been completely revitalized. The project began in 2011 with repair work on the exterior, which included restoring the terra cotta façade, upgrading the building entrances, installing new windows and storefronts, removal of old awnings, and **new lighting**. The team also worked with the City of Columbus to expand the sidewalk, add street trees, and create a valet zone.

Interior work was extensive as well; the LeVeque Tower has been rethought and renovated top to bottom. It now features a much more welcoming, vibrant, and historically-appropriate ground level entrance; a soaring lobby for the new Hotel LeVeque, which occupies floors five through ten; high-end, market rate apartments and condominiums on the top 19 floors; ten floors of renovated office space; and a bar, restaurant, and coffee shop for the use of residents and visitors alike.

After six years of design and construction, The LeVeque Tower is now a home for many, a welcoming spot for visitors, and an inspiring, active workplace. The building is well-positioned to remain competitive in a growing marketplace. Perhaps most importantly, it's a place that once again evokes excitement and pride, and it will remain an iconic piece of the skyline.

The LeVeque Tower lit at night





Section 4:
Team Resumes



Section 4:
Team Resumes

Ted (Todd) A. Zachwieja, P.E., CEM, LEED AP
CEO, Principal-in-Charge M/E/P/FP Design and Commissioning

Todd has over 38 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 Public Library
- Kohl's
- Laidley Towers
- Marshall University
- Mercer County Courthouse Annex
- Olin Corporation
- Phillip Morris USA
- Pendleton County Courthouse & Annex
- Public Service Commission of WV
- Redmond House, WVDOT
- Rhone-Poulenc
- Robinson Grand Performing Arts Theatre
- Santa Anna Federal Building, CA
- St. Patrick's Church
- Sears
- Toyota Motor Manufacturer, WV Inc.
- Union Carbide/DOW
- United Center
- University of Charleston Innovation Ctr
- Walker Machinery
- 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 0402
- West Virginia

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



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Ted Zachwieja III, P.E., CEM
Chief Technical Officer

Ted has over 14 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**
- Bayer Material Science
- Catholic Church of Ascension, Parish Hall Renovations
- Coal Heritage Discovery Center
- Culture Center, WV State Capitol Complex
- 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
- University of Charleston Innovation Center Additions/Renovations
- William R. Sharpe, Jr. Hospital Additions/Renovations, WVDHHR
- World Trade Center, 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 [REDACTED]
West Virginia [REDACTED]

Certified Energy Manager (CEM)
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



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



www.zdsdesign.com

Section 4:
Team Resumes

James E. Watters

Project Manager/Construction Administration



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 (formerly 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 Renovations
- 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**
- White Sulphur Springs Welcome Center

PROFESSIONAL AFFILIATIONS

- Member of Investigative Engineers Association (IENG-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 (IEE)

OTHER RECOGNITIONS



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



www.zdsdesign.com

Paul S. O'Dell, P.E.
Senior Project Engineer

Paul has over 21 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

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



Section 4:
Team Resumes

Chase J. Thomas, PE
Project Engineer

Chase has nearly 9 years of experience providing design and Construction Administration services in mechanical, plumbing, fire protection and various electrical systems. His experience encompasses a broad range of Projects including, but not limited to, Commercial, Government, Healthcare, Educational and Industrial facilities. These Projects over the years have ranged extensively from small to large in terms of both physical sizes and construction budgets.

Chase's primary strengths are in the design and layout of HVAC systems, fire protection/sprinkler systems, lighting and other electrical systems. Other strengths include a good understanding of the design and implementation of piping systems encompassing all domestic water, sanitary waste/vent, storm water and natural gas combined with a knowledge in water heating systems, boilers, pumps, recirculating systems, Thermostatic Mixing Valves, etc. He consistently stays current with applicable Codes and national, as well as local, standards and regulations.

He has a good awareness of all aspects of the design process and how the various disciplines need to be coordinated to avoid conflicts during construction. Chase has maintained growth as technology has changed throughout the years in the field of engineering design and drafting standards beginning with varying degrees of CAD drafting and currently BIM/REVIT.

Chase maintains an active membership to the WV ASHRAE professional society as Vice President. 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 has also continued his education with relevant courses associated with the field of engineering, and has been active in leadership training provided through ASHRAE and other highly reputable coaching services.

GOVERNMENT/HISTORIC/COMMERCIAL/EDUCATIONAL PROJECT EXPERIENCE

- Ashland Community & Technical College HVAC Controls
- Ben Franklin HVAC Renovations, Kanawha County Schools
- Bonsak Elementary (VA) HVAC Controls
- Cabell Huntington Hospital Surgery Center HVAC Controls
- CAMC Memorial Hospital Patient Rooms HVAC Renovations
- St. Mary's Hospital Patient Rooms HVAC Renovations
- Tucker County High School HVAC Renovations
- Urlings General Store Building Renovations
- West Edge Factory Building Renovations
- Weston Hampton Inn HVAC Renovations
- World Trade Center, MD



PROFESSIONAL REGISTRATIONS

Professional Engineer
West Virginia

EDUCATION

West Virginia University
Bachelor of Science
in Mechanical Engineering

AWARDS AND RECOGNITIONS

Vice President of WV ASHRAE
Member of Boy Scouts of America
(Eagle Scout)
General Contractor License
Holder



www.zdsdesign.com



Robert D. Loversidge, Jr., FAIA
Design Principal

Bob is President and CEO of Schooley Caldwell and has been with the firm for 40 years. Through his more than four decades of architectural practice, Bob has earned a national reputation as an expert in historic preservation design. His passion for preservation began over 40 years ago after the stealth demolition of a landmark train station, and he has been involved with virtually every preservation project the firm has completed. In addition, he was the author of the Ohio Historic Inventory Manual, used for all State historic surveys and Access for All, the State's manual on accessibility. He is a founder, past president, and honorary trustee of the Columbus Landmarks Foundation; current Chairman of the Advisory Group of the National Historic Resources Committee of the American Institute of Architects; past president of the Ohio Preservation Alliance; and a frequent guest speaker on preservation issues.

Education & Registrations

Master of Architecture
The Ohio State University, 1976

Bachelor of Science, Architecture
The Ohio State University, 1974

Registered Architect in
Ohio # [REDACTED]
West Virginia
Kansas
Utah
Minnesota
NCARB Certified

AIA Ohio Gold Medal, 2006

AIA Fellowship for Design and Technical
Leadership in Historic Preservation

Relevant Experience

Ohio Statehouse Master Plan, Restoration, Renovation, and Addition — restoration, renovation and addition to the National Historic Landmark; including historical analysis, master plan, programming, space planning, architectural design, code analysis, ADA compliance and systems integration; Columbus, Ohio

Minnesota State Capitol — Design Principal for architectural design, mechanical and electrical engineer services for the design of the interior restoration and preservation; St. Paul, Minnesota

Joseph P. Kinneary U.S. Federal Courthouse — On-call design service contract with GSA, work has included the reallocation of 68,000 sq. ft. of offices and public spaces included space design, specifications, cost estimating, construction documents, and contract administration, designed new millwork and complete courtroom furnishings, electrical modifications/replacement, new HVAC system, ADA modification, fire protection, window replacement, and interior stone repair/replacement, Columbus, Ohio

Thomas J. Moyer Ohio Judicial Center — Principal in Charge and Design Principal for the restoration, renovation and adaptation of a 415,000 sq. ft. state office building to house the Supreme Court of Ohio; including architectural and engineering design, programming, space planning, code analysis, ADA compliance, new systems integration, Columbus, Ohio

LeVeque Tower Renovation — Design Principal for master plan, renovation and revitalization of iconic, 1927 Columbus building, work includes restoration of the terra cotta facade, creating new lobby space and public entrances, enhanced streetscape, and conversion to apartments and boutique hotel; Columbus, Ohio

Kansas Statehouse — design consultant for master planning, renovation and restoration, including life safety improvements, sensitive replacement of HVAC and electrical systems, and accessibility; Topeka, Kansas

Utah State Capitol — Design Principal for renovation, restoration, and seismic base isolation for this 1912 building, including replacement of all engineering systems; Salt Lake City, Utah

Section 4: Team Resumes



Melinda Shah, AIA, LEED AP Historic Preservation Architect

Melinda specializes in historic preservation and renovation design. As Project Architect, she is responsible for overseeing the design and production of construction documents, and coordinates the work of our internal team as well as the engineers and consultants. Melinda received a Bachelor of Science degree in Architecture and a Master of Architecture degree from the University of Cincinnati, where she had the opportunity to co-op with other design firms and gain significant experience in preservation design before graduating. In addition, she received a Certificate of Historic Preservation from the University of Cincinnati.

Melinda excels at communicating and keeping all parties informed and on schedule, and is able to build strong working relationships with our consultants and clients as a result of her diligent approach to management.

Education & Registrations

M.Arch, University of Cincinnati

BS.Arch, University of Cincinnati

Registered Architect in
Ohio

Certificate in Historic Preservation, University of Cincinnati

LEED Accredited Professional

American Institute of Architects

Member, Ft. Hayes Preservation Program Committee

Member, Clintonville Area Commission Preservation Committee

Relevant Experience

Wayne County Courthouse — Melinda was project manager and architect for renovation and restoration of 1879 courthouse; project involved exterior repair and restoration, including masonry, roof, sheet metal, windows, gutters, and paint; goal was to address the serious deterioration and water damage on the exterior. Melinda's role included coordination and communication between all team members.

Kinnery Federal Courthouse (LEED project) — The most recent contract included repair and restoration of the sandstone façade, as well as replacement of the windows. As part of this project, SC also created the first-ever BIM model of the Courthouse building, created to become a long-term tool for managing the building. The Courthouse has also recently achieved LEED Silver certification.

Minnesota State Capitol — Project Manager and architect for the design of the \$272 million, full interior restoration and preservation of the 1905 capitol in association with HGA Architects; St. Paul, Minnesota

Utah State Capitol — Melinda provided architectural support for this renovation and restoration project, including design and detailed custom millwork for sensitive areas such as the Governor's suite, House Chamber, Senate Chamber, and hearing rooms. All engineering systems needed to be replaced, and the renovation work also created secure public and private access points, discreet and efficient service areas, a visitor center, functional committee rooms and efficient office space.

Ohio Statehouse (Architect of the Capitol) — Melinda is currently serving as project manager for a number of projects at the Statehouse as part of Schooley Caldwell's ongoing role as Architect of the Capitol. These projects include exterior lighting, the Holocaust Memorial Kiosk, and the Legislative kiosk. Melinda meets with CSRAB to coordinate the projects with the State's program, budget, and schedule needs. Recently, Melinda completed new exterior lighting for the Statehouse; plans for a window/service door and Memorial/fountain repair; Room 113 House Hearing Room renovation; and plans for a House Press Room.



Ardra Paige Zinkon, CLD, IALD
 President | Director of Lighting Design

Ardra Paige Zinkon is the President and Director of Lighting Design for Tec Studio, a WBE firm specializing in lighting and technology design. Ms. Zinkon has been working as a professional lighting designer since 1997 and is dedicated to the practice of professional lighting design. She is a professional member of the International Association of Lighting Designers (IALD) and an active member of the Illuminating Engineering Society (IES). She has served on the National Board of Directors for the IES, as well as contributing to several national committees to maintain her expertise in the industry. As a long-term member of the IES Progress Report Committee, Ms. Zinkon is part of a team charged with reviewing new product for Progress and Innovation in the Industry, and providing a yearly report to the Society at the National Conference. Ms. Zinkon has been recognized for multiple international design awards and regularly collaborates with firms all over the US.

Ardra Zinkon, has earned the Certified Lighting Designer (CLD), evidence-based certification in architectural lighting design. Zinkon is among the first lighting designers in the world to earn the new international certification, which demonstrates that she has a proven track record of excellence and has successfully validated her skill to a rigorous assessment process that define high standards of professional practice.

The certification process, governed by the Certified Lighting Design Commission, is designed to assess ability to operate as a lead architectural lighting designer in a professional and proficient manner by considering a person's imaginative, technical, and professional responsibility skills.

Her expertise in the lighting industry has led to national speaking engagements at Lightfair International, the IES Annual Conference, IALD Enlighten Americas Conference, Neo-Con, and Gov-Energy.

Relevant Projects

- The Ohio Statehouse Exterior Façade Lighting Renovation, Columbus, Ohio
- Michael B. Coleman Governmental Center, Columbus, Ohio
- Columbus Metropolitan Library | Main Branch Renovation, Columbus, Ohio
- Technology Center of Excellence, CenturyLink Monroe, Louisiana
- Ohio Veterans' Home Site Lighting, Sandusky, Ohio
- Greater Columbus Convention Center; City of Columbus, Columbus, Ohio
- Adelbert Quad Lighting; Case Western Reserve University, Cleveland, Ohio
- Mount Vernon Nazarene University Ariel Arena Site Lighting, Mount Vernon, Ohio

Education

The Ohio State University - 1997
 Bachelors of Arts - Theatre - Specialization in Lighting Design

Awards

- 2016 Cooper Source Award, Honorable Mention for the Ohio University, West Green Market, Athens, Ohio
- 2016 IES Illumination Design Award of Merit for the Ohio University, West Green Market, Athens, Ohio
- 2016 IES Illumination Design Award of Merit for the CenturyLink Technology Center of Excellence, Monroe, Louisiana
- 2012 GE Edison Award in Environmental Design for the Hilton Columbus Downtown, Columbus, Ohio
- 2011 GE Edison Award of Excellence in Environmental Design for the Farmer School of Business, Miami University
- 2010 IES International Illumination Design Award of Merit for the Cleveland Public Library, Rice Branch

Organizations:

- IALD
- IALD Education Trust Ambassador Outreach Committee
- IES
- Contributor to Design Guide (DG29-11) The Commissioning Process Applied to Lighting and Control Systems
- IES Progress Report Committee
- Published in LD+A



Section 5:
Required
Attachments





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

State of West Virginia
 Centralized Expression of Interest
 02 - Architect/Engr

Proc Folder: 448934

Doc Description: EOI: CAPITOL CAMPUS EXTERIOR LIGHTING UPGRADES

Proc Type: Central Contract - Fixed Amt

Date Issued	Solicitation Closes	Solicitation No	Version
2018-05-09	2018-06-06 13:30:00	CEOI 0211 GSD1800000007	1

BID RECEIVING LOCATION

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

VENDOR

Vendor Name, Address and Telephone Number:

ZDS Design/Consulting Services
 281 Smiley Drive
 St. Albans, West Virginia 25177
 (304) 755-0075

FOR INFORMATION CONTACT THE BUYER

Crystal Rink
 (304) 558-2402
 crystal.g.rink@wv.gov

Signature X *Joshua Q. Zochineja* FEIN # 550735995 DATE June 6, 2018

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

ADDITIONAL INFORMATION

EXPRESSION OF INTEREST

THE WEST VIRGINIA PURCHASING DIVISION IS SOLICITING AN EXPRESSION OF INTEREST FOR THE AGENCY, THE WEST VIRGINIA GENERAL SERVICES DIVISION, FROM QUALIFIED ELECTRICAL ENGINEERING FIRMS TO PERFORM A THOROUGH REVIEW AND UPDATE OF AN EXISTING 50% DESIGN FOR THE REPLACEMENT OF THE EXTERIOR LIGHTING ON THE WEST VIRGINIA CAPITOL CAMPUS PER THE ATTACHED DOCUMENTS.

* ONLINE SUBMISSIONS ARE PROHIBITED FOR EXPRESSION OF INTEREST SOLICITATION RESPONSES. *

INVOICE TO	BHP TO
DEPARTMENT OF ADMINISTRATION GENERAL SERVICES DIVISION 112 CALIFORNIA AVENUE, 5TH FLOOR CHARLESTON WV25305 US	DEPARTMENT OF ADMINISTRATION GENERAL SERVICES 112 CALIFORNIA AVENUE, 5TH FLOOR CHARLESTON WV 25305-0123 US

Line	Comm Ln Desc	Qty	Unit Issue
1	EOI: Capitol Campus Exterior Lighting Upgrades Project		

Comm Code	Manufacturer	Specification	Model #
81101508			


Extended Description :

A/E Services for Capitol Campus Exterior Lighting Upgrades Project

SCHEDULE OF EVENTS

Line	Event	Event Date
1	QUESTION DEADLINE 10AM EST	2018-05-22

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)
Todd A. Zachwieja, PE, CEM, LEED AP CEO, Principal in Charge

(Printed Name and Title)
281 Smiley Drive, St. Albans, WV 25177


(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, PE, CEM, LEED AP CEO, Principal in Charge

(Printed Name and Title of Authorized Representative)
June 6, 2018

(Date)
304-755-0075, 304-755-0076

(Phone Number) (Fax Number)

**ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.:**

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received: N/A
(Check the box next to each addendum received)

- | | |
|---|--|
| <input type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6 |
| <input type="checkbox"/> Addendum No. 2 | <input type="checkbox"/> Addendum No. 7 |
| <input type="checkbox"/> Addendum No. 3 | <input type="checkbox"/> Addendum No. 8 |
| <input type="checkbox"/> Addendum No. 4 | <input type="checkbox"/> Addendum No. 9 |
| <input type="checkbox"/> Addendum No. 5 | <input type="checkbox"/> Addendum No. 10 |

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

ZDS Design/Consulting Services

Company

Judd A. Zebineja

Authorized Signature

June 6, 2018

Date

NOTE: This addendum acknowledgment should be submitted with the bid to expedite document processing.

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 OTHER 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 § 23-2b-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 A. Zebingja* Date: June 6, 2018

State of Kanawha

County of West Virginia to-wit:

Taken, subscribed, and sworn to before me this 6 day of June, 2018

My Commission expires May 21, 2020.

AFFIX SEAL HERE

NOTARY PUBLIC



Lauren M. Hendley
Purchasing Affidavit (Revised 07/07/2017)



Appendix:
References



February 1, 2017

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,

Michael E. Pickens

Section 5:
Client References

Boyd, Gary MA, CEFP

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

August 11, 2016

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,



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



ELSWICK & ASSOCIATES, LLC

April 15, 2017

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
304.542.8977

Section 5:
Client References

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,



Bill Elswick, MBA, CEO