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Header 1

List View

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Procurement Folder: 919514

Procurement Type: Central Contract - Fixed Amt

Vendor ID: VS0000012506

Legal Name: DRS ARCHITECTS INC

Alias/DBA:
Total Bid: \$0.00

Response Date: 09/23/2021

Response Time: 13:24

Responded By User ID: Michelle63?

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Solicitation Description: A/E Svcs-New Facilities at Lost River, Cacapon, Blackwater

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

State of West Virginia
Solicitation Response

Proc Folder: 919514
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Solicitation Closes	Solicitation Response	Version
2021-09-23 13:30	SR 0310 ESR09232100000002072	1

VENDOR
VS0000012506
DRS ARCHITECTS INC

Solicitation Number: CEOI 0310 DNR2200000004

Total Bid: 0 **Response Date:** 2021-09-23 **Response Time:** 13:24:38

Comments:

FOR INFORMATION CONTACT THE BUYER

Joseph E Hager III
(304) 558-2306
joseph.e.hageriii@wv.gov

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

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Civil engineering				0.00

Comm Code	Manufacturer	Specification	Model #
81101500			

Commodity Line Comments:

Extended Description:

Architectural/engineering services and contract administration for new facilities at Lost River, Cacapon and Blackwater Falls State Parks.

CEOI 0310 DNR2200000004

AE Services for New Facilities at Lost River, Cacapon, Blackwater

DRS Architects

September 23, 2021

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DESIGN APPROACH

We would structure this project's design phase to be focused and methodical. Having vetted many similar proposals, you must be well acquainted with the typical project checklists that define levels of performance and compliance. Therefore, in lieu of reciting familiar details, we would like to describe design principles and values that support our approach, concluding with a brief outline of project tasks focused on their implementation.

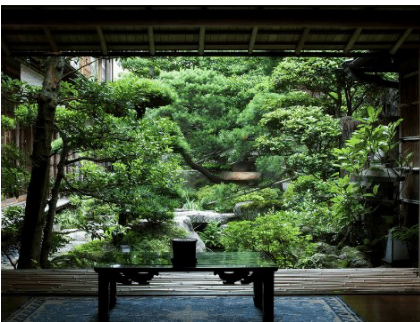
LEARNING FROM THE LAND

We look forward to acquiring an understanding of the two parks before we think about any site-specific additions to them. Architects often assume the role of place makers, but in this case, we are more than content to adopt the role of responsible and inspired, stewards of inherently beautiful places. Our team of environmental, engineering, and design professionals will observe, experience, listen, and document our understanding of the parks critical characteristics and establish a comprehensive list of design requirements to meet project goals. Our method will assure that the conceptual integrity of the design approach is sound and achieves the highest standards of environmental, functional, regulatory, fiscal, and operational performance.



Moraine State Park, PA

Construction debris near a footpath. We can not always rely on nature to clean up after us.



The traditional Japanese Inn, or ryokan is a model of **architectural invisibility**. The landscape however, is highly cultivated.

TREAD LIGHTLY AND LEAVE NO TRACE

We are sensitive to the finely tuned balance that exists in our State Parks between the wilderness and its appreciation. Although our task will be to increase the capacity for enjoyment of the parks, our ambition is not to create architectural “attractions” with our proposed additions. As designers, we measure success in terms of the minimal impact of our intervention – upon completion, during construction, and, most importantly, over a long period of sustained use. We believe in architecture that complements its natural milieu and permits human habitation assimilate into its ecosystem. Additionally, the patterns of use that the architecture prescribes must inspire visitors to observe the same land ethic. Considerations of sensitive siting, provision of utilities, access and maintenance, sustainable materials and construction methods, minimal energy consumption, aesthetic harmony, and a degree of resilience approaching permanence. In these terms, the penultimate architectural achievement is fitness, structures that are constituent parts of a natural place, and elements that arise from the landscape, which, in turn, mature to help define it. We believe the art of architecture is defined by fitness to context.



COLLABORATION AND COMMUNICATION

We believe every project is an opportunity for us to grow our skills and learn from our collaborators. It may be a cliché to state that large building projects are a team sport. Regardless of how hackneyed the phrase may be, it is nevertheless, true. Successful teams learn to leverage individual strengths in a cooperative effort to achieve common goals. Our process will establish regularly scheduled meetings, frequent dialogue through a structured stakeholder distribution chain, appropriate project goals, and a goals checklist that will be repeatedly applied to keep our focus trained on those goals. Quality assurance will include programmatic, technical, aesthetic, environmental, cost, and schedule criteria. We will routinely communicate ideas using a variety of graphic techniques, including 3-D models and short animations, that will incorporate staging/phasing steps and promotional materials for client use.

GOAL SETTING

A focus of early project team conferences will be to understand the scope of the project and establish benchmarks for: *maintaining physical assets and acknowledging project vulnerabilities; confirming functional and program requirements; determining legal and code requirements; and finally, schedule and budget requirements.*

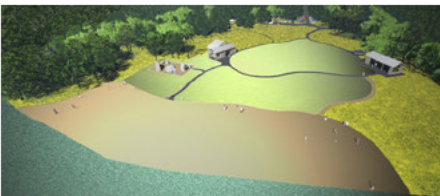
Concurrent initial phase activities will include environmental assessments and surveying, including LiDAR mapping of the relevant context.



DESIGN TIMETABLE AND PROCESS

We assume that design development, permitting, and construction related activities will occur simultaneously for Lost River, Cacapon and Blackwater sites. We will work with you to thoroughly capture the different work scopes and develop a coordinated review, submission, and construction schedule that is much more “granular” for efficient delivery of the projects. We expect all projects to undergo similar phase development and also expect that the schedules for each site will diverge early so the smaller work scopes may experience accelerated delivery. Review meeting schedules will be adjusted and/or added as required for greatest efficiency and speed of execution. The design team acknowledges that the addition of virtual meetings to support this process may be required and will be organized as needed. Longer lead times, NPDES permitting for instance, will be strategically integrated into the project schedules.

The design team will seek to avoid wetlands impacts to the greatest extent possible in order to avoid the need for wetland and stream impact permits.



Concept images from the executed rehabilitation plan for Yellow Creek State Park, Indiana County, PA

Completed project included beach reconfiguration, parking improvements, concessions pad & utilities, site regrading, new path system, two new playgrounds, event pavilion, new restrooms and new landscaping.

We do anticipate that documentation will be required for certain environmental permitting including:

Wetland and Stream Identification and Delineation.

Clean Water Act Section 404 wetland and stream impact permit through the WVDEP or ACOE Huntington District.

NPDES permit application (disturbance over 1 acre.)

Threatened and endangered species coordination will be conducted.

NEPA clearance for the project sites.

MONTH 1



Barn, Summers County, WV

Simple, expressive and functional. The character of this structure belies its modest size.

TEAM MEETING # 1 – KICK-OFF

Kick-off meeting to introduce & establish the Client-Consultant Design Team

Begin round-up of any existing documents of relevance.

Goal Setting: Initial Programming Requirements & Considerations

Discuss relevant Park Operations parameters.

Establish Communications protocols, regular meetings and main points of contact for each stakeholder group.

List regulatory authorities having jurisdiction over the project.

Establish a critical-path design schedule including Permit Review projections including review by WVDEP and NPDES permits.

Schedule surveys for any essential information absent from the database.

Perform LiDAR scans of relevant site areas for site suitability analysis, as required.

Format Base Documents for design “backgrounds” & distribute for Team use

Discuss Performance Goals: Projected Lifecycles, Maintenance, Sustainability.

Begin Site Analysis and Program Documentation.

Formalize Project Goals – Develop Project Checklist.

TEAM MEETING #2 - SITE ANALYSIS

Meet to discuss formal documentation of critical site features and program requirements.

Map Critical Site Features including, but not limited to:

Surface Water and Wetlands

Groundwater



Barn, Summers County, WV

Another remarkable example of vernacular architecture. A utilitarian building executed with extraordinary refinement.

Wildlife Habitats
 Emergency Vehicle Access
 Recreation Resources, Access and Trails
 Historic Resources
 Scenic Resources
 Unique and Scarce Vegetation
 Wildfire Hazards
 Topological / Geological features of interest
 Microclimates

Update base documents and re-distribute to Team.

MONTH 2



Concept for a restroom pavilion for Yellow Creek State Park, Indiana County, PA

Formulate preliminary concept plans.

Site Master Plans including preliminary Grading Plan

Building Plans / 3D models buildings + site.

Code Analysis – Permit Filing strategy.

Engineering Narratives describing the utilities and building systems.

Preliminary cost data applied on \$/SF basis for general improvements by division.

Architectural Narrative of Sustainable Design and Construction features.

TEAM MEETING #3—CONCEPTS EVALUATION

Meet to review initial design concepts based upon program and project goals.

Select concepts for further development.

Continue to refine cost data to keep pace with architectural / site development.

Update base documents and redistribute to Team.

TEAM MEETING #4—CONCEPTS PROGRESS

Meet to review concept development progress.

Project Goals Review: Apply Project Checklist.

Update base documents and redistribute to Team.

Continue to refine cost data to keep pace with architectural/site development

MONTH 3



Continue Construction Documentation.

Detailed Site Development, Architecture Development

Construction Phasing Narrative / Diagrams.

Begin to formulate a detailed Cost Estimate per the evolving master plan and building design.

Outline Specifications.

TEAM MEETING #5—DESIGN DEVELOPMENT & TECHNICAL REVIEW

Review focused on project's technical solutions and constructability

Park Operations

Site Impacts

Phasing

Maintenance and Durability

Energy Performance and Sustainable Practices

Project Goals Review: Apply Project Checklist.

Update base documents and redistribute to Team.

Continue to refine cost data to keep pace with architectural development.

MONTH 4



Pool House, Nemacolin Woodlands Resort

The simple elegance of small pool house at Nemacolin. We chose a simple expression utilizing quality materials, an easily shipped & assembled prefabricated structure, and a floor plan that is efficient and highly functional.

Continue Architectural and Engineering Construction Documentation up to 60% Completion.

Detailed drawing development (all disciplines) including schedules, tags, dimensions, and notes.

Refine the detailed Cost Estimate per the developing design.

Complete Draft Specifications, all disciplines.

TEAM MEETING #6 – ARCHITECTURE / ENGINEERING COORD CONFERENCE (LOCATION OF YOUR CONVENIENCE.)

Review 60% Complete Construction Documents

Review Comprehensive Project Costs with DNR

Technical review to coordinate engineering, architecture and fill missing gaps

Project Goals Review: Apply Project Checklist.

Update base documents and redistribute to Team.

Continue to refine cost data to keep pace with site / architectural development.



Pool House, Nemacolin Woodlands Resort

MONTH 5

Continue Architectural and Engineering Construction Documentation up to 95% complete.

Complete details, schedules, tags, dimensions, and notes.

Complete Specifications, all disciplines, including “Front End” specifications.

Refine the detailed Cost Estimate up to 95% Complete Construction Documents.

TEAM MEETING #7 – PRE-BID REVIEW

Review 95% Complete Construction Documents.

Review Bidding and Permit Filing Procedures with DNR.

Confirm Phasing Strategies for project delivery.

Define limit of construction impacts, both environmental and operational, on the parks.

Project Goals Review: Apply Project Checklist.

Update base documents and redistribute to Team.

Adjust cost data for any project refinements or construction market changes.

MONTH 6

Complete Bid Documents and Filing Documents including specifications.

TEAM MEETING #8 (+ #9) – CONDUCT BID CONFERENCES

Answer Bidding RFI's.

Perform Bid Analysis.

Review Contract for Construction Services.



Curtain Wall and Structural Detail, Sundial Lodge, NWR&S

The heavy timber structure for this project was fabricated in Vermont and shipped to the site in two tractor trailers. It was assembled on-site in less than a week.

MONTHS 7+

Attend weekly construction meetings (remote vs on-site, TBD)

Answer Contractor RFI's.

Review Contractor Submittals.

Review Contractor Payment Applications.

POST-OCCUPANCY REVIEW

We would encourage you to reconvene the design team for a post occupancy conference to evaluate the performance of the completed design after season of use has elapsed. Post-occupancy reviews are a valuable and under-utilized learning tool for institutional clients and design professionals to evolve their methodology. We can build commissioning into our services agreement, but an informal approach has been equally effective.

QUALIFICATIONS, EXPERIENCE, PAST PERFORMANCE

For this project, **DRS Architects** will be the prime consultant and will provide architectural design, project management, and interior design services.

Our additional team members include:

Allegheny Design Services – Structural Engineering and MEP

Stahl Sheaffer Engineering – Civil Engineering

Civil & Environmental Consultants – Environmental Consulting

Klavon Design Associates – Landscape Architecture

Trophy Point - Cost Estimating

TEAM QUALIFICATIONS

DRS ARCHITECTS

Celebrating over 60 years of business in downtown Pittsburgh, DRS has been one of the region's leading architectural, planning, and interior design firms. We manage the design process, control project costs and schedules, and seek design excellence for every project. In addition to architectural design, we offer a range of services for our clients, including facilities evaluation and condition assessments, site analysis, master planning, programming, feasibility studies, circulation and parking studies, functional space planning, interior design, cost estimating, contract documentation, construction administration, and post-occupancy services. DRS Architects is the recipient of over 50 design and technical awards for its work.

ENVIRONMENTALLY RESPONSIBLE DESIGN

DRS offers a "green" approach to design through our LEED and WELL Accredited Professionals, with experience gained in more than 20 LEED projects including the renovation of our own office. We see each project with an eye towards sustainability and as an opportunity to improve the well-being of people and the environment by employing environmentally responsible design strategies in every project we do, even when certification is not a requirement. We work with engineering consultants and specialists with an emphasis on sustainable design for projects that require a higher level of achievement, and we fully integrate them into our project team for the entire design and construction process. Since we take part in shaping our physical environment, we believe it is our responsibility to help guide our clients towards designs that are environmentally responsible. This assistance allows our clients to make informed decisions that support a better experience for users of a building and a better outcome for the planet. DRS has helped clients in various market sectors to achieve LEED certification for their projects, ranging from LEED Certified to LEED Platinum, but we also are knowledgeable in other criteria and platforms for achieving green design.

ALLEGHENY DESIGN SERVICES – STRUCTURAL ENGINEERING/MEP

Allegheny Design Services (ADS) is a consulting engineering firm specializing in Structural & MEP building design and analysis. ADS has 4 Licensed Professional Engineers and 2 LEED Accredited Professionals that are dedicated to serving West Virginia and the surrounding region. ADS recognizes the need for reliable and full-service engineering service for clients. ADS provides all phases necessary to successfully complete a building project including schematic design, design development, construction documents and specifications, and construction administration. Their straightforward approach provides clients with efficient and creative solutions to their project.

STAHL SHEAFFER ENGINEERING – CIVIL ENGINEERING

Stahl Sheaffer provides a full range of multi-discipline civil engineering services including building structural design, bridge design and inspection, construction inspection, geotechnical engineering, land development, survey and reality capture, and transportation engineering. They provide these services to public and private clients in multiple industries, including parks and recreation, municipal services, and hospitality. Stahl Sheaffer is licensed to operate in sixteen states, with professional engineers licensed in 44 states. Stahl Sheaffer was ranked as a top design firm in the ENR Mid-Atlantic Top Design Firms list in 2018, 2019, 2020, and 2021. Their team has extensive experience in parking lot analysis, design, and additions.

CIVIL & ENVIRONMENTAL CONSULTANTS

CEC provides environmental services for a wide range of industries and businesses, and a wide range of land surveying services with a full complement of cutting-edge technology, including 3D laser scanners using terrestrial Light Detection And Ranging (LiDAR) scanning to create spatial imaging. The experienced CEC team uses innovative and cost-effective solutions for analyzing pavement and curb conditions. Minimizing the impact of having personnel on the ground, they utilize LiDAR technology to efficiently determine a community's pavement and curb repair needs. CEC has supported projects of similar size, scale, and scope as outlined in the solicitation. They provide a "one-stop-shop" for professional environmental services required during all phases of a project.

KLAVON DESIGN ASSOCIATES – LANDSCAPE ARCHITECTURE

Transforming a land space into a favorable environment requires talents that range from hard science to gentle arts. Klavon Design Associates, Inc. (Klavon) brings these skills together in an exceptional union of technical expertise and aesthetic ingenuity. Dedicated to creating sites that are as pleasant to use as they are to see, we offer enlightened innovation in landscape architecture.

With a focus on design and a proficiency in project management, Klavon has accumulated extensive experience in a variety of landscape architecture, planning, and urban design services. Klavon's philosophy is to provide simple design solutions that are timeless, ecologically sensitive, and easy to maintain. Klavon has a unique approach to client relationships. Their experience in major project execution is usually found in much larger firms, yet their structure allows them to provide flexible, responsive service that is only possible through one-on-one collaboration.

TROPHY POINT – COST ESTIMATING

Trophy Point is a certified Service-Disabled, Veteran-Owned Small Business (SDVOSB) that provides Construction Cost Estimating, Construction Management Support, Owner's Representative Services and Construction Consulting services. The most common services offered by Trophy Point are cost estimating, scheduling, integrated design and constructability review services, staff augmentation, and owner's representation. The Trophy Point team strives to assist their clients in understanding construction costs during the concept phase of a project and provides them with detailed and accurate estimates as a project design matures. They developed an ability to provide accurate estimates prior to the execution of formal design efforts in an unrivaled manner that enables clients to align their scope with their budgets quickly and effectively.

Paul Cali, AIA, NCARB

Principal, DRS Architects



Summary of Qualifications:

Mr. Cali brings a wealth of architectural experience to a project team whether serving as designer, architect, or master planner. His focus at DRS has been directed toward architectural planning and design. He has a broad and diverse range of sports, recreation and hospitality design experience. While at Penn, he trained as a Regional Planner under Prof. Ian McHarg, the most important environmental planner and landscape architect of the 20th Century.

Education:

Master of Architecture,
Graduate School of Fine Arts,
University of Pennsylvania,
1992

Core Curriculum, Landscape
Architecture and Regional
Planning, Graduate School of
Fine Arts,
University of Pennsylvania,
1984-85

Graduate Studies, The
Architectural Association,
London, 1987-88

Bachelor of Arts, Philosophy,
Lafayette College, 1984

Relevant Project Experience:

Yellow Creek State Park, Brush Township, PA

Principal-in-Charge, Project Manager and Lead Designer for the complete renovation of the recreational beach at YCSP. Partnered with Klavon Design Associates for the extensive reconfiguration of the lakeside area including the sand beach from below the low-tide waterline and a central landscape of native grasses and pedestrian paths bounded by renovated parking areas and existing woodlands. New structures designed and built included restroom facilities, an event pavilion and two play areas for children of different age groups.

UPMC Cooper Fieldhouse at Duquesne University, Pittsburgh, PA

Principal-in-Charge, Project Manager and Lead Designer for Duquesne University's new Athletics Master Plan and the extensive renovation of the AJ Palumbo Center. The 81,000 SF renovation included sustainable design strategies including the reuse of the existing building structure & envelope, new LED lighting, high-efficiency replacement units, recycled content in materials and FSC-certified casework, doors and paneling products.

Community Center, North Fayette Township, PA

Lead Designer for the 30,000 SF community center, a capstone for North Fayette Township's Donaldson Park Recreation Complex. The project included a basketball court, fitness areas, running track, administrative offices, an outdoor terrace, and an upper floor banquet space with conferencing center for 150 persons.

University Master Plans at Edinboro, Shippensburg, Duquesne, Slippery Rock, CCBC

Lead Master Planner for complete master plans, athletic master plans and master plan updates for a variety of higher education institutions in the region. Formal training in regional planning utilized to inform large-scale architectural master planning projects.

Baldwin Community Pool, Baldwin Borough, PA

Principal-in-Charge, Project Manager and Lead Designer for the extensive renovation of the Baldwin Borough Pool House constructed in 1970. Toilets, bathing and changing room features were replaced inside the fifty-year-old structure and the pool house's exterior envelope was given a complete makeover, complemented by the addition of six, 16' square fabric and steel shade structures.

Nemacolin Sundial Lodge and Adventure Center, Farmington, PA

Project Manager and Lead Designer for the design and construction of a new 25,000 SF adventure center which replaced the former ski lodge tragically lost to fire the previous year. The new facility perched at the apex of Mystic Mountain, serves as the resort's year-round outdoor activity hub and contains one of Nemacolin's signature restaurants. The hybrid steel / heavy-timber structure incorporating unbroken expanses of curtain wall and a natural stone base was a unique solution to a fast-track project delivery that replaced the destroyed structure by the opening of the following ski season.

Nemacolin Woodlands Resort, Paradise Pool, Farmington, PA

Project Manager and Lead Designer for a new ADA-compliant lap pool and pavilion at Nemacolin Woodlands Resort & Spa.

Tony Pagliaroli, AIA

Project Architect, DRS Architects



Summary of Qualifications:

Tony's depth of knowledge in architecture is founded in his experience working at both architecture and engineering firms and for a contractor. His background has informed his belief that listening to the client and strong coordination with all members on the team will result in a solution that meets the expectations of clients. With experience in a variety of market sectors his higher education projects reflect a variety of space types and uses on campuses across the country. He has successfully followed many projects from design through construction.

Education:

Master of Architecture, Kent State University, 2009

Bachelor of Science, Architecture, Kent State University, 2008

Registration:

Pennsylvania and New York

Professional Affiliations:

American Institute of Architects

Pennsylvania Society of Architects

Relevant Project Experience:

Department of Energy/NETL, Building 34, Alloys Laboratory Renovation, Albany, OR
Architect responsible for developing the detailed documents for the renovation of approximately 8,000 SF with an addition of 3,000 SF to house a new Advance Alloy Laboratory. The new facility will provide code-compliant laboratory spaces, a material staging/storage area, a control room and other support areas to allow for the safe and effective conduct of the required research and support operations. \$15 M estimated construction cost.

**Penn State University New Kensington Campus, New Kensington PA*

Project Manager and Lead Designer for several projects on campus including the conceptual interior renovations to an existing auditorium, including a new catwalk, new proscenium, new stage, and finishes. The design of a new entrance for the athletics building, new vestibule, roof improvements, new curtain wall, exterior hardscape improvements, accessibility upgrades, and new casework and finishes.

**Penn State University, Main Campus, State College, PA*

Designer and Product Researcher for the design of interior improvements to the Paterno Library, including new office spaces, new Starbucks installation, and updated finishes.

**Penn State University, Main Campus, State College, PA*

Designer and Product Researcher for the design of an addition and interior improvements to the Pattee Library, including a courtyard infill, new office spaces, student study rooms, curtain wall detailing, raised flooring and stair detailing, new toilet rooms, movable partition detailing, AV coordination, and new finishes.

**Interior Renovations for Honeywell Robotics, Pittsburgh PA*

Served as project architect for the relocation of equipment and office spaces into a 17,000 sq ft existing office space. The A/E design services included renovations to the main entry space and relocation of work stations and large equipment.

**University of Nebraska-Lincoln, Lincoln NE*

Designer and Product Researcher for the design of interior improvements to the Student Union, including new office spaces, decorative guardrail detailing, and updated finishes.

**University of South Carolina, Columbia SC*

Designer for the conceptual design of a new Student Union, including building form and use, and engagement with surrounding program and public transportation.

**Interior Office Renovation for Bank of America, Bethesda, MD*

Served as project architect for an interior renovation to an existing 5,000 sq ft office space. The A/E design services included the relocation and renovation of office work spaces, break room renovation, and two conference room renovations. Construction cost is estimated at \$400,000.

Jason Woynar, NCIDQ

Senior Interior Designer



Summary of Qualifications:

Highly-skilled Senior Interior Designer with over 20+ years of professional experience in design work that focuses on higher education, hospitality, corporate and government facilities. Extensive knowledge in various project areas including space planning, programming, construction documentation, and furniture specification requirements to deliver a project from conception through completion. Team-oriented designer with project management skills and effective communication/presentation skills.

Education:

B.S. Interior Design, 1999, La Roche University

Registration:

National Council Interior Design Qualifications Certified, 2011

Relevant Project Experience:

Nemacolin Resort Sundial Resort and Adventure Center, Farmington, PA

Interior designer for the 28,000 SF ski lodge and recreational facility. The lodge was conceived and constructed in a mere eight months and serves as the resort's four-season adventure center. Involved in all aspects of the project which included a 150-seat full-service restaurant/bar and lounge supported by outdoor dining terraces, retail shop, equipment rental area, video arcade, 8-lane bowling alley, lockers, restrooms and administrative offices.

Next Tier Connect Pittsburgh East, Monroeville, PA

Project Interior Designer involved in all aspects of the project including the design and renovation of the 5,800 SF conferencing center and management suite. The project included 2,250 SF of conferencing space divisible into three distinct spaces to accommodate various meeting types and furniture configurations. The conference center also incorporated a breakout area for small team meetings & gatherings and a catering kitchen to serve the new conference spaces. The management suite consisted of private and open offices, copy room and 10-person conference room.

Thelma Lovette YMCA, Pittsburgh, PA

Interior Designer for the Thelma Lovette, a cornerstone of Pittsburgh's Hill District's revitalization. The 40,000 SF, \$10,600,000 facility is a full-service YMCA and includes a gymnasium, swimming pool, exercise rooms, indoor track, multipurpose rooms, computer lab, daycare facility, outdoor playground and public plaza. The project received LEED NC Silver.

Community Center, North Fayette Township, PA

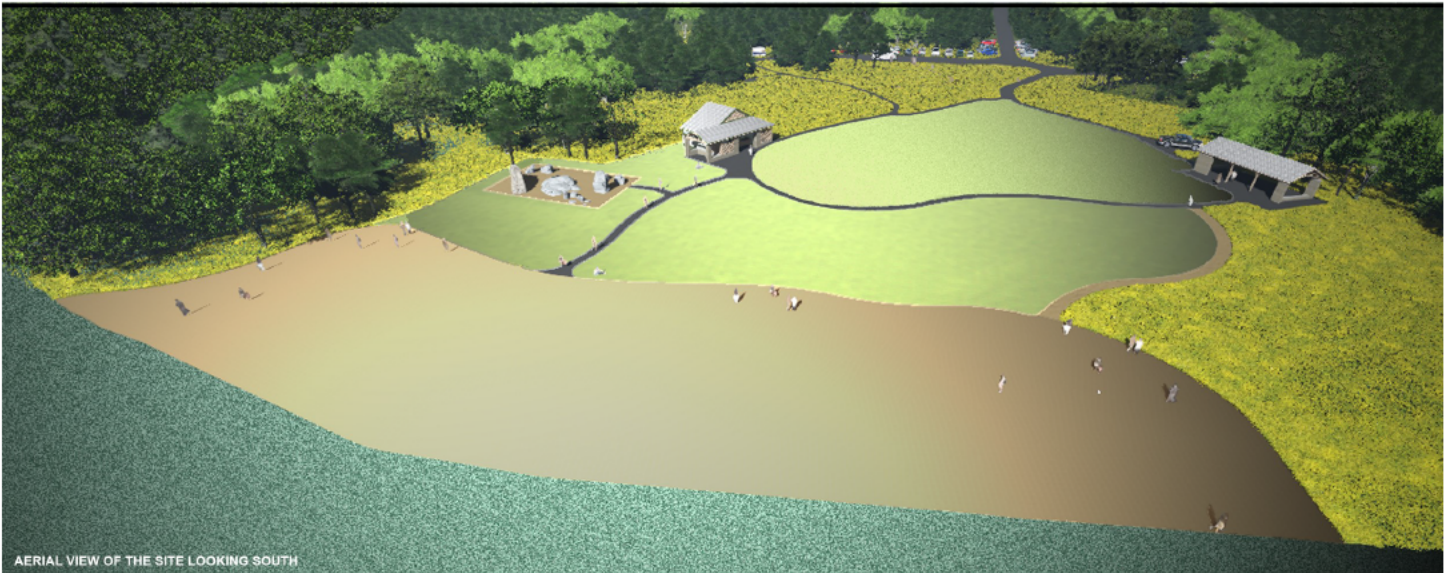
Interior Designer for the 30,000 SF community center, a capstone for North Fayette Township's Donaldson Park Recreation Complex. The project included a basketball court, fitness areas, running track, administrative offices, an outdoor terrace and an upper floor banquet space / conferencing center for 150 persons.

Community College of Beaver County, Monaca PA

Senior Interior designer involved in all aspects of the \$26 M renovation, including interior design, detailing, and specifications of FF&E for 9 buildings.

Butler County Community College—Science, Technology and Cultural Center

Interior Designer responsible for the selection and specifications of finishes and furniture including auditorium seating and stage gear. The Science, Technology and Cultural Center is an award-winning facility by the American Association of School Administrators.



AERIAL VIEW OF THE SITE LOOKING SOUTH

YELLOW CREEK STATE PARK BEACH REHABILITATION PROJECT

BRUSH TOWNSHIP, PENNSYLVANIA

DRS was hired by the PA Department of Conservation and Natural Resources to complete an extensive renovation of the recreational beach at YCSP. Working with Klavon Design Associates, reconfiguration of the lakeside area including the sand beach from below the low-tide waterline and a central landscape of native grasses and pedestrian paths bounded by renovated parking areas and existing woodlands. New structures designed and built included restroom facilities, an event pavilion and two play areas for children of different age groups.

SERVICES PROVIDED

Architectural Design
Project Management
Construction Administration





NEMACOLIN WOODLANDS RESORT & SPA - SUNDIAL LODGE

FARMINGTON, PENNSYLVANIA

DRS designed the 28,000 SF Sundial Lodge at Nemacolin Resort and Spa. The project began as the design of a ski lodge, but the project goals changed, and it became the design of a four-season center for resort outdoor activities, including a full-service restaurant. The timeline, however, remained the same. The Lodge was conceived, constructed, and occupied in less than eight months and was completed within

SERVICES PROVIDED

Architectural Design
Project Management
Construction Administration

SIZE

28,000 SF

CONSTRUCTION COST

Withheld by Owner

REFERENCE

Trey Matheu
Managing Director
Nemacolin Woodlands Resort
Route 40, P. O. Box 188
Village of Farmington, PA 15437
(724) 329-8555



The architectural design approach was to create a functional space that felt like an extension of the outdoors and mountainous environment. The facility features massive, custom-designed, Douglas fir “tree columns” and a matching exposed timber roof. This structural solution affords visitors a postcard-perfect panorama of the surrounding landscape from the top of Nemacolin’s famous Mystic Mountain.



NEMACOLIN WOODLANDS RESORT & SPA - PARADISE POOL RENOVATION

FARMINGTON, PENNSYLVANIA

In 2015, Nemacolin asked DRS to help improve the crowded conditions at their most popular summertime attraction, The Paradise Pool. The solution was the addition of a smaller lap pool, spa, and pavilion carved into a neighboring woodland terrace and overlooked by the larger pool eight feet above.

The new features, catering to adults, include a state-of-the-art spa / firepit, satellite bar, and restaurant servery for poolside refreshment and exclusive events. Beautifully integrated within the mature native landscape, the new pool features provide a more intimate resort experience and alternative to the more active, family-oriented Paradise Pool amenities.



The project has proven to be an immediate success and has become a most popular nighttime attraction at the Resort.

SERVICES PROVIDED

Architectural Design
Project Management
Construction Administration

SIZE

1,600 SF Pavilion
25' x 50' Pool

CONSTRUCTION COST

Withheld by Owner

REFERENCE

Trey Matheu
Managing Director
Nemacolin Woodlands Resort
Route 40, P. O. Box 188
Village of Farmington, PA 15437
(724) 329-8555



OGLEBAY PARK AND RESORT, WILSON LODGE GUESTROOM ADDITION

WHEELING, WEST VIRGINIA

This four-story, 46,000 SF addition was the first new guestroom wing at Oglebay in 25 years. The addition provided 53 luxury rooms and increased the total Wilson Lodge inventory to 265 rooms.

The new addition connects to the Lodge via a bridge to the Byrd Wing, and sits high above the sloping hillside with dramatic views of Schenk Lake and the surrounding park and countryside. Two thirds of the new rooms orient to this view, with the rest of the rooms looking onto a landscaped courtyard between the addition and the Byrd Wing, formerly a parking lot. In addition to guestrooms, the project had a small porte-cochere, lobby, and expanded call center that processes all the guest reservations for the resort. Building materials were chosen to blend with the existing Lodge, particularly the field stone and wood siding.

All the new guestrooms were designed with minibars, exterior balconies or patios at grade, and large 5-fixture bathrooms with two sinks, separate glass-enclosed showers, and bathtubs. All the king guestrooms feature gas fireplaces. The room mix is 36 Double Queens, 8 Kings, 4 ADA accessible and 5 suites.

SERVICES PROVIDED

Architectural Design
Project Management
Construction Administration

SIZE

46,000 SF

CONSTRUCTION COST

\$8,720,000



Allegheny
Design Services
Consulting Engineers



102 LEEWAY STREET MORGANTOWN, WV 26505
PHONE: (304) 599-0771—WWW.ALLEGHENYDESIGN.COM

CONSULTING ENGINEERING FIRM SPECIALIZING IN STRUCTURAL & MEP DESIGN AND BUILDING DESIGN

RECREATIONAL—WV STATE PARKS—LODGES—RESORTS



Boy Scouts of America Welcome Center



Fork in the Road Diner & Eagle's Nest Lodge



Fork in the Road Diner & Eagle's Nest Lodge



Hazel Ruby McQuain Park Amphitheater, , Kayak & Bike Rental Facility, Site Walls and Stair Design & Dock Foundation

Welcome to Allegheny Design Services

Allegheny Design Services is a consulting engineering firm specializing in Structural & MEP building design and analysis. Dedicated to serving West Virginia and the surrounding region, ADS recognizes the need for reliable and full service engineering service for our clients. ADS provides all phases necessary to successfully complete a building project including: schematic design, design development, construction documents and specifications, and construction administration. Our straightforward approach provides our clients with efficient and creative solutions to their project.

Specialties—

Structural Engineering

Mechanical Engineering

Electrical, and Plumbing Engineering

Building Information Modeling

System Engineering



Cacapon Resort State Park Addition & Renovations



Canaan Valley Resort State Park



Hawk's Nest State Park CCC Museum & Shelter Restoration

Education:

West Virginia Institute of Technology - B.S. Civil Engineering
West Virginia University - Masters Business Administration
West Virginia State College - Architectural Technology Courses



Professional Registrations:

Year first registered: 1984
West Virginia, Pennsylvania, Maryland, Virginia, Florida, District of Columbia, New York, New Jersey, North Carolina, South Carolina, Georgia, Ohio, Structural Engineering Certification Board and National Council of Examiners for Engineering and Surveying

Professional Memberships:

American Society of Civil Engineers, Structural Engineering Institute, Charter Member, American Concrete Institute, American Institute of Architects – West Virginia Chapter, American Institute of Steel Construction, Inc., American Iron and Steel Institute Member, National Academy of Forensic Engineers

Professional Experience:

Responsible for strategic management, marketing, quality control, personnel development, business development, project management and design at Allegheny Design Services. Experience includes over 32 years in structural design and project management for industrial, commercial, institutional, and nuclear/chemical facilities utilizing steel, concrete, masonry, and wood. Past accomplishments include design and construction administration of health care facilities, hotels, schools, shopping centers, aircraft hangars, numerous retail facilities, and numerous forensic engineering assignments. Experience has been obtained from the following assignments:

Project Experience Includes:

Nemacolin Woodlands Sundial Lodge, Farmington, PA:

- Structural Engineer-of-Record
- New 25,000 Sq. Ft. Multi-Purpose Ski Lodge, Restaurant, Bowling Alley
- \$3 million Renovation, Completed in 2013

Hawk's Nest State Park Civilian Conservation Corp Museum & Shelter Restoration, Ansted, WV:

- Structural Engineer-of-Record
- \$Approx. 1.9 million, Completed in 2021

Cacapon Resort State Park Lodge Addition and Renovations, Berkeley Springs, WV:

- Structural Engineer-of-Record
- \$22 million, Completed 2021

Canaan Valley Resort State Park, David, WV:

- Structural Engineer-of-Record
- (2) New Guest Wings (162 Rooms), and Extensive Renovations of the Main Lodge
- 102,534 SF (Addition); 64,993 SF (Renovation); Design-Bid-Build
- \$25 million, completed in 2013

J. W. and Hazel Ruby West Virginia Boy Scout Welcome Center, Mt. Hope, WV:

- Structural Engineer-of Record
- 11,000 Sq. Ft. Timber Frame / Stone Steel Frame Welcome Center
- Winner of the 2020 AIA Awards for Excellence in Architectural Awards, New Construction
- \$17 million completed in 2017

Education:

West Virginia University - B.S. Civil Engineering

Professional Registrations:

Professional Engineer – West Virginia, Pennsylvania, Maryland, Kentucky, Nebraska, Mississippi and Alabama

Professional Memberships:

Member of AISC

Associate Member of ASCE



Continuing Education:

WVU Steel Design—Fall 2007

AISC - Façade Attachments to Steel Frames - September 20, 2007

ASCE - Reinforced Masonry: Design and Construction - November 8, 2007

TSN - Cold-Formed Steel Seminar – Load Bearing and Curtain Wall Systems - December 4, 2008

Lincoln Electric Co. - Blodgett's Welding Design Seminar - October 13-16, 2009

Steel Camp – November 4-5, 2010

The New 14th Edition Steel Manual – October 25, 2011

ASCE-Design and Renovation of Wood Structures - October 2012

SE University multiple structural technical training webinars.

The MGI Management Institute—Successful Marketing of Engineering Services 2015

Steel Camp—March 25-28, 2015

Professional Experience:

Responsibilities include structural engineering design, construction documents, quality control and field engineering.

Experience Record:

Allegheny Design Services, LLC, Vice President / Principal

June 2007 to Present

Project Experience Includes:

Boy Scouts of America—Gene H. Yamagata Lodge, Glen Jean, WV:

- Senior Structural Engineer
- Approximately 24,770 SF Lodge Addition
- \$7 Million, Completion 2020

Hazel Ruby McQuain Park Amphitheater & Kayak & Bike Facility, Morgantown, WV:

- Structural Engineer
- Completed Spring 2020

Canaan Valley Institute (CVI) Headquarters / Educational Facility, Davis, WV

- Structural Engineer
- Design-Build
- \$6.5 Million, Completion 2009

WVU Milan Puskar Stadium Renovations, Morgantown, WV:

- Senior Structural Engineer
- North End Improvements including new concessions, restrooms, ADA access, plaza and media access
- \$40 Million, Completed 2017

OCDA Sports Complex, The Highlands, Triadelphia, WV

- Senior Structural Engineer
- New Outdoor and Enclosed Sports Facility Complex, consisting of two 116,400 total SF PEMB
- \$30 Million, Completed 2019



GARY M. (MIKE) CHANCEY, P.E., LEED AP
MEP DEPARTMENT MANAGER
102 LEEWAY STREET, MORGANTOWN, WV

Education:

West Virginia Institute of Technology - B.S. Electrical Engineering

Professional Registrations:

Professional Engineer, West Virginia, Ohio, Pennsylvania,
Maryland and Virginia
LEED Accredited Professional

Professional Memberships:

National Society of Professional Engineers
West Virginia Society of Professional Engineers
American Institute of Architects - WV Chapter



Continuing Education:

2019 Commercial Buildings Energy Code Workshop - ASHRAE 90.1 - 2010
2018 LightFair International, Chicago, IL

Professional Experience:

Responsible for project management and electrical design at Allegheny Design Services. Experience includes over 30 years in electrical design and project management for industrial, commercial, residential, institutional, educational, and recreational facilities. Building system design includes lighting, site lighting, power distribution, communications, surveillance, access control, and fire protection. Past accomplishments include design and construction administration of health care, schools, municipal, sports, commercial and retail facilities.

Experience Record:

Allegheny Design Services, LLC, MEP Project Manager	June 2009 - Present
MSES Consultants, Project Electrical Engineer	August 1990 - June 2009
Triad Engineering Consultants, Staff Electrical Engineer	May 1988 - August 1990
Duke Power, Design Engineer	August 1985 - May 1988

Project Experience Includes:

Experience includes estimating, design, project management, coordination, and project engineering for construction projects:

East Marion Pool Renovations, Fairmont, WV

- Electrical Engineer-of-Record
- MEP design includes new kitchen, dining, locker rooms, and restrooms.
- \$1.6 million Renovation, Completed in 2018

Doddridge County Athletic Center

- Electrical Engineer-of-Record
- A 2-story, 16,000 SF Fieldhouse and Office Building consisting, and 9,800 SF Student Athletic Building consisting of Offices, Locker Rooms, Restrooms, and open Practice Space.
- \$3.5 million, Completed in 2018

WVU Wrestling Locker Room renovation, Morgantown, WV

- Electrical Engineer-of-Record
- WVU wrestling team locker room, shower, and restroom renovations at WVU Natatorium Building.
- \$150,000.00 Renovation, Completed in 2017

WVU Percival Hall Chiller & Cooling Tower Replacement, Morgantown, WV

- Electrical Engineer-of-Record
- Replace existing chillers with (2) 300-ton absorption chillers and cooling tower.
- \$600,000.00 Renovation, Completed in 2010

Clarksburg Aquatic Center, Clarksburg, WV

- Electrical Engineer-of-Record
- \$3 million, Completed in 2012



DAVID A. COTTON, P.E., LEED AP BD+C
SENIOR MECHANICAL ENGINEER
PROJECT MANAGER

Education:

West Virginia Institute of Technology – B.S. Mechanical Engineering

Professional Registrations:

Professional Engineer, West Virginia, Pennsylvania, Ohio, Maryland and Virginia.

LEED AP BD+C Professional Accreditation

NCEES Record Certificate

Professional Memberships:

American Society of Heating, Refrigerating and Air-Conditioning Engineers

- Secretary Mountaineer Chapter
- Student Activities Chair West Virginia Chapter
- Government Activities Chair West Virginia Chapter

U.S Green Building Council

National Fire Protection Association

- Architects Engineers and Building Officials Chapter Member



Professional Experience:

Responsible for HVAC & plumbing design at Allegheny Design Services. Experience includes mechanical design and project management for industrial, commercial, institutional, education, and recreational facilities. Building system designs include packaged gas heating / dx cooling, split systems, VRF Systems, air distribution systems, boiler & chiller systems, VAV & VVT zone control, indoor air quality ventilation and server room cooling. Plumbing systems include sanitary, domestic water, fuel gas, and storm drainage. Implemented sustainable building design concepts, and provided construction administration to achieve LEED certification for new construction projects.

Experience Record:

Allegheny Design Services, LLC, Senior Mechanical Engineer

June 2009 - Present

March-Westin Company, Project Manager

August 2006 - June 2009

Contracting Engineering Consultants, Detailer

May 2006 - August 2006

Special Metals, Corrosion Lab Technician

May 2005 - January 2006

Oasis Landscaping, Landscaper

May 2004 - September 2004

GC Services, Account Representative/Team Leader

May 2002 - October 2003

Project Experience Includes:

East Marion Pool Renovations, Fairmont, WV

- Mechanical Engineer-of-Record
- MEP design includes new kitchen, dining, locker rooms, and restrooms.
- \$1.6 million Renovation, Completed in 2018

Doddridge County Athletic Center

- Mechanical Engineer-of-Record
- A 2-story, 16,000 SF Fieldhouse and Office Building consisting, and 9,800 SF Student Athletic Building consisting of Offices, Locker Rooms, Restrooms, and open Practice Space.
- \$3.5 million, Completed in 2018

WVU Wrestling Locker Room renovation, Morgantown, WV

- Mechanical Engineer-of-Record
- WVU wrestling team locker room, shower, and restroom renovations at WVU Natatorium Building.
- \$150,000.00 Renovation, Completed in 2017

WVU Percival Hall Chiller & Cooling Tower Replacement, Morgantown, WV

- Mechanical Engineer-of-Record
- Replace existing chillers with (2) 300-ton absorption chillers and cooling tower.
- \$600,000.00 Renovation, Completed in 2010

Clarksburg Aquatic Center, Clarksburg, WV

- Plumbing Engineer-of-Record
- \$3 million, Completed in 2012



ALEXANDER (ALEX) L. CLARKSON, P.E.
ASSOCIATE ENGINEER
102 LEEWAY STREET, MORGANTOWN, WV

Education:

West Virginia University - Morgantown, WV - B.S. Mechanical Engineering

Professional Registrations:

Professional Engineer, West Virginia
West Virginia Journeyman Electrician

Professional Memberships:

ASHRAE West Virginia Student Chapter
* President for Spring 2015 semester
* Treasurer for Fall 2014 semester



Continuing Education:

2019 - Complying with ASHRAE Standard 90.1 - 2010

Professional Experience:

Responsible for electrical design for industrial, commercial, institutional, educational, and recreational facilities. Building system design includes lighting, site lighting, power distribution, communications, surveillance, access control, and fire protection. Experiences include mechanical and plumbing system design.

Experience Record:

Allegheny Design Services, LLC, Associate Engineer	November 2020 - Present
Allegheny Design Services, LLC, Staff Engineer	January 2020 – October 2020
Allegheny Design Services, LLC, Jr. Mechanical Engineer	June 2015 - January 2020
Allegheny Design Services, LLC, Engineering Intern	March 2015 - May 2015
Miller Engineering, MEP Engineering Intern	May 2014 - March 2015

Project Experience Includes:

Experience includes design, coordination, construction administration, and project engineer for projects:

East Marion Pool Renovations, Fairmont, WV

- Assisted in Electrical Design of Kitchen, Dining, and Restrooms.
- \$1.6 million Renovation, Completed in 2018

Doddridge County Athletic Center, West Union, WV

- Assisted in Electrical Design of 2-story, 16,000 SF Fieldhouse and Office Building, and 9,800 SF Student Athletic Building consisting of Offices, Locker Rooms, Restrooms, and open Practice Space
- \$3.5 million, Completed in 2018

WVU Locker Room Renovation, Morgantown, WV

- Assisted in Electrical Design of WVU Wrestling Team Locker Room, Shower, and Restroom Renovations at WVU Natatorium Building
- \$150,000 Renovation, Completed in 2017

Beckley Police Department Building, Beckley, WV

- Assisted in Electrical Design of 2-story, 25,000 SF Police Station consisting of Holding Cells, Interview Rooms, Evidence, Offices, Training, Wellness Room, Mat Room, Kitchen, Restrooms, and Locker Rooms
- \$5 million, Completed in 2018

Boy Scouts of America Rex W. Tillerson Leadership Center, Glen Jean, WV

- Assisted in Electrical Design of 15,000 SF Visitor's Center with Lecture Hall, Classrooms, Lobby, and Restrooms
- \$4 million, Completed in 2019

Dominion Energy Transmission Office, West Delmont, PA

- Assisted in Electrical Design of 2-story, 18,000 SF LEED Silver Office Building
- \$5 million, Completed in 2018



Allegheny
Design Services
Consulting Engineers

PROJECT PROFILE

Nemacolin Woodlands Sundial Lodge Farmington, PA



PROJECT ARCHITECT:
STRUCTURAL ENGINEER:
CONTRACTOR:

DRS Architects, Pittsburgh, PA
Allegheny Design Services, LLC, Morgantown, WV
Martik Brothers, Inc., Finleyville, PA

PROJECT SCOPE:

- 25,000 Sq. Ft. Multi-Purpose Ski Lodge
- Restaurant
- Bowling Alley

PROJECT VALUE: \$3 Million

PROJECT COMPLETION: 2013

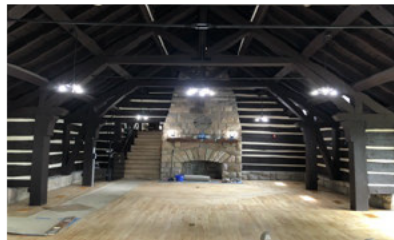




Allegheny
Design Services
Consulting Engineers

PROJECT PROFILE

Hawk's Nest State Park Civilian Conservation Corps Museum & Shelter Restoration Ansted, WV



PROGRESS PHOTOS: The windows have been restored and replaced at the Hawks Nest CCC Museum in Ansted, WV.
Photos /Courtesy of the Mills Group, LLC, Morgantown, WV

STRUCTURAL ENGINEERS:
CONTRACTOR:

Allegheny Design Services, LLC, Morgantown, WV
Danhill Construction Company, Gauley Bridge, WV

PROJECT SCOPE:

- Hawk's Nest State Park CCC Museum and Shelter Renovation at Ansted.

PROJECT VALUE:

Approx. \$1.9 Million

PROJECT COMPLETION:

2021

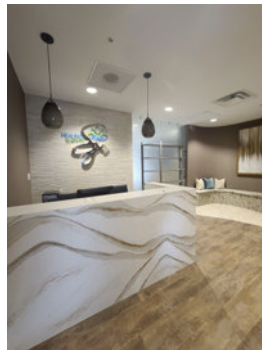




Allegheny
Design Services
Consulting Engineers

PROJECT PROFILE

Cacapon Resort State Park Lodge Addition and Renovations Berkeley Springs, WV



STRUCTURAL ENGINEER:
CONTRACTOR:

Allegheny Design Services, LLC, Morgantown, WV
Paramount Builders, Inc., St. Albans, WV

PROJECT SCOPE:

Located in the eastern panhandle of West Virginia, Cacapon Resort State Park is available for both family vacations and business retreats, offering access to golf, lake, and camping activities. The facility functions as the main lodging and meeting center of the resort and offers a mix of hotel rooms and suites, and a conference center. The new addition provides an additional 79 guest rooms, swimming pools, new dining facilities and commercial kitchen, and a spa and fitness area. Additional renovations to the resort includes golf course upgrades, as well as water and wastewater treatment upgrades. This is a Design-Bid-Build Project.

PROJECT VALUE: \$22 Million

PROJECT COMPLETION: 2021





Allegheny
Design Services
Consulting Engineers

PROJECT PROFILE

Canaan Valley Resort State Park Davis, WV



STRUCTURAL ENGINEER:
CONTRACTOR:

Allegheny Design Services, LLC, Morgantown, WV
Harbel, Inc., Cumberland, MD

PROJECT SCOPE:

- Construction of Two Brand New Guest Wings (162 Rooms)
- Extensive Renovations of the Main Lodge
- 102,534 SF (Addition); 64,993 SF (Renovation); Design-Bid-Build

PROJECT VALUE: \$25 Million

PROJECT COMPLETION: Fall 2013





Allegheny
Design Services
Consulting Engineers

PROJECT PROFILE

J. W. and Hazel Ruby West Virginia Boy Scout Welcome Center Mt. Hope, WV



AIA
West Virginia

2020

Excellence in Architecture
Design Awards

Scouting
LEAD • INSPIRE • EXPLORE



STRUCTURAL ENGINEER:
CONTRACTOR:

Allegheny Design Services, LLC, Morgantown, WV
DCI / Shires, Inc., Bluefield, WV

PROJECT SCOPE:

- Winner of the 2020 AIA Awards for Excellence in Architectural Awards , New Construction
- 11,000 Sq. Ft. Timber Frame / Stone Steel Frame Welcome Center
- 4 Stand Alone Rest Room Buildings
- Inside, the building includes seating areas, retail and exhibit space, a climbing wall and restroom facilities accessible from both inside and outside. The site provide parking for more than 12,000 vehicles.

PROJECT VALUE: \$ 17 Million

PROJECT COMPLETION: 2017





Allegheny
Design Services
Consulting Engineers

PROJECT PROFILE

Hazel Ruby McQuain Park Amphitheater Site Walls and Stair Design & Dock Foundation Hazel Ruby McQuain Park



PROJECT ARCHITECT:
STRUCTURAL & MEP ENGINEERS:
CONTRACTOR:

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

PROJECT SCOPE:

- Design of the Steel Amphitheater
- Design of Concrete site Retaining Walls and Site Stairs for both the Walnut Street Landing and the Amphitheater.
- Design of Ramp, Site Retaining Walls & Site Stairs at the Walnut Street location
- Design of Site Retaining Walls, Seating and Site Stairs at the Amphitheater.

PROJECT COMPLETION: Spring 2020

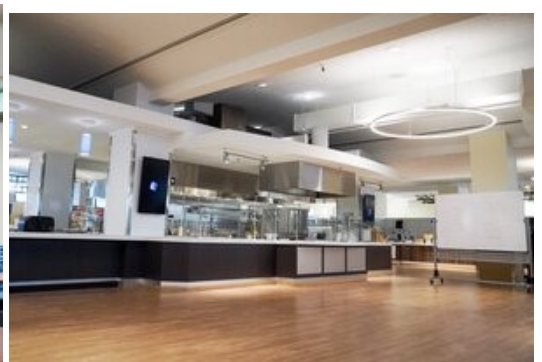




Allegheny
Design Services
Consulting Engineers

PROJECT PROFILE

Evansdale Towers Food Service Renovations Morgantown, WV



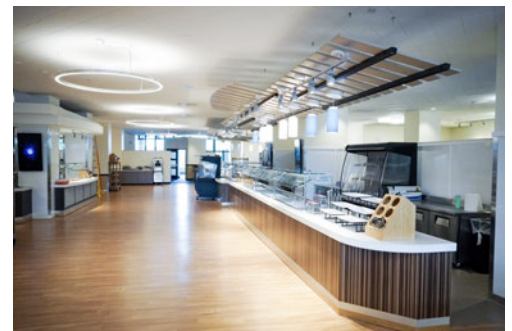
MEP & STRUCTURAL ENGINEERS: Allegheny Design Services, LLC, Morgantown, WV
CONTRACTOR: Sodexo Construction, Inc., Gaithersburg, Maryland

PROJECT SCOPE:

- A 13,470 SF Kitchen and Dining renovation of existing Towers Dining Hall located on the Evansdale Campus of West Virginia University.

PROJECT VALUE: 1.5 Million

PROJECT COMPLETION: 2019





Allegheny
Design Services
Consulting Engineers

PROJECT PROFILE

Mountainlair Hatfield's Dining Renovations Morgantown, WV



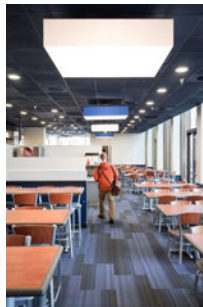
MEP & STRUCTURAL ENGINEERS: Allegheny Design Services, LLC, Morgantown, WV
CONTRACTOR: Sodexo Construction, Inc., Gaithersburg, Maryland

PROJECT SCOPE:

- The renovation involved a total area of approximately 9,700 square feet.
- The space was transitioned from retail to a residential dining hall and included complete renovation of the serving and seating areas and included expansion of dining concepts with several new action stations.
- The space was expanded to increase the seating capacity by approximately 15 percent.
- A new dish return accumulator and dishwashing area was provided within the space to eliminate the need to transport dishware to the basement level for washing.
- The project was completed within a 3-month construction schedule and below budget.

PROJECT VALUE: 1.5 Million

PROJECT COMPLETION: 2019



**Paul Walker, AIA, President
Paradigm Architecture, Inc.
2223 Cheat Road, Suite 300
Morgantown, WV 26508
(304)284-5015**

**Richard T. Forren, AIA, NCARB, Senior Principal
The Omni Associates - Architects
1543 Fairmont Avenue, Suite 201
Fairmont, WV 26554
(304)367-1417**

**April Messerly
West Virginia University
Associate Athletic Director/Facilities & Operations
PO Box 0877
Morgantown, WV 26507
304-293-3056**

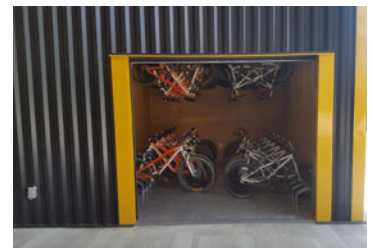


Allegheny
Design Services
Consulting Engineers

PROJECT PROFILE

Harvey Family Mountain Bike Shop Glen Jean, WV

AIA West Virginia AWARD WINNER



STRUCTURAL ENGINEER:
CONTRACTOR:

Allegheny Design Services, LLC, Morgantown, WV
Ayers Construction Co., Beckley, WV

PROJECT SCOPE:

- Design for a new Bike Shop and Approach Ramp located at the Summit Bechtel Reserve.

PROJECT VALUE:

N/A

PROJECT COMPLETION:

2017



Timothy H. Kinder, PLS, CFM – Director of Survey, Director of Operations WV



EDUCATION

Associate of Science, Land Surveying, Glenville State College
Regents Bachelor of Art, Marshall University

PROFESSIONAL EXPERIENCE

Mr. Kinder oversees all survey projects and leads all operations out of Stahl Sheaffer's West Virginia locations. Mr. Kinder is responsible for driving project schedules, managing project budgets, leading client/sub-consultant coordination, and overseeing the technical design and survey of project teams. He is responsible for performing reviews of all survey projects, directing staff surveyors and technicians, and managing client communication and project progress. Mr. Kinder has over 27 years of experience in boundary and topographical surveying, subdivision and land development planning, oil and gas upstream and midstream development planning, and construction survey layout. Mr. Kinder is a certified Floodplain Manager and Professional Land Surveyor in West Virginia, Rhode Island, and Connecticut.

REPRESENTATIVE PROJECTS

- **Club Julian Parking Lot Expansion, Allegheny County, PA** – Survey Project Manager for the topographic survey of the Club Julian Fitness building and parking lot for proposed renovations and parking lot expansion.
- **Waterdam Church Parking Lot Expansion Project, McMurry, PA** – Project Manager for the topographic survey of the Waterdam Church building and parking lot for proposed parking lot expansion.
- **State of West Virginia Capitol Building, Charleston, WV** – Project Manager for the 3D scan and modeling of the state capitol dome for the preparation of drawing plans for the use during architectural renovations.
- **Lots 10, 11 and 12 Village at Sleepy Hollow, Morgantown, WV** – Project Manager for the 3D House Scan (exterior), Topographic Survey and Property Boundary Survey for a residential property.
- **Washington Street Streetscape Project, Charleston, WV** – Project Surveyor for streetscape project which included decorative street lighting, brick paver sidewalks, and amenities including decorative signage. Mr. Kinder assisted in survey base mapping, horizontal and vertical control establishment, and utility verification.
- **I-64 Merritt's Creek Interchange, WVDOH, Barboursville, WV** – Survey Project Manager for an interstate widening and upgrade design for I-64. Mobile LiDAR was used to map 3.3 miles of roadway plus ramps and side roads, document underground utilities and produce 3D scans for two bridges. Stahl Sheaffer also conducted supplemental topographical surveying and provided deed and utility research, post construction monumentation, and settlement survey. The total roadway scanned was 16.1 miles including ramps and side roads.
- **Greenbag Road Improvements, WVDOH, Morgantown, WV** – Survey Project Manager for widening and intersection improvements along 1.1 miles of Greenbag Road, including 3D LiDAR scanning, design, right-of-way development, public involvement, and all required environmental work needed for construction.

- **Beechurst Avenue PIE Study, WVDOH, Morgantown, WV** – Survey Project Manager for survey, mobile LiDAR, survey control, deed research and plotting, landowner questionnaires, and right of entry.
- **Confidential Natural Gas Transmission Client, Various Counties, WV** – Survey Manager for 3D survey and base mapping of approximately 150 miles of rural roads spread across 10 counties in West Virginia. Mr. Kinder was responsible for the oversight and scheduling of the survey crew and technicians for providing topographic mapping, certified plat creation for new right of way, and easement acquisitions.
- **Route 60 Repaving/Reconstruction Project, Kanawha County, WV** – Project Surveyor for a 2.5-mile repaving/reconstruction project. Mr. Kinder was responsible for construction layout and calculations for portions of Route 60 that were reconstructed due to traffic volumes, drainage problems, etc.
- **Route 34 Repaving/Reconstruction Project, Putnam County, WV** – Project Surveyor for a 1.2-mile repaving/reconstruction project. Responsible for construction layout and calculations for portions of Route 34 that were reconstructed due to traffic volumes.
- **Laser Scanning for Building Conversion, Boas Street, Harrisburg, PA** – Stahl Sheaffer provided laser scanning to convert a former church into a multi-family residential dwelling in Harrisburg, PA. As a subconsultant to a local architect, Stahl Sheaffer used a FARO Focus 330X HDR phase-based laser scanner to acquire high-resolution 3D point cloud and 360-degree imagery of the interior and exterior of the existing 7,658-SF historic building at 260 Boas Street in Harrisburg, PA. Interior scanning included all three levels, including all rooms, closets, and hallways. Exterior scanning encompassed as much of the exterior of the building as possible including windows, doors, and protrusions. Stahl Sheaffer processed and registered the scans into a single high-resolution colorized point cloud to document the interior and exterior of the building, which will be used for 3D modeling and plan generation.
- **Robert Quature, Washington County, PA** – Served as Project Manager for a land development project consisting of a full site topographical survey and development feasibility study for a proposed “mini storage” complex.
- **Club Julian Parking Lot Expansion, Allegheny County, PA** – Survey Project Manager for the topographic survey of the Club Julian Fitness building and parking lot for proposed renovations and parking lot expansion.
- **Waterdam Church Parking Lot Expansion Project, McMurry, PA** – Project Manager for the topographic survey of the Waterdam Church building and parking lot for proposed parking lot expansion.

CREDENTIALS

- Professional Surveyor:
 - State of West Virginia License [REDACTED]
 - State of Rhode Island and Providence Plantations License [REDACTED]
 - State of Connecticut License [REDACTED]
 - Commonwealth of Kentucky License [REDACTED]
 - Commonwealth of Massachusetts License [REDACTED]
- Certified Floodplain Manager License [REDACTED]
- Association of Floodplain Managers (ASFM), Member
- West Virginia Society of Professional Surveyors, Member
- Pennsylvania Society of Land Surveyors, Member
- National Society of Professional Surveyors (NSPS), Member
- American Association of Drilling Engineers, Member

Mark J. Haefner, P.E. – Senior Project Manager, Land Development



EDUCATION

Bachelor of Science, Civil Engineering, West Virginia University

PROFESSIONAL EXPERIENCE

Mr. Haefner is responsible for the supervision, management and implementation of Stahl Sheaffer's land development projects. He has 25 years of experience, with extensive expertise in site evaluation and layout, utility design, erosion and sedimentation control plans, permitting, feasibility studies, stormwater management design, and drainage design. Mr. Haefner is also responsible for the coordination of projects through government and planning commission review processes, conducting Quality Assurance/Quality Control (QA/QC) reviews, project administration, review and approval of shop drawings, and peer review. Additionally, he has 15 years of experience serving as a municipal engineer, performing duties such as the review of subdivision and land development plans, providing consultation, and preparing reports for municipal projects. Project experience includes commercial, residential, retail, education, healthcare, corporate, industrial, institutional, recreation, government, and civic facilities. A few project examples follow:

- **Millbrook Marsh Nature Center Site Engineering, Centre County, PA** – Project manager responsible for civil engineering services for the 12-acre Millbrook Marsh Nature Center. Completed schematic site plan and required documentation for a zoning variance application to the Township for the Welcome Center project, which required updated surveying to complete a site and utility plan for a proposed hike/bike pedestrian path, and utility connections for the continued development of the Nature Center. Previous work completed for this facility included the construction of a parking lot, access drives, and related stormwater, zoning, and subdivision and land development ordinances. A DEP NPDES permit and an Erosion & Sedimentation Control plan were also required. Stahl Sheaffer also provided construction administration services.
- **Wheeling Park High School, Wheeling, WV** – Site civil engineer responsible for the design of site improvements associated with a security vestibule addition to the main entrance and additions to the wrestling and art storage rooms. Site improvements included new concrete stairs and ADA access to the main entrance addition, ADA parking, and stormwater conveyance design to collect and convey runoff from the additions to the existing on-site conveyance facilities.
- **Woodsdale Elementary School, Wheeling, WV** – Site civil engineer responsible for the design of site improvements associated with a security vestibule addition to the main entrance, an addition to the cafeteria, and the bus drop-off area. Site improvement included ADA improvements to both the main entrance and the cafeteria addition, additional vehicle parking and access improvement to the bus drop-off / pick-up loop.
- **Gore Elementary School Renovation, Harrison County, WV** – Site civil engineer responsible for the design of site improvements associated with a security vestibule addition to the main entrance, a two-story classroom addition, and renovation to the interior of the facility. Site improvement included concrete walks to provide access to the building addition, stormwater conveyance facilities, a new water service for both domestic and fire, new sanitary sewer services laterals to accommodate the classroom addition, additional restroom facilities and renovation to the cafeteria.

- **Lebanon VA Medical Center, Lebanon County, PA** – Civil Engineer for the site and civil engineering for the design and permitting of the new 16,000 SF behavioral health and primary care building. Site survey has been completed, and this project is currently in progress.
- **Warriors Mark Township Engineer, Huntingdon County, PA** – Responsible for the review of all plan submissions for conformance with subdivision and land development, stormwater management and floodplain ordinances, including coordination with other Township staff (Solicitor, Secretary, Zoning Officer, Sewage Enforcement Officer, etc.) and county, state, and local regulatory agencies. Also responsible for inspection and acceptance of public improvements including stormwater management facilities and public streets.
- **Penn State Beaver Stadium Elevator / Lobby Addition, University Park, PA** – Project Engineer for site design, municipal coordination, and permitting for an elevator / lobby addition to Beaver stadium and new EMS parking lot. Project included site layout and grading, design of stormwater collection and conveyance facilities, erosion control plans, and construction administration. *This project has not yet gone to construction as client put the project on hold.*
- **Pine Hall Development, Centre County, PA** – Responsibilities included master planning for a 160-acre traditional town development, including residential, commercial, and office components. Master planning efforts have included survey, stormwater management assessment, roadway design, sanitary sewer design, utility coordination, and municipal coordination.
- **Restek Corporate Campus Distribution Center, Manufacturing Building, and Fitness Center, Centre County, PA** – Project included site design services for manufacturing building, distribution center, and fitness center on the 22-acre Restek Corporate Campus in the Penn Eagle Industrial Park. Infrastructure included site design, additional parking, utility extensions, etc. Site related service include grading, stormwater management, landscape, lighting, utility coordination, erosion and sediment control, permit applications, and approval coordination.
- **The Oaks at Pleasant Gap, Pleasant Gap, PA** – Project Manager. Managed site engineering for a new 5,600 SF community center and 28 age restricted cottages, including the extension of the internal road network to access the cottage on the campus of Allegheny Lutheran Social Ministries – The Oaks at Pleasant Gap. Site-related engineering services included, stormwater management design, roadway design, sanitary sewer design, utility coordination, regulatory permitting, and municipal coordination.
- **Fulton County Medical Center, McConnellsburg, PA** – Project Manager. Managed master planning for the expansion of the medical center campus and site engineering for Phase 1 – the Center for Advanced Medicine. Phase 1 included a 69,500 SF, two-story medical office building, relocation of the main access to the hospital, a new patient drop-off, a pharmacy drive-thru, additional site parking, and relocation of the helipad. Site design services included site layout and grading, stormwater management, landscape, lighting, utility coordination, erosion and sediment control, permit applications, and approval coordination. Est. Construction Cost: \$20 million.

CREDENTIALS

- Professional Engineer (P.E.): PA [REDACTED] 2003, WV [REDACTED] 2018
- American Society of Civil Engineers

- **Owner:**
Centre Region Parks & Recreation
- **Services:**
 - Site Design
 - Stormwater Analysis
 - Sanitary Service
 - Grading
 - Traffic Impacts
- **Size:**
51 Acres
- **Total Project Cost:**
\$2.2 Million
- **Year Completed:**
2017

Oak Hall Regional Park Site Design



Centre Region Parks & Recreation Authority, Centre County, PA

Stahl Sheaffer Engineering provided the land development for the creation of a master plan for Oak Hall Park, a new regional park in State College. Park facilities include four diamond fields, a restroom and concession building, a perimeter walking trail, parking areas, plantings, and benches. A future phase will include a playground, shelters, and dog park.

Stahl Sheaffer's specific roles included analysis of stormwater, sanitary service, grading, traffic impacts for the proposed improvements to the site, as well as all zoning and municipal approvals. The project is situated at an elevation several hundred feet above the wooded surrounding area, and therefore required a unique approach for stormwater management, including the incorporation of rain gardens and landscaped drainage swales. All stormwater and drainage features are functioning well after several years of park use.





- **Owner:**
Centre Region Parks & Recreation
- **Services:**
 - Land Development
 - Surveying
 - Construction Stakeout
 - Permitting
 - Construction Administration
- **Year Completed:**
2017

Millbrook Marsh Nature Center & Parking Lot Projects

Centre Region Parks & Recreation, Millbrook Marsh Nature Center, State College, Centre County, PA

Stahl Sheaffer provided land development and surveying services on several projects for the 12-acre Millbrook Marsh Nature Center.



The Welcome Center project required updated surveying to complete a site and utility plan for a proposed hike/bike pedestrian path, and utility connections for the continued development of the Nature Center. Stahl Sheaffer completed the schematic site plan and required documentation for a zoning variance application to College Township.

Stahl Sheaffer previously provided site engineering, topographic survey, and land development plan submissions for parking accommodations in 2013. This project included the construction of a parking lot, access drives, and related stormwater, zoning, and subdivision and land development ordinances. A DEP NPDES permit and an Erosion & Sedimentation Control plan were also required. Stahl Sheaffer provided construction administration services.



Additionally, Stahl Sheaffer provided full construction stakeout for this project, including parking areas, rain gardens, and stormwater facilities. During construction, a deeper than anticipated depth of topsoil was encountered. Stahl Sheaffer quickly revised the plans as construction continued without interruption. The project was successfully completed prior to several scheduled events at the Nature Center.

STAHL SHEAFFER ENGINEERING

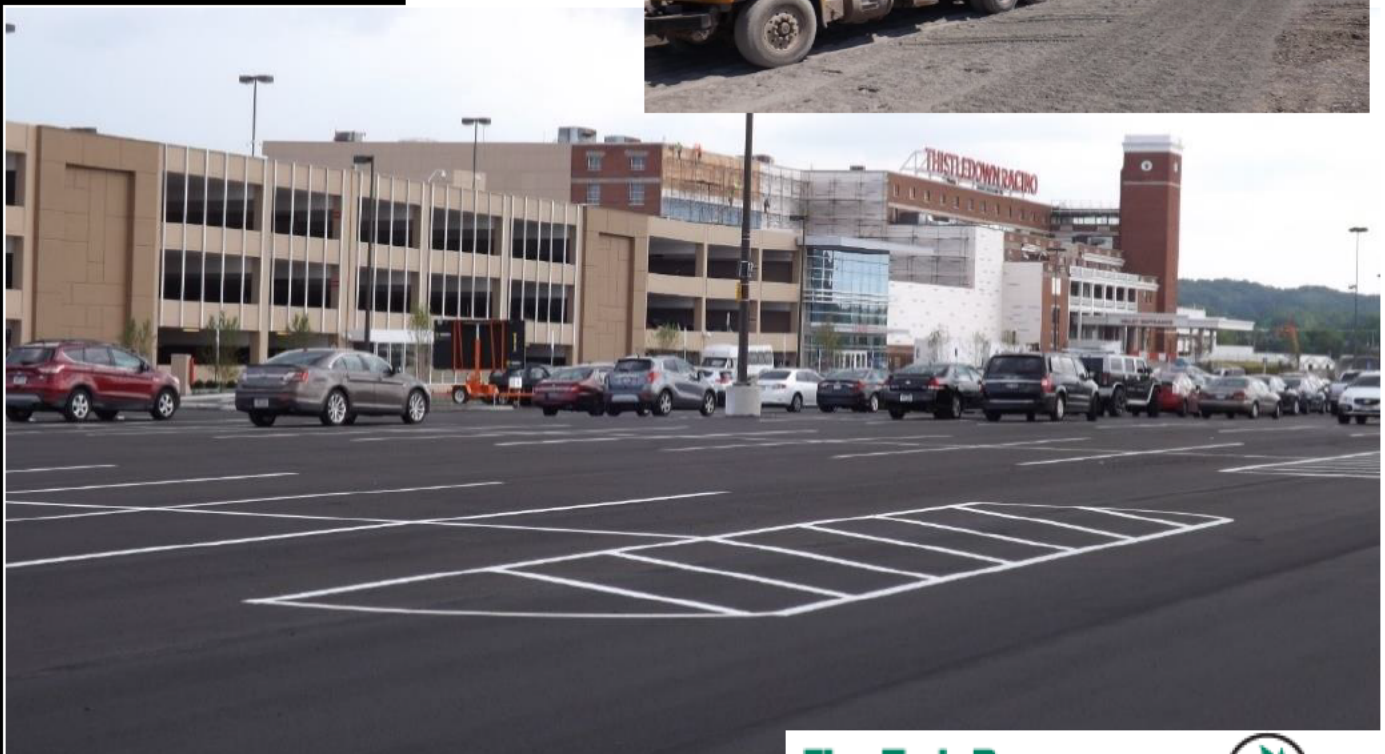
- **Owner:**
JACK Thistledown Racino
- **Project Contact:**
Flex-Tech Resources Ltd.
- **Services:**
 - Geotechnical Analysis
 - FDR Mix Designs
- **Contract Amount:**
\$15,500
- **Year Completed:**
Professional Services: 2016
Construction: 2016

Parking Lot Geotechnical Analysis & FDR Mix Designs



JACK Thistledown Racino, Flex-Tech Resources, Cuyahoga, OH

Stahl Sheaffer completed geotechnical analysis and recommendations for the JACK Thistledown Racino parking lot in 2016. Stahl Sheaffer performed two Full Depth Reclamation (FDR) mix designs (10" FDR and 12" FDR) based on the strata of the on-site materials as well as an overlay pavement design. Compared with the initial design, Stahl Sheaffer's designs increased the pavement structure capacity and reduced the proposed overlay thickness from 4" to 2.5" plan.



stahlsheaffer.com

Flex-Tech Resources LTD.



- **Owner:**
Pennsylvania Turnpike Commission
- **Services:**
Construction Management
- **Year Completed:**
2019
- **Construction Cost:**
\$6,600,000



Lawn Service Plaza Auxiliary Parking Lot



Pennsylvania Turnpike Commission, MP 258.77 Westbound,
Dauphin & Lebanon Counties, PA

The Pennsylvania Turnpike Commission (PTC) has an ongoing strategy in place to increase truck parking for its service plazas along the Turnpike system. The Lawn Service Plaza was selected to provide much needed capacity for truck parking and added 77 tractor trailer parking spaces to safely address this necessity.

Stahl Sheaffer's role consisted of representing the PTC, overseeing the contractor and inspectors during the project, report writing, and plan and specification review. The scope of work includes preparing suitable subgrade, electrical and lighting improvements, and paving over 10,000 CY of concrete.

This project won first place as the 2020 Project the Year by the ASHE Harrisburg section.



Placement of Pavers Begins



Pavers Complete

- **Owner:**
Mercedes-Benz of State College
- **Services:**
 - Land Development Submission
 - Stormwater Analysis
- **Year Completed:**
2011



Car Dealership Land Development Submission



Mercedes-Benz, State College, PA

Stahl Sheaffer conducted a land development submission that included stormwater analysis as well as erosion and sedimentation control recommendations for the development of a 17,000-SF building space with a showroom, services, and offices.

The development of the lot included buildings, parking, sidewalks, and analysis of the current state of the existing dealership plus an additional impervious area to allow for potential expansion. Updates included a new paved parking lot, stormwater detention/retention facilities, and grading improvements.



- **Owner:**
St. Joe's Catholic School Parish
- **Project Contact:**
Flex-Tech Resources
- **Services:**
 - Geotechnical Analysis
 - FDR Mix Designs
- **Year Completed:**
Professional Services: 2015
Construction: 2015

St. Joseph's Parish Parking Lot Analysis

St. Joseph's Catholic School Parish, Strongsville, OH

Stahl Sheaffer completed geotechnical analysis and provided Full Depth Reclamation (FDR) recommendations for Saint Joseph's Catholic Church parking lot in 2015. Because of the high clay content, Stahl Sheaffer recommended a mechanical adjustment by replacing 3" depth of clay found in subgrade with 3" depth of well-graded sand. This adjustment reduced the shrinkage cracking potential and the cement application rate. In addition, Stahl Sheaffer recommended that the contractor perform micro-cracking after curing the reclaimed mixture for two to three days. Micro-cracking creates a large amount of tiny cracks to release the tensile stress due to shrinkage strain but will not influence the structural performance of the FDR base layer but can prevent the large cracks from developing. The cost effective means of FDR with cement stabilization improved the existing parking lot to sufficiently support the projected traffic.



- **Owner:**
Waterdam Church
- **Services:**
 - Site Design
 - Survey
 - Parking Lot CI

Church Building & Parking Lot Additions

Waterdam Church, Canonsburg, Washington County, PA



Stahl Sheaffer provided site and survey engineering services for the addition to the Waterdam Church in Washington County. This multi-phase project included an addition to the church building, parking, and driveway facilities, as well as landscaping, site lighting, utility upgrades, and stormwater improvements to meet local municipal regulations.

Stahl Sheaffer teamed with architects and was responsible for all site design, municipal permitting, and utility coordination. Site engineering services added 51 parking spaces to the southern end of the existing parking area. Services also included land development submission, and bidding assistance as it pertains to design of new parking facilities. In addition to site layout, the project also involved grading, post-construction stormwater management, and erosion and sediment control requirements.



- **Owner:**
The Pennsylvania State University
- **Services:**
 - Parking Lot Reconstruction
 - Stormwater
 - NPDES
- **Construction Cost:**
\$512,000

Mont Alto Parking Lot Replacement

The Pennsylvania State University, Mont Alto, PA

Stahl Sheaffer completed design for the reconstruction of an aging commuter parking facility located along SR 233 at the entrance to the Mont Alto campus to provide a functional, safe, and stable parking facility to accommodate approximately 255 vehicles.

The project included hydrologic and hydraulic design, parking lot expansion, stormwater management design, and replacement of exterior site lighting, and the inclusion of an adjacent gravel parking area into the parking lot.



1.0 Firm Overview

In 1989, four engineers and scientists came together with a singular vision: to be a people-first company, one that promotes a culture where clients and employees enjoy working together, and that is responsive to client needs with integrated services and high-quality work for projects both complex and routine.

More than 30 years later, Civil & Environmental Consultants, Inc. (CEC) has 1,000+ team members in offices nationwide. Headquartered in Pittsburgh, Pennsylvania, we are consistently ranked on Engineering News-Record's annual lists of the Top Design Firms and Top Environmental Firms in the nation.

A culture of accountability. We own it. At CEC, every member of our team has a personal stake in ensuring the success of our clients. Because their success is our success. As employee-owners of the firm, we are all personally accountable for building lasting relationships and delivering outstanding results. Because we don't just work at CEC. We own it.

Being easy to work with. We own it. At other firms, you may find one person you work well with. Here, our clients tell us they work well with all of us. It's because all of us are invested in your success. We're accessible, responsive, and operate with integrity.

Putting people first. We own it. At CEC, people come first. Always. Whether that's our clients, our employees, or our community. It's why we listen more and work harder to understand the unique needs of our clients. And it's why we prioritize the career development of every individual on our team. People are why we do this, and why we love what we do.

Teamwork. We own it. We are at our best when we work together. That means bringing together a diverse team of talented, passionate, multidisciplinary experts to work closely alongside clients to craft comprehensive solutions to complex problems. We believe that by working together, no problem is insurmountable.

Safety excellence. We own it. We believe all accidents are preventable and are committed to creating an accident- and incident-free workplace for employees and subcontractors through training, safe workplace practices, and processes for assessing project hazards. CEC strives for safety excellence throughout our entire organization and holds all individuals accountable for the safe performance of their work.

CEC is an expanding, multi-disciplined company that is home to:

- Civil Engineers
- Geotechnical Engineers
- Transportation Engineers
- Structural Engineers
- Environmental Scientists
- Environmental Engineers
- Chemical Engineers
- Geologists
- Hydrogeologists
- Hydrologists
- Ecologists
- Biologists
- Wetland Scientists
- Threatened & Endangered Species Experts
- Agronomists/Soil Scientists
- Emissions Testing Professionals
- Meteorologists
- Chemists
- Archaeologists
- Construction Managers and Inspectors
- Environmental Technicians
- Treatment Plant Operators
- Land Surveyors
- Landscape Architects
- GIS Analysts and Programmers



WHERE WE ARE.



Athens, PA
877.389.1852

Austin, TX
512.439.0400

Boston, MA
866.312.2024

Bridgeport, WV
855.488.9539

Buffalo, NY
888.364.2324

Charlotte, NC
855.859.9932

Chicago, IL
877.963.6026

Cincinnati, OH
800.759.5614

Cleveland, OH
800.365.2324

Columbus, OH
888.598.6808

Fall River, MA
508.679.5646

Greenville, SC
855.574.4331

Houston, TX
800.365.2324

Indianapolis, IN
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Kansas City, KS
866.250.3679

Knoxville, TN
865.977.9997

Martinsburg, WV
800.365.2324

McAllen, TX
800.365.2324

Monroeville, PA
800.899.3610

Nashville, TN
800.763.2326

Oklahoma City, OK
405.246.9411

Philadelphia, PA
888.267.7891

Phoenix, AZ
877.231.2324

Pittsburgh, PA
800.365.2324

San Diego, CA
760.977.8106

Sevierville, TN
865.774.7771

St. Louis, MO
866.250.3679

Toledo, OH
855.274.2324

Ecological Sciences

CEC provides a wide range of ecological and environmental assessment and permitting services. Our experienced professionals have successfully filed for permits with various federal and state regulatory agencies.

CEC provides extensive ecological services to the manufacturing, mining, natural gas, power, real estate, and solid waste industries, as well as to the public sector.

WETLAND AND STREAM DELINEATION AND PERMITTING

Wetlands regulations significantly impact the overall feasibility, economics, and efficiency of new land development projects. CEC has extensive experience working with regulatory agencies to address and solve wetland issues for land development, producing positive and timely results.

- Wetland and Stream Delineations
- 401/404 Permitting for Wetland and Stream Encroachments
- Jurisdictional Determination (JD) Meetings with Regulators
- Wetland and Stream Functional Assessments
- Alternatives Analysis
- Cumulative Impact Assessments
- Mitigation Design, Construction Oversight, and Success Monitoring
- Mitigation Construction Bid Documents
- Design of Wetland Treatment Systems
- NEPA Environmental Impact Statements & Assessments

TERRESTRIAL ECOLOGY AND WILDLIFE SERVICES

CEC ecologists perform habitat assessments and flora and fauna surveys for environmental planning and impact studies, endangered species presence or absence surveys along with protection and enhancement plans, and baseline and post-restoration monitoring for ecosystem restoration and enhancement projects. CEC scientists monitor invasive plants, perform agronomic evaluations to restore fertility and vegetation to highly disturbed sites, and design phytoremediation systems for treating contaminated soils.

- Rare Plant Surveys and Agency Coordination
- Rare Plant Relocation and Mitigation
- Threatened and Endangered Species Surveys
- Habitat Assessments
- Conservation and Mitigation Plans
- Agronomy and Phytoremediation Services
- Invasive Plant Inventory and Control Strategies
- Revegetation of Disturbed Landscapes
- Ecological Risk Assessment
- Green Infrastructure Design and Performance Monitoring

AQUATIC ECOLOGY SERVICES

CEC offers aquatic ecology monitoring services to help clients meet regulatory requirements pertaining to Clean Water Act Section 404 and 401 permits, functional assessments, stream and wetland mitigation, NPDES permits, cause and effect determinations, impact studies, and ecological risk assessments.



Ecological Sciences



- Fisheries Surveys
- Benthic Macroinvertebrate Surveys
- In-House Benthic Laboratory for Benthic Processing and Identification
- Aquatic Functional Assessment
- Water and Sediment Sampling
- Bathymetric and Hydrographic Surveys
- Freshwater Mussel Surveys
- Rare Aquatic and Wetland Plant Surveys

BAT-RELATED SERVICES

CEC's U.S. Fish & Wildlife Service-approved bat surveyors provide comprehensive bat-related services, conducting habitat assessments and mist-net surveys for Indiana bats, gray bats and northern long-eared bats.

- Bat Habitat Assessments
- Bat Mist-net and Harp-trap Surveys
- Mine/Cave Portal Surveys
- Radio Telemetry and Tracking
- Acoustic Detection and Analysis
- Federal and State Agency Consultation
- Indiana Bat Conservation Plans
- Habitat Mitigation
- Habitat Conservation Plans (Section 10)
- Biological Assessments (Section 7)

ECOSYSTEM RESTORATION SERVICES

Aquatic ecologists, geomorphologists, wetland scientists, botanists, agronomists, and engineers are familiar with the complex nature of ecosystems and work together to create functional, self-sustaining stream and wetland systems.

- Technical Assistance to Mitigation Bankers
- Site Selection and Evaluation
- Fluvial Geomorphic Assessments
- 3D Natural Channel Design
- Riparian and Wetland Planting Specifications
- Erosion Prevention and Sediment Control Specifications
- Geomorphic Restoration of Mined Land
- Design-Build Services
- Construction Specifications and Bid Packages
- Construction Management and Quality Assurance
- As-Built Drawings and Certification Reports

Environmental Engineering and Sciences

CEC conducts environmental assessments, site investigation/remediation, and other general compliance auditing and support services.

CEC provides environmental services for a wide range of industries and businesses, including power plants, mining facilities, waste processing facilities, oil & gas development and processing sites, industrial manufacturing sites, law firms, and real estate companies.

PHASE I & II ENVIRONMENTAL SITE ASSESSMENTS

With a focus on proposed land use and a practical evaluation of likely exposure pathways, CEC conducts environmental site assessments of properties to identify environmental liabilities and determine if past or adjacent land uses have resulted in environmental impacts. Assessments are designed to meet industry standards, such as ASTM and AAI, as well as client-specific and state-mandated standards when regulatory closure is the ultimate goal.

SITE INVESTIGATIONS

Site investigations are performed to evaluate whether impacts to environmental media are present or to further study the extent and degree of known impacts. CEC specializes in groundwater modeling; soil, waste and water sampling; human and ecological risk assessment; and regulatory negotiations.

SITE REMEDIATION AND BROWNFIELDS REDEVELOPMENT

CEC has successfully transitioned dozens of idle industrial sites through the redevelopment/re-use process. Licensed professionals complete assessments and remediation, in many cases obtaining liability protections available through state voluntary remediation programs. CEC engineers and environmental specialists work together to provide practicable solutions that often allow for reuse of a property using limited engineering and institutional controls.

SITE REMEDIATION AND GROUNDWATER REMEDIATION

CEC applies knowledge of groundwater flow, groundwater chemistry and contaminant transport to evaluate and design remedial alternatives for contamination problems. Capabilities include groundwater extraction and treatment using methods such as air stripping, steam stripping and carbon adsorption, as well as separate phase extraction of both light and dense freephase liquids. In-situ groundwater remediation experience includes chemical oxidation, natural and enhanced bioremediation, and phytoremediation. CEC is experienced with the physical manipulation of groundwater flow, including capture systems and physical barriers such as slurry walls, infiltration trenches and impermeable caps.

COMPLIANCE AUDITING AND REGULATORY COMPLIANCE/ LIABILITY RESERVE DEVELOPMENT SUPPORT SERVICES

Compliance audits are designed to help prepare and implement cost-effective solutions and improve systems for maintaining and tracking regulatory compliance. Audits often include liability assessments and reserve estimates, and regulatory compliance assessments to support due diligence and acquisitions.



Environmental Engineering and Sciences

COMPLIANCE SUPPORT – ENVIRONMENTAL HEALTH & SAFETY MANAGEMENT SYSTEMS

CEC assists with creation, implementation and ongoing support of Environmental Management Systems (EMS) and Occupational Health and Safety Management Systems (OHSMS). Services include: identifying EHS impact of activities, operations, processes, products and services; identifying and evaluating applicability of state, federal and local regulations; identifying responsibilities and resources for successful EMS or OHSMS implementation; and developing and auditing EMS/OHSMS programs.

COMPLIANCE SUPPORT – CLEAN WATER ACT (CWA)

CEC assists clients across many market sectors with various CWA issues, including: NPDES individual discharge permit acquisition and renewal applications; NPDES stormwater and general permit acquisition and renewal applications; Storm Water Pollution Prevention Plan (SWPPP) preparation; routine Discharge Monitoring Report (DMR) completion and submittal; wastewater treatment plant design and upgrades to meet permit limits; and assistance with design/implementation of Best Management Practices (BMPs).

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA)

CEC assists clients in complying with RCRA obligations, including: waste characterization evaluations and support; waste management planning and evaluation of beneficial use/recycling opportunities; design of hazardous waste storage areas and containment buildings; implementation of weekly hazardous waste inspection programs; providing RCRA training for personnel involved with management of hazardous waste; preparation of facility RCRA Contingency Plans; completion of biennial hazardous waste reports; and completion of state residual waste (non-hazardous) biennial reports.

EMERGENCY PLANNING AND COMMUNITY RIGHT TO KNOW (EPCRA)

CEC assists clients in complying with annual filings of emergency and hazardous chemical inventory reports (Tier II) and Toxic Release Inventory (TRI) Reports (Form A/R). Services include: rule applicability and Tier II/Form R reporting threshold evaluations; review of safety and chemical data sheets for completeness; preparation of Tier II reports from chemical inventory information; and calculation of chemical releases and preparation of TRI Reports.



LiDAR

CEC provides a wide range of land surveying services with a full complement of cutting-edge technology, including 3D laser scanners using terrestrial Light Detection And Ranging (LiDAR) scanning to create spatial imaging.

CEC utilizes the latest technology in ground-based 3D laser scanning with GPS to provide solutions to clients' unique survey needs.

Using LiDAR, CEC can create an extremely detailed and dimensionally accurate 3D image using millions of acquired intelligent data points on a project site. Downloaded directly to a laptop at the site, LiDAR generates the 3D model in real time allowing immediate decision-making ability.

MOBILIZATION

With ease of portability and setup, and decreased data processing and clean-up time, LiDAR scanning provides significant time savings versus traditional land surveying techniques. The use of LiDAR technology also enables increased safety by minimizing the need to send crews into dangerous spaces or high-traffic areas and roadways. Plus, the data can be revisited and new survey information can be retrieved based on client needs without remobilizing to the field.

BROAD APPLICATION

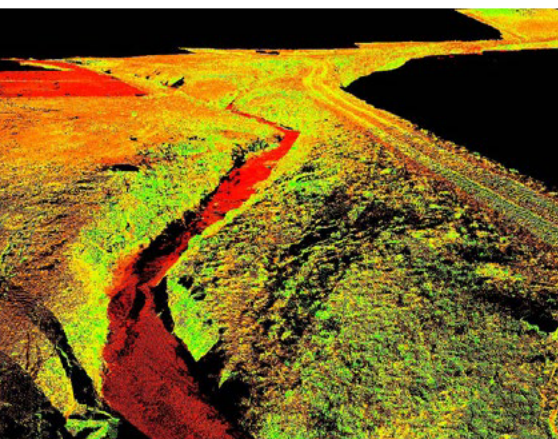
Through the use of LiDAR, CEC can efficiently capture high-definition field data that enhance a broad range of land surveying and engineering projects from architectural and building surveying to industrial mapping of intricate sites and structures to forensics and accident reconstruction.

- As-builts for architectural and commercial projects, industrial facilities, landfills, water treatment plants, power plants, electric substations, and oil and gas well pads and pipelines
- Horizontal and vertical clearances for roadways, bridges, and structures
- Detailed earthwork volumes and quantities
- Before-and-after dredging scans to calculate quantity for dry basins and ponds
- DOT surveys for traffic and highway structures, installations, and appurtenances
- Tunnel and mine scanning

TECHNOLOGY

CEC utilizes both "Phase Based Scanners" and "Time of Flight Scanners." The performance of these scanners can capture objects up to and more than 1,000 feet away, and in direct sunlight. Typical deliverables are intensely accurate and include:

- 2D CAD Data in plan, elevation, or cross-sectional view
- 3D CAD Data
- Animated fly-throughs of the point cloud
- Text, RCS, DXF, TIN, or XML file of the point cloud



Mobile Light Detection and Ranging (LiDAR) System

As a marketplace leader, CEC maintains the latest in LiDAR technology by utilizing an advanced Riegl VMQ-1HA Kinematic LiDAR system to collect survey-grade data at highway speeds.

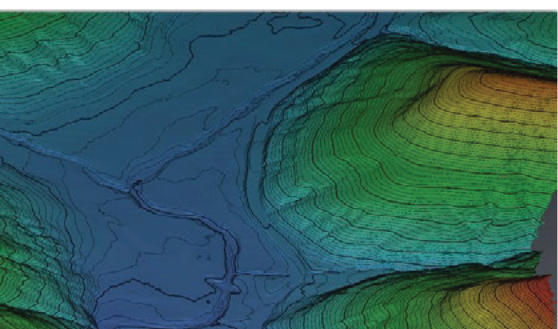
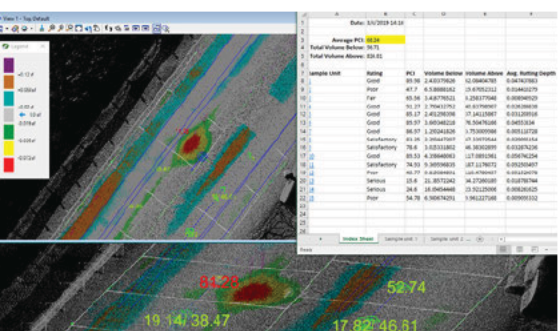
With data collection rates of up to 1,000,000 points per second, high-resolution point clouds enable extraction of topographic information as well as detailed analyses of sidewalk and pavement conditions.

PAVEMENT ANALYSIS

CEC performs analyses on the pavement condition to aid in roadway maintenance and repair. Through the application of this technology, CEC's clients can plan for the most efficient use of available resources. CEC maintains its place as a leader in the marketplace by maintaining the latest in LiDAR technology. The collection of LiDAR and imagery and production of ASTM 6433 Excel-format pavement assessment reporting can all be done through our cost-efficient workflow solutions.

TOPOGRAPHIC SURVEY

Through the use of kinematic LiDAR and 360° imagery, CEC creates topographic mapping of roadway corridors in a safe manner. Traveling at highway speeds, CEC's experts capture detailed topographic information on all visible objects. High-reflectance targets can be acquired at 50 KHz from distances over 1 km away. Using a variety of software packages including Terrasolid and TopoDOT, CEC extracts topographic features and digital terrain models from the colorized point cloud datasets and georeferenced imagery. Overhead clearance and wire heights can be measured and labeled with certainty.



Pavement and Curb Condition Analysis

Leading the efforts in remote sensing, our experienced team has innovative and cost-effective solutions for analyzing pavement and curb conditions. Minimizing the impact of having personnel on the ground, CEC can utilize LiDAR technology to efficiently determine a community's pavement and curb repair needs.

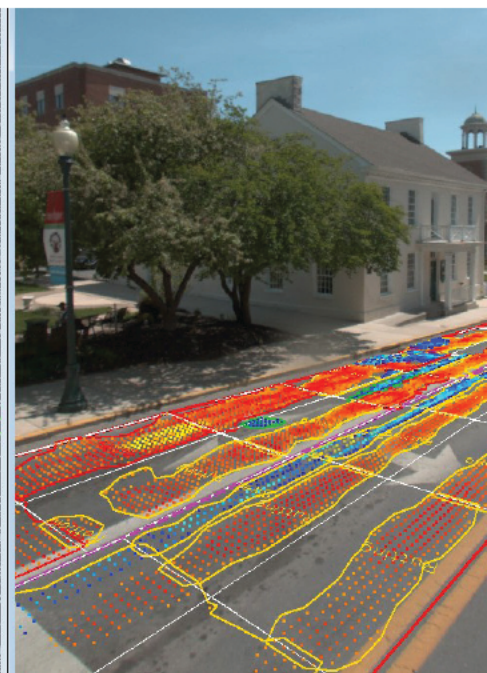
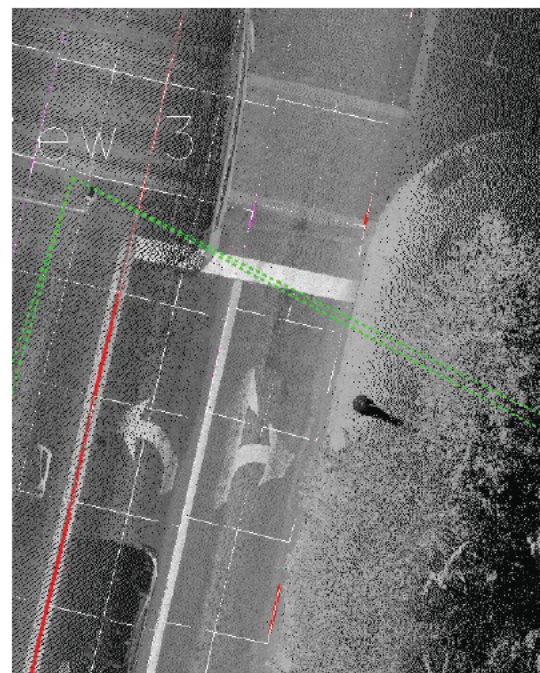
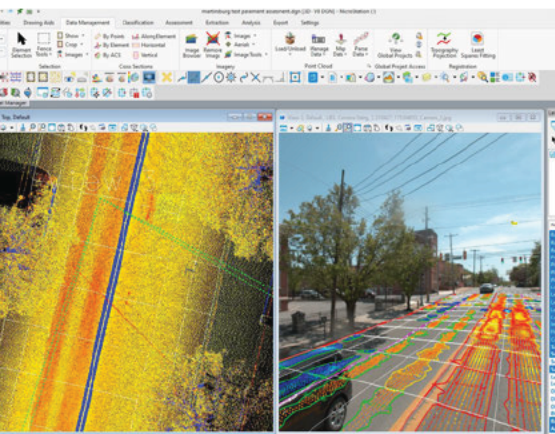
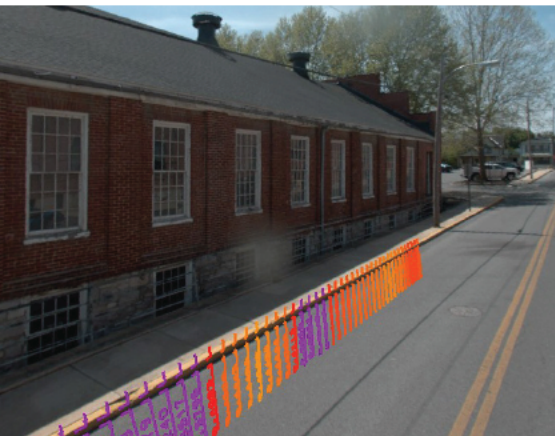
Through the collection of LiDAR and 360 Imagery, CEC can map existing roadway conditions and analyze pavement conditions to aid in roadway maintenance and repair. A high-resolution point cloud combined with detailed imagery makes pavement assessment seamless and can be output into GIS format as well as a quantifiable spreadsheet for the end user.

CEC can accurately locate and label types of pavement distress types including patching, swelling and alligator cracking. PCI values are determined using the ASTM Standard D 5340 method and can be extrapolated into a spreadsheet for roadway upgrades.

CURB CONDITION ANALYSIS

CEC can help identify curb heights and conditions that are extracted from LiDAR data sets. Staff members will flag curb areas containing poor conditions and will evaluate on a percent pass/fail. This data can be formatted into a spreadsheet database as well as GIS interface. Non-passing conditions may also be located in the imagery and geotagged to be viewed in the GIS interface.

CEC can locate defects and curb heights for repair or replacement, which puts less personnel on the ground and offer cost-effective solutions for the client. Analyzing percent slopes for ADA compliance is also possible with the collected data, upon request, as an additional service.



Site Intelligence Services

CEC understands the importance of comprehensive and timely due diligence services to support our client's evaluation of real estate. We also know that today's real estate acquisition, development and re-financing processes demand more than the traditional due diligence—comprehensive Site Intelligence is needed! CEC provides a diverse and complete scope of Site Intelligence services to assist our clients with understanding risk, developing project pro-formas and making informed business decisions.

ENVIRONMENTAL SCREENING

Environmental screening is an effective method of providing initial opinions on potential environmental conditions that represent a potential liability and could be a fatal flaw for the project. CEC's Environmental Screening includes:

- Screening of the environmental conditions on a property, based on the ASTM E 1527-13 All Appropriate Inquiry process
- High-level review performed by senior environmental professionals

Completed in advance of a full ASTM Phase I Environmental Site Assessment to provide vital, timely and cost-effective information for property/business transactions to support an informed business decision.

ECOLOGICAL REVIEWS

CEC's ecological reviews include desktop reviews of property for the presence of threatened and endangered (T&E) species, potentially jurisdictional waters and archaeological and historic resources. Ecological reviews precede wetlands/stream delineations and T&E surveys, and can be completed quickly and relatively inexpensive.

TRAFFIC EVALUATIONS

Traffic impacts and resulting traffic impact fees can be fatal to a project. An initial evaluation of a project's traffic impacts, in advance of the completion of a traffic impact study (TIS), is very valuable to understand a project's exposure to potential offsite road improvement costs. CEC's initial traffic evaluation services include:

- Trip Generation Calculations
- Review of previous TIS's and municipal and Department of Transportation (DOT) comprehensive roadway plans
- Estimation of potential traffic impact fees
- Identification of conceptual roadway improvements and potential funding options

GEOTECHNICAL OVERVIEWS

Our geotechnical overviews include desktop reviews of soil surveys, physiographic maps, landslide-prone soils and expansive soils, and mining conditions. We also review past geotechnical work completed in the vicinity, including contact with local drilling contractors. Our geotechnical overviews precede geotechnical investigations, and cost-effectively provide valuable initial information regarding the geotechnical aspects of the property which may impact construction costs.

SITE EVALUATION

CEC's experienced real estate development professionals provide a diverse scope of site evaluation services to include:

- Zoning/Entitlements reviews identifying processes/timelines
- Test Fits/Site Capacity/Fatal Flaw completed after the zoning/entitlement reviews
- Site Plan/Site Grading concepts and earthwork analyses
- Augmented Reality and Visualization Tools
- Unmanned Aerial Vehicle (UAV) applications
- Site Utility Investigations
- Site Development Checklists and Site Intelligence Reports



Site Intelligence Services



The acquisition and the operation/management of real estate requires a different level of Site Intelligence – namely; what do I have, and what condition is it in? CEC provides a unique service, a Rapid Infrastructure Assessment (RIA) to help our clients understand the apparent conditions, and deficiencies of existing site infrastructure, and anticipated maintenance needed to include life cycle costs. RIA's can be performed economically for acquisition, or at any time during the life cycle of the property.

RAPID INFRASTRUCTURE ASSESSMENTS

- Pavements and Roadways
- ADA Compliance
- Site Hardscape
- Landscaping
- Site Drainage and Utilities
- Post-Construction Stormwater Management Plan Regulatory Compliance
- Other Site Infrastructure

PORTFOLIO MANAGEMENT

- Use of Geographic Information System (GIS) data and technology for asset management
- Smart data collection to drive timely decision-making
- Data visualization
- Secure, long-term management of infrastructure assets

DUE DILIGENCE

CEC provides comprehensive due diligence services as follow up to our Site Intelligence services, to include:

- Property and ALTA/NSPS Surveys
- Phase I Environmental Site Assessments
- Property Condition Assessments (PCA's)
- Delineation of Ecological Resources
- Traffic Impact Studies
- Geotechnical Investigations
- Land Planning
- Civil Engineering Services

James Christie, P.L.A.

Principal






23 YEARS OF EXPERIENCE

EDUCATION

B.S., Landscape Architecture, West Virginia University, 1998

REGISTRATIONS

Registered Landscape Architect

- CO 
- WV 
- MD 

Jim is a Principal in the Civil department. In his capacity, he is responsible for complete project management within CEC. He is responsible for site design, landscape architecture, site development entitlement services, construction documents, client management, personnel supervision, and construction administration on numerous municipal, commercial, and institutional projects. Jim is a detail-oriented, highly-creative Landscape Architect with 23 years of dedicated experience in designing and implementing projects to support client needs and meet business objectives. His wide range of project experience ranges from landscape design to destination resort design in multiple regions both within the United States and internationally. Jim has dedicated his career to projects that have a direct effect on the local economy and job growth.

PROJECT EXPERIENCE

Palatine Park, Marion County Commission, Fairmont Marion County, WV*

Palatine Park was designed to be a multi-use amphitheater facility and has become the gathering place in Marion County. The Phase 1 masterplan included a tiered grass amphitheater, splash park, multiple restroom facilities and a large parking area. The entire site meets ADA requirements and was designed to allow multiple events to happen simultaneously within the park grounds. Each area was planned to have multiple uses such as greenspace, event tent areas and full electric so that farmers markets, art festivals and concerts have multiple opportunities for vendor setups as well as for the public to utilize for everyday use. The project was fast tracked and had to be designed, bid and built in a six-month timeframe in order to be completed and operational for the Marion County's Three River Festival in 2014. Since the opening of the park, the amphitheater and associated spaces have become the center of entertainment and gathering in Marion County throughout the year.

Wave Pool Demo and Concept, MCPARC, Pleasant Valley Marion County, WV*

In 2016, the MCPARC worked with Jim to create a demolition plan for the existing Wave Pool buildings as well as create a conceptual plan to address the needs and opportunities for a new building and amenities for the Wave Pool at East Marion Park. The conceptual plan included multiple upgrades as well as multiple revenue producing areas that are currently not at the pool facility such as a FlowRider, rentable cabanas and flex space for events.

The Eastern Continental Divide Loop Trail Master Plan, Garrett Trails, McHenry Garrett County, MD*

Served as Master Planner, Landscape Architect, and Project Manager. Building from the success of the Great Allegheny Passage (GAP), the Eastern Continental Divide Loop Trail (ECDLT) is a multi-use trail system which starts along the GAP and travels south along the continental divide connecting communities, state parks, resorts, wild and scenic rivers, and reservoirs on a 150-mile journey until connecting again with the GAP trail. Successfully presented the idea of a marketing booklet to showcase the idea and plans for the trail to be used to obtain funding through private donations and governmental backing. Through this booklet, Garrett Trails has obtained over \$800,000 for completing sections of the trail and is continuing to utilize it for future grants.

Allegheny County Bicycle and Pedestrian Master Plan, Cumberland Area Metropolitan Planning Organization, Cumberland Allegheny County, MD*

Building from the success of the Great Allegheny Passage (GAP), The Cumberland MPO utilized a master plan of the region to take advantage of the GAP trail as the pedestrian backbone for connectivity in the region. It creates connections to all of the



Civil & Environmental Consultants, Inc.

James Christie, P.L.A.

Principal

municipalities, recreational areas in the region and allows for an alternative type of transportation. Jim was the creative director and project manager of the creation of the master plan which was adopted by Allegany County into their latest comprehensive plan.

Loch Lynn Heights Wetland Boardwalk Trail, Loch Lynn Heights, Loch Lynn Heights Garrett County, MD*

Part of the Easter Continental Divide Loop Trail system, the Wetland Boardwalk Trail is a boardwalk trail as well as on-grade trail through multiple classifications of wetlands and upland forest taking the visitor on a journey through multiple environments and the little yough river. The boardwalk system was built on helical piles to create a sensitive environmental solution to the high altitude wetland at the headwaters to the Wild and Scenic Youghiogheny River. This trail is the first helical pile boardwalk system in Western Maryland. This trail was not only to give the public access and education to wetlands but also to keep ATV's out of the sensitive environment. All three phases of the project are completed.

Stonewall Resort Peninsula Cottages, Stonewall Resort, Roanoke Lewis County, WV*

The Cottages Peninsula is a new product with in Stonewall Resort. This area will have twenty seven new homes set in a wooded area with direct connection to the lake. As part of this project, a passive park and trail network are also included for the use of cottage owners and guests. The trail system includes the first wetland trail system in the resort. Jim also designed the grading and landscape plans for the first set of cottages. Current ongoing work with Stonewall Resort to complete Cottages as well as a master plan for a new splash park, hot tub and board walk trail area adjacent to the main lodge.

Brooke Hills Park, Brooke Hills Park, Wellsburg Brooke County, WV*

Brooke Hills Park is a 700 acre park in the northern panhandle of West Virginia. Jim project managed a team of consultants on a lodge feasibility study and master plan. Currently Jim is leading the implementation of the 2016-17 phase of the project which includes, a new pool, pool buildings, additional parking, multi-use athletic facilities, disc golf and residential cabins. This is an ongoing project which provides additional amenities and an economic draw for the community.

WVU - Evansdale Campus Entry Realignment, West Virginia University, Morgantown Monongalia County, WV*

Jim was chosen to create multiple concepts for the solution to the pedestrian and vehicular conflicts on Evansdale Campus. The focus was on the entry along Monongahela Boulevard between the Coliseum parking lot and Campus. Jim's design of moving the intersection not only helped the pedestrian crossing issue but also took advantage of creating a secondary entrance and exit for the Coliseum parking lot. By moving the intersection, the two traffic signals were able to be synchronized, which has lead to better traffic flow into the lot and campus respectively.

Great Allegheny Passage Mile Markers, Allegheny Trail Alliance, Homestead Allegheny County, PA*

The Great Allegheny Passage is a 150 mile long distance bike trail from Pittsburgh, PA to Cumberland, MD which follows an abandoned railroad line for most of its journey. Most of the trail is in rural regions and the Allegheny Trail Alliance (ATA) hired Jim to create a creative way to mark the miles for the trail users. This will allow them to know where they are for navigation as well as for safety and maintenance. Jim's idea was to utilize material that was similar to once was on the railroad but also something historical. The final choice was granite curbing repurposed from the Longfellow Bridge in Boston. The granite would then have the mile markers sandblasted into the sides and at special points have the name of the trailhead or significant historical sites. The mile makers are currently being installed by the ATA.

Town of Bath Streetscape, Town of Bath, Bath Morgan County, WV, USA*

Jim was the project manager and landscape architect for the Bath (Berkeley Springs) streetscape project. In his role, he coordinated with the Town of Bath, the WVDOH and Berkeley Springs State Park to create the sense of place along Route 522 (Washington St) and Fairfax Street in the resort area of downtown Berkeley Springs. The project utilized green infrastructure to treat the sidewalk and road runoff prior to returning to Warms Springs Run. The project also included new ADA access as well as lighting and landscaping features. Beyond the sidewalk and green infrastructure, the project also consisted of a historic brick street which was replaced with current heavily load pavers to keep with the history of the area which services commercial water trucks daily.

Parsons Streetscape, City of Parsons, Parsons Tucker County, WV*

Jim served as the landscape architect and creative lead for the Parsons Streetscape on Route 219. The streetscape included decorative brick pavers, historical period lighting and was coordinated with the addition of the new County Courthouse Annex. The

James Christie, P.L.A.

Principal

project also had challenges with basements and coal shoots under the existing sidewalk as well as ADA challenges with multiple heights on entries into existing buildings. This was the first phase of streetscape and it has set precedent for the future streetscaping of Parson's downtown.

Fairmont Connectivity Plan, Mainstreet Fairmont, Fairmont Marion County, WV, Marion*

Jim was the project manager for the Fairmont Connectivity Plan. The Connectivity Plan is a master plan booklet mapping out improvements for pedestrian connections within the City of Fairmont and surrounding Marion County. The plan's goal is to encourage walking and biking as a viable mode of transportation for all residents and visitors. The plan utilizes the existing and proposed rail trails as the backbone of the pedestrian system and links neighborhoods to schools, government agencies, shopping areas and recreational opportunities.

Bridgeport Rec Center, Omni Associates, Bridgeport, WV

Civil/Site engineering and landscape architectural services for the proposed City of Bridgeport 40 million dollar recreational complex on 55+ acres. The complex will include four NCAA regulation sand cap all-purpose natural grass fields with associated irrigation and drainage systems, one synthetic turf field and drainage system, indoor turf facilities, aquatic center, tennis courts, basketball courts and various other recreational amenities. To create the 55+ acre site in mountainous terrain and meet ADA regulations, the project will move 350,000 cubic yards of earth.

Grand Vue Park Master Plan, Omni Associates, Moundsville, WV

Role: Project Manager

Jim served as the project manager and lead designer for the 600+ acre park master plan. The client extended the project for the creation of the first phase of camping in the form of a 40 lot RV park and 20 lot primitive camping area. Construction will be completed in the fall of 2021.

Norwood All Inclusive Park, City of Fairmont, Fairmont, West Virginia

Role: Project Manager

CEC was hired to create an All Inclusive park designed to include all ages and physical abilities. It is to be the first All Inclusive park in North Central West Virginia and a model for other communities. Currently under design.

West Monroe Downtown Master Plan, Atlas Community Studios, West Monroe, LA

Role: Landscape Architect

Jim was hired by Atlas Community Studios to create a downtown master plan for the city to follow during redevelopment. Jim served as the project manager and landscape architect on the project. While designing the master plan, Jim coordinating public meetings for feedback on the concepts.

Tomlinson Run State Park Improvements, West Virginia Division of Natural Resources, New Cumberland, WV

Role: Project Manager

CEC was hired to creating ADA pathways, fishing platforms, interpretive signage and adjustments to the disc golf course to coincide with stream and wetland redesign.

Blackwater River Loop Connector Trail, Friends of Blackwater, Thomas, WV

Role: Project Manager

Jim serves as the project manager and landscape architect for the Blackwater River Loop Connector Trail. The Trail is designed as a tourism draw and will connect the towns of Davis and Thomas with a pedestrian corridor. In addition, the trail connects to Blackwater Falls State Park. In the Park, CEC has designed a pedestrian bridge over Pendleton Falls, a look out at Pace Point and finally a wood suspension bridge at Douglas Falls. The trail will allow for additional site seeing opportunities for visitors of the State Park and Canaan Valley. The project is currently under design with construction slated to begin in the spring of 2022.

Mt State Jellystone Resort, Blue Water Development Group, Charleston, WV

Role: Project Manager

Jim serves as the project manager and lead designer of the 300+ acre Jellystone Resort. The camping resort will have over 300 RV, Camping and Cabin units. In addition, the resort will have adventure sports, outdoor water park and trails. Construction is to begin in the spring of 2022.

** Work performed prior to joining CEC*

James Christie, P.L.A.

Principal

AWARDS

ALCC Water Feature Merit Award – Betty Ford Alpine Garden, Vail, Colorado, 2003

ALCC Xeriscape Grand Award – Private Estate, Eagle County, Colorado, 2004

ALCC Xeriscape Grand Award – Betty Ford Alpine Garden, Vail, Colorado, 2004

ALCC Water Feature Merit Award – Mewhinney Residence, Avon, Colorado, 2011

ALCC Design/Build Merit Award – Private Residence, Vail, Colorado, 2011

2013 Volunteer of the Year – Garrett County, MD Chamber of Commerce

PROFESSIONAL AFFILIATIONS

Trout Unlimited

American Society of Landscape Architects

Jacquelyn D. Kester

Principal



15 YEARS OF EXPERIENCE

EDUCATION

B.S., Environmental Sciences, West Virginia University, 2005

EXPERTISE

Section 404/401 Clean Water Act Permitting

Section 7 Consultation under the Endangered Species Act

Section 106 Consultation under the National Historic Preservation Act

Aquatic Resource Delineations

Ms. Kester is the Ecological Services Lead for CEC's Bridgeport, West Virginia Office. She has extensive experience in the attainment of stream and wetland data for various baseline reporting and permitting projects. She is knowledgeable of permitting at the local, state, and federal levels for temporary and permanent aquatic resource impacts associated with energy infrastructure and site development projects. Jacquelyn is a project manager with a proficiency in managing ecological projects while supervising a team. Ms. Kester's project management experience includes proposal preparation and cost estimate of billable hours. She manages multiple projects concurrently according to the terms and conditions of proposals.

PROJECT EXPERIENCE

FirstEnergy Service Company, West Virginia

Role: Principal

Served as client contact for the preparation of proposals and oversaw invoicing and budget control for line upgrades and new connections. Provided overall coordination with FirstEnergy and maintained regular and consistent communication pertaining to the planning and execution of projects. Oversaw the preparation of and performed quality reviews of nationwide permit packages, stream activity applications, and agency coordination for Section 7 consultation under the Endangered Species Act (ESA) and Section 106 consultation under the National Historic and Preservation Act (NHPA). Worked in tandem with FirstEnergy to develop a brochure on environmental permitting and compliance for field use by their employees.

American Electric Power, West Virginia

Role: Ecological Project Manager

Managed the preparation of a Joint 404/401 Individual Permit application for the Mitchell Excess Soil Disposal Area, which included permanent impacts to 3,023 linear feet of streams and 0.025 acre of wetlands. Performed quality reviews of the permitting documents and field data collection. Facilitated a permittee responsible mitigation project to compensate for impacts. Lead multiple agency meetings to discuss project purpose and need.

CNX Midstream Operating Company, LLC, West Virginia

Role: Principal

Served as client contact for the preparation of proposals and oversaw invoicing and budget control on numerous well connects, laydown yards, and compression facilities. Provided overall coordination with CNXM and maintained regular and consistent communication pertaining to the planning and execution of projects. Maintained a spreadsheet to provide weekly update reports via email to the CNXM project team detailing field work progress, environmental report development progress, permit development and agency processing progress, receipt of clearances, permits, upcoming work, and outstanding issues. Ms. Kester managed the natural resource permitting activities for various midstream projects. Oversaw the preparation and performed quality reviews of nationwide permit packages, stream activity applications, and agency coordination letters for Section 7 consultation under the ESA and Section 106 consultation under the NHPA. Coordinated and managed sub-contractors for cultural resources studies with the West Virginia Division of Culture and History (WVDCH).



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Jacquelyn D. Kester

Principal

Pope Properties, LLC, West Virginia

Role: Ecological Task Manager

Coordinated field efforts for completion of stream and wetland delineations and stream functional assessments for a real estate development. Performed quality reviews of data collection and report preparation. Performed on-site agency meetings with the West Virginia Division of Natural Resources (WVDNR). Performed quality reviews of data collection and report preparation.

Genesis Partners, LP, West Virginia

Role: Ecological Task Manager

Coordinated the field efforts for completion of stream and wetland delineations, stream assessments, and mitigation monitoring in association with real estate projects. Performed quality reviews of reports and data collection. Attended on-site agency meetings with the EPA, U.S. Army Corps of Engineers (USACE), West Virginia Department of Environmental Protection (WVDEP), and WVDNR.

Doss Enterprise, LC, West Virginia

Role: Ecological Project Manager

Coordinated the field efforts for completion of stream and wetland delineations for the development of a business park. Oversaw the preparation and performed quality reviews of a nationwide permit package, stream activity application, and agency coordination letters for Section 7 consultation under the ESA and Section 106 consultation under the NHPA.

Jay Bee Oil and Gas, West Virginia

Role: Ecological Project Manager

Following an EPA Administrative Order for Compliance on Consent, Docket Number: CWA-03-2016-0063DW, Ms. Kester developed an Environmental Management System (EMS) for Jay Bee's Marcellus gas operations in West Virginia for EPA review and approval. The EMS served to enhance overall environmental performance at Jay Bee's multiple operations, and to assist their future operations in complying with applicable regulations. The EMS incorporated multiple Mandatory Environmental Plans for compliance with Sections 10, 401, 402, and 404 of the Federal Clean Water Act. Additional components developed for the EMS included environmental awareness training, an internal compliance audit plan and forms, and a corrective and preventative action system.

Ecosystem Investment Partners, West Virginia

Role: Ecological Task Manager

Coordinated the field effort for completion of stream and wetland delineations and stream assessments. Performed reviews of data collection and report preparation for the development of large scale mitigation banking projects. Proposal preparation and budget control for Indiana bat habitat assessments and conservation plans. Coordinated with and managed sub-consultants for cultural resource studies. Attended on-site agency meetings with the EPA, USACE, WVDEP, and WVDNR.

Dominion Hope, West Virginia

Role: Ecological Task Manager

Managed the preparation of nationwide permit packages for impacts to streams and wetlands associated with pipeline replacement and bank stabilization projects. Agency coordination for Section 7 consultation under the ESA and Section 106 consultation under the NHPA for those projects that did not meet the terms and conditions of Dominion's current blanket agreements. Preparation of stream activity applications through the Office of Land and Streams. Met Dominion representatives in the field to provide immediate permitting guidance on navigating the regulatory program for proposed project plans.

XTO Energy, Inc., West Virginia

Role: Project Manager

Performed Section 404/401 compliance reviews of shallow gas well sites and made remediation recommendations to bring sites into compliance. Conducted stream and wetland delineations for oil and gas related projects in West Virginia. Prepared the appropriate nationwide permit packages for impacts to streams and wetlands per the Mandatory Environmental Plan issues as part of their federal Consent Decree through the EPA. Agency coordination for Section 7 consultation under the ESA and Section 106 consultation under the NHPA. Preparation of stream activity applications through the OLS.

Jacquelyn D. Kester

Principal

Hancock County Board of Education, West Virginia*

Role: Ecological Task Lead

Performed stream and wetland delineations for the development of a new elementary school located in West Virginia. Assisted in sampling benthic macroinvertebrates and biological monitoring. Prepared a Nationwide Permit 39 Pre-construction Notification with a joint 401 Water Quality Certification. Completed a jurisdictional determination site visit with the USACE. Developed an onsite, out-of-kind permittee responsible mitigation plan to compensate for permanent impacts; the plan was designed to incorporate the mitigation project into the school's science curriculum.

Ronald Lane, Inc., West Virginia

Role: Ecological Project Manager

Coordinated the field effort for completion of stream and wetland delineations and stream assessments. Performed reviews of data collection and report preparation for the development of large commercial site development. Attended client meetings to provide guidance on permitting requirements.

Town of Marlinton, West Virginia

Role: Ecological Project Manager

Coordinated the field effort for completion of stream and wetland delineations. Performed quality review of data collection and report preparation.

Jewel City Church, West Virginia

Role: Ecological Task Manager

Coordinated the field effort for completion of stream and wetland delineations. Performed quality review of data collection and report preparation.

Town of Harman, West Virginia

Role: Ecological Task Manager

Coordinated the field effort for completion of stream and wetland delineations associated with an emergency repair of a waterline and sewer line following flooding. Oversaw the preparation and submission of nationwide permit packages for impacts to streams and wetlands. Agency coordination for Section 7 consultation under the ESA and Section 106 consultation under the NHPA. Preparation of stream activity applications through the OLS.

** Work performed prior to joining CEC*

TRAINING

40-hour Wetland Delineation Course, March 31, 2011

Advanced Hydrology for Jurisdictional Determinations, April 19, 2012

Identification of Sedges, Grasses, and Rushes, December 19, 2012

Connectivity of Streams and Wetlands to Downstream Waters, November 14, 2013

NEPA: Writing the Perfect EA/FONSI or EIS, February 16, 2016

Endangered Species Act Section 7 Consultation Training, August 25, 2016

PROFESSIONAL AFFILIATIONS

West Virginia Oil and Natural Gas Association

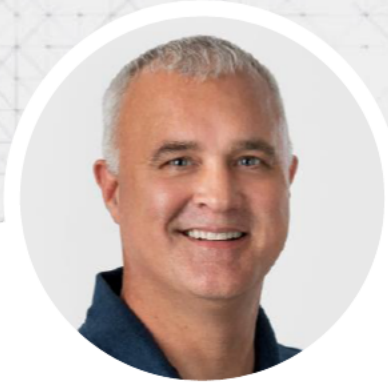
West Virginia Independent Oil and Gas Association

Ohio Valley Oil and Gas Association

Harrison County Chamber of Commerce

Jason H. Littler, P.S.

Senior Project Manager



25 YEARS OF EXPERIENCE

EDUCATION

A.S., Civil Engineering Technology, West Virginia Institute of Technology, 1995

B.S., Engineering Technology - (Survey Emphasis), West Virginia Institute of Technology, 1996

REGISTRATIONS

Professional Surveyor

- WV [REDACTED]

Mr. Littler has over 24 years of experience with proven leadership skills, including managing, supervising, and motivating staff to achieve company objectives. Responsibilities have included positions as Roadway Designer and Survey Project Manager. He has performed roadway design, site civil design, drainage computations, construction layout, earthwork volumes, topographical surveys, aerial mapping control surveys, boundary surveys, WVDOH right of way plan development, courthouse research, deed work maps, survey plats, survey descriptions, earthwork volume computations, hydrology computations, WVDOH waste permits, plan preparation, subdivision plats, cell tower surveys, oil and gas landowner exhibits, pipeline as-builts, pipeline alignment sheets, pipeline routing, fine grade computations, and survey field crew management and oversight. He has been in direct charge with as many as 12 survey crews, which all reported to him and were supervised by him for direction and client satisfaction. He has been in professional charge of several boundary surveys ranging in size from small lot and partition surveys to large multi-tract 1000 acre surveys. He has performed numerous ALTA/ASCM land title surveys all throughout West Virginia for various banks, title insurance companies and development companies.

PROJECT EXPERIENCE

Land Development

Sun Mountain Resort, Mount Hope, WV*

This project consisted of the development of approximately 1,000 acres of land located on the west side of US Route 19, north of the exit to Mount Hope in Fayette County, WV. Preliminary plans for the Sun Mountain Resort included an amphitheater, hotel, Gary Player golf course, and a conference facility. Mr. Littler was responsible for all storm drainage and some of the civil design associated with the construction of the complex. The construction of this project was not completed.

Northeast Quad Development, Bridgeport, WV*

Mr. Littler was involved in performing all site design for the development of this proposed commercial site, such as producing a detailed set of plans showing all site grading and drainage structures and performing all runoff calculations and sediment pond sizing. He also submitted a National Pollution Discharge Elimination System (NPDES) permit for approval.

Fairskies Development, Buckhannon, WV*

Mr. Littler performed a complete site design to produce the most available land use for this development. He also calculated pre and post runoff curve numbers with discharges, designed all structures accordingly, and provided mapping and placement of a relocated gas line. He also completed and submitted an NPDES permit.

Surveys / Geomatics

Tygart Valley Dam, Grafton, WV*

Served as survey crew chief producing as-built surveying diagrams of piping within the dam. Surveying was conducted inside the dam for all as-built locations. Information was to be used for realignment of new pipes being replaced. Also performed original ground topography surveying for an access road leading to the base of the dam for access of equipment.



Civil & Environmental Consultants, Inc.

Jason H. Littler, P.S.

Senior Project Manager

Pine Bluff Tipple Complex, Pine Bluff, WV*

This project is a Bond Forfeiture site located in Pine Bluff, WV. Mr. Littler produced all original ground sections and monthly pay volumes for submittal to the State of West Virginia. He also constructed an as-built map of the completed site.

Dolphin Communications, Bridgeport, WV*

Mr. Littler performed a complete boundary survey of this tract and produced original ground mapping for the proposed road location to the new KISS FM radio station. Mr. Littler acquired all necessary permits and contracted all state agencies necessary for the construction of this road. He also performed runoff calculations and sized all culverts along the road.

Taylor Creek Impoundment, Widen, WV*

Mr. Littler was involved in this Abandoned Mine Land (AML) project. The project consisted of two (2) sites of which all original ground sections were produced and monthly pay volumes were submitted for approval.

Buckhannon Readiness Center, Capitol Engineering, Buckhannon, West Virginia

Role: Survey Project Manager/surveyor-in-Charge

UAV-based acquisition of LiDAR and georeferenced Photography for the existing conditions as-built mapping for an approximately 16 acre site of the Buckhannon Readiness Center. This project involved the collection of UAV Lidar mapping combined with Conventional/GPS surveying techniques. Responsibility included project management, quality control review of all survey deliverables and survey crew coordination.

Long Haul Linear Project, Jennings Excavation, Wood, Richie, Doddridge, Harrison, Lewis, Upshur, and Randolph Counties, West Virginia.

Role: Survey Project Manager, Lead Surveyor in Charge

Survey Project Manager in charge of the as-built surveying of 140 miles of 1 1/4 Inch Conduit that crossed over seven counties in West Virginia. In charge of the survey crews for collecting of the as-built information from trenching and boring activities. CEC set project control along the length of the 140 miles for as-built surveying to be performed. Managed the generation of the as-built data and all deliverables. Was an integral part of the office management quality control before final submittal to the client.

WVDOH-Red Jacket Postal Facility ALTA Survey, Mingo County, WV*

Performed an ALTA/ASCM land title survey for this project. Mr. Littler served as Survey Project Manager coordinating all survey crews and managing the daily field collection of data in accordance to ALTA survey procedures along with utility coordination, record research and computations.

Robinson Run Overland Conveyor Project, Harrison County, WV

Mr. Littler served as Survey Project Manager in charge of surveying on this 4.1 mile, overland conveyor belt line being constructed for Consol Energy. This project consisted of the survey layout, volume computations, and as-built mapping of the 4.1 mile overland conveyor along with over 4 miles of access roads and over 500,000 cubic yards of excavation. Mr. Littler was responsible for the crew scheduling, reviewing of all data, final cross section data, checking of all computations.

Robinson Run Preparation Plant, Harrison County, WV*

Mr. Littler served as Survey Project Manager in charge of surveying on this 2200 TPH coal preparation plant being constructed for Consol Energy. This plant was built to replace the existing plant which had served its time. This project was unique in that the new prep plant was positioned directly behind the existing plant and the existing conveyor feed line to the plant was to only be extended from the old plant into the new plant. The tolerances on alignment tie in was minimal and final tie-in between the old conveyor feed line and the new conveyor feed line was accomplished in a couple of days with no misalignment problems.

WVDEP Office of Abandoned Mine Lands and Reclamation Northern Mapping Services, northern counties of West Virginia*

Mr. Littler served as Survey Project Manager in charge of surveying and mapping on these individual Projects with the West Virginia Department of Environmental Protection, Division of Land Restoration, Office of Abandoned Mine Lands. This contract consisted of a 3 year assignment with the WVDEP and involved surveying and mapping services to be used for the design and construction of Abandoned mine lands projects located throughout the northern counties of West Virginia. Currently in the

Jason H. Littler, P.S.

Senior Project Manager

Northern contract, Mr. Littler has been in charge of the successful completion of the mapping for 40 individual projects with a total mapped acreage of 5,800 acres. Mr. Littler was responsible for the client maintenance, field visits, billing, invoicing and oversight for this three year assignment.

WVDEP Office of Abandoned Mine Lands and Reclamation Southern Mapping Services, southern counties of West Virginia*

Mr. Littler served as Survey Project Manager in charge of surveying and mapping on these individual Projects with the West Virginia Department of Environmental Protection, Division of Land Restoration, Office of Abandoned Mine Lands. This contract consisted of a 3 year assignment with the WVDEP and involved surveying and mapping services to be used for the design and construction of Abandoned mine lands projects located throughout the southern counties of West Virginia. Currently in the southern contract, Mr. Littler has been in charge of the successful completion of the mapping for 53 individual projects with a total mapped acreage of 5,000 acres. Mr. Littler was responsible for the client maintenance, field visits, billing, invoicing and oversight for this three year assignment.

** Work performed prior to joining CEC*

PROFESSIONAL AFFILIATIONS

West Virginia Society of Professional Surveyors

Ohio Oil & Gas Association

Matthew K. Bainbridge, E.I.T.

Project Manager III



17 YEARS OF EXPERIENCE

EDUCATION

B.S., Mathematics, Fairmont State University, 2007

B.S., Civil Engineering Technology, Fairmont State University, 2012

EXPERTISE

Advanced Geospatial Processing
LiDAR Classification and Mapping
Reality Capture Data Processing and 3D Visualization
Kinematic GNSS/IMU Post-Processing

REGISTRATIONS

Engineer in Training

- WV [REDACTED]

Surveyor Intern

- WV [REDACTED]

Mr. Bainbridge possesses a diverse background in both Civil Engineering and Geomatics. With experience ranging from site design to advanced geospatial data processing, Mr. Bainbridge's capabilities enable him to provide a wide variety of services throughout the AEC industry. Geomatics expertise from acquisition through Topographic and/or BIM deliverables using Mobile Laser Scanning (MLS), Terrestrial Laser Scanning (TLS), and sUAS LiDAR and Photogrammetry.

PROJECT EXPERIENCE

Aerial LiDAR and Mapping

UAV LiDAR Well Pad As-Built, EQT, Wetzel County, WV

Role: Project Manager

UAV-based acquisition of LiDAR and Photography of existing well pads and production of As-Built drawing sets.

Rum Creek Connector UAV LiDAR As-Built, WVDOH, Logan, WV

Role: Project Manager

UAV-based acquisition of LiDAR and georeferenced Photography for As-Built of the 8 mile highway project prior to the grand opening in Logan, WV. Involved the collection of 2.5 billion LiDAR data points along an 8 mile highway corridor including hill cuts upwards of 700-feet in elevation relief.

Coal Fields Expressway, WVDOH, WV

Role: Project Manager

UAV-based acquisition of LiDAR and georeferenced Photography for detailed mapping of highway project under construction in Southern West Virginia for the purpose of stockpile volume calculations and pavement design. Collection of data included over 10 miles of roadway to produce detailed existing conditions mapping.

Building and Site Design

Pharmacy Site and Revit Building Design, White Hall Pharmacy, White Hall Marion County, WV*

Design of Building and Site for Whitehall Pharmacy in Fairmont WV.

Grant Avenue Site and Building Design, Rod Everly, Morgantown Monongalia County, WV*

Design of Building and Site for Grant Ave Apartment Complex in Morgantown WV

UFCU Site and Building Design, UFCU, Morgantown Monongalia County, WV*

Design of Building and Site for two Locations of United Federal Credit Union in Morgantown WV

Mobile LiDAR Survey

Route 622 Widening Survey, WVDOH, Kanawha County, WV

Role: Project Manager

Mobile LiDAR and Conventional Survey for Route 622 widening project in WVDOH including boundary evidence location and topographic map preparation through the use of a vehicle-mounted LiDAR sensor and georeferenced 360-degree imagery.



Civil & Environmental Consultants, Inc.

Matthew K. Bainbridge, E.I.T.

Project Manager III

US 441 & Casino Trail MLS, Johnson Architecture, Inc., Cherokee, NC

Role: Topographic Mapping

Mobile LiDAR acquisition and topographic map preparation of approximately 3 miles of roadway in Cherokee, NC for the purpose of streetscape and lighting upgrades.

Pittsburgh District Energy System Route Survey, NRG Energy Center Pittsburgh, Pittsburgh, PA

Role: LiDAR Manager

Mobile Laser Scan and Topographic Map Production for over 30 city blocks in Downtown Pittsburgh.

Oil and Gas

Oil and Gas Infrastructure Design and Permitting, Daybrook Development, Daybrook, WV*

Role: Project Manager

Design of Well Pads and Roads, Mapping of Oil Fields, and Permitting of existing and new drilling for shallow horizontal and vertical wells

Marcellus Well Plats, Southwestern Energy Company, Valley Grove Ohio County, WV

Production of well plat package with ownership for Marcellus Well 6A1 permit.

Survey and Land Subdivision

Potomac Valley Overlook Subdivision, North American Land, Milam Pendleton County, WV*

Survey and Subdivision of 2000+ Acres of Potomac Valley Overlook in Grant and Pendleton Counties, WV. E&S Design, Permit Drawings and NPDES Permit Applications for 9 individual phases of construction.

Terrestrial LiDAR Survey, West Virginia University

Role: Project Manager

Terrestrial Lidar scan of WV Towers for a renovation project that was built for the entire existing facility. Created a map of the entire facility using UAV LiDAR.

Video Processing Dominion Energy , Dominion Energy , Bridgeport West Virginia

Role: Project Manager

360 video documentation of existing roadways of the 1,700 miles of the existing roadway.

NASA IV&V LiDAR, Fairmont West Virginia

Role: Project Manager

Terrestrial LiDAR scan of the entire existing facility. As well as created a recap and a view of the deliver abilities.

Terrestrial LiDAR Survey and 3D Modeling

Owens Corning LiDAR and Modeling, Varo Engineers, Newark Licking County, OH

Terrestrial LiDAR acquisition of 14,000 SQ FT Furnace at the Owens Corning Fiberglass plant. LOD300 3D Model created in AutoCAD from Point Cloud, and adjusted to plant control.

Two Lick Dam Removal, Canaan Valley Institute, Inc., Harrison County, WV

Role: LiDAR Manager

Terrestrial LiDAR Acquisition and existing conditions mapping of pedestrian bridge near the Two Lick Dam site for monitoring before and after removal.

Steelhead LiDAR, Equitrans Midstream, Waynesburg, PA

Role: Project Manager

LiDAR of exposed underground assets during construction and final as-built scan of facility. Adjustment of Plant 3D model BIM 360 to reflect as-built conditions

Matthew K. Bainbridge, E.I.T.

Project Manager III

Houston Railyard As-Built Model, Markwest, Houston, PA

Role: Project Manager

Terrestrial Laser Scan and Subsurface Utility Locations of rail loading facility at the Houston facility. Production of As-built Plant 3D model and delivery of Leica Truview and Navisworks to client.

Marble Cliff - LiDAR Subsidence Analysis, Marble Cliff Apartments, Columbus Columbus County, OH

Terrestrial LiDAR scan of Interior and Exterior of multiple apartment buildings that were experiencing significant subsidence. Floor elevation maps created showing the specific areas and extent of subsidence.

New Castle Power Plant - LiDAR As-Built, Mitsubishi Hitachi Power Systems, New Castle, PA

Establishment of Plant Control and LiDAR As-Built scan and 3D model for Natural Gas Conversion of the power plant. Pipes and Structural Steel objects were created and delivered in Microstation DGN format at the client's request.

Joliet Dolomite Mine - LiDAR As-Built, Q4 Impact Group, LLC, Joliet, IL

LiDAR Scan of entire Dolomite Mine 500 foot below ground in complete darkness. Produced as-built model of conditions of 100-foot tall pillars. Cross sections of pillars delivered to client for structural analysis.

Compressor Facility LiDAR As-Built, Eureka Hunter Pipeline, Pine Grove, WV

Terrestrial LiDAR As-Built of 40 acre compression facility, basemap and as-built 3D model creation. Created an asset management inventory that dynamically linked to truvIEWS in an ArcGIS Online map environment with attribute data on all valves such as detail photographs, serial number, manufacturer, and inspection data.

Nestle Purina LiDAR As-Built and 3D Modeling, Varo Engineers, Zanesville, OH

LiDAR As-Built of 4 story Nestle Purina facility and 3D model produced of the structure and all equipment inside for the client to use for design.

LiDAR As-Built of Stream Restoration, Ecosystem Investment Partners, LLC, Logan Logan County, WV

As-Built Survey of over 20 miles of constructed natural stream channel using Terrestrial LiDAR and production of As-Built surfaces and breaklines. Truview Global creation and linking via QR code to As-Built sheet sets.

** Work performed prior to joining CEC*

TRAINING

Civil 3D Professional Certification through Synergis

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers

PUBLICATIONS

Bainbridge, M. K. "Modern Adventures in History", The American Surveyor, November 2019

Brittany Hedrick, CPSS

Project Manager I



8 YEARS OF EXPERIENCE

EDUCATION

M.S., Agronomy, West Virginia University, 2013

B.S., Environmental Science, West Virginia University, 2009

Mrs. Hedrick has eight years of experience working as an environmental consultant for natural gas, mining, and manufacturing industries, as well as, municipal entities and financial institutions. She has worked on projects for the public and private sectors. Mrs. Hedrick is a Project Manager at Civil & Environmental Consultants, Inc. where she assists clients in understanding and working through ever-changing environmental regulations. She earned her Master of Science in Agronomy from West Virginia University in 2013 and her Bachelor of Science in Environmental Protection in 2009. Currently, she is a Certified Professional Soil Scientist, a West Virginia Licensed Remediation Specialist, and holds multiple asbestos licenses. She has designed asbestos abatement projects, as well as, performed multiple asbestos inspections and asbestos air clearance monitoring. In the past, she has worked on a variety of remediation sites from tire recycling facilities to a former DuPont-owned Superfund site. Brittany has served as a project manager on multiple West Virginia Voluntary Remediation Program projects assisting clients in navigating the regulatory framework of the program. Mrs. Hedrick's specialty is soil remediation and she enjoys studying contaminant migration through a soil profile. She is very familiar with groundwater sampling, modeling, and remediation techniques.

PROJECT EXPERIENCE

Phase I ESA

Benedum Phase I ESA - Terminal Construction, Benedum Airport Authority, Bridgeport, WV*

Role: Project Manager

As the project manager, Ms. Parks organized and delegated tasks of this Phase I Environmental Site Assessment to junior staff. After the junior staff compiled the Phase I ESA, she conducted a subject matter review of the document. As the Environmental Professional, she mentored staff to identify recognized and historical environmental conditions, De Minimis conditions, and business economic risks associated with the site. This Phase I ESA was written to obtain EDA grant money. A very tight deadline was met with a thorough deliverable to our client.

Bombardier Hangar Renovation - Phase I ESA, Benedum Airport Authority, Bridgeport, WV*

Role: Project Manager

Ms. Parks organized and delegated tasks of this Phase I Environmental Site Assessment to junior staff. After junior staff compiled the Phase I ESA, she conducted a subject matter review of the document. As the environmental professional, she mentored staff in identifying recognized and historical environmental conditions, De Minimis conditions, and business economic risks. This Phase I ESA was written to obtain EDA funds. A very tight deadline was met with a thorough deliverable to our client.

Central Cab, Kari Resources, Inc, Waynesburg, Pennsylvania*

Role: Environmental Technician

Ms. Parks performed the site reconnaissance, conducted interviews with state and local officials, reviewed historical information, and developed conclusions and recommendations based on the future redevelopment for the site. Two recognized environmental

REGISTRATIONS

Licensed Remediation Specialist
• WV

CERTIFICATIONS

Heartsaver CPR AED, American Heart Association

40-Hour OSHA HAZWOPER, Occupational Safety & Health Administration

Certified Professional Soil Scientist, Soil Science Society of America

Asbestos Inspector, West Virginia

SafeLand USA - Basic Orientation, PEC Safety

10-Hour OSHA Construction Safety (Occupational Safety & Health Administration), OSHA

Environmental Professional, ASTM

Asbestos Management Planner, WV



Civil & Environmental Consultants, Inc.

Brittany Hedrick, CPSS

Project Manager I

conditions and one non-ASTM scope finding were identified for the site. She recommended that the unused 4,000 gallon tank be drained and removed from the site and better housekeeping be kept for the material storage onsite. Although this Phase I ESA did not suggest a Phase II ESA, we were able to advise our clients so that they may avoid fines and/or fees in the future.

Joe McCoy Phase I ESA, Premier Bank, Inc., Ravenswood, West Virginia*

Role: Project Manager

As project manager, Ms. Parks facilitated a request from Premier Bank for a Phase I ESA on a property that was owned by the same family for over 50 years. Historically, this property was utilized for agricultural purposes. More recently, the property took on a more industrious land use and was an auto repair shop for tractor trailers. The property also was an overflow for chemical storage of a nearby plastics facility. As the environmental professional reviewing the Phase I ESA, she recommended a Phase II ESA based on the soil staining, oil sheens, and chemical storage observed at the site.

Vienna Goldmark, LLC., Premier Bank, Inc., Vienna, West Virginia*

Role: Project Manager

As the project manager, Ms. Parks organized and delegated tasks of this Phase I Environmental Site Assessment to junior staff. After the junior staff compiled the Phase I ESA, she conducted a subject matter review of the document. This Phase I ESA was conducted on a site that was already under construction. The site was identified as a service/gas station in 1964, 1969, and 1973. During the site reconnaissance, soil staining was observed approximately 1 foot below ground surface. A Phase II ESA was recommended to determine if soil and/or groundwater contamination exists onsite. The client agreed and a Phase II ESA was performed.

Phase II ESA

Vienna Goldmark, LLC. Phase II ESA, Premier Bank, Inc., Vienna, West Virginia*

Role: Project Manager

The Phase II ESA was performed to sample site soils and groundwater for evidence of an underground storage tank that was removed from the property. The underground storage tank was removed from the site prior to 1988, when regulations were enacted regarding leak detection and spill prevention. As project manager, Ms. Parks organized all site activities with the sub-contracted driller and environmental scientists. Results from the Phase II indicated the property should be entered into the voluntary remediation program. As the project manager, I explained to our client the environmental liabilities they would be taking on if a foreclosure action was to take place.

Voluntary Remediation

Elk Terminal, City of Parkersburg - Urban Renewal Authority, Parkersburg, WV*

Role: Project Manager

As an Environmental Technician, Ms. Parks began field work on this project and finished as the project manager guiding the City of Parkersburg through the WVDEP Voluntary Remediation Program. From the early 1950's to 2006, this site was utilized as a Pennzoil terminal that had two aboveground storage tanks containing petroleum hydrocarbons and bulk fuels. It was found that the aboveground storage tanks and associated piping contributed to the petroleum constituents present in soils and groundwater. Ms. Parks conducted surface and subsurface soil sampling, and low-flow groundwater sampling for the site. As a consultant for the City of Parkersburg, she coordinated with regulatory agencies to fulfill the requirements of the voluntary program and determine cost-effective solutions that satisfied both the City of Parkersburg and the WVDEP.

Elkview Field Camp, Halliburton Energy Services, Elkview, West Virginia*

Role: Project Manager

As an Environmental Technician, Ms. Parks performed field work for Halliburton Energy Services (Halliburton). As a Project Manager, she assisted Halliburton navigate the WVDEP Voluntary Remediation Program. This site borders the Elk River making it a prime location for redevelopment. Purchased in approximately 1969, Halliburton utilized this property as an oil and gas services field camp. After researching the history of the site, it was determined that an underground storage tank release occurred in 1989 which resulted in remediation via pump-and-treat system. In 2018, results indicated various volatile organic compounds and heavy metal concentrations in the soil exceeded WVDEP standards. One polycyclic aromatic hydrocarbon (PAH) compound exceeded WVDEP groundwater standards in only one location indicating that natural attenuation was occurring onsite. In this project, Ms. Parks assisted Halliburton in negotiations with the WVDEP regarding the groundwater exceedance. She researched the hydrophobic properties of the PAH and determined through field notes, that this particular sample was very turbid. As the project

Brittany Hedrick, CPSS

Project Manager I

manager, she suggested to the WVDEP to allow for the recollection of this one sample, to save Halliburton a second round of groundwater sampling.

Harrison Recycling Center, Energy Solutions Consortium, Herndon, VA*

Role: Project Manager

Acting as Project Manager, Ms. Parks was responsible for delegating tasks; developing the WVDEP-approved sampling plan; coordinating with subcontractors, the client, and the WVDEP; and providing oversight for field work. This site was previously a coal mine and, most recently, the site was utilized for metal recycling activities. Energy Solutions Consortium planned to utilize this property for construction of their power plant in Clarksburg, WV. To move forward with construction, this site needed to be remediated to state standards. I sent preliminary analytical data to a risk assessor. Based on the data, the risk assessor determined, and the WVDEP agreed, that grading activities could begin prior to the issuance of a certificate of completion. This put the client ahead of their original construction schedule.

Jane Lew Field Camp, Halliburton Energy Services, Jane Lew, WV*

Role: Project Manager

During this voluntary remediation project, Ms. Parks collected environmental media samples from approximately 6-acres to characterize the site. Historically, Halliburton utilized this site as a field camp for oil and gas services from 1963 until 2013. Truck maintenance, truck washing operations, HCl tanks, and chemical storage contributed to the suspected site contamination and eligibility for the voluntary remediation program. Surface soil, subsurface soil, and groundwater samples exceeded WVDEP standards and contributed to offsite migration. As a project manager for the project, I assisted in coordinating correspondence regarding offsite migration between the client and WVDEP.

Moundsville Zinc , Regional Economic Development Partnership, Moundsville, WV*

Role: Project Manager

As part of the former United Zinc Smelting Corporation's Zinc Smelter in Moundsville, WV, I assisted RED through the beginning stages of the WVDEP Voluntary Remediation Program. Historically, this facility was notorious for smelting activities from 1918 to 1945. A U.S. EPA "no further action" letter was issued for the site; however, this did not satisfy the state's remedial concerns. It was challenging for our client to understand why their newly purchased property, with a USEPA no further action letter, still needed the onsite environmental media characterized and assessed. As project manager, she worked with RED in understanding the importance of having a certification of completion from the state and they proceeded with the VRP.

Remedial Action

The Perrine-DuPont Settlement, NorthStar Contracting, Inc., Spelter, West Virginia*

Role: Environmental Technician

A DuPont-owned zinc smelter, located outside Clarksburg, WV, was in operation for approximately 90 years in a town called Spelter. During the time of its operation, wind-blown heavy metal contaminants from production and slag piles were deposited throughout Spelter and surrounding communities. Millions of dollars were awarded towards the cleanup of Spelter and the surrounding communities in a class-action lawsuit. For three years, Ms. Parks acted as the onsite environmental consultant for the general contractor performing the dig and haul job. Structures were also remediated as the structures were also subjected to the contamination. As an environmental technician, Ms. Parks inspected erosion and sediment controls, monitored ambient and personal air, provided quality control for the interior and soil remediation efforts, and documented all daily remedial activities.

Asbestos

Airport Hangar Inspection, Benedum Airport Authority, Bridgeport, WV*

Role: Project Manager

The Benedum Airport Authority, manager of the North Central West Virginia Airport, needed an asbestos inspection in order to receive \$1.7 million from a federal Economic Development Authority (EDA) grant. The grant money was intended to renovate the Bombardier Aviation building. Although the EDA was mainly concerned with the renovation activities, the Benedum Airport Authority was working against a tight deadline. The CEC Project Manager was able to rearrange schedules to get an inspector on-site, inspect a hangar (> 100,000 square feet), and for the inspector to be off-site within a few days. Plans have changed for the North Central West Virginia Airport since the inspection was completed; however, when the client needed the project to be handled with urgency, the CEC Project Manager was able to accommodate the client's needs.

Brittany Hedrick, CPSS

Project Manager I

Aleshire Pedestrian Bridge, WV Department of Transportation, Division of Highways, Seth, West Virginia*

Role: Project Manager

This job was completed for the West Virginia Division Of Highways (DOH) in April 2019. The CEC Project Manager worked with Mr. Harry Bradley for the inspection of 16 structures in a community only accessible via concrete bridge. Often, the concrete bridge was flooded from small amounts of rain. The CEC Project Manager worked to find a solution to the problem and get the work done. Instead of waiting for a low flow along the Big Coal River, a kayak was organized with equipment and two WV-licensed asbestos inspectors finished inspecting the 16 structures within two days. The inspection revealed fire-damaged homes. Samples collected in these buildings were obtained from a safe distance due to the unknown structural stability of the building. The CEC Project Manager QCed the report submitted to Mr. Bradley so that the document was in accordance with DOH standards for asbestos inspection reporting.

Gilmore Building, City of Madison, Madison, WV*

Role: Project Manager

Asbestos professionals, under the leadership of CEC's Project Manager, were able to help the small, rural community of Madison, WV after enduring a challenging time in the Fall of 2018. A structure fire engulfed the Gilmore Building causing major structural damage. The asbestos inspection was performed so that the City of Madison could rebuild. CEC's Project Manager was able to find savings around every corner for the client. An estimated cost of \$6,300 was provided to the client and at the end of the project, the City of Madison only paid about half of that cost. Limiting sampling areas and cutting field time accelerated the project, brought the project in under budget, and on time.

K & J Apartments, Wst Virginia University Medicine, Morgantown, WV*

Role: Project Manager

West Virginia University Hospitals plans to construct a 6-story parking garage to expand parking for patients and visitors. The new parking garage is to be constructed on the same lot that the Medical Center Apartments (K & J Apartments) are located on. In order to demolish the buildings, an asbestos inspection was performed on the identical set of apartment buildings. Asbestos was identified on the property and an abatement was performed. Ms. Parks is a licensed West Virginia air clearance monitor and performed the air clearance, allowing the demolition to proceed on schedule.

Various Inspections throughout WV, Confidential Client, Varies, WV*

Role: Project Manager

As a project manager for a previous firm, the Project Manager worked with a confidential client that dominates the oil and gas industry nationally and in West Virginia. CEC's Project Manager performed multiple asbestos inspections for this client. Two residential buildings were planned for demo so that the road could be widened in that area. A rush was put on the results and a report was delivered to the client just in time for the 10-day notification to be submitted. This client was able to start demolishing the structures on time, keeping the project on schedule.

Various Inspections throughout WV, Confidential Client, Clendenin, WV*

Role: Project Manager

As a project manager for a previous firm, the Project Manager worked with a confidential client that dominates the oil and gas industry nationally and in West Virginia. CEC's Project Manager performed multiple asbestos inspections for this client. Multiple sheds were inspected for this client. These sheds were typically in-line to be demolished. The inspections were completed in approximately one half day to keep the construction schedule up-to-date.

Various Inspections throughout WV, Confidential Client, Varies, WV*

Role: Project Manager

As a project manager for a previous firm, the Project Manager worked with a confidential client that dominates the oil and gas industry nationally and in West Virginia. CEC's Project Manager performed multiple asbestos inspections for this client. Some utility repairs require the excavation of older pipes with an applied coal tar coating on the outside of the pipe that protects against pipe corrosion. When our client was laying pipe in the field and encountered coal tar wrapped pipe, we could be onsite within two and a half hours (depending on the location of the site). The pipe was sampled, cut to the length of the waste disposal box, wrapped, labeled, and placed in an area that is out of the way. The client was very pleased with the work performed on the project.

Brittany Hedrick, CPSS

Project Manager I

WVU - Fieldcrest Hall, Wst Virginia University Medicine, Morgantown, WV*

Role: Project Manager

WVU's Fieldcrest Hall was originally the Monongalia County General Hospital. The building underwent multiple renovations which created a multitude of homogeneous areas. Diligence and dedication to the project pushed this project through to the abatement phase, as asbestos materials were found. Keeping organized and methodical, this inspection was completed under one week. The project manager was available to the abatement contractor to collect samples of homogeneous areas that were missed. The client was happy with the project manager staying in budget and on time so their demolition schedule was not delayed.

** Work performed prior to joining CEC*

AWARDS

Graduate Research Assistantship (August 2010 - October 2012)

PROFESSIONAL AFFILIATIONS

American Society of Agronomy

Soil Science Society of America



Civil & Environmental Consultants, Inc.

OHIOPYLE STATE PARK OFFICE/LAUREL HIGHLANDS FALLS AREA VISITOR CENTER

OWNER/CLIENT

Pennsylvania Department of Conservation
& Natural Resources

LOCATION

Fayette County, PA

CEC SERVICES

Civil Engineering
Geotechnical Engineering
Land Survey
Structural Engineering
Landscape Architecture
Ecological Permitting
Green Stormwater Infrastructure
Wastewater Treatment System Design
Site Plan and Regulatory Approvals
Subcontractor Coordination
Ground-based Geothermal System
Planning and QA
Sustainability Planning/Design

AWARDS

LEED Gold Certified
2015 Forever Green Award (USGBC)

OWNER OBJECTIVE

A new park staff office at Ohiopyle State Park, one of the most visited state parks in the United States, had been planned by The Pennsylvania Department of Conservation and Natural Resources (DCNR) along with a new Interpretive Center for visitors. The center's primary function is to introduce and orient visitors to the many activities and features that Ohiopyle State Park, Ferncliff National Natural Area, and Ohiopyle Borough have to offer.

CEC APPROACH

This was the fourth project under a master services agreement with DCNR, and CEC would lead the design discussions for the facility and provide site civil engineering, structural engineering, geotechnical engineering, surveying, and landscape architecture services—all with a goal to have the facility achieve LEED® Gold certification.

CEC utilized Building Information Modeling (BIM) software for the structural design of the building while architectural services, HVAC, plumbing, and electrical design services, as well as commissioning services, were provided by sub-consultants.

The ~8,000-gross-square-foot facility includes an interpretive exhibit space, multipurpose room, park staff offices, and a boater registration area. The development also includes ecological landscaping, new access paths, permeable paving and dark sky lighting. It serves as a key portal location for the region, and is a prime example of sustainable, low-impact development design. Innovative energy and utility systems were also implemented, as well as a specialized biological wastewater treatment system integrated with a wetland. The system utilizes soils, plants, and microorganisms to break down wastewater effluent produced by the facility. A ground-based geothermal well field provides primary heating and cooling for the interior.

The project received the 2015 Forever Green Award presented by the Central Pennsylvania Chapter of the U.S. Green Building Council.



Photo courtesy of Halkin-Mason Photography



The Laurel Highlands Falls Area Visitor Center project has been awarded the USGBC LEED Gold Certification Photo courtesy of Halkin-Mason Photography



Civil & Environmental Consultants, Inc.

MYLAN PARK RV PARK

OWNER/CLIENT

Mylan Park Foundation

LOCATION

Morgantown, WV

CEC SERVICES

Erosion & Sedimentation Control/NPDES Permitting

Geotechnical Engineering

Roadway Design

Site Grading/Earthwork Analysis

Stormwater Management/BMP Design

OWNER OBJECTIVE

Mylan Park Foundation supports the development of Mylan Park in Morgantown, West Virginia. Mylan Park is a full-service sports, recreation, wellness, and events complex spanning across 400 acres. The park is home to 14 indoor and outdoor facilities comprising more than 60 acres of athletic field space and more than 180,000 square feet of indoor sport, recreation, and event venues. The park includes trails for walking, biking, and carts, with plans to expand the trail system.

Mylan Park Foundation sought to add an RV Park and additional accommodations to add capacity to the park and allow event attendees to stay on site for the duration of their event. Mylan currently has a small RV area, but increased demand is creating a need for additional RV spaces and other lodging options.

CEC APPROACH

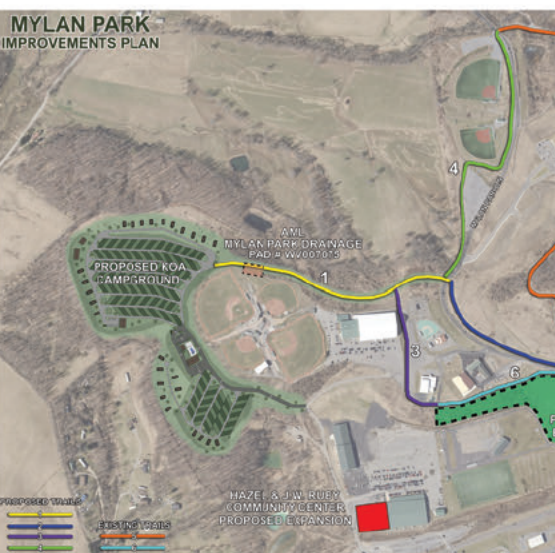
The RV Park is located on property that has been surface and deep mined. The mining reclamation has left gently sloping field on a majority of the site, but multiple feet of mine spoil is expected to be encountered during construction. Utility extension is required to serve the RV Park including water, sanitary sewer, and electric.

CEC has teamed with the Mylan Park Foundation to assist the organization in applying for funding opportunities, including the Abandoned Mine Lands and Reclamation (AML) Pilot Program, sponsored by the West Virginia Department of Environmental Protection (WVDEP). CEC researched past mining activities, preparing a report and mapping, and met onsite with WVDEP AML representatives to review the project and assisted in getting a portion of Mylan Park established as an abandoned mine land. Getting that designation allowed the project to be eligible for the AML Pilot Program.

CEC has begun designing the layout, grading, and utilities for the park, which includes approximately 167 RV spaces, 26 cabins, and a multipurpose trail to connect the RV Park to Mylan Park Lane. The park is planned to be a Kampgrounds of America (KOA) site, so CEC has coordinated the design with KOA to ensure the park meets their requirements. Because utilities, including water and sanitary sewer extensions, are required as part of the project, CEC also has coordinated with the Morgantown Utility Board (MUB) for connections and for the design of utility extensions beyond MUB's system.

Working closely with Mylan Park, KOA, and MUB to ensure the RV Park meets Mylan Park's needs while also heeding to KOA and MUB requirements, CEC anticipates submitting for permits in fall 2021 and for construction to begin in spring 2022.

A 36 BACK-IN LOTS
B 131 FULL THROUGH LOTS | 2 BATHS
C 26 CABIN SITES
D 4 TENT SPOTS
E 1



Proposed Campground Site



DINA COLE KLAUVON, RLA, ASLA

Principal, Klavon Design Associates, Inc.

Dina founded Klavon Design Associates, Inc. in 1996. She is responsible for all aspects of the business, including business development, client relationships, financial accountability, staff management, and daily office management. For over 38 years, she has helped transform the public spaces of Pittsburgh with beautiful and innovative landscape architecture. She has worked on projects across the country and in Europe ranging from intimate gathering spaces to large-scale master plans. She is an advocate for equitable design and sustainability as a means of improving the social and economic well-being of communities and the people that live in them.

Education

BS, Landscape Architecture
Pennsylvania State University

Registrations

Registered Landscape Architect
Pennsylvania

Certifications

Master Planning Principles
USACE Learning Center

Awards

2020 AIA Pittsburgh Honor Award
CMU ANSYS Hall

2018 ASLA Merit Award
CMU Margaret Morrison Reflection
Garden

2015 ULI Award of Excellence
Energy Innovation Center

2013 ULI Award for Excellence
Academic Village at Point Park University

**2011 Planetizen Top 100 Public
Spaces in the US and Canada**
Market Square

**2011 10,000 Friends of Pennsylvania
Commonwealth Award**
Market Square

**2004 ASLA PA/DE Special
Recognition Award**
Strawberry Way

Affiliations

**Pennsylvania State Board of
Landscape Architects**
Board Member, 2017-present

City of Pittsburgh Art Commission
Chairperson, 2002-2010

Selected Projects

Academic Village Plaza, Point Park University, Pittsburgh, PA
Principal

**ALCOSAN Customer Service Center, Allegheny County Sanitary Authority,
Pittsburgh, PA**
Principal

Bloomfield Business District Parking Lot, Pittsburgh, PA
Principal

Borough of Sewickley, Riverfront Park, Sewickley, PA
Principal

Braddock Borough, Braddock Civic Plaza, Braddock, PA
Principal

Carnegie Mellon University, ANSYS Maker Space Courtyard, Pittsburgh, PA
Principal

Carnegie Mellon University, Margaret Morrison Reflection Garden, Pittsburgh, PA
Principal

Carnegie Mellon University, South Neville Project, Pittsburgh, PA
Principal

City of Beaver Falls Carnegie Library Park, Beaver Falls, PA
Principal

Lock Haven University, Lock Haven University Parking Lot, Lock Haven, PA
Principal

**PA Department of Conservation and Natural Resources, Yellow Creek State Park,
Site and Landscape Improvements, Pittsburgh, PA**
Principal

Pittsburgh Zoo and PPG Aquarium, Jungle Odyssey, Pittsburgh, PA
Principal

Steel Valley School District, Transforming 12th Avenue, Homestead, PA
Principal

Urban Redevelopment Authority, Market Square, Pittsburgh, PA
Principal

Wilkins Township, Amphitheater and Site Improvements, Pittsburgh, PA
Principal

USACE, Shore Park Recreation Area, Aberdeen Proving Ground, MD
Principal



DREW HARBAUGH, RLA

Senior Landscape Architect, Klavon Design Associates, Inc.

Drew's experience ranges from planning and design to construction administration. He has played a critical role in large-scale planning projects as well as finely-detailed construction projects. He is able to think broadly about a site in terms of its potential while understanding how future development will be implemented on the ground, allowing for the creation of buildable and sustainable design solutions. Drew has developed exemplary skills in the technical aspects of landscape architecture such as grading and drainage, site details, specifications, cost estimating, construction observation, and zoning code review.

Education

Bachelor of Landscape Architecture
Pennsylvania State University

Registrations

Registered Landscape Architect
Pennsylvania

Certifications

Master Planning Principles
USACE Learning Center

Awards

2020 AIA Pittsburgh Honor Award
CMU ANSYS Hall

2018 ASLA Merit Award
CMU Margaret Morrison Reflection Garden

2015 ULI Award of Excellence
Energy Innovation Center

2015 APA Great Public Spaces in Pennsylvania
Market Square

2013 ULI Award for Excellence
Academic Village at Point Park University

2011 Planetizen Top 100 Public Spaces in the US and Canada
Market Square

2011 10,000 Friends of Pennsylvania Commonwealth Award
Market Square

Selected Projects

Borough of Sewickley, Riverfront Park, Sewickley, PA
Landscape Architect

Braddock Borough, Braddock Civic Plaza, Braddock, PA
Landscape Architect

Carnegie Mellon University, Legacy Plaza, Pittsburgh, PA
Landscape Architect

Carnegie Mellon University, Margaret Morrison Reflection Garden, Pittsburgh, PA
Landscape Architect

Carnegie Mellon University, South Neville Project, Pittsburgh, PA
Landscape Architect

Children's Home of Pittsburgh, Site and Landscape Improvements, Pittsburgh, PA
Landscape Architect

City of Beaver Falls Carnegie Library Park, Beaver Falls, PA
Landscape Architect

City of Pittsburgh Schools, Homewood Elementary School Playground, Pittsburgh, PA
Landscape Architect

Lock Haven University, Lock Haven University Parking Lot, Lock Haven, PA
Landscape Architect

Monaca Water Works Park, Monaca, PA
Project Manager

PA Department of Conservation and Natural Resources, Yellow Creek State Park, Site and Landscape Improvements, Pittsburgh, PA
Project Manager

Pittsburgh Zoo and PPG Aquarium, Jungle Odyssey, Pittsburgh, PA
Landscape Architect

Steel Valley School District, Transforming 12th Avenue, Homestead, PA
Landscape Architect

Urban Redevelopment Authority, Market Square, Pittsburgh, PA
Landscape Architect

Wilkins Township, Amphitheater and Site Improvements, Pittsburgh, PA
Landscape Architect



RACHELLE WOLF, LEED AP

Facilitator/Senior Landscape Designer, Klavon Design Associates, Inc.

Rachelle's experience includes landscape architecture, master planning, site planning, and urban design with an emphasis on sustainable design and project management. Rachelle's years of experience include design, site layout, grading and drainage, site details, planting plans, specifications, cost estimating, and construction administration. Rachelle is also responsible for LEED® integration and documentation for all projects within the firm. She completed the National Charrette Institute (NCI) Charrette System Training and leads public engagement and facilitation exercises for Klavon.

Education

BS, Landscape Architecture
Pennsylvania State University

Certifications

LEED Accredited Professional
Green Business Certification Inc.™

Master Planning Principles
USACE Learning Center

Charrette System Training
National Charrette Institute

Awards

2020 AIA Pittsburgh Honor Award
CMU ANSYS Hall

2018 ASLA Merit Award
CMU Margaret Morrison Reflection Garden

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2013 ULI Award for Excellence
Academic Village at Point Park University

2011 Planetizen Top 100 Public Spaces in the US and Canada
Market Square

2011 10,000 Friends of Pennsylvania Commonwealth Award
Market Square

2009 DWR Chair Design
Finalist

2008 ASLA PA/DE Honor Award
PNC Firstside Park

Selected Projects

Army Research and Laboratory Deer Loop Master Plan, Aberdeen, MD
Senior Landscape Designer

Borough of Braddock, Braddock Civic Plaza, Braddock, PA
Project Manager

Borough of Sewickley, Riverfront Park, Sewickley, PA
Project Manager

Carnegie Mellon University, ANSYS Maker Space Courtyard, Pittsburgh, PA
Project Manager

Carnegie Mellon University, Legacy Plaza, Pittsburgh, PA
Project Manager

Carnegie Mellon University, Margaret Morrison Reflection Garden, Pittsburgh, PA
Project Manager

Carnegie Mellon University, South Neville Project, Pittsburgh, PA
Senior Landscape Designer

Four-Mile Run Mobility Trail, Pittsburgh, PA
Project Manager

Monongahela Riverfront Walkability Study, City of Monongahela, PA
Senior Landscape Designer

Oxford Development, The Stacks at 3 Crossings, 75 Hopper Place, Pittsburgh, PA
Project Manager

PA Department of Conservation and Natural Resources, Yellow Creek State Park, Site and Landscape Improvements, Pittsburgh, PA
Project Manager

Pittsburgh Zoo and PPG Aquarium, Jungle Odyssey, Pittsburgh, PA
Project Manager

Point Park University, Academic Village Plaza, Pittsburgh, PA
Project Manager

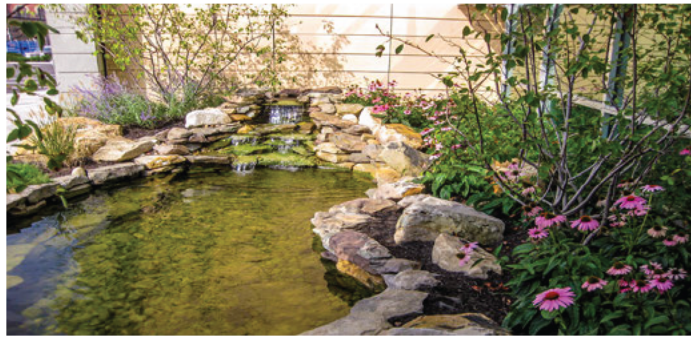
Steel Valley School District, Transforming 12th Avenue, Homestead, PA
Senior Landscape Designer

Summerbrook Homeowner's Association Community Park, Canonsburg, PA
Project Manager

Wilkins Township, Amphitheater and Site Improvements, Pittsburgh, PA
Project Manager

ALCOSAN Customer Service Center

Allegheny County Sanitary Authority | Pittsburgh, PA



ALCOSAN integration of stormwater best management practices

As part of LEED Gold Certified project, Klavon designed a sustainable parking lot and landscape constructed on the Allegheny County Sanitary Authority (ALCOSAN) corporate campus. The goal of the project was to design a comprehensive sustainable site to showcase creative stormwater management, with both hardscape and softscape stormwater management features such as pervious pavement, bioretention beds, rain gardens, and the use of native plants. The water features are designed to reuse runoff from the building, and the majority of stormwater in the parking lot is infiltrated through pervious pavement or conveyed to rain gardens and bioretention beds.

Klavon's tasks included schematic design, design development, construction documents, bidding and negotiation, and construction administration. Specific responsibilities included revising an existing site plan, designing a bioretention area, designing a fountain, and preparing site and fountain details.

Contract Duration

2009

Construction Costs

\$6.8M

Project Size

1 AC

Contact

Greg Maynes
Principal
Moshier Studio
1501 Reedsdale Street Suite 301
Pittsburgh, PA 15233
(412) 361-5302

Project Features



Landscape Architecture



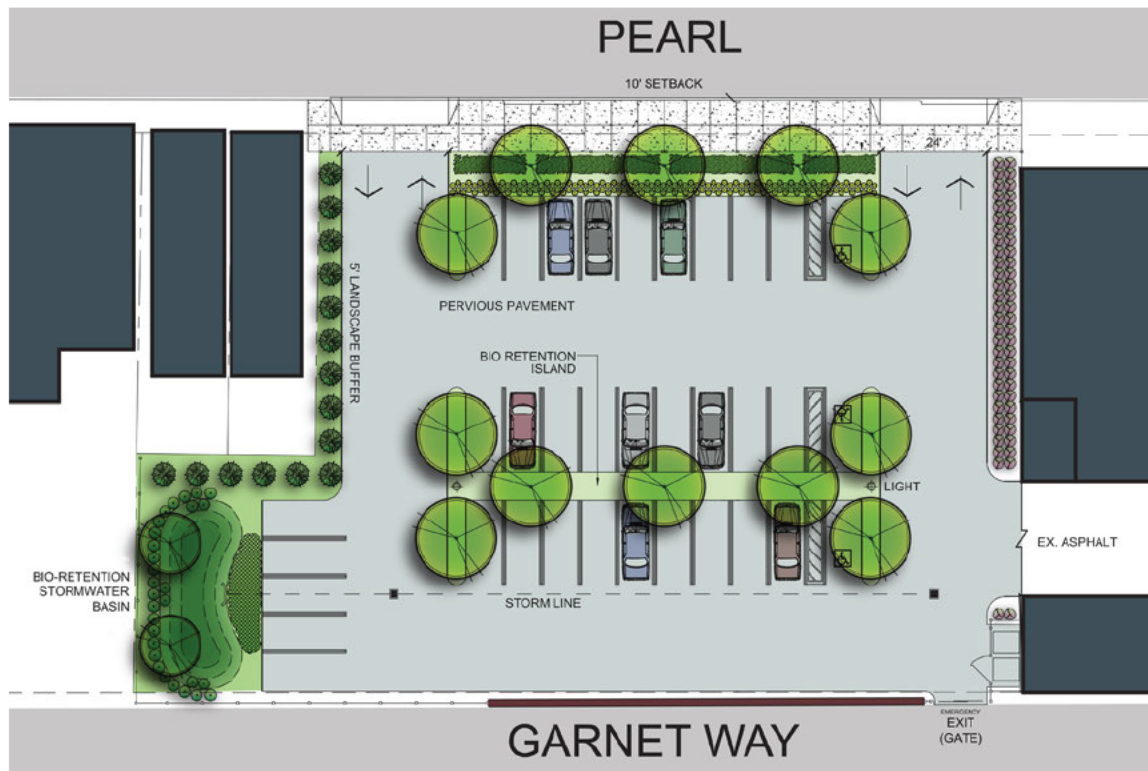
Green Infrastructure



Sustainable Design

Bloomfield Business District Parking Lot

Pittsburgh, PA



A rendered plan of the parking lot shows the landscape buffers and bioretention basin in relation to the parking aisles

This parking lot in the heart of Pittsburgh's Bloomfield neighborhood is designed to efficiently capture and filter stormwater rather than relying on hardscape and pipe conveyance as seen in traditional stormwater methods. Best management practices included the use of pervious pavement, landscape buffers, bioretention islands, and bioretention stormwater basins. The use of landscape buffers and trees in the design also reduces the urban heat island effect, creating a more comfortable space to park.

Klaxon relied on stakeholder interviews and charrettes to understand the existing conditions and what the neighborhood expects from the design. Klaxon's responsibilities included site design, landscape design, producing construction documents, and construction administration.

Contract Duration

2005

Fee

\$34K

Project Size

0.7 AC

Contact

Community Design Center of
Pittsburgh

938 Penn Ave # 600

Pittsburgh, PA 15222

(412) 391-5190

Project Features



Landscape Architecture



Green Infrastructure



Sustainable Design



Urban Design

South Neville Project

Carnegie Mellon University | Pittsburgh, PA



Clockwise from top: FMS Building, commuter parking lot, birds eye of site between rail and road easements

The Carnegie Mellon University South Neville Project included transforming a narrow strip of land between a two rights-of-way into a Facilities Management Services (FMS) facility and a commuter parking lot.

The highly-constrained site required meticulous organization to accommodate all of the university's needs. The FMS area includes a garage, salt storage, and additional space for staging. The adjacent commuter parking lot serves faculty and staff of the university. A shared-use path was integrated along the railroad easement to provide a safe walking route between the parking lot and campus. The path will eventually be extended to establish a dedicated connection between Fifth Avenue and the Junction Hollow Trail.

Project budget was set at \$2M bids received were within a 1% of budget. This project turned an underused orphan space into 100 parking leases and a maintenance facility for FMS.

Contract Duration

2016

Fee

\$2M

Project Size

2.25 AC

Contact

Ralph Horgan
Associate Vice Provost
Campus Design and Facility
Development
Carnegie Mellon University
5000 Forbes Avenue
Pittsburgh, PA 15213-3890
rh44@andrew.cmu.edu
(412) 268-6156

Project Features



Landscape Architecture



Green Infrastructure



Sustainable Design



Urban Design



Multimodal Circulation

Lock Haven University Parking Lot

Lock Haven University | Lock Haven, PA



Lock Haven parking lot plantings



Klaxon provided design and construction management services for Lock Haven University. As a LEED project, the landscape utilized several “green” techniques, including the incorporation of large deciduous trees to aid in heat island reduction, native vegetation to attract wildlife, and plant beds to aid in on-site stormwater management.

Landscaping consisted of native and adapted-native street trees, shade trees, ornamental grasses, groundcover, and perennial plantings that do not require permanent irrigation systems. The site captures stormwater from the parking lot and manages it in a manner that benefits the plantings. Curb openings allow stormwater from the parking lot to pass into the bioretention planting beds and infiltrate the soils. This reduces runoff from the site as well as supplements the natural rainfall the plants receive. All planting soil was amended with organic matter to aid in water retention.

Temporary hose connections to the building’s water supply system were incorporated for establishment of the plant material and also for periodic watering during dry periods.

Contract Duration

2009

Fee

N/A

Project Size

3.29 AC

Contact

John Schrott, President, AIA
IKM, Inc.
11 Stanwix Street Suite 2200
Pittsburgh, PA 15222
media@ikminc.com
(412) 281-1337

Project Features



Planning / Urban Design



Landscape Architecture



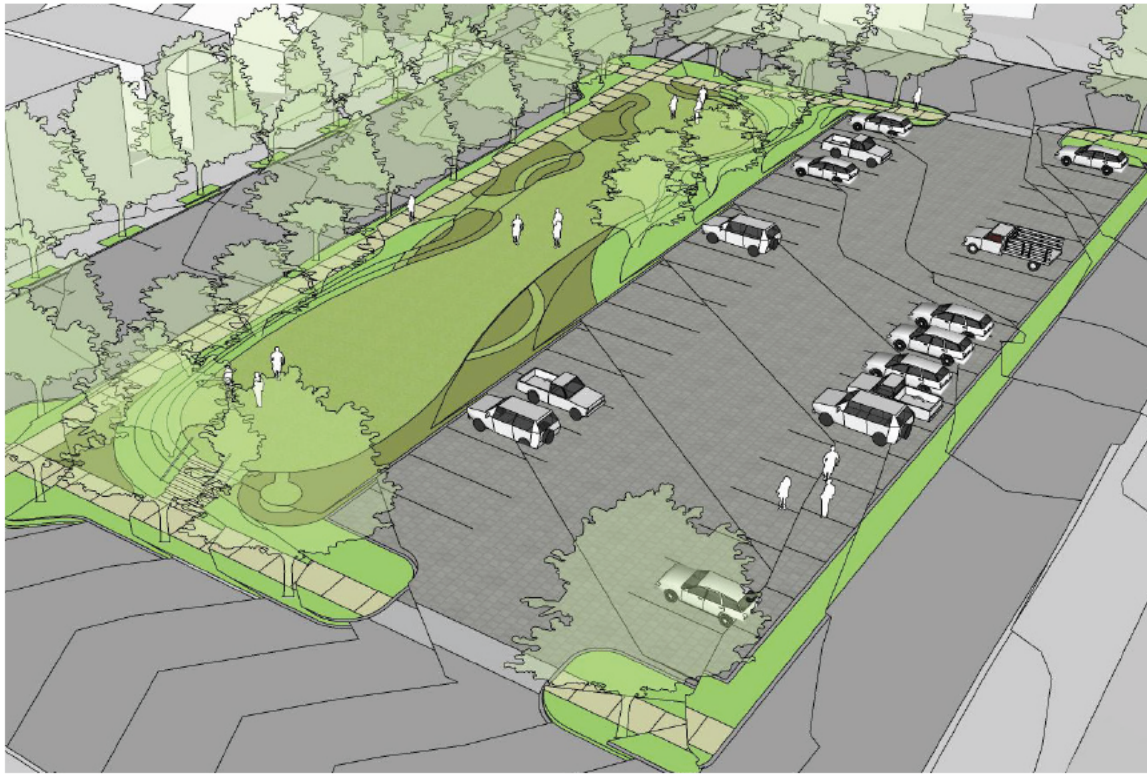
Green Infrastructure



LEED Building and
Site Design

Transforming 12th Avenue

Homestead, PA



Bird's eye axonometric view of the proposed parking lot and green space

Transforming 12th Avenue is a green stormwater infrastructure project that required the collaboration between the Steel Valley School District's students, teachers, faculty, and the surrounding community. The goal of the project was to restore a paved site in order to reduce storm flow into the combined sewer system.

Coordinating with ms consultants, Klavon aided in the design of a pervious parking lot that captures stormwater and retains it in underground storage cisterns. The pervious parking lot takes up roughly one-half of the block, while the other half consists of programmable green space that allows for educational programs. The green space includes educational features such as native plants and trees, rain gardens, an amphitheater area, open space for play and educational programming, ADA-accessible lawn areas, meandering paths through native plantings, a raised cross walk encouraging pedestrian dominance, and ADA parking directly adjacent to the green space.

Klavon provided ms consultants with two design options, one with the parallel street being removed and transformed into programmable space, and one with the street staying. Klavon's deliverable included inspiration imagery boards, several schematic design options, 3-D models, and perspectives and renderings based on the 3-D model.

Contract Duration

2020

Fee

\$31K

Project Size

0.5 AC

Contact

Lauren Terpak
Project Manager, ms consultants
300 Corporate Center Drive
Moon Township, PA, 15108
LTerpak@msconsultants.com
(412) 216-9349

Project Features



Planning / Urban Design



Landscape Architecture



Green Infrastructure



Sustainable Design

Yellow Creek State Park

Pennsylvania DCNR | Penn Run, PA



Clockwise from Left: Beach and surrounding picnic area, ADA accessible parking spaces, and paved path and pavilion near beach

The 2,981-acre Yellow Creek State Park in Indiana County is managed by the Pennsylvania Department of Conservation and Natural Resources (DCNR). Klavon was responsible for developing a 4.5 acre master plan of the site that would encourage people of all abilities to have the ability to enjoy all of the park's major amenities, including Yellow Creek Lake in the center of the park. The Park Management's goals included minimizing and reducing the park's carbon footprint and greenhouse gas emissions, rehabilitate the beaches day use area for improved public access, and enhance the overall park operational and maintenance control.

The priorities were to demolish the existing outdated structures; improve access and drainage; and install new public toilets, a playground, and a pavilion. The beach house and comfort station were completely refurbished to create a more inviting destination for visitors. Five ADA parking spaces were added within 550 feet of the beach area to encourage people of all abilities to have the option to enjoy the beach. An ADA path to the water was added to create easier access to the beach. Additional ADA accessibility was also added to the parking lot as well as the sidewalks to all buildings. A designated food truck parking space, complete with water and electric hook-ups, was also incorporated.

Contract Duration

2017-2019

Fee

\$48K

Project Size

4.5 AC

Contact

Paul Cali, AIA, NCARB
Project Manager
DRS Architects, Inc.
One Gateway Center, 17th Floor
Pittsburgh, PA 15222
PCali@drsarchitects.com
(412)-391-4850

Project Features



Community
Engagement



Landscape Architecture/
Site Planning



Green Infrastructure



Recreation

State of West Virginia

**New Facilities at Lost River,
Cacapon, Blackwater**

**In Response To:
Request for Proposal**



Proposal Information for Cost Estimating Services

Trophy Point, LLC

Blasdell, NY

Pittsburgh, PA

New York, NY

Contact: Rich Chudzik

Phone: 716-823-0006

Email: rchudzik@trohypoint.com

Firm Profile

Trophy Point is a certified **Service-Disabled, Veteran-Owned Small Business (SDVOSB)** that provides **Construction Cost Estimating, Construction Management Support, Owner's Representative Services and Construction Consulting** services. Within each of these areas, Trophy Point provides ancillary services. The most common services offered by Trophy Point are cost estimating, scheduling, integrated design and constructability review services, staff augmentation, and owner's representation. Trophy Point's services enable the company to provide full pre-construction controls.

For decades, Trophy Point has provided Construction Cost Estimating services, where required, in the Pre-Construction, Construction, and Post-Construction phases of a project. In 2018, Trophy Point merged with Baer & Associates, a nationally-recognized cost consulting firm known for its estimating accuracy and thoroughness. The combination of Trophy Point's mission first approach with Baer & Associates' experienced staff and history enabled the new organization to integrate the best practices of both teams in a manner that resulted in tremendous synergistic benefits to the industry.

The Trophy Point team strives to assist their clients in understanding construction costs during the concept phase of a project and provides them with detailed and accurate estimates as a project design matures. Since 1976, the Trophy Point team has developed an ability to provide accurate estimates prior to the execution of formal design efforts in an unrivaled manner that enables clients to align their scope with their budgets quickly and effectively.

The Trophy Point team is capable of supporting their clients as a project transitions into Construction in several different capacities, such as Change Order Management / Review, Pay App Reviews and Construction Consulting. Trophy Point's understanding of the variables that impact costs and their associated magnitude on a project is unrivaled and serves as the bedrock upon which their team differentiates itself from other cost consultants.

Trophy Point also provides unparalleled Owner's Representative, Construction Management Support, and Construction Consulting services. Their understanding of how a project's costs are derived has enabled them to expand their professional services into many areas, such as Scheduling, Construction Administration, Staff Augmentation, Integrated Design and Constructability Reviews, and general Owner's Representation. Their team provides a "one-stop shop" for professional services required during all phases of a project. Trophy Point is flexible and able to accommodate the needs of their clients by providing any of these services in an independent capacity as well.

Trophy Point's team consists of construction industry professionals with diverse and complementary backgrounds, educations, training and collective experiences that benefit their clients and any project team they are a part of.

The Trophy Point team consists of professionals who work out of offices in Buffalo, NY, Pittsburgh, PA, and New York, NY. Based on the nature of Trophy Point's work, members of their team are continuously co-located with clients in the field as well.



Key Staff

Richard Chudzik

**President & Owner –
Estimator & Project Manager**

Background

Rich brings 20 years of leadership experience across organizations and teams of varying functions, sizes, and industries to Trophy Point. Rich has served as the Estimator-of-Record and Project Manager on several new-build and renovation projects.

Rich has worked as a Quantity Estimator, Project Manager, and Estimator-In-Charge. These projects have ranged from \$75,000 to \$250M in construction value. Prior to starting Trophy Point, Rich worked as an Estimator and Business Development Director for one of the Nation's most reputable Cost Consulting firms, Baer & Associates.

Prior to joining the Construction Industry, Rich worked in the Aerospace & Defense Industry where he served in several different capacities and at varying levels at Moog and General Dynamics Land Systems in General Management, Supply Chain, Business Development, and Operations. As a Veteran Infantry Officer who served in Iraq and Afghanistan, Rich has a passion for supporting our Veterans and their Spouses – something that served as an impetus behind the founding of Trophy Point. He is the recipient of a Bronze Star, Purple Heart and a graduate of several military schools, including Ranger, Airborne, Air Assault, Marine Corps Mountain Warfare, and SERE Level B schools.

Education

- *United States Military Academy, West Point, NY*
B.S. – Political Science & Computer Science
- *Duke University, Durham, NC*
M.B.A.
- *Cornell University, Ithaca, NY*
M.Eng. – Systems Engineering

Project Experience

- NYS Hudson Eagles State Recreation Area – Hudson, Athens & Coxsackie Boat Launches
- Lake Walton Trail Upgrades, Fishkill, NY
- Sterling Nature Center – Visitor's Center & Site Improvements
- Nassau County DPW – Parking Field 15 & South Drive Improvements
- SUNY Canton – Rehab Parking Lots 1 & 12
- Rome VAMC – Expand Parking & Site Deficiencies



Key Staff

Joseph Dommer

Executive Vice President – Senior Estimator

Background

Joe brings 30 years of industry experience to the firm. With a degree in Construction Management Technology, Mr. Dommer's experience includes many public, university, K-12, healthcare, and complex industrial projects where he has served as the Chief Cost Estimator and/or Project Manager.

Joe has supported hundreds of projects that have ranged from \$100,000 to \$500M in construction value. He is also a graduate of the University at Buffalo Center for Entrepreneurial Leadership. Joe's experience is rooted in his time at Baer & Associates where he started in June 1991 as a Summer intern and became a full-time employee in May 1992. Joe's career path took him through several different roles at Baer & Associates, including Quantity Estimator, Project Manager, Vice President, and President in 2004.

In 2017, he co-founded Trophy Point with Rich Chudzik and has been applying his lessons learned from the industry over the past 30 years towards growing the company. Mr. Dommer is a member of the Hilbert Board of Trustees, and an affiliate member of the Buffalo-Western New York Chapter of the American Institute of Architects.

Education

- *Erie Community College, Buffalo, NY*
Associates – Construction Management
- *University at Buffalo, Buffalo, NY*
Core program graduate – Center for Entrepreneurial Leadership

Project Experience

- Ralph C. Wilson Jr. Park – New Office & Maintenance Building and Comfort Station
- Allegany State Park – New Comfort Stations
- Hamlin Beach State Park – Capital and Rehab Projects
- 1827 Fillmore, Buffalo – Surface Parking Lot
- Dutchess Stadium Parking Lot Improvements
- OGS Glenmore Road State Armory – POV Parking Lot Improvements



Relevant Experience

OGS Glenmore Road State Armory – POV Parking Lot

Location: Troy, NY

Client: The Chazen Companies

Scope: This project consisted of the construction of a new parking lot for the Vehicle Maintenance Facility. The scope of work included clearing, grubbing and grading of the existing site, miscellaneous SWPPP items, 14,194 SY of new asphalt paving and subbase, sidewalks, curbs, stormwater management system and new lawn areas.

Estimated: 2020

Cost Estimate: \$2M

1827 Fillmore, Buffalo – Surface Parking Lot

Location: Buffalo, NY

Client: C&S Companies

Scope: This project involved the removal and replacement of 8,000 SY of asphalt paving, along with new curbs, storm piping and detention chambers, and site work.

Estimated: 2019

Cost Estimate: \$1.4M

Allegany State Park – New Comfort Stations

Location: Salamanca, NY

Client: Architectural Resources

Scope: This project consisted of constructing four new comfort station buildings. The comfort stations included new restroom, shower and changing room facilities for campers/park visitors.

Estimated: 2021

Cost Estimate: \$5.8M



Client#: 1517804

DRSARC

ACORD₁₁

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

8/09/2021

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer any rights to the certificate holder in lieu of such endorsement(s).

PRODUCER USI Insurance Services, LLC Six PPG Place, Suite 200 Pittsburgh, PA 15222 412 765-3510	CONTACT NAME: Collin Jackson	
	PHONE (A/C, No, Ext): 412 765-3510	FAX (A/C, No):
	E-MAIL ADDRESS: Collin.Jackson@usi.com	
INSURED DRS Architects, Inc. One Gateway Center 17th Floor Pittsburgh, PA 15222	INSURER(S) AFFORDING COVERAGE	
	INSURER A: RLI Insurance Company	NAIC # 13056
	INSURER B: Mt. Hawley Insurance Company	37974
	INSURER C:	
	INSURER D:	
	INSURER E:	

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:		PSB0003690	08/14/2021	08/14/2022	EACH OCCURRENCE \$1,000,000 DAMAGE TO RENTED PREMISES (Per occurrence) \$1,000,000 MED EXP (Any one person) \$10,000 PERSONAL & ADV INJURY \$1,000,000 GENERAL AGGREGATE \$2,000,000 PRODUCTS - COM/OP AGG \$2,000,000 \$
A	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY		PSA0001857	08/14/2021	08/14/2022	COMBINED SINGLE LIMIT (Per accident) \$1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS-MADE DED <input type="checkbox"/> RETENTION \$		PSE0002101	08/14/2021	08/14/2022	EACH OCCURRENCE \$5,000,000 AGGREGATE \$5,000,000 \$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? <input checked="" type="checkbox"/> Y/N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N/A	PSW0002736	08/14/2021	08/14/2022	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$500,000 E.L. DISEASE - EA EMPLOYEE \$500,000 E.L. DISEASE - POLICY LIMIT \$500,000
B	Cyber Liability		PCY0000170	04/02/2021	04/02/2022	\$1,000,000 Aggregate
A	Professional Liab		RDP0043051	04/19/2021	04/19/2022	\$1,000,000 Per Claim \$2,000,000 Aggregate

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Evidence of Coverage

CERTIFICATE HOLDER

CANCELLATION

DRS Architects, Inc.
One Gateway Center
17th Floor
Pittsburgh, PA 15222-0000

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Collin Jackson

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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:

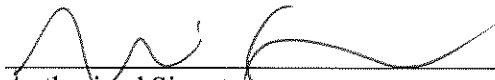
(Check the box next to each addendum received)

- ☒ Addendum No. 1
- ☐ Addendum No. 2
- ☐ Addendum No. 3
- ☐ Addendum No. 4
- ☐ Addendum No. 5

- ☐ Addendum No. 6
- ☐ Addendum No. 7
- ☐ Addendum No. 8
- ☐ Addendum No. 9
- ☐ 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.

DRS Architects
Company


Authorized Signature

9/22/21
Date

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