studio zewde

APRIL 7, 2020

Homewood Park

Proposal for Park Improvements for the City of Pittsburgh

studio zewde

ATTENTION OF

Dan Tobin

Sourcing Specialist
Office of Management
and Budget
City-County Building
Room 502
414 Grant Street
Pittsburgh, PA 15219

APRIL 7, 2020

Dear Mr. Tobin,

Today, Homewood Park plays host to a range of intergenerational activity and relationship-building that are at the core of its community. With the proposed expansion of the park, we understand this project to represent a critical opportunity to amplify the park's offerings, strengthen its relationship to adjacent residents and community institutions, and bolster the park's presence as the social and cultural nexus of the historically significant Homewood community. On behalf of Studio Zewde, I am pleased to submit our team's proposal for Professional Design Services for Homewood Park Infrastructure Upgrades. As leaders in the national discourse on culturally relevant park landscapes, we recognize the incredible opportunity this project embodies for Homewood.

Our studio brings an unmatched commitment to both the culture and the construction of high quality landscapes. Years of working on complex, public-facing design projects have given us the experience to effectively design, communicate, and coordinate towards delivering the highest quality landscape. Studio Zewde's work for the Fairmount Park Conservancy at the Mander Recreation Center Campus in Philadelphia represents the potential for a culturally-relevant design process to carefully translate physical site considerations and public input into a landscape design that is supported by its community. Moreover, our work developing the Circuit of African Heritage in Rio de Janeiro was featured on the cover of *Landscape Architecture Magazine* and is emblematic of the cultural rigor, design fortitude, and unique engagement processes that Studio Zewde offers to you at Homewood Park.

As the design team leader, I look forward to working with incredible teammates in Pittsburgh like Ethos Collaborative, Alpine Allegheny, Navarro & Wright, WBCM, and WJE as well as with JBC, DIGSAU, Tillotson Design Associates, Drummond Carpenter, and J+M Engineering. Working with the best in their respective industries, the Studio Zewde team proposes to deliver the next evolution of Stargell Field and Homewood Park towards ensuring that the traditions of sports, active play, and community gathering are not only part of Homewood's history, but a fortified part of its future.

Thank you for your consideration of our proposal for this incredibly significant project.

Sincerely,

Sara Zewde
Principal

STUDIO ZEWDE 163 LENOX AVE NEW YORK, NY 11026 212 518 1548 INFO@STUDIO-ZEWDE.COM WWW.STUDIO-ZEWDE.COM

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Qualifications & Experience

STUDIO ZEWDE

Studio Zewde is a vibrant landscape architecture, urban design, and public art practice based in New York City. Fusing the years of experience of Sara Zewde and Ashley Ludwig, our work is lauded for its innovative design methodology that syncs site interpretation with community engagement, a design process powered by narrative, and a dedication to the craft of construction. A Black and woman-owned firm, our employees have backgrounds in landscape architecture, architecture, city planning, urban design, sociology, statistics, community organizing, and public art.

Our practice is recognized for its ability to design meaningfully for people and their stories in the context of contested narratives and development pressure. Projects like the Mander Rec Center Campus in Philadelphia, Africatown Plaza in Seattle, Volango Wharf in Rio de Janeiro, and Domino Park in New York City demonstrate the potential for our design work to illuminate the stories of people and place. Our design energy is devoted to the "aesthetics of being" and to creating enduring places where people belong.

DIGSAU

DIGSAU's philosophy of practice is guided by a commitment to design excellence, experimentation, attentiveness to the needs of their clients, and a deep connection to material culture of the places where they work. Their approach builds enthusiasm in others for the creation of meaningful places that empower people to be more inspired, productive, and fulfilled.

DIGSAU's studio consists of a staff of thirty-five, including nineteen Registered Architects. Their diverse backgrounds and a wide range of partnerships allow them to execute innovative projects across a wide range of project types. They have a broad view of architecture, how it is made, and who makes it. They work together rather than working alone, and a culture of open dialogue ensures that all voices are heard and encourages full exploration of ideas.

DIGSAU approaches their projects with enthusiasm and intensity. They engage their clients in the design process, empowering them to bring physical form to their missions and visions. They take pride in their ability to listen, ask thoughtful questions, and conduct an open design process based on inclusiveness, reasoned debate, and mutual respect. They approach each project with no preconceived solution, but with a desire to listen, observe, and inquire. DIGSAU is the recipient of the AIA Pennsylvania Firm Award.

ETHOS COLLABORATIVE

Ethos Collaborative provides civil engineering design and consulting services to address a wide range of green infrastructure, water resources, and social needs within the urban environment. They strive to differentiate themselves

MANDER REC CENTER CAMPUS
STUDIO ZEWDE & DIGSAU

from traditional engineering firms by staying focused on the social, environmental, and economic aspects of design, the triple bottom line of sustainability. They consistently deliver civil engineering design services to effectively and economically address the unique infrastructure challenges of working within the urban environment. Their highly qualified team of engineers, scientists, and landscape architects takes pride in our extensive portfolio of civil, ecological and community-based design projects.

Ethos Collaborative and partners continue to develop a rich history of professional work with PWSA and City of Pittsburgh Agencies and Departments. As a result, their team members know design standards, specifications, furnishings, maintenance, and permitting processes, providing important institutional memory. Ethos has intimate knowledge of Pittsburgh, our infrastructure, policies, challenges and opportunities. They have built a strong network of partners, clients, agency decision-makers, and community collaborators to help support their local presence.

DRUMMOND CARPENTER

Drummond Carpenter, PLLC is a certified service-disabled veteran-owned small business (SDVOSB) specializing in engineering and applied research. Corporate principals are licensed professional engineers and have successfully completed projects across the country including Pennsylvania. Drummond Carpenter provides technical services in five practice areas – Green Infrastructure, Water Resources, Environmental Modeling, Nuclear and Assessment & Remediation. Their clients have included federal agencies, municipal governments, educational institutions, industrial clients, and non profit organizations.

Their staff have the expertise and experience necessary to assist their clients in managing stormwater and implementing green infrastructure in urban and combined sewer settings. Drummond Carpenter projects have included conducting site assessments, developing conceptual stormwater management plans, developing schematic design and illustrative site plans, designing monitoring investigations and QA/QC of flow monitoring data, hydraulic and hydrologic modeling, finalizing civil

site design plans and specifications, and performing QA/QC of construction documents and bid specifications. For the Homewood Park Infrastructure Upgrades Project, Drummond Carpenter staff will be engaged in design of stormwater management systems.

Drummond Carpenter has familiarity with the Pittsburgh stormwater system having been engaged as a veteran owned small business sub-contractor on six PWSA Projects including South Side Green Infrastructure Stormwater Project, St. John's Stormwater Management Project, Thomas & McPherson Green Infrastructure Design, Maytide Storm & Sanitary Improvement Project, 2019 Small Diameter Sewer Rehabilitation, and Spring Garden Stream Removal Project.

NEAR EAST RECREATION FIELDS
UNIVERSITY OF WISCONSIN MADISON
JBC

JBC

JBC is a design-oriented firm specializing in high-performance sports fields and athletic master plans. The firm has experience in the design and administration of over 500 high-performance sports fields at high school, collegiate, and professional levels. JBC is well known for its involvement on projects that have produced some of the highest quality sports fields in the industry. The firm has received over 150 separate design and leadership awards for innovation and creativity.

Jeffrey L. Bruce & Company (JBC) was founded in 1986 by Jeff Bruce. JBC's initial projects during the 1980's earned the firm a solid reputation in comprehensive master planning, site design, landscape architecture, recreation planning, and urban design.

By the early 1990's, the firm began to take on larger and more complex projects and was considered one of the nation's leading firms in athletic field and sports turf design. Work in recent years has included the design of athletic field and sports turf for many major sports facilities. Projects have included University of Notre Dame Multi-Venue Athletic Projects in South Bend, IN, New York City Football Club Training Pitch, Purchase, NY, Swope Park Soccer Village in Kansas City, MO, Orange County Great Park in Irvine, CA, Wedgbury Stadium Soccer Pitch at Sportscore II in Rockford, IL, Blue Valley Recreation Complex in Overland Park, KS, and Hummer Sports Park in Topeka, KS.

WBCM

Whitney Bailey Cox & Magnani, LLC (WBCM) is a full-service firm founded in 1977 and based in Baltimore, Maryland with Pennsylvania offices in King of Prussia, Mechanicsburg, and Pittsburgh. WBCM has grown organically from four original partners to its current staff of 214 engineers, technicians, inspectors and surveyors. The notable growth of WBCM is related to their effort and commitment to provide clients with quality they expect and deserve. Along with experienced personnel, their sound management and quality assurance approach assure a professional product and completion on schedule.

WBCM is comprised of experienced engineers and designers who have considerable knowledge in their fields. They take great pride in their reputation for consistently providing engineering services which are completed on time with efficient use of materials, and within budgetary guidelines. With their experience in the design of a broad range of building types, as well as a strong department team, they have the resources to dedicate key individuals to project teams and maintain continuity of services from design development through construction completion.

J+M ENGINEERING

J+M Engineering is a full service Mechanical, Electrical, Plumbing and Fire Protection Engineering Design firm with offices located in Philadelphia, PA and Washington, DC specializing in sustainable building systems design, permitting services and construction administration.

With backgrounds in the design-build, residential, commercial, and utility sectors, J+M Engineering provided technical expertise with the field experience to support consultants, contractors, and utilities from project inception through project completion. Their clients include, but not are not limited to residential, commercial, education, historical, theater, dormitory, medical, high-rise, restaurant, pharmaceutical, laboratory, and athletic centers.

NAVARRO & WRIGHT

Navarro & Wright Consulting Engineers, Inc. (N&W) is a multi-disciplined civil engineering firm, servicing public, private and institutional clients throughout the Mid-Atlantic Region. The firm is certified as a Minority Business Enterprise (MBE). N&W provides responsive, quality-driven customer service that seeks to engage the client and stakeholders as active participants in the decision-making process.

The level of service that N&W strives to provide to its clients starts with their staff. N&W's staff is well-qualified and technically competent. Their staff members are energetic and passionate about their work. They are committed to meet the client's expectations and are genuinely concerned about the specific needs and values of the communities that they serve. N&W understands that the perception of value for the money spent is important to their clients. To that end, N&W endeavors to price their services in a fair and equitable manner that not only provides their clients with a sense that they have, indeed, received real value for their money, but also provides a finished product that enhances the quality of life in the communities that they serve.

TILLOTSON DESIGN ASSOCIATES

Tillotson Design Associates, founded in 2004, is a WBE lighting design consultancy based in New York City. A diverse staff with backgrounds in architecture, interior design, and theater, including several LEED accredited professionals, combine talents to create exemplary work. Together, their principals provide over 80 years of lighting expertise. The launch of Tillotson Design Associates came just after Ms. Tillotson completed lighting designs for the Seattle Central Public Library and Prada Beverly Hills with the Office for Metropolitan Architecture.

Collaborating with developers, architects, and interior designers throughout the world, our award winning portfolio includes interior and exterior lighting for corporate headquarters, universities, hotels, libraries, masterplans, museums, parks, performance halls, residences, restaurants, and retail establishments. Their clients have included some of the most talented architects in the world including nine Pritzker Prize Laureates: Rem Koolhaas, Herzog & de Meuron, Norman Foster, SANAA, Thom Mayne, Renzo Piano, Christian de Portzamparc, Frank Gehry, and Shigeru Ban.

Their passion for design excellence, meticulous attention to detail, and heavy principal involvement from concept to final focusing contributes to their success. They have no preconceived notions about what works. They welcome new challenges and enjoy the exploration and research of unique materials and ideas. They offer solutions, but encourage collective decision making by the entire design team and client. Their goal is to provide the best possible lighting design service for their clients.

ALPINE ALLEGHENY

Alpine Allegheny, Inc. was established in 2015 by Severino DePasquale, a Certified Professional Estimator and Project Manager with over 40-years of experience in the utilities and heavy construction industries. The company is headquartered in Pittsburgh and has two employees, along with partnerships that are engaged to meet each project's requirements. The team serves municipal, contractors, utility sectors, corporate, legal, engineering and private clients.

They direct the development of phased processes in close communication with project owners, suppliers and subcontractors. Alpine Allegheny also conducts construction management, photography and related documentation for infrastructure projects, as well as cost/valuation confirmation studies.

WJE

WJE is a global firm of architects, structural engineers, and materials scientists that specializes in the investigation, analysis, testing, and design of repairs for historic and contemporary structures. Headquartered in Northbrook, Illinois, WJE has offices throughout the United States including Pittsburgh, Pennsylvania. Since the firm's founding more than 60 years ago, they have performed over 125,000 projects. With over 750 personnel, they complete over 7,000 billable projects each year. As such, they have the breadth and depth of knowledge to provide value to the project team.

Certified Cost Estimating Services include site studies of utilities, such as water, wastewater, electrical and gas lines. They investigate historical data, with a knowledge of current standards to assist their clients in effective cost analysis and recommendations for creating the basic essential elements of every construction project.

2018-2019: PHILADELPHIA, PENNSYLVANIA

Mander Rec Center Campus

Understanding, interpreting, amplifying.

As the most used and treasured public space in Strawberry Mansion, Mander Recreation Center Campus serves a hybrid of functions: a place to gather, a place to play, a place to celebrate, and a crossing place. Our design approach focused on understanding the ways in which Strawberry Mansion lives and grows everyday, as to design a living monument at Mander that is enhancing of it. Through connectivity, orientation, and visibility, the design supports the wide spectrum of the daily palette of living in Strawberry Mansion. By shaping the landscape to form a clear epicenter or heart of the site and allowing thresholds and passing to support the navigability and wayfinding in and around Mander, the landscape works to communicate Mander as a gateway between Strawberry Mansion and the larger Fairmount Park. The masterplan is rooted in understanding, interpreting and amplifying the existing strengths of the space.

FACTS

Project Size: 22 acres

Client : Fairmount Park Conservancy, Strawberry Mansion Community Development Corporation

Project Team : Studio Zewde, DIGSAU, Amber Art & Design

Services Provided: Masterplan and Community Engagement

2017-2018: SEATTLE, WASHINGTON

Africatown Plaza

A prototype for the future of Africatown.

In 1970, Seattle's only historically black neighborhood – the Central District – was 73 percent black, and home to teachers, lawyers, and shop owners. Now, that number is closer to 12 percent, and its economic base scattered to the wind. But the numbers belie a growing movement to repatriate the Central District's diaspora, to recast the Central District as Africatown. A diverse group of people are working to shape the chapter after gentrification and have formed the Africatown Community Land Trust (ACLT).

Studio Zewde was commissioned by the ACLT to design an interim plaza to prototype what a future Africatown could look and feel like. Studio Zewde conducted three "design ciphers" —Africatown's own remix of the charette—with the current and previous residents of the neighborhood in the process of designing the plaza. The design team also worked with ACLT to hire young people from the community to build the formwork and pour the concrete. Hundreds more from the community volunteered to install the plaza, creating a weeks-long spectacle of community-powered labor in the construction of a prototype for the future of Africatown.

FACTS

Project Size: 0.4 acres

Client : Africatown Community Land Trust

Project Team : Sudio Zewde

Services Provided: Concept Design - Construction

Awards: Bloomberg Public Art Challenge, Nominee

Pavilion & Children's Discovery Garden at Sister Cities Park

Philadelphia, PA

A threshold between Fairmount Park and Philadelphia's urban core, this modest pavilion evokes the park's natural geology, creating an intimate urban park welcoming to all in the heart of Center City.

Sister Cities Pavilion & Discovery Garden breathes fresh life and activity into a nearly forgotten corner of the arts and culture district of Center City, Philadelphia. The project consists of a highly transparent park pavilion, café, visitor's center, and discovery garden. By blurring the divide between interior and exterior spaces, the structure displays a multitude of settings celebrating cultural events to private functions and community activities. The material palette inspired by the City's neighboring Fairmount Park and Wissahickon Creek, utilizes native plants and stone materials of the regional geology to encourage children's ability to discover, learn and play.

The Discovery Garden's interactive play space invites children to scale the rock formations, rest on the log benches, run through a "creek bed" and splash in the sprayground. Since its completion, it has become a destination for families, for working professionals, student groups and visitors making it one of the most active urban parks in Philadelphia.

CLIENT
Center City District/Central Philadelphia Development Corporation

BUDGET
$3.5 M

SIZE
3,000 GSF

STATUS
Completed 2012

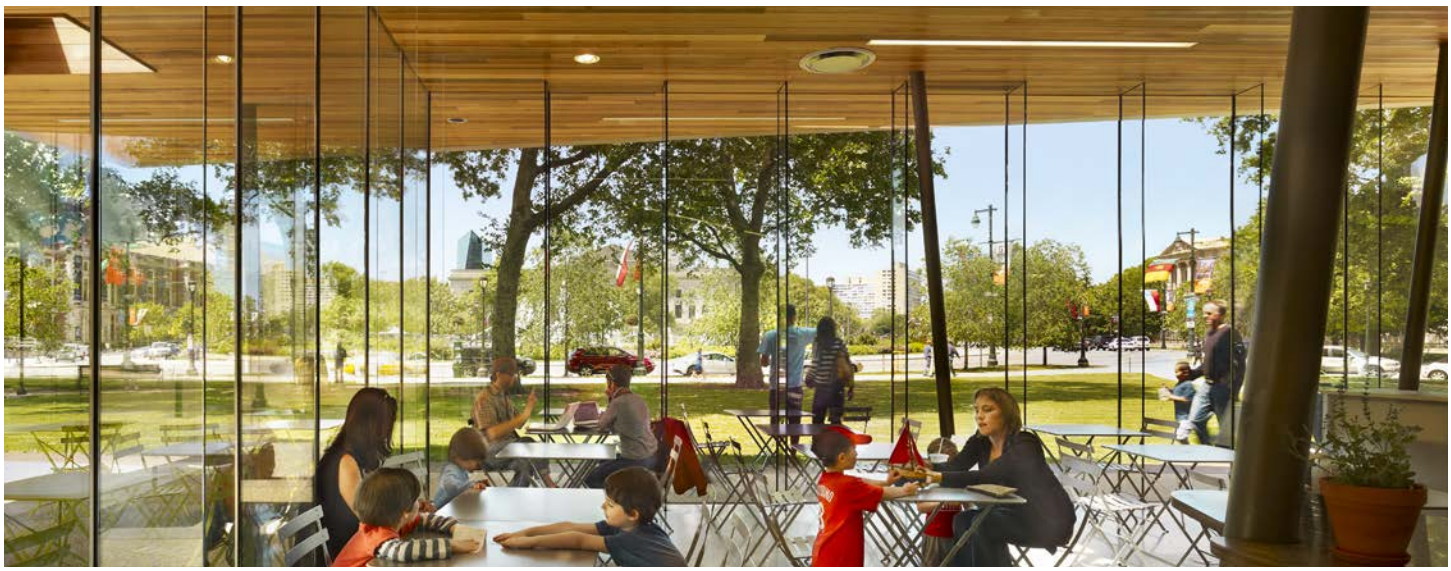
PROGRAM
Children's Discovery Garden,
Fountain Plaza, Cafe & Visitor's Center

RECOGNITION
2014 Bill Rouse Award for Excellence: ULI
2012 Merit Award: International Downtown Association
2011 Merit Award: AIA Pennsylvania
2010 Honor Award: AIA Philadelphia

COLLABORATORS
CVM
BHG
Studio Bryan Hanes
Pennoni

REFERENCES
Nancy Goldenberg
President & CEO
Laurel Hill Cemetery
(Former VP of Development for Center City District)
ngoldenberg@westlaurelhill.com
(215) 228-8200


CAFE & VISITOR CENTER



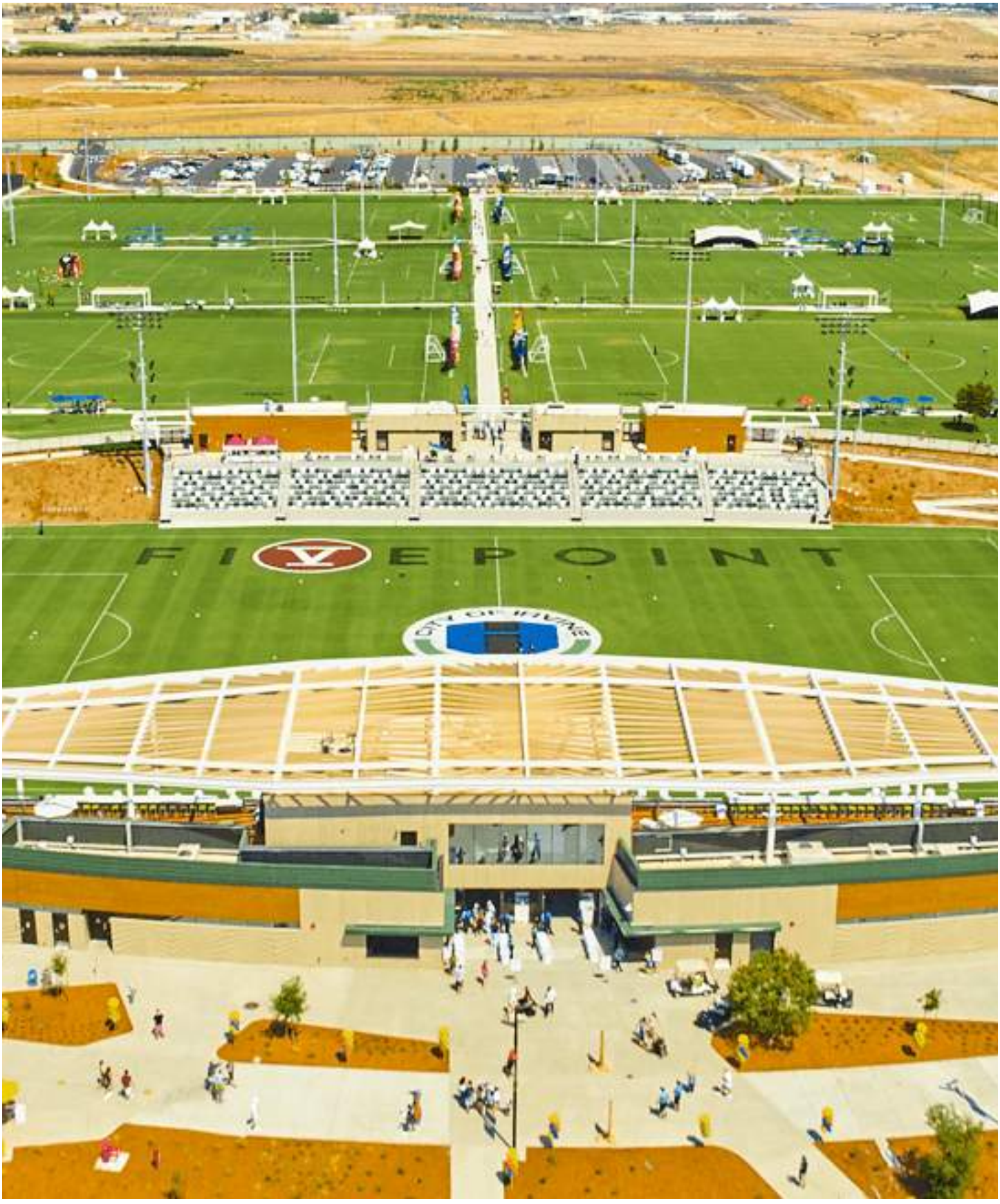
ORANGE COUNTY GREAT PARK - SPORTS PARK

Irvine, California

Orange County Great Park (OCGP), located in Irvine, California was formerly the location of an old military base and airport. As part of the design/build team of Brightview Design Group and Brightview Landscape Development, JBC is the sports field consultant for the expansive sports complex associated with Orange County Great Park. JBC was heavily involved with the sports complex Master Plan, which has been at the forefront of the design moving forward through the DD phase.

JBC was initially brought in as the sports complex Master Plan consultant and subsequently provided construction documentation on the layout of the complex as it relates to the sports fields and sports courts. As a result of that master planning process, OCGP sports complex has 18 soccer fields (12 natural turf and 6 synthetic turf), 7 baseball fields, 5 softball fields, 5 natural grass multi-purpose fields, 1 Championship Soccer Field, 1 Championship Baseball Field, 1 Championship Softball Field, 24 Tennis Courts, 1 Championship Tennis Court, 4 Basketball Courts.

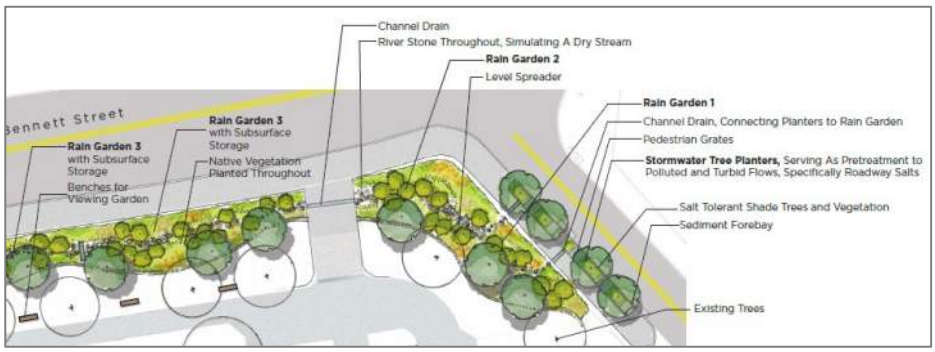
JBC



ROSEDALE RUNOFF REDUCTION PROJECT PHASE 1 AND 2
CLIENT: NINE MILE RUN WATERSHED ASSOCIATION

Urban Green Infrastructure Design, Final Design and Construction Engineering Support and Post Construction Performance Monitoring: These Projects focused on reducing runoff into Nine Mile Run, an urban stream located in Pittsburgh, PA. Water from streets in the Rosedale neighborhood, in the upper Nine Mile Run watershed, is directed to curb bump-outs in the right of way, where it is conveyed through a sediment forebay, through a series of planters, and to underground storage. The system is fitted with a series of weirs and flow monitors that provide information on GSI performance including the total volume of stormwater managed by the system. The curb bump-outs additionally enhance pedestrian safety by shortening crossing distances and calming traffic and augment neighborhood aesthetics with seasonal blossoms and foliage.in the street. On the grounds of the neighboring Crescent Early Childhood Education Center, high-impact facilities capture stormwater from Tokay Street and the Crescent ECEC building and convey it to bioswales, a rain garden, and underground storage. Ethos Collaborative and collaborators Landbase Systems and StormWorks sited, designed and supported construction of projects. The completed systems control over 325,000 gallons of water per year.

Municipal/Government Agencies: PWSA, City of Pittsburgh Department of Planning and Department of Public Works, Alcosan, Utility companies, Senator Jay Costa, the Tri-Borough Council, and various non-profit community groups



Project References:
Brenda Smith, Executive Director, Nine Mile Run Watershed Assoc., brenda@ninemilerun.org
Sara Madden, Landscape Architect, Allegheny County Parks Department, sara.madden@alleghenycounty.us

ethos collaborative
water-energy-climate-community

BARBARA JORDAN MEMORIAL
STUDIO ZEWDE

References

STUDIO ZEWDE & DIGSAU

Ellen Ryan

Mander Master Plan

Senior Director of Strategy & Planning (former)
Fairmount Park Conservancy

(917) 697-4338
ellenryan8@gmail.com

STUDIO ZEWDE

Katie Sheehy

Africatown Activation

Strategic Advisor, Equitable Development Team
City of Seattle

(206) 684-5345
katie.sheehy@seattle.gov

STUDIO ZEWDE

Andrew McConnico

First Creek Park

Project Manager Parks for People
The Trust for Public Land

(206) 274-2913
andrew.mcconicco@tpl.org

DIGSAU

Nancy Goldenberg

Sister Cities Park

Laurel Hill Cemetary (former VP of Development for Center City District)
ngoldenberg@westlaurelhill.com
(215) 228-8200

2
QUALIFICATIONS OF TEAM

KANSAS STATE UNIVERSITY MEMORIAL STADIUM
JBC

CLIENT

City of Pittsburgh Department of Public Works

DESIGN TEAM

LANDSCAPE ARCHITECTURE, LEAD CONSULTANT

Studio Zewde
New York, NY / WMBE

Sara Zewde
Ashley Ludwig, ASLA PLA
K. Wyking Garrett

ARCHITECTURE

DIGSAU
Philadelphia, PA

Jeff Goldstein, FAIA
Elizabeth Kahley, AIA

FIELD DESIGN, IRRIGATION, SOILS

JBC
Kansas City, MO

David Stokes, PLA ASLA ASIC
Spencer Sneller, ALSA

LIGHTING DESIGN

Tillotson Design
New York, NY / WBE

Suzan Tillotson, CLD
Erin Dreyfous

STORMWATER STRATEGY

Drummond Carpenter
Detroit, MI / Veteran

Don Carpenter, PhD PE
Lee Mullon, PE CFM
Rachel Pieschek, PE

CIVIL ENGINEERING

Ethos Collaborative
Pittsburgh, PA

Damon Weiss, PE
Barton Kirk, PE
Marion Divers, PhD GIT

THIRD-PARTY COST ESTIMATION

Alpine Allegheny
Pitttsburgh, PA / MBE

Severino DePasquale

THIRD-PARTY REVIEW

WJE
Pitttsburgh, PA

Robert Firman PE

MEP

J+M Engineering
Philadelphia, PA / MBE

Aaron Johnson
Joseph Matje, PE
Richard Hwang, PE

SURVEY, GEOTECHICAL ENGINEERING, ENVIRONMENTAL ASSESSMENT, ARCHEOLOGY

Navarro & Wright
Pittsburgh, PA / MBE

Joseph Allegra, PLS: Survey Manager
Ginger Randall: Environmental Services Manager
Luke Turko, PE: Geotechnical Manager
Robert Eiswert: Cultural Resources Group Leader

STRUCTURAL ENGINEERING

WBCM
Pittsburgh, PA

Michael Wuerthele, PE
Shawn A. Graham, PE

PROJECT COLLABORATION

Carnegie Library of Homewood	YMCA	CCAC	Afro American Music Institute	Homewood Community Sports
Homewood CDC	Bridging the Gap Development	Operation Better Block	The Mission Continues	Neighborhood Allies

PRINCIPAL

Sara Zewde

Sara is recognized in the industry as an expert in designing landscapes of cultural significance. She finds that in considering the relationship between culture, craft, and ecology, there are often many powerful departure points for design. Sara is the recipient of a number of awards including the 2014 Landscape Architecture Foundation's National Olmsted Scholar, the National Trust for Historic Preservation's 2018 "40 Under 40" list, and a 2020 United States Artists Fellow. Sara serves on the Urban Design teaching faculty at Columbia University.

SELECTED PROJECTS

MANDER REC CENTER CAMPUS
Philadelphia, PA
Design Lead for a masterplan for a masterplan to re-envision the 22 acre recreational space within Fairmount Park.

VALONGO WHARF
Rio de Janeiro, Brazil
Design Lead for the conceptualization and development of a network of spaces celebrating the memory and movement of Afro-Brazilian identity and culture.

PLANK ROAD MASTER PLAN
Baton Rouge, LA
Landscape and Urban Design Lead for a master plan study of a five mile long commercial corridor in North Baton Rouge.

AFRICATOWN PLAZA
Seattle, WA
Design Lead for a series of public art installations in Seattle's historic black community.

FIRST CREEK PARK
Tacoma, WA
Design Lead for a new gathering space near the Eastside Community Center and Pipeline Trail.

GENESEE STREET, FREEDMAN'S TOWN
Houston, TX
Design lead for a streetscape design that speaks to the memory of the neighborhood.

GRAFFITI PIER
Philadelphia, PA
Design Lead for a new waterfront park on the Delaware River that seeks to preserve a street art icon and space of cultural expression.

GOOD LIFE HEADQUARTERS
Syracuse, NY
Design Lead for the landscape and roof gardens of a new mixed-use development and event space for a youth foundation.

THE LIVING ROOM PROJECT
Seattle, WA
Co-designer of an award-winning outdoor public living room installation, blurring boundaries of the homed and homeless divide.

THE COMING SOON SERIES
Seattle, WA
Co-designer of an art installation creating dialogue with fantastical development signs writing Black futures into the story of Seattle.

SELECTED AWARDS & HONORS

2020 United States Artists Fellow

2019 Dumbarton Oaks Mellon Fellow

2017 Seattle Design Foundation 1st Prize Entry "Coming Soon"

2016 Venice Architecture Biennale

2016 Robert Rauschenberg Artist in Residence

2014 Landscape Architecture Foundation National Olmstead Scholar

2010 Ross Silerberg Memorial Award in Urban Design

EDUCATION

Harvard University : Masters of Landscape Architecture

Massachusetts Institute of Technology : Master of City Planning and Urban Design

Boston University : BA Sociology and Statistics Minor, Cum Laude

SELECTED TEACHING AND LECTURES

2020 Columbia University, GSAPP Faculty

2018 University of Texas School of Architecture Faculty

2018 Mayors' Institute of Design

2018 National Museum of African American History and Culture Lecture

2016 American Institute of Architects, New Orleans, Lecture

2014 Harvard University, Lecture

2013 Houston Center for Contemporary Craft, Lecture

PRINCIPAL

Ashley Ludwig PLA ASLA

Ashley brings ten years of professional experience in landscape, architecture, and urban design to Studio Zewde. Her design work focuses on connecting people to place by revealing ecological and cultural narratives within the everyday built environment. With understanding and efficiency, Ashley has led large collaborative teams through complex design processes to transform neglected urban sites into active public spaces from cultural plazas to large urban waterfront spaces and civic parks.

SELECTED PROJECTS

MANDER REC CENTER CAMPUS
Philadelphia, PA
Managing principal for a masterplan to re-envision the 22 acre recreational space within Fairmount Park.

FIRST CREEK PARK
Tacoma, WA
Managing principal for a new gathering space near the Eastside Community Center and Pipeline Trail.

GRAFFITI PIER
Philadelphia, PA
Managing principal for a new waterfront park on the Delaware River that seeks to preserve a street art icon and space of cultural expression.

PLANK ROAD MASTER PLAN
Baton Rouge, LA
Managing principal for a master plan study of a five mile long commercial corridor in North Baton Rouge.

GOOD LIFE HEADQUARTERS
Syracuse, NY
Managing principal for the landscape and roof gardens of a new mixed-use development and event space for a youth foundation.

DOMINO PARK
Brooklyn, NY
Project designer for the 5-acre waterfront park at the former Domino Sugar factory on the East River. (JCFO)

INDIA BASIN SHORELINE PARK
San Francisco, CA
Project lead for a new 10 acre waterfront park for the Hunters Point-Bayview community. (GGN)

LONG BEACH CIVIC CENTER
Long Beach, CA
Project manager for public-private partnership to redevelop the historic Lincoln Park, Main Library, Port Headquarters, and City Hall. (GGN)

CORNELL TECH CAMPUS
New York, NY
Project designer for a new resilient university campus on Roosevelt Island. (JCFO)

MANHATTAN WEST
NEW YORK, NY
Project manager for a midtown Manhattan development with 6 acres of plaza space. (JCFO)

REGISTRATIONS & AFFILIATIONS

Licensed Landscape Architect
Washington

American Society of Landscape Architects

Washington Chapter ASLA member

EDUCATION

University of Pennsylvania
Master in Landscape Architecture

University of Pennsylvania
Bachelor of Arts in Architecture

SELECTED AWARDS & HONORS

2019 ASLA-NY Award of Excellence, Domino Park, JCFO

2019 MASterworks Award, Best New Urban Amenity, Domino Park, JCFO

2015 National Park Now Competition, winner
Van Alen Institute, National Parks Service

2012 Eleanore T. Widenmeyer Prize in Landscape and Urbanism

2011 Susan Cromwell Coslett Traveling Fellowship

ENGAGEMENT STRATEGIST

K. Wyking Garrett

K. Wyking Garrett is a serial social entrepreneur and community engagement strategist with 20 years of progressive experience in non-profits, program development and advocacy. A recognized change agent, Wyking designs programs and initiatives that catalyze, mobilize and activate communities for policy change and social impact. For 14 years, Wyking served as director for the UmojaFest African Heritage Festival & Parade, implementing innovative programming and marketing strategies to increase attendance to 10-15K attendees annually.

SELECTED PROJECTS

MANDER REC CENTER CAMPUS
Philadelphia, PA
Community engagement strategist for a masterplan to re-envision the 22 acre heart of the Strawberry Mansion neighborhood through an inclusive engagement and design process.

PLANK ROAD MASTERPLAN
Baton Rouge, LA
Community engagement strategist for a master plan study of a five mile long commercial corridor, to improve the disinvested but historic central spine to transportation, commerce, and culture of north Baton Rouge.

COMING SOON SERIES
Seattle, WA
With the Africatown Community Land Trust, developed a temporary installation in dialogue with these signs, writing Black futures into the story of Seattle.

GRAFFITI PIER
Philadelphia, PA
Community engagement strategist for a new waterfront park on the Delaware River that seeks to preserve a street art icon and space of cultural expression.

AFRICATOWN
Seattle, WA
Director for the process of design visioning and engagement to create a series of installations addressing the need for a physical expression of African expression and Pan-African design in Seattle's historic black community.

LIBERTY BANK
Seattle, WA
Managed the development of an affordable housing project with 100+ units.

FIRE STATION 6
Seattle, WA
Working with the City of Seattle to transform a historic fire station into a collaborative innovation space.

CIVIC AFFILIATIONS

City of Seattle Equitable Development Advisory Board, Member

City of Seattle Race & Social Equity Task Force, Member

City of Seattle Music Commission, Inaugural Member

Green For All, National Fellow

Seattle Central Area Chamber of Commerce, Member

Seattle Public Schools African American Action Team, Member

EDUCATION

New Jersey Institute of Technology

SELECTED AWARDS

2020 *Seattle Times* Most Influential People of the Decade

2016 Crystal Eagle Award

2014 Center for Ethical Leadership Legacy Leadership Award

JEFF GOLDSTEIN FAIA, LEED AP

A founding partner of DIGSAU, Jeff is a recognized expert in sustainable design and community engagement, and would be deeply involved throughout the project.

With a background in ecology and environmental studies, Jeff is an expert in ecological and sustainable design practices and construction methodologies. His projects for Universities, Colleges, and Non-profit Organizations have been recognized with local, regional, and national Design Awards. He regularly presents the firm's work for professional and academic audiences across the country and is an Adjunct Professor at Temple University. Jeff currently serves on the Board of Directors of the Community Design Collaborative and AIA Philadelphia, where he advocates for empowering communities through design excellence.

EDUCATION
Master of Architecture,
Yale University, 2001
Bachelor of Arts in Biology &
Environmental Studies, University
of Pennsylvania, 1998

SELECT ACADEMIC EXPERIENCE
Lecturer: Temple University

SELECT PROCESSIONAL LECTURES
2018 AIA Iowa
2018 AIA Portland
2018 AIA Eastern Tennessee
2017 Monterrey Design Conference
2016 AIA Central Pennsylvania

MEMBERSHIPS
AIA College of Fellows

REGISTRATIONS
Professional Architect: Pennsylvania,
Delaware, New Jersey, Michigan,
District of Columbia,
NCARB Certifiation
LEED Accredited Professional

CLIENT REFERENCES
Marjorie Ogilvie
Owner, Philadelphia Business
& Technology Center
ogilvie@philabtc.com

Joel Nichols
Cluster Leader, Free Library
of Philadelphia
NicholsJ@freelibrary.org

SELECT PROFESSIONAL EXPERIENCE

DIGSAU Philadelphia, PA
Founder/Principal 2007 - Present

- UAS Research Lab Renovation & Addition | The Pennsylvania State University: University Park, PA
- PPR Residence Hall | Swarthmore College: Swarthmore, PA
- Rehoboth Pub & Distillery | Dogfish Head Craft Brewery: Rehoboth, DE
- The Study at University City | Hospitality3: Philadelphia, PA
- Construction Training & Education Center | The Challenge Program: Wilmington, DE
- Base Camp Delta | Boy Scouts of America: Glen Jean, WV
- Edible Garden Classroom | Tyler Arboretum: Media, PA
- Library Playspaces | Philadelphia Free Library: Philadelphia, PA
- Mander Recreation Center | Fairmount Park Conservancy: Philadelphia, PA
- West Parkside Youth Sports Facility | Parkside Association of Philadelphia: Philadelphia, PA

ELIZABETH KAHLEY AIA, LEED AP BD+C

An effective listener with strong attention to detail, Elizabeth excels at bringing disparate voices and disciplines into alignment in service of a common project vision.

Prior to her appointment at DIGSAU, she managed interdisciplinary design teams for new engineering research laboratory facilities for multiple university clients, including the nationally-renowned Integrated Project Delivery (IPD) project for Brown University's Engineering Research Center. Elizabeth's experience and prior engineering education propel her deep interest in high-performance building envelope design, thermal comfort, and energy modeling through rigorous collaboration with climate design experts. She is a committed mentor and advocate for emerging design professionals, and the parent of two lively young children.

EDUCATION
Master of Architecture,
University of Virginia, 2008

Bachelor of System Engineering,
Minor in Mechanical Engineering,
University of Virginia, 2001

REGISTRATIONS
Pennsylvania Architect
AIA, Architect
LEED Accredited Professional

CLIENT REFERENCES
Susan Cahan
Dean, Tyler School of Art,
Temple University
susan.cahan@temple.edu

Bill Stank
Project Manager, Bucks County
Community College
william.stank@bucks.edu

SELECT PROFESSIONAL EXPERIENCE

DIGSAU Philadelphia, PA
Associate 2018 - Present

- Dillon Gymnasium | Princeton University, Princeton, NJ
- School Addition | Gettysburg Montessori Charter School, Gettysburg, PA
- Tyler School of Art Space Assessment and Renovation | Temple University, Philadelphia, PA
- Center for Workforce Development Programming | Bucks County Community College, Newtown, PA
- Mander Community Center Master Plan, Fairmount Park Conservancy | Philadelphia, PA

KIERANTIMBERLAKE Philadelphia, PA
Project Architect 2018 - Present

- Engineering Research Center, Brown University, Providence, RI
- Institute for Energy Efficiency, University of California Santa Barbara, Santa Barbara, CA
- Richardson Memorial Hall Renovation and Addition Study, Tulane University, New Orleans, LA

Damon Weiss, P.E.

Damon is a project manager and registered professional engineer in the state of Pennsylvania. He is principal and co-founder of Ethos Collaborative. He has over 20 years of experience in green infrastructure and co-founded Ethos Collaborative in 2014.

damonweiss@ethoscollaborative.com
linkedin.com/in/damonweiss

EDUCATION

M.S. Advanced Infrastructure Systems
Carnegie Mellon University, 2008

B.S. Civil Engineering
University of Virginia, 1997

AWARDS AND AFFILIATIONS

Allegheny Land Trust,
Board of Directors, Since 2010
Board Secretary, 2011 to 2016
Board Chair, Since 2016
Green Building Alliance,
Policy Committee Member, 2016
Pennsylvania Environmental Council / 3RWW,
Storm Water Advisory Panel Member, 2007
American Society of Civil Engineers, 2002
Environmental and Water Resources Institute (EWRI), 2004

REFERENCES

Ron Schipani, Project Manager
Allegheny County Parks Foundation
rschipani@acparksfoundation.org
724-327-7627

Renee Suhr
Mycelia Development LLC
connect@myceliadevelopment.com
724-650-7978

Laura Nettleton, Principal
Thoughtful Balance
laura@thoughtfulbalance.com
412-661-6010

ethos collaborative
water-energy-climate-community

REPRESENTATIVE PROJECTS
STORMWATER & GREEN INFRASTRUCTURE

Panther Hollow Lake GI Monitoring and Retrofit, Pittsburgh, PA
Re-engineered the outlet of Panther Hollow Lake to detain stormwater. Project includes management, design/feasibility and installation services

Wightman Park Green Infrastructure, Pittsburgh, PA
Design of base plan and alternatives for the Wightman Park Green Infrastructure project, which will combine neighborhood-scale stormwater conveyance with park-based constructed wetland and stormwater detention infrastructure

Green Infrastructure at Crescent Early Childhood Center, Nine Mile Run Watershed Association, Pittsburgh, Allegheny County, PA
Worked closely with Nine Mile Run Watershed Association on the design of green infrastructure within the City of Pittsburgh Right-of-Way and Crescent Early Childhood Center property. The proposed green infrastructure consists of curbside planter beds, cascading rain gardens and modular (R-tank) subsurface storage, in series to maximize the stormwater treatment train.

Porous Pavement Parking Lot and Green Infrastructure at Scottdale Borough, Westmoreland County, PA
This project includes replacement of the entire concrete plaza with porous concrete, hydraulically connected and fully integrated into a system of decorative and high performing rain gardens. The porous pavement surface, constructed by Ligonier Concrete, continues to hold up and perform beautifully after five yaears of operation. Responsibilities as civil engineering lead include utility design and coordination, drainage and storm water management design and E&S / NPDES permitting. Storm water management design includes the rain garden and porous pavement system with subsurface infiltration beds.

Philipsburg Field, California University of Pennsylvania, California Borough, Washington County, Pennsylvania
This project consists of the replacement of the existing field and the installation of a new synthetic turf field, as well as the construction of a new parking lot and related storm water management and drainage improvements. Civil engineering lead for the design of E&S and NPDES permitting, storm water management, utility coordination and the generation of associated construction drawings, reports and supporting permit documentation. Storm water management design includes a terraced pervious asphalt parking lot with subsurface infiltration beds and a bioretention bed / rain garden.

Green Infrastructure Pay-for-Success Feasibility Study, Pittsburgh Region, Allegheny County, P In partnership with BNY Mellon and the Green Building Alliance, this project takes an innovative outcome-based approach to solving the region's combined sewer overflow issue. The Pay-for-Success financing model effectively leverages private capital for watershed-scale, community-driven green infrastructure design and build-out, in such a way that mitigates risk to the sewer authority and maximizes social and environmental benefits.

Barton Kirk, P.E.

ethos collaborative
water-energy-climate-community

Barton is a project manager and registered professional engineer in the state of Pennsylvania. He is principal and co-founder of Ethos Collaborative. He has over 20 years of experience in green infrastructure and co-founded Ethos Collaborative in 2014.

bartonkirk@ethoscollaborative.com
linkedin.com/in/bartonkirk

EDUCATION

M.S. Ecological Economics, Planning & Design
University of Vermont, 2006

B.S. Agricultural and Biological Engineering
Penn State University, 2001

AWARDS AND AFFILIATIONS

3 Rivers Rain Garden Alliance – *Commercial Rain Garden Design Award Winner*, 2013
Pittsburgh Water & Sewer Authority, *Green Infrastructure Technical Advisor (GITAC) & Monitoring Committee Chair*, 2013-2017
Int'l. Ecological Engineering Society, 2002
Urban Ecology Collaborative, 2007
Pittsburgh Climate Initiative, 2008
Engineers for a Sustainable World, 2016

REFERENCES

Laura Nettleton, Passive House Architect and Principal
Thoughtful Balance
Pittsburgh, PA 15232
laura@thoughtfulbalance,com
412-661-6010

Joel Perkovich, Landscape Architect
Allegheny County Parks Department
Pittsburgh, PA 15219
Joel.perkovich@alleghenycounty.us
412-420-4185

Pete Muñoz, PE Bioregional Team Lead / Senior Engineer
Biohabitats - Cascadia Bioregion
Portland, OR 97209
pmunoz@biohabitats.com
802-598-2372

REPRESENTATIVE PROJECTS STORMWATER & GREEN INFRASTRUCTURE

Panther Hollow Lake GI Monitoring and Retrofit, Pittsburgh, PA
Ongoing project to re-engineer the outlet of Panther Hollow Lake to detain stormwater. Project includes management, design/feasibility and installation services.

Wightman Park Green Infrastructure, Pittsburgh, PA
Ongoing project to design base plan and alternatives for the Wightman Park Green Infrastructure project, which will combine neighborhood-scale stormwater conveyance with park-based constructed wetland and stormwater detention infrastructure.

Carrick Library Sustainable Stormwater Site Design, Pittsburgh, PA
Developed an artful cascading stormwater planter design along with civil site design for the Carnegie Library of Pittsburgh's expansion of the Carrick Library. This Passive House re-design doubles square footage, modernizes facilities and creates inviting outdoor spaces. Porous paver patios are enveloped in native plantings along cascading stormwater planter bays that capture the first inch of runoff from the site.

Retirement Residence of Glassport Sustainable Site Design, Glassport Boro, PA
Sustainable site design and permitting for the three acre redevelopment of the Glassport Elementary School into an ultra-energy-efficient Passive House senior living apartment building. Low-impact design site amenities include porous paver parking areas, extensive native plantings and rain garden, retentive grading stormwater swales, and healing garden with edible landscaping and dark-sky compliant lighting.

YWCA Homewood, Rain Garden Retrofit & Monitoring, Pittsburgh, PA
Design of entry and parking lot rain gardens with collaborator Stormworks. Rain gardens manage the stormwater runoff and address persistent flooding and site maintenance issues. Project included a community design charrette with Operation Better Blocks Junior Green Corps, as well as long-term performance monitoring. The project is funded with a PWSA Green Infrastructure matching grant and built upon previous stormwater master planning work, performed in 2014.

Oakwood-Batavia GSI, Nine Mile Run Watershed Assoc., Pittsburgh, PA
Final design and permitting of urban retrofit green infrastructure within the City of Pittsburgh Right-of-Way. The design captures six acres of watershed and consists of cascading planter bed bumpouts, sediment forebays, green gutters and modular (R- tank) subsurface storage.

OTHER REPRESENTATIVE PROJECTS

Midwife Center of Pittsburgh Porous Parking Lot Monitoring, Pittsburgh, PA
Integrated Water Resources Planning/Act 167, Westmoreland County, PA
Deer Lakes Portal Project PCSM and E&S, Allegh. Co. Parks, Tarentum Boro, PA
Oasis Farm Stormwater & Soil Reclamation Plan, Grow PGH, Pittsburgh, PA
Wingfield Pines Regenerative Stormwater Conveyance, Allegh. Land Trust, PA
Infiltration Trench Site Investigation & Soil Testing, Wallace Motors, Butler, PA

Duygu Altintas, EIT

ethos collaborative
water-energy-climate-community

Duygu Altintas is a project engineer and is a registered engineer-in-training in the state of Pennsylvania. She has 7 years of experience in water/ wastewater engineering research and modeling, three of which was dedicated to green infrastructure.

duygualtintas@ethoscollaborative.com
www.linkedin.com/in/duygu-altintas

EDUCATION

M.S. Civil and Environmental Engineering
Carnegie Mellon University, 2013

B.S. Environmental Engineering
SUNY at Buffalo, 2008

AWARDS AND AFFILIATIONS

Metro21 Fellow, 2015
Paul Christiano Distinguished Service Award, 2015
American Society of Civil Engineers, 2014
EWRI CMU Graduate Chapter Vice President (2014-2015)

REFERENCES

Jeanne VanBriesen, PhD, PE,
Duquesne Light Company Professor
Carnegie Mellon University
Department of Civil and Environmental Engineering
jeanne@cmu.edu
412-268-4603

Sam Shamsi, PhD, PE,
Hydrologic and Hydraulic Specialist, ALCOSAN
Pittsburgh, PA
sam.shamsi@gmail.com
412-249-3500

Jen Gallagher, RLA, LEED AP
Principal
Studio for Spatial Practice
Pittsburgh, PA
j.gallagher@studiofsp.com
412-980-3345

REPRESENTATIVE PROJECTS STORMWATER & GREEN INFRASTRUCTURE

Panther Hollow Lake GI Monitoring and Retrofit, Pittsburgh, PA
Project to re-engineer the outlet of Panther Hollow Lake to detain stormwater. A real time control system (OptiRTC) and several sensors were installed to predict storms and drain the lake in anticipation of heavy flow. Project includes management, design/feasibility and installation services.

Lawn and Ophelia Park Parklet Green Infrastructure, Pittsburgh PA
On-going project to design a 10,000 cubic feet detention based system with spread out closed drainage system and surface conveyance in the Lawn and Ophelia Parklet of Oakland. Project features several rain gardens and a bumpout. Design phase is near final and the project is expected to be constructed 2020.

Four Mile Run Green Infrastructure Project, Pittsburgh, PA
This ongoing project aims to re-imagine stormwater infrastructure integration in urban watersheds by addressing combined sewer overflows, neighborhood flooding, and degrading park and public infrastructure while increasing ecological function.

Franklin County Energy Baseline Analysis, Columbus, OH
Inventoried all major forms of energy produced and consumed within the Franklin County by leveraging data largely made available by the U.S. Department of Energy's Energy Information Administration (EIA). Commissioned by Mid-Ohio Regional Planning Commission (MORPC), the project examined how much and how intensively energy is produced, imported, processed, consumed, exported, and lost annually and how the consumption correlated with census data, such as population, income and other household data. The resulting analyses served as a baseline for guiding the future energy strategies and benchmarking progress for the region.

Wightman Park Green Infrastructure, Pittsburgh, PA
Project to design base plan and alternatives for the Wightman Park Green Infrastructure project, which will combine neighborhood-scale stormwater conveyance with park-based constructed wetland and stormwater detention infrastructure. Base plan has been finalized and the project expanding to streets to increase capture is still on going.

Stormwater Footprint Analysis, Allegheny Co. Conservation District, Pittsburgh PA Conducted a GIS-based baseline stormwater analysis of select parcels throughout Allegheny County. The method used conventional Equivalent Runoff Unit (ERU) methodology with a primary focus on impervious surface cover as a metric. Final deliverable web-based tool included the ability to report parcel and impervious cover statistics, as well as a feasibility tool for creating a stormwater utility.

Improved monitoring and modeling of GSI, Carnegie Mellon Univ., Pittsburgh PA Collaborated and consulted with municipalities and a non-government organization on planning and implementing effective green infrastructure. Compared and analyzed the accuracy and the efficiency of EPA SWMM versus ArcGIS based SUSTAIN in predicting green infrastructure performance. Compared outputs from hydraulic modeling to sensor data. Developed a new protocol for GSI monitoring and modeling to assist decision making.

Elizabeth Glowczewski, EIT

ethos collaborative
water-energy-climate-community

Elizabeth is a project engineer and certified engineer-in-training in the state of Pennsylvania. She has 7 years of experience in construction management and green infrastructure permitting and design. She has been with Ethos Collaborative since 2015.

glowsczewski@ethoscollaborative.com
linkedin.com/in/elizabeth-glowczewski/

EDUCATION

B.S. Civil Engineering
University of Pittsburgh, 1999

AWARDS AND AFFILIATIONS

PA Master Naturalist in Training, Expected Fall 2019
Girl Scouts of Western Pennsylvania
Troop Leader, Since 2012
Citizen's Climate Lobby, Since 2016

REFERENCES

Sara Madden, Landscape Architect
Allegheny County Parks
542 Forbes Ave, Room 211
Pittsburgh, PA 15219
ara.madden@alleghenycounty.us

Monique McIntosh, Chief Administrative Officer
YWCA Greater Pittsburgh
Pittsburgh, PA 15222
Phone: 412-391-5100

Joel Perkovich, Landscape Architect
Allegheny County Parks Department
Pittsburgh, PA 15219
Joel.perkovich@alleghenycounty.us
412-420-4185

REPRESENTATIVE PROJECTS STORMWATER & GREEN INFRASTRUCTURE

Wightman Park Green Infrastructure, Pittsburgh, PA
Wightman Park Green Infrastructure project combines neighborhood scale stormwater conveyance with park-based constructed wetland and stormwater detention infrastructure.

Carrick Library Sustainable Stormwater Site Design, Pittsburgh, PA
Developed an artful cascading stormwater planter design along with civil site design for the Carnegie Library of Pittsburgh's expansion of the Carrick Library. Responsibilities included site plan preparation, green stormwater infrastructure design, details, and specification, utility coordination, and erosion and sedimentation control.

YWCA Homewood/Brushton Rain Garden Retrofit, Pittsburgh, PA
Worked closely with Stormworks and YWCA staff to provide grant support and rain garden design. Responsibilities includes coordination with the client and design team, consisting of civil engineering, preliminary construction cost estimating, and monitoring quantitative and qualitative performance data.

Raccoon Creek Streambank Restoration, Hanover Township, PA
Streambank stability project with Best Management Practices including restoration of Riparian Buffer and installation of root wads. Restoration aimed to improve water quality and decrease downstream sediment loading to a creek impaired from runoff.

Deer Lakes Portal Project, West Deer, PA
Design of erosion and sedimentation controls for improvements to an existing playground and associated site improvements. Prepared E&S site layout, stormwater management plans and calculations, NPDES and Chapter 105 permitting, and site renderings.

Wingfield Pines Ephemeral Stream Restoration and Alternatives Study, PA
Study of the functional, ecological and aesthetic problems associated with the separated pipes and uncontrolled runoff and sediment onto the Wingfield Pines site. Developed innovative, integrative, and robust design options that were mindful of budgetary and logistic constraints. Responsible for planning design charrette and development of design solution.

Rosedale Runoff Reduction Project, Pittsburgh, PA
Project consisted of the design of two urban green infrastructure retrofit projects to reduce combined sewer overflows and localized flooding. Responsibilities included site infiltration testing, plan detailing, and preparing and submitting a land operations permit.

Retirement Residence of Glassport Site Design, Glassport Borough, PA
This project consists of the conversion of a former elementary school into a retirement residence with aesthetic, low-impact site design. Responsibilities as civil engineering include site layout and coordination, E&S / NPDES design and permitting. Storm water management design includes a rain gardens and porous pavement.

Donald D. Carpenter, Ph.D., P.E., LEED AP
Vice President
Drummond Carpenter, PLLC

Donald D. Carpenter is an accredited green design professional and professional engineer whose expertise includes green infrastructure (GI), stormwater best management practices (BMPs), hydrologic modeling and design, and field data collection. Dr. Carpenter's has 20 years' experience working with diverse clients across the United States as a researcher and practicing professional. In the Midwest, his efforts have focused on researching GI performance and designing stormwater management retrofits for non-profit organizations and local municipalities. Currently, he is working on several Pittsburgh Water and Sewer Authority (PWSA) projects that range from conceptual GI planning to stormwater monitoring. As a NCI Certified Charrette Facilitator, he has extensive experience in community engagement and planning. His efforts have facilitated community implementation of GI and the development of community socio-economic sustainability plans. Dr. Carpenter routinely provides professional lectures and short courses on stormwater design and GI implementation. Professionally, Dr. Carpenter is an active leader and board member for several regional committees and non-profit organizations dedicated to improving water quality.

Education

2001
University of Michigan, Ph.D.

1996
Oregon State University, M.S.

1993
Purdue University, B.S.

Registrations

Registered Professional Engineer
Michigan, Florida, Pennsylvania

Leadership in Energy and Environmental Design Accredited Professional

NCI Charrette Facilitation Certified, National Charrette Institute
Portland, OR

Years of Experience

20

Professional Affiliations

American Society of Civil Engineers
Society of American Military Engineers
Water Environment Federation
National Charette Institute

Select Project Experience

City of Atlanta, Parks and Recreation Master Plan, Atlanta, GA

Clinton River Watershed Council, Green Infrastructure Support Services for WaterTowns, Rochester Hills, MI

Detroit Water and Sewerage Department (DWSD), Engineering and Design Services for Stormwater Best Management Practices, Detroit, MI

DWSD, West Warren Stormwater Design Project, Detroit MI

Huron-Clinton Metro Park Authority, Huron-Clinton Metro Park Stormwater Management Master Plan, Brighton, MI

Meijer Corporation, Green Infrastructure Parking Lot Retrofit, Columbus, OH

Michigan Sea Grant, Sustainable Small Harbor Management Project, Ann Arbor, MI

Midtown Detroit, Inc., Cultural Center Planning Initiative, Detroit MI

Orange County Parks, Park Growth Analysis for Orange County, Orlando, FL

Pittsburgh Water and Sewer Authority (PWSA), Pre-Construction Flow Monitoring for 2019 Small Diameter Sewer Rehabilitation Project, Pittsburgh, PA.

PWSA, Thomas & McPherson Conceptual GSI Project, Pittsburgh, PA.

PWSA, South Side Green Infrastructure Project, Pittsburgh, PA.

PWSA, St John's Stormwater Management Project, Pittsburgh, PA.

PWSA, Maytide Storm & Sanitary Improvement Project, Pittsburgh, PA.

PWSA, Spring Garden Stream Removal Project, Pittsburgh, PA.

The Watershed Center Grand Traverse Bay, Village of Northport Stormwater Reduction Project, Traverse City, MI.

Lee Mullon, P.E., CFM, D.WRE
Principal Engineer
Drummond Carpenter, PLLC

Mr. Mullon is a Principal Engineer, with over 18 years of professional engineering consulting experience in civil, environmental, and water resources engineering serving primarily capital infrastructure improvements for municipalities. His career is highlighted by his work related to the environment, civil infrastructure, and their mutual interaction. Mr. Mullon has provided professional engineering services to over 15 municipalities, providing solutions to address transportation, stormwater management, water quality impairment, total maximum daily load (TMDL) regulatory challenges and compliance, natural systems degradation, water availability, and climate change vulnerability. Mr. Mullon is a subject matter expert in stormwater management and green infrastructure, with experience designing, permitting, implementing, and monitoring both conventional and innovative best management practices (BMPs). Mr. Mullon has served as expert consultant for litigation matters that have challenged environmental resources and stormwater permits in the state of Florida and is an expert in numerous stormwater quantity and quality models. In addition to Mr. Mullon's consulting experience, he has conducted stormwater research at the University of Central Florida (UCF) and has also served as adjunct instructor teaching water resources design to upper level UCF students.

Education

2014
University of Central Florida, M.S.

2005
University of Central Florida, B.S.

Registrations

Registered Professional Engineer
Florida, Pennsylvania

Diplomate, Water Resources Engineer, AAWRE

Certified Floodplain Manager, ASFPM

Certified Stormwater Erosion and Sediment Control Inspector, FDEP

Years of Experience

17

Professional Affiliations

American Society of Civil Engineers
American Academy of Water Resources Engineers
Environmental Water Resources Institute
Association of State Floodplain Managers
Florida Stormwater Association
American Public Works Association

Select Project Experience

City of Cape Canaveral, City Park Green Infrastructure Improvements, Cape Canaveral, FL

City of Casselberry, Casselton Drive Complete Streets and Green Infrastructure Design, Casselberry, FL

City of St. Augustine, Macaris Infrastructure Resiliency Improvements, St. Augustine, FL

Detroit Water and Sewerage Department, West Warren Stormwater and Green Infrastructures Project, Detroit, MI

Orange County Growth Management Division, Pine Castle Green Infrastructure Master Plan, Orange County, FL

Orange County Stormwater Division, Big Sand Lake Watershed Master Plan, Orange County, FL

Pittsburgh Water and Sewer Authority, South Side Green Infrastructure Project, Pittsburgh, PA

Pittsburgh Water and Sewer Authority, St John's Stormwater Management Project, Pittsburgh, PA.

Tallahassee Water Utilities Department, Segment 3D Pond Trash Capture Improvements, Tallahassee, FL

Tallahassee Water Utilities Department, Lee Avenue Stormwater Improvements, Tallahassee, FL

University of Central Florida, Gemini Boulevard Erosion Control Project, Orlando, FL

Rachel Pieschek, P.E.
Project Engineer
Drummond Carpenter, PLLC

Rachel Pieschek is a multi-disciplined professional, with a background in civil engineering and architecture. She is a Professional Engineer in Michigan with experienced in stormwater best management practices (BMPs) design, community engagement, Geographic Information Systems (GIS), and hydrologic and hydraulic modeling. Rachel leads green infrastructure design projects and performs small and large-scale stormwater modeling. She is proficient with utilizing and generating GIS databases for graphic communication and modeling. Her design expertise includes civil site design on commercial and municipal projects as well as preparing construction and bid packages for those projects. Rachel has worked with municipalities and private entities to capture their vision in stormwater master plans, green infrastructure design, and placemaking. As a National Charrette Institute (NCI) Certified Charrette Facilitator, she has extensive experience in community engagement, facilitating public meetings, and planning. With her background in architecture, Rachel is skilled with artistic rendering software to communicate with clients and stakeholders how designs will interact with site constraints and human elements.

Education

2017
Lawrence Technological University, M.S.

2014
Lawrence Technological University, BSCE, B.Arch

Registrations

Registered Professional Engineer
Michigan

NCI Charrette Facilitation Certified,
National Charrette Institute
Portland, OR

Years of Experience

6

Professional Affiliations

American Society of Civil Engineers
Water Environment Federation
National Charette Institute

Select Project Experience

City of Royal Oak, Green Infrastructure Evaluation Report, Royal Oak, MI

Clinton River Watershed Council, Green Infrastructure Support Services for WaterTowns, Rochester Hills, MI

Detroit Economic Growth Corporation, USEPA Shoreline Cities Green, Detroit MI

Huron-Clinton Metropark, Huron-Clinton Metropark Stormwater Master Plan, Brighton, MI

Macomb Community College, MCC Rain Garden Project, Warren MI

Midtown Detroit, Inc., Cultural Center Planning Initiative, Detroit MI

Pittsburgh Water and Sewer Authority (PWSA), Pre-Construction Flow Monitoring for 2019 Small Diameter Sewer Rehabilitation Project, Pittsburgh, PA

PWSA, Thomas & McPherson Conceptual GSI Project, Pittsburgh, PA

PWSA, St John's Stormwater Management Project, Pittsburgh, PA

PWSA, Maytide Storm & Sanitary Improvement Project, Pittsburgh, PA

PWSA, Spring Garden Stream Removal Project, Pittsburgh, PA

The Watershed Center Grand Traverse Bay, Village of Northport Stormwater Reduction Project, Northport, MI

Village of Elk Rapids, Elk Rapids Stormwater Reducion Project, Elk Rapids, MI

JBC

DAVID STOKES, PLA, ASLA, ASIC
Principal

Mr. Stokes is a principal at Jeffrey L. Bruce & Company, with over 22 years experience in sports, recreation and park projects around the United States. David has worked nationally on conceptual design and construction documentation of parks and athletic complexes, sports fields, and public realm recreation projects.

His responsibilities include assisting clients develop sports and recreation master plans, managing design and project documentation, determining issues for clients and the public involved and construction administration. With the knowledge and the understanding of the opportunities and constraints of the project, Mr. Stokes has a strong working knowledge of sports surface technologies, and its applications.

EDUCATION
Bachelor of Landscape Architecture, Iowa State University, 1998

Loras College
Psychology Minor, 1993-1995

AFFILIATIONS
American Society of Landscape Architects

Prairie Gateway Chapter - ASLA

American Society of Irrigation Consultants

Iowa State University - Landscape Architectural Professional Advisory Council (LAPAC)

REGISTRATIONS
Professional Landscape Architect - Missouri, Kansas

(application in progress for Pennsylvania, Iowa, Illinois, Wisconsin, Nebraska, Kentucky, Texas, New York, North Carolina, Washington, Virginia, Washington DC, Florida, and California)

RELEVANT SPORTS AND PARK PROJECT EXPERIENCE
- University of Wisconsin - Near West Fields (4 Fields), Madison, Wisconsin
- Adzick Baseball Field Renovation - Clayton School District, St. Louis, MO
- Adzick Field Masterplan - Clayton School District, St. Louis, MO
- Holiday Park Sports Complex, West Des Moines, IA
- Orange County Great Park Sports Park (32 Fields), Irvine, CA
- Service Blake Park and Soccer Complex, Edmund, OK
- UMKC Durwood Soccer Stadium, Kansas City, MO
- Washington University - Athletic District Master Plan, St. Louis, MO
- Washington University - Women's Softball Field Master Plan, St. Louis, MO
- Smith Cove Park, Seattle, WA
- Navy Pier and Polk Bros. Park, Chicago, IL
- West End Smart Square Park, Dallas, TX
- Houston Arboretum and Nature Center, Houston, TX
- Hemisfair Park, San Antonio, TX
- Tisch Park at Washington University, St. Louis, MO
- Swope Soccer Village for Sporting KC (6 Fields), Kansas City, MO
- Hummer Sports Park (2 Fields), Topeka, KS
- Wedgbury Field @ Sportscore II Sports Park, Rockford, IL
- University of Notre Dame Multi-Venue Athletic Projects, South Bend, IN
- Louisiana State University Outdoor Football Practice Field, Baton Rouge, LA
- Louisiana State University Alex Box Stadium, Baton Rouge, LA
- University of Kansas Women's Softball Stadium, Lawrence, KS
- University of Missouri Walton Track & Soccer Stadium, Columbia, MO
- University of Missouri-Columbia Women's Softball Stadium, Columbia, MO
- Oklahoma State University - Soccer Field Renovation, Stillwater, OK
- Bill & Melinda Gates Foundation, Seattle, WA

JBC

SPENCER SNELLER, ASLA
Project Manager

Mr. Sneller is a project manager with six years of experience who has been extensively involved in a wide range of sportsfield and park design projects. He is typically involved in all phases of projects especially, construction documentation and construction administration and observation. Having worked on a myriad of projects throughout the nation, Mr. Sneller is experienced with a great variety of project sites, types, and sizes and is aware of the detail team coordination required to ensure a successful project.

EDUCATION
Bachelor of Landscape Architecture, Iowa State University, 2012

Minor in Spanish

AFFILIATIONS
American Society of Landscape Architects

Prairie Gateway Chapter-ASLA

RELEVANT SPORTS AND PARK PROJECT EXPERIENCE
- Adzick Baseball Field Renovation - Clayton School District, St. Louis, MO
- Adzick Field Masterplan - Clayton School District, St. Louis, MO
- Service Blake Park and Soccer Complex (16 Fields), Edmund, OK
- Orange County Great Park Sports Park (32 Fields), Irvine, CA
- Blue Valley Recreation Commission - Masterplan, Overland Park, KS
- UMKC Durwood Soccer Stadium, Kansas City, MO
- Washington University - Athletic District Master Plan, St. Louis, MO
- Washington University - Women's Softball Field Master Plan, St. Louis, MO
- New York City Football Club Training Facility, Purchase, NY
- Swope Soccer Village for Sporting KC (6 Fields), Kansas City, MO
- Tisch Park at Washington University, St. Louis, MO
- Hemisfair Park, San Antonio, TX
- Smith Cove Park, Seattle, WA
- Navy Pier and Polk Bros. Park, Chicago, IL
- Houston Arboretum and Nature Center, Houston, TX
- Nord Family Greenway, Cleveland, OH
- Holiday Park Sports Complex, West Des Moines, IA
- Wydown & Glenridge Schools, - Clayton School District, St. Louis, MO
- Upper Gay Field Renovation, - Clayton School District, St. Louis, MO
- Bill & Melinda Gates Foundation, Seattle, WA

WBCM

MICHAEL D. WUERTHELE, PE

Senior Vice President
Building Structures Division
Years of Experience: 36

PE Registrations:

FL:	04-06-16	80930
GA:	05-25-17	PE042017
IN:	04-13-17	PE11700185
KY:	10-01-18	PE34072
MI:	03-30-99	43801
MO:	03-14-19	PE2019008797
NJ:	01-01-95	GE38414
PA:	01-22-89	PE039329
WV:	12-06-16	22143

Experience:
Whitney, Bailey, Cox & Magnani, LLC (WBCM); Pittsburgh, PA
1999 – Present

Michael Baker, Jr., Inc.; Pittsburgh, PA
1987 to 1999

Brockette, Davis, Drake, Inc.;
Dallas, TX
1983 to 1987

Education:
Bachelor of Science in Architectural Engineering (Structural Emphasis)
The Pennsylvania State University

Affiliations:
-International Concrete Repair Institute (ICRI) Pittsburgh Chapter – Treasurer / 15 years

General Experience

Mr. Wuerthele is a Senior Structural Engineer with extensive knowledge of concrete, steel, masonry, and wood design. He has 36 years of experience in the construction industry including a large portion involving mid to high-rise construction. Mr. Wuerthele has also obtained an in-depth knowledge of pre-stressed concrete design. Acting as the Structural department manager, he has combined strong leadership qualities with an experience which allows WBCM to provide economical, efficient and effective engineering design solutions. Recent projects that Mr. Wuerthele has overseen include:

RIDC Lawrenceville Technology Center
Lawrenceville, PA
Two-story, steel framed, retail/light industrial building. Construction cost was $6 million dollars.

Howard Concrete Pumping Headquarters
Houston Borough, PA
New two-story, 11,600 SF composite steel framed office building, and foundation/slab on grade design for new one-story, 33,200 SF pre-engineered metal building.

Distillery at 129 McKean
Pittsburgh, PA
Renovation of an existing six-story timber framed warehouse building and new five-story, steel framed building addition. $10 million construction cost.

The Bridge on Forbes
3423 Forbes Avenue, Pittsburgh, PA
New ten-story, 301,000 SF, steel, Deltabeam and precast plank framed apartment building with two lower levels of retail and parking, on deep caisson foundations.

The Murdoch Building
3420 Forbes Avenue, Pittsburgh, PA
New nine-story, 111,500 SF, composite steel framed office building with two lower levels of retail and parking, on deep caisson foundations.

Bridgewater Crossing Apartments
Bridgewater, PA
Three, six-story steel frame buildings with precast plan floors. $25 million dollars in construction costs.

Parkersburg Apartment Building
Parkersburg, WV
Four-story, $3 million, wood framed building.

BPMI – 135 Jamison Lane Expansion
Monroeville, PA
Four-story, $15 million, conventional steel framed office building.

Two Doughboy Square
Pittsburgh, PA
New three-story steel framed office building addition. Construction cost approximately $3.5 million dollars.

Hyatt House
Orlando FL
Nine-story, $23 million hotel building that was originally designed as a conventional steel frame structure then totally redesigned as a reinforced concrete building.

Cal U of PA – Coover Hall Renovation/Addition
California, PA
$6 million project with steel framed building addition.

PA State Police Headquarters Facility
Greensburg, PA
New two-story office building with conventional steel frame floor construction and load bearing masonry wall construction. Total construction cost was $15 million dollars.

Ashby at South Hills Village
Upper St. Clair, PA
Four new four-story wood-framed apartment buildings totaling 317,000 SF, bridge connector to existing garage, one-story clubhouse and five one-story garages.

Firstsite Office Building
Pittsburgh, PA
Four-story, 28,000 SF office building founded on existing pile caps and piles that were exposed from a previous building, demolished for this new construction. Construction cost was $4.5 million dollars.

Waterfront III
Wexford, PA
Four-story, 69,730 SF, office building which utilized conventional steel frame construction with concrete on metal deck floors. The exterior façade is a combination of precast concrete panels and curtain wall. Construction cost was $8 million dollars.

SHAWN A. GRAHAM, PE

Vice President /
Senior Structural Engineer
Building Structures Division
Years of Experience: 16

PE Registrations:

AR:	04-27-15	PE16600
DC:	12-20-07	PE904738
MA:	09-16-15	52110
MD:	09-15-15	47247
NE:	09-25-15	E15795
OH:	04-01-15	PE79937
PA:	04-09-15	PE083457
SC:	09-09-19	37188
VA:	09-25-15	0402055489
WV:	05-28-15	PE21328

Experience:
Whitney, Bailey, Cox & Magnani, LLC (WBCM); Pittsburgh, PA
2014 – Present

Structura, Inc.; Rockville, MD
2003 to 2014

Education:
Bachelor of Science in Architectural Engineering (Structural Emphasis)
The Pennsylvania State University

Computer Experience:
-Revit Structure
-AutoCAD

Affiliations:
-Structural Engineers Association of Western Pennsylvania (SEAoWP)
-International Concrete Repair Institute (ICRI) Pittsburgh Chapter

General Experience

Mr. Graham has over sixteen years of structural design and project management experience and has served as the Engineer-of-Record for numerous projects. His experience spans a broad range of market sectors and building types; including office, retail, parking, mixed use, educational, residential, renovations, and adaptive reuse. He has extensive knowledge in the design of structural steel, reinforced concrete, masonry, wood/timber, and cold-formed steel. He strives to exceed client expectations and increase project performance, while integrating the latest trends in structural systems, technology, and Building Information Modeling into his projects. He assists in overseeing the office's overall engineering operations, quality control, strategic planning, and business development. Projects Shawn has been involved with include:

Westridge Commerce Centre, Building #4
Monongalia County, WV
Foundation/slab on grade design for new one-story, 30,000 SF pre-engineered metal building. Cold-formed steel shop drawings for exterior back-up framing.

Waukesha Pearce Industries
Oklahoma City, OK
Foundation/slab on grade design for new one-story, 91,000 SF pre-engineered metal building with second floor mezzanine and FEMA compliant cast-in-place concrete Tornado Safe Room.

The Bridge on Forbes
3423 Forbes Avenue, Pittsburgh, PA
New ten-story, 301,000 SF, steel, Deltabeam and precast plank framed apartment building with two lower levels of retail and parking, on deep caisson foundations.

The Murdoch Building
3420 Forbes Avenue, Pittsburgh, PA
New nine-story, 111,500 SF, composite steel framed office building with two lower levels of retail and parking, on deep caisson foundations.

Square View Apartments
3433 Butler Street, Pittsburgh, PA
New four-story, 25,000 SF wood/steel framed apartment building with street level retail and a below grade parking garage. Deep caisson foundations provide stability for steep site.

Carnegie Mellon University Marketing & Communications Building
4721 Fifth Avenue, Pittsburgh, PA
Adaptive reuse of an historic four-story, 22,000 SF building; including floor strengthening for new office loading, an enlarged elevator shaft, new canopy, and LEED Gold certification.

Bursca Retail South
Bursca Drive, Bridgeville, PA
New one-story, 14,000 SF, steel framed retail building.

Ashby at South Hills Village
1100 Village Drive, Upper St. Clair, PA
Four new four-story wood-framed apartment buildings totaling 317,000 SF, bridge connector to existing garage, one-story clubhouse and five one-story garages.

Morningside Crossings
1802 Jancey Street, Pittsburgh, PA
Passive house adaptive reuse of existing 120-year-old school and a new four-story, wood/steel framed senior living addition located over parking.

Howard Concrete Pumping Headquarters
Houston Borough, PA
New two-story, 11,600 SF composite steel framed office building, and foundation/slab on grade design for new one-story, 33,200 SF pre-engineered metal building.

Pittsburgh Zoo – The Island Exhibit
7370 Baker Street, Pittsburgh, PA
Two new load bearing masonry buildings with cast-in-place concrete floor and wood roof trusses.

Pittsburgh Zoo – Jungle Odyssey Exhibit
7370 Baker Street, Pittsburgh, PA
Four new one-story, load-bearing masonry retaining wall buildings placed into the hillside.

Pittsburgh Zoo & PPG Aquarium
7370 Baker Street, Pittsburgh, PA
Rehabilitation of existing ocean aquarium concrete piers that laterally support viewing window walls.

Pittsburgh Zoo Zipline Towers
7370 Baker Street, Pittsburgh, PA
2 new wood/steel framed takeoff and landing towers for three,170-foot-long zip lines, 25 feet in the air. Towers are supported on deep caisson foundations.

Gebben's Residence
1061 Winfield Road, Butler, PA
New 5,100 SF custom woof framed residence.

J+M ENGINEERING

PHILADELPHIA
215.454.2662

WASHINGTON
202.320.9173
jandmengineers.com

Aaron B. Johnson
Principal |Project Engineer

General Experience:

Mr. Johnson's experience in both commercial and residential construction related positions includes 15+ years of mechanical, plumbing, and electrical engineering as well as building life cycle analysis for energy consumption sustainability with domestic and international firms. Mr. Johnson's responsibilities encompass design and analysis, project management, and procurement.

Selected Project Experience:

- Mechanical system design and project management of a 95-unit, new construction, townhome development. Provided 3D schematic layouts and HVAC performance specifications for multiple 2,000 square foot unit layout variants. Mt. Sinai, Philadelphia, PA.

- Design of mechanical, electrical, and plumbing engineering systems for a 35,000 SF, new construction, mixed use project. The design consisted of six duplex residential units, four townhomes, and two mixed use buildings and achieved LEED Platinum certification. Powerhouse, Philadelphia, PA.

- Energy consumption analysis, ASHRAE Level – II energy audit, of a new 100,000 square foot athletic and recreation complex. Analyzed all major HVAC system's performance data gathered from the building automation system to provide energy conservation measures which assisted in achieving a LEED Gold Certification. The George Washington University, Charles E. Smith Center, Washington, DC.

- Design and construction administration of mechanical and plumbing systems for the U.S. Department of the Navy during PENREN [Pentagon Renovation]. A 35,000 square foot tenant-fit out of the basement level, E-Ring corridor in Wedge 4, which included sensitive compartmented information facilities (SCIF) and utilization of steam systems for HVAC and domestic hot water heating. Pentagon, Arlington, VA.

Education:

Howard University, Bachelor of Science in Mechanical Engineering

Memberships:

Engineers Without Borders – Howard University Chapter
American Society of Heating, Refrigerating and Air-Conditioning Engineers

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202.320.9173

jandmengineers.com

Joseph Matje, P.E.
Principal |Project Engineer

General Experience:

Mr. Matje's experience in the construction engineering field includes the design and project management of high rise buildings, commercial structures and tenant fit-outs, residential developments, maintenance programs for industrial pharmaceutical facilities, design of medical and education facilities, parking garages, and laboratories.

Selected Project Experience:

- Folsom Power House Development, consisting of two mixed use buildings and twenty two townhomes on a consolidated site at 18th and Folsom Streets in the Francisville neighborhood of Philadelphia. Completed the mechanical, plumbing, and electrical design for all buildings in this development, including a photovoltaic array on the mixed use building roof for the developers Post Green and Equinox.
- 3070 and 3100 Spring Garden Street, mixed use buildings with eight residential units, commercial office space, and a ground floor restaurant. Competed the mechanical, electrical, and plumbing design for the developer New Age Reality and Interface Studio Architects.
- Provide mechanical design services for the comprehensive renovation of the Firestone Library, a 450,000 square foot building on the Princeton University campus. The design scope includes energy modeling and thirty year life cycle cost analysis for all major engineering decisions. The project scope includes a rare books vault designed with climate control and fire protection systems to protect priceless artifacts. The design and construction period for this project will be ten years of phased work with the library remaining open to the public and to students throughout this process.
- Penn State Consortium for Building Energy Innovation, Philadelphia, Pa. The CBEI's staff will be headquartered at the Navy Yard in Building 661, rechristened the Center for Building Energy Science and Engineering. A new building, 7R aka the Center for Building Energy Education and Innovation, will serve as Penn State's Philadelphia-area headquarters and hold classrooms, offices and a lecture hall. The $37.5 million, 63,000 square foot complex features four distinct types of HVAC systems: three in 661 to accommodate research, and one—a ground-coupled heat pump system—in 7R. The project, which is administered by Penn State, has a LEED Gold goal.
- CHOP South Philadelphia Family Care Center, Philadelphia, Pa. Representing a partnership between Children's Hospital of Philadelphia and the City of Philadelphia, the new 63,000 square foot facility will occupy a 1.9-acre site on Broad Street. CHOP's primary care center and the City's health center comprise 45,000 square feet, with the balance allocated to the South Philadelphia Library, the DiSilvestro Recreation Center and a three-story connector. LEED Silver achieved.

Education:

Villanova University, Bachelor of Science in Engineering

Professional:

Registered Professional Engineer in PA, NJ, MD, NY, DC, VA
NFPA Certified Fire Protection Specialist
Passive House Certified Consultant

Memberships:

Design Advocacy Group of Philadelphia
Community Design Collaborative, sponsored by AIA Philadelphia

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jandmengineers.com

Richard Hwang, P.E.
Principal |Project Engineer

General Experience:

Mr. Hwang's experience in the construction engineering field includes the design and project management of commercial structures and tenant fit-outs, historic buildings, residential developments, dormitory facilities, design of medical and education facilities, parking garages, and laboratories.

Selected Project Experience:

- CHOP South Philadelphia Family Care Center, Philadelphia, Pa. Representing a partnership between Children's Hospital of Philadelphia and the City of Philadelphia, the new 63,000 square foot facility will occupy a 1.9-acre site on Broad Street. CHOP's primary care center and the City's health center comprise 45,000 square feet, with the balance allocated to the South Philadelphia Library, the DiSilvestro Recreation Center and a three-story connector. LEED Silver achieved.

- Headstart, Atlantic City, NJ. After Super Storm Sandy destroyed three of Atlantic city's Head Start centers in 2012, Gateway Community Action Partnership (CAP) initiated the sustainable project, with a LEED Silver goal. The building consists of 3 stories of low-flow fixtures throughout the child classrooms, high efficiency water source heat pumps tied to a geothermal well field below the facility, rooftop and kitchen makeup air units with energy recovery, and LED light fixtures throughout.

- New Palmer, Pittenger, Roberts Dormitory (NPPR), Swarthmore, PA. Swarthmore College Sustainability Metrics (LEED Platinum equivalent) achieved. NPPR has been recognized as the College's flagship for sustainability. The achievement was accomplished with aggressive sustainability measures, including multiple LCCA iterations to determine the final product of LED lighting, valance unit heating/cooling for dorm rooms and rooftop units with energy recovery, both tied to a geothermal well field through water to water heat pumps, solar thermal domestic hot water heating, solar photovoltaics, and grey water toilet flushing/irrigation from rooftops.

- Haverford Magill Library, Haverford, PA. Initially built in 1864, with additions throughout the late 1800s, into the mid 1900s, Magill Library on Haverford's campus is a historic fixture. The renovation of the original 1800s structures and new addition replacing the 1900s structures aim to be a new face for Haverford's libraries. New MEP and fire protection systems carefully integrate into the historic structure, and introduce new systems to align with Haverford's sustainability goals, including LED fixtures, low flow plumbing fixtures, air cooled chillers with hot water reclaim, rooftop units with energy recovery, and chilled beam units through the stack and office floors.

Education:

Washington University in St. Louis, Bachelor of Science in Mechanical Engineering
Loyola University in Chicago, Bachelor of Science in Physics

Professional:

Registered Professional Engineer in NJ

Memberships:

Grow Philly Sustainable Communities 501(c)(3)
Circle Compost
Community Design Collaborative, sponsored by AIA Philadelphia

Joseph H. Allegra, PLS

Survey Manager - West

EDUCATION:

B.A./History, Mathematics + Business, Computers and Economics Minor, Saint Vincent College, 1986

Coursework/Construction Management, Computer Science, Mathematics and Surveying, Catholic University of America/American River College/Catonsville Community College

REGISTRATION:

Professional Land Surveyor, Pennsylvania, No. SU-05345-E, 8/26/1999
Professional Land Surveyor, Virginia, No. 2262, 1/5/1998
Professional Land Surveyor, Washington DC, No. LS901866, 8/24/2006

CERTIFICATION:

Underground Miner – Red Hat, Surface Miner, Veriforce Examiner
Ashtech Products Trainer
DoD – Subject Matter Expert

EXPERIENCE:

Years with Navarro & Wright: <1 Years with other firms: 32

General Qualifications:

Mr. Allegra has over 30 years of experience in surveying services. He uses strategic business processes by bringing in projects that are out of the traditional scope for a civil engineering company. His experience has included enhance staffs technical expertise, recruit / retain additional practice experts, oversee and direct technical staff, managed multiple, simultaneous projects' budgets, acting as a project manager for large projects, recruited and managed a team to perform innovative integration of Aerial mapping, GIS, Real-Time data and data collection using various platforms/data types to create efficient workflow processes. Developed and managed a UAV program integrated into Aerial Mapping.

EXPERIENCE

Consol Enlow Mine - Project manager for the survey and layout of an 84" convey belt system traversing 1 mile in length with 800' vertical change. Established control network, as-built existing structures performed layout for completion and performed 3D Laser scanning to ensure clearances.

Various Pipelines Ohio, PA, WV, VA NC - managed up to 40 personnel performing initial through as-built surveys on pipelines ranging in diameter form 8" - 42". Developed a real-time data transfer so progress changes and other project related information could be uploaded remotely to survey personnel without leaving field.

Government building in Clarksburg WV - Managed a project for a Government building that included as-built surveys using 3d Scanning to determine the nature of vertical and squareness. The results were used to fabricate protective panels for shield the structure.

Ginger L. Randall

Environmental Services Manager

EDUCATION:

B.S./ Environmental Science with a Biology Concentration, Long Island University

CERTIFICATION:

ASTM Conference on Environmental Site Assessments for Property Transfer
EPA AHERA Asbestos Building Inspector Certification (multiple states)
EPA AHERA Asbestos Management Planner Certification (multiple states)
Asbestos Hazard Evaluation Specialist/Asbestos Hazard Abatement Air Monitoring Technician (Ohio)
Lead Inspector (Pennsylvania)
Lead Remodeling, Repair, and Painting (RRP)
OSHA 40Hour HAZWOPER

EXPERIENCE:

Years with Navarro & Wright: 2 Years with other firms: 12

General Qualifications:

Ms. Randall is Environmental Service Manager for N&W's expanding Construction Services Division including field and laboratory materials testing, drilling services, geotechnical and environmental services with a focus on private sector clients. She has over twelve years of experience managing a team of technicians and developing solutions for a broad spectrum of clients throughout the Mid-Atlantic region in the related fields of environmental consulting and remediation, Phase I and II Environmental Site Assessments, Asbestos Surveys and Abatement Projects, Hazardous Material Surveys, Property Condition Assessments, Construction Draw Monitoring, Wetlands Presence/Absence Surveys, GPR and UST Removals, and Lead-Based Paint Inspections.

Ms. Randall has prepared and/or provided technical review of over 500 Phase I and Transaction Screen Environmental Site Assessments nationwide including site reconnaissance, data review, compliance monitoring, regulatory interfacing, and report preparation for properties ranging from small gasoline stations to large scale industrial facilities. She has provided strategic assistance for environmental due diligence and risk management of several large property transaction portfolios for use in mergers, acquisitions, and litigation. She has managed Phase II intrusive subsurface investigations integrating all aspects of hydrogeologic investigations involving managing subcontracted environmental drillers, groundwater monitoring well installation, and soil sampling.

Ms. Randall has also prepared hundreds of mold, asbestos, and lead-based paint surveys and provided technical oversight and IAQ monitoring on numerous abatements in conjunction with site redevelopment and renovation/demolition projects. Ms. Randall has also provided construction monitoring, loan oversight, property condition assessments, and property inspection reports, tailored to various clients' reporting requirements, for hundreds of existing or new developments including; residential, commercial, and industrial properties.

EXPERIENCE

Brilliant Avenue Intersection S.R. 1001, Section A57, **Re-Alignment, Borough of Aspinwall, PA –** Ms. Randall was the project manager responsible for environmental investigation and testing as well as

Luke T. Turko, P.E.

Geotechnical Department Manager - West

EDUCATION:

B.S., 2005, Civil and Environmental Engineering, University of Pittsburgh
M.S., 2010, Civil (Geotechnical) Engineering, University of Pittsburgh

REGISTRATION:

Professional Engineer, Pennsylvania, PE078230,2010
Professional Engineer, West Virginia, 21092
Professional Engineer, Kentucky, 30084
Professional Engineer, Maryland, 53512
Professional Engineer, Virginia, 402061341
Professional Engineer, Ohio, PE85280

CERTIFICATION:

PennDOT Drilling Inspector, Level I, Pennsylvania
OHSA HAZWOPER, 40 Hour
Safeland USA

TRAINING:

Safety Training Supervisor, Board of Certified Safety Professionals

EXPERIENCE:

Years with Navarro & Wright: 2 Years with other firms: 13

General Qualifications:

Mr. Turko is a Geotechnical Department Manager for Navarro & Wright's Western Geotechnical team including the responsibilities of overseeing and managing the team as well as working on related projects. Specializing in transportation projects in Pennsylvania and West Virginia and natural gas projects throughout the Appalachian Basin, Mr. Turko's experience includes subsurface characterization and geotechnical recommendations and design for clients such as Pennsylvania Department of Transportation (PENNDOT), Pennsylvania Turnpike Commission and West Virginia Department of Highways. He has extensive experience with preparing PENNDOT deliverables including Geotechnical Engineering Reports and Structure Foundation Reports. He has overseen geotechnical drilling and laboratory testing for small and large natural gas and highway projects. He has worked on over 40 projects for PennDOT Districts 10, 11 and 12 and was the lead geotechnical engineer for Section 55A2 of the PA Turnpike's Southern Beltway Project. Mr. Turko has provided site characterization and geotechnical recommendations for over 40 different well pad sites throughout Pennsylvania, West Virginia and Ohio. Mr. Turko's specific expertise includes slope stability, seepage, settlement, spread footing and pile foundation design, reinforced soil slope design, coal refuse dam design, soil-cement stabilization of well pads, pavement design and earthwork construction oversight.

EXPERIENCE

PennDOT District 11-0 E04156, Geotechnical Open-End Agreement. Geotechnical, Design and Environmental Services on various projects in Allegheny, Beaver and Lawrence Counties. Navarro &

NAVARRO & WRIGHT CONSULTING ENGINEERS, INC.

Robert H. Eiswert

Cultural Resources Group Leader

EDUCATION:

M.A./American Studies, Pennsylvania State University, 2005
B.A./Anthropology, History, Bloomsburg University, 1995
Directed Independent Reading on Middle Atlantic Prehistoric Archaeology, Under Dr. Michael Stewart, Temple University, 2002

CERTIFICATION:

Introduction to Section 106 Review, University of Nevada Reno Heritage Resources Management Program, 2000
OSHA 40 Hour HAZWOPER Course 29 CFR 1910.120

EXPERIENCE:

Years with Navarro & Wright: 1 Years with other firms: 20

General Qualifications:

Mr. Eiswert is an archaeologist with over 20 years of experience in the excavation of archaeological sites, report writing, and lab work. He has supervised work on historic archaeological sites ranging from industrial to 18th and 19th century farmsteads in Pennsylvania, Delaware and New Jersey. His prehistoric experience includes directing field work on deeply stratified and upland sites in Pennsylvania, Delaware, and Ohio. His areas of expertise include supervising field projects, mapping with precision surveying instruments, research, and technical report writing and production. As a Principal Investigator he meets and exceeds the standards of the Secretary of Interior for both historic and prehistoric archaeology. His current responsibilities include the development of technical proposals and cost estimates, project management, supervision of field and laboratory personnel, and authorship of project documents. Mr. Eiswert has served as one of PennDOT's Cultural Resource Qualified Professionals which involves the supervision, management and coordination of transportation projects involving archaeology and cultural resources.

EXPERIENCE

S.R. 4018 (McClay's Mill Road) East and West Bridges over the Conodoguinet Creek, Southampton and Lurgan Townships, Franklin County, Pennsylvania, PennDOT District 8-0. This project involved the rehabilitation of the two stone arch bridges that span the Conodoguinet Creek. The project was located at the former location of Maclay's Mill. Archaeological investigations resulted in the identification of one pre-contact (36FR448) site dating to the Terminal Archaic Period and one historic site (36FR449) associated with the ruins of the mill. The portion of 36FR449 within the APE was determined to not contribute to the eligibility of the site and the portion of 36FR448 within the APE was protected with geotextiles and fill in lieu of additional investigations. Served as Principal Investigator and was the lead author of the report (2019, N&W #1805TD159).

Logan Valley Streetcar Trail, Antis Township, Blair County, Pennsylvania, PennDOT District 9-0. This project involved the construction of a new trail connecting the Bellwood-Antis Community Park to the Bells Gap Trail. The project was located in Bellwood Borough and along the undeveloped Bell's Gap Run floodplain. Geomorphological and Phase I Archaeological studies undertaken for the project indicated that the majority of the project APE was disturbed or exhibited low archaeological potential due the scoured nature of the Bell's Gap Run floodplain. No archaeological sites were discovered during the investigations. Served as Project Manager and was co-author of the Negative Survey Form (2019, N&W #1904TD129).

TILLOTSON
DESIGN
ASSOCIATES

Suzan Tillotson, CLD
Founding Partner

Ms. Tillotson founded Tillotson Design Associates in 2004 with over twenty-three years of lighting design experience. She has won over one hundred lighting design awards for her work, including a 2018 IES Meritorious Service Award and the 2017 Lighting Designer of the Year at the Lighting Design Awards, and has been featured in many national and international publications.. Ms. Tillotson has directed all phases of design for a wide variety of award-winning domestic and overseas interior and exterior lighting projects.

EXPERIENCE
2004 - Present Tillotson Design Associates, President
1988 - 2004 Kugler Tillotson Associates, Principal
1987 - 1988 Brandston Partnership Incorporated, Project Manager
1986 - 1987 Flack + Kurtz Engineers, Lighting Department Project Manager
1981 - 1986 Levy-Kramer Consulting Engineers, Head of Lighting Design Department

EDUCATION
2012 Distinguished Alumni Award Recipient, LSU College of Art and Design
2012 LSU College of Art and Design Commencement Speaker
1981, Louisiana State University School of Architecture - Bachelor of Art, Interior Design

MEMBERSHIPS
International Association of Lighting Designers (IALD) Member since 1981
Illuminating Engineering Society (IES) Member since 1982

RECENT AWARDS
2019 IES Illumination Award of Distinction - Gateway Arch and Visitor's Center - St. Louis, MO
2019 IESNYC Lumen Award of Excellence - Gateway Arch and Visitor's Center - St. Louis, MO
2019 IALD Award of Excellence – Gateway Arch Museum and Visitor's Center - St. Louis, MO
2019 IALD Award of Excellence – London Mithraeum - London, UK
2019 IALD Award of Excellence – Bloomberg European Headquarters - London, UK
2018 LDA Global Project of the Year – Bloomberg European Headquarters - London, UK
2018 LDA Workplace of the Year – Bloomberg European Headquarters - London, UK

PROFESSIONAL DEVELOPMENT
2019 Certified Lighting Designer, Certified Lighting Designer Commission
LightFair Panel Speaker - 2019
LDA Masters of Light Presenter - 2018
Acuity Workplace Empowerment Women's Network Panel - 2018
Lumens Then and Now Presenter - 2018
LDA North American 40 under 40 Keynote Speaker - 2018
Lightspace Speaker – 2017
International Dark-Sky Association (IDA) Annual General Meeting Speaker - 2017
IESNYC Student Competition Judge - 2017
IESLA Speaker - 2017
IALD Enlighten Americas Speaker - 2014
Lumina Project Luminaire - 2014, 2015
New York Festival of Light (NYFOL) Advisory Council Member - 2014
A+D Editors Panel Speaker - 2013
International Association of Lighting Designers (IALD) NY Chapter Regional Coordinator - 2012, 2013; Board Member – 2012, 2013, 2014
Visiting Professor - Princeton University School of Architecture - 2009
Judge - New York IES Lumen Awards and IALD Awards
Instructor - New York IES Introductory Lighting
Guest Lecturer - Louisiana State University, Rutgers University, McGill University, University of Arkansas, Cornell University, Dalhousie University

TILLOTSON
DESIGN
ASSOCIATES

Erin Dreyfous
Partner

Erin joined Tillotson Design in 2007 immediately upon graduating from Parsons: the New School for Design with an MFA in Architectural Lighting Design. Her prior experience includes work as an apprentice electrician and designing for estate-sized residential projects with a lighting firm in Michigan. She also worked as a freelance lighting designer for Tanteri + Associates, where she gained valuable experience with daylighting. She served as an IALD New York City Regional Coordinator from 2013 to 2015. In 2018 Erin was named one of Lighting Magazine's 40 under 40 "to watch" and joined Suzan Tillotson as Partner of Tillotson Design Associates. Erin has guest-lectured for architectural graduate students at Columbia University, has presented her completed award-winning projects to fellow colleagues through the DLF Organization, and has served on design juries including Architectural Record's competition panel for Best New Products of the Year.

EXPERIENCE

2007 – Present	Tillotson Design Associates, Principal
2005 – 2006	Tanteri + Associates, Freelance Lighting Designer
2004 – 2005	Haner Lighting Design, Lighting Designer
2003 – 2004	Grand Rapids Lighting Distribution, Showroom Sales
2000 – 2003	DeVries Electric, Apprentice Electrician

EDUCATION

Parsons the New School for Design – Master of Fine Arts, Architectural Lighting Design
Kendall College of Art and Design - Bachelor of Fine Arts, Interior Architecture

MEMBERSHIPS

International Association of Lighting Designers (IALD)
Illuminating Engineering Society (IES)

RECENT AWARDS

2019 IES Illumination Award of Merit - Four Seasons Restaurant - New York, NY
2019 IES Illumination Award of Merit - Heavenly Bodies Exhibit - New York, NY
2019 IES Illumination Award of Merit - Remai Modern - Saskatoon, Saskatchewan, Canada
2019 IALD Award of Excellence – Bloomberg European Headquarters - London, UK
2019 IESNYC Lumen Award of Merit - Four Seasons Restaurant - New York, NY
2019 IESNYC Lumen Award of Merit - Nicollet Mall - Minneapolis, MN
2019 LAMP Award for Indoor Lighting - Bloomberg European Headquarters - London, UK
2019 IALD Award of Excellence - Bloomberg European Headquarters - London, UK
2019 LDA Restaurant Project of the Year - Four Seasons Restaurant - New York, NY
2018 LDA 40 Under 40 "To Watch"
2018 LDA Global Project of the Year – Bloomberg European Headquarters - London, UK
2018 LDA Workplace of the Year – Bloomberg European Headquarters - London, UK
2018 A|L Outstanding Achievement Award for Whole Building - Bloomberg European Headquarters - London, UK
2018 IESNYC Lumen Award of Excellence - Bloomberg European Headquarters - London, U
2018 IESNYC Lumen Award of Merit – The Roy and Diana Vagelos Medical Education Center – New York, NY
2017 IES Illumination Award of Merit – The Roy and Diana Vagelos Center – New York, NY
2017 IES Illumination Award of Merit – Vietnam Veterans Memorial – New York, NY
2016 IESNYC Lumen Award of Merit – The Broad – Los Angeles, CA

PROFESSIONAL DEVELOPMENT

Lighting Magazine's 40 Under 40 international lighting designers "to watch" - Class of 2018
Judge – Architectural Record Best of Category - 2017
IALD New York Chapter Regional Coordinator – 2013, 2014, 2015
Guest Lecturer to Fifth Year Architecture Students at Columbia University - 2015
Guest Presenter at DLF Events Showcasing Two Award Winning Projects – 2014, 2015

Severino@alpineallegheny.com
412-782-4759

147 Oakhurst Rd.
Pittsburgh, PA 15215

EDUCATION
University of Pittsburgh
BS Mathematics, 1988

AFFILIATIONS

Member, American Society of Professional Estimators

Member, Consulting Estimators Round Table

PROFICIENCIES

RS Means
PlanSwift
HCSS
Trimble Paydirt
Primavera Sure Trak

Microsoft Office Suite
- Excel
- Access
- Word
- Powerpoint
- Outlook
- MS Project

SEVERINO C. DEPASQUALE, CPE
PROJECT MANAGER/COST ESTIMATOR

Severino DePasquale is an experienced Certified Professional Estimator and Construction Project Manager with more than 30 years of experience in the heavy construction industry, specializing in infrastructure systems. His skills include the ability to develop goals and schedules, quantity take-offs, prepare reports. He also prepares site conditions documentation and photography. He founded Alpine Allegheny in 2015 after decades working for large contractors and utility companies.

Alpine Allegheny, President 2015 - Present
Estimating, Scheduling, & Construction Documentary Photography Consulting. Recent/Current projects include:
- City of Pittsburgh, Southside and Wightman Parks
- City of Pittsburgh, on-call contract
- Rand Corporation, Puerto Rico Cost Valuation Unit

M. DePasquale, Inc. and PERDAR Company, President
1982 - 2015
- Heavy Construction and Project Management for the US Department of the Interior.
- Estimating & Scheduling 258 construction items for PennDOT Wood Street Corridor Project.
- Completed projects up to $11 million.
- Waste/Water Treatment Plant Construction/1.1 MGD Sewage treatment plant; install a sodium hyper chlorate system of the raw water intakes of 120 MGD water treatment plant, residual waste clean up of plants and reinstalling major valves (Sluice Gates, Air Release and Gates greater than 16 inches)
- Partnered with the US Department of the Interior, Office of Surface Mining in the construction Cement Bentonite Slurry Cut Off Walls in mitigating mine gas release.
- Major Utility Excavations (Steam & Chilled Water mains) at the Peterson Events Center and PNC Park,
- Constructed cantilevered concrete retaining walls for the US Department of the Interior in the wake of Hurricane Ivan.

Walbridge East, Estimator November 2008 – April 2010
Civil Construction Projects up to $50 Million in Scope.
- Duties included Take-Off, Costing, Sub-Contractor Sourcing and Pre-Bid Scheduling for Industrial, Wind Power Plant and Waste Water Treatment

WG Tomko Inc., Estimator and Project Manager
March 2006 – September 2008 & Current Client
Estimator and Project Manager of civil Construction Projects up to $22 Million in scope. Duties included Take-Off, and Costing and Pre-Bid & Project Scheduling for Utilities and Wastewater Treatment.

WJE

PERSONNEL QUALIFICATIONS

Robert J. Firman III | Senior Associate

EDUCATION

- Bucknell University
  - Bachelor of Science, Civil Engineering, 2010
  - Bachelor of Management for Engineers, 2010
- Purdue University
  - Master of Science, Civil Engineering, 2011

PRACTICE AREAS

- Failure/Damage Investigations
- Concrete Structures
- Nondestructive Evaluation
- Instrumentation/Monitoring/ Load Testing
- Bridges

REGISTRATIONS

- Professional Engineer in DC, MD, NJ, and VA

PROFESSIONAL AFFILIATIONS

- American Concrete Institute
- American Institute of Steel Construction
- American Society of Civil Engineers

CONTACT

rfirman@wje.com
703.641.4601
www.wje.com

EXPERIENCE

Robert Firman joined the Washington, D.C. office in January 2012. Since that time, he has gained experience working on a broad range of projects, including condition assessments; instrumentation; materials testing; and structural analysis of structural steel buildings, light-gauge metal structures, and prestressed and post-tensioned concrete buildings and bridges. Prior to joining WJE, Mr. Firman gained work experience in structural dynamics, engineering, construction, steel fabrication, and erection.

REPRESENTATIVE PROJECTS

Failure/Damage Investigations

- Precast Parking Garage - Fairfax, VA: Investigation of spandrel cracking
- Wood Subfloor Assessment - Washington, D.C.: Investigation and materials testing of wood subfloor exposed to moisture during construction
- Glass Breakage - Washington, D.C.: Investigation of glass breakage during construction of curtain wall
- Springfield Town Center - VA: Investigation of partial collapse of elevated concrete slab during construction
- Underground Parking Garage - Washington, D.C.: Investigation of concrete structure collapse during construction
- File Storage Warehouse - Landover, MD: Structural analysis and investigation of warehouse progressive collapse

Concrete Structures

- Airport Roadway Tunnels - Buffalo, NY: Condition assessment and materials testing of tunnels located beneath airport runway
- Multistory Building - Denver, CO: Condition assessment, analysis, and repair design of precast concrete column connections
- Silver Spring Transit Center - MD: Field investigation and structural analysis related to the performance of a post-tensioned concrete structure

Nondestructive Evaluation

- Metrorail Station Platforms - Washington, D.C.: Ground penetrating radar and specialized inspections
- Elevated Structures - Washington, D.C.: Visual inspection, magnetic particle testing, and ultrasonic testing of fracture critical steel transverse box girders

Instrumentation/Monitoring/Load Testing

- Garage Monitoring - Tysons, VA: Installation and monitoring of environmental sensors at precast parking garage
- Balcony Railing Load Testing - Alexandria, VA: Assessment and load testing of balcony railings at apartment building
- Overhead Lift Anchor Testing - Washington, D.C.: Load testing of overhead anchors used for moving equipment within hospital
- Fall Protection Anchor Testing - Raleigh, NC: Load testing of roof fall protection anchors
- USS Maine Memorial - Arlington, VA: Installation of temperature and humidity monitoring equipment at Arlington National Cemetery
- Miller-Coors Brewery - Elkton, VA: Installation of tiltmeters on fermenting tanks in response to steel column failures
- Embassy Building - Washington, D.C.: Crack monitoring at concrete beams and columns

Bridges

- Multiple Timber Bridges - MS: Condition assessment of multiple timber pile bridges
- Nottoway Reservoir Bridge - Nottoway County, VA: Condition assessment, instrumentation, materials testing, and service life modeling of concrete substructure and steel superstructure
- Route 15/Interstate 66 Overpass - Haymarket, VA: Fire damage assessment of steel and concrete bridge components
- Commodore Barry Bridge - Bridgeport, NJ: Concrete materials testing of bridge piers to determine the potential for alkali-silica reaction

WJE ENGINEERS ARCHITECTS MATERIALS SCIENTISTS

3
PROJECT APPROACH & PLAN

FIRST CREEK PARK
STUDIO ZEWDE

Project Approach: Designing the Cultural Nexus of Homewood Park

Today, Homewood Park is the vibrant epicenter of community gathering for youth and families in the neighborhood of Homewood. Energized by the programming of Homewood Community Sports and the anchor that is Homewood Community Pool, the site plays host to a range of intergenerational activity and relationship-building that are at the core of its community. With the demolition of the school and the proposed expansion of the park, we understand this project to represent a critical opportunity to amplify the park's offerings, strengthen its relationship to adjacent residents and community institutions, and bolster the park's presence as the social and cultural nexus of the historically significant Homewood community.

SPORTS AND STARGELL FIELD

Youth sports in Homewood is a critical vessel for mentorship and teaching moments, intergenerational relationship building, and a rallying of the community. Moreover, active health, wellness, and play are of developmental and social importance for Homewood's youth, and these offerings at Stargell Field are paramount. As President of Homewood Community Sports, Mubarik Ismaeli is quoted as saying in *90.5 WESA* that Stargell Field is "the mecca for youth and families in Homewood. It's a place where we come in fellowship." In this way, Stargell Field is a storehouse of community capital and connects the present day community to generations of history and legacy. As the Westinghouse Hall of Fame represents, many young people in this community represent the best in the city, region, and nation and go on to make incredible contributions to the world around them.

In response to the significance of sports at Stargell Field, the Studio Zewde team is partnered with Jeffrey L. Bruce & Company (JBC), a landscape architecture firm nationally renowned for their specialized work in the highest quality athletic field design. Together, we will work towards bringing the fields to regulation size, increasing the quality of the field soil and drainage to optimize play, creating a safe playing surface, and designing the park to enhance the visibility and spectacle of community engagement around sports. JBC's experience in the design of over 300 high-performance sports fields and their ongoing research and performance evaluations will be invaluable in creating a field for Homewood that meets the requirements of Cal Ripken Sr Foundation specifications as well as the latest ASTM safety standards. Together with DIGSAU, leaders in sustainable architecture, we will also work to relocate and construct Homewood Community Pool and a bathhouse and locker rooms. Together, Studio Zewde, JBC, and Digsau will design the next evolution of Stargell Field towards ensuring that the traditions of sports and active play are not only part of Homewood's history, but in fact a fortified part of its future.

MUSIC, THE ARTS, AND THE PERFORMANCE OF CULTURE

In Homewood, cultural production is not merely for the sake of observance, but central to the advancement of community and society. With programs like the Afro American Music Institute, the annual Harambee Black Arts Festival, Jazz on the Steps, and a wide array of notable and

A SELECTION OF HOMEWOOD ACTIVITIES

emerging writers, musicians, and artisans all within the orbit of the project site, we believe the next evolution of the park has the potential to amplify these traditions. We recognize cultural production as a remarkable asset of the site, and we propose to design in honor of that very spirit.

The landscape design at Homewood Park, then, should speak to the celebratory spirit and strong tradition of music, the arts, events, church picnics, markets, and festivals in Homewood. This tradition of celebration can be functional in the design by crafting the space to perform commemoration and offer spaces in the park for performance groups, summer camps, public performance series, and beyond. The Studio Zewde team sees the opportunity to design a high use, flexible, civic landscape that supports a wide-range of events, while feeling intimate and comfortable everyday. As indicated in the Master Plan completed by HCS, a well-designed amphitheatre can also offer flexible seating, shade, orientation, and even acoustics that support a landscape that can host a large performance just as easily as comfortable as it can host a person sitting down for lunch.

HOMEWOOD PARK'S DAILY PALETTE OF LIVING

Homewood Park is in many ways already treasured as the community's front yard. In Studio Zewde's previous work in Black cultural landscapes, the "front yard" community space is an oft-loved motif. In his book *African-American Gardens and Yards*, Richard Westmacott writes that the front yard "is a landscape valued for functional purposes and is also a treasured landscape." In celebration of this tradition, and in view of the park's expansion, we see this project as an opportunity to enhance the spatial welcome mat between the beloved communal front yard of Stargell Field, community institutions, and the residents of Homewood.

Re-imaging the park's edges presents immense potential to achieve this spatial welcome mat and support the community's daily palette of living to Homewood Park. With the demolition of the school, the site's new orientation to Hamilton Avenue represents an opportunity to bolster the park's presence in the everyday life of Homewood, particularly towards the nearby civic anchors of Carnegie Library and the Afro-American Music Institute as well as the YMCA and CCAC beyond. Through connectivity, orientation, and visibility, the new frontage to the park along Hamilton Avenue can leverage the high visibility and foot traffic around the site and link the park directly to the business and institutional core of the neighborhood. Integrating the previous school site with the field site is an important aim of the project, as it is critical to communicating the expanded park as one, cohesive, cultural nexus. Re-grading the site offers a vital opportunity to re-imagine the park's relationship to its adjacent neighbors along Clawson Street and North Lang Avenue. The Studio Zewde team proposes to shape the landscape to support legible navigability and clear organizations of space towards achieving this aim. Moreover, the landscape itself can offer comfortable seating, shade, gardens, and playgrounds, and a Homewood History Hall of Fame to support the wide spectrum of everyday life in and around Homewood and the everyday interactions that hold a community together.

Project Methodologies

COMMUNITY ENGAGEMENT

Studio Zewde is unrivaled in our industry for our ability to synthesize community narratives with a well-designed and well-constructed landscape. By pairing creative community engagement with design rigor, Studio Zewde will bring the highest levels of project delivery to Homewood Park. In this way, Studio Zewde team does not approach community engagement as a distinct effort from design, but rather, integral to its success. We approach community engagement as a creative endeavor in and of itself and invest significant creativity in the design of engagement formats in our practice.

We are proud to say that no two community engagement event formats we have facilitated have been the same. For instance, for the Fairmount Park Conservancy in Philadelphia, Studio Zewde kicked off the Mander Rec Center Campus design process by holding an "I Love Mander" Block Party. Community members created collages to generate ideas for a new campus, against the backdrop of a cookout, music, and local emcees. In the Africatown-Central District neighborhood of Seattle, Studio Zewde orchestrated three "design ciphers" – an approach to a design charrette rooted in hip-hop culture local to the neighborhood. For the Living Room Project, Studio Zewde designed and installed an outdoor living room in a notorious back alley in Seattle in collaboration with urban planner Sloan Dawson and the City of Seattle Office of Arts & Culture. The composition and materiality of the temporary Living Room installation were crafted to engage the bifurcated populations of homeless and housed on the issue of housing. And, at Graffiti Pier in Philadelphia, where graffiti artists have risked arrest for four decades in the making of the site into a cultural icon, Studio Zewde has engaged artists in a series of discrete roundtable conversations such that their identities can remain anonymous in the process of engaging this critical constituency.

At Homewood Park, the Studio Zewde team believes that the engagement approach shall be as creative, unique, and singular as the spirit of the neighborhood itself. We propose to work with the client and Advisory Committee to craft an engagement plan that offers a wide range of entry points for the large transect of community members that are integral to its success. In our experience, installation art, visual and performance arts, and events programming often offer low barrier opportunities to include people of all ages and walks of life in the process. We look forward to designing a unique approach to engagement that honors the Stargell Field / Homewood Park legacy, while inviting people to imagine its future.

We understand that the true testament of an engagement process is ultimately in the resonance of the resulting design. Accordingly, our team relies on process drawings in the form of sketches and diagrams to process information on-the-fly, to receive reactions or confirmations about our interpretations with members of the public, and communicate clearly our flexibility in the planning process.

MANDER REC CENTER CAMPUS
STUDIO ZEWDE & DIGSAU

We believe this method of design engagement serves to make more transparent the otherwise "black-box" of design and is critical to building confidence with the people who hold a stake in this process. Studio Zewde believes design and engagement must work to challenge each other, such that the design process will not only inspire participation, but that the design product will be actively advocated for by the community and stakeholders.

In view of the public health challenges that shape the nature of social interaction today, Studio Zewde can and will develop an adaptable community engagement plan that can flexibly accommodate a range of future conditions while still achieving the stated project goals. Having already hosted a number of successful digital community engagement events, Studio Zewde has demonstrated expertise in working across digital platforms and media to meet people where they are and offer a creative venue for participating in the process of shaping the future of Homewood Park.

SUSTAINABILITY

The Studio Zewde team works creatively and collaboratively across disciplines to craft sustainable, resilient, and enduring landscapes. Together with Ethos Collaborative and Drummond Carpenter, we will work to sculpt the landscape towards the capture and retention of stormwater, while meeting ADA and civic programming requirements. Moreover, we will think carefully about the overall experience of water and its safe integration into the park and pedestrian settings, with the goal of ultimately improving people's appreciation of water in urbanized landscapes.

Ethos Collaborative actively engages in Pittsburgh's ongoing conversations around stormwater and urban water sustainability, from both a public education perspective, as well as how individual people and organizations understand and interact with these complex issues. Through their open end contract with Pittsburgh Water and Sewer Authority, Ethos has been involved in several of the largest park-focused green infrastructure projects in the region, including projects at Wightman Park in Squirrel Hill, Four Mile Run

SWARTHMORE COLLEGE RESIDENCE HALL SUSTAINBILITY DIAGRAM
DIGSAU

/ Panther Hollow Lake in Schenley Park, Lawn & Ophelia Parklet in Oakland, the St. Johns site in the north side of Pittsburgh, and the Southside Park Green Infrastructure project. In Homewood alone, they have designed rain gardens and swales for the Homewood-Brushton YWCA to mitigate localized flooding, developed stormwater bump-outs for the Oakwood-Batavia Green Infrastructure project to receive stormwater from the street and provide pollinator habitat, and co-led classes with Homewood Children's Village over the past several years, educating a volunteer group of neighborhood community stewards in regional water issues, green infrastructure benefits, and community engagement actions, as part of the HCV's successful Urban Leadership Institute (ULI) program.

With the goal of managing on-site stormwater at Homewood Park, Ethos and Drummond Carpenter will complete a hydrological analysis to help pinpoint a green infrastructure (GI) installation location and quantify the stormwater capture potential for this site. In so doing, they will utilize all assess soils and existing conditions on the site to evaluate the potential for working GI installations that sustainably manage stormwater. Studio Zewde, Ethos and Drummond Carpenter will work collaboratively on a Stormwater Conceptual Plan with further design calculations, plans, details, etc. for stormwater features, and green infrastructure details. Design elements will include an exploration of stormwater BMP elements and predicted performance. Plans will include design and construction detailing of the necessary closed drainage systems and BMP's to concurrently meet the minimum stormwater management requirements of the regulating agencies, plus any elective water management goals.

Further, the Studio Zewde team is prepared to work towards accomplishing the goals of energy efficiency and net zero readiness at the new facilities of Homewood Park. As experts in sustainable architectural design, DIGSAU will bring their wealth of knowledge and experience in net zero architecture and sustainable design practices to Homewood Park. A number of their past projects demonstrate innovative approaches to using recycled materials, renewable energy sources, high-performance building envelopes, and beyond. In the design of new structures including the bathhouse/locker room at Homewood, DIGSAU will work closely with J+M Engineers towards increasing energy

efficiency and reduce greenhouse gas emissions, in lockstep with the City of Pittsburgh Climate Action Plan 3.0.

PROJECT MANAGEMENT AND STAFF ROLES

In our mission to create enduring places where people belong, Studio Zewde partners with skilled consultants to deliver the highest quality built landscape. The Studio Zewde team is prepared to conduct a thoroughly iterative design process with corresponding design documentation at each stage of the project, in close coordination with the client, stakeholders, city agencies, and community members.

Delivering construction documents relies on superior project management and technical expertise. Our approach to management relies on establishing defined communication channels, clear expectations, and rigorous follow-through. Studio Zewde has a positive track record of preparing and maintaining detailed project schedules and adhering to deadlines. Our management style ensures the highest level of coordination and integration throughout the duration of a project – from community engagement, conceptual development, all the way through construction. By establishing a steady pattern of communication and meetings between disciplines, we are able to produce a well-functioning landscape design that is precisely documented.

In addition to the twice monthly Department of Public Works and design team meetings, we propose to hold a weekly project management call with the Project Manager to track project progress between the City of Pittsburgh and the design team. Given our experience managing large teams and collaborating with diverse stakeholders in high-profile projects like India Basin Shoreline Park, we understand the immense responsibility of bringing this project to fruition, on-time and on-budget. We anticipate close collaboration with the City of Pittsburgh to ensure seamless communication with the community and stakeholders. Our team is accustomed to working across the country and frequently collaborating using email and web conferencing, in addition to frequent in-person meetings in Pittsburgh.

Prior to all submissions, our office conducts a thorough quality control process on all internal and consultant drawings to ensure that our documentation meets current code and city standards, reflects the project design intent, and is technically correct and constructible. Additionally, we require an internal coordination set deadline from all disciplines at the mid-point of SD, DD, and CDs. With the 30% and 60% CD submissions, Alpine Alleghany will update the cost estimate and our team will participate in DPW's staff design review process. The beginning of the subsequent phase will start with resolving the design to meet budget and address staff comments.

In working with the City of Pittsburgh, as we do with all clients, Studio Zewde will work in an open and communicative manner, and be highly responsive to requests. From our previous experiences, we believe that clearly establishing expectations and communicating our understandings of parameters, constraints, and challenges serves the project well.

Sara Zewde will serve as Design Lead on the project. Sara has led complex design processes in projects across the Americas, with a design approach that works explicitly to illuminate the local culture of a place in its built landscapes. Her work demonstrates the potential for design to coalesce collective visioning into built work. Complementing Sara's design and engagement expertise, Ashley Ludwig will be project manager and the prime contact with the City of Pittsburgh for the duration of this project. Bringing a wealth of technical knowledge and project management experience, Ashley has focused her career on designing large urban parks and working with municipalities.. Wyking Garrett brings twenty years of experience in community engagement strategy working to catalyze, mobilize, and activate communities for positive social impact. Together, these three key staff members will usher the major tasks of design, documentation, and engagement. See the fee chart on Page 63 for sub-consultants' time commitment by phase.

REVIEW AND PERMITTING

In addition to a steady rhythm of reviews with the Department of Public Works and several presentations to the Art Commission and the City Planning Commission, the Studio Zewde team anticipates additional agency reviews, including but not limited to, the Department of Mobility and Infrastructure, Department of City Planning and Permits, Licensing and Inspection, and the Pittsburgh Water and Sewer Authority. Our team expects to meet with city agencies and prepare an application for the Vacation of the Street Right of Way of the small section of Susquehanna Street that currently extends into the project site. Ethos will lead the preparation of narratives, calculations, and supporting documents necessary to submit the general NPDES permit, as well as water and sewer use application. Digsau, WCBM, and J+M Engineering will prepare documents for the various permits necessary to obtain a building permit for the new facilities at Homewood Park.

Project Plan

Our team welcomes the opportunity to work with the Project Manager to refine the project schedule and clarify any assumptions made by the Studio Zewde team in the preparation of this proposal. If any of our assumptions are unclear, incomplete, or incorrect, we welcome the opportunity to discuss them with you in greater detail.

TASK 1 PRE-DESIGN

The Studio Zewde team proposes to initiate the project with a series of kick-off meetings with DPW and the Advisory Committee, to work early towards the development of a detailed project management plan, community engagement plan, and to establish and communicate the project schedule for design, permitting, and public process. We will commence to conduct existing site analyses, inclusive of an Archeology Phase 1A and 1B, geotechnical report, Phase 1 Environmental Assessment, topography and boundary survey, assessment of structural and stormwater systems, and pedestrian park access study. While synthesizing inputs from these technical studies, we will work with the City and the Advisory Committee to plan and execute Engagement Event #1 and craft a format that will generate key, emergent themes from community members and stakeholders. Conducting this comprehensive, multi-disciplinary site analysis in a simultaneous fashion at the on-set of the project will clue the project team, client and stakeholders into the site's opportunities and constraints for the duration of the subsequent work.

Deliverables: Engagement Event #1, Archeology Phase 1A & 1B, Geotechnical Report, Phase 1 Environmental Assesment, Topography and Boundary Survey, and Pedestrian Park Access Study

Duration: 9 weeks

TASK 2 SCHEMATIC DESIGN

The Studio Zewde team will synthesize input from Engagement Event #1 and site analyses conducted in Pre-Design towards developing concept plan alternatives to be presented at Engagement Event #2. From the feedback generated on those alternatives, we will develop one consolidated schematic design to present to the community at Engagement Event #3 as well as the Art Commission Conceptual Review and Planning Commission Review. The team will develop the project narrative and 30% Construction Documents to be submitted for costing and DPW staff review.

Deliverables: Engagement Events #2 and #3, 30% CD Documentation, 30% Cost Estimate

Duration: 16 weeks

TASK 3 DESIGN DEVELOPMENT

Based on the approved schematic design, the Studio Zewde team will develop and adjust the park design, given DPW staff review, Advisory Committee input, and feedback generated in Engagement Event #3. Our team will work to further develop the park design to meet the design intent and project budget and respond to staff design review. The team will develop the 60% Construction Documents to be submitted for costing and staff review.

Deliverables: 60% CD Documentation, 60% Cost Estimate

Duration: 18 weeks

TASK 4 CONSTRUCTION DOCUMENTATION

Based on the approved design development documentation, the Studio Zewde team will further develop the park design to meet the design intent and project budget and respond to staff design review. During Task 4, the team will complete two cycles of drawings for DPW review and costing at 90% and 100% Construction Documents. The 90% Construction Documents will be reviewed by WJE as a Third-Party Document Reviewer. Based on feedback, the team will then develop the complete Bid Documents including construction drawings and technical specifications for the City to bid the project. Prior to finalizing construction documents, the team will present to the Art Commission for Final Review and the Planning Commission. The team will work with DPW to create

THE DISCOVERY CENTER
DIGSAU

an Operating and Maintenance Plan with task matrix, schedule, and cost estimates for the project. The team will sumbit applications for all necessary permits prior to the conclusion of Task 4.

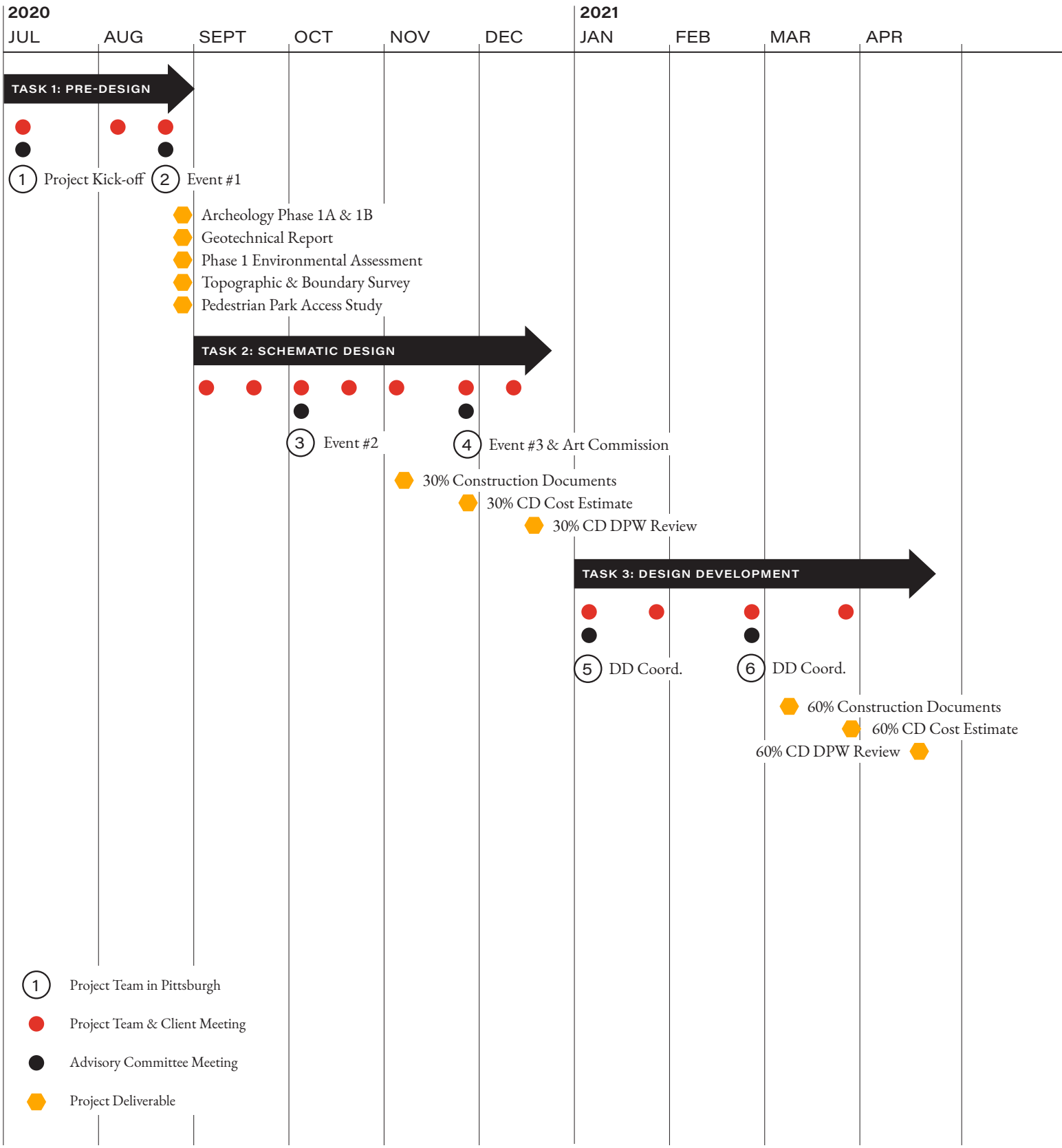
Deliverables: 90% CD Documentation, 90% Cost Estimate, 100% CD Documentation, 100% Cost Estimate, Bid Documents, Operating and Maintenance Plan

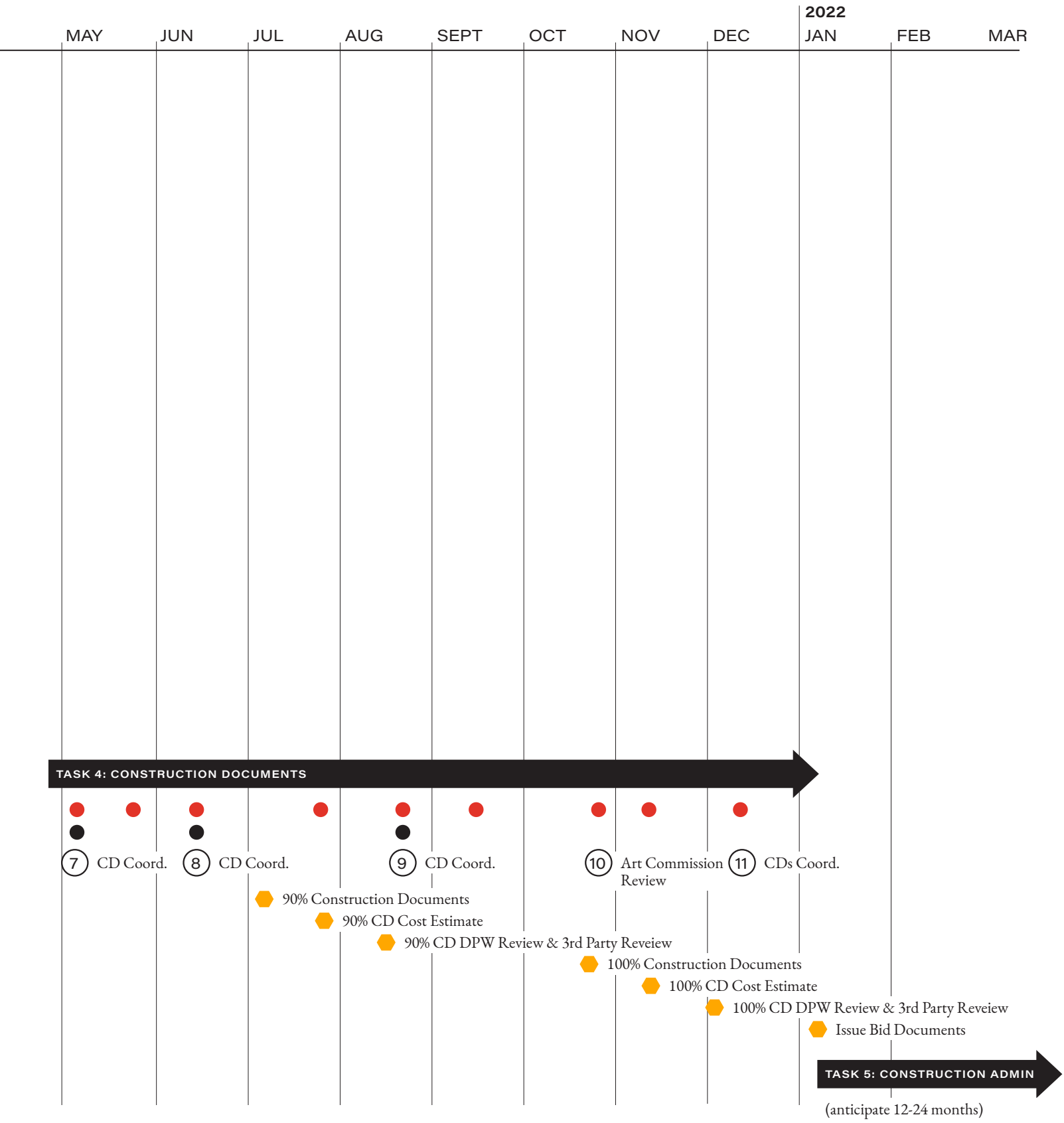
Duration: 37 weeks

TASK 5 CONSTRUCTION ADMINISTRATION

The Studio Zewde team will participate in the bidding process by reviewing bids with the City and providing comments and interviewing potential contractors as requested. The Studio Zewde team will attend and record construction meetings, perform on-site construction overview, review submittals and requests for information, and conduct punch list and final inspection. Studio Zewde will be active in submittal review and requests for information and complete regular construction oversight to maintain design intent and quality, while Ethos will be able to field on-site requests.

Deliverables: Field Observation Reports, Punch List and Substantial Completion Reviews


2020
JUL
AUG
SEPT
OCT
NOV
DEC
2021
JAN
FEB
MAR
APR
TASK 1: PRE-DESIGN
1 Project Kick-off
2 Event #1
Archeology Phase 1A & 1B
Geotechnical Report
Phase 1 Environmental Assessment
Topographic & Boundary Survey
Pedestrian Park Access Study
TASK 2: SCHEMATIC DESIGN
3 Event #2
4 Event #3 & Art Commission
30% Construction Documents
30% CD Cost Estimate
30% CD DPW Review
TASK 3: DESIGN DEVELOPMENT
5 DD Coord.
6 DD Coord.
60% Construction Documents
60% CD Cost Estimate
60% CD DPW Review
1 Project Team in Pittsburgh
Project Team & Client Meeting
Advisory Committee Meeting
Project Deliverable


2022
MAY
JUN
JUL
AUG
SEPT
OCT
NOV
DEC
JAN
FEB
MAR
TASK 4: CONSTRUCTION DOCUMENTS
7 CD Coord.
8 CD Coord.
9 CD Coord.
10 Art Commission Review
11 CDs Coord.
90% Construction Documents
90% CD Cost Estimate
90% CD DPW Review & 3rd Party Reveiew
100% Construction Documents
100% CD Cost Estimate
100% CD DPW Review & 3rd Party Reveiew
Issue Bid Documents
TASK 5: CONSTRUCTION ADMIN
(anticipate 12-24 months)

4
COST PROPOSAL

DOMINO PARK
ASHLEY LUDWIG AT JCFO

Cost Proposal

The entire collaborative team lead by Studio Zewde is committed to delivering an integrated plan in alignment with the community's vision for this important site, while working with the Client group to establish and maintain project budgets. Homewood Park and its surrounding communities are deserving of a design process that brings agency and investment to the community.

FEE

Studio Zewde has worked to develop a design budget in line with the requests of the RFP. If selected to proceed with the project, we will work with the Client to confirm or adjust our scope and schedule as needed. The Studio Zewde team fees for services outlined in the RFP are $1,899,296.

REIMBURSABLE EXPENSES

Reimbursable expenses shall be in addition to the overall project fee, invoiced at cost, to include drilling, supplies, photography, shipping, and travel-related expenses such as airfare, hotel, meals, and ground transportation assuming GSA rates for Pittsburgh. A not to exceed estimate of reimbursable expenses is projected to be $54,855.

EXCLUSIONS

The following services are not proposed as part of this scope of services: water feature design, traffic engineering, production of physical models, as-built drawings, costs to acquire permits, and costs to rent space, provide catering and print materials for and publicize community engagement meetings.

ADDITIONAL SERVICES

The scope of services accounts for a structural report of the existing pedestrian bridge and existing site retaining walls as well as the design and detailing of reinforcing the existing pedestrian bridge, if the report determines that only minor repairs are needed. In the worst case scenario inwhich it is determined that the bridge must be replaced, the Studio Zewde team anticipates design fees for a new bridge range between $201,000 - $438,000. These costs would be considered an additional service and evaluated once the structural report is complete. Additional services can be provided on an as-needed basis for work beyond the basic scope of services at the Studio Zewde team's houly rates provided in the fee chart on the following page.

	TASK 1: PRE	TASK 2: SD	TASK 3: DD	TASK 4: CD	TASK 5: CA	TOTAL
DESIGN FEES	$81,790	$367,850	$467,760	$765,300	$216,596	**$1,899,296**
REIMBURSABLE EXPENSES	$15,135	$8,970	$4,960	$11,060	$14,730	**$54,855**

STAFFING	RATE	TASK 1: PRE	TASK 2: SD	TASK 3: DD	TASK 4: CD	TASK 5: CA	TOTAL
STUDIO ZEWDE		**$22,440**	**$197,040**	**$205,200**	**$428,460**	**$76,120**	**$929,260**
SARA ZEWDE	$180	34	144	36	74	24	
ASHLEY LUDWIG	$180	26	64	144	333	94	
K. WYKING GARRETT	$150	20	40	-	-	-	
ASSOCIATE	$140	36	640	720	1480	392	
DESIGNER	$100	48	640	720	1480	60	
DIGSAU		**$10,670**	**$75,290**	**$78,400**	**$103,120**	**$65,330**	**$332,810**
JEFF GOLDSTEIN	$240	16	64	48	48	48	
TOM BAKER	$240	2	12	12	20	9	
ELIZABETH KAHLEY	$175	26	102	92	112	116	
FOOD & SPEC SPECIALISTS	$175	-	20	36	48	10	
VIVIAN SHAO CHEN	$125	8	204	256	336	160	
JAMIE FERELLO	$100	8	102	96	168	96	
ETHOS COLLABORATIVE		**$900**	**$27,580**	**$63,020**	**$72,790**	**$12,400**	**$176,690**
PROJECT ENGINEER	$100	6	160	420	375	70	
SR. PROFESSIONAL ENGINEER	$150	2	42	43	103	36	
GRADUATE ENGINEER / CAD	$80	-	66	184	248	-	
DRUMMOND CARPENTER		**$1,420**	**$26,520**	**$44,200**	**$22,200**	**$2,360**	**$96,700**
PRINCIPAL	$175	4	24	40	24	8	
PROFESSIONAL ENGINEER	$120	6	96	160	60	8	
STAFF ENGINEER	$90	-	120	200	120	-	
WBCM		**$10,000**	**$8,000**	**$14,500**	**$20,000**	**$15,000**	**$67,500**
MICHAEL D. WUERTHELE	$200	4	2	4	6	-	
SHAWN GRAHAM	$160	24	12	18	23	15	
STRUCTURAL ENGINEER	$120	38	24	46	66	50	
EIT	$100	8	28	53	72	66	
J+M ENGINEERING		**-**	**$3,400**	**$6,500**	**$6,500**	**$2,600**	**$19,000**
RICHARD HWANG	$200	-	12	20	20	8	
BETH HUXTA	$125	-	8	20	20	8	
NAVARRO & WRIGHT		**$36,360**	**-**	**-**	**-**	**$1,066**	**$37,426**
SCOTT SUMMERS	$165	3	-	-	-	-	
GINGER RANDALL	$125	20	-	-	-	2	
TIM CARN	$74	64	-	-	-	-	
ROBERT EISWERT	$105	20	-	-	-	2	
KRISTEN JANOWSKI	$100	16	-	-	-	-	
JOHN STITELER	$157	24	-	-	-	-	
LAND SURVEYOR	$135	24	-	-	-	2	
TECH II	$90	64	-	-	-	-	
QAQC GEOTECHNICAL	$168	1	-	-	-	2	
PM/ SR. GEOTECH ENGINEER	$131	3	-	-	-	-	
JR. ENGINEER / GEOLOGIST	$83	32	-	-	-	-	
CADD	$47	2	-	-	-	-	
TILLOTSON DESIGN ASSOCIATES		**-**	**$18,000**	**$22,500**	**$26,500**	**$16,500**	**$83,500**
PARTNER	$235	-	11	14	17	11	
SENIOR ASSOCIATE	$185	-	24	30	36	22	
SENIOR DESIGNER	$155	-	35	44	51	32	
DESGINER	$120	-	45	56	66	41	
ALPINE ALLEGHENY		**-**	**$7,800**	**$6,500**	**$13,000**	**-**	**$27,300**
SEVERINO DEPASQUALE	$130	-	60	50	100	-	
JBC		**-**	**$4,220**	**$26,940**	**$45,180**	**$25,220**	**$101,560**
PRINCIPAL	$160	-	8	64	104	56	
PROJECT MANAGER	$85	-	20	104	168	96	
DESIGNER	$70	-	16	96	160	72	
ADMINISTRATIVE	$60	-	2	4	6	6	
AGRONOMIST	$225	-	-	4	12	12	
WJE		**$0**	**$0**	**$0**	**$27,550**	**$0**	**$27,550**
TOTAL		**$81,790**	**$367,850**	**$467,760**	**$765,300**	**$216,596**	**$1,899,296**

5
DEMONSTRATION OF GOOD FAITH EFFORT

This form must be completed and submitted with your bid or proposal

List below all M/WBE and VOSBs that were solicited whether or not commitment was obtained.

Name of Prime or Bidder: Studio Zewde LLC **Contact Person:** Sara Zewde

Address: 163 Lenox Ave, New York, NY 10026 **Email:** saraz@studio-zewde.com

Phone Number: 212-518-1458 **Is Your Firm M/WBE/VOSB Certified?** (•) Yes ( ) No

Certification Type: (•) MBE (•) WBE ( ) VOSB **Certifying Entity:** NYC - certification pending

M/WBE/VOSB Sub Vendor Firm Name:			**Contact Person:**
Tillotson Design Associates			Lindsay Serrano
Address:	**Phone Number:**	**Email:**	
40 Worth Street, NY, NY 10013	212-675-7760	lindsay@tillotsondesign.com	
Certification Type: ( ) MBE (•) WBE ( ) VOSB **Certifying Entity:** PA - DGS		**Types of Subcontract Work or Materials:** Lighting Design	
Date Solicited:	**Solicitation Method:**	**Quote Received:**	**Commitment Made:**	**Amount Committed:**
3/4/20	( ) Phone (•) Email	(•) Yes ( ) No	(•) Yes – Date: 3/20/20 ( ) No	**$ Amount:** $83,500 **% Of Total Bid:** 5%
Give Reason(s) If No Commitment Made:				

M/WBE/VOSB Sub Vendor Firm Name:			**Contact Person:**
Navarro & Wright			Ginger Randall
Address:	**Phone Number:**	**Email:**	
1000 Cliff Mine Rd, Pittsburgh, PA 1527	412-788-6789	grandall@navarrowright.com	
Certification Type: (•) MBE ( ) WBE ( ) VOSB **Certifying Entity:** PA UCP		**Types of Subcontract Work or Materials:** Survey, Geotechnical Engineering, Environmental Assess	
Date Solicited:	**Solicitation Method:**	**Quote Received:**	**Commitment Made:**	**Amount Committed:**
3/4/20	( ) Phone (•) Email	(•) Yes ( ) No	(•) Yes - Date: 3/17/20 ( ) No	**$ Amount:** $38,186 **% Of Total Bid:** 2%
Give Reason(s) If No Commitment Made:				

Signature: **Date:** 4/7/20

Copy this form as necessary.

This form must be completed and submitted with your bid or proposal

List below all M/WBE and VOSBs that were solicited whether or not commitment was obtained.

Name of Prime or Bidder: Studio Zewde LLC **Contact Person:** Sara Zewde

Address: 163 Lenox Ave, NY, NY 10026 **Email:** saraz@studio-zewde.com

Phone Number: 212-518-1458 **Is Your Firm M/WBE/VOSB Certified?** (•) Yes ( ) No

Certification Type: (•) MBE (•) WBE ( ) VOSB **Certifying Entity:** NYC - certification pending

M/WBE/VOSB Sub Vendor Firm Name: Drummond Carpenter, PLLC			**Contact Person:** Donald Carpenter	
Address: 47 E. Robinson St, Suite 210, Orlando F	**Phone Number:** 248-763-4099	**Email:** dcarpenter@drummondcarpenter.com		
Certification Type: ( ) MBE ( ) WBE (•) VOSB **Certifying Entity:** State of Florida;		**Types of Subcontract Work or Materials:** Stormwater Design		
Date Solicited: 3/12/20	**Solicitation Method:** (•) Phone (•) Email	**Quote Received:** (•) Yes ( ) No	**Commitment Made:** (•) Yes – Date: 3/12/20 ( ) No	**Amount Committed:** $ Amount: $96,700 % Of Total Bid: 5%
Give Reason(s) If No Commitment Made:				

M/WBE/VOSB Sub Vendor Firm Name: J+M Engineering			**Contact Person:** Richard Hwang	
Address: 11 W Thompson St. Phila, PA 19125	**Phone Number:** 215-454-2662	**Email:** richard@jandmengineers.com		
Certification Type: (•) MBE ( ) WBE ( ) VOSB **Certifying Entity:** PA		**Types of Subcontract Work or Materials:** MEP		
Date Solicited: 3/13/20	**Solicitation Method:** ( ) Phone (•) Email	**Quote Received:** (•) Yes ( ) No	**Commitment Made:** (•) Yes - Date: 3/13/20 ( ) No	**Amount Committed:** $ Amount: $19,000 % Of Total Bid: 1%
Give Reason(s) If No Commitment Made:				

Signature:  **Date:** 4/7/20

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This form must be completed and submitted with your bid or proposal

List below all M/WBE and VOSBs that were solicited whether or not commitment was obtained.

Name of Prime or Bidder: Studio Zewde LLC **Contact Person:** Sara Zewde

Address: 163 Lenox Ave, New York, NY 10026 **Email:** saraz@studio-zewde.com

Phone Number: 212-518-1458 **Is Your Firm M/WBE/VOSB Certified?** (•) Yes ( ) No

Certification Type: (•) MBE (•) WBE ( ) VOSB **Certifying Entity:** NYC - certification pending

M/WBE/VOSB Sub Vendor Firm Name:			**Contact Person:**
Address:	**Phone Number:**	**Email:**	
Certification Type: ( ) MBE (•) WBE ( ) VOSB **Certifying Entity:**		**Types of Subcontract Work or Materials:**	
Date Solicited:	**Solicitation Method:** ( ) Phone (•) Email	**Quote Received:** (•) Yes ( ) No	**Commitment Made:** (•) Yes – Date: ( ) No	**Amount Committed:** **$ Amount:** **% Of Total Bid:**
Give Reason(s) If No Commitment Made:			

M/WBE/VOSB Sub Vendor Firm Name: Alpine Allegheny			**Contact Person:** Severino DePasquale
Address: 147 Oakhurst Rd, Pittsburgh, PA 15215	**Phone Number:** 412-782-4759	**Email:** severino@alpineallegheny.com	
Certification Type: (•) MBE ( ) WBE ( ) VOSB **Certifying Entity:** PA		**Types of Subcontract Work or Materials:** Cost Estimation	
Date Solicited: 3/4/20	**Solicitation Method:** ( ) Phone (•) Email	**Quote Received:** (•) Yes ( ) No	**Commitment Made:** (•) Yes - Date: 3/4/20 ( ) No	**Amount Committed:** **$ Amount:** $27,300 **% Of Total Bid:** 1%
Give Reason(s) If No Commitment Made:			

Signature:  **Date:** 4/7/20

Copy this form as necessary.