




2020 | MMSD

**Green Infrastructure
Green Vendor List
Qualifications**



414 / 259 1500  www.graef-usa.com

 275 West Wisconsin Avenue, Suite 300
Milwaukee, WI 53203



ProHealth Care Regional Cancer Center Green Roof

Executive Summary

Resilient infrastructure is a priority at GRAEF. Our team is passionate about green infrastructure to manage water quality and quantity – from education facilities, commercial town centers, to health campuses. Our team can help you with determine the best green infrastructure features for your project.

WE NEED BOTH GRAY & GREEN

While traditional gray stormwater infrastructure is designed to move stormwater from hard surfaces, green infrastructure can manage stormwater volumes and treat the water at its source, with additional community benefits. Green infrastructure manages water where it falls by slowing it down, retaining it, filtering it, and allowing it to infiltrate into the ground instead of entering the sewer system – mimicking nature and with many community benefits.

GRAEF CAN BE YOUR GUIDE TO GREEN INFRASTRUCTURE

Our team can help you organize your project from start to finish. We build capacity with your partners, plan green infrastructure on your site, determine what types are most applicable for your project or stormwater needs, pursue funding as possible, and guide your implementation, maintenance, and monitoring. Our experienced team of planners, engineers, and landscape architects will help you get your project in the ground.

TRIPLE BOTTOM LINE OF SUSTAINABILITY CONSIDERATIONS

The GRAEF team integrates the triple bottom line of sustainability (ecological, social, and economic factors) into all projects, and the associated co-benefits. This includes stormwater requirements in terms of water quality and quantity improvement, but also recreation and education opportunities, habitat improvements, and the overall cost of the infrastructure, from start to the ongoing maintenance. Green infrastructure is unique infrastructure in that it can increase community connectedness and be directly integrated into urban design (e.g. bioswales and porous pavement), but also into nature (e.g. wetlands and greenways).

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FIRM INTRODUCTION

GRAEF is a multi-discipline, planning, design, and engineering firm dedicated to serving public and private clients throughout the United States. GRAEF began as an individual partnership structural engineering firm in 1961 and our ability to excel has been driven by integrity, quality, and our commitment to customer service. Today, GRAEF offers our clients a full range of consulting services nationwide.

OUR CORE PURPOSE

To improve the physical environment for the benefit of society in a sustainable manner.

EMPLOYEES

270+

YEARS IN BUSINESS

59 (founded in 1961)

OFFICES

Chicago, IL; Green Bay, WI; Madison, WI; Miami, FL; Milwaukee, WI (HQ); Minneapolis, MN; Orlando, FL

SERVICES

Commissioning, Electrical Engineering, Environmental Engineering, Landscape Architecture, Mechanical Engineering, Parking Consulting, Planning + Urban Design, Plumbing and Fire Protection Engineering, Site/Civil Engineering, Structural Engineering, Surveying and Field Services, Sustainable Design, Traffic/Transportation Engineering

SCALE OF WORK

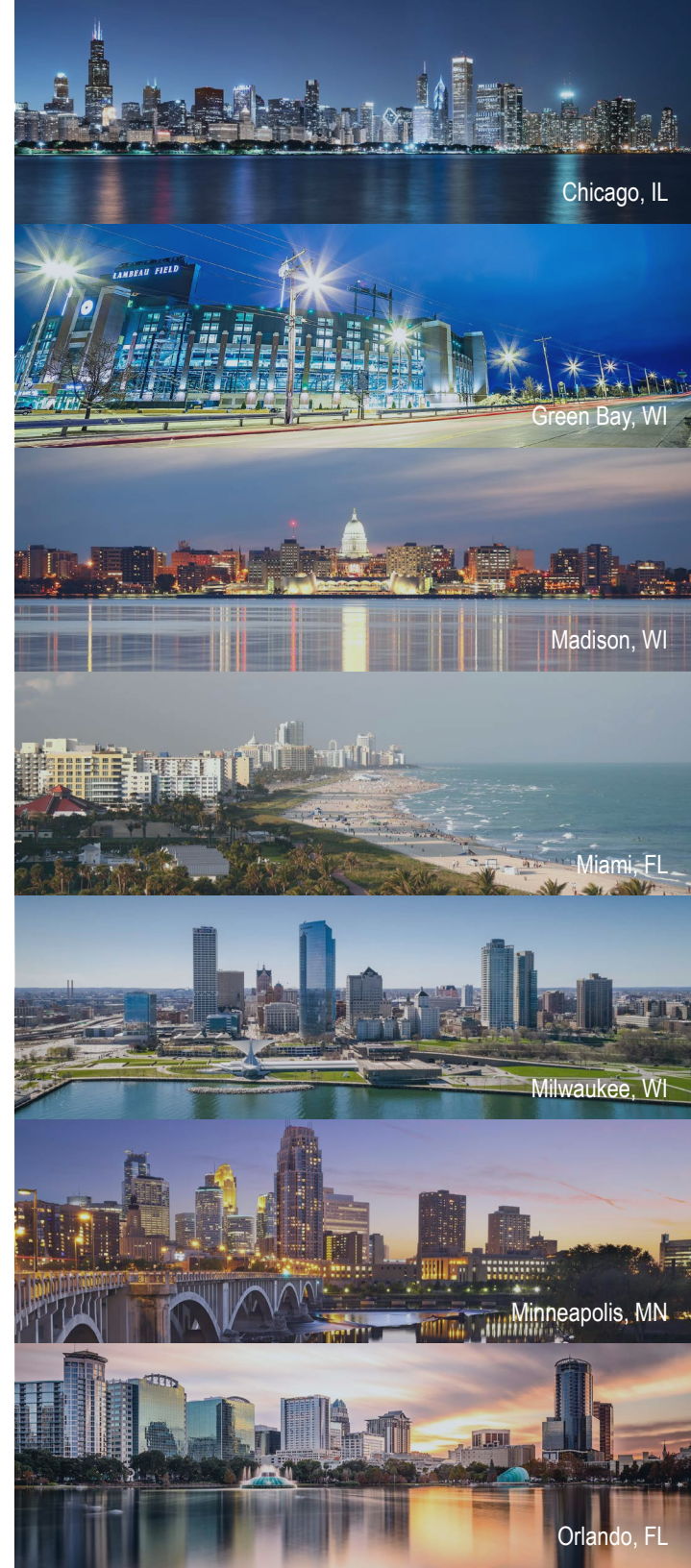
Commercial/Industrial; Multifamily

SPECIALTIES

Design; Engineering

GREEN INFRASTRUCTURE TYPES

Bioswales; Cisterns; Constructed Wetlands; Green Roofs; Native Landscaping; Porous Pavement; Rain Barrels; Rain Gardens; Soil Amendments; Stormwater Trees; Other: Greenways - Planning, Design, and Engineering, Grant Funding



Chicago, IL

Green Bay, WI

Madison, WI

Miami, FL

Milwaukee, WI

Minneapolis, MN

Orlando, FL

Green Infrastructure Experience

Project Name * Featured Project on Qualifications Worksheets

	Type of Green Infrastructure Installed									
	Green Roofs	Constructed Wetlands	Native Landscaping	Porous Pavement	Rain Barrels	Cisterns	Stormwater Trees	Bioswales	Rain Gardens	Soil Amendments OTHER: Grant Funding
Drexel Town Square*		x	x	x			x	x		x x
Milwaukee School of Engineering Diercks Computational Science Hall*						x	x			x x
Wauwatosa West High School Parking Lot Improvements*			x	x				x		x x
I-794 Lakefront Gateway Interchange*			x	x			x	x		x
ProHealth Care Regional Cancer Center	x		x					x		x
UW - Milwaukee Hillel Student Center	x		x						x	x
UW - Madison Union South	x		x							x
UW - Milwaukee Innovation Campus Infrastructure			x					x		x
Johnson Controls' Reflecting Pool						x				
Kerry Center of Excellence			x							



PROJECT INFORMATION:

Project Name: Drexel Town Square

Address/City/State/Zip: Drexel Ave and Howell Ave, Oak Creek, WI 53154

Type of green infrastructure installed (check all that apply):

- | | | |
|--|--|--|
| <input type="checkbox"/> Green Roofs | <input type="checkbox"/> Rain Barrels | <input type="checkbox"/> Rain Gardens |
| <input checked="" type="checkbox"/> Constructed Wetlands | <input type="checkbox"/> Cisterns | <input checked="" type="checkbox"/> Soil Amendments |
| <input checked="" type="checkbox"/> Native Landscaping | <input checked="" type="checkbox"/> Stormwater Trees | <input checked="" type="checkbox"/> Other; Grant Funding |
| <input checked="" type="checkbox"/> Porous Pavement | <input checked="" type="checkbox"/> Bioswales | |

Area of specialty for this project (check all that apply):

- | | | |
|---|--------------------------------------|---|
| <input checked="" type="checkbox"/> Design | <input type="checkbox"/> Landscaping | <input type="checkbox"/> Downspouts and Gutters |
| <input checked="" type="checkbox"/> Engineering | <input type="checkbox"/> Maintenance | <input type="checkbox"/> Inspection |
| <input type="checkbox"/> Construction | <input type="checkbox"/> Plumbing | |

PROJECT (PROPERTY) OWNER INFORMATION:

Owner's Name: City of Oak Creek, Andrew Vickers

Address/City/State/Zip: 8640 S. Howell Avenue, Oak Creek, WI 53154

Phone: 414 / 768 6528

Email: avickers@oakcreekwi.org

PROJECT CONSTRUCTION INFORMATION:

Construction Management Vendor: The Towne Group

Project Manager Name: Fred Hampe

Project Manager's Vendor history: ☒ currently employed ☐ no longer employed ☐ other

Email: fred.hampe@zilber.com

Contract information (if applicable): NA

Final Contract Amount (contracted and amended if applicable): \$1.3M

Construction Start date (contracted): 2012

Construction Start date (actual): 2012

Construction End date (contracted): 2016

Construction End date (actual): 2016

Was the project completed on time? ☒ Yes ☐ No; Explanation

Was the project completed on budget? ☒ Yes ☐ No; Explanation

Was the project completed to the owner's satisfaction? ☒ Yes ☐ No; Explanation

Project Description (Be sure to include cost information, photos, and a detailed description of the work performed by the Vendor applicant):

Drexel Town Square is a new mixed-use town center on the 85-acre site of the former Delphi automotive parts factory in Oak Creek. Oak Creek is an auto-dependent suburb of Milwaukee that currently lacks a 'downtown' area. Drexel Town Square will house civic, retail, office, open space, and residential uses.

Infrastructure Design | GRAEF is providing storm water management, utility design, grading, and site layout. Other services include development of site demolition, layout, grading, and utility plans for the public infrastructure, a wetland park, a town square, and streetscape design.

Brownfields Grant Assistance | GRAEF prepared and helped win approval for the largest grant awarded as part of Wisconsin's Blight Elimination and Brownfield Redevelopment (BEBR) program. This \$1.1 million award is being used to clean up the site and prepare it for new development.

Public Participation | GRAEF directed the initial public participation and concept design for the Town Square. The participation process included multiple public meetings and workshops intended to gather input regarding the ideal density and mix of uses on the site.

Sustainable Development Guide | With grant assistance from the MMSD, GRAEF prepared a Sustainable Development Guide to examine potential interventions on the site. The guide includes information on best practices, design considerations, costs, and the interrelationships of various techniques. The guide also outlines whether certain techniques are recommended at Drexel Town Square and shows how and where the techniques could be used, prompting discussion of cutting-edge sustainable features.

GRAEF Services: Site/Civil Engineering; Stream Relocation; Environmental Impact Assessment; Stormwater Management; Landscape Architecture

Awards: Sustainable Development Guide: 2013 APA-WI Award for Innovations in Planning; 2015 Eureka Award – The Business Journal

Drexel Town Square



PROJECT INFORMATION:

Project Name: Milwaukee School of Engineering Diercks Computational Science Hall

Address/City/State/Zip: 1025 N Milwaukee St, Milwaukee, WI 53202

Type of green infrastructure installed (check all that apply):

- | | | |
|---|--|--|
| <input type="checkbox"/> Green Roofs | <input type="checkbox"/> Rain Barrels | <input type="checkbox"/> Rain Gardens |
| <input type="checkbox"/> Constructed Wetlands | <input checked="" type="checkbox"/> Cisterns | <input checked="" type="checkbox"/> Soil Amendments |
| <input type="checkbox"/> Native Landscaping | <input checked="" type="checkbox"/> Stormwater Trees | <input checked="" type="checkbox"/> Other; Grant Funding |
| <input type="checkbox"/> Porous Pavement | <input type="checkbox"/> Bioswales | |

Area of specialty for this project (check all that apply):

- | | | |
|---|--------------------------------------|---|
| <input checked="" type="checkbox"/> Design | <input type="checkbox"/> Landscaping | <input type="checkbox"/> Downspouts and Gutters |
| <input checked="" type="checkbox"/> Engineering | <input type="checkbox"/> Maintenance | <input type="checkbox"/> Inspection |
| <input type="checkbox"/> Construction | <input type="checkbox"/> Plumbing | |

PROJECT (PROPERTY) OWNER INFORMATION:

Owner's Name: Milwaukee School of Engineering, Thomas Barsokine

Address/City/State/Zip: 1025 North Broadway, Milwaukee WI 53202

Phone: 414 / 277 7165

Email: barsokine@msoe.edu

PROJECT CONSTRUCTION INFORMATION:

Construction Management Vendor: Mortenson

Project Manager Name: Rob Myers

Project Manager's Vendor history: ☒ currently employed ☐ no longer employed ☐ other

Email: rob.myers@mortenson.com

Contract information (if applicable): NA

Final Contract Amount (contracted and amended if applicable): NA

Construction Start date (contracted): 2018

Construction Start date (actual): 2018

Construction End date (contracted): 2019

Construction End date (actual): 2019

Was the project completed on time? ☒ Yes ☐ No; Explanation

Was the project completed on budget? ☒ Yes ☐ No; Explanation

Was the project completed to the owner's satisfaction? ☒ Yes ☐ No; Explanation

Project Description (Be sure to include cost information, photos, and a detailed description of the work performed by the Vendor applicant):

Dwight and Dian Diercks Computational Science Hall is the new home to Milwaukee School of Engineering (MSOE)'s Computer Science students. The 81,000-square-foot, four-story building features a 256-seat auditorium, six contemporary classrooms, eight innovative teaching laboratories, 32 faculty and staff offices and 18,000 square feet of underground parking.

Diercks Hall is also home to a NVIDIA supercomputer, named "Rosie." Housed in a state-of-the-art data center, the supercomputer is a high-performance processor that is fueling advancements in AI, which impacts multiple areas of business, including graphics, robotics, data centers and self-driving cars.

The new science hall positions MSOE at the forefront of artificial intelligence education. The next-generation technologies in the building will have an impact on all areas of MSOE's curriculum, including the way engineers design and optimize, the way construction projects are planned and managed, the way actuaries calculate risk, and the way nurses care for patients.

The project was recognized by MMSD as a Green Luminary for its successful installment of an underground cistern and irrigation system. The underground cistern helps manage storm water and divert it from the sewerage system. Water is pumped out of the cistern and used to irrigate the green space surrounding the building. The heat generated by the supercomputer within the building will be reused for a snow-melt system for nearby sidewalks and parking lots, which reduces the need for shoveling and salt usage. These sustainability efforts were funded by a \$75,000 grant.

GRAEF Services: Civil Engineering; Landscape Architecture; Structural Engineering

Project Data: 81,000 SF; \$35 Million



PROJECT INFORMATION:

Project Name: Wauwatosa West High School Parking Lot Improvements
Address/City/State/Zip: 11400 West Center Street, Wauwatosa, WI 53222
Type of green infrastructure installed (check all that apply):

- | | | |
|--|---|--|
| <input type="checkbox"/> Green Roofs | <input type="checkbox"/> Rain Barrels | <input type="checkbox"/> Rain Gardens |
| <input type="checkbox"/> Constructed Wetlands | <input type="checkbox"/> Cisterns | <input checked="" type="checkbox"/> Soil Amendments |
| <input checked="" type="checkbox"/> Native Landscaping | <input type="checkbox"/> Stormwater Trees | <input checked="" type="checkbox"/> Other; Grant Funding |
| <input checked="" type="checkbox"/> Porous Pavement | <input checked="" type="checkbox"/> Bioswales | |

Area of specialty for this project (check all that apply):

- | | | |
|---|--------------------------------------|---|
| <input checked="" type="checkbox"/> Design | <input type="checkbox"/> Landscaping | <input type="checkbox"/> Downspouts and Gutters |
| <input checked="" type="checkbox"/> Engineering | <input type="checkbox"/> Maintenance | <input type="checkbox"/> Inspection |
| <input type="checkbox"/> Construction | <input type="checkbox"/> Plumbing | |

PROJECT (PROPERTY) OWNER INFORMATION:

Owner's Name: Wauwatosa School District, Melissa Nettersheim
Address/City/State/Zip: 1752 Wauwatosa Avenue, Wauwatosa, WI 53213
Phone: 414 / 773 1052
Email: nettesme@wauwatosa.k12.wi.us

PROJECT CONSTRUCTION INFORMATION:

Construction Management Vendor: Wauwatosa School District Buildings & Grounds Dept.
Project Manager Name: Melissa Nettersheim
Project Manager's Vendor history: ☒ currently employed ☐ no longer employed ☐ other
Email: nettesme@wauwatosa.k12.wi.us
Contract information (if applicable): NA
Final Contract Amount (contracted and amended if applicable): NA

Construction Start date (contracted): June 2017

Construction Start date (actual): June 2017

Construction End date (contracted): August 2017

Construction End date (actual): August 2017

Was the project completed on time? ☒ Yes ☐ No; Explanation

Was the project completed on budget? ☒ Yes ☐ No; Explanation

Was the project completed to the owner's satisfaction? ☒ Yes ☐ No; Explanation

Project Description (Be sure to include cost information, photos, and a detailed description of the work performed by the Vendor applicant):

GRAEF assisted in acquiring grant funding through MMSD to install and incorporate green infrastructure practices in the reconstruction of a main parking lot. After a funding commitment was obtained through MMSD, GRAEF developed the design of parking lot reconstruction plans and provided assistance through construction.

The project included approximately 23,575-square-feet of porous asphalt pavement, approximately 340-square-feet of permeable precast concrete panels, and two bio-retention basins totaling approximately 1,560-square-feet. The green infrastructure practices installed were connected to the existing site storm sewer system via underdrains and storm sewer. All of these green infrastructure practices provide both water quality and water quantity benefits and collectively resulted in the project complying with the post-construction stormwater management regulatory requirements of the City of Wauwatosa and MMSD for this project.

GRAEF Services: Permeable Parking Lot & Biofiltration Basins Design; Civil/Site Engineering; Stormwater Management; Landscape Architecture



PROJECT INFORMATION:

Project Name: I-794 Lakefront Gateway Interchange

Address/City/State/Zip: Downtown Milwaukee – Clybourn and Lincoln Memorial Drive

Type of green infrastructure installed (check all that apply):

- | | | |
|--|--|---|
| <input type="checkbox"/> Green Roofs | <input type="checkbox"/> Rain Barrels | <input type="checkbox"/> Rain Gardens |
| <input type="checkbox"/> Constructed Wetlands | <input type="checkbox"/> Cisterns | <input checked="" type="checkbox"/> Soil Amendments |
| <input checked="" type="checkbox"/> Native Landscaping | <input checked="" type="checkbox"/> Stormwater Trees | <input type="checkbox"/> Other |
| <input checked="" type="checkbox"/> Porous Pavement | <input checked="" type="checkbox"/> Bioswales | |

Area of specialty for this project (check all that apply):

- | | | |
|---|--------------------------------------|---|
| <input checked="" type="checkbox"/> Design | <input type="checkbox"/> Landscaping | <input type="checkbox"/> Downspouts and Gutters |
| <input checked="" type="checkbox"/> Engineering | <input type="checkbox"/> Maintenance | <input type="checkbox"/> Inspection |
| <input type="checkbox"/> Construction | <input type="checkbox"/> Plumbing | |

PROJECT (PROPERTY) OWNER INFORMATION:

Owner's Name: WisDOT, Heather Sackman

Address/City/State/Zip: Barstow, Waukesha

Phone: 414 / 750 3233

Email: heather.sackman@dot.wi.gov

PROJECT CONSTRUCTION INFORMATION:

Construction Management Vendor: WisDOT

Project Manager Name: Heather Sackman

Project Manager's Vendor history: ☒ currently employed ☐ no longer employed ☐ other

Email: heather.sackman@dot.wi.gov

Contract information (if applicable): NA

Final Contract Amount (contracted and amended if applicable): \$3.1M

Construction Start date (contracted): January 2016

Construction Start date (actual): January 2016

Construction End date (contracted): November 2016

Construction End date (actual): December 2016

Was the project completed on time? ☒ Yes ☐ No; Explanation

Was the project completed on budget? ☒ Yes ☐ No; Explanation

Was the project completed to the owner's satisfaction? ☒ Yes ☐ No; Explanation

Project Description (Be sure to include cost information, photos, and a detailed description of the work performed by the Vendor applicant):

This project is a unique collaborative project between the City of Milwaukee, the State of Wisconsin, and Milwaukee County. Its purpose is to improve connections to the lakefront, downtown Milwaukee, and the Historic Third Ward. The project created a developable parcel in the area south of East Clybourn Street, an area vacated by the realignment of the existing I-794 ramps.

Work on the project included the study of alternatives; traffic analysis; preparation of the environmental document; preparation of the IAJR, TMP, DSR, and TIGER grant application; stormwater evaluation and design; bridge and retaining wall design; streetscape design; cost estimates; construction staging; traffic control; public involvement; and plans, specifications and estimates for the project.

Geometric Layout | The roadway design of the project included the reconfiguration of the roadway network within the project area summarized as follows: The IH 794 Lake Interchange eastbound exit ramp to N. Lincoln Memorial Drive and westbound entrance ramp from N. Lincoln Memorial Drive were relocated to the south, providing space for the redevelopment of the E. Clybourn Street and N. Lincoln Memorial Drive intersection. This will allow for the creation of developable parcels in the area.

GRAEF Services: Traffic Analysis/Traffic Control; Geotechnical Investigations; Environmental Report; Agency/Utility Coordination; Transportation Project Plat; Stormwater Report; Streetscape Design; Public Involvement; Preliminary & Final Roadway Design; Survey

I-794 Lakefront Gateway Interchange



ProHealth Care Regional Cancer Center

Client: ProHealth Care

Location: Pewaukee, WI

Types of green infrastructure installed: Green Roofs; Native Landscaping; Bioswales; Soil Amendments

GRAEF services: Landscape Architecture; Site/Civil Engineering; Traffic Engineering

Project data: 14 Acres; \$70 Million

As a leader in health, ProHealth Care offers comprehensive cancer care to its patients. This 166,000-square-foot cancer center was designed to create a patient-and family-centered environment that is conducive to healing. The \$70 million state-of-the-art facility is warm and inviting, to promote comfort and ease stress.

GRAEF provided landscape architecture design and site/civil and traffic engineering services for the 14-acre regional cancer care center that opened in early 2015. The landscape program elements include green roofs, healing garden development, outdoor courtyards/terraces, pedestrian circulation and walkways, special paving areas, parking lot landscape and screening, site furniture, landscape lighting and site amenities.

The cancer center is the centerpiece of an ambulatory campus that incorporates a full-service imaging and diagnostics center and a multi-specialty physician clinic.



University of Wisconsin - Milwaukee Hillel Student Center

Client: Milwaukee Jewish Federation

Location: Milwaukee, WI

Types of green infrastructure installed: Green Roofs; Native Landscaping; Rain Gardens; Soil Amendments

GRAEF services: Site/Civil Engineering; Landscape Architecture

Project data: 8,000 SF; \$1.38 Million

The new Hillel Student Center at the University of Wisconsin-Milwaukee is in a residential neighborhood adjacent to the campus. The Zilber Building, named after local philanthropists Joseph and Vera Zilber, is a comfortable place for Jewish students and other members of the community to gather and interact. The building is modern, sustainable, and reflective of the Jewish culture. The center offers the opportunity for dinners, gatherings, study groups, meal preparation, and administrative functions.

GRAEF was retained by Milwaukee Jewish Federation and La Dallman Architects Inc. to provide site/civil engineering and landscape services. The stormwater management plan incorporated sustainable design through a green roof and rain garden.



University of Wisconsin - Madison Union South

Client: State of Wisconsin Division of State Facilities

Location: Madison, WI

Types of Green Infrastructure Installed: Green Roofs, Native Landscaping; Soil Amendments

GRAEF Services: Site/Civil Engineering; Structural Engineering; Landscape Architecture; Sustainable Design

Project Data: LEED® Gold Certified; 276,000 SF; \$94.8 Million

The original Union South was built in 1971 and its size and configuration limited programs and activities for the growing campus. Analysis showed rebuilding the facility was as cost effective as renovating, and by using 'green' design, energy costs will be lower in the long-term. Union South is the University's first LEED-rated sustainable design project receiving LEED® Gold certification.

The new \$94.8 million union is 276,000 square feet including a three-level entertainment center with bowling alley, a billiards hall, a rock climbing wall, bar and grill and live stage area. The facility also has a balcony, large event space and 400-seat auditorium.

The facility creates a new green space that serves as a gateway to the south side of campus. GRAEF provided structural engineering, site/civil engineering and landscape architecture services for Union South and programming for the existing Memorial Union.



University of Wisconsin - Milwaukee Innovation Campus Infrastructure

Client: UWM Real Estate / City of Wauwatosa

Location: Wauwatosa, WI

Types of Green Infrastructure Installed: Bioswales, Native Landscaping, Soil Amendments

GRAEF Services: Survey; Site/Civil Engineering; Landscape Architecture; Stormwater Management

Project Data: 58 Acres

UWM Innovation Campus is a 58-acre university research park on the Milwaukee County grounds. GRAEF worked closely with the City to provide design for the \$9 million infrastructure to serve the new campus. Services included surveying, mass grading, roadways, utilities, landscape, lighting, and stormwater management.

The City of Wauwatosa and Milwaukee County wanted to go above and beyond the customary approach to stormwater management. Green infrastructure techniques were to be employed for stormwater management, such that there was no surface runoff from the developed site for up to a 100-year storm event. Water quality goals set by the WDNR also needed to be met or exceeded.

The project scope included development of a unique system of storm water bio-filtration basins to meet the City and stakeholder goals for a “zero-discharge” of runoff from the developed portions of the site. The bio-filtration basins infiltrate, evapotranspire, or discharge via underdrain, all runoff from developed areas up to a 100-year storm event. The basins do not have open water like conventional wet detention ponds, and instead have prairie plantings, including milkweed, for support of the Monarch Butterfly migration. The bio-filtration basins are outside the public right-of-way, but will provide stormwater management for the public roadways and the private development areas, requiring a unique agreement between the City and UWMRF for shared use of the facilities, to meet the overall stormwater management goals established by the City.



Johnson Controls' Reflecting Pool

Client: CYLA Design Architects, Inc.

Location: Glendale, WI

Types of Green Infrastructure Installed: Cisterns

GRAEF Services: Sustainable Design; Storm Water Management; Grey Water System; Site Irrigation

Project Data: LEED Platinum Certified; 1-Acre Pond

GRAEF was involved in the renovation of a 1-acre reflecting pool and fountain at Johnson Controls' corporate headquarters. The reflecting pool, originally constructed in the 1960s, was overgrown and deteriorating. The renovated pool is equipped with a new fountain system and pool bottom and included complete re-landscaping.

GRAEF was integrally involved with the project by designing a stormwater re-use system to capture and clarify parking lot runoff, and using it for site irrigation. The system includes two cisterns with storm water treatment units that provide a water reservoir for an irrigation system pump vault. The impacts are a reduction in stormwater discharge from the site, improved water quality in the reflecting pool, and a reduction in the use of municipal water for irrigation purposes.



Kerry Center of Excellence

Client: Kerry Americas

Location: Beloit, WI

Types of Green Infrastructure Installed: Native Landscaping

GRAEF Services: Site/Civil Engineering; Stream Relocation; Environmental Impact Assessment; Stormwater Management; Landscape Architecture

Project Data: 124 Acre; \$60 Million; LEED® Certified

Kerry Americas Center of Excellence is a \$60-million, 200,000-square foot research and office building project. GRAEF was retained by the architect to provide site/civil, landscape architecture, and environmental services for the project.

Site/civil services for the project included permitting, extension of public water and sewer service to the site, design of site grading, design of access and circulation roads, design of a roundabout intersection, parking lots, loading dock bays, and a storm sewer system to convey the building and site runoff to two stormwater ponds.

GRAEF worked with the project architect and owner to provide the necessary site elements to achieve the LEED® Silver Certification the building has received, and the owner's concept of "Building on the Prairie." The site design incorporated the use of recycled and reclaimed material for use in paving and site filling operations. Bio-

infiltration and wetland areas were created to promote the infiltration of stormwater into the groundwater table and restoration of the native wetland habitat once present on the site. The remaining upland areas and riparian areas along the relocated stream were re-graded and restored with native plantings and riffles and pools, to help return the area to its natural condition and promote the return of wildlife to the prairie and stream. GRAEF provided landscape architecture design services that included: schematic through final design plans for development of project including interior circulation roads, 700+ surface parking lot, outdoor plaza areas, stream bed relocation and redevelopment of stream edge plant communities, native prairie development, storm water ponds, and walking trails.



Project Management Team





Stephanie Hacker AICP, LEED AP

PRACTICE AREA LEADER | PLANNING + URBAN DESIGN | PRINCIPAL

Professional Certifications: American Institute of Certified Planners; LEED Accredited Professional

Education: M.U.P, University of Wisconsin-Milwaukee, Milwaukee, WI; B.A. Geography, Augustana College, Rock Island, IL

Professional Affiliations: American Planning Association (APA); Wisconsin Chapter of the American Planning Association (APA-WI)

Stephanie's experience spans comprehensive and master planning, economic development and market assessment, public participation strategies, municipal code review, neighborhood revitalization, grant writing, and ongoing services for urban, suburban, and rural communities. At the core of Stephanie's work lies her dedication to building a central vision and establishing systems that kick-start physical and systems change. She cares deeply about using urban design and planning to enhance the nexus of community and neighborhood vitality, public health, and the triple bottom line (environment, equity, economics). Stephanie works with business, nonprofit, and government clients to implement vital enhancements in our physical and social environment.



Tanya Fonseca AICP

SENIOR PLANNER | ASSOCIATE

Professional Certification: American Institute of Certified Planners

Education: M.S., Urban Planning, Columbia University, New York, NY; B.A., Architectural Studies, Mount Holyoke College, South Hadley, MA; Year of Architecture & Design Field Work, Copenhagen, Denmark

Professional Affiliations: American Planning Association (APA); Wisconsin Chapter of the American Planning Association (APA-WI)

Tanya has a strong background in both urban planning and architecture. Her planning expertise includes revitalization, comprehensive and neighborhood planning, community and economic development, code review and updates, urban design, sustainability, and ongoing planning services for urban, suburban and rural communities. She has a focus on sustainability and resiliency, assisting clients with the integration of triple bottom line accounting (social, economic, and ecological considerations) and sustainable infrastructure in their projects.



Craig Huebner *AICP*

PLANNER & URBAN DESIGNER

Professional Certification: American Institute of Certified Planners

Education: Master of Architecture, 2012, Master of Urban Planning, 2012, Certificate in Real Estate Development, 2012, University of Wisconsin-Milwaukee, Milwaukee, WI; B.S., Architectural Studies, 2009, Certificate in Urban Planning, 2009, University of Wisconsin-Milwaukee, Milwaukee, WI

Professional Affiliations: American Planning Association (APA); Wisconsin Chapter of the American Planning Association (APA-WI)

Craig's academic background is in both architecture and urban planning, and he has several years of experience working in both fields. His work experience includes neighborhood master planning, commercial redevelopment, streetscape corridor planning/design, site plan review, urban design, site and building design, park and open space planning, and design guidelines.



Joseph Pepitone *PLA, LEED AP*

SENIOR LANDSCAPE ARCHITECT | PRINCIPAL

Professional Registrations/Certifications: Registered Landscape Architect – CA, MN, WI; CLARB National Certification; LEED Accredited Professional

Education: B.S., Landscape Architecture, 1986, University of Wisconsin-Madison, Madison, WI

Professional Affiliations: American Society of Landscape Architecture (ASLA); Council of Landscape Architects Review Board (CLARB); Society for College and University Planning (SCUP); American Sports Builders Association (ASBA)

Joe is a licensed landscape architect who brings 30 years of professional experience in project management and landscape architectural design and planning. During his tenure at GRAEF, Joe's projects have won numerous design awards. Joe has been involved in master planning and design for corporate office, industrial, commercial/retail, recreational facilities, urban design, multi-family residential, senior housing, healthcare and educational campuses of all sizes. His expertise includes master planning to incorporate building(s) and site program elements in a functional and cohesive manner. His thorough knowledge of all aspects of site development allow him to provide complete and thorough documentation which includes site planning, detailed design, landscape design and details, planting design, construction documentation, specifications and on-site construction administration.



Joe Porter *PLA*

LANDSCAPE ARCHITECT | SITE DEVELOPMENT TEAM LEADER

Professional Registrations: Registered Landscape Architect – WI

Education: B.S., Landscape Architecture, 2002, University of Wisconsin – Madison, Madison, WI

Joe Porter is a licensed Landscape Architect with fifteen years of experience working on academic and corporate campuses, brownfield redevelopments, green roofs, greenway corridors, mixed-use developments, parks, plazas, streetscapes, residences, resorts, and waterfronts throughout North America and the Caribbean. His involvement with these projects has included every aspect of the design process, from conception through completion. Joe is passionate about context-sensitive design, with emphasis on sustainability and the facilitation of social interaction. He enjoys creative problem solving within a collaborative team environment.



Erik Schmitt *PLA, CDT*

LANDSCAPE ARCHITECT | ASSOCIATE

Professional Registrations/Certifications: Registered Landscape Architect – WI; Certified Construction Documents Technologist – Construction Specifications Institute

Education: B.S., Landscape Architecture, 1996, University of Wisconsin-Madison, Madison, WI; B.S., Horticulture, 1996, University of Wisconsin-Madison, Madison, WI

Professional Affiliations: American Society of Landscape Architecture (ASLA)

Erik has worked for more than 19 years in landscape design and is an Associate at GRAEF. He has a wide range of project experience featuring a variety of scales: community identity, project visioning, streetscape design, urban plaza design, intimate scale pedestrian spaces, parks and open spaces, community elements, mixed-use developments, business parks, corporate campus design, master planned community water parks and large-scale land use planning. Erik has extensive experience working with private and public client groups regarding project planning, design, project approvals and construction.



Jim Hansen *PE, CDT*

CIVIL ENGINEER | PRINCIPAL

Professional Registration/Certifications: Professional Engineer – WI; Certified Construction Documents Technologist

Education: B.S., Civil Engineering, 1994, University of Wisconsin-Platteville, Platteville, WI

Professional Affiliations: American Society of Civil Engineers

Jim brings 25 years of experience to site development and public works engineering projects at GRAEF. Jim's approach to designing and managing projects ensures that clients are satisfied and projects are completed on time and within budget. His site development services includes site grading, storm water management, sanitary and storm sewers, water mains, roadways, paving, erosion control, and permitting. Jim has evaluated and designed multiple types of underground storm water best management practices (BMPs) for public and private clients to provide solutions that minimize the amount of surface required for storm water management.



Anuja Patil

CIVIL DESIGNER

Professional Certifications: Municipal Waterworks Operator Certification, WI DNR; Wastewater Operator Certification, WI DNR; ISI Envision® Sustainability Professional

Education: M.S.E, Civil/Water Management, 2003, Swami Ramanand Teerth Marathwada University, Nanded, IDA; B.S., Engineering, 1999, Civil, Shivaji University, Kolhapur, IDA

Anuja has been involved in a wide variety of projects that center around water management and civil engineering. She has trained and assisted development teams to implement watershed projects, evaluated watershed projects with respect to government guidelines, and developed digital survey maps using GIS skills. Anuja's experience encompasses water management software, storm sewer calculations, pipe sizing, impervious area estimations, and drainage delineation.



Brian Schneider *PE, LEED AP, CDT*

ENVIRONMENTAL ENGINEER | ASSOCIATE

Professional Registration/Certifications: Professional Engineer – IL, MI, WI; Certified Document Technologist, LEED Accredited Professional

Education: M.B.A., 1987, University of Wisconsin-Madison; B.S., Civil and Environmental Engineering, 1984, University of Wisconsin-Madison; Certificate of Pollution Prevention, 1984, Milwaukee School of Engineering

Brian has managed both technical and administrative aspects of projects such as site civil engineering, environmental studies and permitting, soil and groundwater clean-up, utility corridor environmental studies and permitting, industrial facility permitting and compliance, environmental risk analysis, and construction monitoring. Brian demonstrates the ability to analyze a specific situation, communicate its elements to the client, and subsequently create and manage a successful solution.



Ryan Van Camp *PE, CFM, CPESC*

WATER RESOURCE ENGINEER

Professional Registration/Certifications: Professional Engineer – ND, WI; Certified Floodplain Manager; Certified Professional in Erosion and Sediment Control; OSHA 40 Hour HAZWOPER (Specialist) (2001) – Lakeshore Technical College

Education: M.S., Civil Engineering, 1999, University of Wisconsin-Milwaukee; B.S., Civil Engineering, 1998, University of Wisconsin-Milwaukee

Ryan has extensive experience in civil and water resources engineering and management, with an emphasis on evaluation of hydrologic and hydraulic systems affected by development and rehabilitation. Ryan has prepared flood study reports and stormwater management plans, conducted design review services, completed civil and site designs, and managed waterway and wetland permitting. Much of his recent project experience has involved storm water management and pollution prevention planning related to transportation facilities and non-metallic mining industrial activities.

Customer Service Approach

The GRAEF philosophy has always been oriented towards customer service. We pride ourselves on meeting our client's objectives by clear communication and a high level of responsiveness. Our goal is to avoid problems through our strong attention to detail, and a vigorous quality assurance program.

However, sometimes issues do arise. One example was a soils issue at the **UWM Innovation Campus** in the City of Wauwatosa, associated with the proposed hotel project. The proposed hotel site required a substantial amount of fill to establish a suitable building pad. The proposed hotel building was to be placed over the deepest fill area. A geotechnical analysis done for the hotel project suggested that there would be settlement of the hotel building due to the depth of fill placement; and recommended deep foundations that would add cost to the project. The site filling, done as part of the campus infrastructure work, had been designed and constructed properly, but the fill soil still required time (several years) to fully consolidate and support a slab on grade without differential settling. GRAEF worked closely with the City of Wauwatosa (our client) to resolve the situation by providing details on the design, and options to address the issue by working with the hotel team to reorient the building to an area of the site with a lower fill depth, so that the project could move forward on schedule.

