

February 18, 2020

Sewage and Water Board of New Orleans
Request for Information

Integrated Master Planning RFI

spackman mossop michaelis



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Patti Wallace
Purchasing Director
Sewage and Water Board of New Orleans
625 St. Joseph Street
Room 131
New Orleans, LA 70165

Dear Patti,

On behalf of Spackman Mossop Michaels, I would like to express our interest in participating in the Sewage and Water Board's RFI process, along with any future workshops, for the Integrated Master Planning process.

Spackman Mossop Michaels is a nationally recognized urban design and landscape architecture firm. With a history of successful design, we have been awarded three National ASLA Awards of Excellence since the founding of our New Orleans studio in 2007. Building on a long track record of professional experience, our practice offers a responsive, design-focused service dedicated to the implementation of sustainable landscapes.

Our planning and design team represents a depth of technical knowledge paired with a first-hand understanding of local conditions. We believe all good design begins with listening closely to the community and a thorough investigation of the site. From that foundation, innovative ideas can flourish while remaining grounded in a sense of place.

Working in New Orleans, we understand just how significant this project is to the further evolution of the City and would love to be a part of this dynamic process. Thank you for your time and consideration.

Sincerely,



Wes Michaels, Principal
Spackman Mossop Michaels
1824 Sophie Wright Pl
New Orleans, LA 70130
(504) 218-8991
wes@smm.studio

Spackman Mossop Michaels

Landscape Architecture + Urban Planning

FIRM LOCATION

1824 SOPHIE WRIGHT PLACE
NEW ORLEANS, LA 70130
(504) 218-8991

FIRM CONTACT

WES MICHAELS
wes@smm.studio

FIRM ROLE

LANDSCAPE ARCHITECTURE
PLANNING/URBAN DESIGN

Spackman Mossop Michaels is a landscape architecture and urban design firm with offices in New Orleans, Detroit and Sydney, Australia. The firm was established in 1994 and has an international reputation for major urban and landscape projects. U.S. Principals, Wes Michaels and Elizabeth Mossop, have been involved in a range of consulting work in the U.S. since 2004. The New Orleans office was established in 2007, and a Detroit office was opened January of 2017.

A Multidisciplinary Approach

Spackman Mossop Michaels is an award winning international office for urban strategy and landscape architecture. Our mission is to create places that people love to use every day. We believe that as designers of public space we have a responsibility to transform the mundane into an extraordinary and meaningful experience. The firm was awarded an ASLA National Honor Award in 2017, and the ASLA National Award of Excellence in 2012, 2009, and 2008.

Culture & Values

Our approach to design is driven by a deep understanding of how the natural, social and cultural environments contribute to the design of the built environment as well as the technical realities of a project. We are focused on finding creative solutions that enrich the urban environment.

Our approach is both pragmatic and visionary in its search for new multi-functional and responsive urban systems. As we continue to work in the public realm, it is increasingly important to us that our work is both effective socially, and accessible to diverse communities.

Skills & Capabilities

Our practices in Sydney and New Orleans comprise teams of landscape architects, urban designers, architects, and planners committed to delivering high-quality outcomes. We take a multi-disciplinary approach to design and urbanism and the practice has extensive experience in small and large-scale master planning and design of multi-functional urban infrastructure.

spackman mossop michael's



Wes Michaels, PLA
Principal/Design Director



Emily Bullock
Principal/Project Manager



Erin Kelly, PLA
Studio Director



Gabrielle Gaspard
Studio Manager



Katie Boutté
Senior Designer



Joie Chan
Designer



Shaohuai Xing
Designer



Jane Satterlee
Designer



Erin Porter, AIA
Designer

Delivering Sustainable Water Management Projects in the New Orleans Area

Spackman Mossop Michaels are leaders in green infrastructure in New Orleans, and have worked on stormwater projects in the city for over 10 years. We were a part of the very early planning efforts after Hurricane Katrina to rethink how water is managed in the city. We completed the first Institutional Master Plan under Article 23 for a local school campus, and were a critical part of the team for the Tulane University and Xavier University Institutional Master Plans as well.

As Prime Consultant, we are currently completing the 5-year Stormwater Master Plan for Tulane University, and recently finished their Stormwater and Green Infrastructure Management Plan. Spackman Mossop Michaels along with Paul Habans Elementary School on the Westbank crafted the only project selected by the Sewerage and Water Board for their Green Infrastructure Demonstration Projects this funding cycle. The project is in design and permitting.

We have designed, permitted and provided oversight on the construction of numerous green infrastructure projects in the City of New Orleans, including:

- Rosa F. Keller Library & Community Center (built)
- Stuart Hall School, New Stormwater Playfield (built)
- Stuart Hall Institutional Master Plan (complete)
- 1925 N. Rocheblave (built)
- 2222 N. Broad (built)
- XULA Parking Lots w/ Manning Architects (built)
- Good Counsel Apartments (built)
- 820 Dauphine (built)
- ST9 Housing (built)
- 1601 O.C. Haley Rain Garden (built)
- 4759 Sandalwood (built)
- Habans Green Schoolyard (built)
- Convention Center Linear Park w/ MAEDR (permitted, under construction)
- Lakeview Green Infrastructure (90% complete, in progress)
- 338 Baronne (permitted)
- Bayou Treme (built)
- Good Shepherd School (built)
- 1320 Magazine (built)
- 1020 Thalia (built)
- 546 Carondelet (built)
- 800 N. Rendon (built)

Written Response

The history of New Orleans is closely tied to the history of large-scale water infrastructure projects. From the earliest canals to the first levees along the Mississippi River, to the pump stations and the recent rebuilding of the levees, it seems each generation has undertaken major infrastructural work to make the city more viable in its relationship to water, however, with a legacy system as the foundation for our drainage infrastructure, perhaps relying on large-scale projects may not be the only way forward. Perhaps a more holistic approach focused on small-scale, incremental improvements, building smarter systems, and gaining support for the work from the public—combined with some targeted, major engineering improvements—is the best way forward.

That being said, the next 50 years has some unique challenges ahead for the city. With the effects of climate change already being seen in more erratic weather patterns, the likelihood of significant rise in sea-level and the continued deterioration of the vast wetland and marsh landscape that surround the city, New Orleans, more than most cities, must start planning now to improve their water systems if it will remain to be a viable city in 50 years.

First, for the city to be viable, we have to figure out a way to minimize the impact flooding has on our local businesses and residents (both economically and psychologically). As the amount of water we have to manage increases, the standards for management are likely to increase as well. We have to be able to do this in a way that is economically viable so we do not bankrupt or overburden ourselves in the process. The systems we design and upgrade must be able to be maintained at a reasonable cost and provide real-time feedback on the overall health and efficiency of the system. Finally, and perhaps most fundamentally, the people of New Orleans must understand the systems that help them manage water and trust the agencies that implement and maintain these systems. That understanding and trust will be necessary to secure the funding needed from the people of New Orleans to keep the system running long-term.

Some of the long-term challenges facing the drainage system in New Orleans:

Minimize the Impacts of Flooding

As climate change continues to alter the weather patterns, potentially producing heavier storm systems in shorter time frames, the challenge to minimize the impacts of localized flooding will become greater. We need to think holistically about this, however, and not just make the goal to “reduce flooding.” Reducing flooding is certainly going to be a primary goal over the next 50 years. Whether that is by increasing the capacity of the system through more efficient pumps, or increasing the size of pipes, or any of a number of other large-scale infrastructural solutions that have been looked at in recent studies, however, this will only get us so far as we will still have some flooding (and of course we need to make sure we don’t contribute to further subsidence while we improve the system).

In part, we should plan for the future by looking at the issue from a “user perspective,” with the goal of minimizing the impact flooding has on the daily lives of the people of New Orleans and our local businesses. By digging into the negative effects of flooding, there may be ways to reduce its impact that operate in tandem with drainage system improvements. Some of the systems that can reduce the impact of flooding may not be engineered solutions at all, such as safe places to park your cars (similar to the neutral grounds), or with better information about the system in hand such as an early warning system that allows people to prepare for flooding sooner.

Of course, we already have something like this ingrained into the culture of New Orleans, as evidenced by the cars parked on the neutral ground during heavy rain events, but there are other impacts that we may be able to reduce given the chance to think deeply about it. This is not to discount the need for increased capacity to reduce flooding levels, but if we look long-term, over 50 years, these types of cultural and social adaptations (given the realistic limits of what we can achieve with improving our water infrastructure alone) could play an important role in reducing the impacts of flooding in New Orleans. A thorough, thoughtful, and intentional study of how these types of focused adaptations might be maximized and implemented could increase their effectiveness, in both the near term and far into the future.

Reduce Flooding in a Legacy System (and be Cost-Effective)

Thinking holistically about the impacts of flooding does not discount the dire need to actually reduce the amount of floodwater during a major rain event. Of course, the challenge of upgrading and improving a legacy system, where the vast majority of the system is underground, is a particular challenge. Over the next 50 years, we will potentially see more rain, bigger storms, and even a significant rise in sea level, so we likely need to improve the system just to keep the status quo.

Thinking strategically about how to improve a legacy system is vital, as there are many scales of improvements and upgrades that could happen, and they are often interrelated. There is the challenge of the approach to technology, given that we have a system built on older, and often outdated, technology. Should we adopt new technologies or build on trusted, proven systems that have been tested in other areas? Finally, resources are limited. Each dollar spent in the system needs to both improve drainage as well as teach us something about how to increase the positive impact of the next dollar spent.

Large-scale improvements to the system, such as pump or pipe upgrades, need to be thought of in conjunction with smaller improvements, such as green infrastructure or minor system upgrades. A planning process that is conscious about integrating scalar differences into the plan is critical. In a resource-challenged city like New Orleans, large-scale decisions potentially need a different decision-making process than small-scale decisions. The technologies for large-scale improvements have a higher burden for effectiveness than small-scale ones. For example, the city could be conservative and time-tested on one end and experimental and innovative on the other. These are the types of approaches that should be examined in the planning process.

One approach worth exploring is a commitment to create a series of decision matrices during the planning process. These matrices can embed the values and goals of a larger vision for improvement of the system, but in a way that can transcend the hot button issues that arise often and without warning, as well as provide continuity between administrations. The matrices can be living documents that are revisited and updated on a regular basis so they become more effective and also change with the changing conditions on the ground.

Create a Culture of Maintenance

One challenge that is mentioned in almost every discussion about the state of our water infrastructure is the “burden” of maintenance. While there is already an enormous amount of maintenance that happens every day to keep our systems operational, a key challenge for the future is how to create a wider culture of maintenance around water infrastructure. A culture of maintenance should exist not only in the departments assigned to keep our water systems working, but also in our community leaders, our politicians, and the people of New Orleans.

Creating cultural change seems daunting as a planning task, but it is critical if we are going to continuously secure funding to maintain and constantly improve our water infrastructure over the next 50 years. Changes like this can happen and they can happen with planning. The acceptance of green infrastructure over the past 10 years represents a major cultural shift in thinking about our infrastructure, and it was done through numerous planning exercises, small-scale meetings, and people in the city administration urging their colleagues to keep an open mind.

Small-scale, constant improvements are difficult to implement in a municipal system that is tied to political cycles, however, there are likely no silver bullet projects that will solve all of the issues, and certainly none that are financially feasible. Getting everyone in the city to see both gray and green infrastructure as a living system, that must be constantly tended to and require a constant resource stream, is a critical change that needs to happen if New Orleans is to be viable 50 years into the future.

Develop a System that Learns

Seeing our water infrastructure as a living system that must be constantly and incrementally improved means that we need to be able to learn from the system. Each dollar spent should contribute to better results when the next dollar is spent. This is difficult to do, especially with a new administration every 8 years, at a minimum, and changing personnel within our agencies.

Furthermore, the system must get better at providing feedback about itself so flooding events can be better predicted and prepared for. This effort is related to the culture of maintenance that must be developed overall and the two would mutually reinforce each other. A planning study to look at the best ways to capture the institutional knowledge and work towards a more robust feedback system will be critical to the goal of incremental improvements of the system over time.

Build Trust with the People of New Orleans

Finally, none of this can happen if our public agencies do not have the support of the people of New Orleans and their leaders. The agencies that operate and maintain our water infrastructure need funding, the support of the elected officials, and cooperation from citizens. This is another difficult task, but something that can be started with a well thought out public engagement strategy during the planning process.

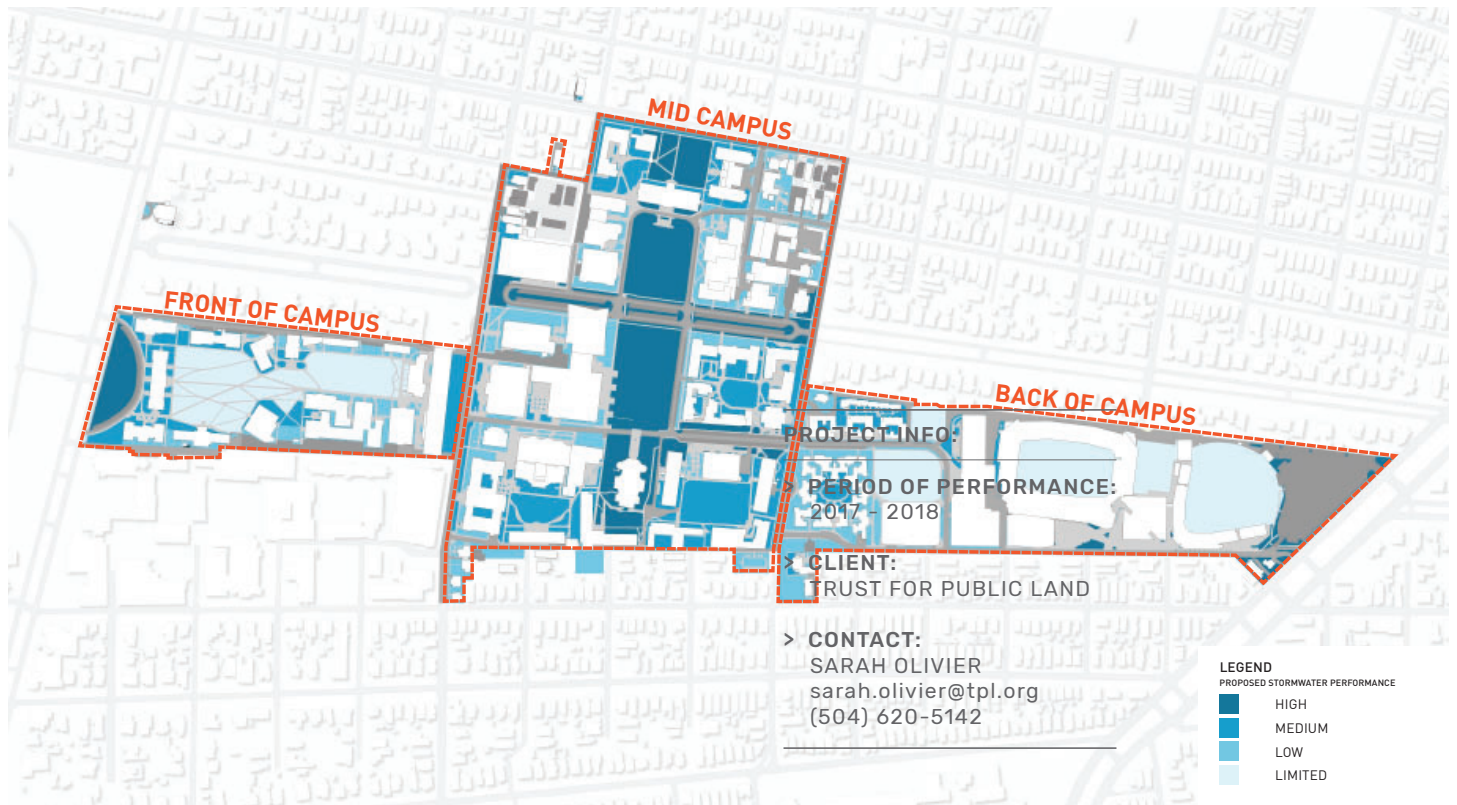
The current process in New Orleans for public engagement often undermines the values it seeks to create. The meetings are set up to be confrontational with the public audience on one side the agency on the other. Often, when the loudest voice is the most important, the opportunity to build consensus is diminished.

There are ways to make the process more effective, less confrontational, and easier for all involved. To build consensus, people in the community have to also talk to each other, not just the representatives of the administration. We want the people to hear what their neighbors think, because it may open their minds to new ideas, and that builds a conversation and that eventually builds some consensus around an issue.

There is also a way to make the process more democratic, where the loudest person and the quietest person can both share their thoughts and have them weigh equally in the discussion. These are all tools and techniques of public engagement that are going to be critical for the process of building trust with the community during the planning process. It is a slow process, and it takes time, but we have seen it work and feel confident that, with the right pre-planning, it could work in this situation as well.

Long-term, building trust with the community is the foundational piece upon which all the other work stands. It is the source of funding; it is the much needed support for the decision-making process; and it is the way to attract and retain the best employees for the agency. In any upcoming planning projects, getting that part right will be critical.

Tulane University Stormwater Master Plan



PROJECT INFO:

- > **PERIOD OF PERFORMANCE:**
2017 - 2018
- > **CLIENT:**
TULANE UNIVERSITY
- > **CONTACT:**
WENDY HILLIS
whillis1@tulane.edu
(504) 247-1797

Overview

Tulane University engaged Spackman Mossop Michaels to develop the Campus Standards and Guidelines for all new stormwater projects on the campus. A product of the 2017 Campus Master Plan (SMM subcontractor to Sasaki) which had a strong focus on stormwater management, this project establishes a range of standard practices and details to be used across campus for both retrofitting green infrastructure into the campus and new projects to be delivered in the future. The project identified best practices, standard details, material availability, and technical considerations for green infrastructure at a range of scales on the campus, from large quads to local downspouts at buildings. Management and maintenance of green infrastructure landscapes were a key consideration of the study.

LIST OF TYPICAL CONDITIONS:

MAIN STREETS (PEDESTRIAN + VEHICULAR)
 MAIN STREETS (SHARED RDS)
 MAIN PATHWAYS (PEDESTRIAN ONLY)
 BACK OF BUILDINGS (ALLEY + PARKING)

FRONT OF BUILDINGS
 ENTRANCES/GATEWAYS TO CAMPUS
 INBETWEEN BUILDINGS (2 OR MORE)



TYPICAL PLANTING ZONES:

PLANTING BEDS
 PUBLIC STREETSCAPE

PLANTING BEDS
 PLAZAS
 LAWNS/QUADS



MAINTENANCE LEVELS:

HIGH
 MEDIUM
 STANDARD



SPECIAL CONDITIONS:

AREAS OCCUPIED
 BY LIVE OAKS

Paul Habans Green Schoolyard



TPL'S FIRST GREEN
PLAYGROUND IN NEW ORLEANS

PROJECT INFO:

- > **PERIOD OF PERFORMANCE:**
2017 - 2018
 - > **CLIENT:**
TRUST FOR PUBLIC LAND
 - > **CONTACT:**
SARAH OLIVIER
sarah.olivier@tpl.org
(504) 620-5142
-

Overview

The Habans Green Schoolyard is the first project of the Trust for Public Land's Green Schoolyard Initiative in New Orleans. The project consists of two complementary work products: a Master Plan for the entire 5 acre school site, and the detailed design for a Phase 1 project. The master plan for the site responds to the needs of both the school and community for spaces for recreation, walking trails, educational enrichment and stormwater management. The first phase of the master plan to be built consists of an innovative wood playground, rain gardens, a chalkboard wall, benches and bold-colored painted stripes on the existing basketball court.

THE PROJECT INCLUDED A PARTICIPATORY DESIGN PROCESS WHICH INVOLVED A 7-WEEK SERIES OF DESIGN WORKSHOPS WITH STUDENTS AND TEACHERS FROM HABANS



PROJECT HIGHLIGHTS

Integrating Stormwater Management with Recreation

The Habans Green Schoolyard demonstrates how stormwater management can be integrated with active play space and become an educational asset for a campus. Rather than treating drainage infrastructure as simply a means to an end, this project demonstrates an opportunity for students to interact with water in a fundamentally different way. The project simultaneously addresses the need to create opportunities for play and the need to improve the drainage in the school's yard.

Before



THE EXISTING SCHOOLYARD EXPERIENCED SIGNIFICANT FLOODING, EVEN DURING SMALL RAIN EVENTS. THE SITE CONSISTED OF A CONCRETE SURFACE AND VAST GRASS FIELDS.

After



THE DESIGN STRATEGY FOR THE PHASE ONE SCHOOLYARD FOCUSES ON MANAGING STORMWATER BY CHANNELING SURFACE RUNOFF AND WATER FROM DOWNSPOUTS INTO RAIN GARDENS.

The playground design was phase one of the overall masterplan. Brightly colored stripes highlight the school's core values and custom play equipment challenges the students through exploratory play. Students' drawings inspired and informed the design team during the schematic design phase.

Rosa F. Keller Library & Community Center



AWARDS

- > 2014 AIA MERIT AWARD LOUISIANA
- > 2014 LANDMARKS SOCIETY AWARD FOR EXCELLENCE IN HISTORIC PRESERVATION
- > 2013 AIA GULF STATES HONOR AWARD
- > 2013 IIDA DELTA REGION AWARD OF EXCELLENCE

PROJECT INFO:

- > **PERIOD OF PERFORMANCE:**
2009 - 2012
- > **CLIENT:**
ESKEW DUMEZ RIPPLE
- > **CONTACT:**
JASON RICHARDS
PROJECT MANAGER
(504) 561-8686

Overview

This neighborhood library and community center is comprised of two buildings joined together with the intention that they function as a whole. One building is a historically significant bungalow built as a residence in 1917, sited prominently on the corner of S. Broad Street and Napoleon Avenue. The bungalow was salvaged after Hurricane Katrina and raised for future flood prevention, and the modern addition was completed in 2012. The new combined library and community center serves the Broadmoor community by providing residents with a 21st century library, community center, gathering space, and valuable educational resource.

THE WATER FROM ALL OF THE ROOF SURFACES IS INTEGRATED INTO THE LANDSCAPE IN A SERIES OF DETENTION BASINS AND RAIN GARDENS.

