

# MILWAUKEE PUBLIC LIBRARY GREEN INFRASTRUCTURE

Adrienne Cizek, PhD, PE | Senior Project Engineer



— “

IMPROVING THE BUILT AND NATURAL  
ENVIRONMENTS WITHIN COMMUNITIES  
THROUGH SUSTAINABLE ENGINEERING  
AND DESIGN

” —

# OUTLINE

01 | SERVICES AND OUR TEAM

02 | PROJECT BACKGROUND

03 | GREEN INFRASTRUCTURE

04 | PROJECT DESIGN AND  
CONSTRUCTION

05 | PROJECT BUDGET  
& FUNDING

06 | SUMMARY/NEXT STEPS



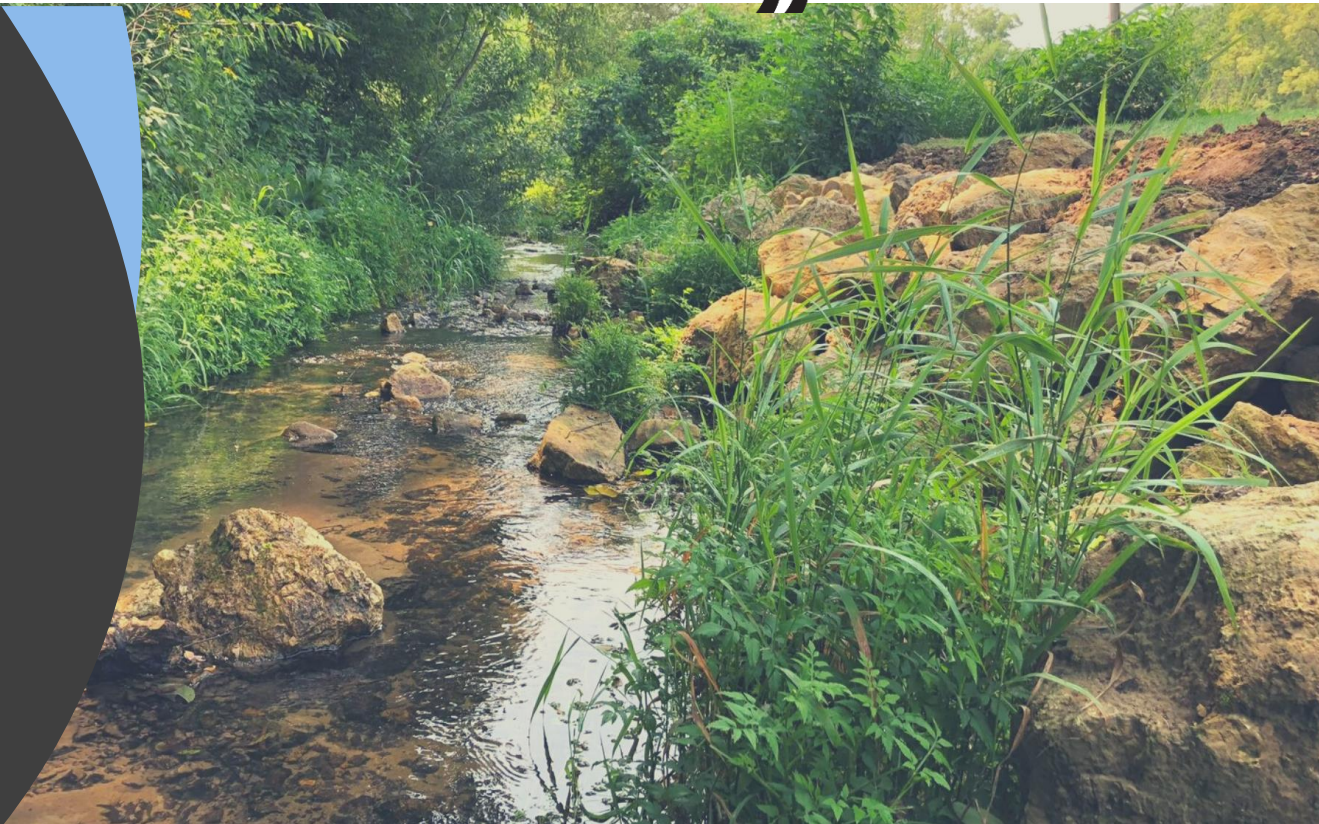
**WE ARE** a specialized civil engineering design firm focused on water quality, drainage design, integrated site design, and flood management.

We provide engineering and project management from concept through construction, working closely with our clients to help them find *their* ideal solutions.



## WE PROVIDE

- Stormwater Management
- Green Infrastructure Design
- Stormwater Integrated Site Design
- Drainage Design & Erosion Control
- Hydraulic Analysis & Reports
- Aquatic Organism Passage
- Stream Restoration
- Regenerative Stormwater Conveyance
- StormGUARDen
- Grant Application Support... AND MORE!

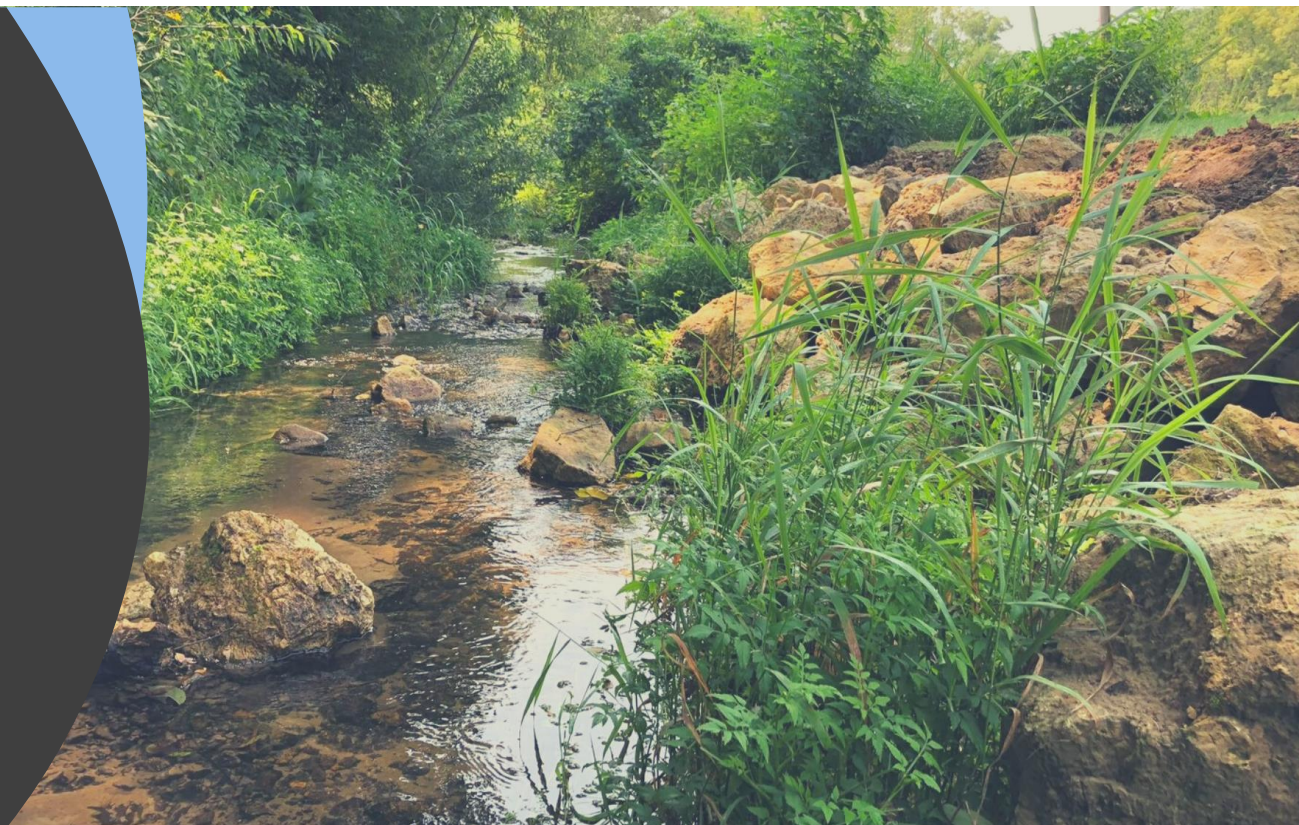






## WE SERVE

- Municipalities
- Schools/Educational Facilities
- Transportation agencies
- Watercourse districts
- Parks and Recreational Facilities
- Commercial property owners
- Residential property owners
- Environmental organizations









# Approximately 80% of SSE Projects Involve Green Infrastructure





# OUR TEAM



Carrie Bristoll-Groll, PE, CFM  
Principal Civil Engineer and CEO

Cassandra Hoppe  
Project Engineer

Adrienne Cizek, PhD, PE  
Senior Project Engineer

James Zsebe, PE  
Senior Project Engineer

Tony Groll  
Business Manager



Kara Koch, PE, ENV, SP  
Senior Project Engineer

Eileen Freres  
Project Engineer

Nader Jaber, PE  
Project Quality Manager

Vacant  
Marketing Assistant

Harlan Groll  
StormGUARDen Operations Manager



# Milwaukee Public Libraries – Parking Lot Updates

## PROJECT TEAM



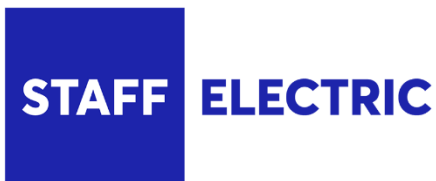
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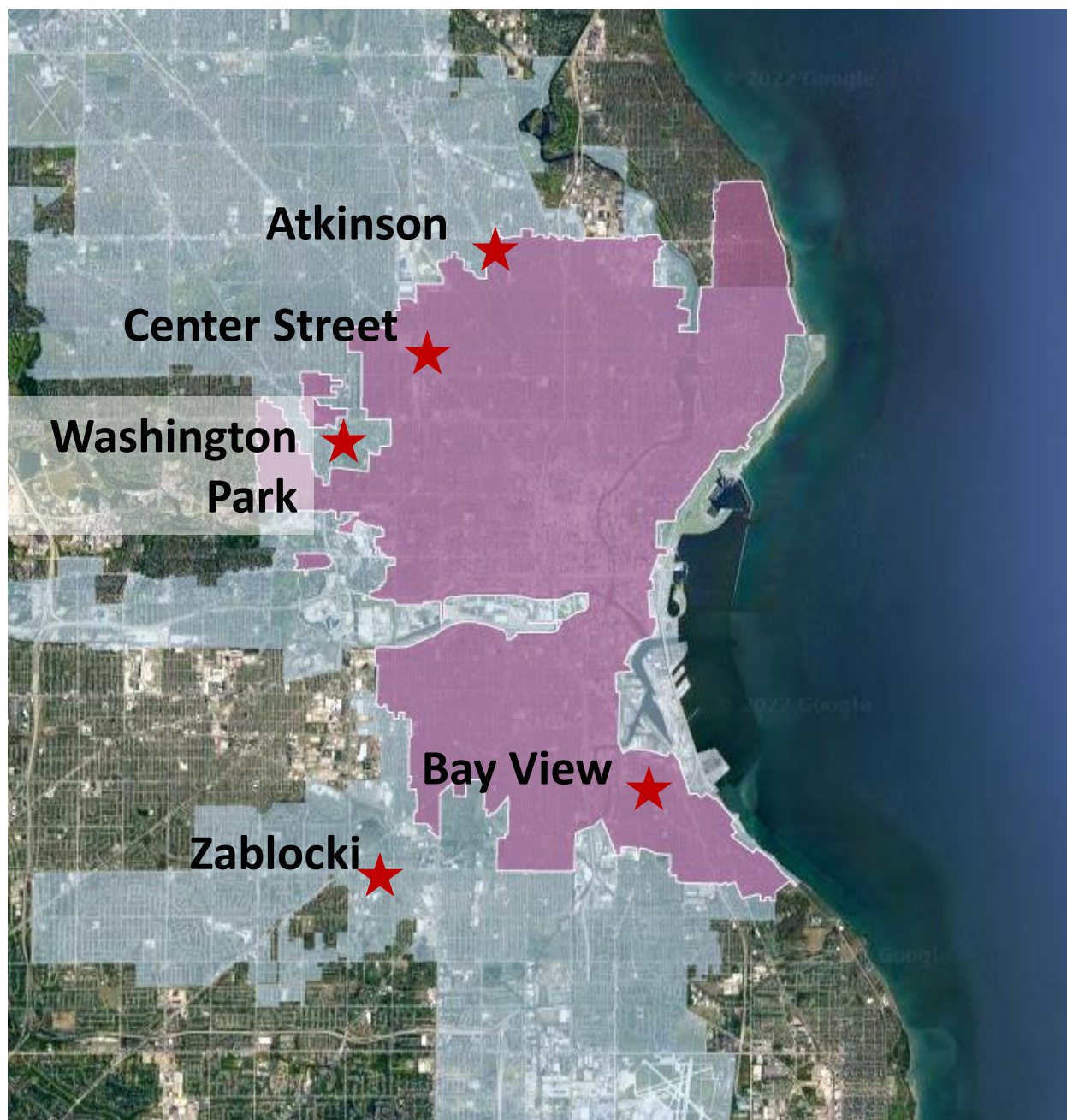


Stephen Solon  
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## PROJECT SCHEDULE

- 2018/2019 – Concept to Final Design and Engineering
- 2019 – Grant Applications
- Fall 2019 – Project Bid
- 2020/2021 - Construction





## Milwaukee Public Libraries – Parking Lot Updates

- Identified as needing ADA accessibility updates
  - Use this as an opportunity to make other updates as well
- 3 of the 5 branches are in the combined sewer area
- 4 of 5 branches are in areas with high social vulnerability index ( $>0.75$ )

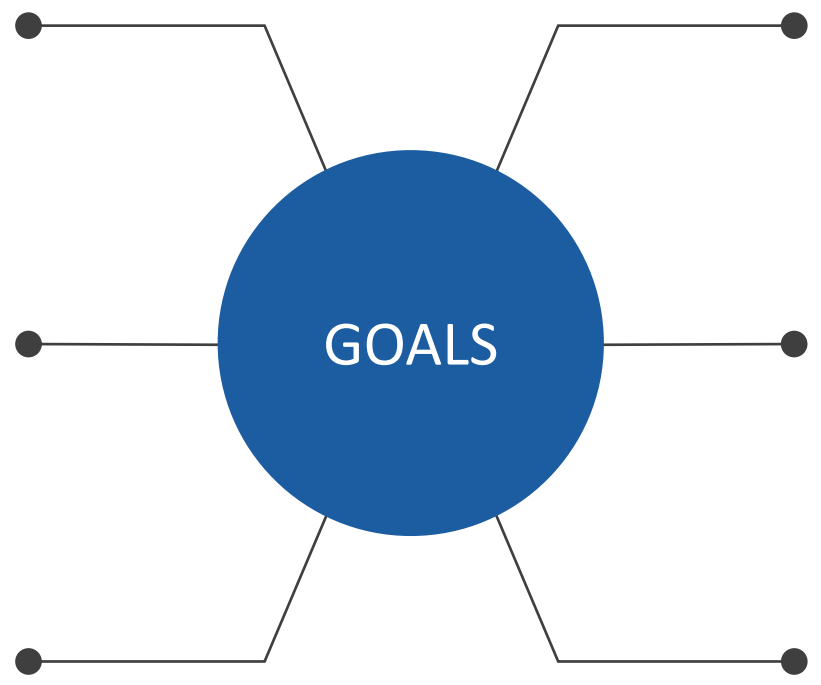


# Milwaukee Public Libraries – Parking Lot Updates

**ADA / Paving**  
ADA compliant;  
Repaving/subgrade  
improvements.

**Connectivity**  
Limit pass-through traffic.  
Improve pedestrian traffic routes.

**Safety & Lighting**  
Increase lighting and  
security cameras on-site.



**Programming**  
Create spaces for green  
infrastructure education and  
other programming.

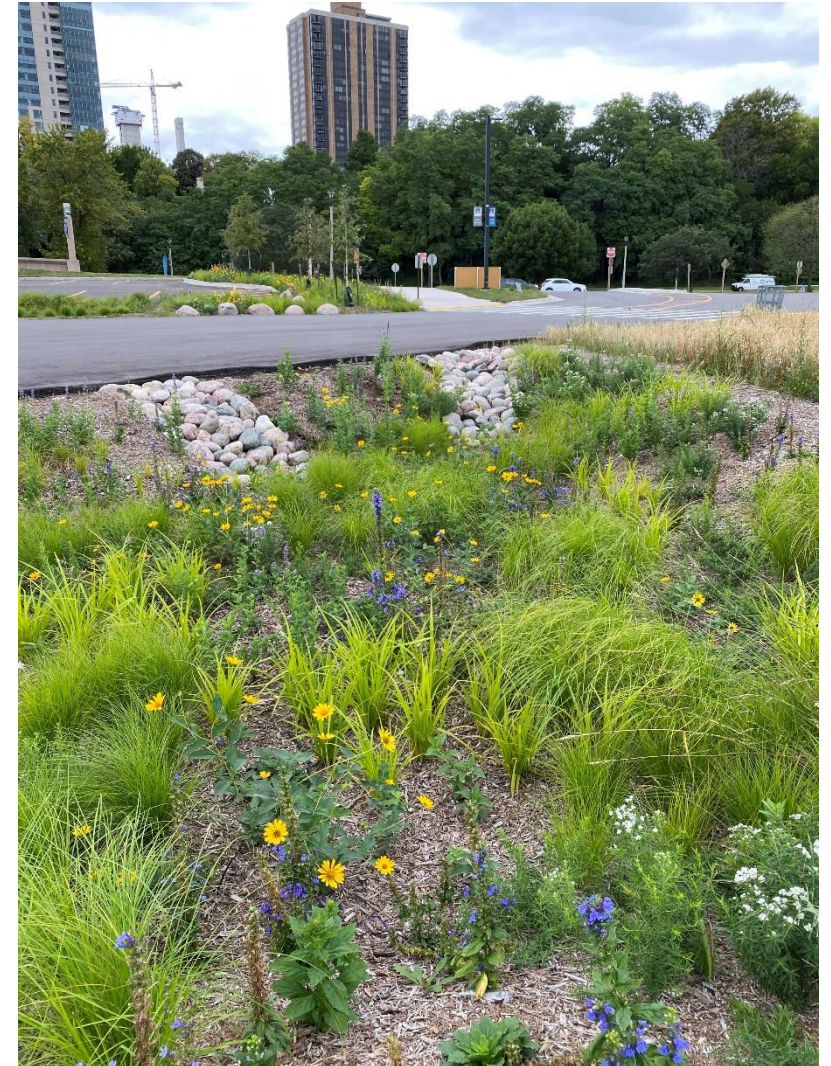
**Green Infrastructure**  
Increase stormwater  
management capacity; Add  
additional green space.

**Grant Funding**  
Maximize amount of  
outside funding.

# WHAT IS GREEN INFRASTRUCTURE?

**GREEN INFRASTRUCTURE** captures, treats, and stores stormwater runoff at the runoff source (i.e. parking lot, street, rooftop, etc.)

- Keeps runoff onsite, prevents neighbors flooding neighbors
- Prevents existing stormwater infrastructure from being overwhelmed
  - Runoff into combined sewer can lead to combined sewer overflows and basement backups.
- Protects our rivers and streams from water pollution.







# ATKINSON LIBRARY

1930 WEST ATKINSON AVENUE



# ATKINSON

## Design Issues:

- Lighting
- Traffic through parking lot to alley
- Ownership of adjacent lot

## ADA Access Issues:

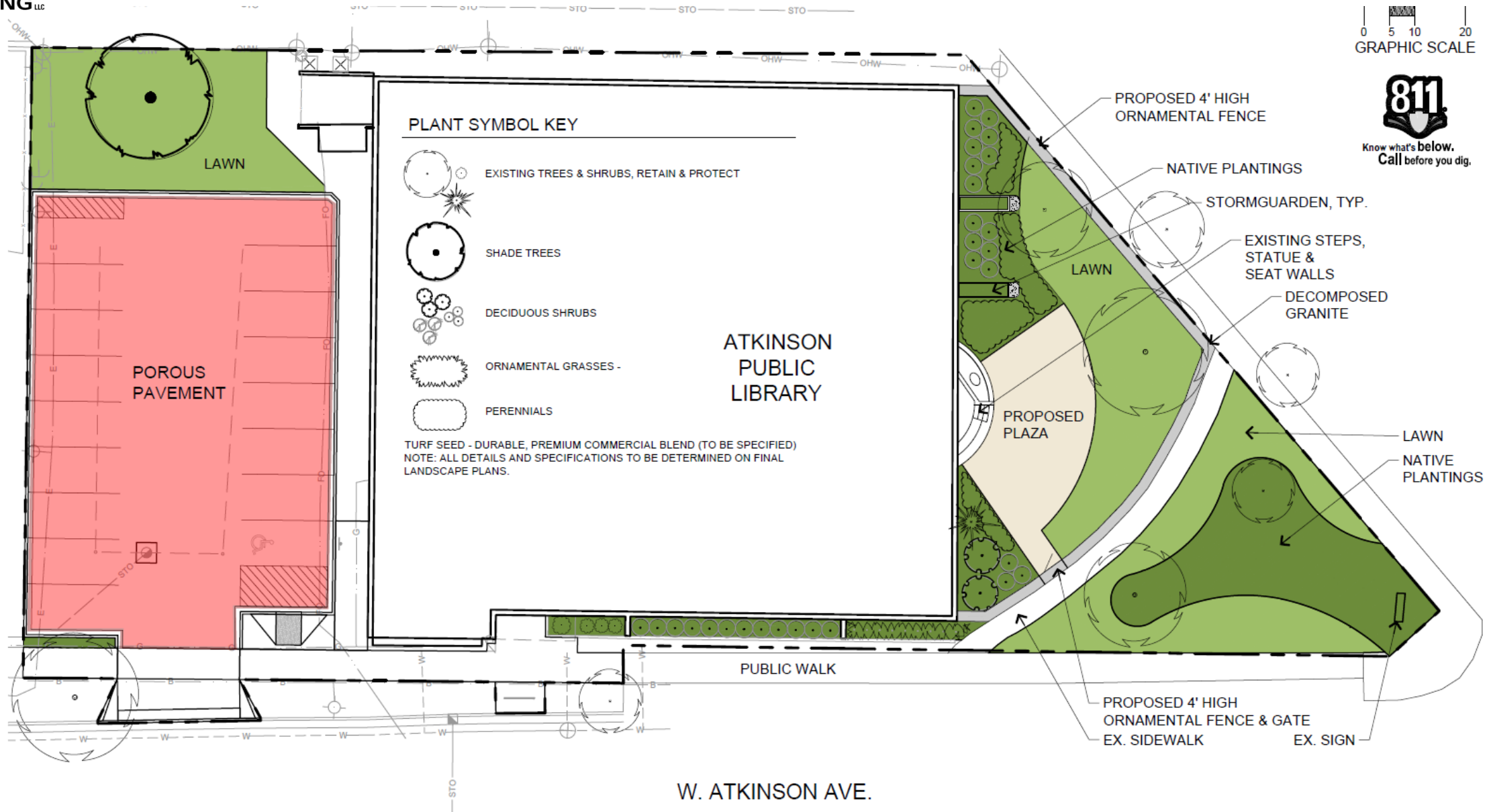
- Curb Ramp
- Walkway
  - Parking surface to sidewalk
  - Gaps between slabs
- Van accessible space and walkway







Know what's below.  
Call before you dig.











# **BAY VIEW LIBRARY**

**2566 SOUTH KINNICKINNIC AVENUE**



# BAY VIEW

## Design Issues:

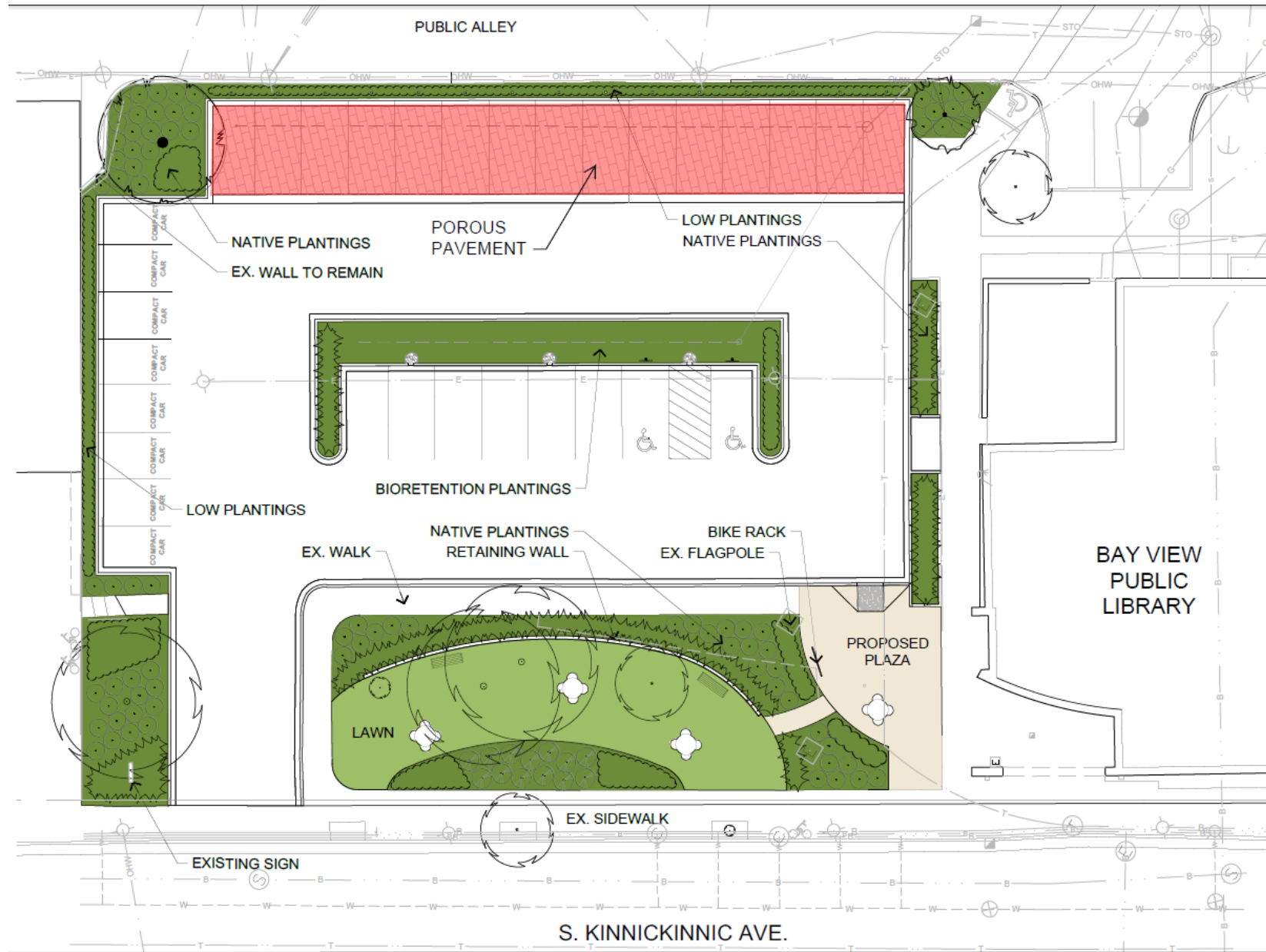
- Differentiate between shared parking
- Lighting
- Alley traffic
- Green space for outdoor seating

## ADA Access Issues:

- Curb Ramp
- Walkway
  - Gaps between slabs

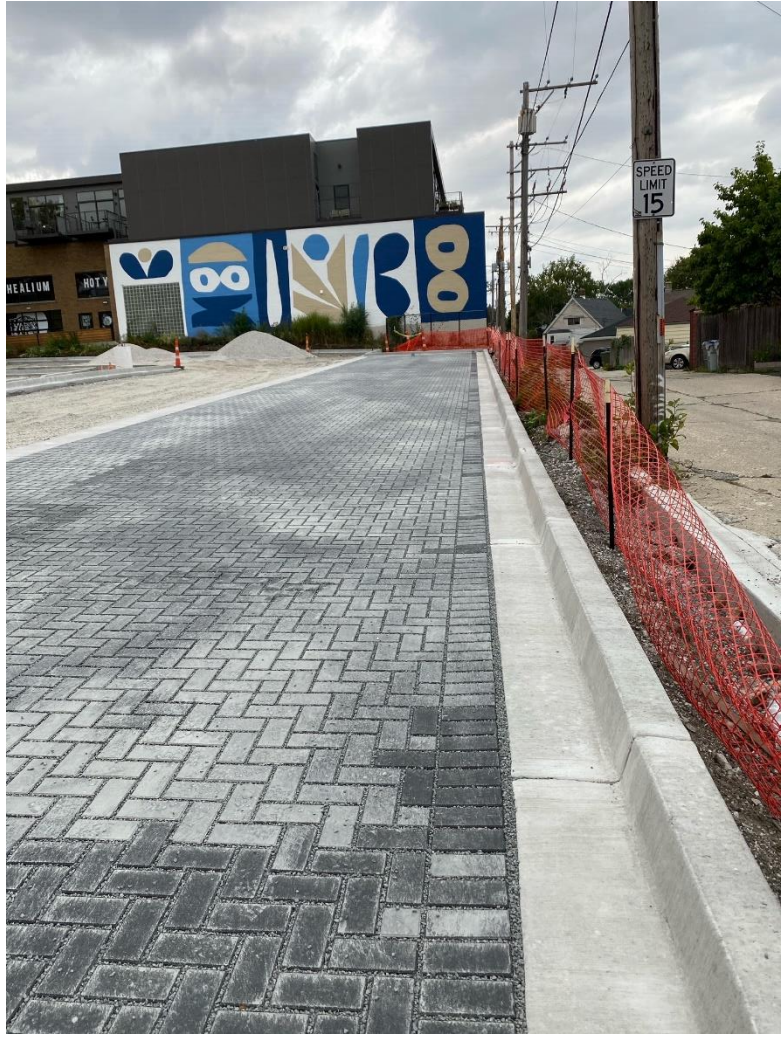








# BAY VIEW







# CENTER STREET LIBRARY

2727 FOND DU LAC AVENUE



# CENTER STREET

## Design Issues:

- Lighting
- Eliminate alley access
- Asphalt in poor condition
- Green space for outdoor seating

## ADA Access Issues:

- Curb Ramp
- Walkway









# CENTER STREET







# WASHINGTON PARK LIBRARY

2121 NORTH SHERMAN BOULEVARD



# WASHINGTON PARK

## Design Issues:

- Lighting
- Cut-through Parking Lot
- Geothermal Wells

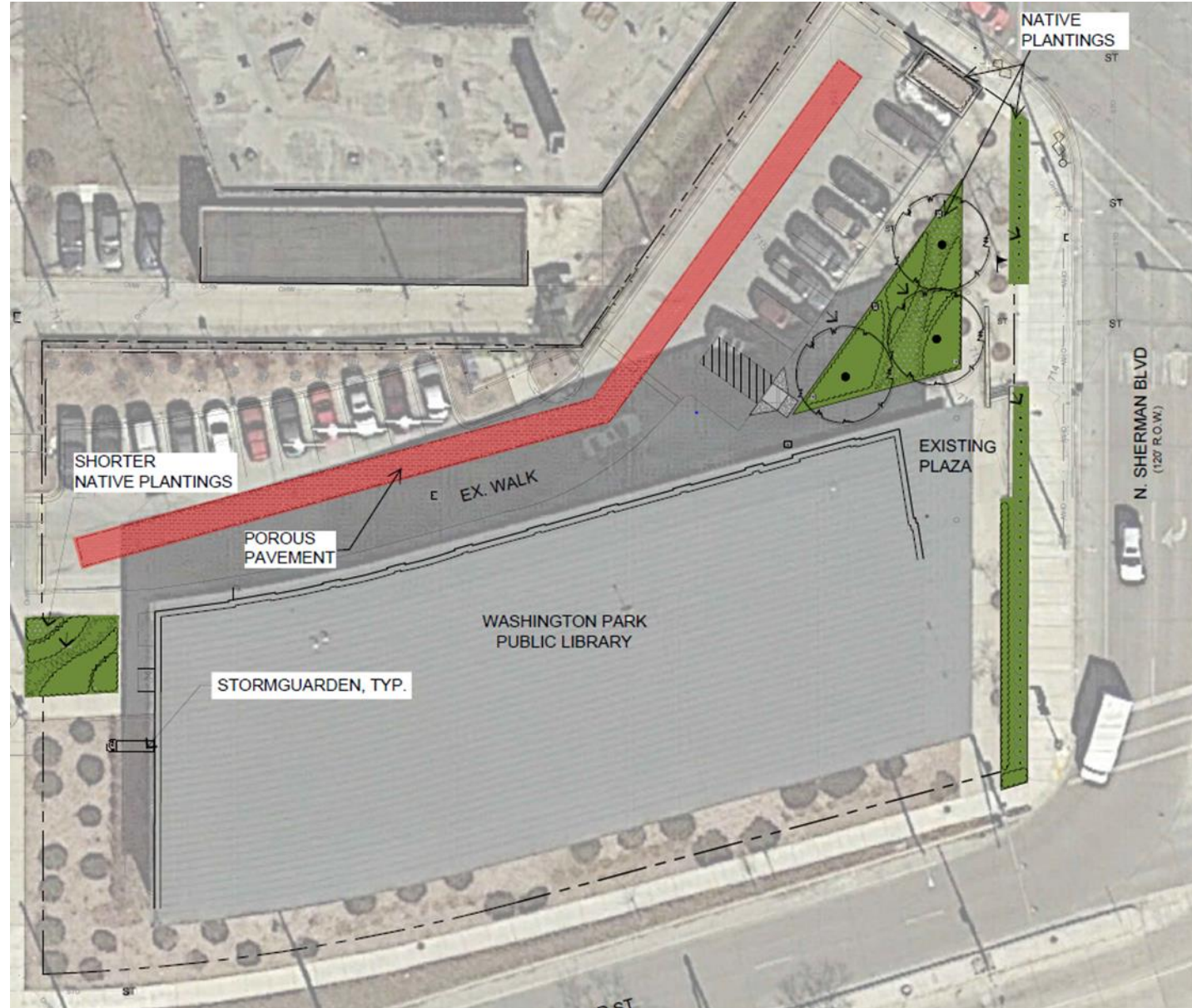
## ADA Access Issues:

- Curb Ramp





# WASHINGTON PARK





# WASHINGTON PARK







# ZABLOCKI LIBRARY

3501 WEST OKLAHOMA AVENUE



# ZABLOCKI

## Design Issues:

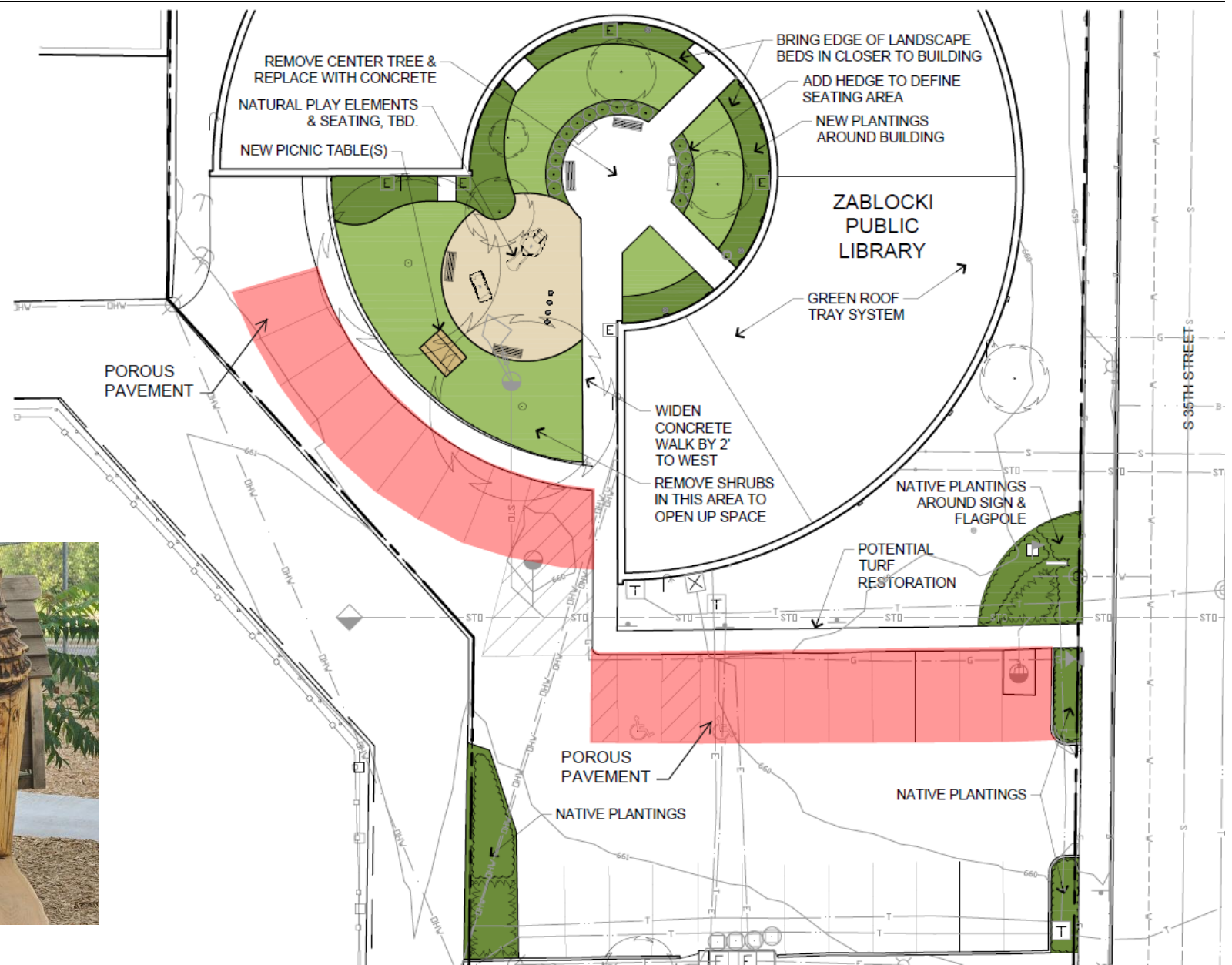
- Poor asphalt condition / potholes
- Parking navigation in alley
- Improved courtyard greenspace

## ADA Access Issues:

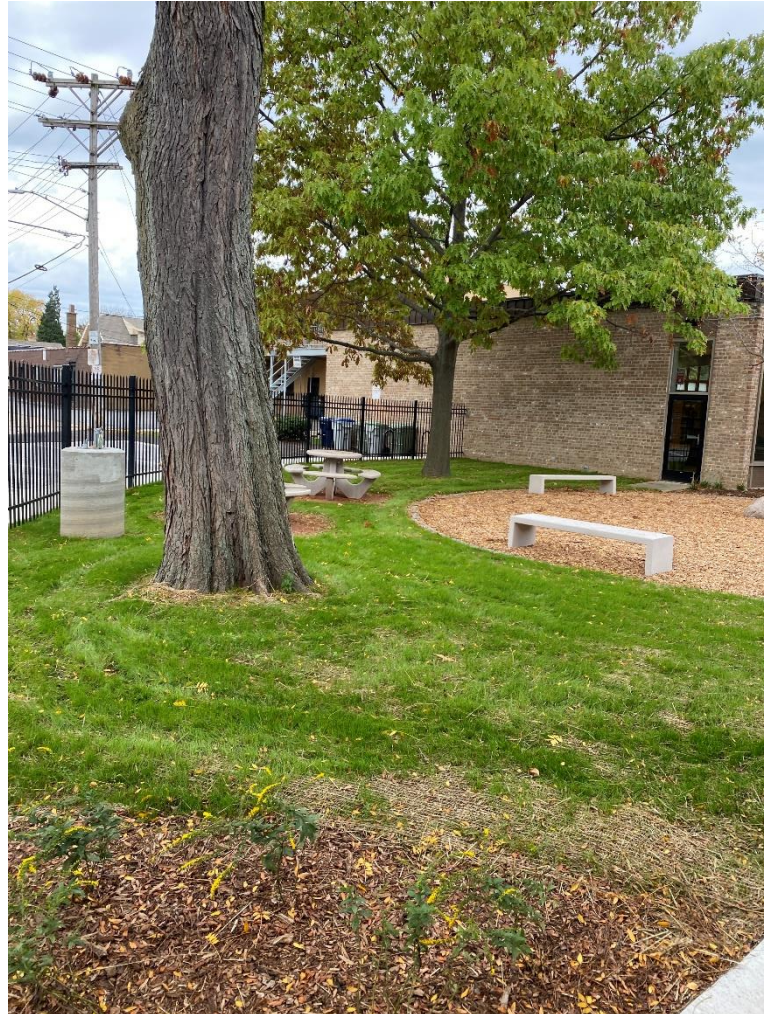
- Walkway



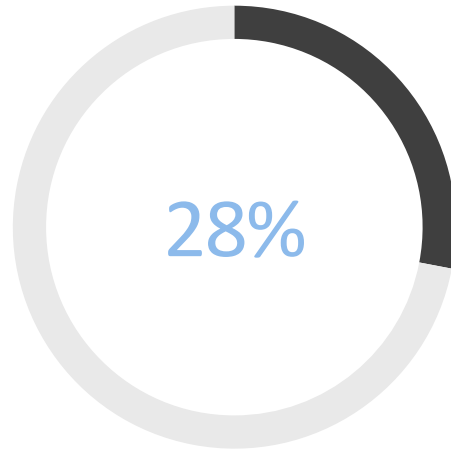




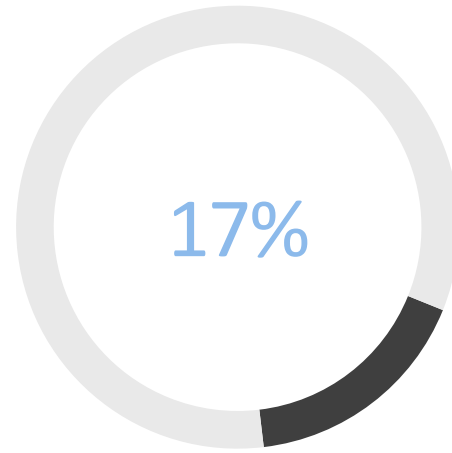




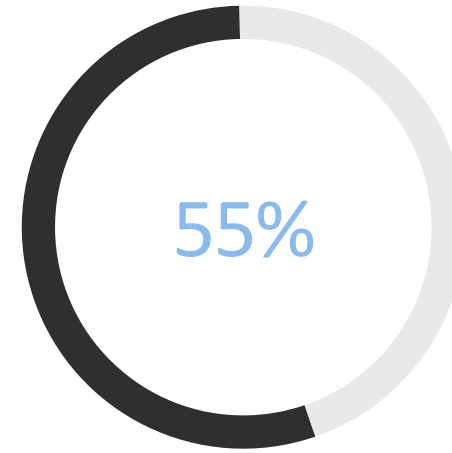




Milwaukee Public Library



Department of Justice



Grants

**\$1.5 Million Total**



	\$ Requested
Wisconsin Coastal Management Program	\$96,230.00
MMSD – GIPP	\$90,741.24
Sustain Our Great Lakes (SOGL)	\$515,554.00
Fund for Lake Michigan (FFLM)	\$125,000.00
<b>Totals</b>	<b>\$826,525.24</b>





## This project...

- Brought five branches of libraries into ADA compliance
- Created additional programming and public gather spaces throughout Milwaukee
- Removed 4,945 square feet of pavement
- Provides 64,435 gallons of onsite stormwater storage
  - An estimated 847,524 gallons captured, stored, and treated annually
- Removes 552 lbs of TSS and 0.85 lbs of TP from stormwater annually



THANK YOU!



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