



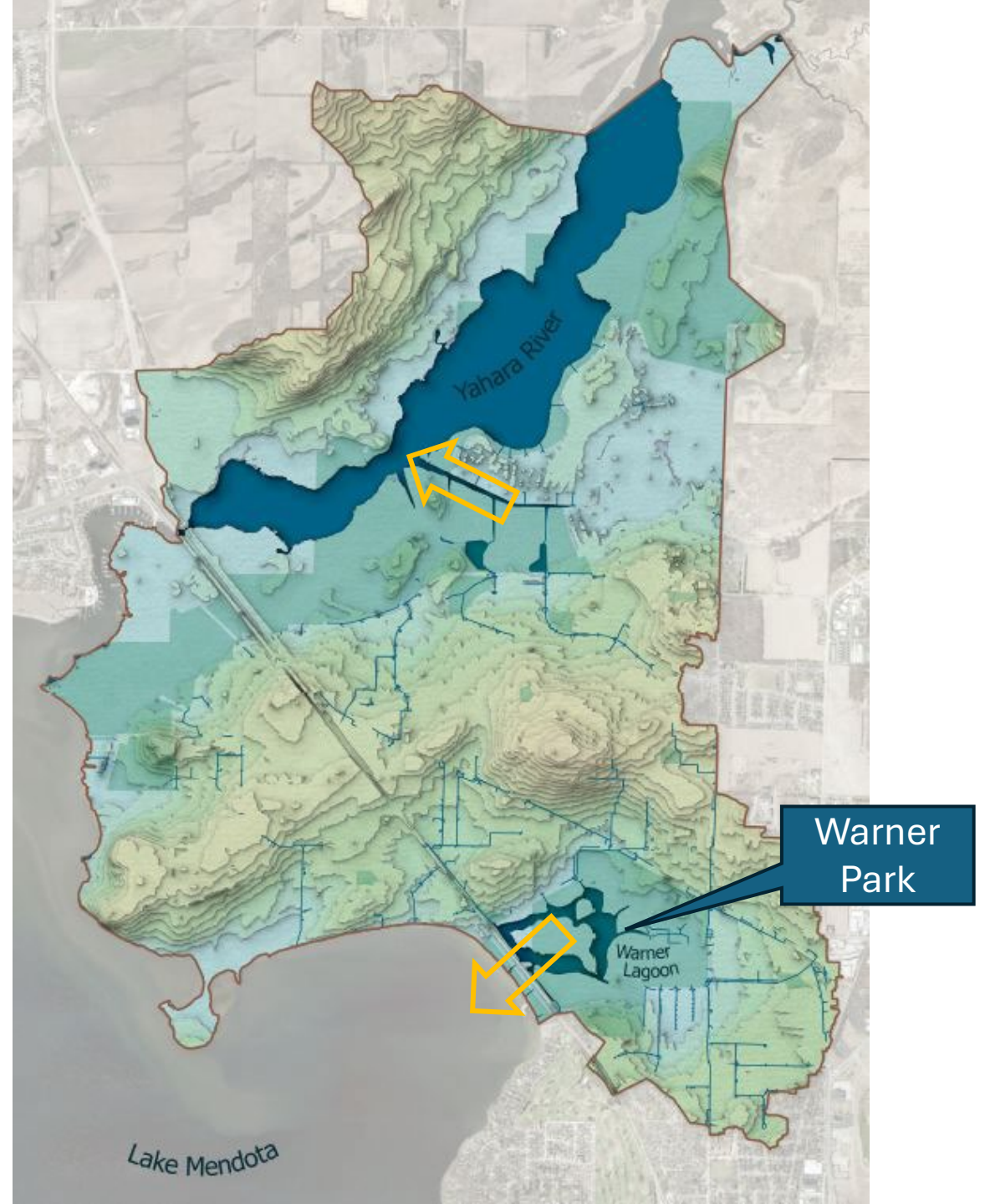
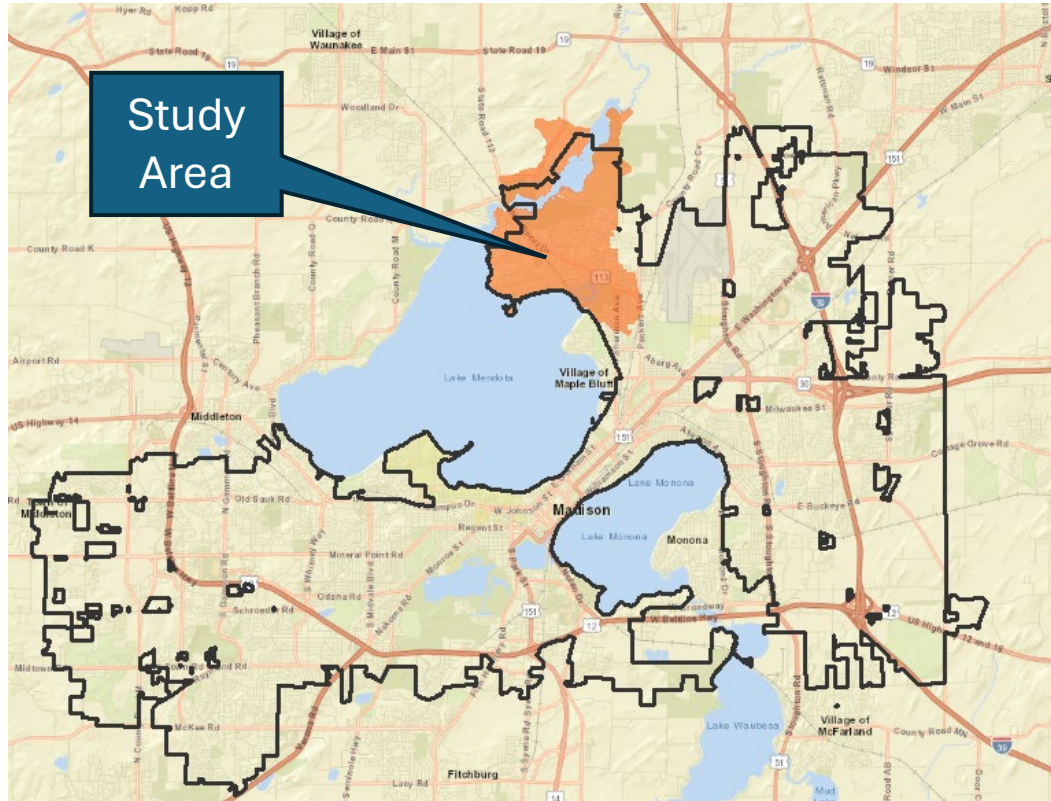
Warner Park & Cherokee Marsh Watershed Study Solutions

City of Madison Engineering Division
Board of Park Commissioners Meeting
4/15/26

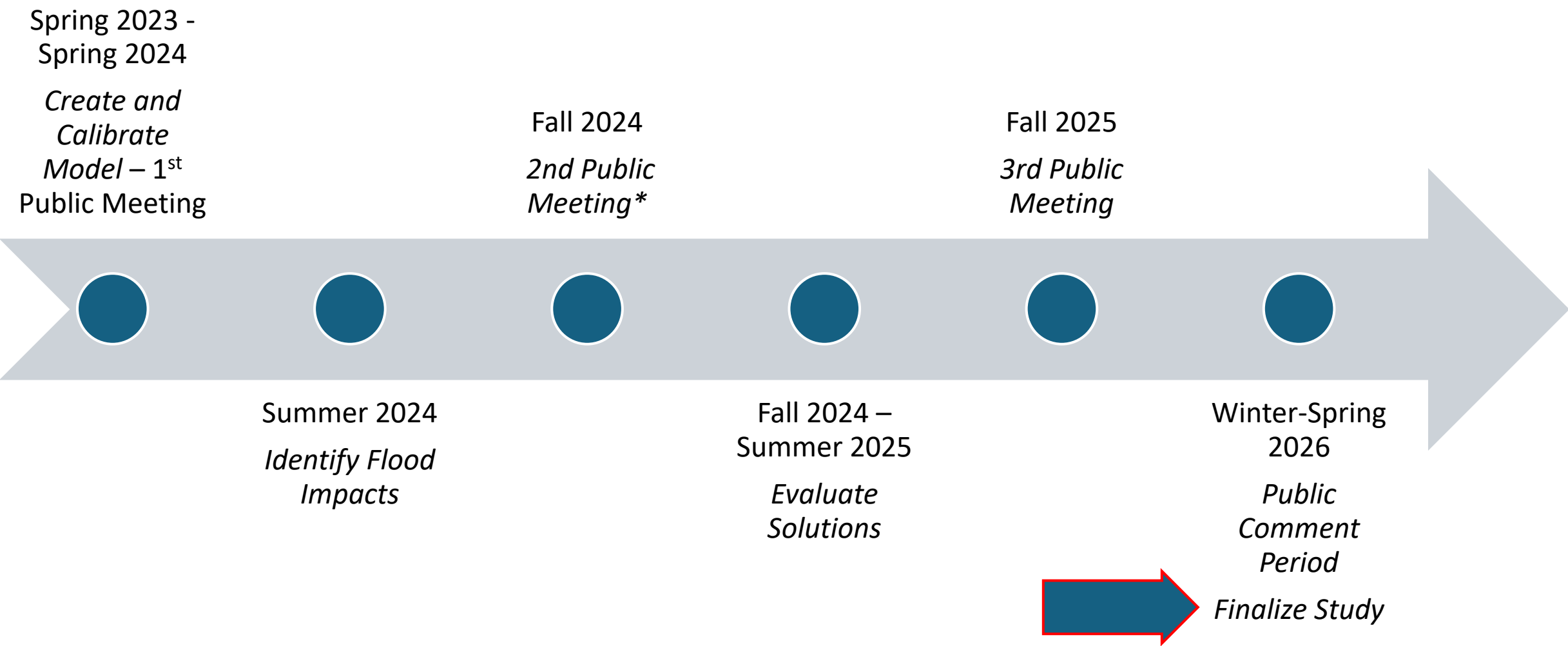
LINK TO FINAL REPORT

(Or can be found on project webpage: www.cityofmadison.com/WarnerCherokeeWatershed)

Warner Park and Cherokee Marsh Watershed



Schedule



Warner/Cherokee Watershed Study Milestones

- PIM 1: 7/20/23
- PIM 2: 10/21/24
- Public Works Improvements: 7/1/25
- Informational to BPC: 7/9/25
- PIM 3: 9/23/25
- Report Public Comment Period: 2/25/26-3/30/26
- BPC: 4/15/26
- BPW: 4/22/26
- FINAL REPORT: Can be found on project webpage:
www.cityofmadison.com/WarnerCherokeeWatershed

Public Outreach

29,479+ points of outreach or interactions for the Warner Park and Cherokee Marsh Watershed Study



Public Meetings
3 meetings, 175 participants



Postcards sent
27,920
*included notification of nearly flooding



Community Events to share information
5 events, ~132 conversations



Project Website
1,178 views



Email Lists
65 subscribers



Virtual Focus Groups
4 groups



Social Media Posts
5 related project posts

Watershed Study Performance Targets

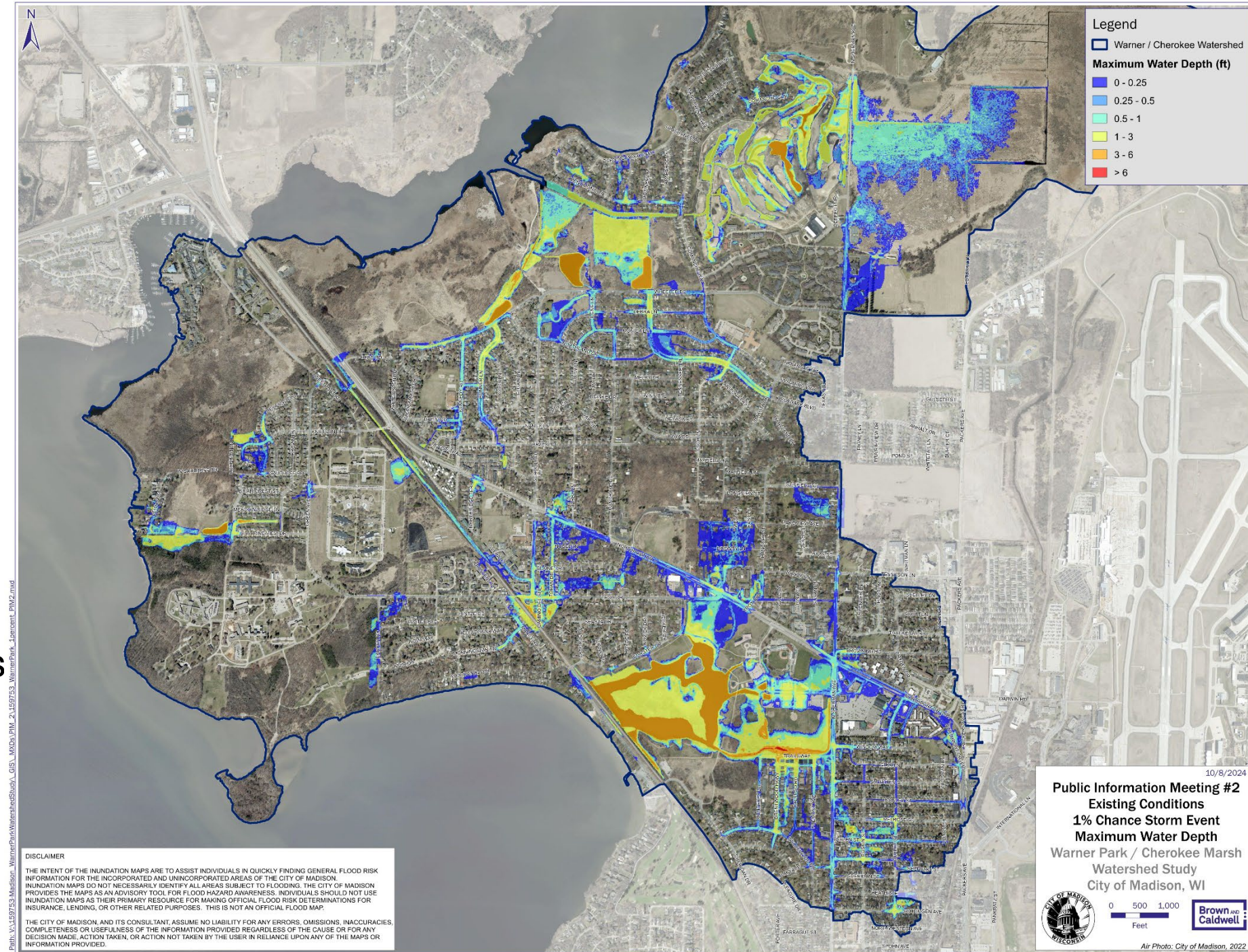
- 10% Event (*4.09" rain/24 hours*).
 - No surcharging of storm sewer onto roadway (storm sewer pipes are sized to carry storm)
- 4% Event (*5.01" rain/24 hours*)
 - Roads passable for emergency vehicles
- 1% Event (*6.66" rain/24 hours*)
 - No structure (home/building) flooding
 - No greenway crossing overflow
 - Safe overflow from enclosed depressions
- 0.2% Chance Event (*8.81" rain/24 hours*)
 - Safe conveyance of overflow



Tenney Park, Madison, WI

1% Chance (100-year) Existing Inundation Mapping

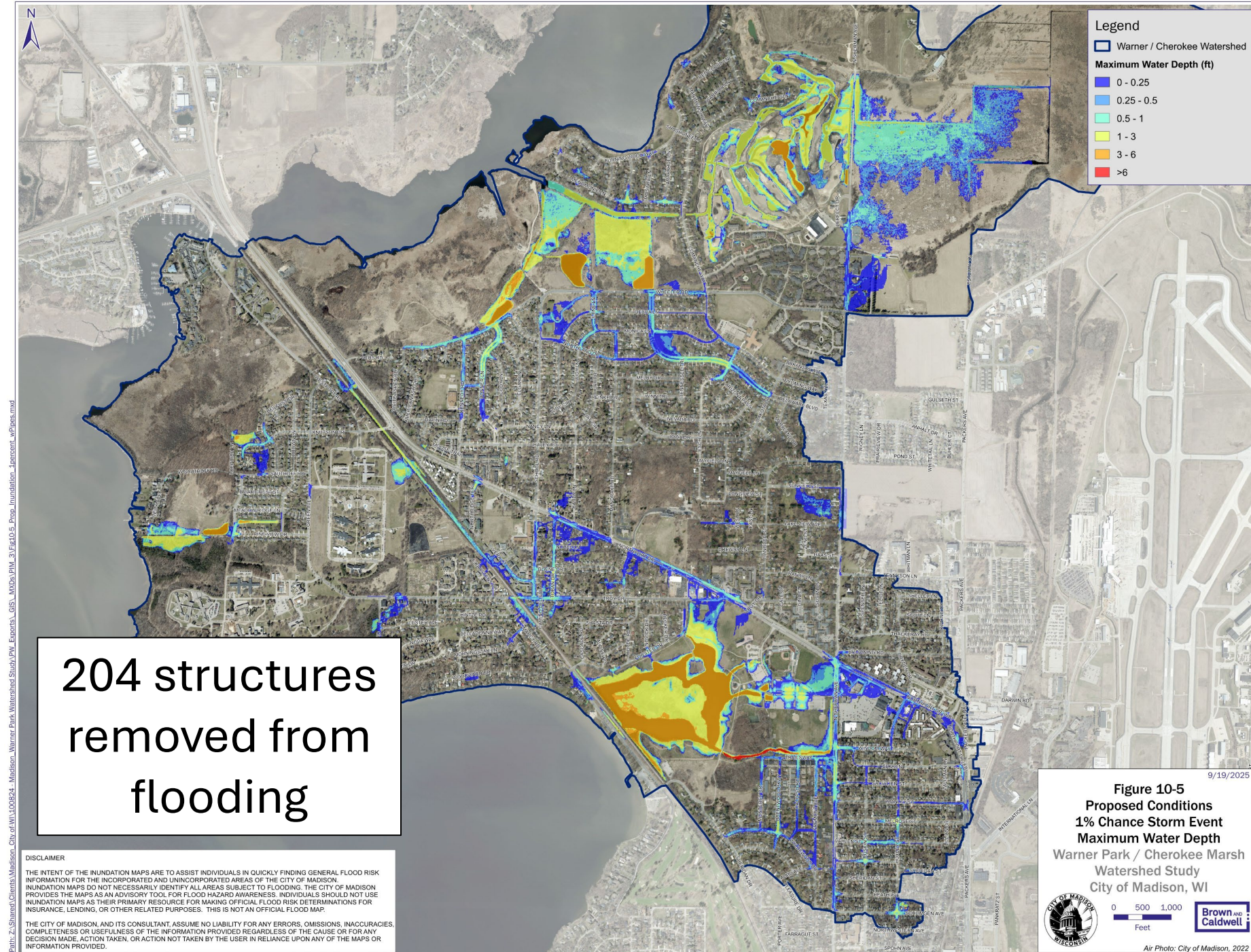
1% Chance Event
(6.66 inches in 24 hours)



1% Chance (100-year) Proposed Inundation Mapping

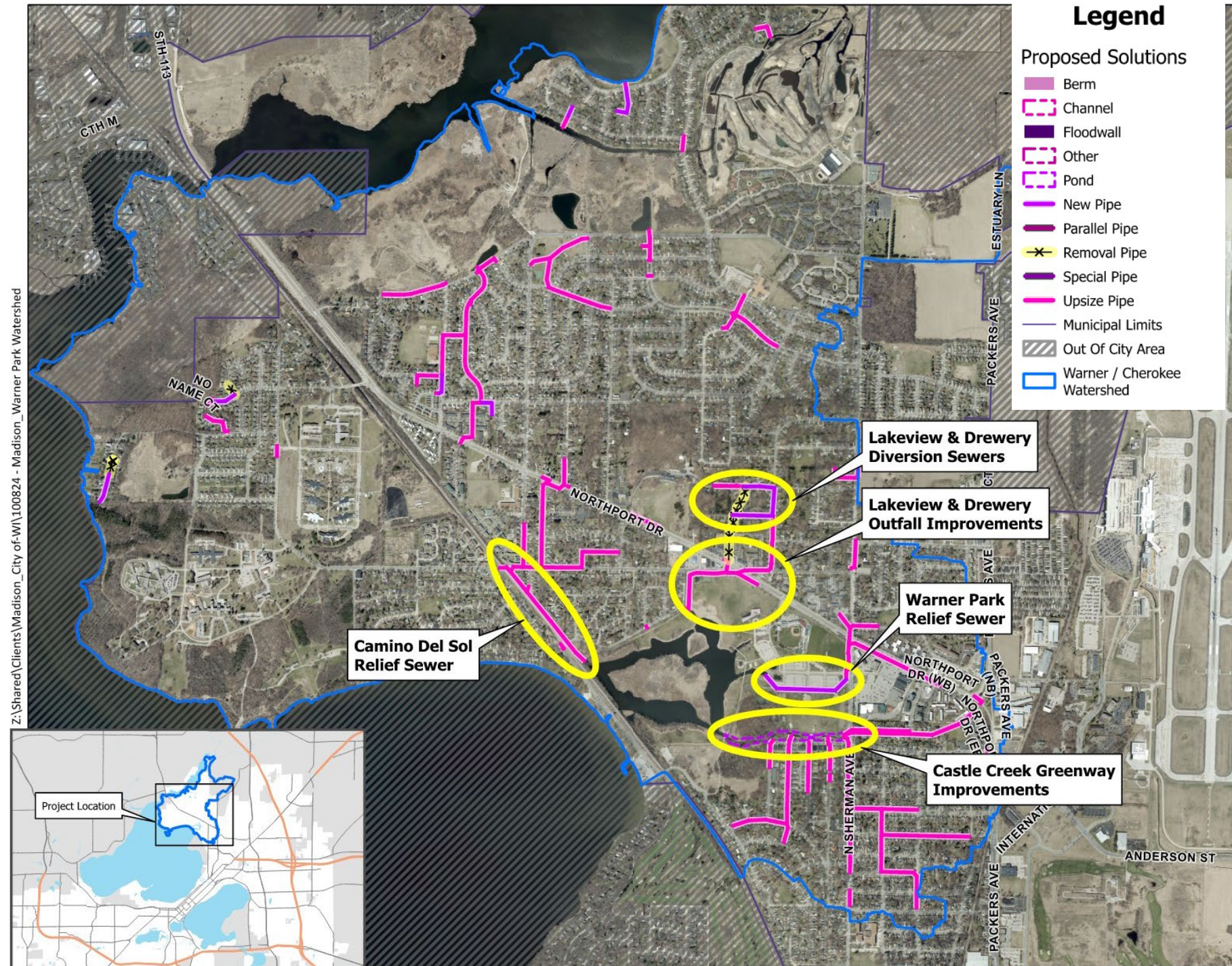
1% Chance Event
(6.66 inches in 24
hours)

204 structures
removed from
flooding



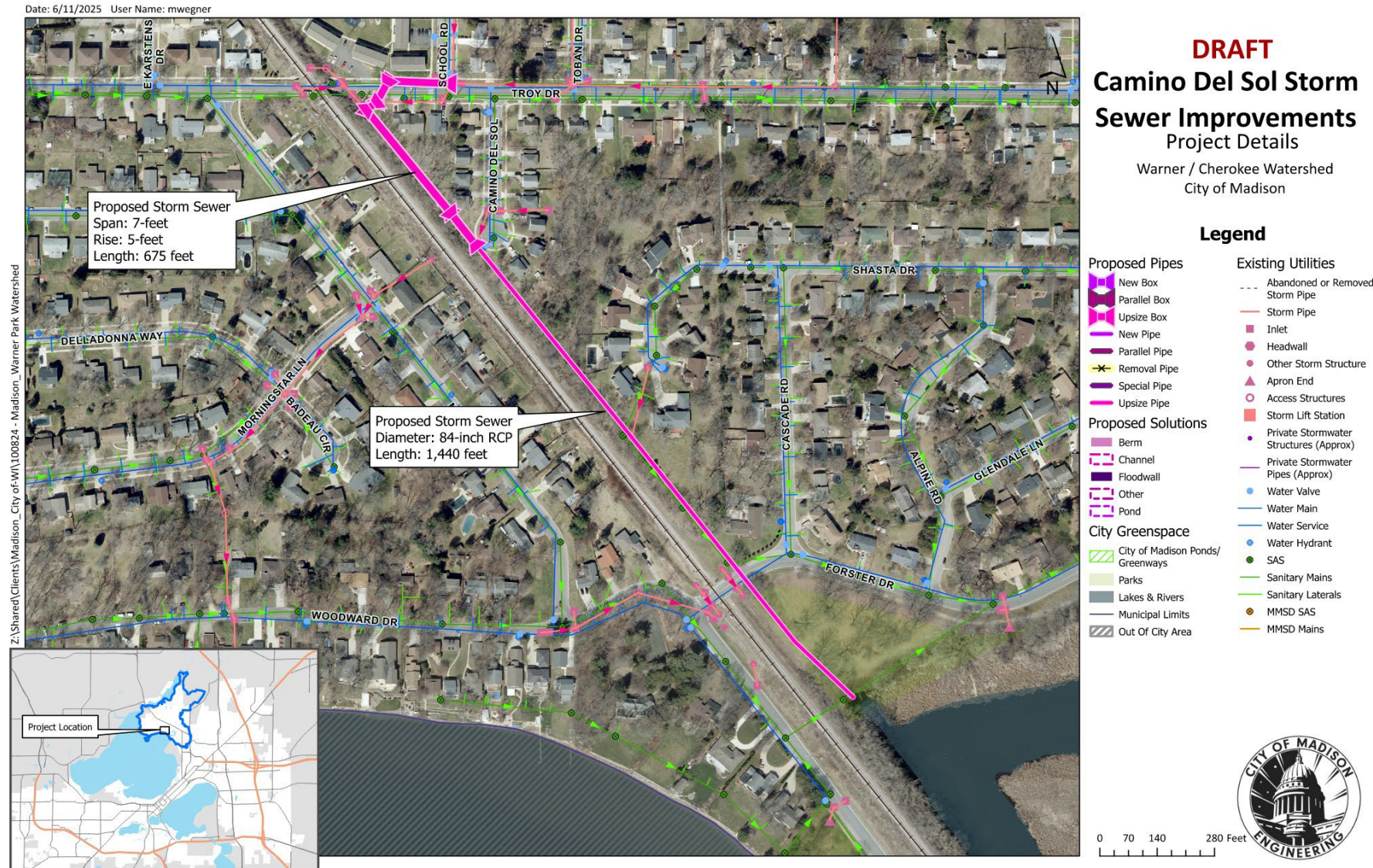
Proposed Solutions

- Local storm sewer improvements
- Camino Del Sol Relief Sewer
- Lake View & Drewery Diversion Sewers
- Warner Park Relief Sewer
- Castle Creek Greenway Improvements



Camino Del Sol Relief Sewer

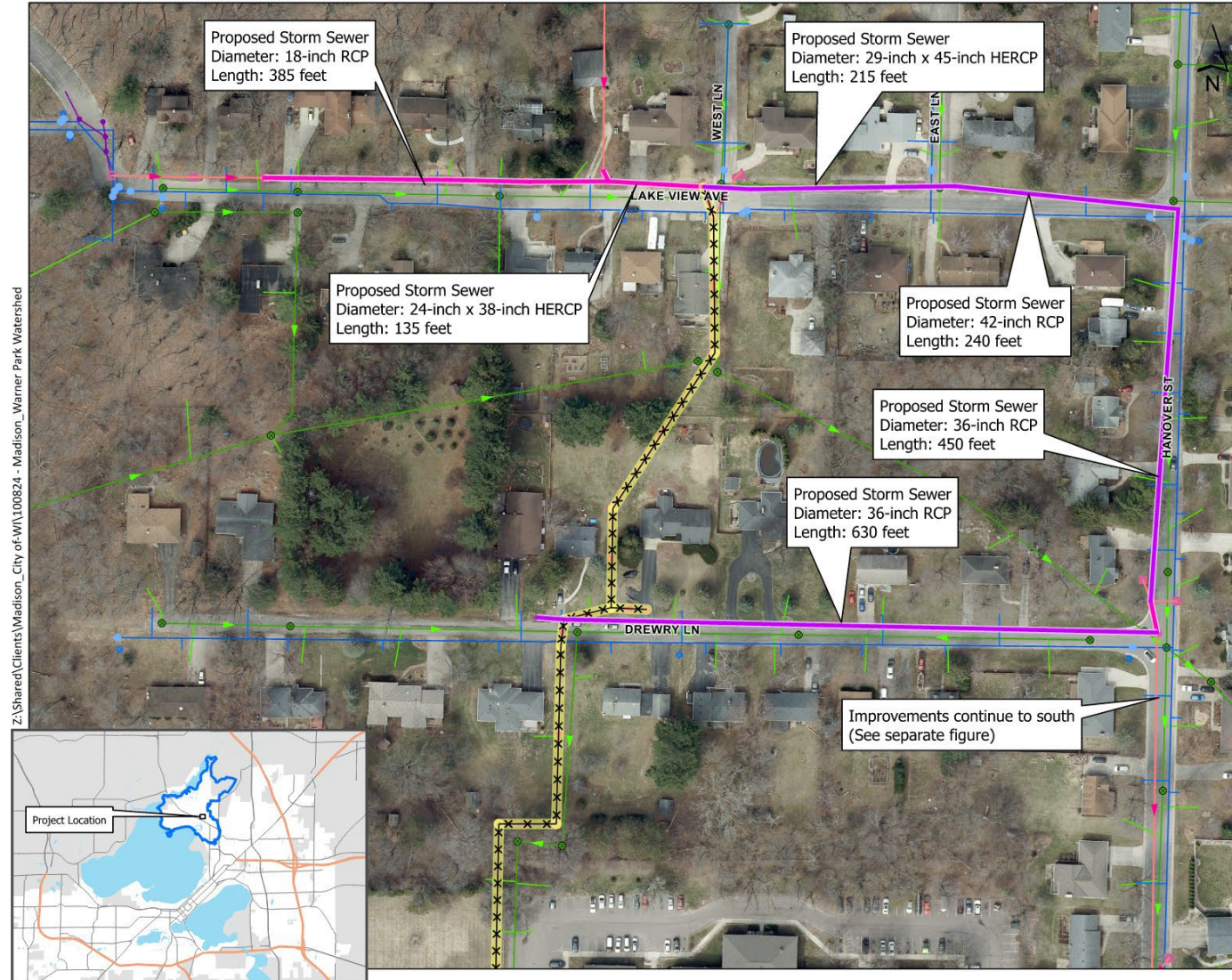
- Enlarge existing storm sewer from Troy Drive to Warner Lagoon
- Reduce flooding in Camino Del Sol cul-de-sac, Troy Dr, & surrounding streets



Lake View & Drewery Diversion Sewers

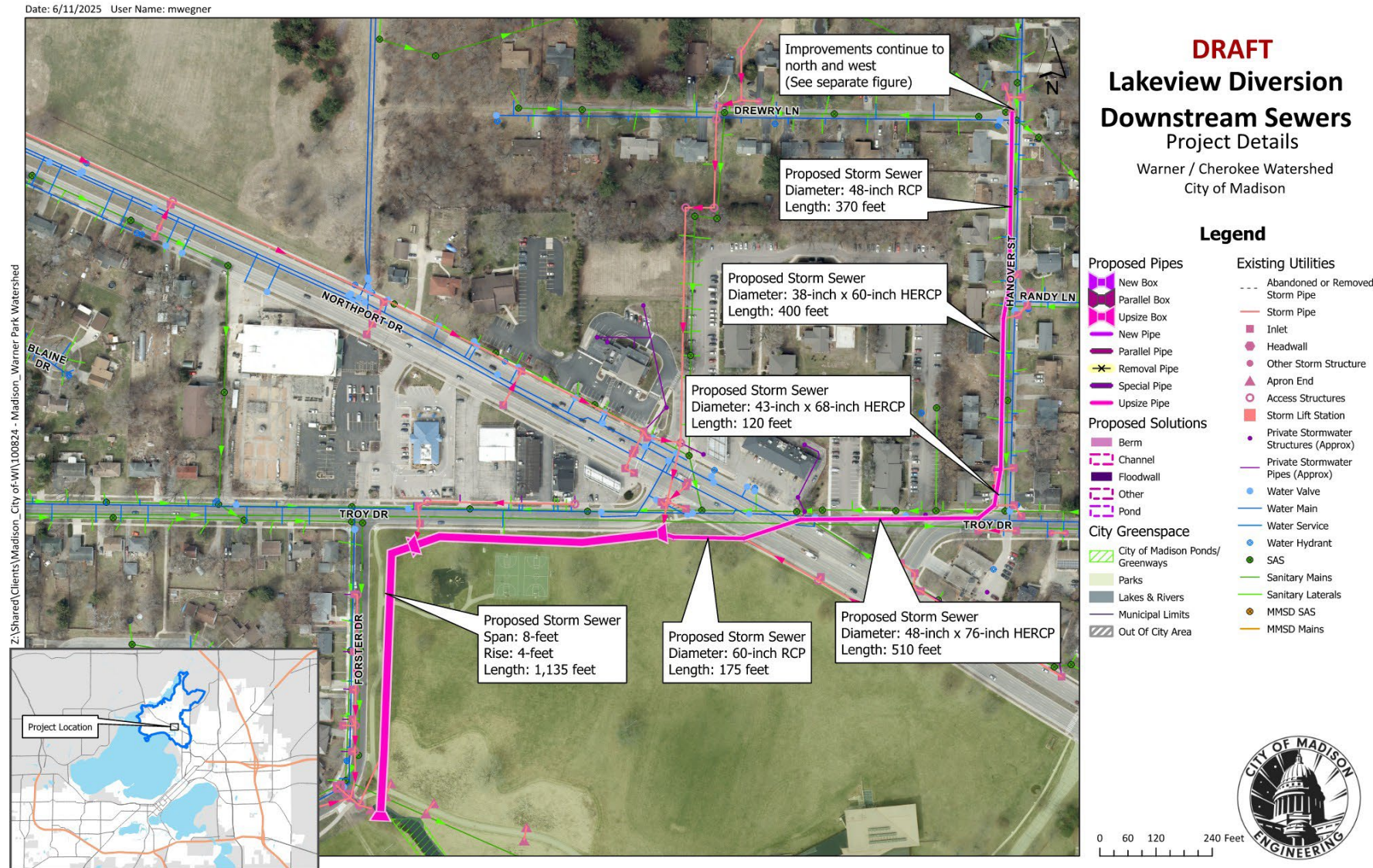
- Divert runoff to east along Lake View Ave & Drewery Ln
- In conjunction with road urbanization
- Coordination with other utilities
- Investigate abandonment of storm sewer outside ROW

Date: 6/20/2025 User Name: mwegner

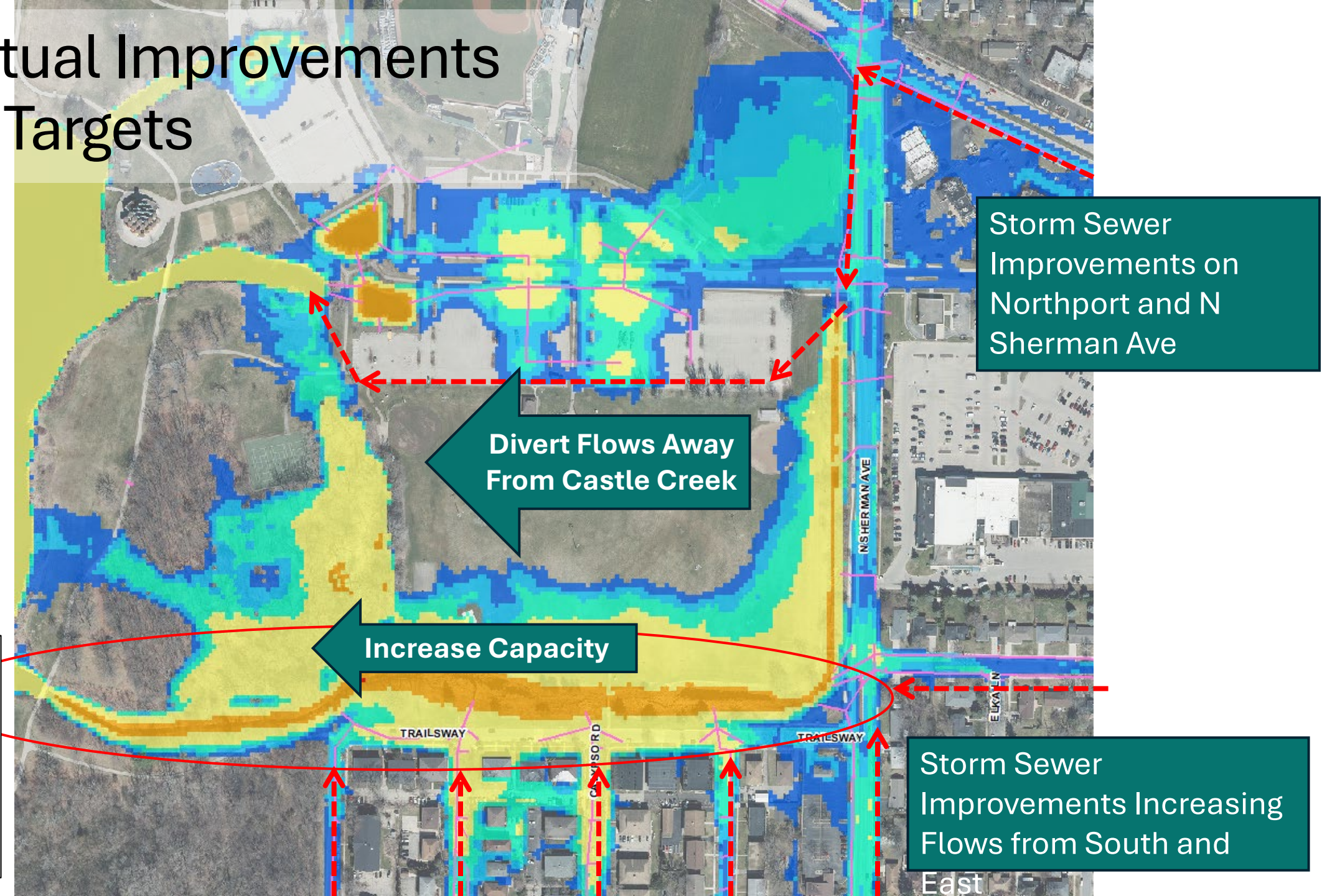
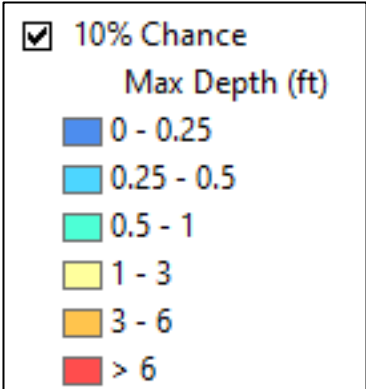


Lakeview & Drewery Downstream Sewer

- Continue improvements downstream
- Convey added flow & mitigate existing flooding

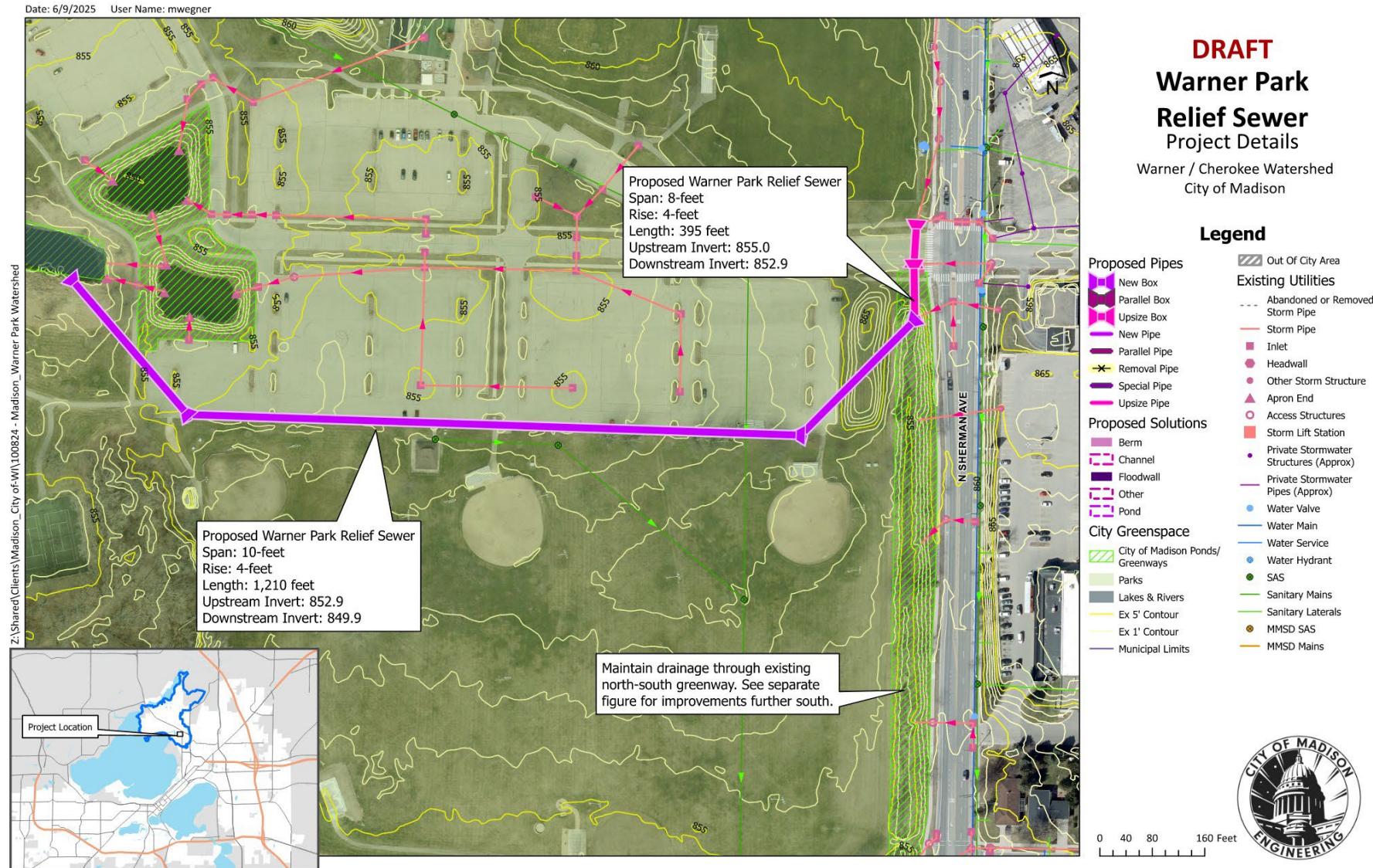


Conceptual Improvements to Meet Targets



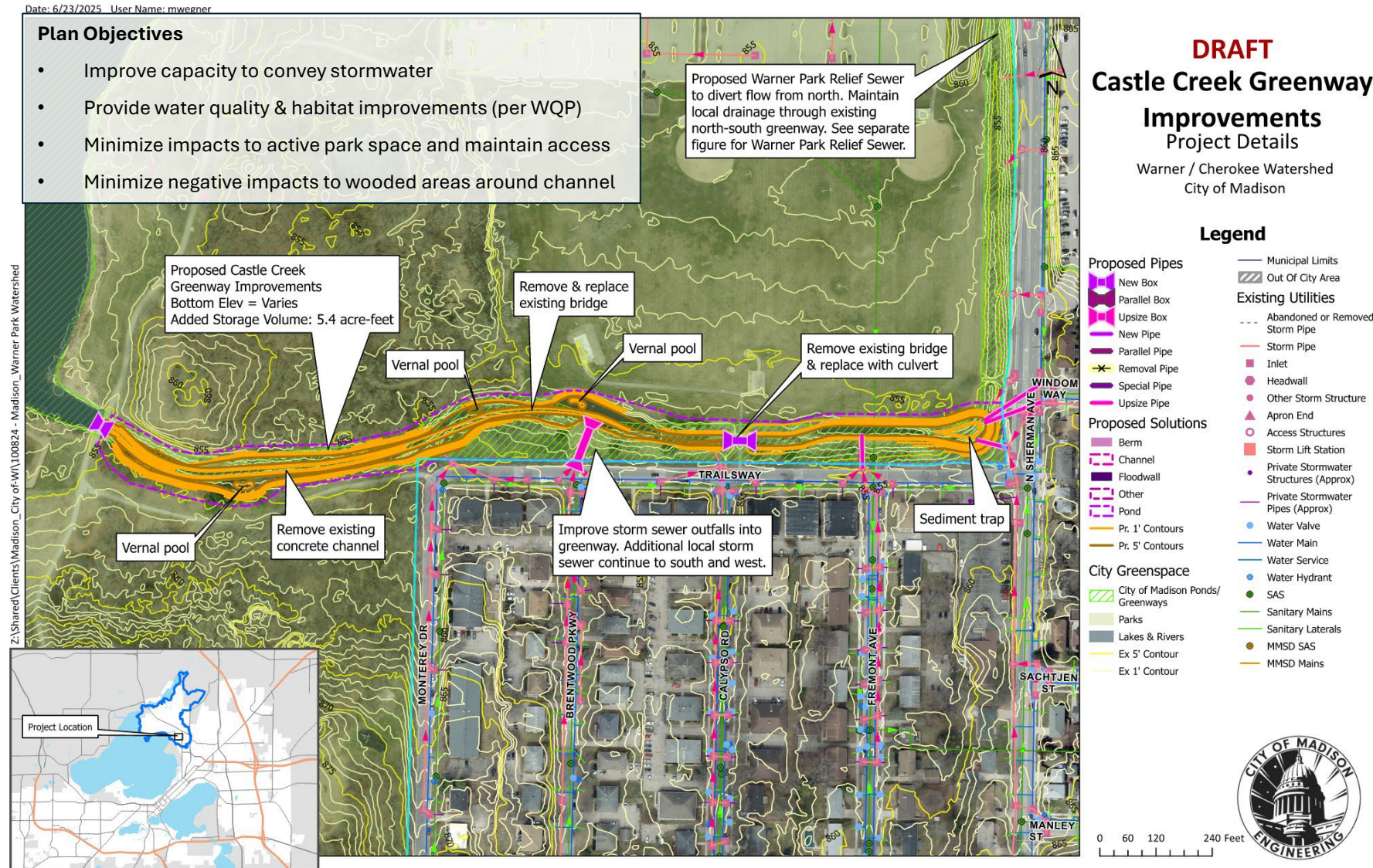
Warner Park Relief Sewer

- Divert runoff from north of park entrance into new relief sewer into Warner Lagoon
- Reduce flow reaching Castle Creek Greenway (to south)



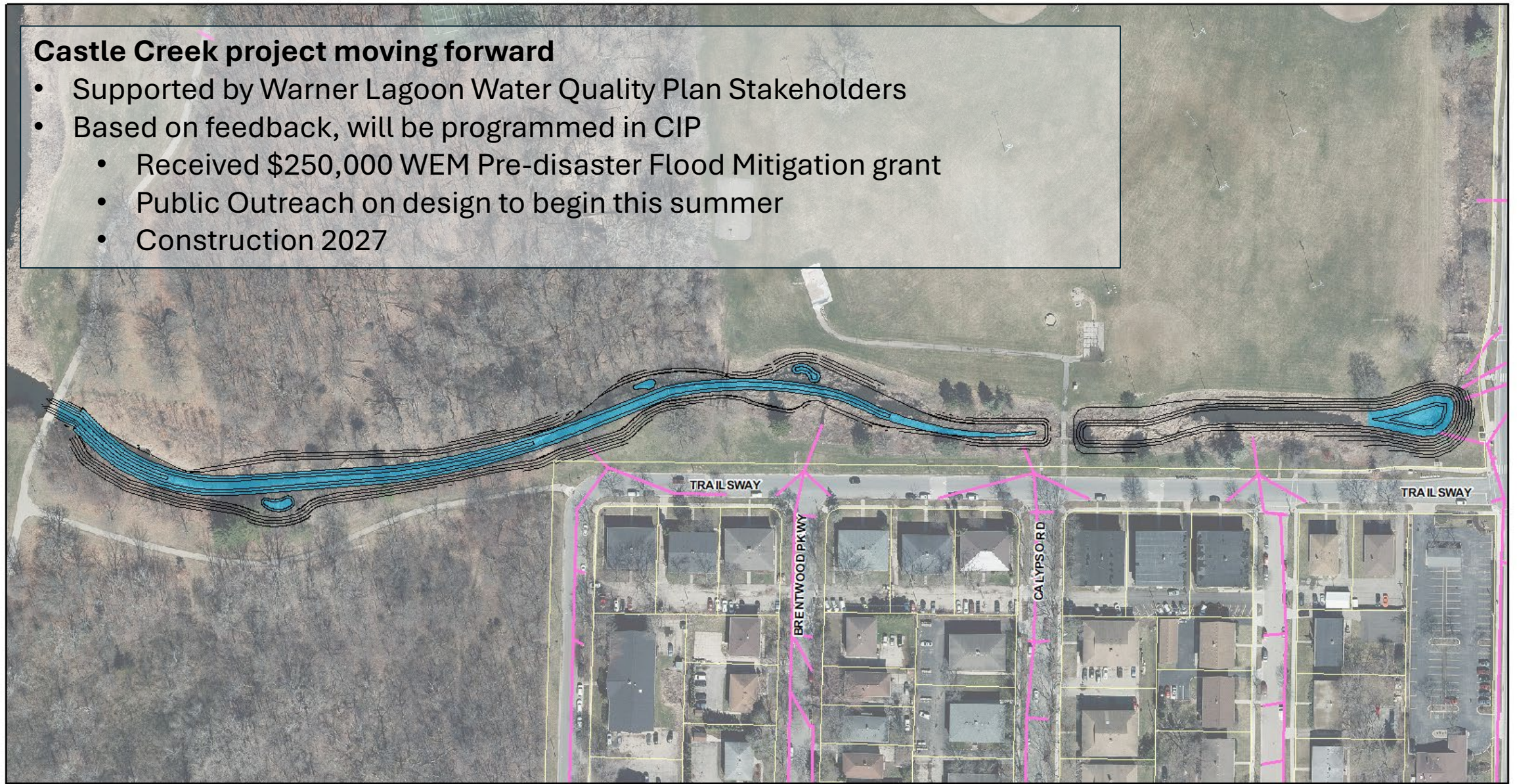
Castle Creek Greenway Improvements

- Re-grade greenway to create deeper channel within existing corridor
 - Add floodplain and vernal pools for improved habitat
- Reduce flooding along Trailsway and adjacent streets
- Incorporates concepts from the approved Warner Lagoon Water Quality Plan (2021)

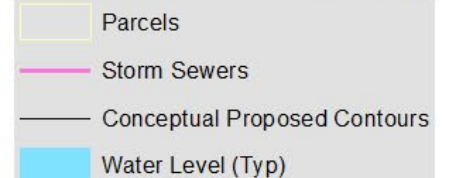


Castle Creek project moving forward

- Supported by Warner Lagoon Water Quality Plan Stakeholders
- Based on feedback, will be programmed in CIP
 - Received \$250,000 WEM Pre-disaster Flood Mitigation grant
 - Public Outreach on design to begin this summer
 - Construction 2027



0 75 150 300 Feet



Cost of Standalone Projects

Project	Estimated Cost
Castle Creek Greenway Improvements	\$2.35 million
Warner Park Relief Sewer	\$3.87 million
Camino Del Sol Relief Sewer	\$3.90 million
Lake View & Drewery Diversion Sewers	\$1.81 million
Lake View Diversion Downstream Sewer	\$4.43 million

Total = \$16.36M

Solution Impacts

Table ES-1. Existing Conditions and Proposed Solutions Results Compared to Flood Mitigation Targets

Warner Park & Cherokee Marsh Watershed Study
City of Madison, WI

Design Storm Events	Target	Watershed-wide Metric	Existing Conditions	Proposed Solutions
10% Chance Event	No Surcharging onto the street	16.1 miles of storm sewer	43% of modeled storm sewers surcharge onto street	9% of modeled storm sewers surcharge onto street
4% Chance Event	Centerline of street remains passable	49.8 miles of road	7% of roads with more than 0.5-ft of water	<1% of roads with more than 0.5-ft of water
1% Chance Event	No structure flooding	5,659 structures	232 (4%) structures impacted	25 (<1%) structures impacted
	Greenway crossings overtopped	2 greenway crossings	0 (100%) greenway crossings overtopped	0 (100%) greenway crossings overtopped
0.2% Chance Event	Safely convey stormwater	5,659 structures	443 structures impacted	203 structures impacted

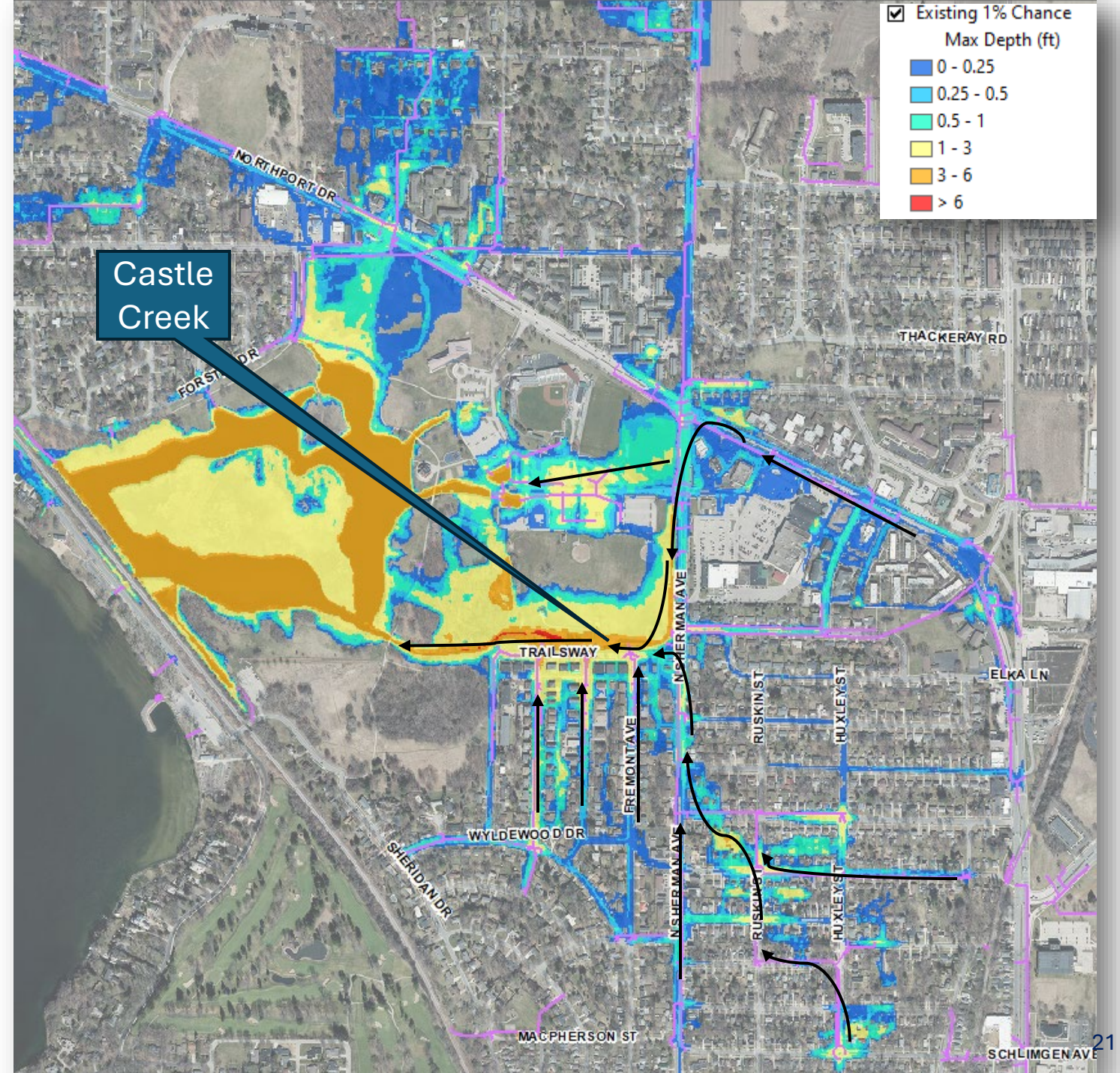
Questions?

Additional slides for reference only

Warner Park and Castle Creek Drainage Area

Existing Conditions 1% Chance Event (6.66" in 24 hr)

Castle Creek is a significant limitation in the drainage system. Several areas that flood drain out through Castle Creek and Warner Park



☒ Existing 1% Chance

Max Depth (ft)

0 - 0.25

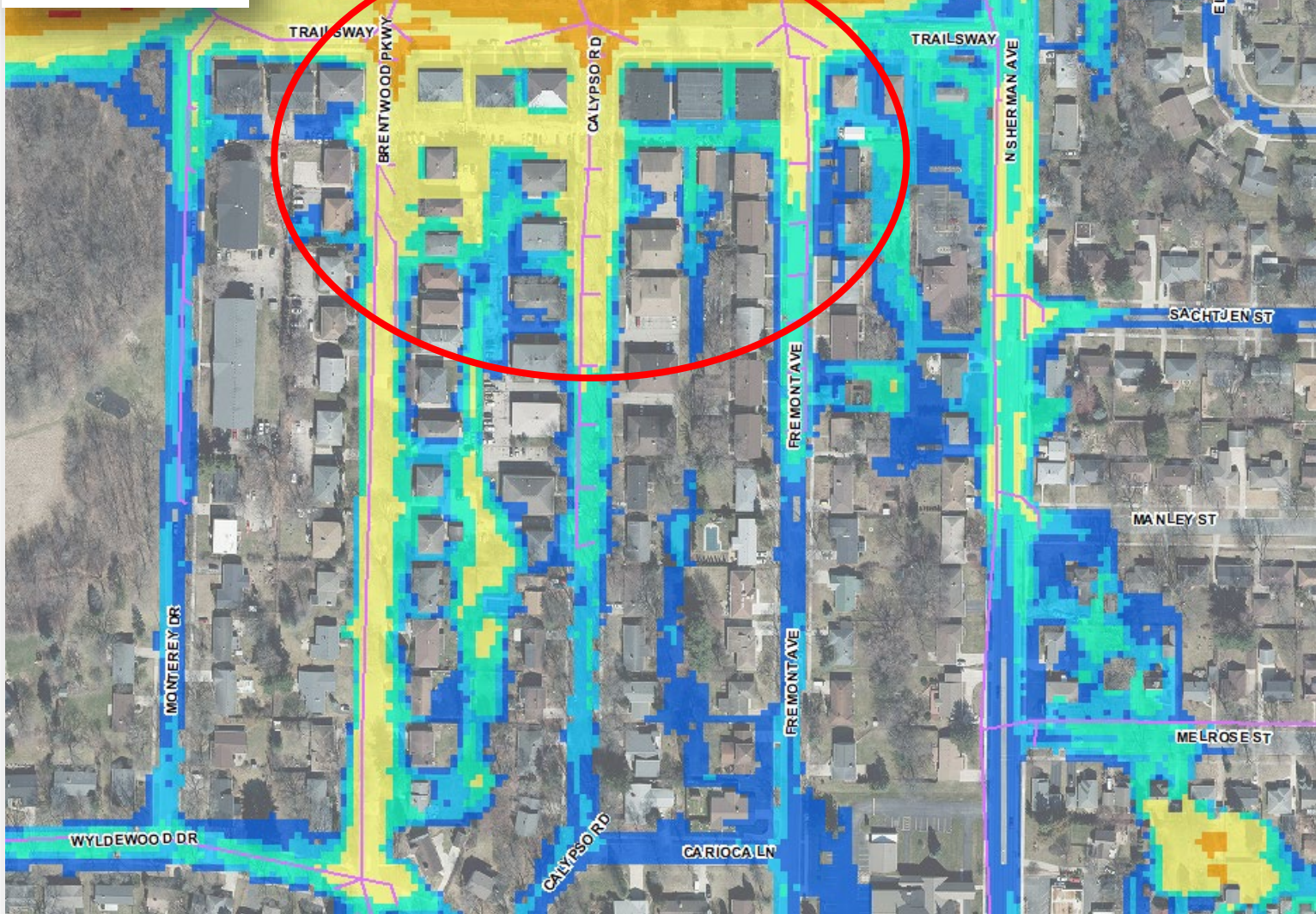
0.25 - 0.5

0.5 - 1

1 - 3

3 - 6

> 6



Brentwood Neighborhood

- Several multi family units flooding in 1% annual chance storm
- Building's parking lots flooded 1-3' deep
- Trailsway, Brentwood Pkwy, Calypso Rd flooding approaching 3' deep
- Flooding >1' deep on N Sherman Ave

Castle Creek Current Conditions



March 2025



March 2025

Castle Creek Current Conditions - Cunette



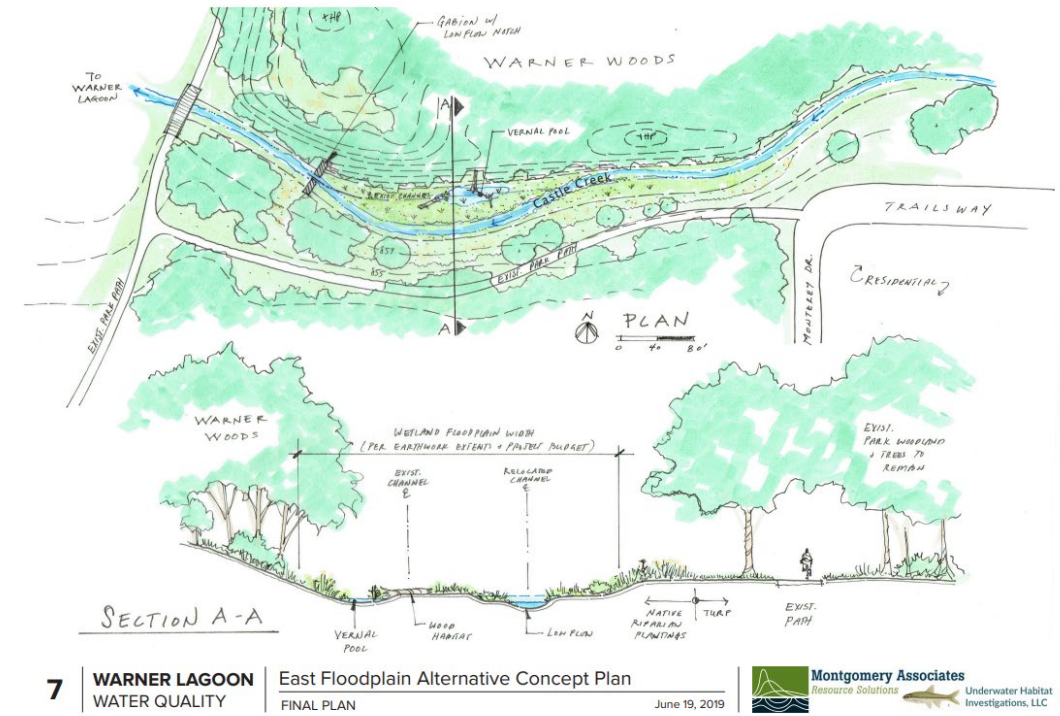
March 2023

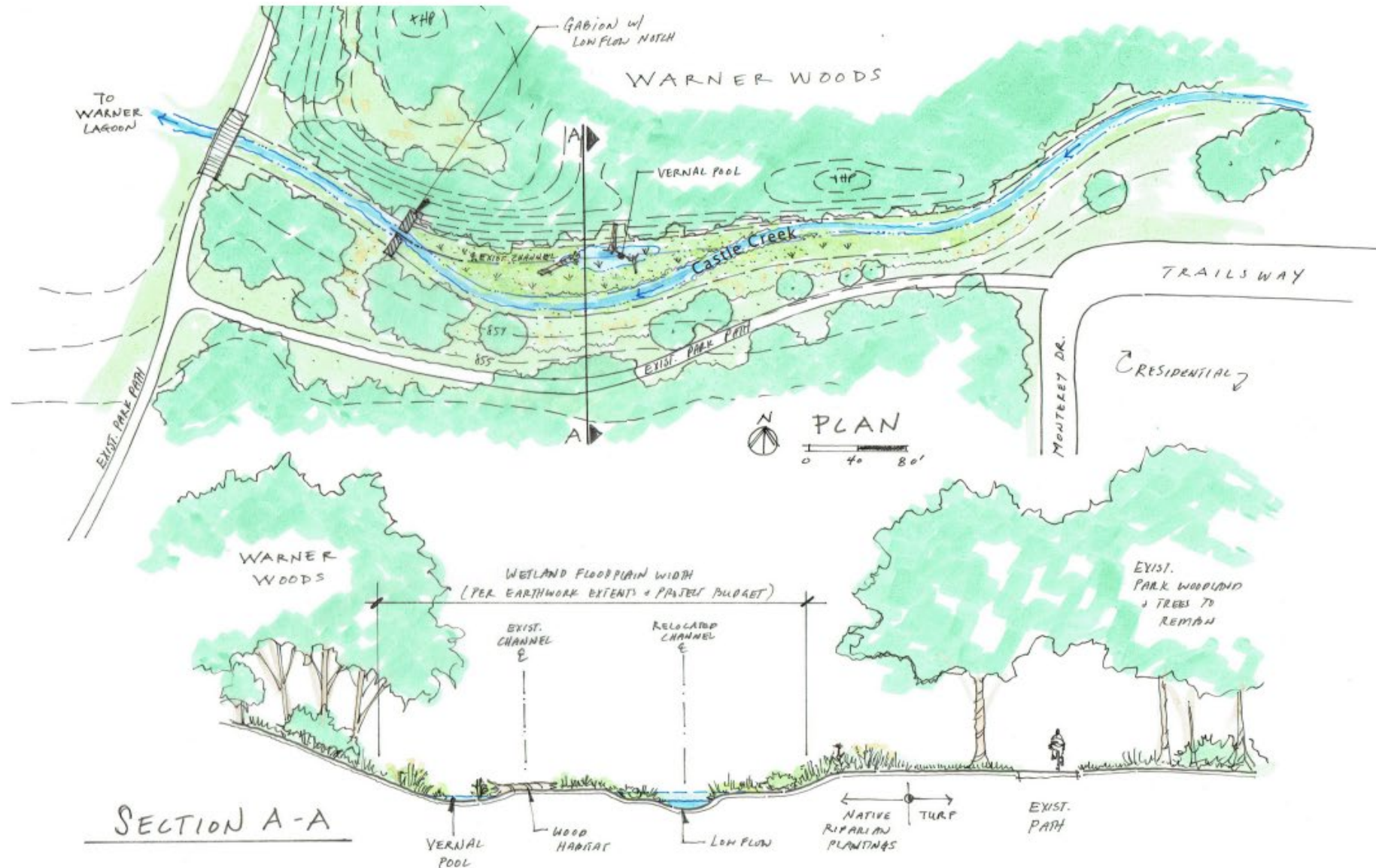


March 2025

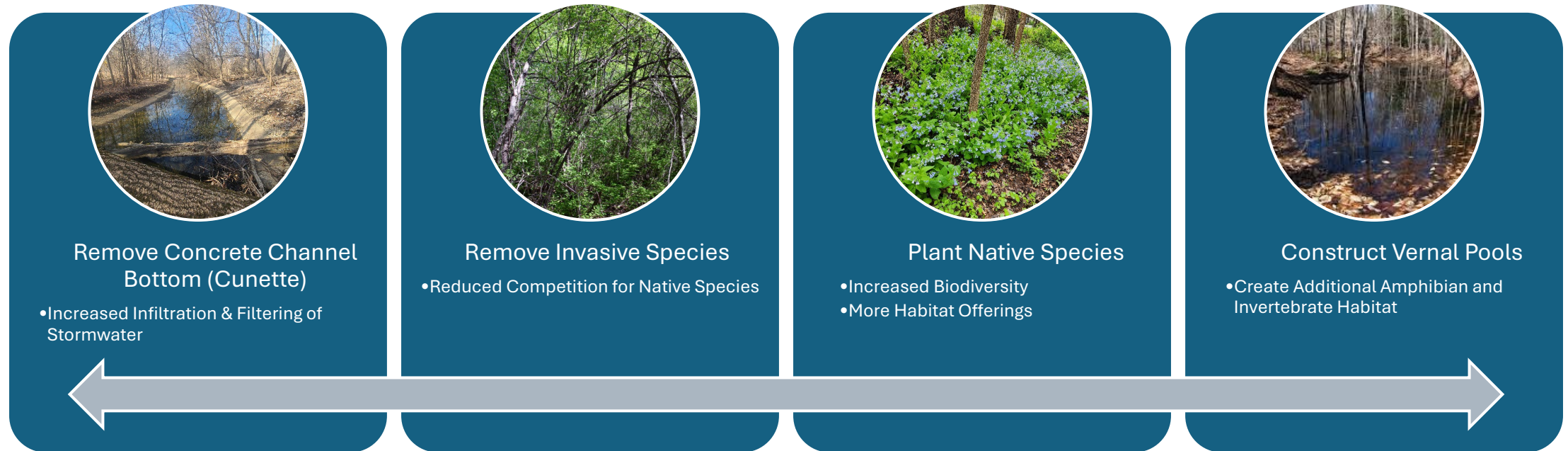
Warner Lagoon Water Quality Plan (2016-2021)

- Objectives:
 - Maintain or Improve Recreational Access
 - Improve Water Quality
 - Habitat Maintenance and Improvement
 - Increase Educational Opportunities
- Stakeholders
 - Wild Warner Park
 - Yahara Fishing Club
 - Dane County Conservation League
 - Clean Lakes Alliance
 - Alders from Districts 12 and 18
 - City of Madison Engineering Division
 - City of Madison Parks Division
 - WDNR
 - Individual Residents





Ecological Benefits & Potential Restoration Approaches



- Build on the Parks Green Team work removing invasives around the channel
- Plant desirable native species appropriate for the given conditions
- Conduct critical ongoing maintenance during native species establishment