



John Nolen Drive Watershed Study: Final Report Acceptance

City of Madison Engineering Division
Board of Public Works Meeting
April 08, 2026

[Link to Final Report](#)

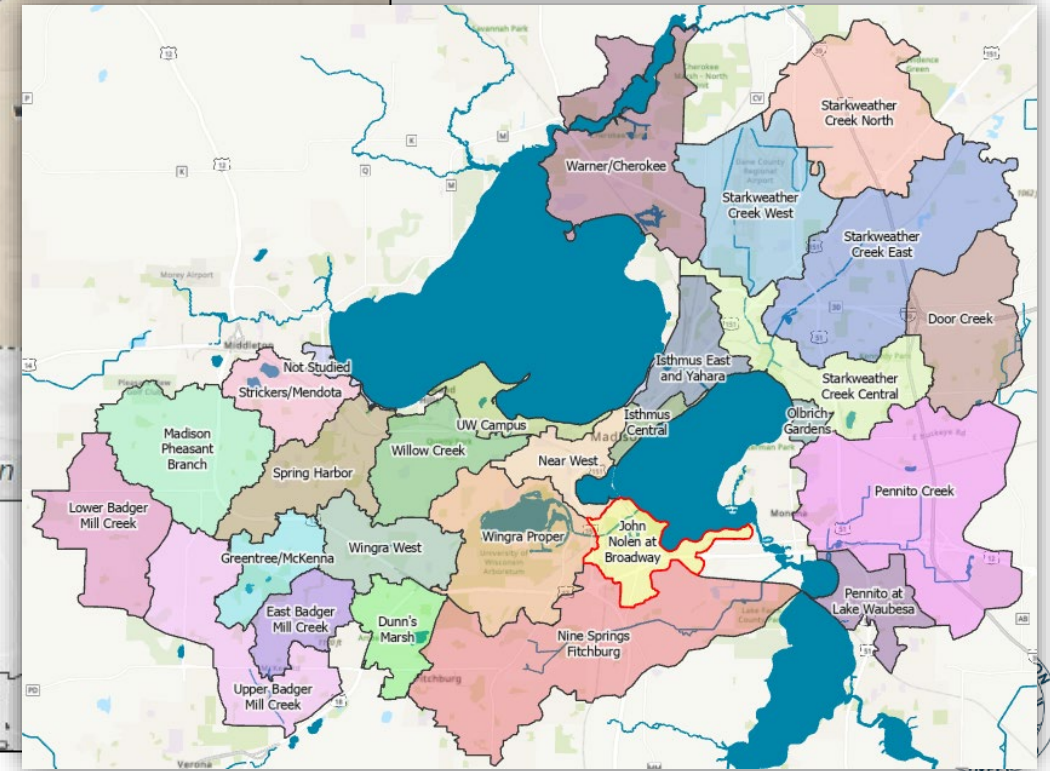
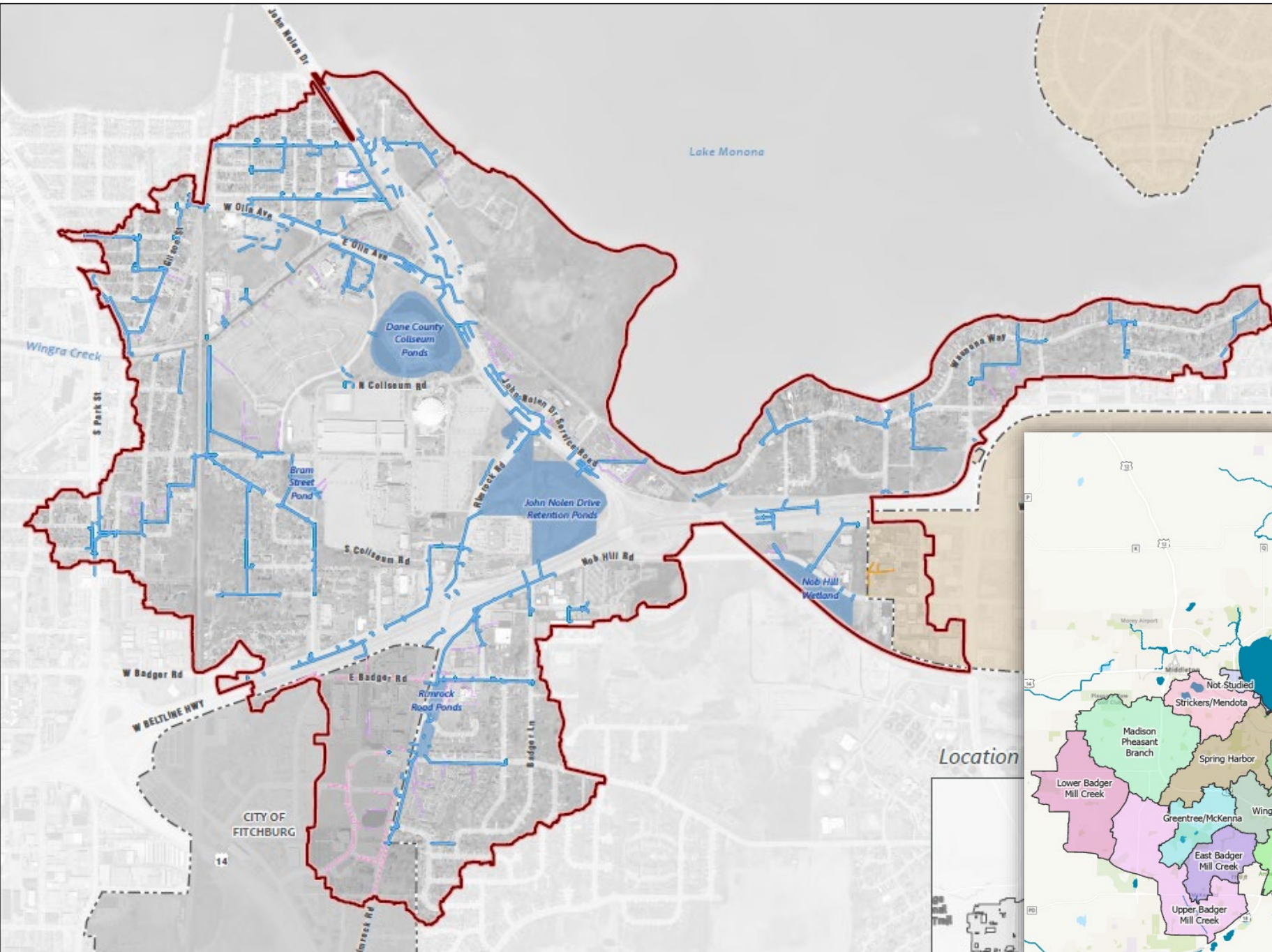
(Or can be found on the project webpage:

[https://www.cityofmadison.com/engineering/
projects/john-nolen-drive-watershed-study](https://www.cityofmadison.com/engineering/projects/john-nolen-drive-watershed-study))

CITY OF MADISON

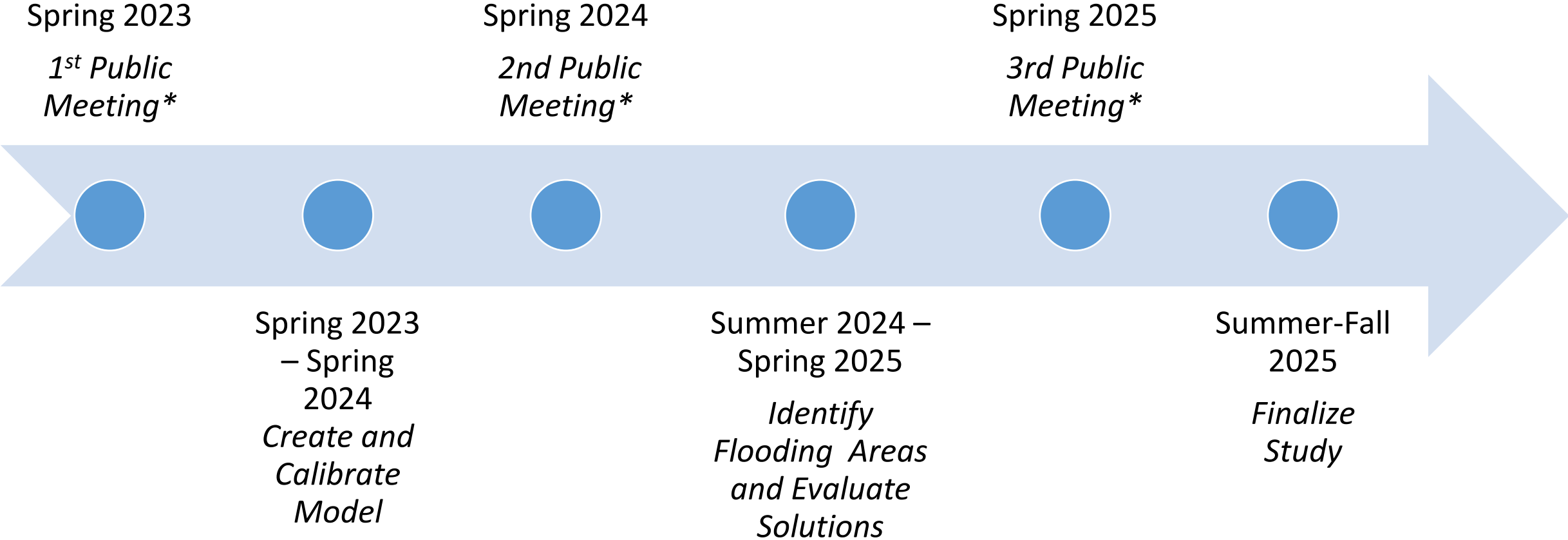


Study Location



Location

Schedule



**Presentations from all three PIM's can be found on the Watershed Study Website*



John Nolen Drive Watershed Study Milestones

- PIM 1: 5/30/23
- PIM 2: 4/24/24
- Public Works Improvements: 2/6/25
- Informational to BPC: 3/12/25
- PIM 3: 3/18/25
- Report Final Draft Finished: 9/2/25
- Report Public Comment Period: 9/17/25 – 10/20/25
- BPC: 11/5/25
- BPW: 4/8/26
- FINAL REPORT:

[https://www.cityofmadison.com/engineering/documents/projects/John Nolen Watershed Study Report for Public Comment_20250902.pdf](https://www.cityofmadison.com/engineering/documents/projects/John_Nolen_Watershed_Study_Report_for_Public_Comm ent_20250902.pdf)

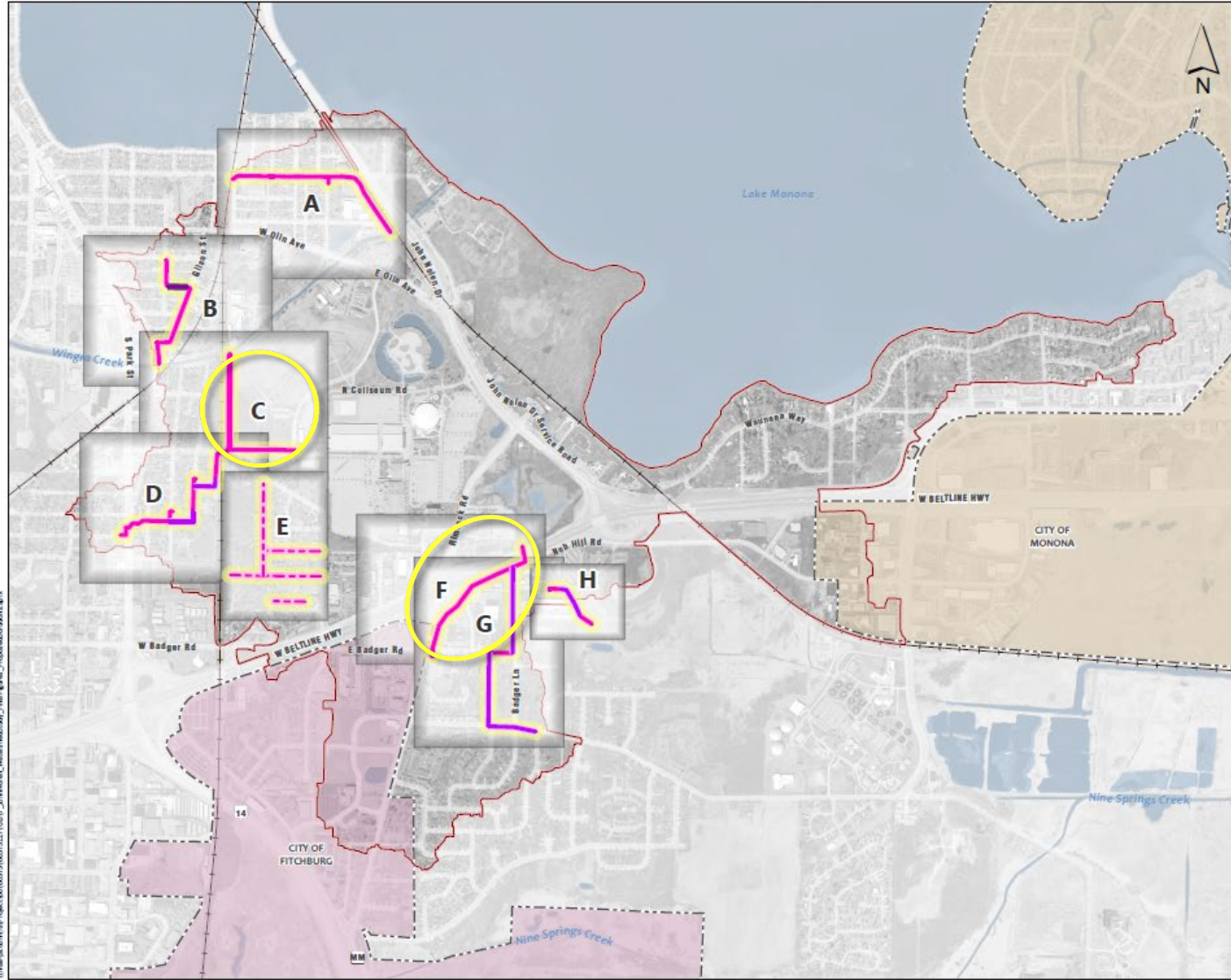


Watershed Study Performance Targets

- 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



Recommended Solutions Index

Figure 26

John Nolen Watershed Study
City of Madison

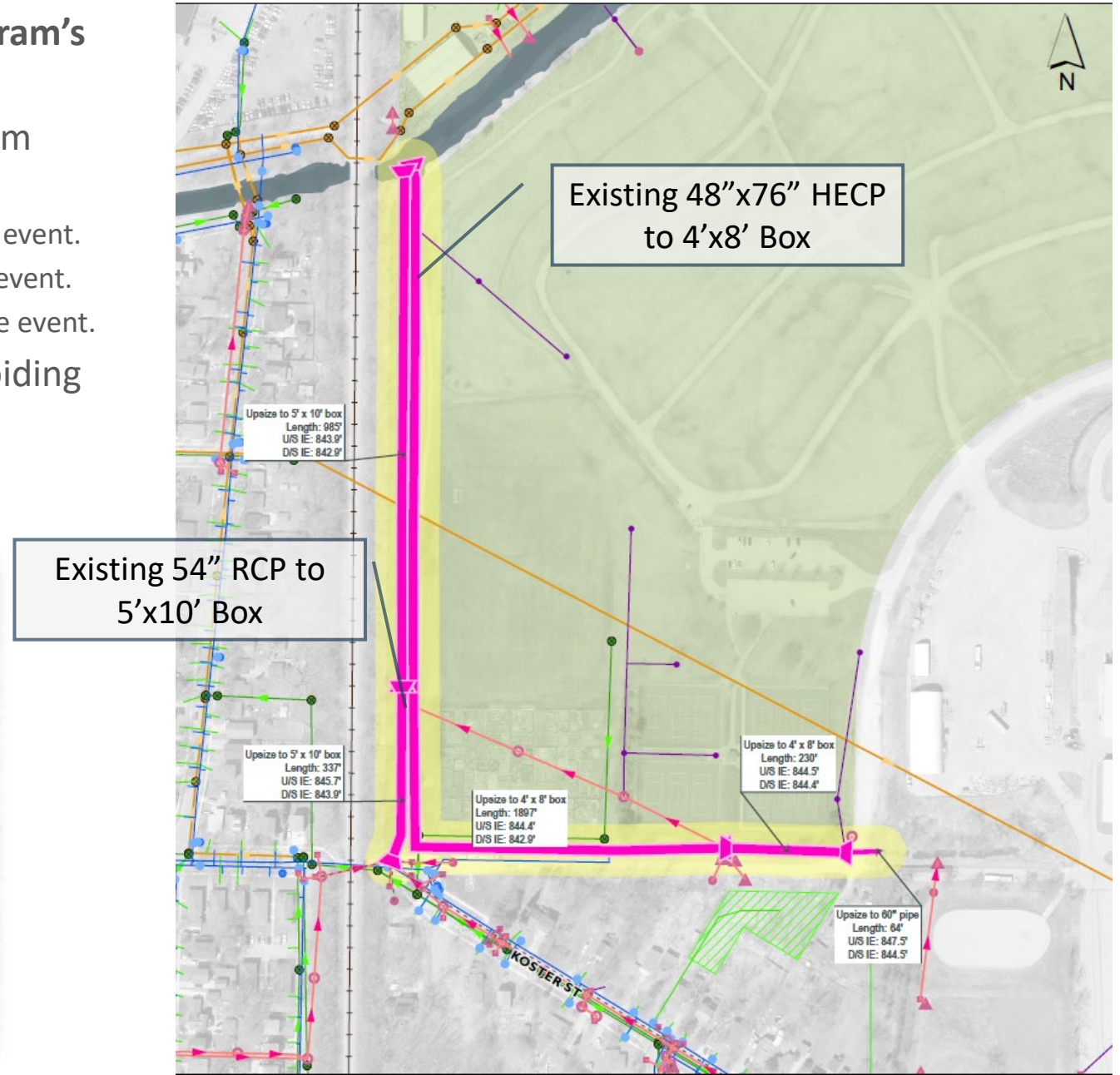
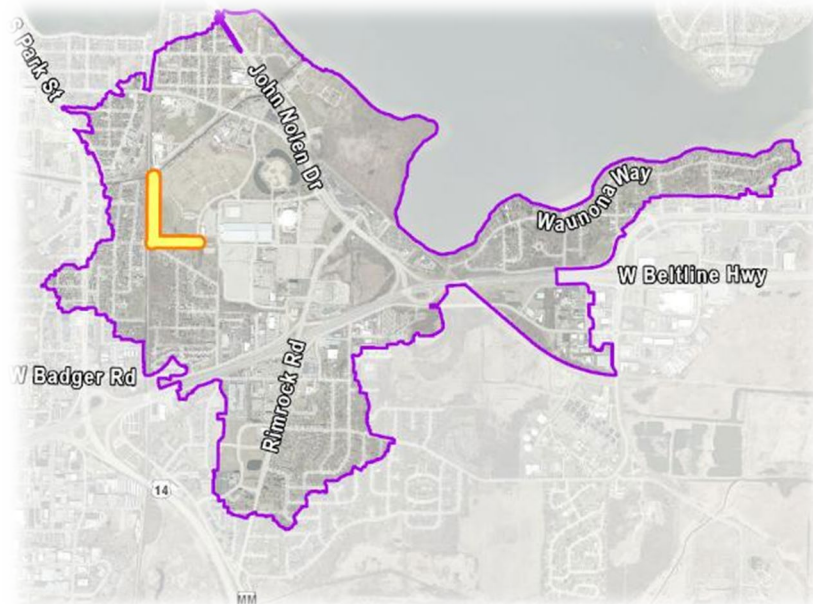
- A. E Lakeside St/Sayle St*
- B. Gilson St*
- C. Bram to Wingra and Alliant Energy Outlet
- D. Brams Addition*
- E. Nygard and Sunstrom St*
- F. Rimrock Pond Outlet
- G. Badger Lane*
- H. Holtzman Rd*

*Local sewer projects
(anticipated to be timed with
street reconstruction)



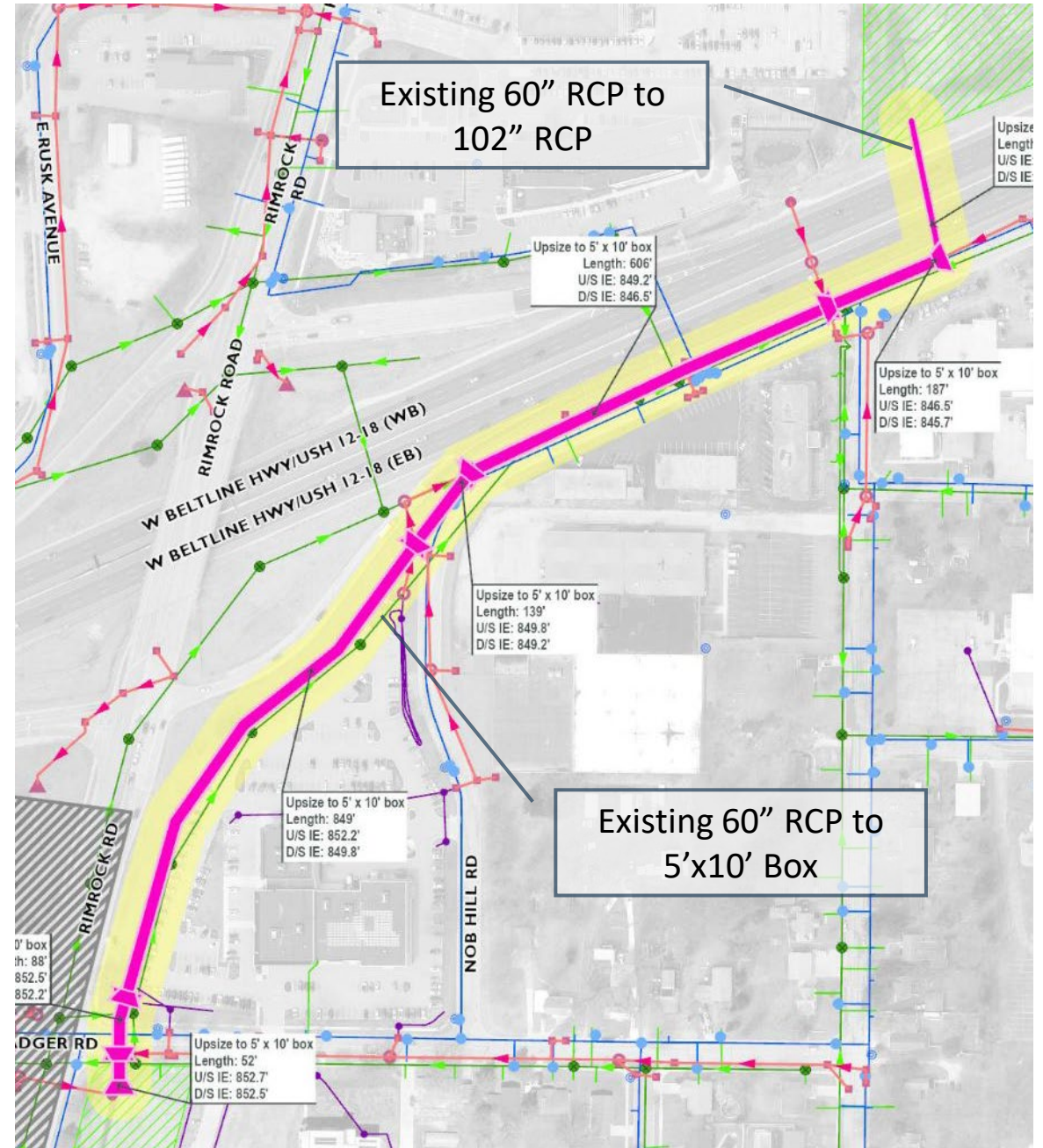
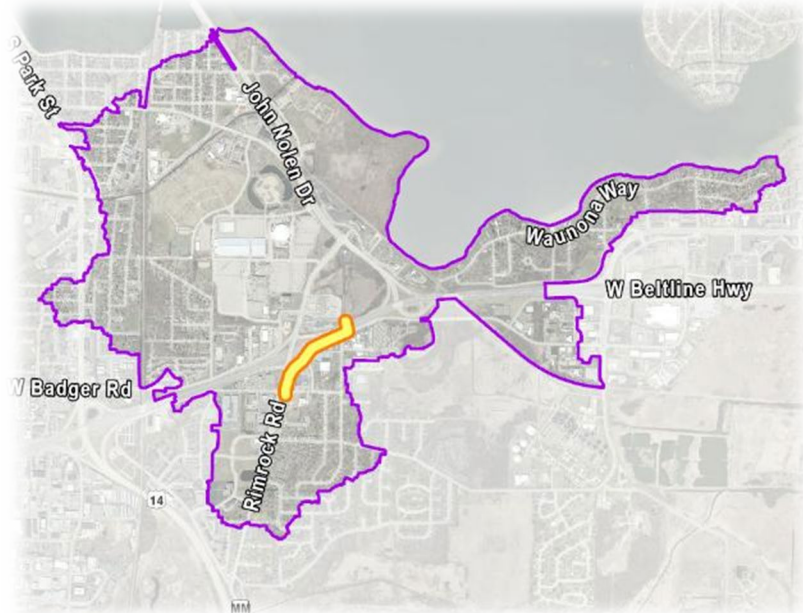
Bram to Wingra and Alliant Energy Outlet

- ▶ **Goal: Reduce Flooding on Bram St and the Bram's Addition Neighborhood**
- ▶ In combination with the Bram's Addition Storm Improvements
 - Improves passability of 550 ft street during 4% chance event.
 - Removes 15 buildings from flooding in the 1% chance event.
 - Removes 36 buildings from flooding in the 0.2% chance event.
- ▶ Likely significant permitting/design effort avoiding impacts to closed landfill
- ▶ Est. Cost - \$8.63M



Rimrock Pond Outlet Improvements

- ▶ **Goal: Reduce Flooding on Rimrock Rd, Badger Rd, Badger Ln, and adjacent areas**
- ▶ In combination with Badger Ln Project
 - Improves passability of 310 ft street during 4% chance event.
 - Removes 3 buildings from flooding in the 1% chance event.
 - Removes 7 buildings from flooding in the 0.2% chance event.
- ▶ Extensive Coordination with WisDOT to bore under Beltline and potential on ramp impacts.
- ▶ Est. Cost - \$5.8M



System Function Improvements

Design Storm	City Target	Total Watershed-wide metric	Number not meeting target (% of total)	
			Existing Conditions	With Recommendations
10% Chance	No Surcharging of Storm Structures onto Street	354 modeled structures	176 (49.7%)	135 (38.1%)
4% Chance	Centerline of Street Passable	32.7 mi of street	0.7 mi (2.0%)	0.4 mi (1.2%)
1% Chance	No Buildings Flooding	2,107 buildings	43 (2.1%)	16 (0.8%)
0.2% Chance	Safely Convey Stormwater (limit impacts to private property)	2,107 buildings	75 (3.6%)	32 (1.5%)



Estimated Costs

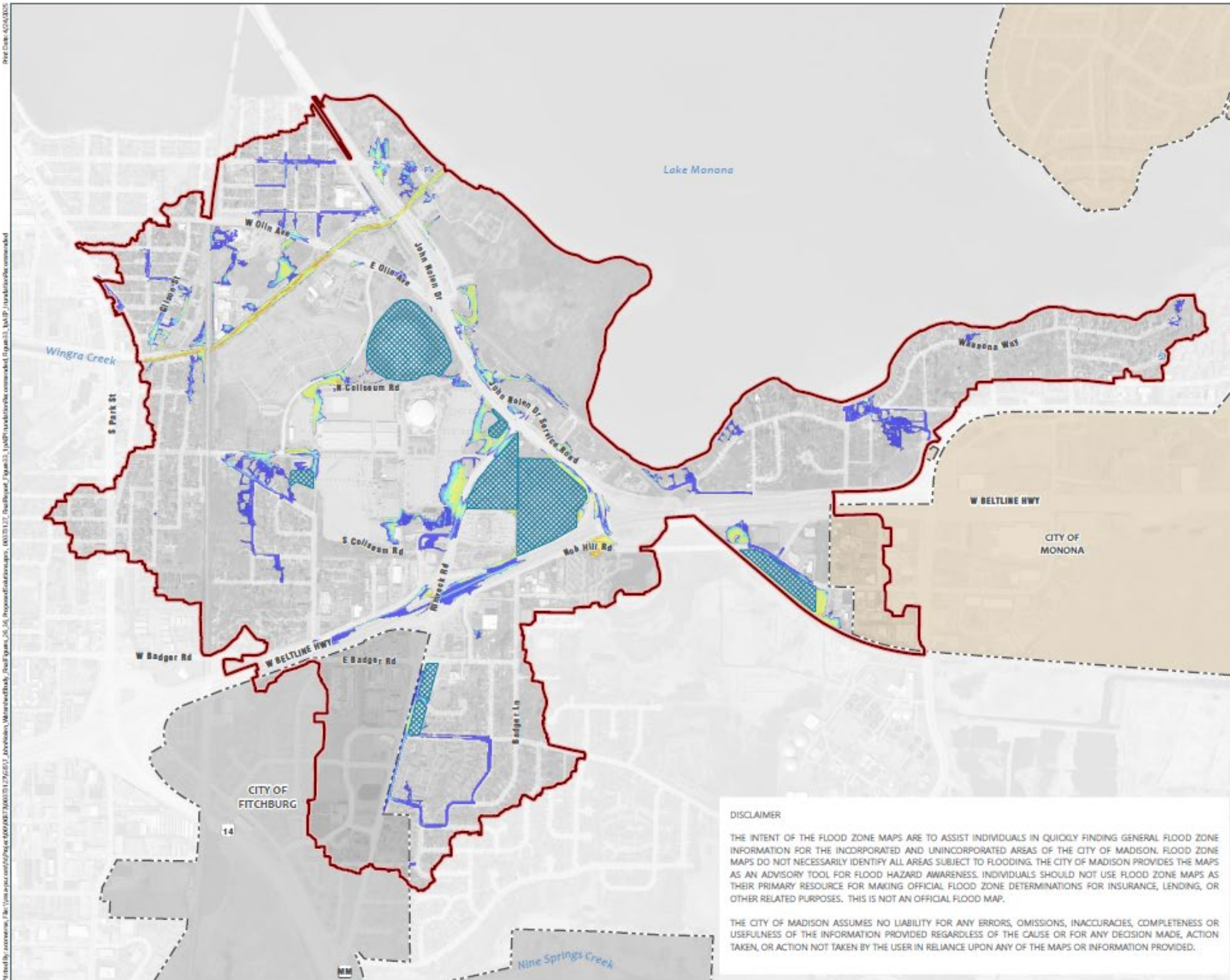
Table 13-1: Stand-Alone Project Cost Estimates for John Nolen Watershed

Project	Estimated Cost
W Lakeside and Sayle St Storm System Improvements	\$3.14M
Gilson St Storm System Improvements	\$0.89M
Bram to Wingra and Alliant Energy Outlet Improvements	\$8.63M
Brams Addition Storm System Improvement	\$1.41M
Nygaard and Sunstrom Street Improvements*	\$0.18M
Rimrock Pond Outlet Improvement	\$7.57M
Badger Lane Storm System Improvements	\$1.20M
Holtzman Rd and Coyier Ln Storm System Improvements	\$0.52M

\$23.54 M

*Costs only accounted for inlets requirements for the 10% AEP design event, not complete reconstruction.





1% AEP Inundation Recommended Conditions

FIGURE 33
John Nolen Watershed
Study Report

City of Madison
Dane County, WI

- Watershed Study Area
- City of Fitchburg
- City of Monona
- Greenway/Pond

Maximum Water Depth (ft)

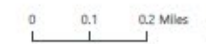
- 0.1 - 0.3
- 0.3 - 0.5
- 0.6 - 1
- 1.1 - 3
- 3.1 - 6
- 6.1+

DISCLAIMER

THE INTENT OF THE FLOOD ZONE MAPS ARE TO ASSIST INDIVIDUALS IN QUICKLY FINDING GENERAL FLOOD ZONE INFORMATION FOR THE INCORPORATED AND UNINCORPORATED AREAS OF THE CITY OF MADISON. FLOOD ZONE MAPS DO NOT NECESSARILY IDENTIFY ALL AREAS SUBJECT TO FLOODING. THE CITY OF MADISON PROVIDES THE MAPS AS AN ADVISORY TOOL FOR FLOOD HAZARD AWARENESS. INDIVIDUALS SHOULD NOT USE FLOOD ZONE MAPS AS THEIR PRIMARY RESOURCE FOR MAKING OFFICIAL FLOOD ZONE DETERMINATIONS FOR INSURANCE, LENDING, OR OTHER RELATED PURPOSES. THIS IS NOT AN OFFICIAL FLOOD MAP.

THE CITY OF MADISON ASSUMES NO LIABILITY FOR ANY ERRORS, OMISSIONS, INACCURACIES, COMPLETENESS OR USEFULNESS OF THE INFORMATION PROVIDED REGARDLESS OF THE CAUSE OR FOR ANY DECISION MADE, ACTION TAKEN, OR ACTION NOT TAKEN BY THE USER IN RELIANCE UPON ANY OF THE MAPS OR INFORMATION PROVIDED.

Data Sources:
Aerial: City of Madison (2022)
Watershed Boundaries: MSA
Stormwater System: City of Madison



Questions?

11,436 points of outreach or interactions for the
John Nolen Drive Watershed Study



Public Meetings
3 meetings, approx. 62 participants



Postcards Sent
10,560



Project Website
729+ views



Email List
50 residents



Virtual Focus Groups
3 groups, 10 participants



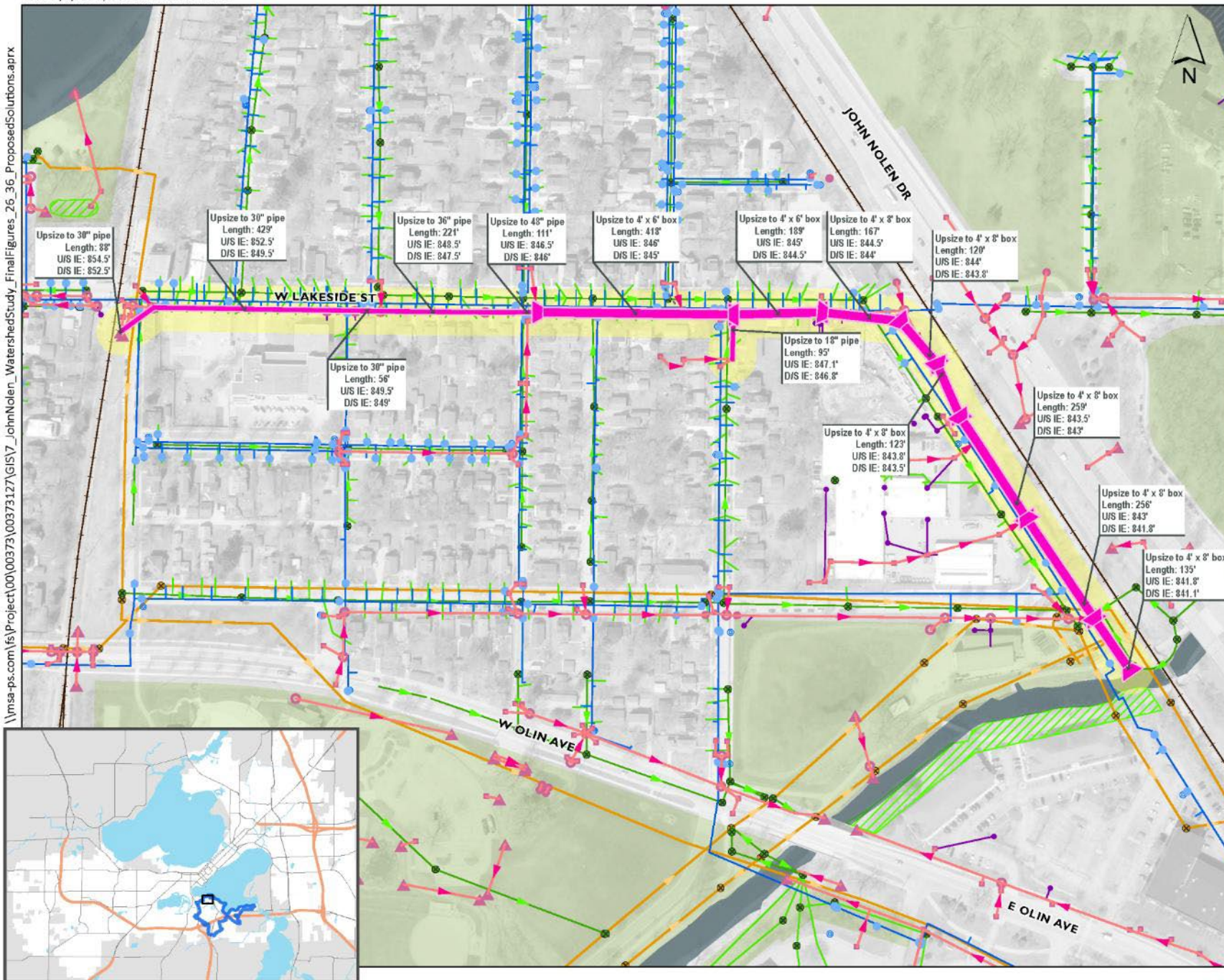
Social Media
25 related project posts

Public Outreach Summary

Local Storm Sewer Projects (for reference)



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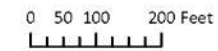


W Lakeside and Sayle St Storm System Improvements

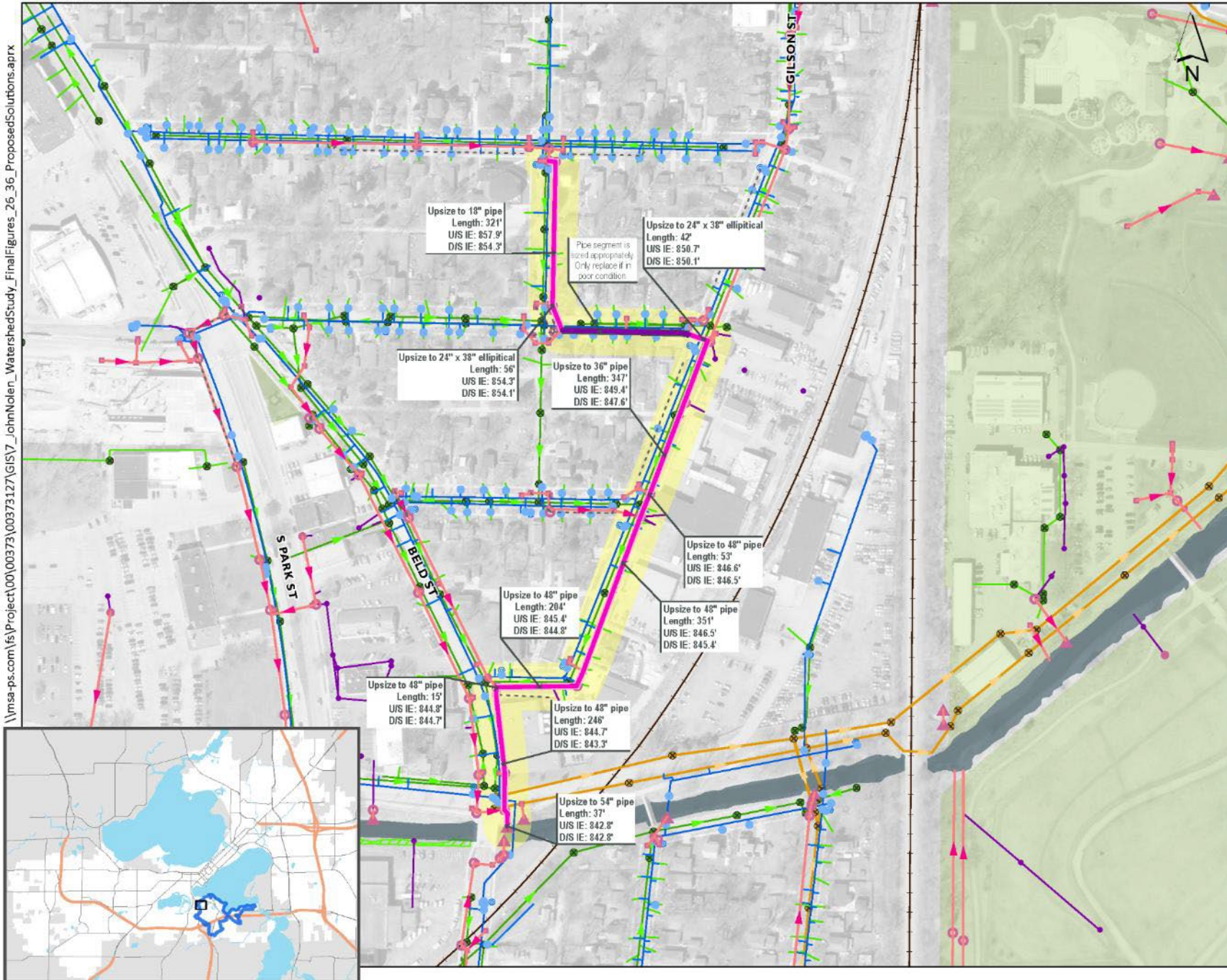
Figure 27 - A

Location
City of Madison

- Stormwater System**
 - Storm Pipe
 - Abandoned Storm Pipe
 - Inlet
 - Bend
 - Apron End
 - Access
- Water System**
 - Water Main/Service
 - Valve
 - Hydrant
- Sanitary System**
 - Sanitary Main
 - Lateral
 - Access
 - MMSD Main
 - MMSD Access
- Legend**
 - Outside of City of Madison
 - Park
 - City of Madison Ponds/Greenways
 - Waterbody
 - Railroad
 - Improvement Area of Interest
 - Increased Inlet Capacity
 - Proposed Storm Box
 - Proposed Storm Pipes
 - Upsize



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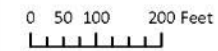


Gilson St Storm System Improvements

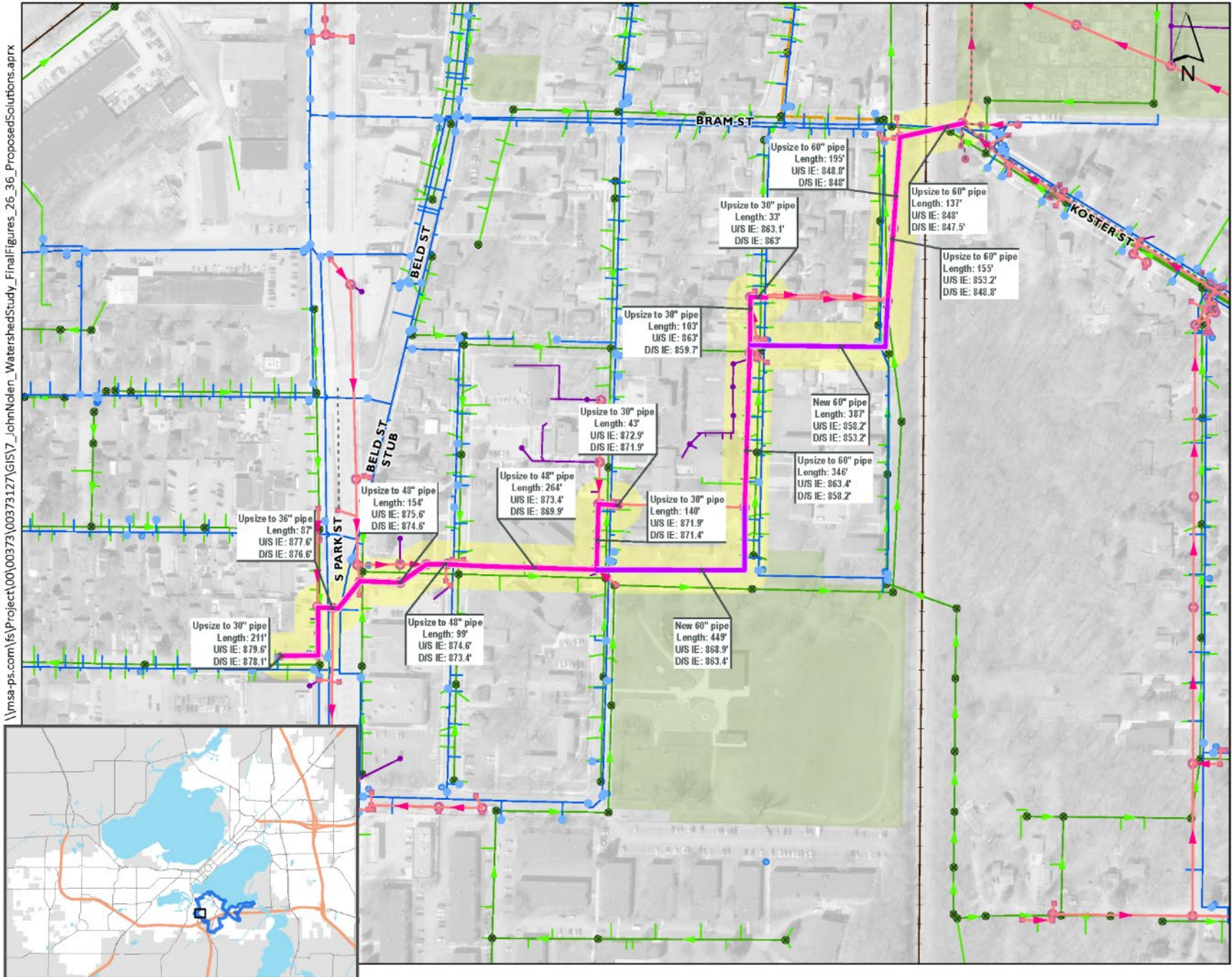
Figure 27 - B

Location
City of Madison

- | | |
|--------------------------|---------------------------------|
| Stormwater System | Park |
| Storm Pipe | City of Madison Ponds/Greenways |
| Abandoned Storm Pipe | Waterbody |
| Inlet | Railroad |
| Bend | Improvement Area of Interest |
| Apron End | Increased Inlet Capacity |
| Access | Proposed Storm Pipes |
| Water System | Special |
| Water Main/Service | Upsize |
| Valve | |
| Hydrant | |
| Sanitary System | |
| Sanitary Main | |
| Lateral | |
| Access | |
| MMSD Main | |
| MMSD Access | |



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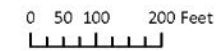


Brams Addition Storm System Improvement

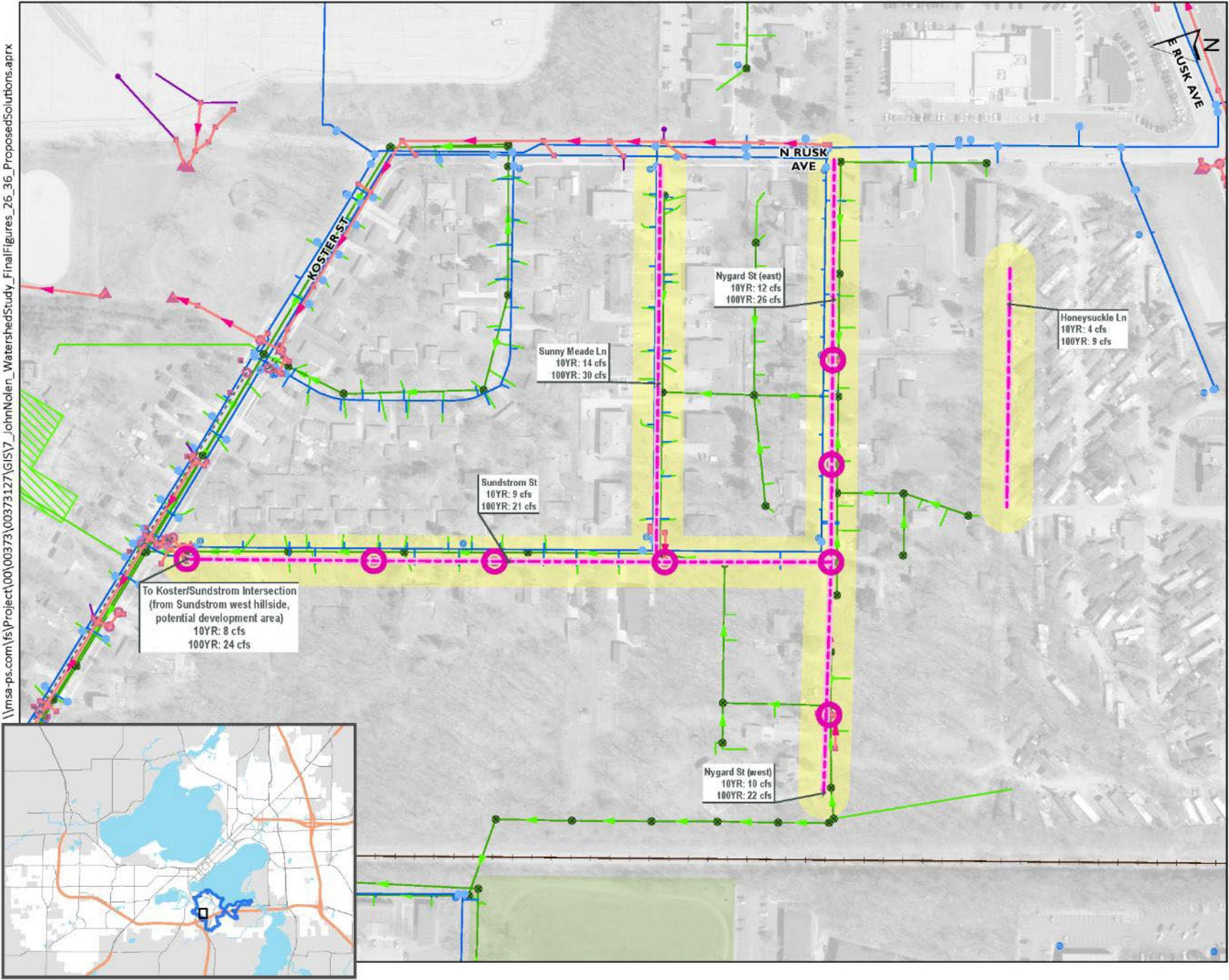
Figure 27 - D

Location
City of Madison

- | | | |
|--------------------------|---------------------------------|------------------------------|
| Stormwater System | | Park |
| Storm Pipe | City of Madison Ponds/Greenways | Waterbody |
| Abandoned Storm Pipe | Railroad | Improvement Area of Interest |
| Inlet | Increased Inlet Capacity | |
| Apron End | | |
| Access | | |
| Water System | | Proposed Storm Pipes |
| Water Main/Service | New | Upsize |
| Valve | | |
| Hydrant | | |
| Sanitary System | | |
| Sanitary Main | | |
| Lateral | | |
| Access | | |
| MMSD Main | | |
| MMSD Access | | |



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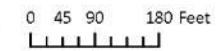


Nygaard and Sundstrom St Improvements

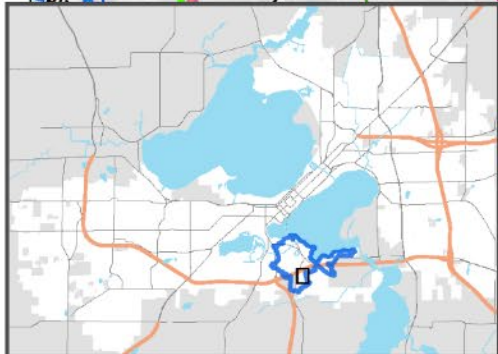
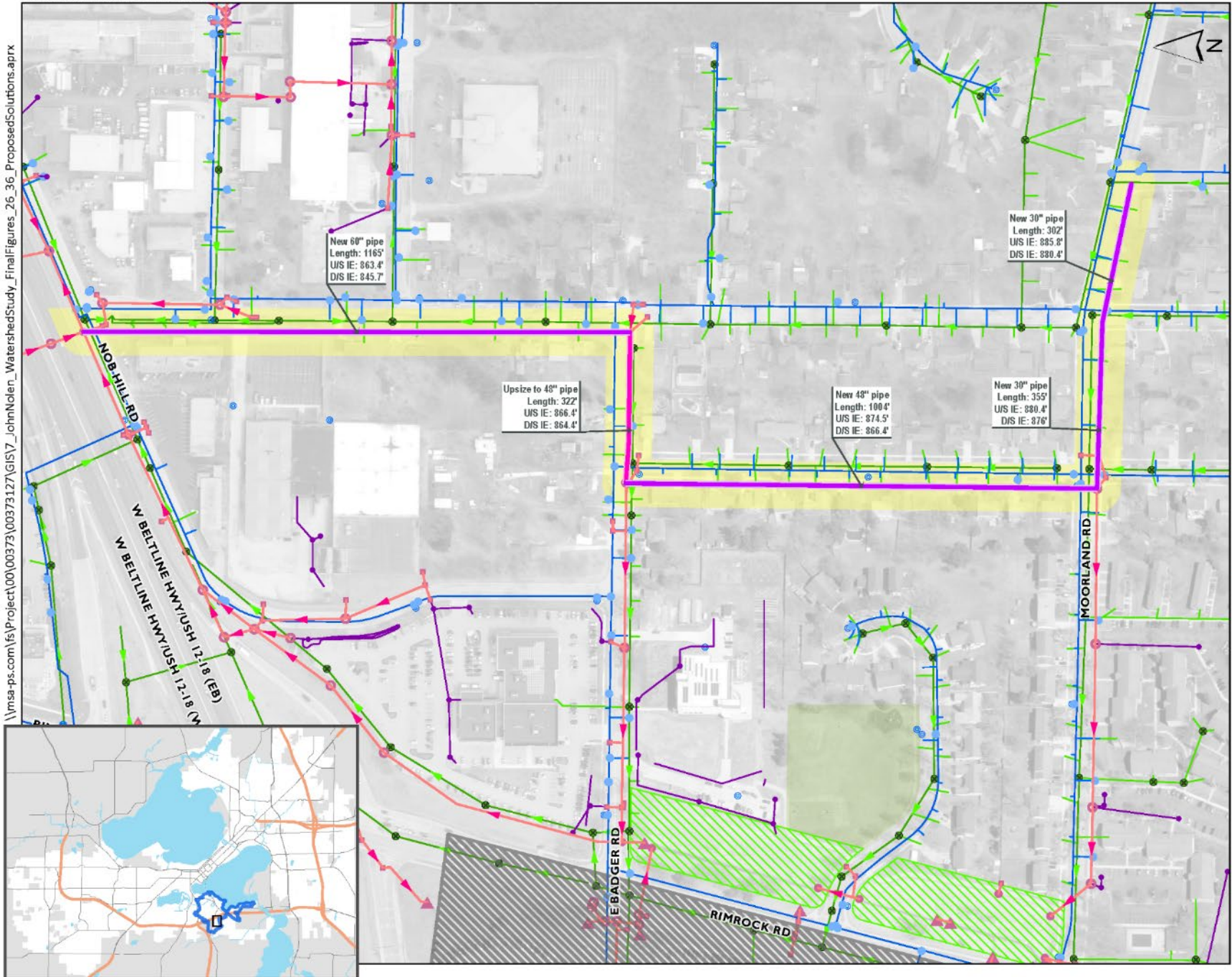
Figure 27 - E

Location
City of Madison

- Stormwater System**
 - Storm Pipe
 - - - Abandoned Storm Pipe
 - Inlet
 - ▲ Apron End
 - Access
- Water System**
 - Water Main/Service
 - Valve
 - ⊙ Hydrant
- Sanitary System**
 - Sanitary Main
 - Lateral
 - Access
- Park
- ▨ City of Madison Ponds/Greenways
- Waterbody
- Railroad
- Improvement Area of Interest
- Increased Inlet Capacity
- Proposed Street Improvement



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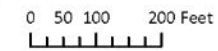


Badger Lane Storm System Improvements

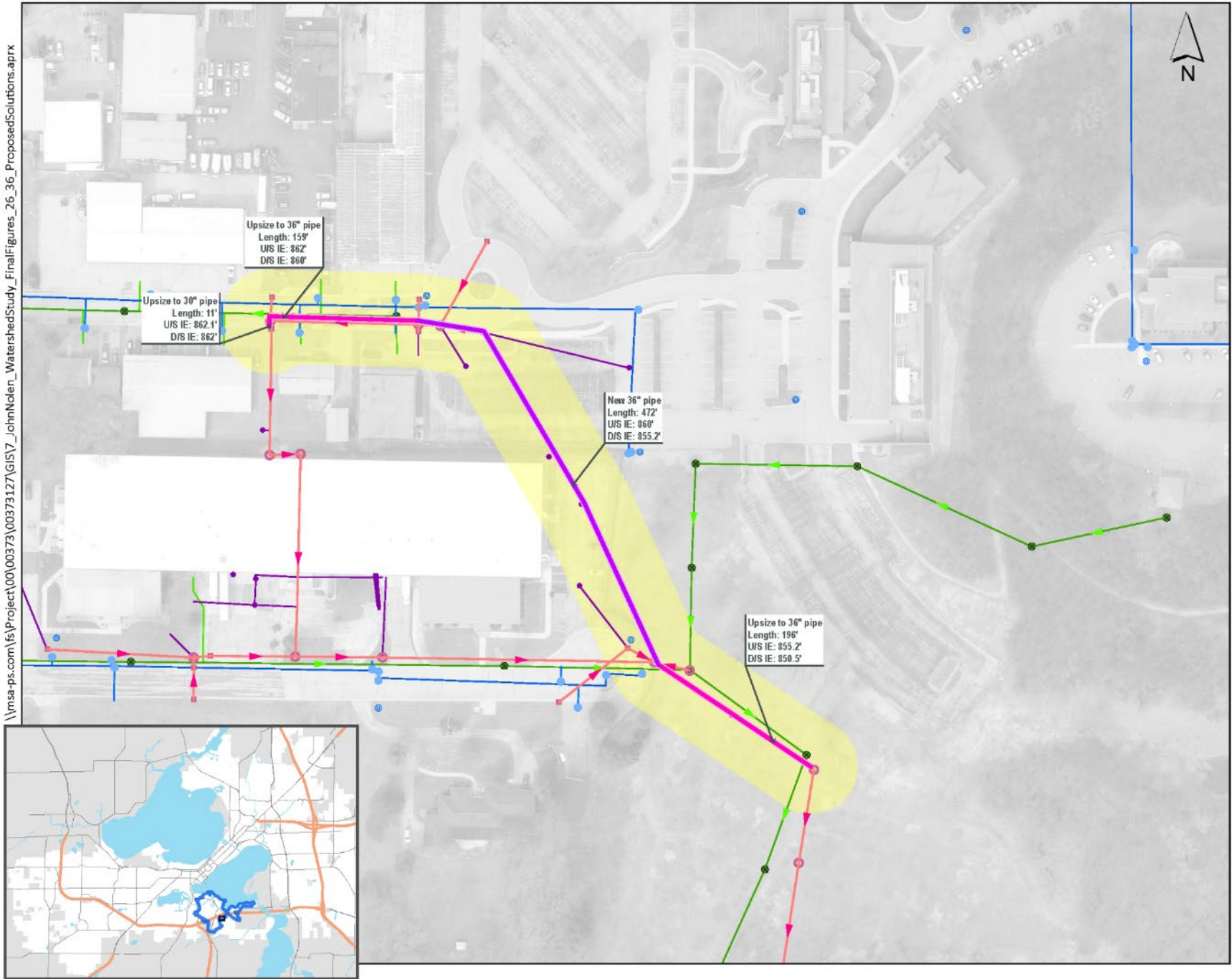
Figure 27 - G

Location
City of Madison

- | | |
|--------------------------|---------------------------------|
| Stormwater System | Outside of City of Madison |
| Storm Pipe | Park |
| Inlet | City of Madison Ponds/Greenways |
| Bend | Waterbody |
| Apron End | Railroad |
| Access | Improvement Area of Interest |
| Water System | Increased Inlet Capacity |
| Water Main/Service | Proposed Storm Pipes |
| Valve | New |
| Hydrant | Upsize |
| Sanitary System | |
| Sanitary Main | |
| Lateral | |
| Access | |



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Holtzman Rd and Coyier Ln Storm System Improvements

Figure 27 - H

Location
City of Madison

- | | |
|--------------------------|--------------------------------|
| Stormwater System | Waterbody |
| — Storm Pipe | — Railroad |
| ■ Inlet | ■ Improvement Area of Interest |
| ○ Access | ○ Increased Inlet Capacity |
| Water System | Proposed Storm Pipes |
| — Water Main/Service | — New |
| ● Valve | — Upsize |
| ● Hydrant | |
| Sanitary System | |
| — Sanitary Main | |
| — Lateral | |
| ● Access | |

