Sauk Creek Corridor Plan

DRAFT FINAL CORRIDOR PLAN - MEETING #4

PRESENTATION: 6:30-7:45 PM

Q&A: 7:45 PM-8:20 PM

VOLUNTEER INFORMATION: 8:20 PM-8:30 PM

DECEMBER 4, 2024

CITY OF MADISON

Meeting Technical Housekeeping

- This meeting will be recorded and posted to the project page.
- All attendees should be muted to keep background noise to a minimum.
- Use the “Q&A” button for technical issues with meeting to troubleshoot with staff to assist.
- Use the “Q&A” button to type questions about presentation.
  - Questions will be answered live after the presentation.
- Use the “raise your hand” button to verbally ask your question. You will be prompted to unmute when it is your turn.

THIS MEETING IS BEING RECORDED.

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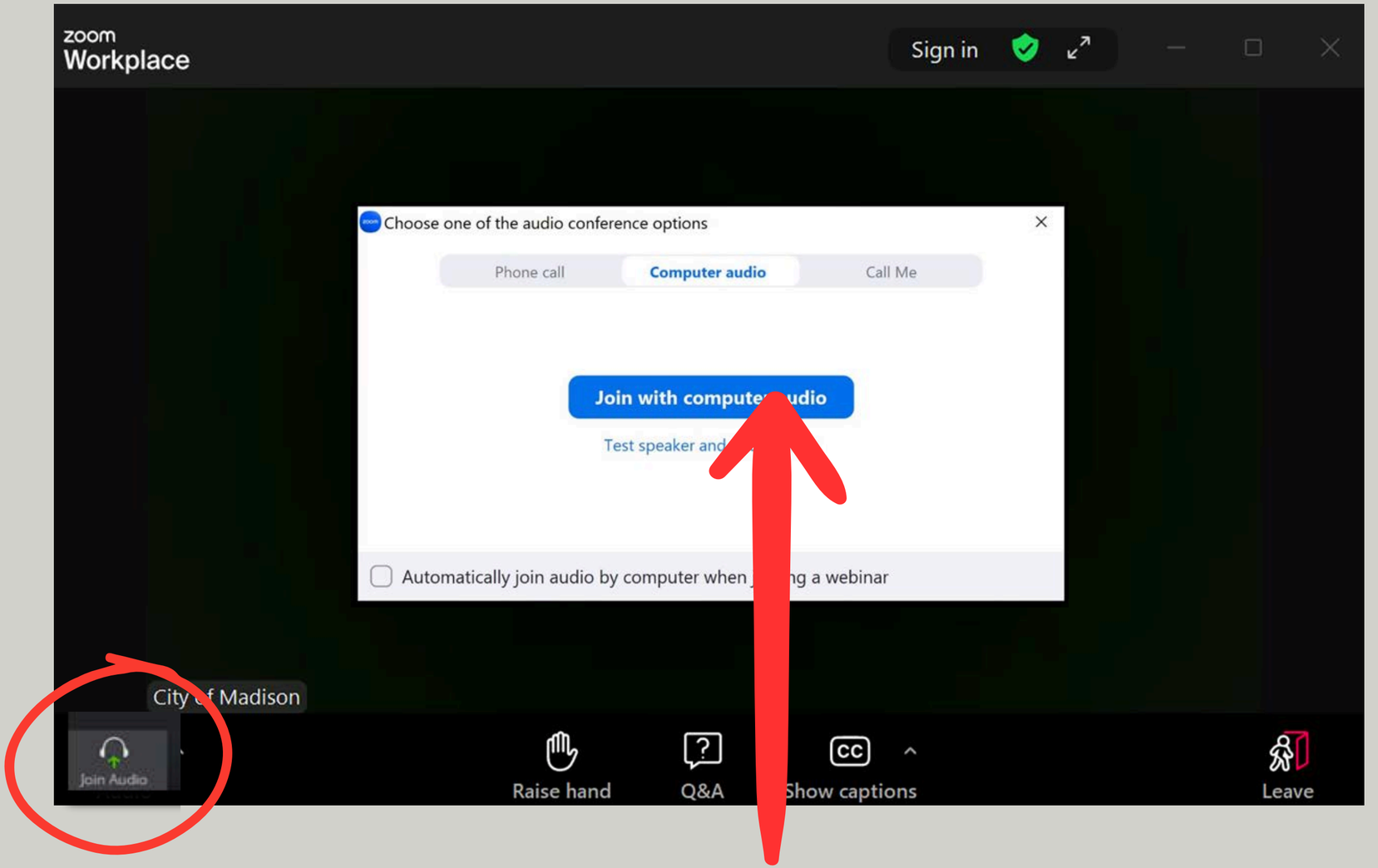
By continuing to be in the meeting, you are consenting to being recorded and consenting to this record being released to public record requestors.

How to Participate



Make sure to join audio

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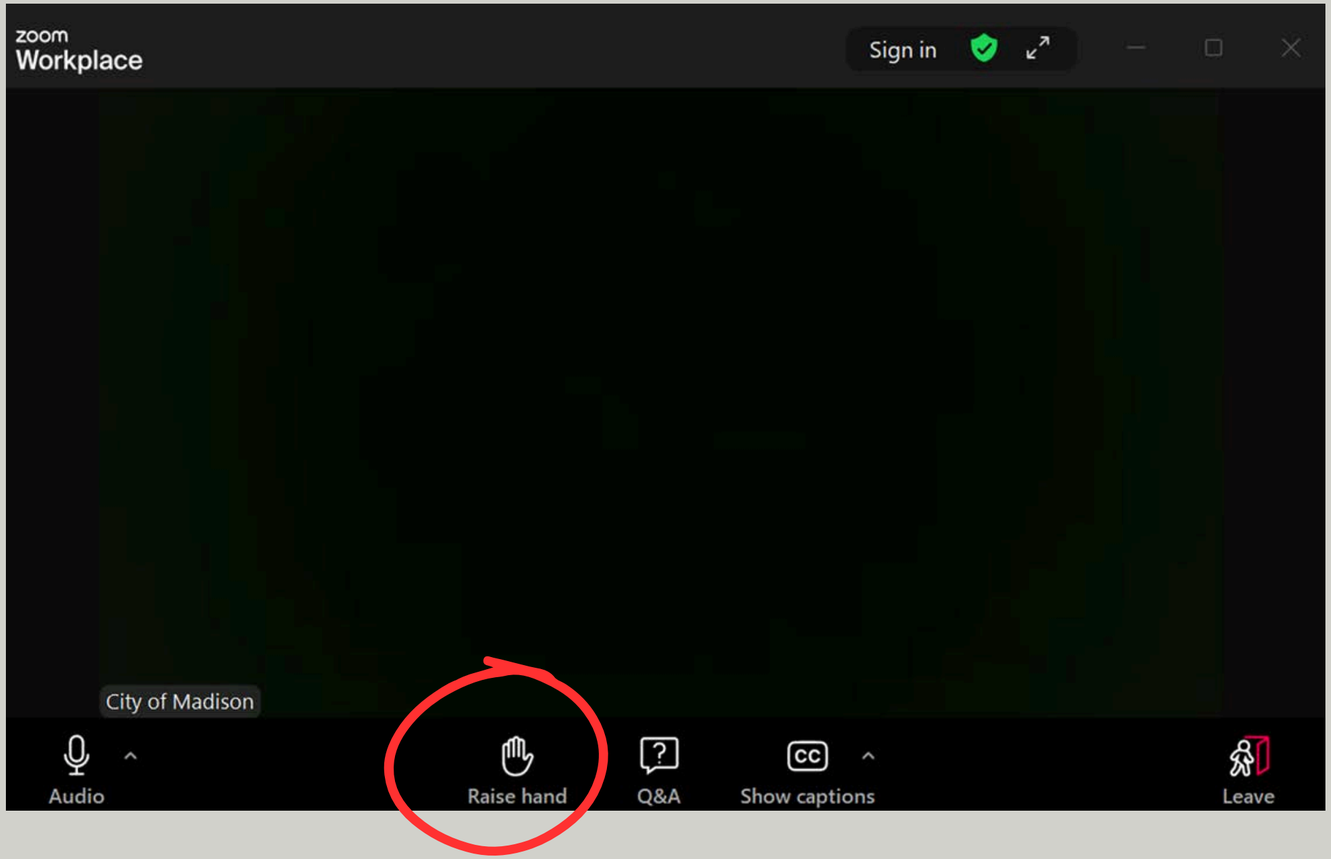
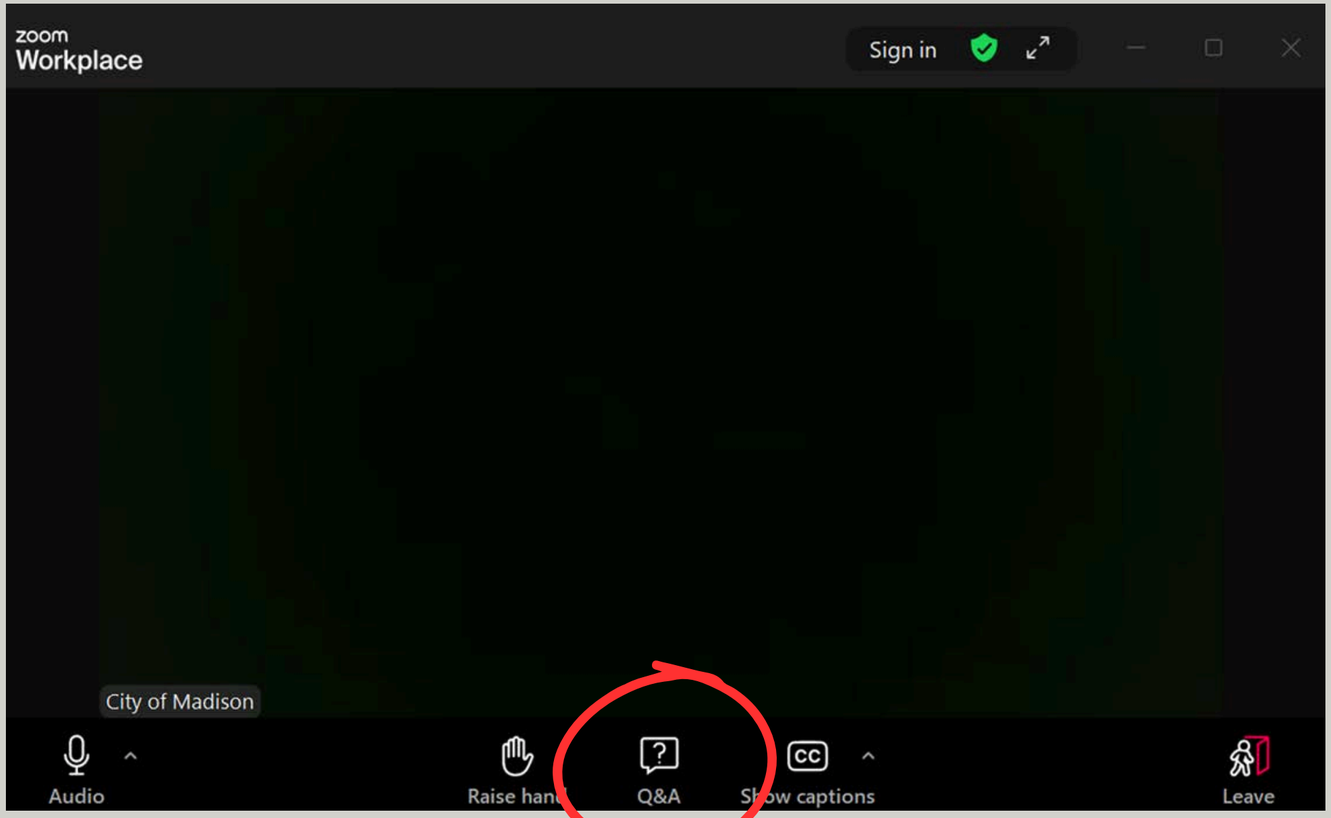


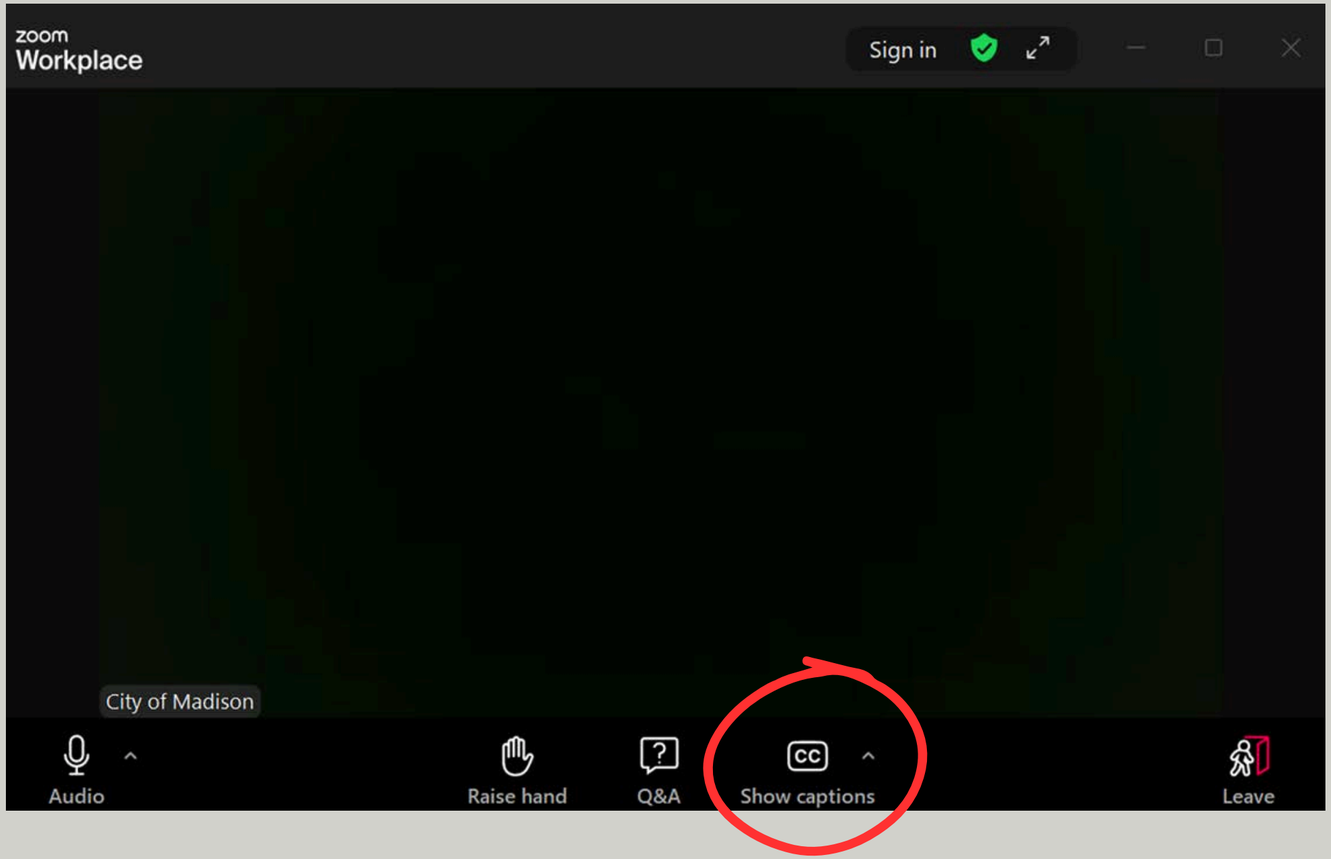
Raise your hand to be unmuted for comments or ask additional questions.

How to Participate



Use Q&A for questions, if you have technical issues or need quick clarification during the presentation. We will answer general questions at the end of the presentation.

How to Participate



Click “Show Captions” for zoom automated captions.

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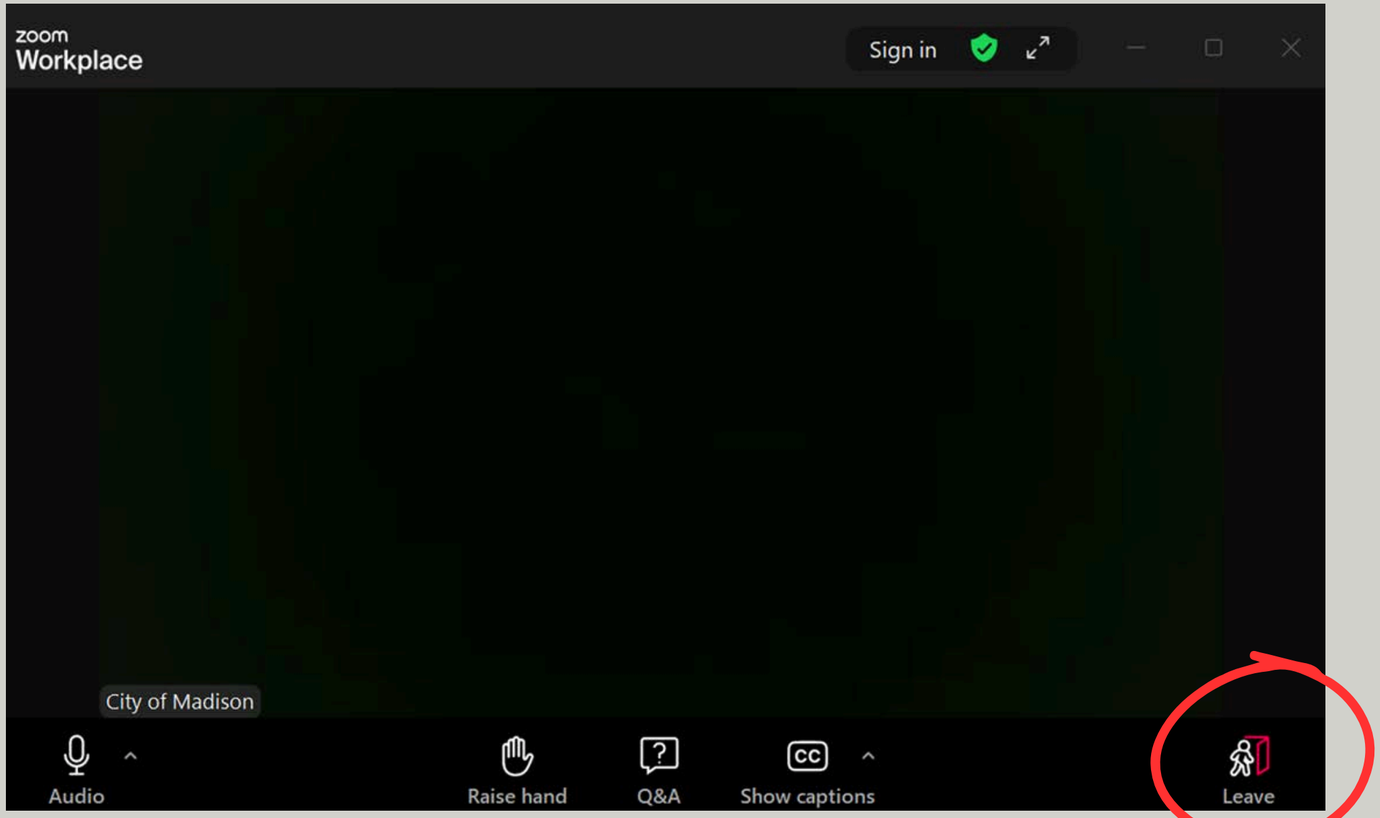


To leave the meeting click here

Meeting Facilitation Requests

- Ask clarifying questions as we go.
  (e.g. explain a term)
- Save discussion questions for the end.
- Practice putting yourself in others' shoes, but speak from your own experience.
- Be respectful. Be open to listening. Respect others in this meeting the way you wish to be respected.
- Recognize that personal opinions differ, there are often competing priorities, differing values, and perspectives.

Our Team

Presenters Bios:

Jojo O'Brien, PE - Project Manager, is a Water Resources Engineer and UW-Madison graduate with a B.S. Degree in Natural Resources and Environmental Engineering and Environmental Studies. She joined the City of Madison in 2016.

Maddie Dumas-Stormwater Vegetation Coordinator, has a Master's of Science from UW-Madison. She joined the City of Madison in 2018, and previously managed 660 acres of restored prairie and wetland for a non-profit.

Supporting Staff Bios:

Janet Schmidt, PE - Principal Engineer for the City Stormwater section, is a Civil Engineer and a 1994 UW-Madison graduate with a B.S. Degree in Civil & Environmental Engineering.

Ian Brown - City Forester, has a BA in Biology and MS in Natural Resources Management. He joined the City of Madison in 2023 after working with the WDNR and City of Milwaukee.

Alder Conklin - District 9

Greg Fries, PE - Deputy City Engineer. Greg is a Civil Engineer and a UW-Madison graduate with a B.S. Degree in Civil & Environmental Engineering and Masters Degree in Business.

Ryan Schmidt - Engineering Operations Supervisor, joined the City of Madison in 2016, currently oversees construction and maintenance operations for the City of Madison's Pond and Greenways.

Agenda

1. Future Input Opportunities
2. Proposed Stormwater Improvements
3. Overview: How Community Input Shaped Plan
4. Construction Access / Maintenance Access
5. Ecological Restoration
    a. With Construction Projects
    b. Ongoing
6. Q&A
7. *Optional: How volunteer conservation work is organized on stormwater land*

Recent input

- We have received a lot of emails in the past week and especially 24 hours. We appreciate you taking the time to share.
- The comments and questions shared are not all answered in the presentation, but will be addressed with the rest of the input we receive (via the meeting tonight, survey and walk-throughs) at the next public meeting.
- As a reminder, this is a DRAFT of a final corridor plan. It is not the final corridor plan.

Sauk Creek Corridor Plan

2018-2023 - CONDITIONS ASSESSMENT
- Tree inventory (complete)
- Topographic survey (complete)
- Pheasant Branch Watershed Study (complete)
- Wetland Delineations (complete)
- Ecological and Channel Assessment (2023)
- West Area Plan (2023-2024)

2023 - ISSUES AND OPPORTUNITIES
- Kick-off Meeting
- Focus Groups

Fall 2023

2024 - CONCEPT REFINEMENT
- Public Meeting

July 2024

2024 - DRAFT PRELIMINARY CORRIDOR PLAN
- Internal advisory group generates corridor concepts
- Public Meeting to gather feedback
  - Focus Groups to give input on vegetation

Fall 2024

2024 - DRAFT FINAL CORRIDOR PLAN
- Internal advisory group refines corridor concept
- Public Meeting to gather feedback

Fall/Winter 2024

we are here

2024 - FINAL CORRIDOR PLAN & IMPLEMENTATION
- Internal advisory group finalizes corridor plan
- Public Meeting to gather feedback

Winter 2024

Added field walk throughs (details later in meeting) and an online survey (following meeting) per community requests

2025 - APPROVAL PROCESS
Ultimate Decision Makers
- Common Council (introduction only)
- Board of Public Works — Entire Corridor Plan
- Common Council – Entire Corridor Plan, Final approval

Winter/Spring 2025

*Developed using the City of Madison Racial Equity and Social Justice Public Participation Resource Guide

Corridor Plan - Engagement Review

- 5 public meetings on Corridor Plan
  - 27 polling questions
  - 1 previous public meeting (2018)
  - 3 watershed study meetings
  - 1 upcoming
- 140 people subscribed to receive email updates
  - 7,110 webpage views
  - Custom webpage with subpages on main topics
- 4 first round focus groups, 70 participants
- 5 vegetation-specific focus groups breakout rooms
- 1 online survey
  - + 1 after this meeting
- Signs
  - 16 signs in greenway and adjacent parks
  - 2 rounds of signs and fliers in libraries
- 44 returned comment cards
- 23,828 postcards sent
- West Area Plan collaboration
  - 3 open house/public meetings

All outreach is additional to our typical design outreach process that will occur for each phase of design

Corridor Plan - Outstanding Opportunities for Input

Opportunities:

- This meeting
- Online survey to comment on specific elements of the plan (12/4-12/15)
- Site walk throughs (12/12)
  - Southern section
  - Northern section
- Next public meeting (January)
- Boards and commissions
  - Board of Public Works
  - Common Council
- During each design phase!

How input will be incorporated:

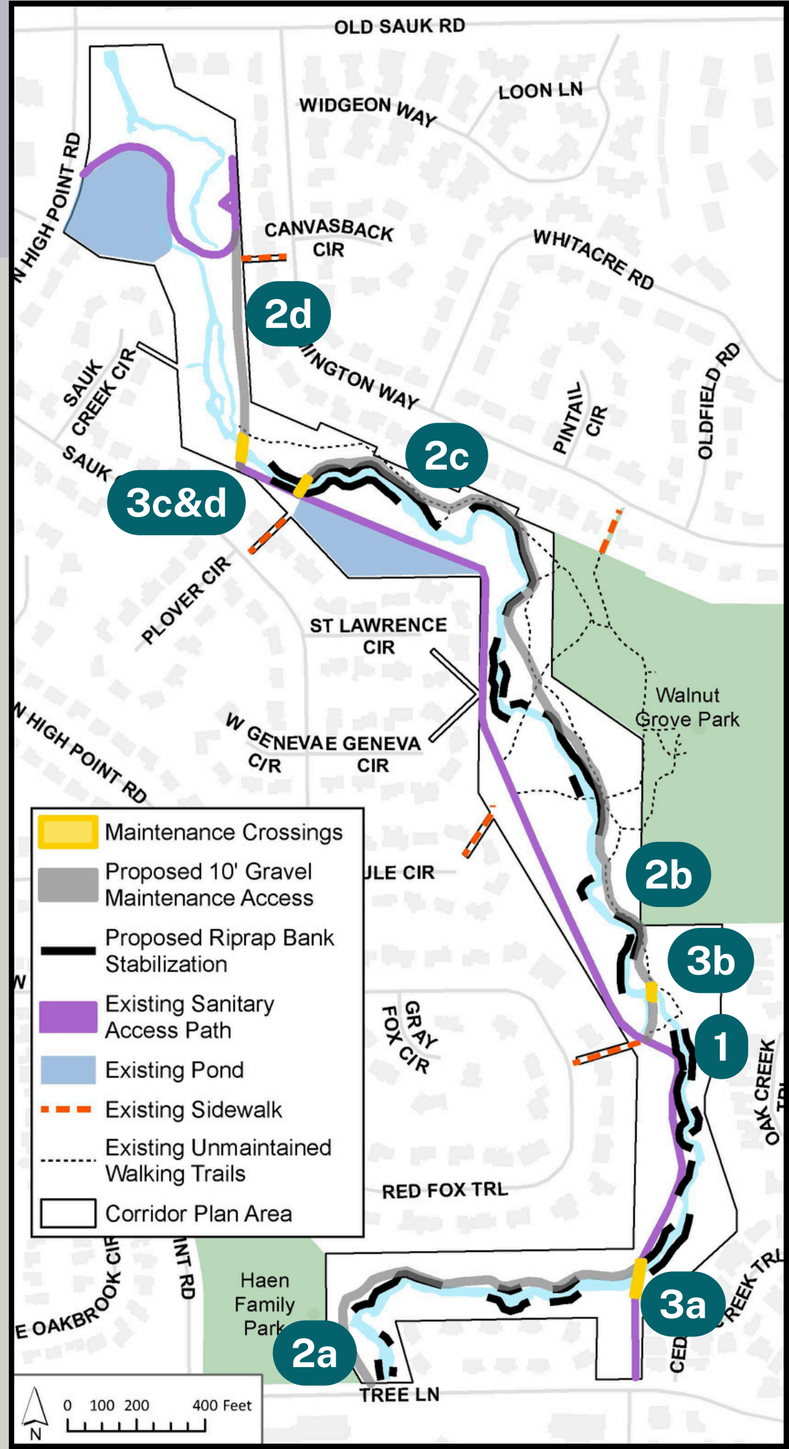
- Corridor plan is a **conceptual** plan that shows a **general** location of proposed improvements.
- High level input will be considered to modify the overall corridor plan
- Comments related to design-elements, will be noted to be considered with the detailed design which will site the final location of all improvements design development.
  - Comments will serve as a starting point for the design phases, and there will be more opportunities for input

Draft Final Corridor Plan - Conceptual stormwater improvements

Proposed improvements:

- 1 - proposed riprap bank stabilization
- 10' wide gravel maintenance access path
  - 2a - Haen Family Park to Sanitary Access Path
  - 2b - Middle Corridor along Walnut Grove Park
  - 2c - Plover Circle to St Lawrence Circle along Farmington Way
  - 2d - Upper corridor along Farmington Way between ponds
- Channel crossings for maintenance access
  - 3a - Culvert crossing for sanitary access
  - 3b - Concrete ford for channel maintenance access
  - 3c & d - Concrete ford(s) for channel maintenance access *(will analyze how to address crossing needs during design)*
- Generalized goals for pond improvements
  - St Lawrence Circle Pond
  - N High Point Pond

Note: Map shows a conceptual plan and general location of proposed improvements. Final location of all improvements will be adjusted based on detailed design including minimizing grading impacts, minimizing tree impacts (per design guidance received from community during corridor plan process), and addressing additional community concerns related to detailed design development.



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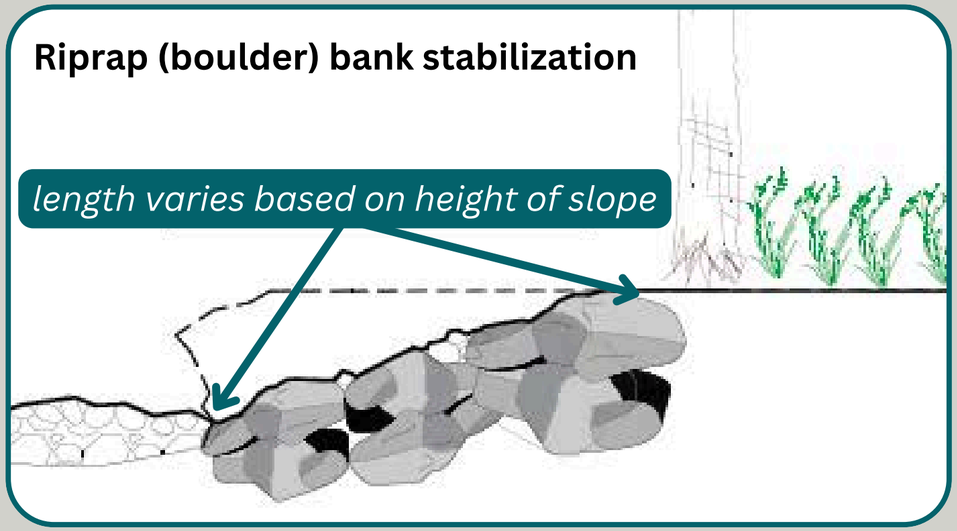
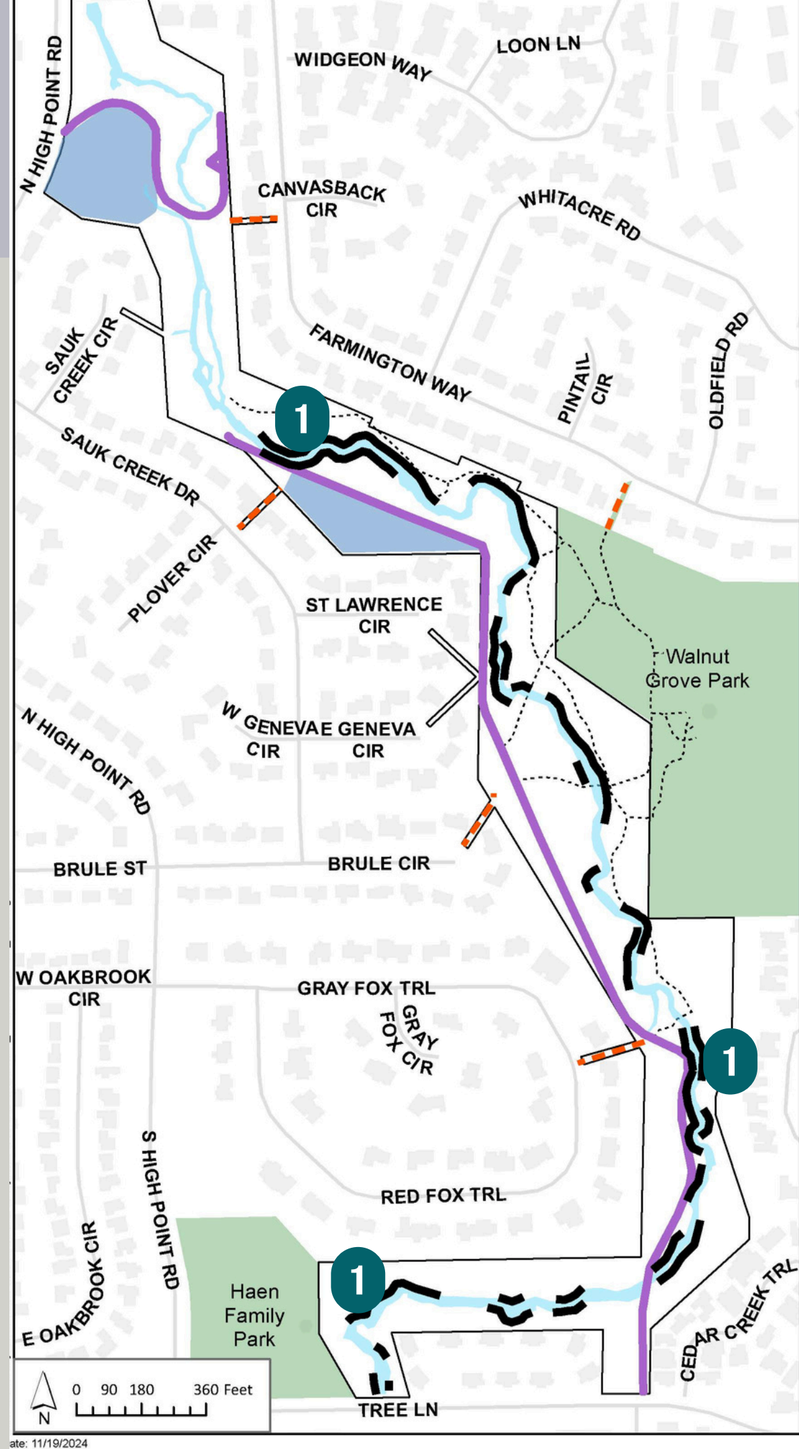


Riprap bank stabilization *(selected based on 60% approval)*



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  - 2c - Plover Circle to St Lawrence Circle along Farmington Way
  - 2d - Upper corridor along Farmington Way between ponds

Heritage Prairie Gwy, ~7 years post path construction

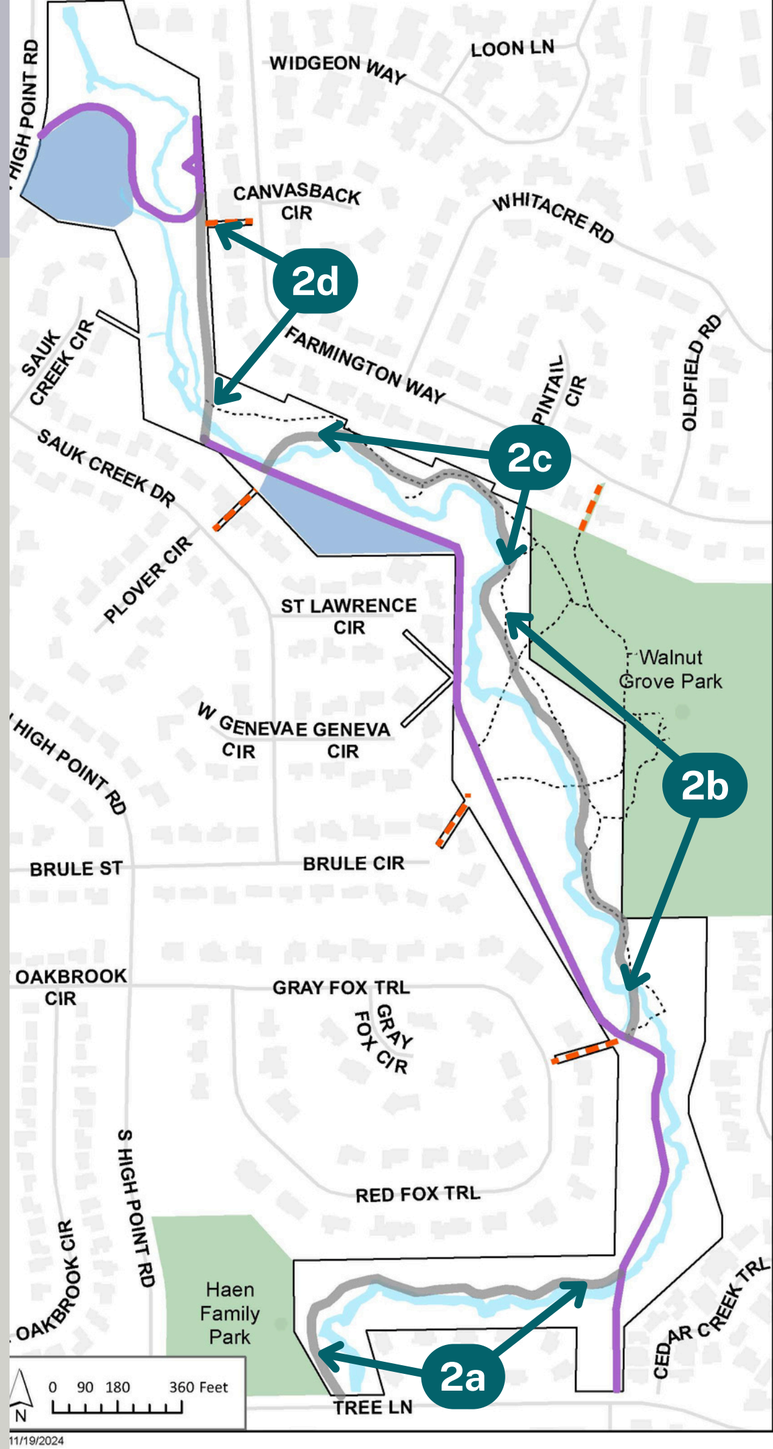
Owen Park Gwy

10' Wide Maintenance Access Path - Gravel *(selected based on 68% approval)*

Paths allow City to:

1. **Install riprap channel stabilization**
2. **Maintain channel by removing blockages, remove adjacent trees that are at risk of damaging private property, may allow removal of adjacent recently dead red oak trees that are key contributors to the spread of oak wilt**

Note: Map shows a conceptual plan and general location of proposed improvements. Final location of all improvements will be adjusted based on detailed design including minimizing grading impacts, minimizing tree impacts (per design guidance received from community during corridor plan process), and addressing additional community concerns related to detailed design development.



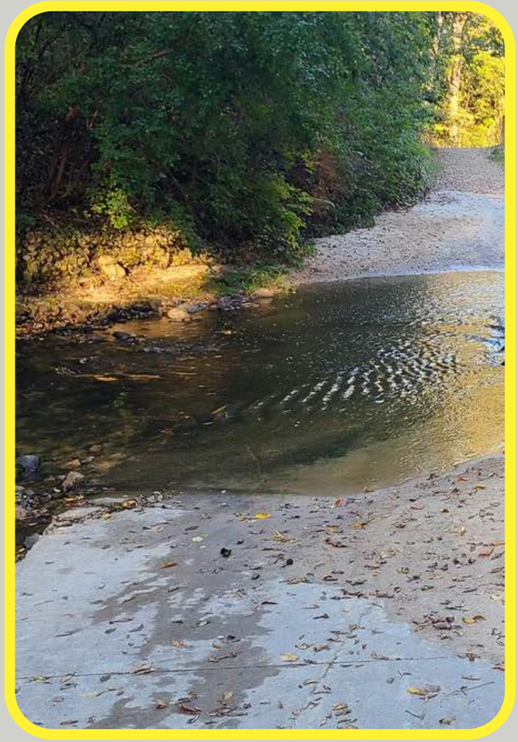
Draft Final Corridor Plan - Conceptual stormwater improvements

Proposed improvements:

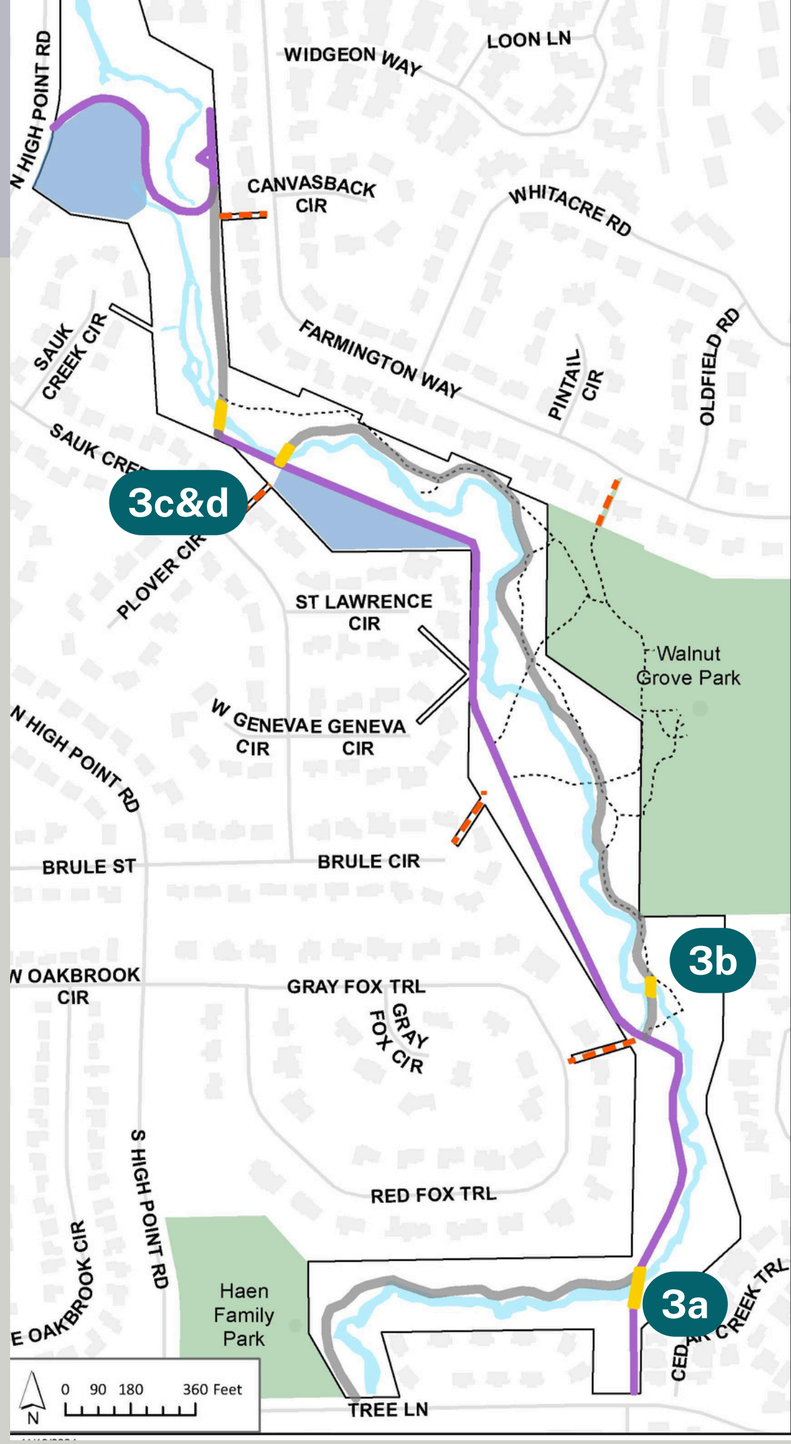
- Channel crossings for maintenance access
  - 3a - Culvert crossing for sanitary access
  - 3b - Concrete ford for channel maintenance access
  - 3c & d - Concrete ford(s) for channel maintenance access *(will analyze how to address crossing needs during design)*

3a -Culverts at sanitary access path crossing - allows consistent and safer vactor access

note: material over top of culvert will be concrete for stability



3b-d: Concrete Ford Construction/ Channel Maintenance crossing

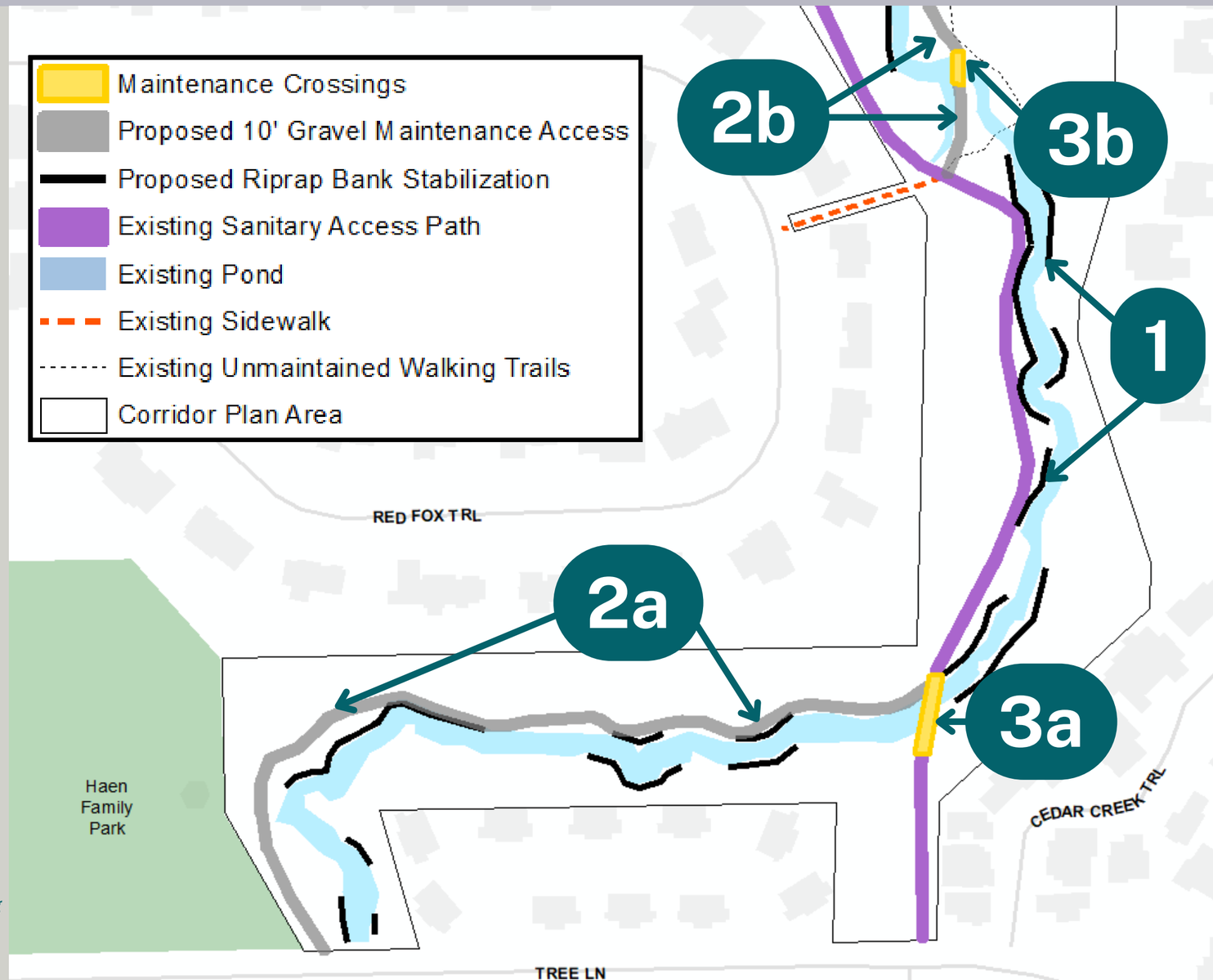


Note: Map shows a conceptual plan and general location of proposed improvements. Final location of all improvements will be adjusted based on detailed design including minimizing grading impacts, minimizing tree impacts (per design guidance received from community during corridor plan process), and addressing additional community concerns related to detailed design development.

Draft Final Corridor Plan - Southern End
Conceptual stormwater improvements

Proposed improvements:

- 1 - proposed riprap bank stabilization
- 10' wide gravel maintenance access path
  - 2a - Haen Family Park to Sanitary Access Path
  - 2b - Middle Corridor along Walnut Grove Park
- Channel crossings for maintenance access
  - 3a - Culvert crossing for sanitary access
  - 3b - Concrete ford for channel maintenance access



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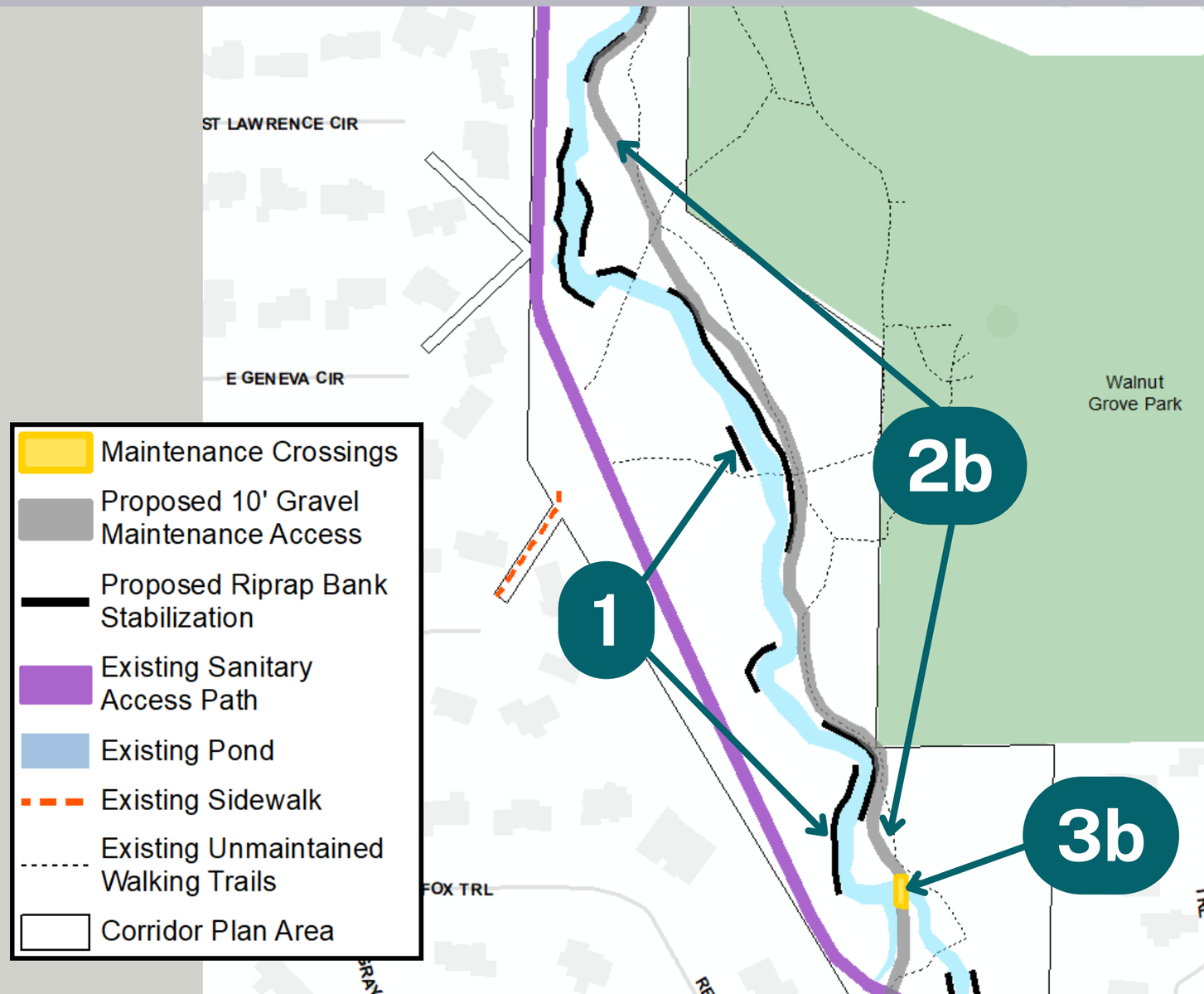
Draft Final Corridor Plan - Middle Section
Conceptual stormwater improvements

Proposed improvements:

- 1 - proposed riprap bank stabilization
- 10' wide gravel maintenance access path
  - 2b - Middle Corridor along Walnut Grove Park
- Channel crossings for maintenance access
  - 3b - Concrete ford for channel maintenance access

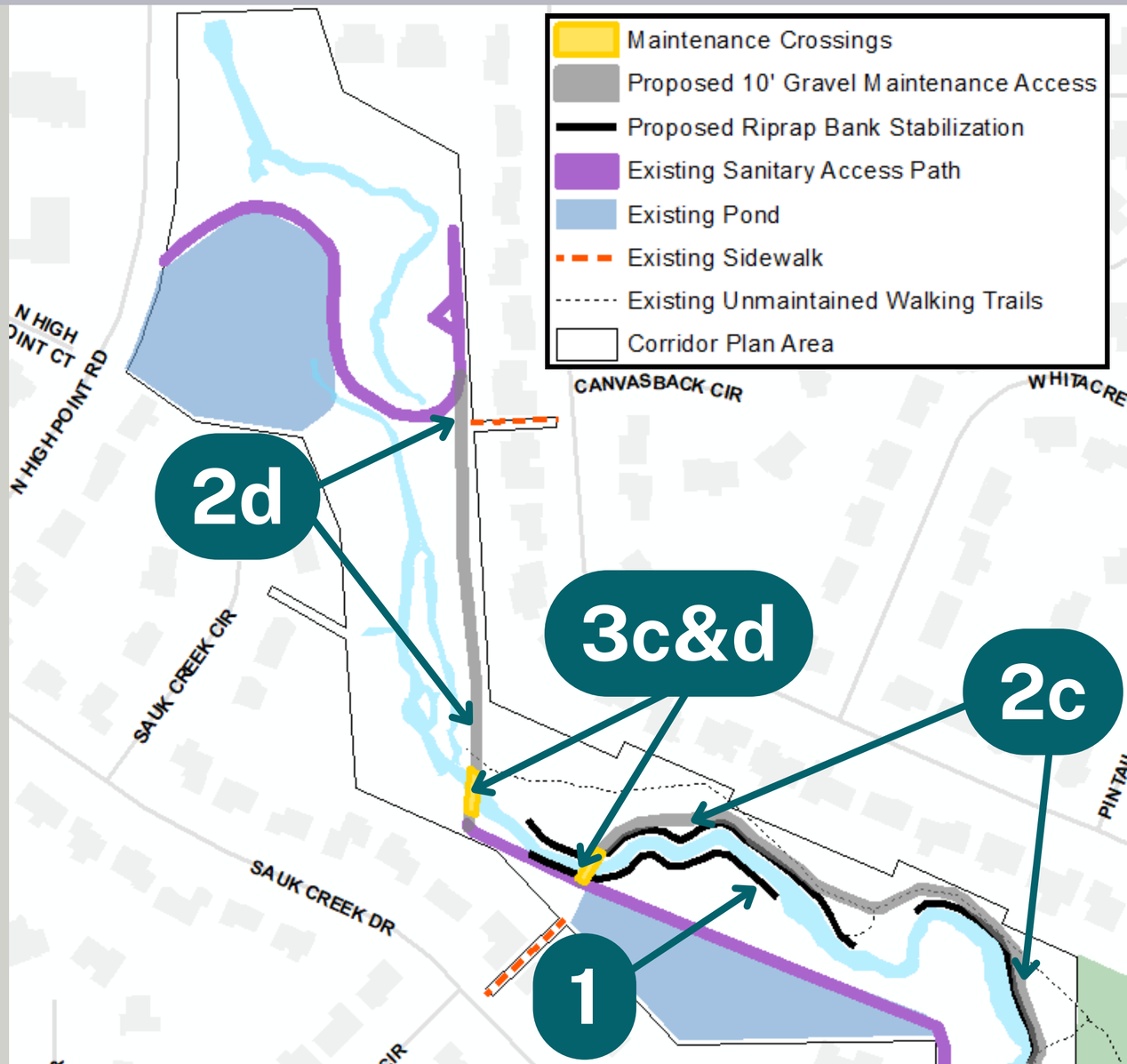


Note: Map shows a conceptual plan and general location of proposed improvements. Final location of all improvements will be adjusted based on detailed design including minimizing grading impacts, minimizing tree impacts (per design guidance received from community during corridor plan process), and addressing additional community concerns related to detailed design development.

Draft Final Corridor Plan - Upper End
Conceptual stormwater improvements

Proposed improvements:

- 1 - proposed riprap bank stabilization
- 10' wide gravel maintenance access path
  - 2c - Plover Circle to St Lawrence Circle along Farmington Way
  - 2d - Upper corridor along Farmington Way between ponds
- Channel crossings for maintenance access
  - 3c & d - Concrete ford(s) for channel maintenance access *(will analyze how to address crossing needs during design)*
- Generalized goals for pond improvements
  - St Lawrence Circle Pond
  - N High Point Pond



Note: Map shows a conceptual plan and general location of proposed improvements. Final location of all improvements will be adjusted based on detailed design including minimizing grading impacts, minimizing tree impacts (per design guidance received from community during corridor plan process), and addressing additional community concerns related to detailed design development.

Pond Improvements

- St Lawrence Circle pond potential improvements
  - Improve flow of water into pond near Plover Circle (repair + clear out pipes and outlet)
  - Deepen and add filtration medium. Restore with native plants to promote infiltration (improve water quality)
  - Remove failed diversion structure from channel
  - >>will help pre-treat and infiltrate some of the stormwater from the area in yellow in small events. It will not have a notable impact on channel capacity.
- High Point pond potential improvements
  - Improve design so sediment can be removed
  - Reconnect main channel to bypass pond
  - Assess sediment loading after channel stabilization to determine improvement options

Note: ponds may receive incremental improvements with adjacent phases, where logical. EX: removing failed diversion structure can be completed with the adjacent channel stabilization.

Channel

Review of existing bank condition

Existing Sanitary Access Path

Corridor Plan Area

Unmaintained Walking Paths

Bank Condition Analysis

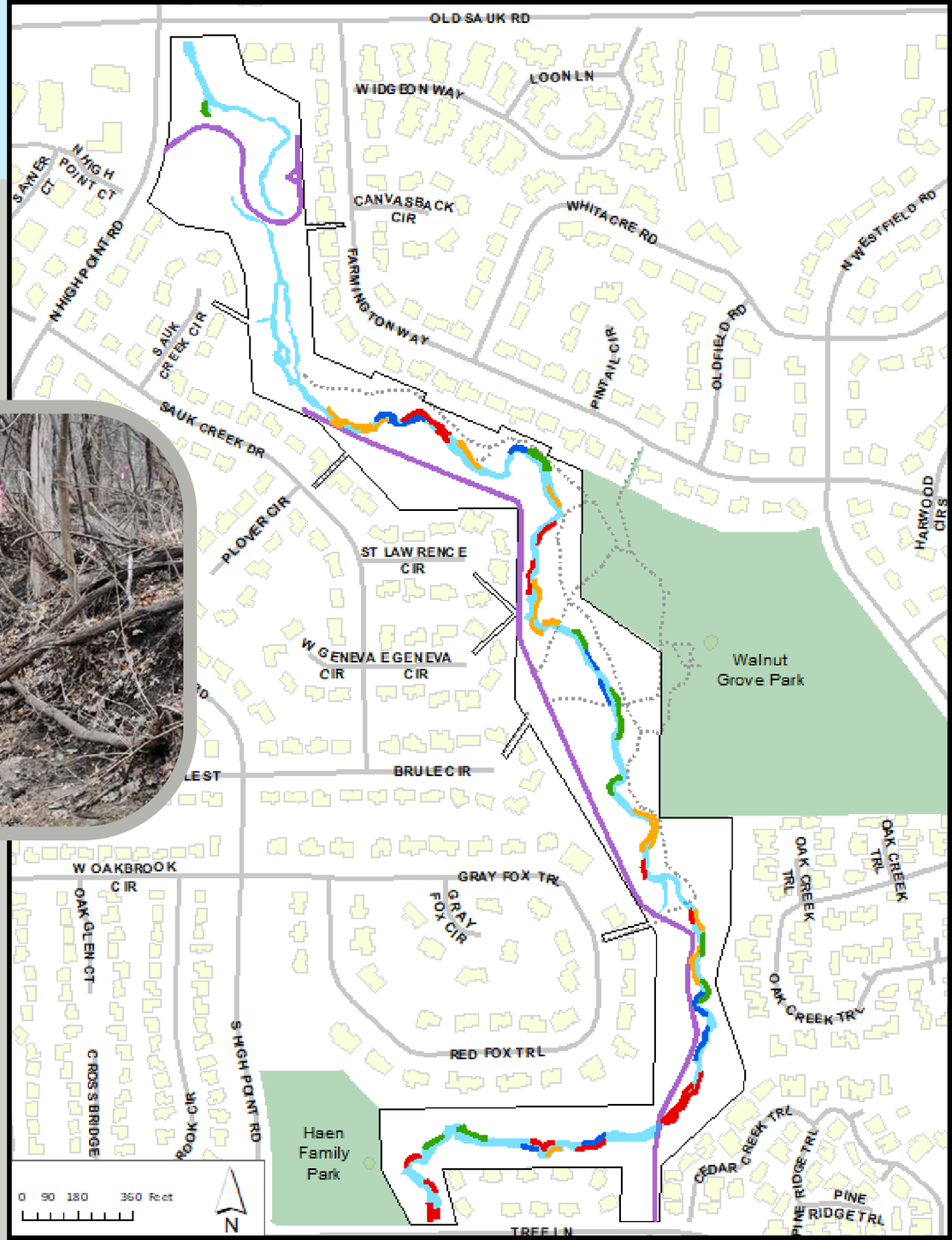
>4' Tall vertical and undercut banks

3-4' tall vertical and undercut banks

>4' tall banks, 2:1 or steeper

3-4' banks, 2:1 or steeper

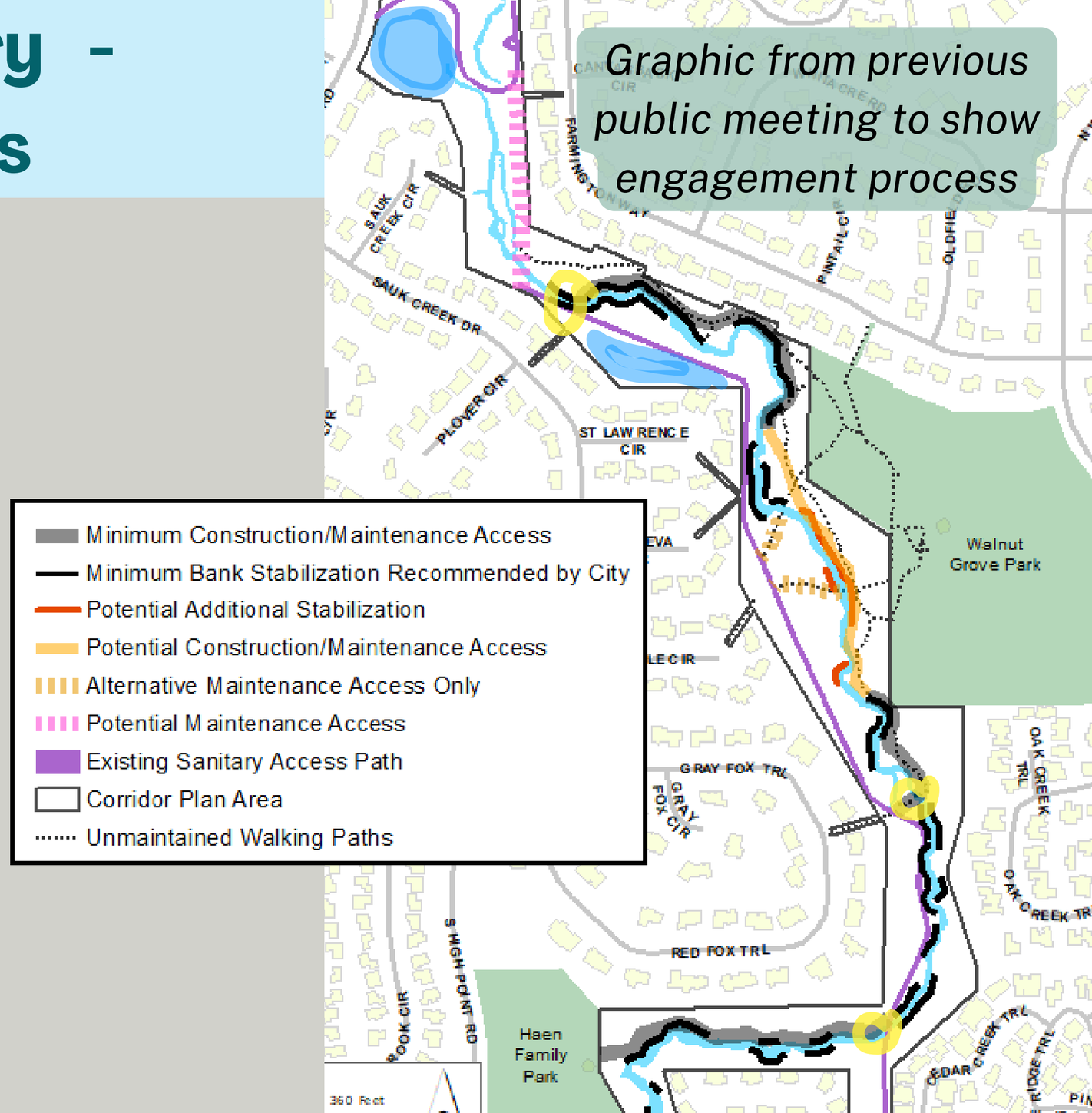
Generally, more susceptible to erosion



Community Input Summary - stormwater improvements

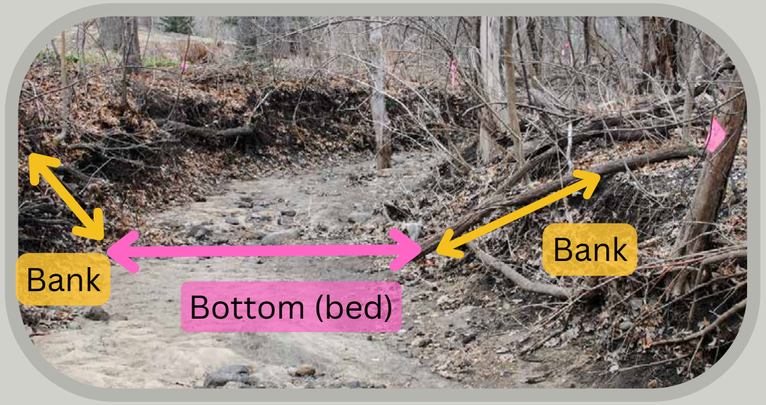
Community Input Shaped:

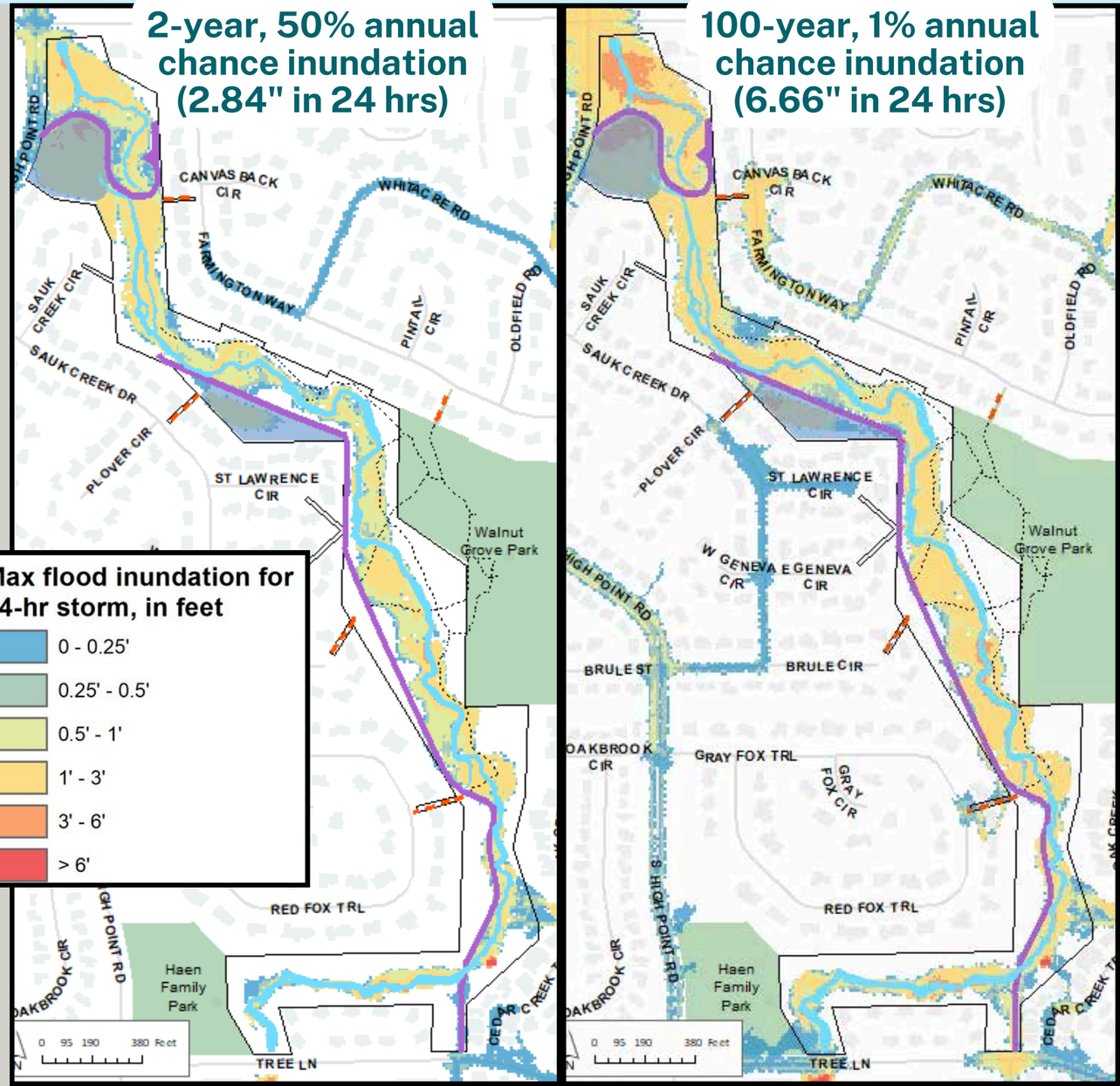
- Relative quantity of channel stabilization and maintenance access (paths and crossings)
- Generalized goals for pond improvements
- Upper corridor section maintenance access (85% supported or neutral)
- Middle corridor channel stabilization + maintenance access (75% supported or neutral)



Channel - Clarifications on Impacts

- The channel does not convey very large events on its own, and in small events (ex: the 50% annual chance) the runoff leaves the channel and is conveyed within the floodplain
    - Stabilizing the banks will not significantly impact channel capacity, so the channel will still be well-connected to the floodplain
- Stormwater improvements shown do not cross regulated wetlands





DESIGN GUIDANCE

During the last meeting the community agreed (85% + 12% neutral) in the following prioritization in considering trees while designing the specific location of the improvements (i.e. shifting channel stabilization or maintenance access to avoiding specific trees) during the future design phases.

- **Priority 1:** Design around the largest quantity of healthy, native trees that are included in the natural ecological communities identified in the ecological assessment

- **Priority 2:** Design around healthy trees not included in the natural ecological communities identified in the ecological assessment

What we heard

Large concern about threats identified in Ecological Assessment -
Invasive Species, Erosion, Replacement of Oaks, Flooding and Sedimentation from the channel

Minimize impacts to trees

Improve health of forest and conditions for native plant and tree species. Specifically concern about protecting existing oaks, and replanting new oaks

Stabilize channel and improve downstream water quality

Increase resiliency to climate change

Wildlife concerns

Important
that the City have access to remove dead/down trees

How we are responding

Ecological Assessment Threats:
-Thinning invasive species within 10-20' of project area
-Replanting with natives
-Creating light openings and planting new oaks
-Stabilizing channel to reduce downstream sedimentation

Minimize impacts to trees
-Limiting channel stabilization
-Utilize existing access paths where possible
-Ecological restoration promotes new generation of forest
-stabilizing channel with riprap
-Hiring arborist to assist during design phases & construction

Improve health of forest and conditions for native plant and tree species
-Thin canopy crowding around mature oaks
-Control invasive herbaceous species like garlic mustard, Dame's rocket, burdock
-Monitoring and planning for oak wilt impacts
-Replanting oaks and other native trees, native shrub layer and native woodland wildflowers, grasses and sedges.

Stabilize channel and improve downstream water quality
-Stabilizing banks most susceptible to erosion with natural materials
-Pond improvement goals will increase stormwater treatment, infiltration, and maintenance

Increase resiliency to climate change
-Improving conditions for existing oaks and hickories that are stressed in changing climate
-Reducing impact on canopy with project by minimizing channel restoration areas
-Stabilizing channel and improving ground cover will reduce erosion during larger storm events

Wildlife concerns
-Ecological restoration to improve habitat offerings
-Collecting wildlife sightings via iNaturalist data, eBird to improve species specific responses
-Timing construction to avoid nesting seasons whenever possible
-Working with UW Urban Canid lab to track fox and coyote denning in area

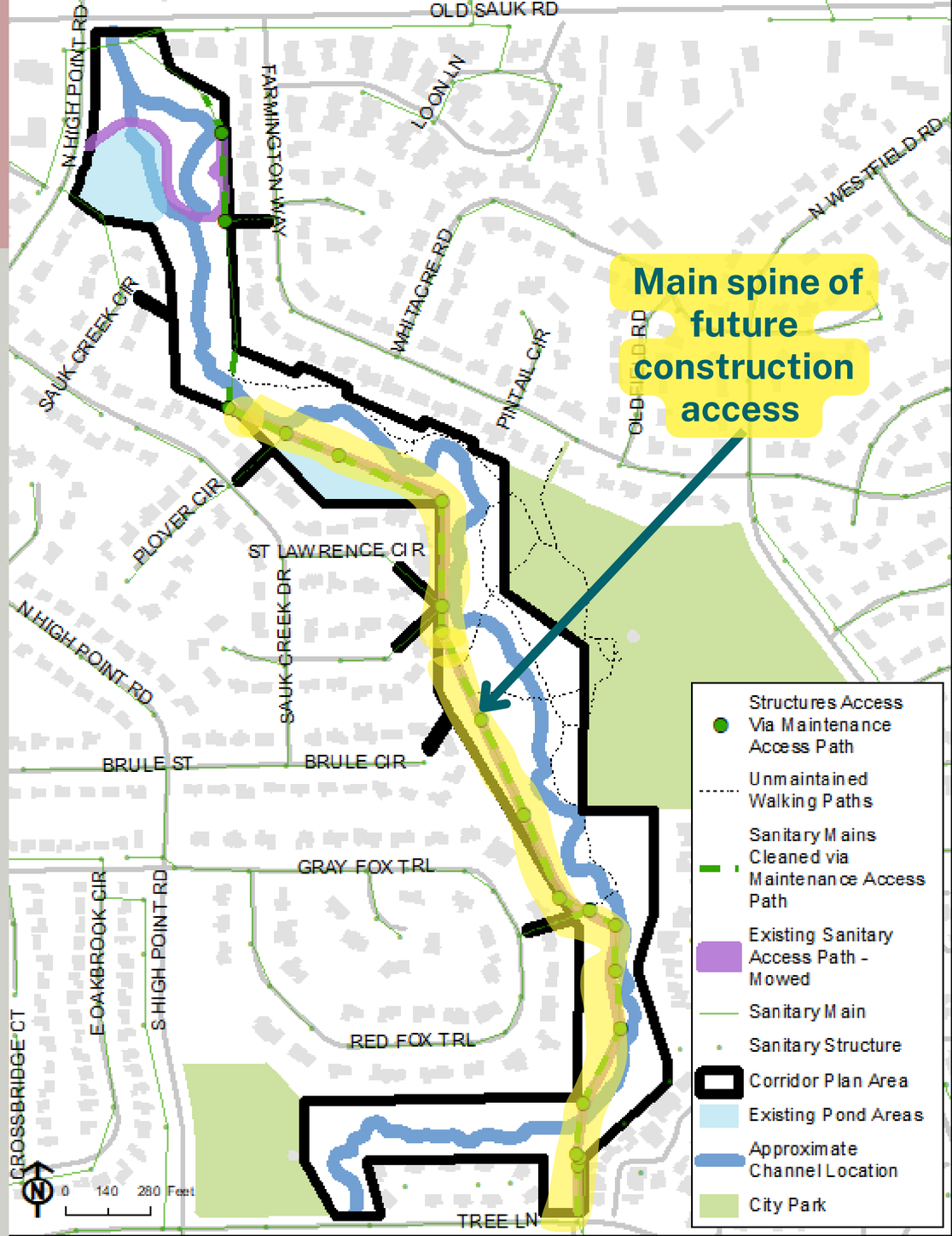
Important that the City have access to remove dead/down trees
-Maintenance/Construction access in more areas, especially where bank stabilization is proposed
-Siting maintenance access along areas with frequent tree removal requests
-Offering options for improved maintenance access along property lines in the southern East-West section

Construction Access

On Existing Sanitary Access Path

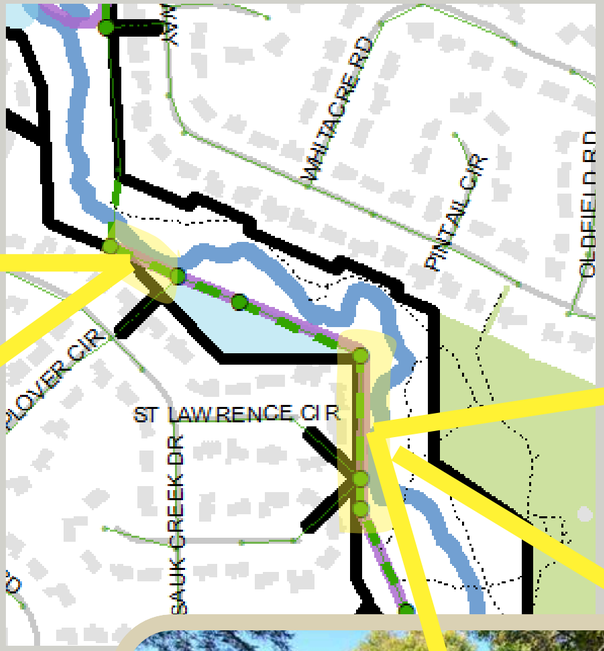
From the previous meeting, we shared:

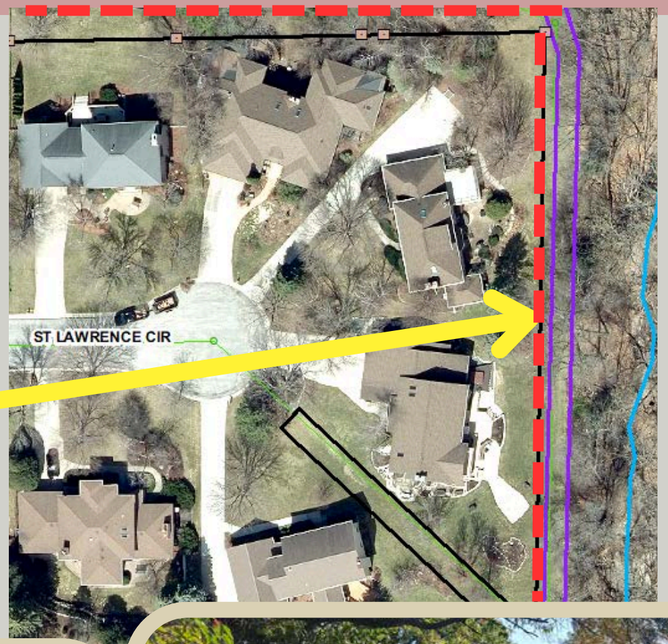
- To minimize tree impacts, existing sanitary access from Tree Lane to Plover Circle will be main spine for future construction access when channel repairs are completed
- Moving forward, repairs of sanitary access path (north and south paths) will be completed with gravel



Construction Access - Along Backyards

On Existing Sanitary Access Path





Construction Access - Along Backyards

On Existing Sanitary Access Path

What we heard

- Concerns about aesthetics adjacent to backyard
- Want to preserve canopy cover
- Desire to shift construction access into channel
- Concerns about tree removal between western bank of channel and access path
- Requests channel to be shifted east away from property boundary further into public wooded area

Construction Access - Along Backyards

On Existing Sanitary Access Path

Limitations

- When access path was built, 6" topsoil and sod were placed in areas along backyards at homeowner's request
    - In past 10+ years, City found the topsoil creates rutting issues, and the grass is too slippery for safe, consistent vactor access
- Cannot relocate sanitary sewer now, and relocating the sanitary path farther into the greenway would cause more tree & canopy impacts

Construction Access - Along Backyards

On Existing Sanitary Access Path

Proposed Modifications (Notes for Design)

- Use riprap to keep channel from migrating closer to private property
- Where possible on western bank, install riprap steeper to minimize grading and tree impacts
- Investigate the impact on healthy, native trees of shifting the channel east
- Minimize additional thinning of WDNR NR 40 invasive trees between the western bank and the access path
- Look at ways to shift the sanitary access path towards the channel (balancing tree impacts with path location)
    - If desired, consider planting native shrubs along property line if space allows

Construction Access - Along Backyards

On Existing Sanitary Access Path

What to expect between now and construction:

- More equipment in the greenway, needed for assessing tree health, for routine maintenance of greenway, sewer cleaning and access to the storm sewer and pond areas
- Path repairs will be completed in gravel when needed; turf is not viable long-term for heavy equipment
- During construction phase this path will be heavily used with large equipment and will be reconstructed as needed at that time

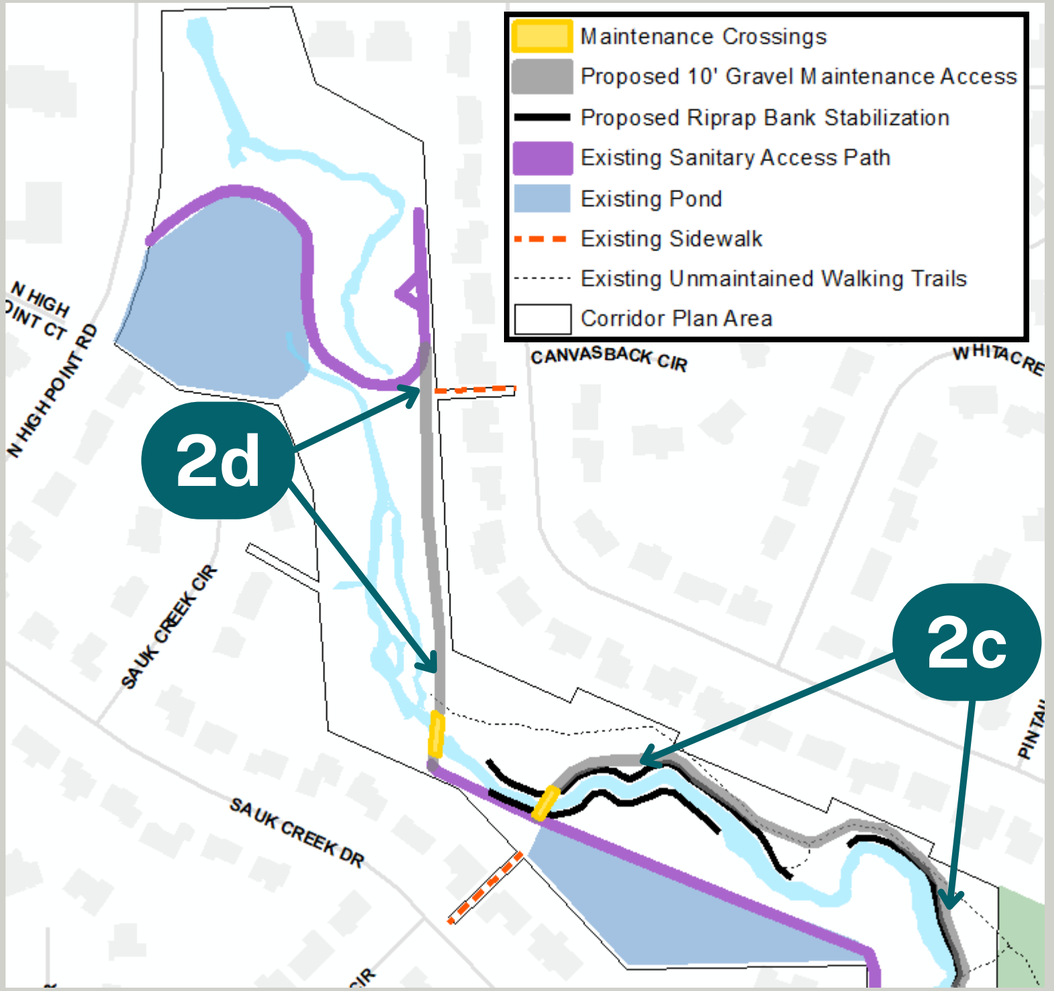
All property owners are able to plant trees or other screening on their own property

- If you need help selecting trees and shrubs that are appropriate for the natural ecological community and improve wildlife habitat, the City is happy to provide resources to help

Channel Maintenance Access - Along Backyards

What we heard so far

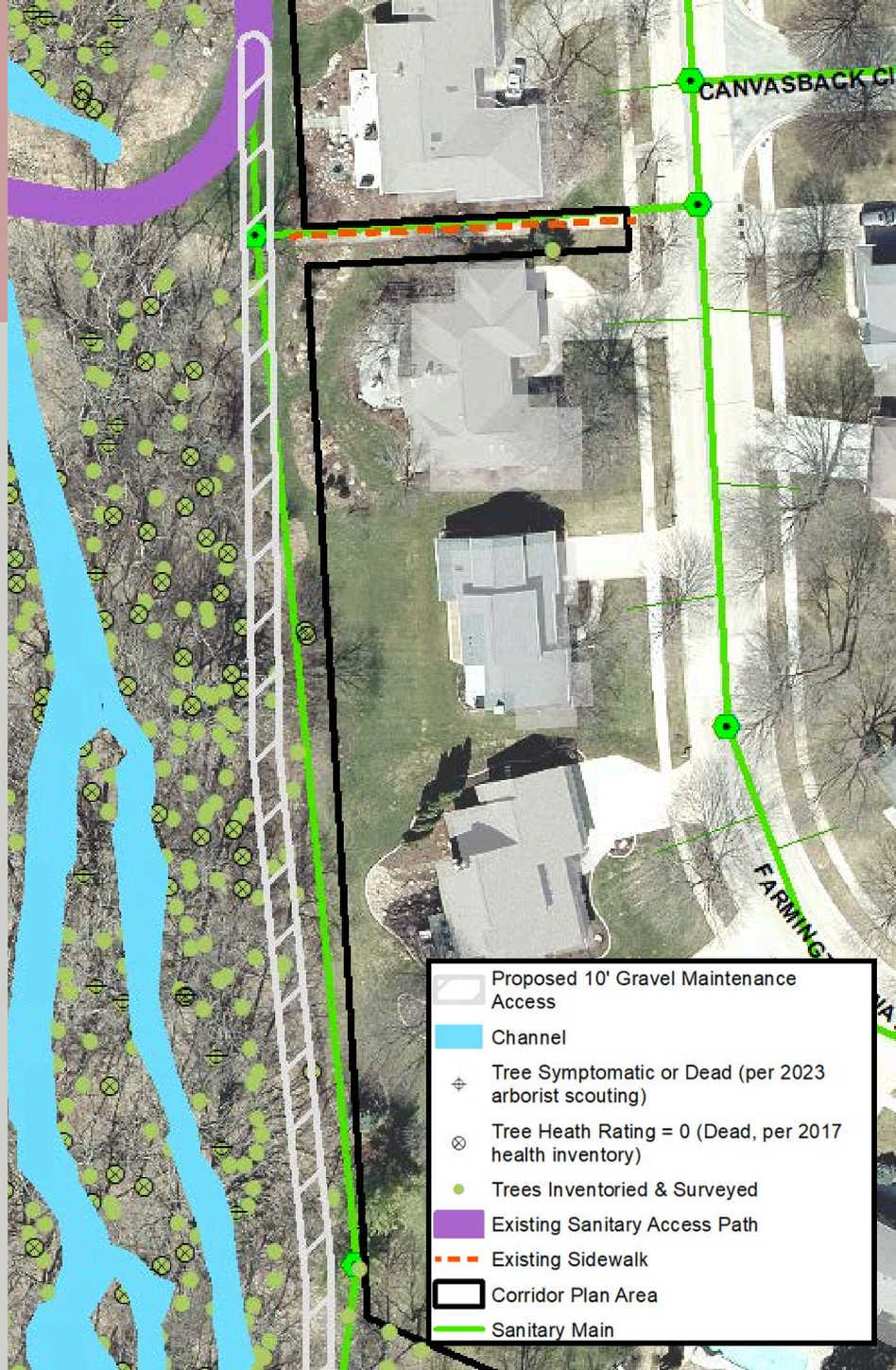
- Concerns about aesthetics adjacent to backyard
    - Areas into the greenway are maintained as turf by adjacent property owners
- Concerns about proximity to property
- Complaints about existing tree maintenance capabilities
- Concerns about tree impacts
- We anticipate learning more tonight, via survey, and via site walk throughs



Channel Maintenance Access - Along Backyards

Important things to note

- Path shown (right) is a **general** location based on minimizing tree impacts (per 2017 inventory), and future maintenance and/or construction needs
  - Path is adjacent to existing sanitary sewer to provide access during an emergency, and a corridor for future reconstruction
  - Path is near edge of greenway to reduce tree impacts, and provide access to trees that are requested by adjacent homeowners to remove because they are at risk of damaging private structures
- Path would allow for improved maintenance access to respond to more dead tree requests and some channel blockage requests
  - Path would also allow to haul more felled tree material out when density is beyond what is needed for habitat

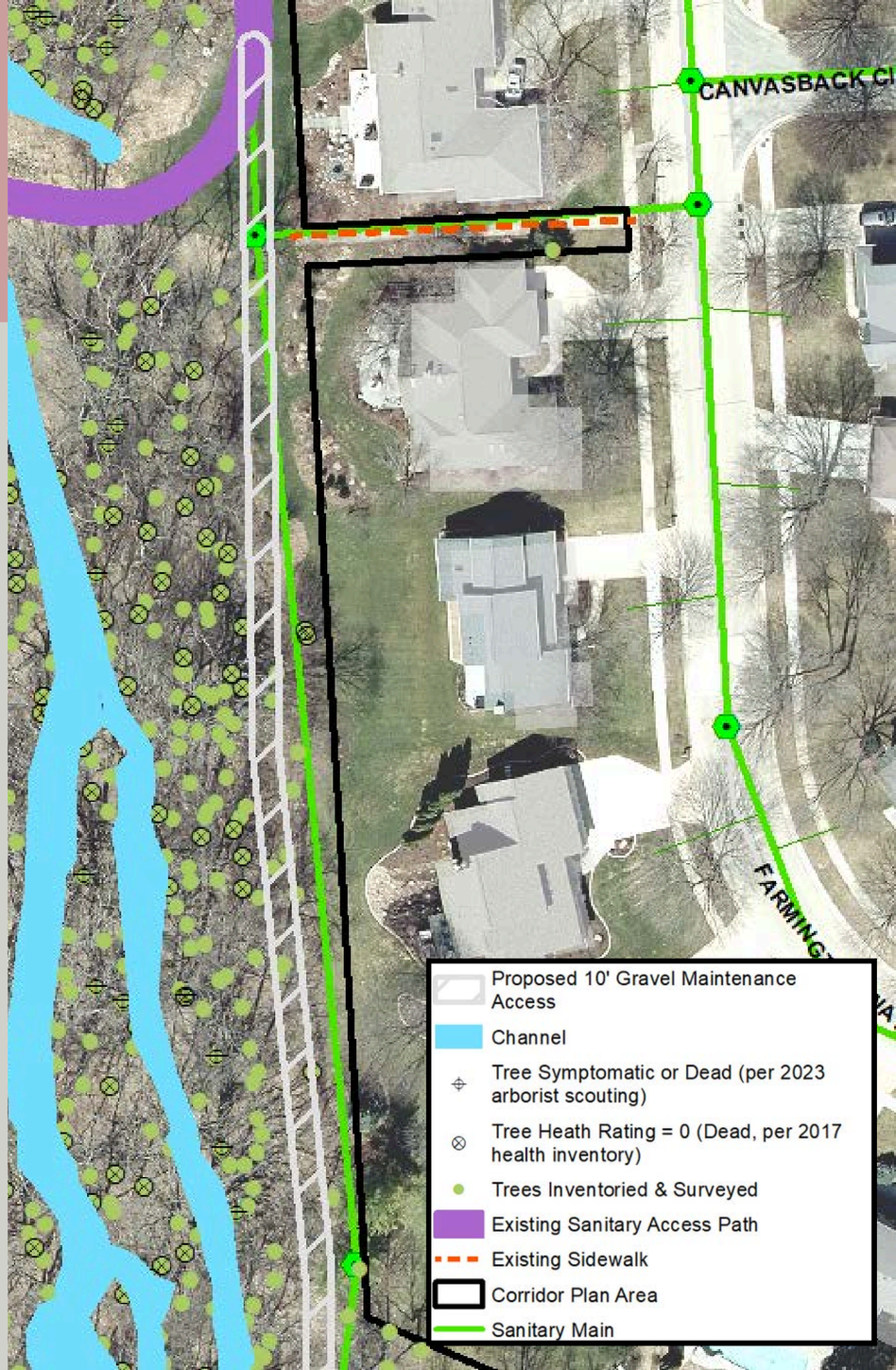


Channel Maintenance Access - Along Backyards

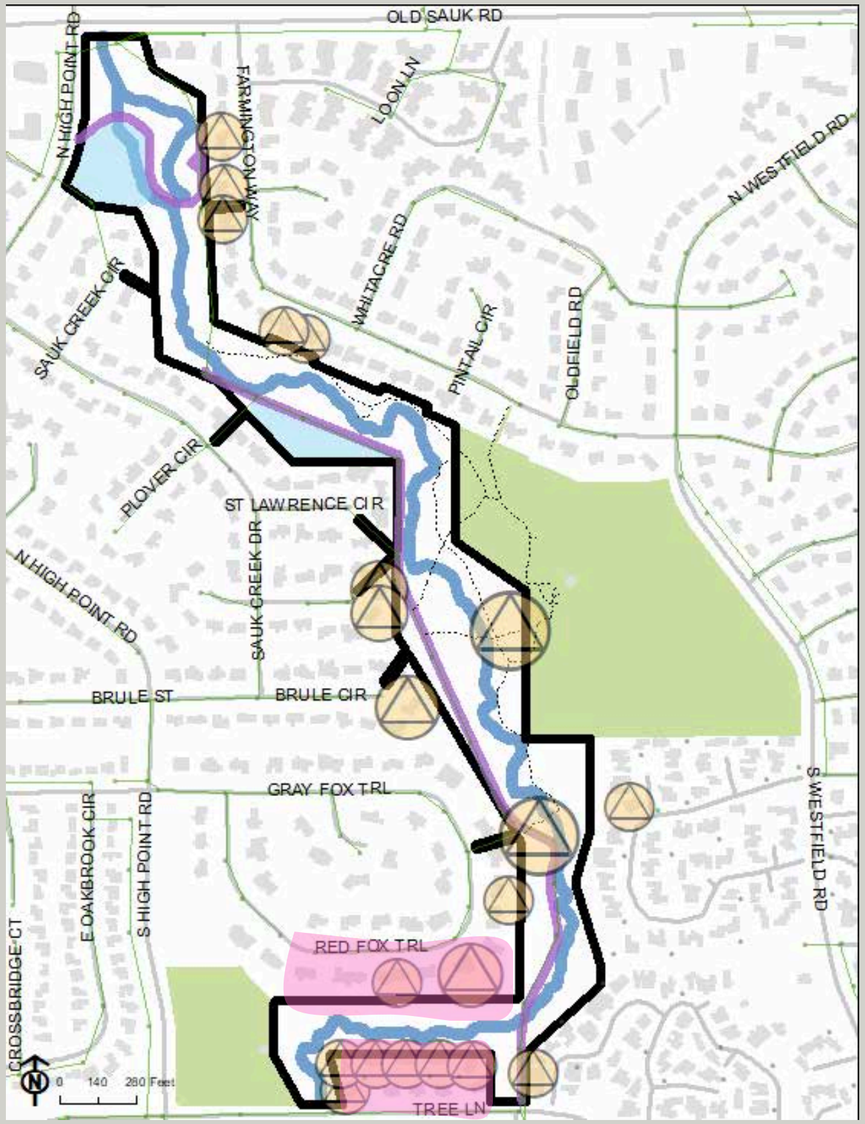
Design considerations

- Actual location will be determined during design phase. Factors include:
  - Maintenance needs
  - Community input
  - Minimizing grading
  - Minimizing tree impacts
- During design can consider:
  - Planting native shrubs along edge of path
  - Placing 1" topsoil and native vegetation on top of path*

**Community would need to be OK with maintenance implications because placing topsoil on top of gravel limits access, especially in wetter areas like this one*



Maintenance Requests



Tree Removals

- The City receives frequent requests to remove standing dead, or fallen trees.
- Since 2018, Engineering Operations has received >40 requests for tree removals in the Sauk Creek Greenway alone

Existing paths/plan shared in plan do not address tree-related maintenance requests in areas highlighted in pink

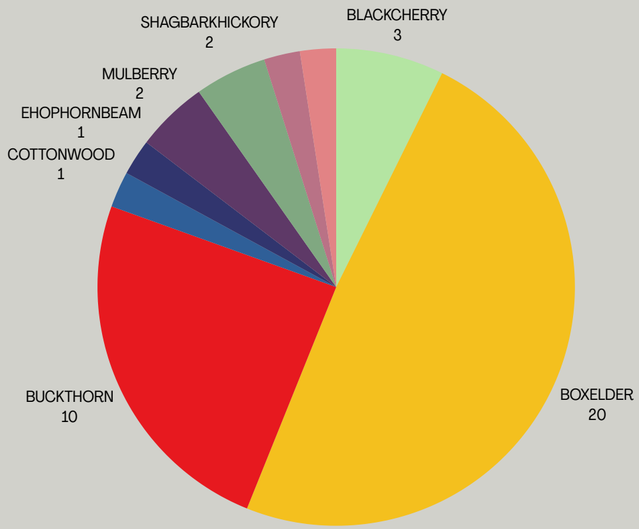
Preventing Dead/Down Trees on Neighbor's Fences/Yards

88% of respondents shared that it was somewhat important, or very important that the City have access to remove dead/down trees on neighbor's fences and yards

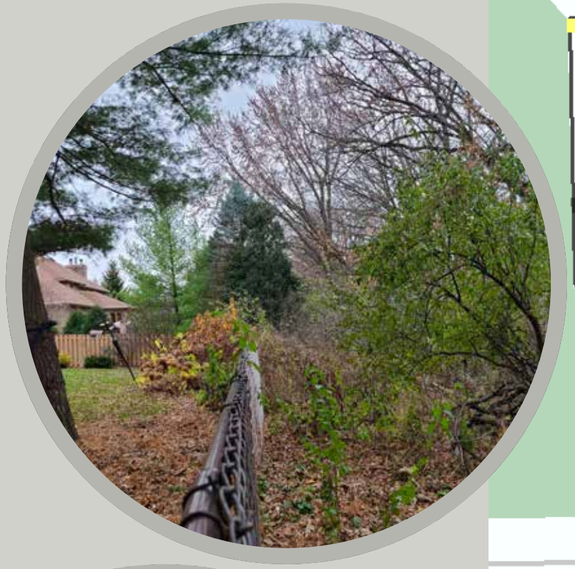
Propose that 10'-20' from property line in high-complaint areas:

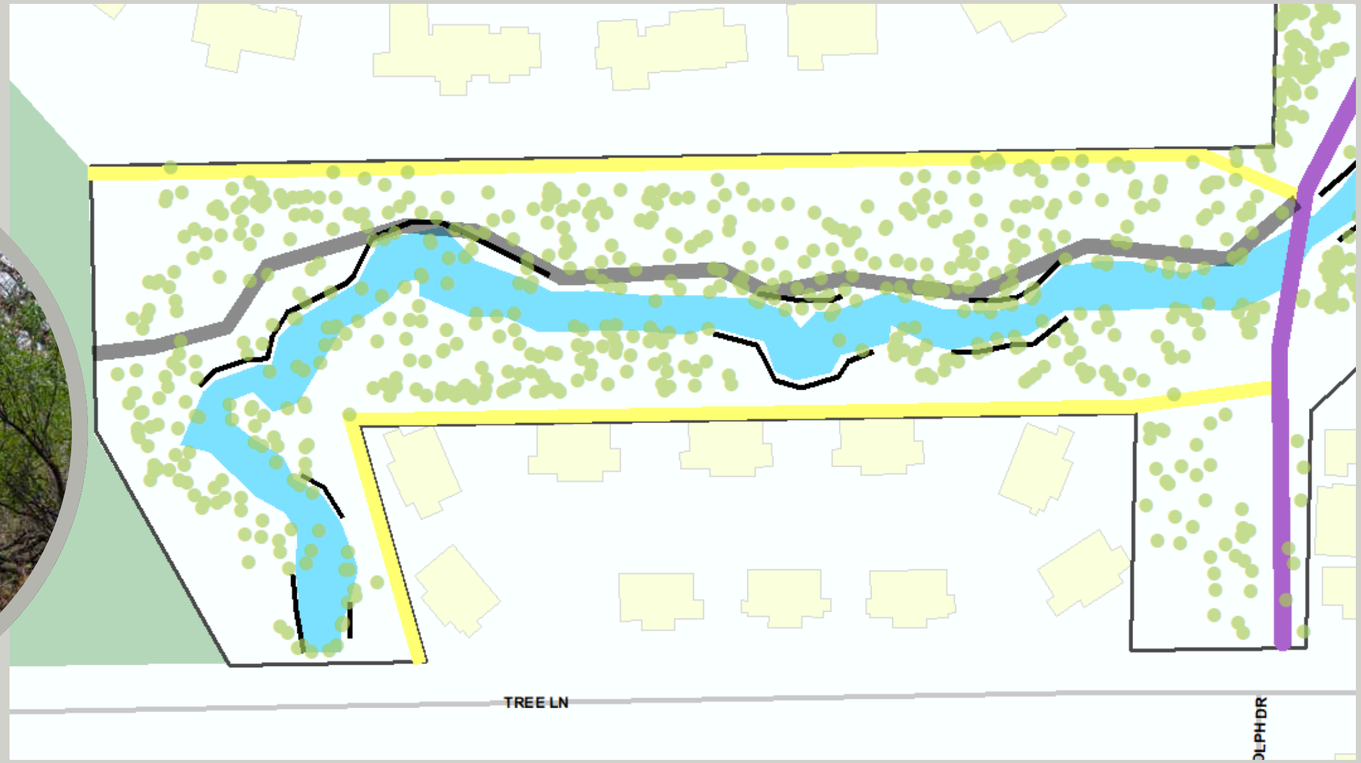
- Create access by removing trees that lean over fences
- Prevent the growth of trees that lean into light opening (yards)
- Work to establish native herbaceous understory
- Do not replant trees within 10' of property line in high-issue areas

Preventing Dead/Down Trees on Neighbor's Fences/Yards



Trees within 20' of property line





Will request input from directly impacted, adjacent neighbors during design phase to see if this is desired. If not desired, City will have limited ability to respond to tree removal requests.

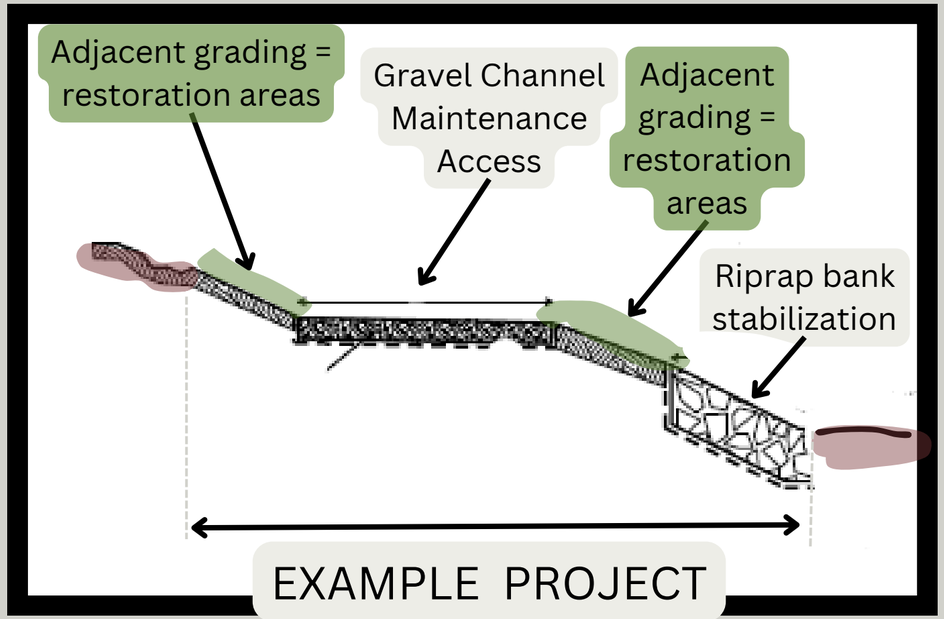
Ecological Input Summary

- Threats community is most concerned about include:
  - Invasive Species
  - Erosion
  - Replacement of Oaks
  - Flooding and Sedimentation from the channel
- 97% of respondents are somewhat or very concerned about preserving the health of existing oaks.
- 93% of respondents think it is somewhat or very important to get new oaks to grow in the greenway.
- 87% of respondents are somewhat or very interested in expanding coverage and increasing the diversity of native herbaceous species (non-tree or shrub plants) in the greenway.

Oaks are being replaced by trees that are more common in the landscape and provide less ecological value. Oaks are considered critical keystone species that provide an enormous contribution to our food webs, as many moths, butterflies, and insects depend on oaks to lay their eggs. These caterpillars and insects in turn are used as food for young birds, and the cycle continues (Tallamy 2021). Oaks also provide acorns that feed numerous wildlife.

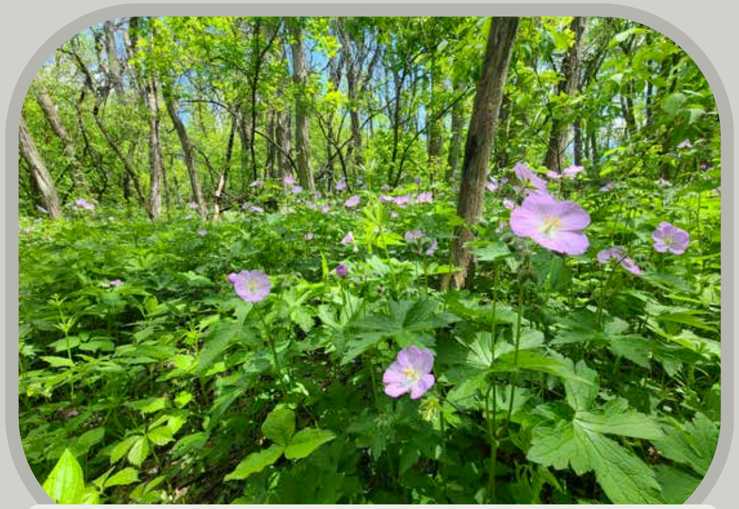
-Heartland Ecological Group
Sauk Creek Ecological Assessment

Proposed Ecological Restoration



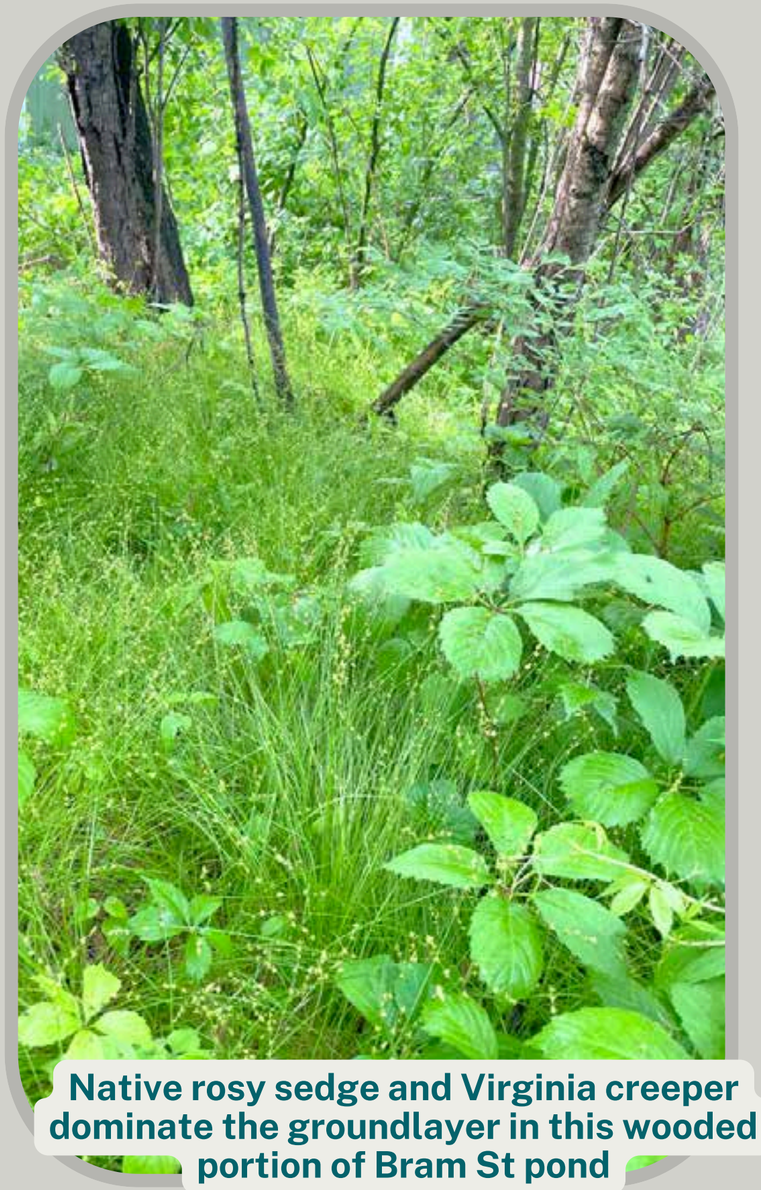
EXAMPLE PROJECT BOUNDARY

Proposed Restoration Areas: grading adjacent to stormwater improvements - extents dependent on site conditions and will be minimized during design



Wild geranium in Sauk Creek greenway

Canopy oaks are not being replaced in areas where shrub layer is too dense as seen in background. Young oak regeneration could be encouraged along edges of restoration areas where pockets of light will be created. A young oak is growing along a sunnier access path in the greenway in foreground.



Native rosy sedge and Virginia creeper dominate the groundlayer in this wooded portion of Bram St pond

Proposed Ecological Restoration Actions

During Construction

- Preserve healthy, mature canopy trees with emphasis on species that are included in the natural ecological communities identified in the ecological assessment
- Utilize certified arborists to provide enhanced tree protection zones and on-site monitoring during construction

Post-Construction Invasive Species Control

- Control herbaceous invasive species especially reed canary grass, garlic mustard, dame's rocket, burdock, daylily, periwinkle, goutweed and other horticultural plants.
- Ongoing control of invasive woody species growth

Periwinkle invading a greenway understory

**Ecological Restoration will only occur within project boundaries. Select restoration work may occur outside of project boundaries if desired by residents and within City resources.*

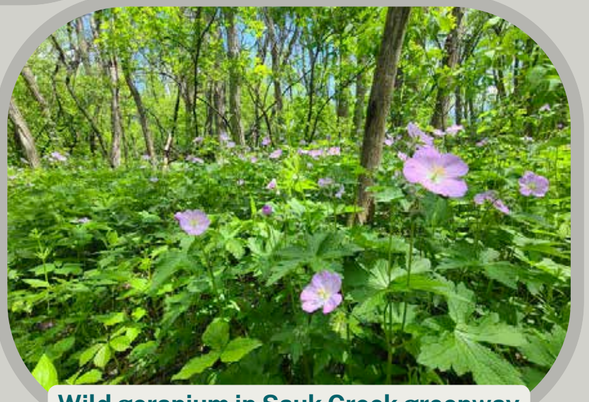
Proposed Ecological Restoration Actions

Post-Construction Native Planting

- Plant native trees
  - EX: bur oak, swamp white oak, swamp-bur hybrid oak, shagbark hickory, bitternut hickory, hackberry or others
- Plant native woodland shrubs
  - EX: witch hazel, bladdernut, pagoda dogwood, Eastern wahoo, elderberry or others
- Plant native plugs in select areas
  - Ex: giant Solomon's seal, mayapple, wild geranium, Canada anemone, ostrich fern, sensitive fern, columbine, big-leaved aster, elm-leaved goldenrod, zigzag goldenrod, Virginia bluebells, figwort, great blue lobelia, Jacob's ladder, golden Alexander, Virginia wild rye, silky wild rye, riverbank wild rye, bottlebrush grass, common wood sedge, rosy sedge and others
- Sow native seed across entire disturbed area.
  - Ex: woodland, partially shade tolerant, wetland species

Native rosy sedge and Virginia creeper dominate the groundlayer in this wooded portion of Bram St pond

55% of people thought that native forest overstory with native diverse understory would be aesthetically pleasing, resilient to flooding and erosion, and beneficial to ecosystem services.



Wild geranium in Sauk Creek greenway

**Ecological Restoration will only occur within project boundaries. Select restoration work may occur outside of project boundaries if desired by residents and within City resources.*

Proposed Ecological Restoration

Post-Construction Ecological Restoration Contract

- For the first 3-5 years after construction, the **project area** will be maintained by an ecological restoration firm. Firms focus on invasive species control and targeted actions to foster native plant growth.

Ongoing Targeted Maintenance

- Project areas that are restored become “Tier 1 Vegetation Maintenance” sites managed by Engineering Conservation staff. These sites receive the highest level of vegetation maintenance service across stormwater land.

Level of Service

  - Each site receives a maintenance visit at least twice during the growing season; this includes targeted invasive species control at this visit overseen by conservation staff.
  - Supplemental native seeding or plug planting as needed.
  - These sites are burned on a maintenance cycle of 3 to 7 years if site conditions and species composition allows. Native planting beds (as opposed to large native restoration sites) are likely to be burned at a shorter return interval.
  - Each site will receive spot brush cutting of woody invasive every 3 years, alternating prescribed burn years.
  - Each site receives a flora survey once every 3 to 5 years.
  - Hybrid Non-Native Cattails and Reed Canary Grass are typically managed in these areas if they are new populations or impede stormwater flow contributing to flooding.

Tier 1

These sites are characterized by their great diversity of native species and receive the highest level of maintenance for ecological restoration. These sites are primarily rain gardens, bioretention basins, native plant demonstration beds, ponds, greenways and shorelines with vegetation most closely resembling a native ecosystem. Tier 1 sites are characterized by majority native plant cover, high diversity of native plant species, low invasive plant presence, and great potential for supporting species specialists that require native plants.

Tier 1 sites are dominated by native species including the canopy layer (for wooded sites), and a diverse assemblage of herbaceous species. Blue tree tube shelters a planted hickory sapling.

Engineering Conservation staff watering native plants grown in-house for use on stormwater land

**Ecological Restoration will only occur within project boundaries. Select restoration work may occur outside of project boundaries if desired by residents and within City resources.*

Habitat and Wildlife Considerations

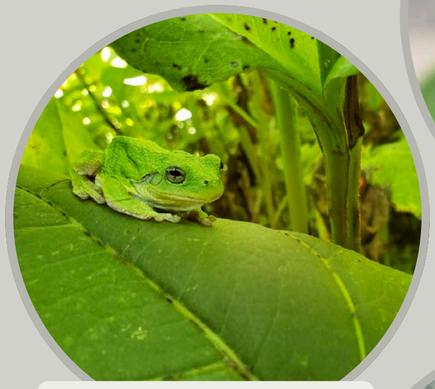
- Avoid disturbing populations of native herbaceous or shrub woodland species
- Protect, preserve, and improve heath of existing oaks, a keystone species
- Leave dead standing trees and naturally felled trees for wildlife habitat if they are not in areas where they will pose a hazard to people or property or will not cause stormwater drainage issues.
- Remove select invasive species that outcompete native species as part of ecological restoration efforts
- Control herbaceous invasive species with high potential to disrupt ecological restoration and follow the Wisconsin Department of Natural Resources Chapter 40 Classification and Control Legislature on Prohibited Invasive Species Invasive species rule – NR 40 | | Wisconsin DNR
- Coordinate with wildlife biologists on ways to improve habitat

Tracks at kenosha greenway

Bloodroot in Sauk Creek Gwy

Monarch caterpillar at Regent St median rain gardens

Endangered Rusty Patch Bumble Bee - South Point biobasin



Tree frog on native cup plant at Grassman Ponds

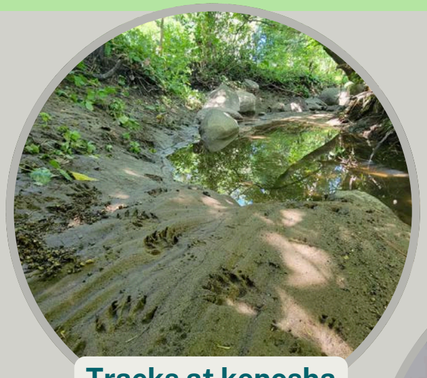
Dragonfly at Lake Mendota Drive

Fox at Linda Vista rain garden

Proposed Ecological Restoration Benefits

Ecological lift and benefits

- Increased biodiversity
- Decreased invasive species
- Increase in pollinators
- Increased habitat
- Increased ability to filter pollutants
- Bio-infiltration – higher permeability
- Decreased potential for washout/erosion



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Endangered Rusty Patch Bumble Bee - South Point biobasin

Tree frog on cup plant at Grassman Ponds

Dragonfly at Lake Mendota Drive

Fox at Linda Vista rain garden

Sweat bee on aromatic aster

Wild geranium in Sauk Creek Gwy

Swallowtail caterpillar at Zeier Lein

Ecological Restoration

Wisconsin DNR Invasive Species Identification, Classification, and Control Rule (NR 40) - Invasive Trees

Regulated and Restricted

- Black locust *(Robinia pseudocacia)*
- Burning bush *(Euonymous alatus)*
- Common buckthorn *(Rhamnus cathartica)*
- Siberian elm *(Ulmus pumila)*
- White mulberry *(Morus alba)*

Draft 20' buffer of where invasive tree removal could occur

Common buckthorn in a wooded greenway. The Ecological Assessment makes a connection between invasive trees/shrubs and a lack of biodiversity.

Invasive species were identified as a threat to the ecological health of the greenway in the Ecological Assessment and is a top concern of the community.

82% of the community polled supported removing <u>all</u> (47%) or the majority (35%) of invasives within 10-20' of the project area.

The City will proceed balancing removing all, and saving select trees with canopy impacts in 10-20' outside the project area during the design phases. Areas with removals will be replanted with native seed and trees, where applicable.

Proposed Ecological Restoration

Q1

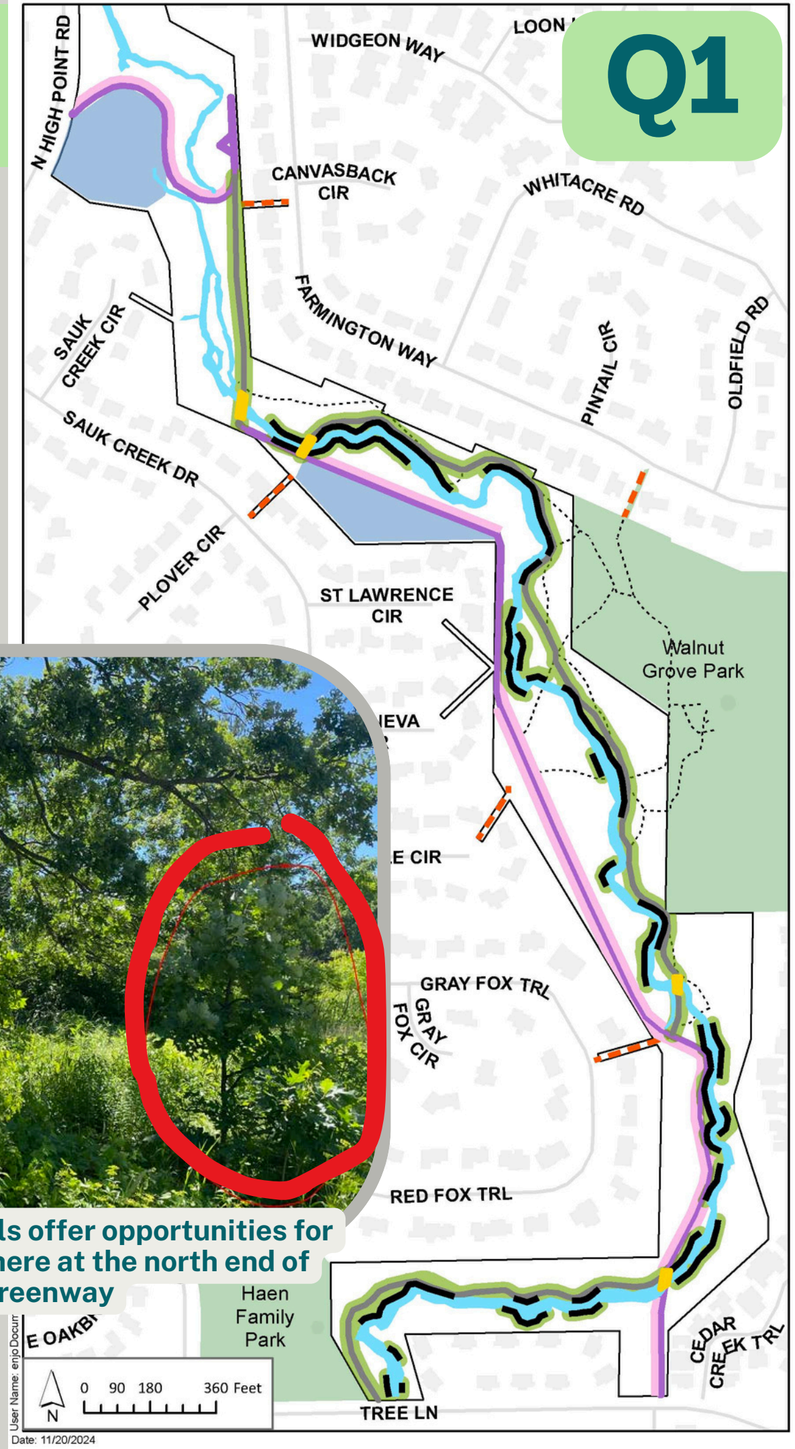
Additional opportunity along existing Sanitary Access Path to thin NR40 invasives and create light openings to replant native trees that are included in the natural ecological communities identified in the ecological assessment. This area is approximated in pink on the right.

The existing path has created some opportunities for light, but may need to selectively remove trees not identified in ecological assessment as part of natural ecological communities.

Do you support the City completing this additional restoration work (as shown in pink) <u>generally</u>? In each design phase, the community could weigh in on areas they'd prefer there is less restoration and replanting.

1. Yes
2. No
3. I'm OK either way
4. Unsure

Sunnier areas adjacent to trails offer opportunities for oaks to regenerate as seen here at the north end of Sauk Creek Greenway



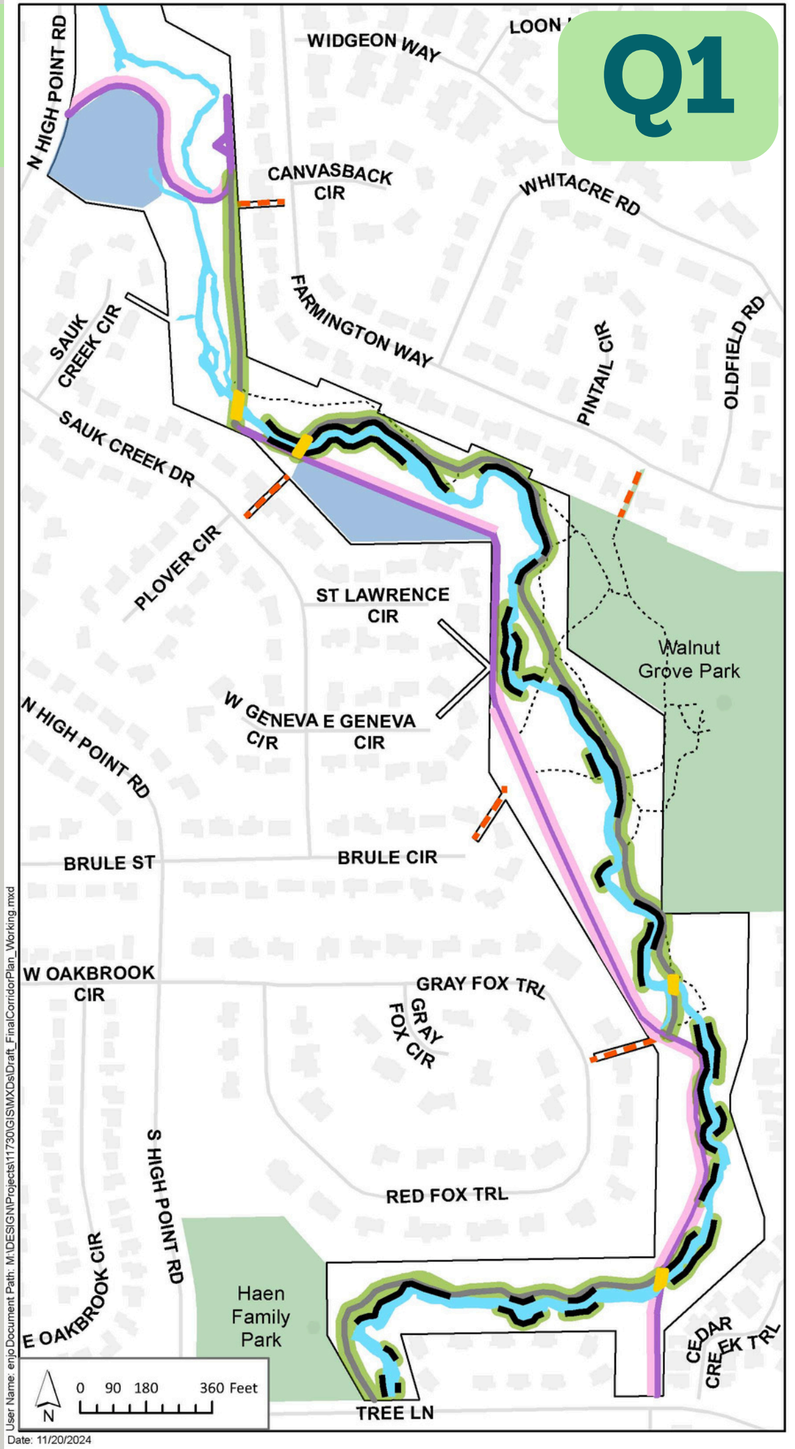
Proposed Ecological Restoration

Question 1 - Sauk Creek Corridor Plan PIM 4

1. Do you support the City completing this additional restoration work (as shown in pink) generally? In each design phase, the community could weigh in on areas they'd prefer there is less restoration and replanting. (Single choice)

Yes	(27/46) 59%
No	(11/46) 24%
I am OK either way	(1/46) 2%
Unsure	(7/46) 15%

You did not answer this question



Ongoing Ecological Restoration

Minimal restoration work has been occurring in the corridor and will continue prior to construction projects

Oak ecosystems are among the most highly productive ecosystems in the world but are rapidly declining and globally imperiled. Oaks are a keystone species, providing habitat structure and critical compositional features for 250+ species of birds, 500+ species of insects, and 500+ species of plants.
-Natural Resources Conservation Service (NRCS)

Goals of this work have been to foster a new generation of native, hardwood canopy trees and protect the older specimen trees as well as improve overall native plant diversity, ecosystem functionality and wildlife habitat in limited, targeted areas.

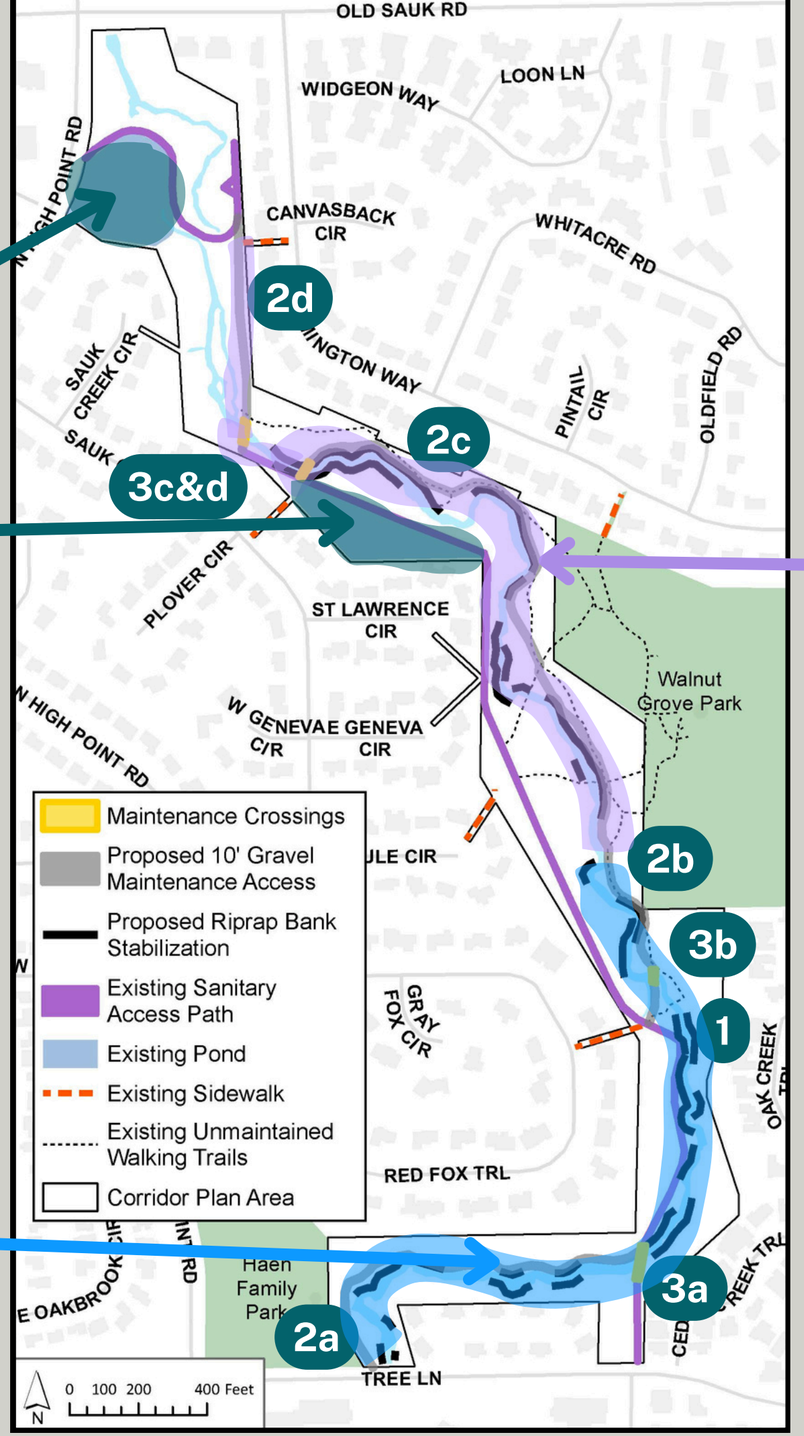
- Removing NR 40 woody invasives under mature oak canopy near intersection of N High Point Rd & Old Sauk Rd
- Pulling garlic mustard from areas with high native herbaceous plant diversity
- Targeted removal of seed-bearing woody invasives in middle of corridor away from property lines by chainsaw certified volunteers

https://fmr.org/updates/conservation/buckthorn-how-can-shrub-be-so-harmful

Draft Phasing of Improvements

Phase 3 - Pond improvements - not currently programmed in 6-year CIP, date TBD (construction duration TBD based on improvements)

Priority Phase 1 - next 2-3 years (with construction lasting 1 year)

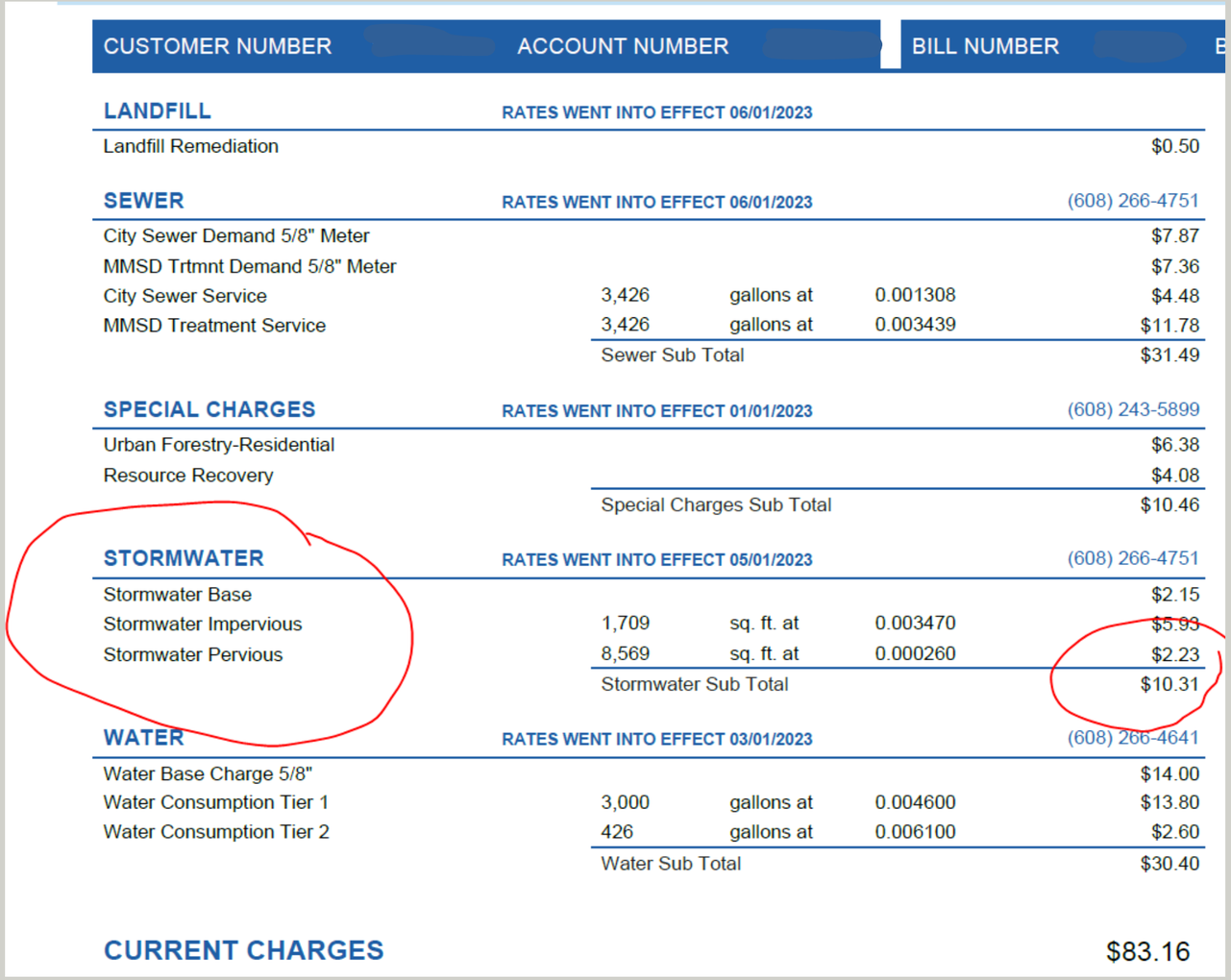


Priority Phase 2 - next 3-6 years (with construction lasting 1 year)

Estimates based on known priorities and best available data -- Extents of each phase and timing are subject to change

Stormwater Utility Funding

- **Not** funded from property taxes, which funds the General Fund
- All stormwater related improvements are funded through a charge on your monthly municipal services bill called “stormwater”.
- The average single family house pays **$11/month** which is used to fund **ALL the operations of the entire stormwater sewer system as well as funding capital projects.**



CUSTOMER NUMBER [redacted]	ACCOUNT NUMBER [redacted]			BILL NUMBER [redacted] E
LANDFILL	**RATES WENT INTO EFFECT 06/01/2023**			
Landfill Remediation				$0.50
SEWER	**RATES WENT INTO EFFECT 06/01/2023**			(608) 266-4751
City Sewer Demand 5/8" Meter				$7.87
MMSD Trtmnt Demand 5/8" Meter				$7.36
City Sewer Service	3,426	gallons at	0.001308	$4.48
MMSD Treatment Service	3,426	gallons at	0.003439	$11.78
	Sewer Sub Total			$31.49
SPECIAL CHARGES	**RATES WENT INTO EFFECT 01/01/2023**			(608) 243-5899
Urban Forestry-Residential				$6.38
Resource Recovery				$4.08
	Special Charges Sub Total			$10.46
STORMWATER	**RATES WENT INTO EFFECT 05/01/2023**			(608) 266-4751
Stormwater Base				$2.15
Stormwater Impervious	1,709	sq. ft. at	0.003470	$5.93
Stormwater Pervious	8,569	sq. ft. at	0.000260	$2.23
	Stormwater Sub Total			$10.31
WATER	**RATES WENT INTO EFFECT 03/01/2023**			(608) 266-4641
Water Base Charge 5/8"				$14.00
Water Consumption Tier 1	3,000	gallons at	0.004600	$13.80
Water Consumption Tier 2	426	gallons at	0.006100	$2.60
	Water Sub Total			$30.40
CURRENT CHARGES				$83.16

Additional Input Opportunity: Site Walk Throughs

Walk Through #1 - Southern portion of corridor

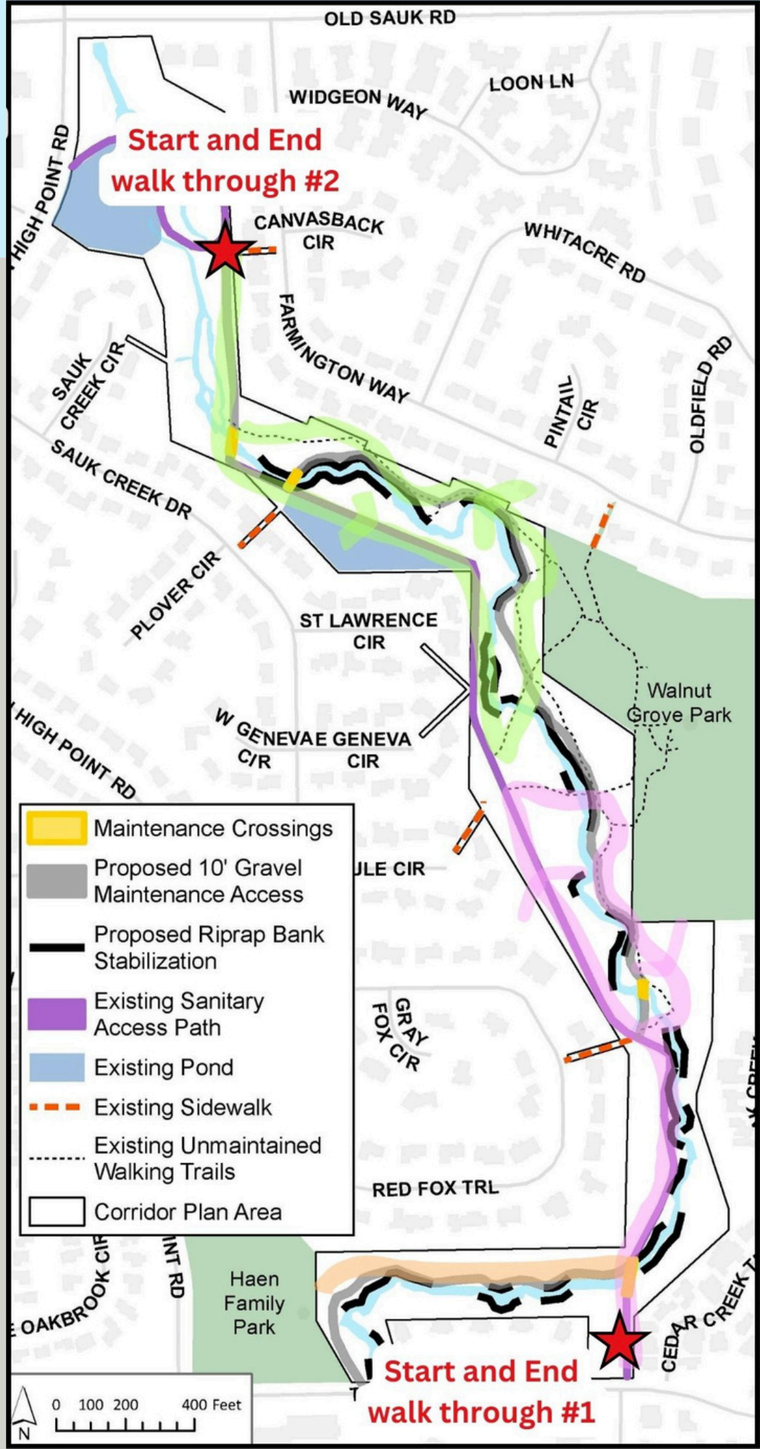
- 12:30-2:15pm, Thursday December 12th
- Meet at Tree Lane and Randolph Dr
- Will follow route in pink and complete orange spur if there is time, and people are interested

Walk Through #2 - Northern portion of corridor

- 2:30pm - 4:15pm, Thursday December 12th
- Meet on greenway near Farmington Way and Canvasback Cir (behind 7637 Farmington Way)
- Will follow route in green

What to Expect:

- The corridor plan shows conceptual improvements in generalized locations. There will not be design details available to share on-site.
- Historically, on-site meetings occur during the design phase when there are specific design elements and clear impacts to discuss. Right now, the City does not have that level of detail, so the main purpose is for City staff to hear and visualize community concerns.
- The following staff will be represented:
  - Jojo O'Brien, Project Manager & Engineer
  - Maddie Dumas, Stormwater Vegetation Coordinator
  - Ryan Schmidt, Engineering Operations Supervisor
- An inclement weather date will be posted by 10:00am on 12/12 on the project webpage. Please check the webpage prior to meeting on site: www.cityofmadison.com/SaukCreekGwy



Next Steps

Developing Final Corridor Plan

- Please take online survey to provide input on individual pieces of the corridor plan (12/4-12/15)
- Community Site Walk Throughs - 12/12/24
- Internal advisory group meets to use your input to create final corridor plan
    - Some input will result in changes to the corridor plan
    - Some input will reflect in notes in the corridor plan to consider in the design
- In January, the City will host another public meeting to share the final corridor plan

Ecological Resources

- **Native Landscaping**
  - WDNR and UW-Extension “Landscaping Alternatives for Terrestrial Invasive Flowers and Grasses”
  - Woody Invasives of the Great Lakes Collaborative (WIGL) “Landscape Alternatives for Invasives Trees, Shrubs & Vines”
  - Native and non-native root comparison chart

- **Invasive Plants**
  - Dane County Invasive Tree & Brush Removal
  - Woody Invasives of the Great Lakes Collaborative (WIGL)
  - Invasive Plants Association of Wisconsin (IPAW)

- **Oak Wilt**
  - DNR Oak Wilt
  - UW Extension: Oak Wilt
  - Identify, Prevent, and Control Oak Wilt

Swallowtail caterpillar at Zeier Lein

Bloodroot in Sauk Creek Gwy

Monarch caterpillar at Regent St

Endangered Rusty Patch Bumble Bee - South Point

Dragonfly at Lake Mendota Drive

Fox at Linda Vista

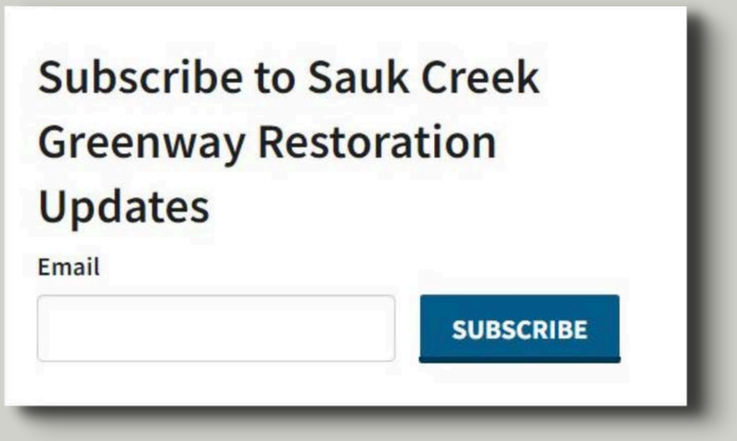
Contact Information & Resources

Contacts

- Project Manager, Jojo O’Brien
  - Email: jobrien@cityofmadison.com

Project website

- **www.cityofmadison.com/SaukCreekGwy**
  - Sign-up for project email updates on the website
  - Updates on plan status will be posted to the project website
  - Recording for virtual meeting, and meeting slides will be posted

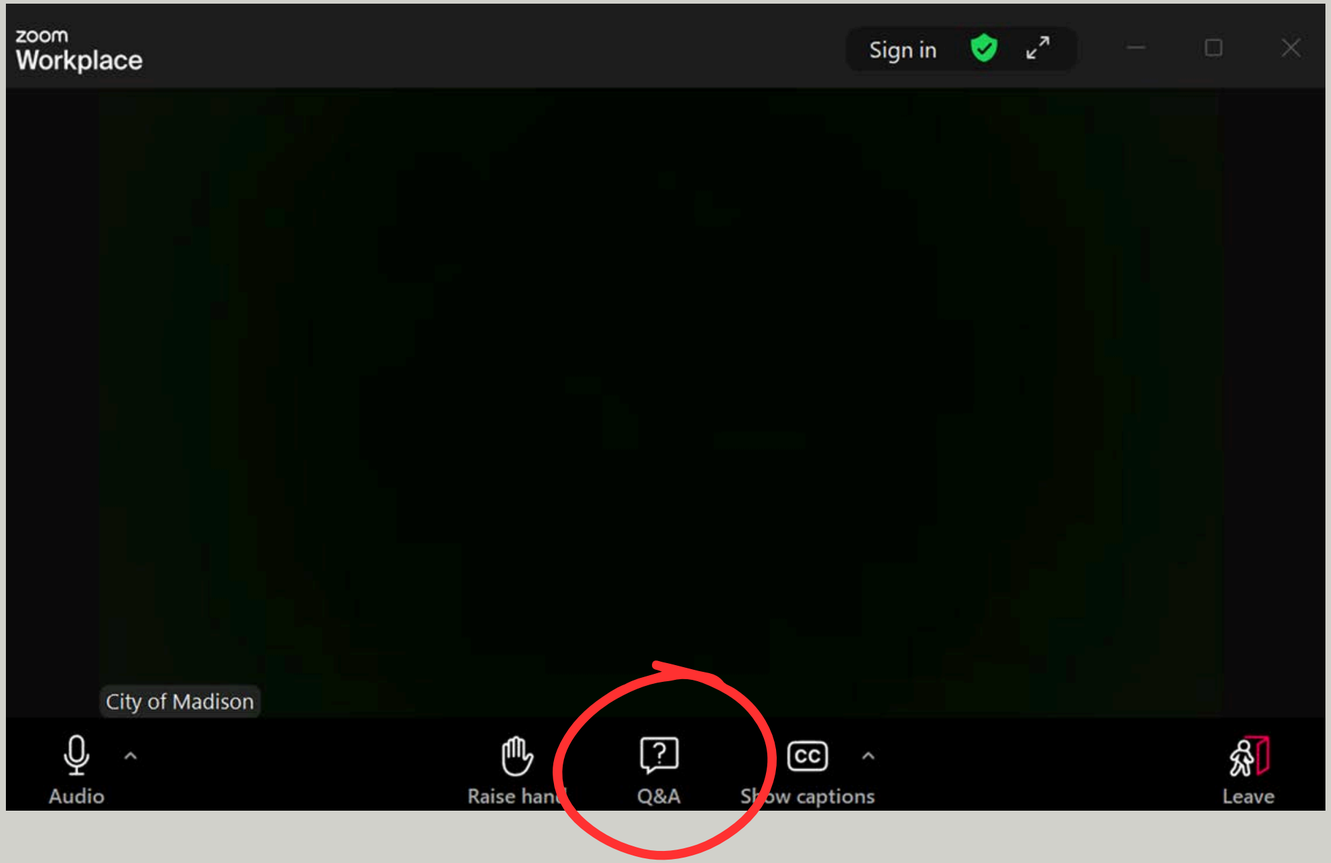


Scan QR code with phone photo app

Please take our survey to:

- Provide input on the corridor planning process
- Provide additional comments on elements of the draft corridor plan
- https://www.surveymonkey.com/r/VKGMX87
  - This will be posted on the project webpage and open from 12/4/24-12/15/24

Questions?



Use Q&A button, or raise your hand to be unmuted for comments or ask additional questions.

Thank you for coming!

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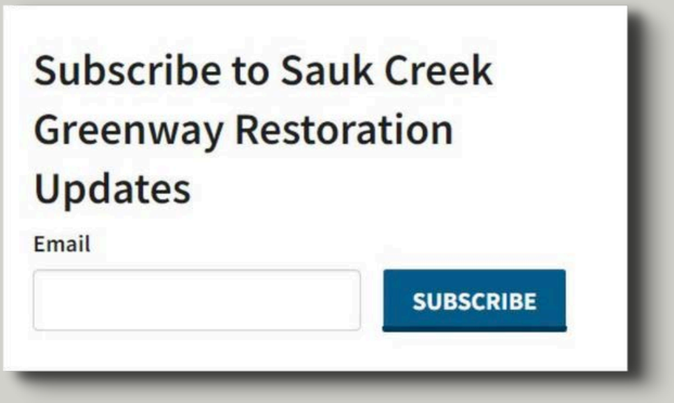

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Scan me

What Community Involvement could look like:

Typical process

1. One community member serves as volunteer liaison to organize volunteer work days, share volunteer activities with interested community members and communicate with City staff
2. Stormwater Vegetation Coordinator may perform an initial or annual site walk-through with volunteers to define volunteer work and help with plant identification
3. Community members report back work that is completed annually

Weed wrenches can remove small, unwanted trees and shrubs such as buckthorn
https://www.ecolandscaping.org/07/landscape-challenges/invasive-plants/product-review-weed-wrench/

Type of work:

- **Dig or hand pull invasive herbaceous species** such as dame's rocket, garlic mustard, burdock to reduce competition with native plants
- **Collect native seed** and sow to diversify herbaceous native plants
- **Selective brush clearing** especially invasive shrubs such as buckthorn, honeysuckle, privet, burning bush to create pockets of light for oak regeneration and herbaceous native plants
  - Small brush can be removed with a brush wrench or loppers
  - Volunteers with chainsaw experience and certifications may be able to use chainsaws for larger invasive brush removals
  - Brush piles may be periodically removed by City if placed on curbs or along access paths
- **Citizen Science** (ongoing and can be done independently of organized volunteer restoration efforts): **P**ost wildlife and plant sightings to the City of Madison Stormwater iNaturalist page; https://www.inaturalist.org/projects/stormwater-species-of-madison-wisconsin
  - Or participate in WI DNR Bumble Bee Brigade; https://wiatri.net/inventory/bbb/

Burdock, Japanese hedge parsley and Queen Anne's lace await removal by City crews after volunteer weed digging event