Lake Mendota Dr. Reconstruction

Public Information Meeting #3
City of Madison Engineering Division
4-4-2022

Thank you for attending. We will begin shortly…

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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 **"chat"** button for technical issues with meeting to troubleshoot with staff to assist.
- Use the **"Q and A"** button to type questions about presentation. Questions will be answered live after the presentation.
- Inappropriate questions may be dismissed.
- Use the **"raise your hand"** button to verbally ask your question. You will be prompted to unmute when it is your turn.

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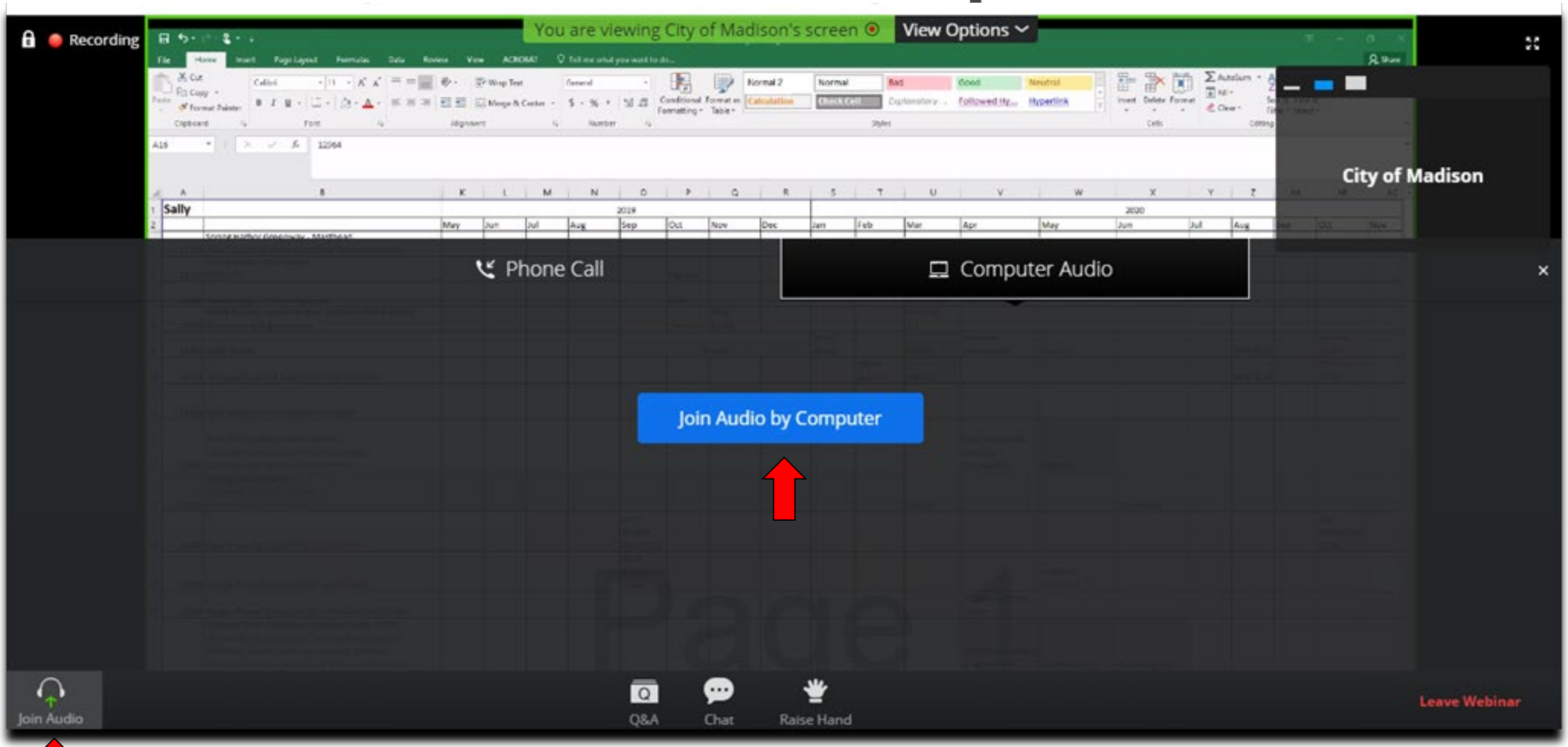

Make sure to join audio

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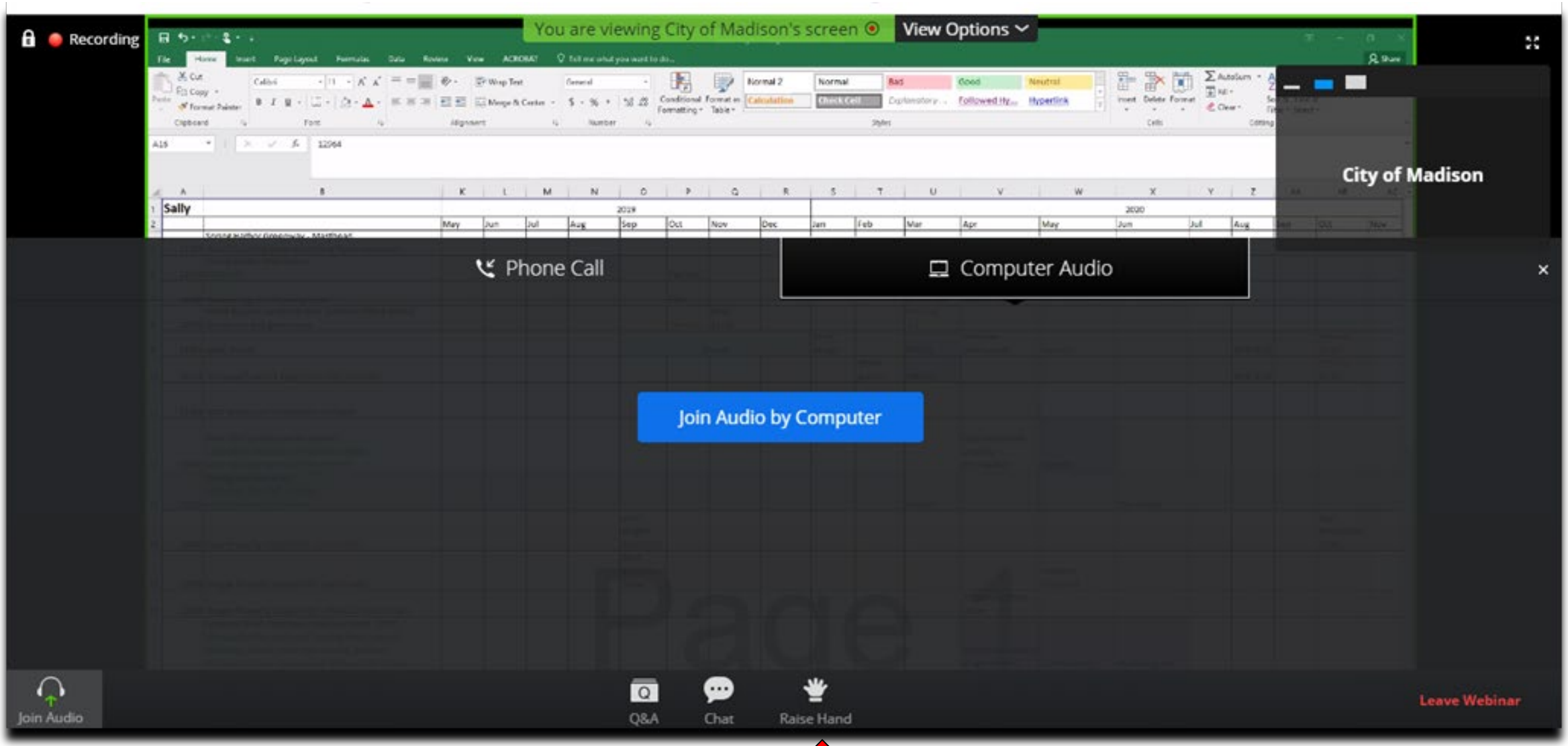

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For comments or ask additional questions.

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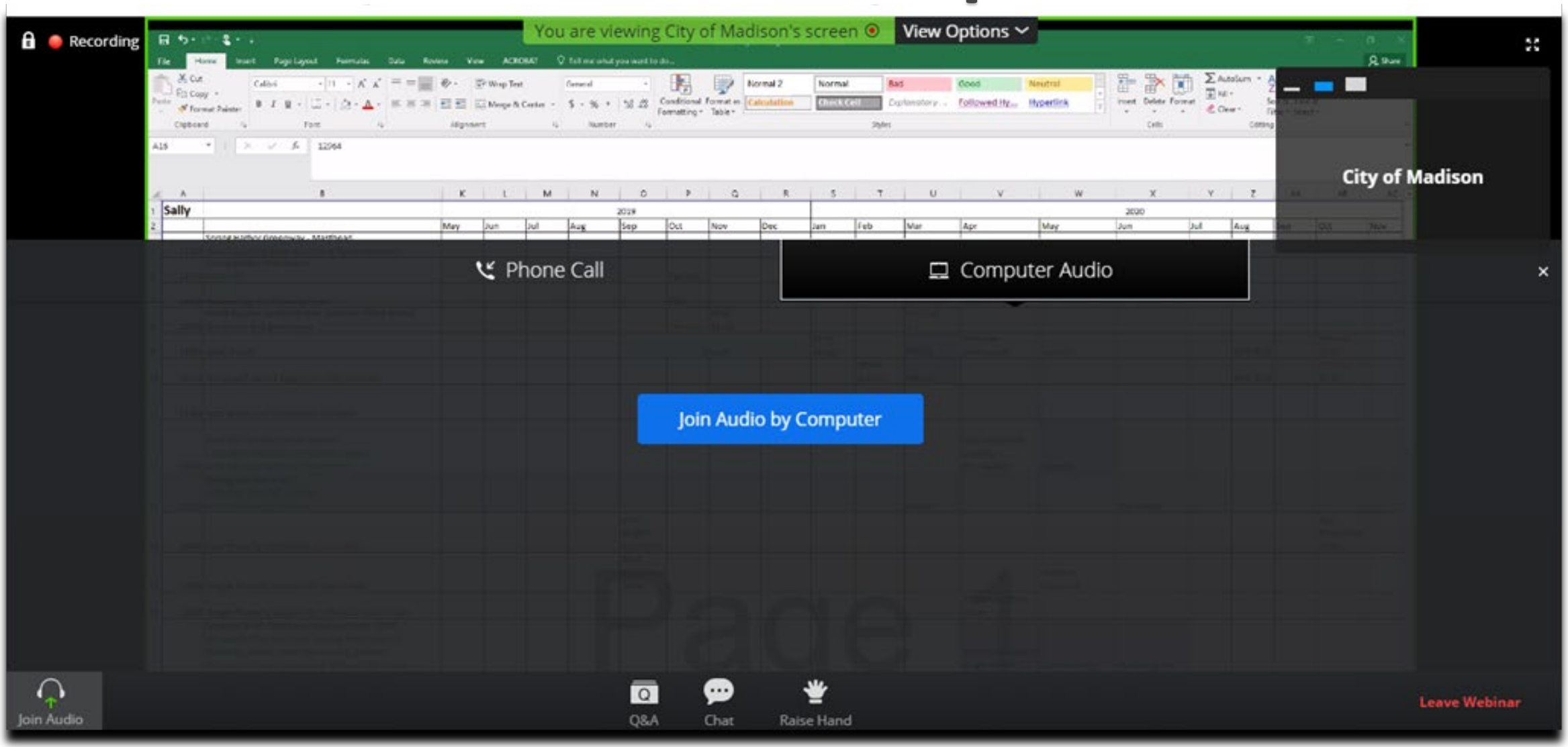

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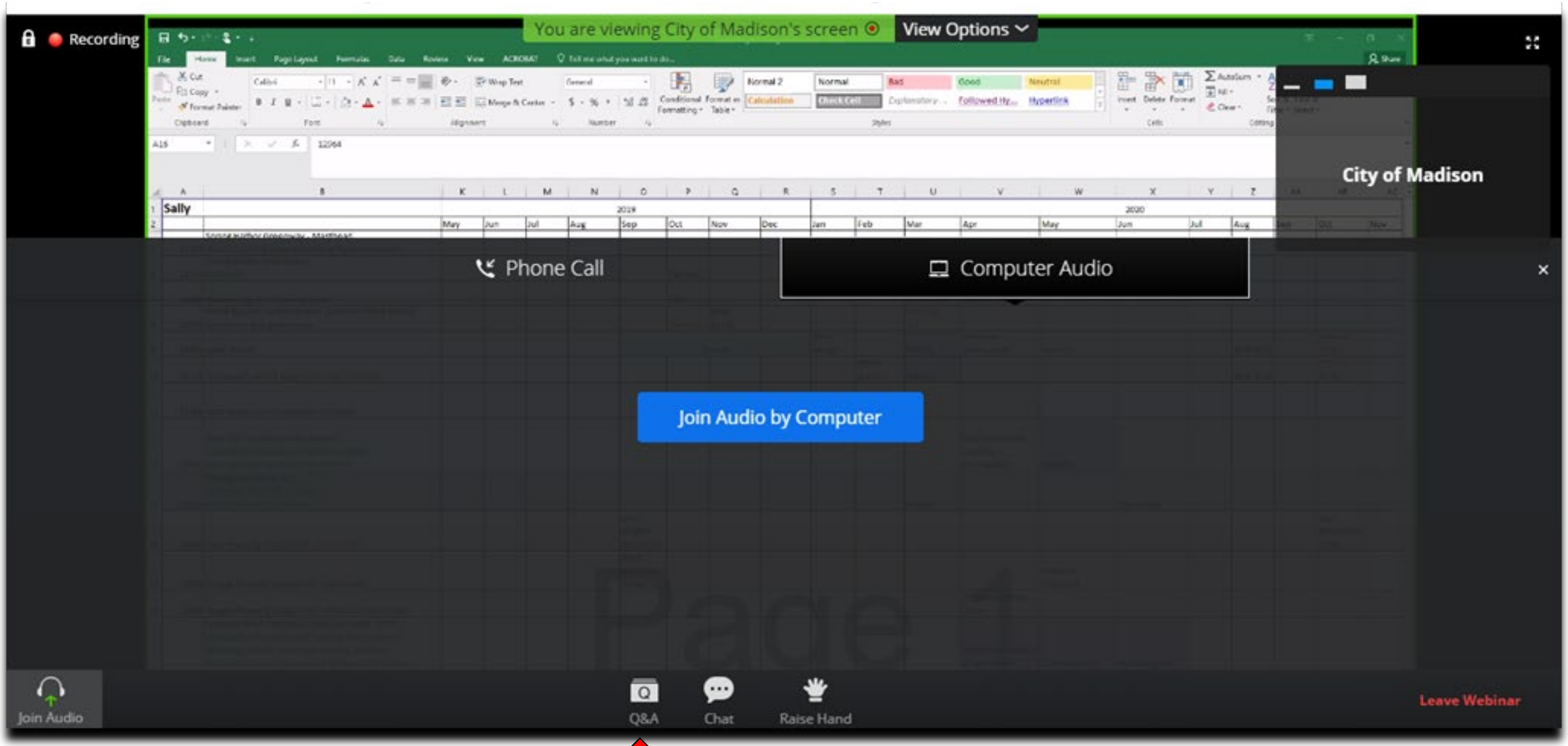

Use Q/A if you have questions.
We will answer after the presentation

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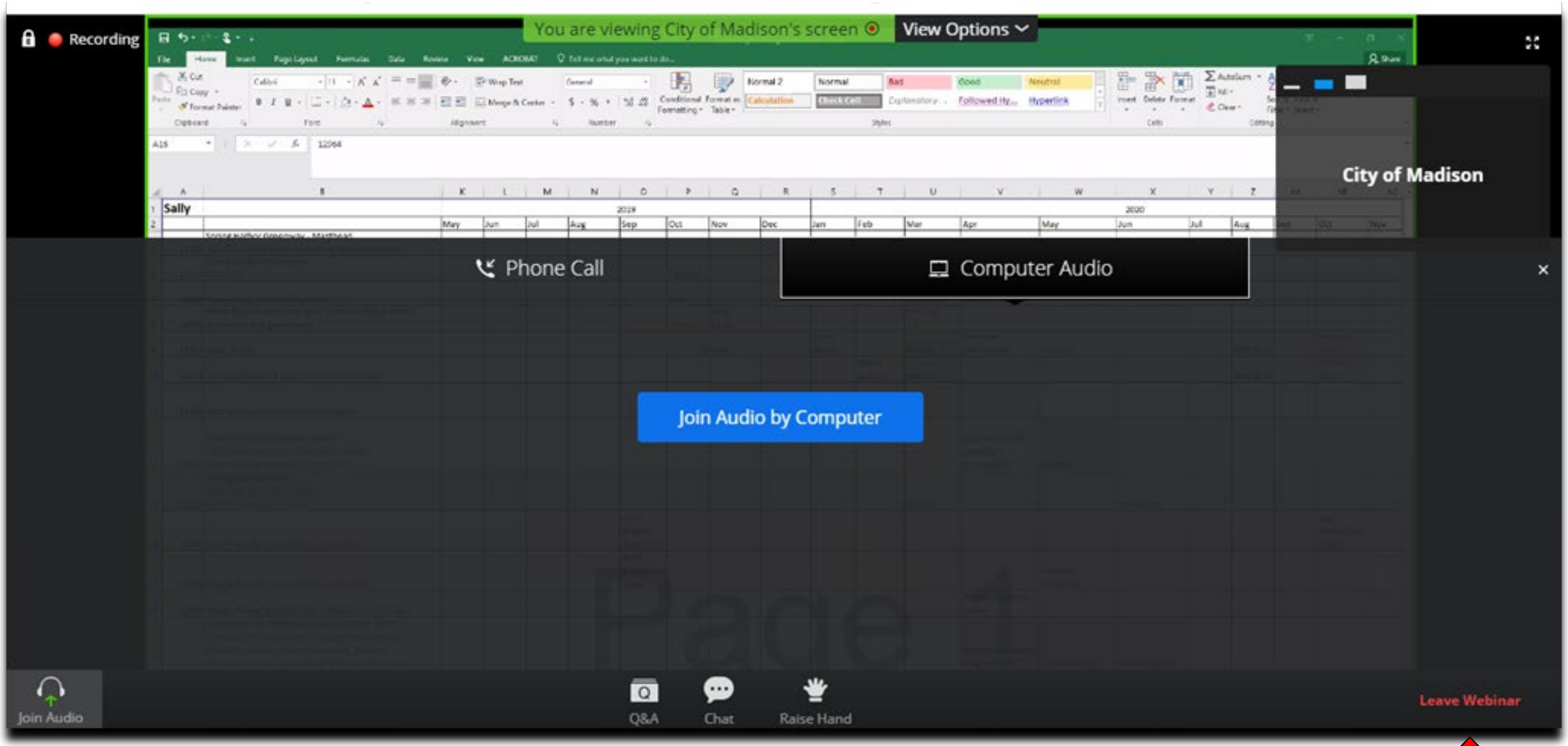

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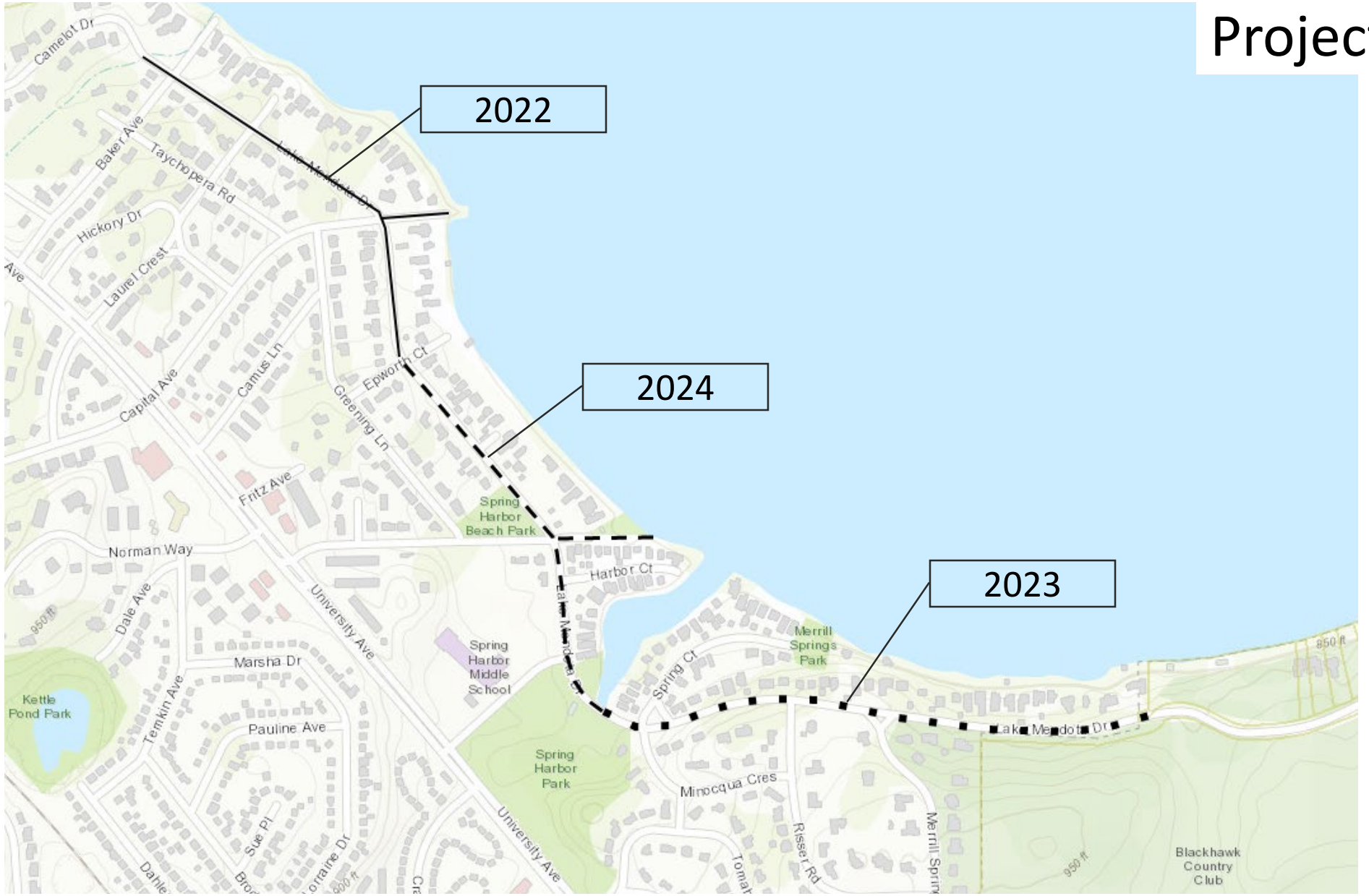
Presentation Outline

- Review of Input
- Discuss Updated Preliminary Plan (Geometrics)
- Environmental Aspects of Project
- Project Schedule and Meetings
- Approval of Geometrics Resolution
- 2022 Project Specifics
- Discussion and Q&A

Project Location



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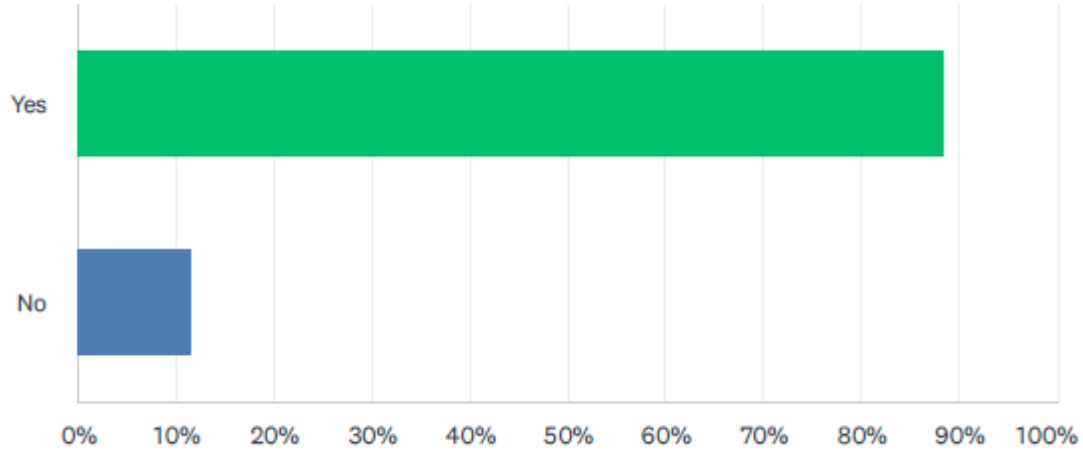
Summary of Discussions Since PIM #2

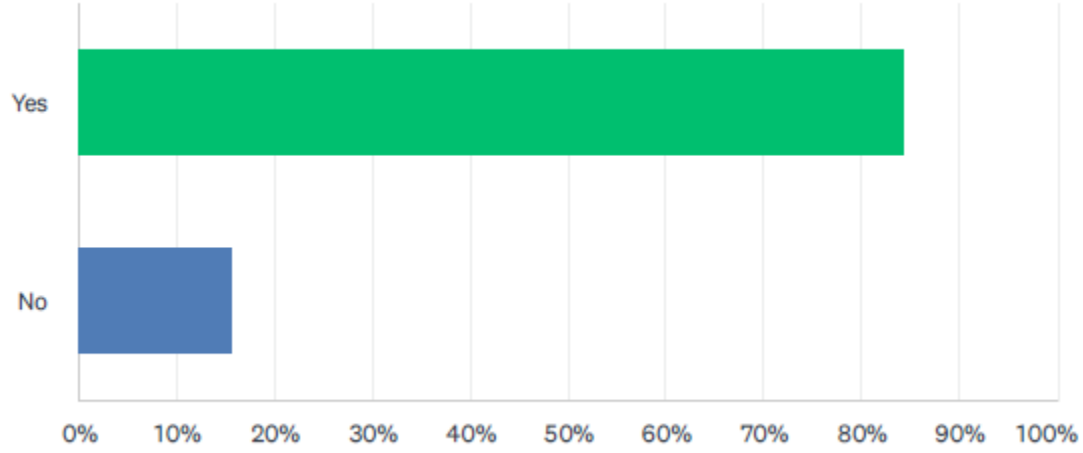
- Survey #2 has closed
  - Results showed support from the neighborhood for traffic calming concepts & intersection changes to create stormwater treatment opportunities
- Support from neighborhood for additional environmental considerations
  - Reduce impervious area & salt use
  - Additional documentation
- Requests to consider other alternatives
  - Without sidewalks
  - Woonerf concept
- Support from Transportation Commission on preliminary plan
  - Project should include sidewalks
  - Request to review for additional bumpout opportunities
  - Discussion to try to have continuous sidewalk along north side

Survey #2 Results

- Changes to Spring Ct.

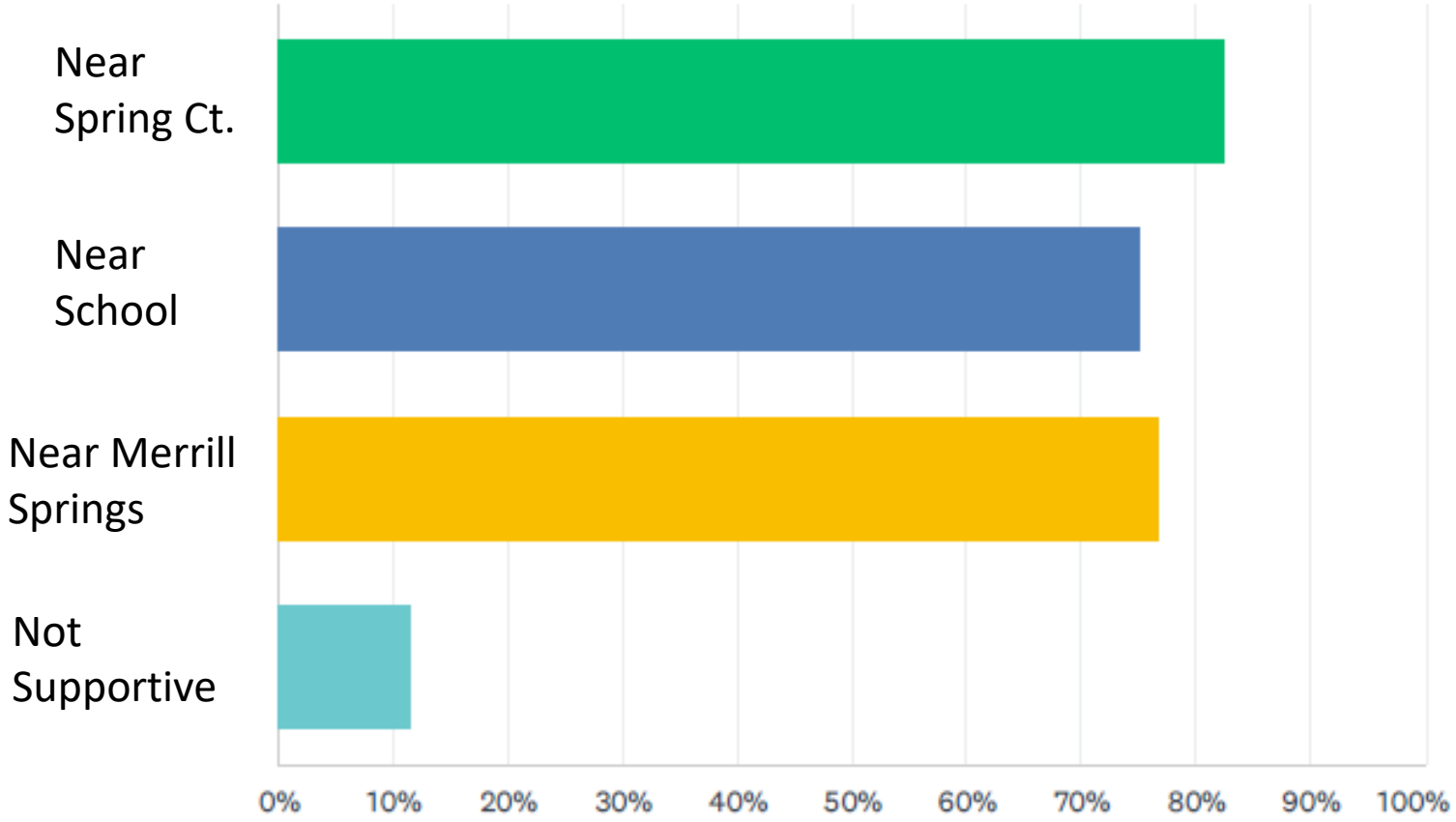


- Changes to Merrill Springs



Survey #2 Results

- Use extra space created in right-of-way for stormwater treatment features?



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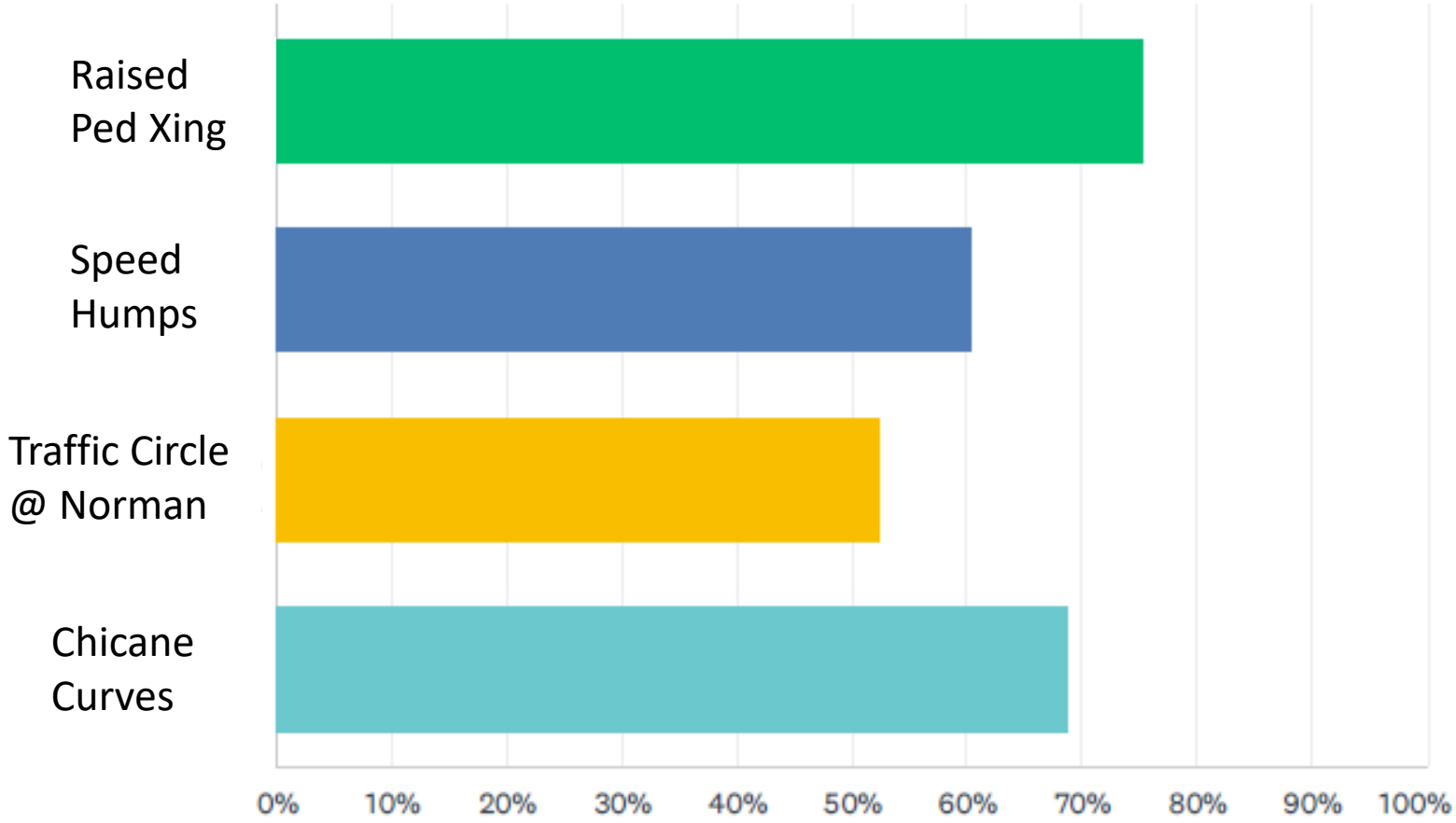
Survey #2 Results

- Supportive of traffic calming features?



Proposed Plan Summary

- Narrow street as much as possible
  - Typical width is 24’-28’, with parking allowed on one side
- Better network of sidewalks
  - North/east side only between Baker & Capital
  - Both sides Capital to Spring Ct./Minocqua Crescent
  - North side only from Spring Ct. to City/Village limits
- Vary street/sidewalk to protect trees, account for grades
- A number of traffic calming features
- Opportunities for additional stormwater features
- Balances priorities of safety, accessibility, tree protection, and environment, especially when compared to other alternatives

Specific Updates to Preliminary Plan

- Added bumpout near 5423-5431 LMD
  - Helps better protect existing tree
  - Further reduces impervious area
  - Additional traffic Calming
- Additional larger rain garden opportunity adjacent to Parks parking lot
- Improved island on Spring Harbor Dr.
  - Additional traffic calming & safer pedestrian crossing
  - No change in impervious area
- Adjusted sidewalk layout near Park building to hopefully save pine tree
- Narrowed street east of boat launch
  - Reduces pavement area, additional traffic calming

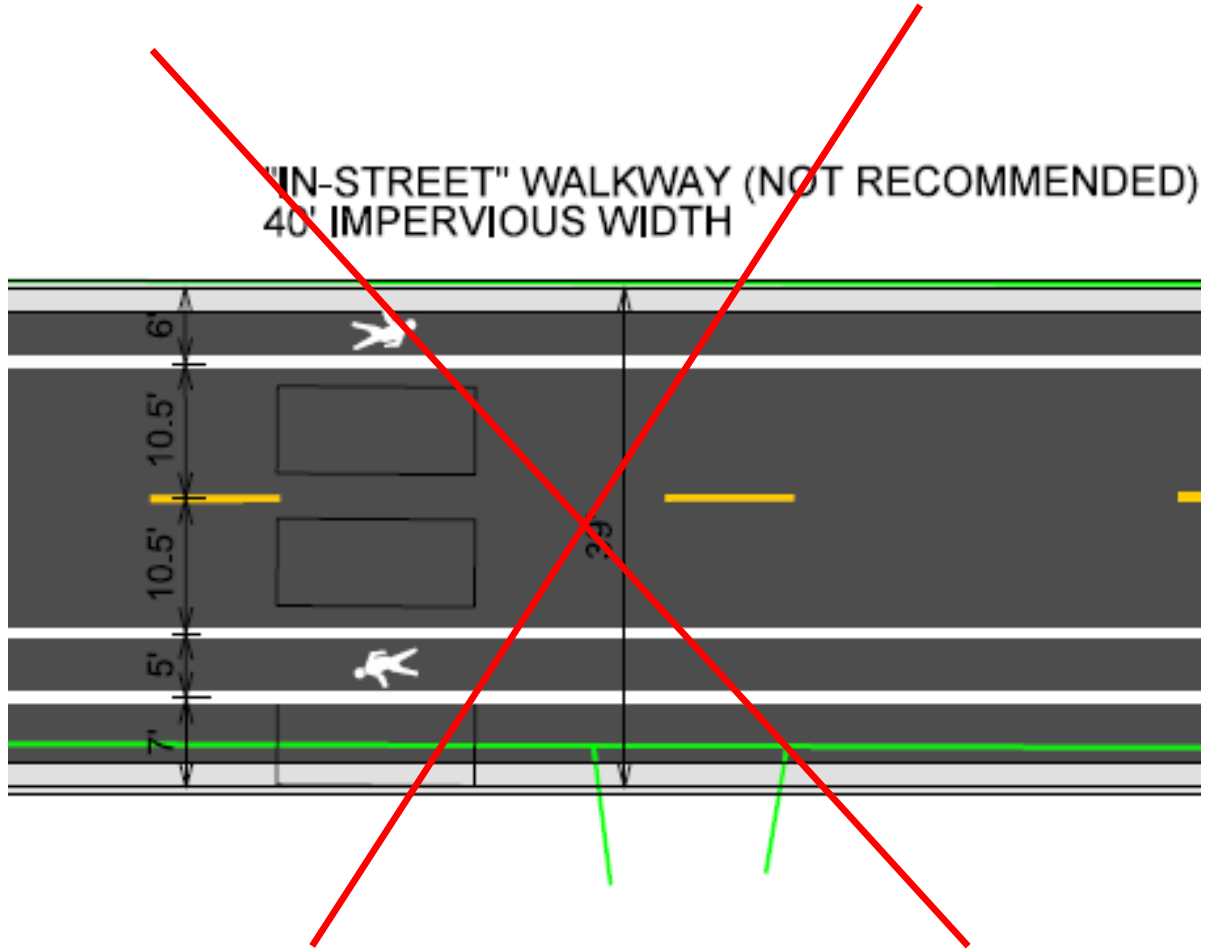
Specific Updates to Preliminary Plan

- Sidewalk can fit along north side from Spring Ct. to Risser
  - Sidewalk is inside existing pavement edge
  - Creates continuous sidewalk along north side of street
- Narrowed street from Spring Ct. to Risser
  - Helps fit sidewalk, reduce pavement area, and traffic calming
  - Create widened areas to allow on-street parking
- Added bumpout at Merrill Springs to better protect mound
  - Additional traffic calming & impervious surface reduction
- Relocated speed humps to be closer to bottom of hills & mid-block
  - Only 2 in current plan due to spacing and addition of more bumpouts

Review Updated Plan

Alternative Option to Sidewalks

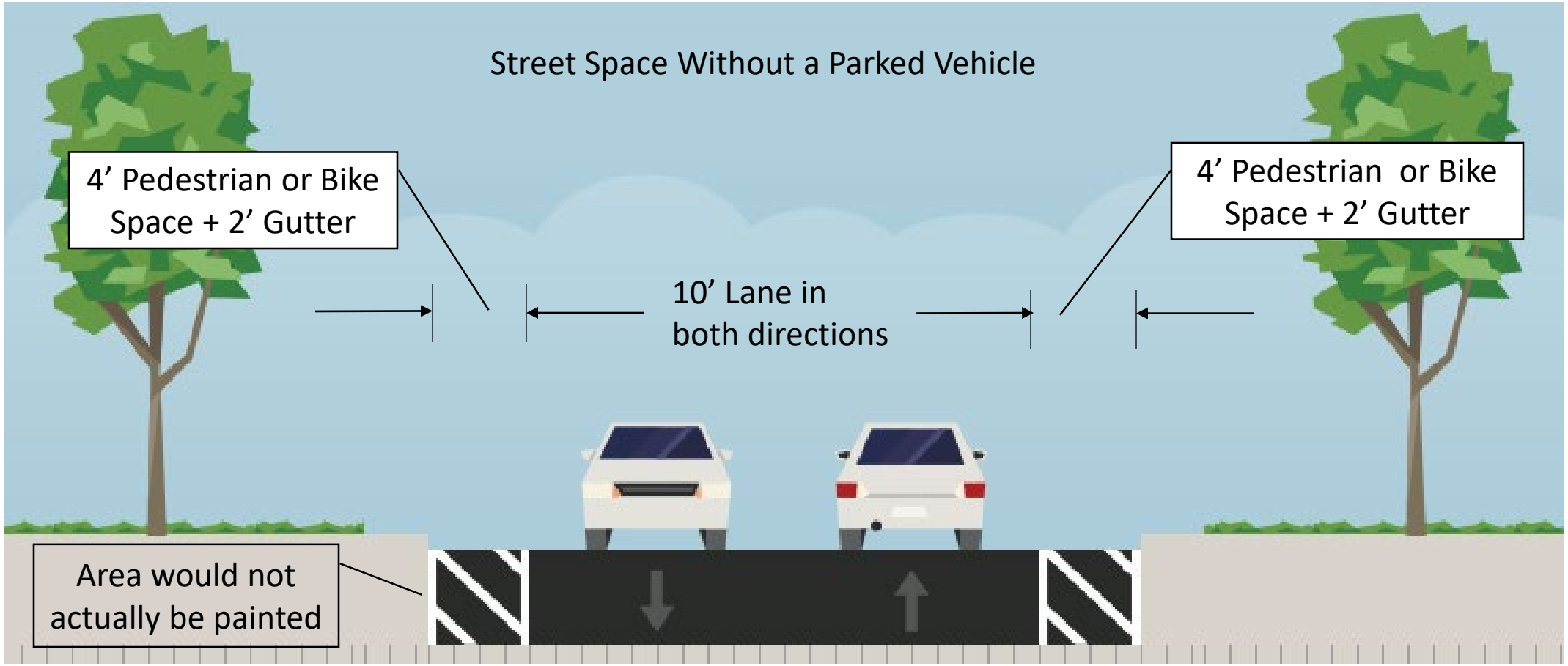
- Already ruled out option to just mark lanes on the street
- Request to consider a shared path instead of sidewalk
  - Min. 8 ft. width, preferably 10 ft.
  - Difficult to fit 5 ft. sidewalk in some areas, so wider path would result in more tree removals
  - No reduction in impervious surface



Hypothetical Design Option with No Pedestrian Facilities

- No dedicated sidewalk or marked lanes for pedestrians
- Essentially functions similar to current condition
- Street would need to be wider than current proposed design
  - Need more space on street for pedestrians to share with bikes and vehicles
- Minimum street width in this scenario is 32’
  - Provides minimal space for two-way travel by everyone
  - Parking only allowed on one side
  - Requires someone to yield (car, bike or pedestrian) when passing parked car
  - Slightly less than average width of street now

Hypothetical Option – 32’ Street, No Sidewalk



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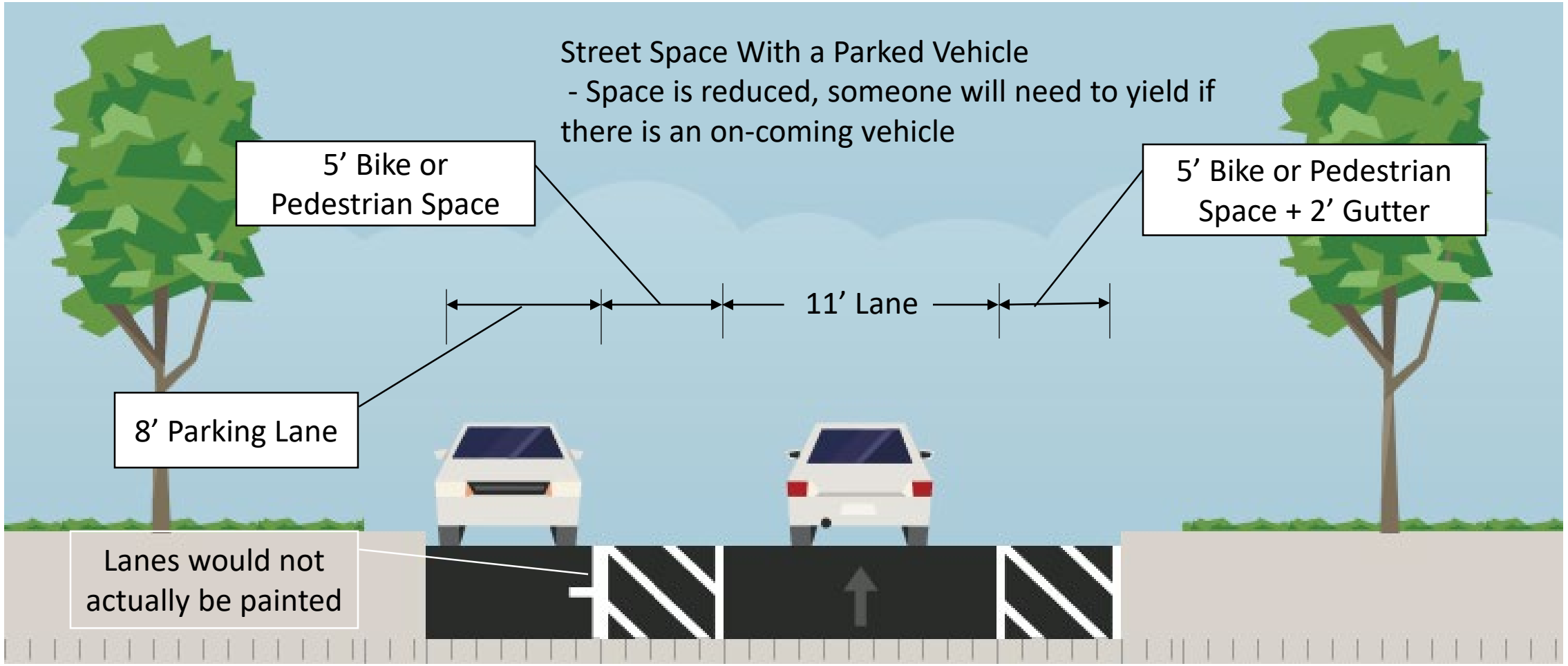
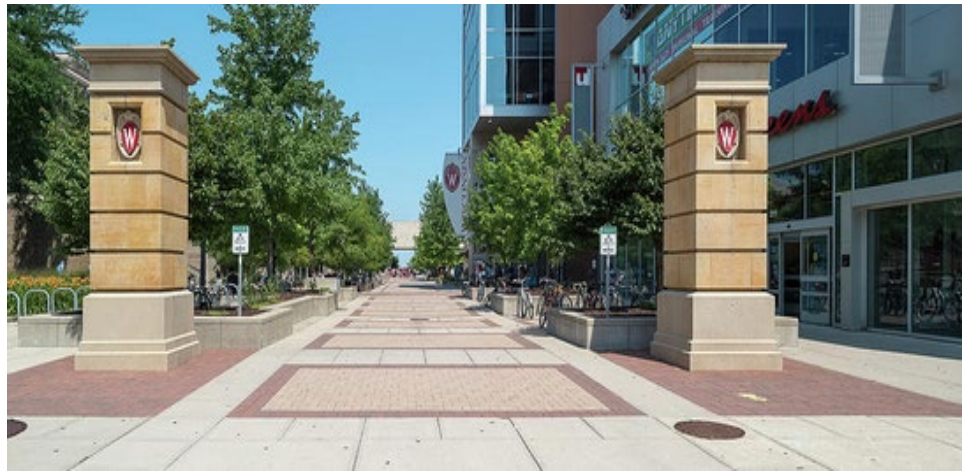


Hypothetical Option – 32’ Street, No Sidewalk

- Requires that pedestrians use street
  - Under State law, pedestrians required to move out of the way of vehicles
  - No protection or buffer space for pedestrians
  - Not detectable for anyone with visual impairment
- Impervious Area
  - Approx 25,500 S.Y. (less than existing, more than proposed design w/ sidewalk)
- All runoff drains to curb & storm sewers
  - Portion of sidewalk in proposed design drains into grass terrace
  - Can provide curb openings into rain gardens with this design & with proposed design
- Minimizes traffic calming options
  - Wider street will result in more speeding
  - Fewer options to install traffic calming measures, especially if trying to maintain ADA compliant surface, and providing adequate space for all to share street
- Not supported by City staff, policies, or committees

Woonerfs – What are they?

- Woonerf = Living Street or often called Shared Street
- Street that includes a shared zone where pedestrians, bicyclists and motor vehicles mix in the same space
- Requires very low speeds and very low motor vehicle volumes
- Allows more space for holding events or festivals and incorporates amenities like benches so people will sit and stay
- Often have a “pedestrian comfort zone” to address accessibility requirements



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Woonerfs – Design Guidance

- Street not needed to access destinations
- Research in the US recommends 300-500 feet in length and should have defined start/end with very limited access points
  - Europe recommends up to 1,968 feet (metric conversion)
- Successful in areas with:
  - Higher density housing and homes with limited private social/play space
  - Minimal setbacks for buildings
  - Limited open space along street
- Parking is intermittent and dispersed
- Typical features include narrow width, pedestrian scale lighting, chicanes, speed humps, continuous sidewalks, and limited or no curb

Woonerfs – Design Guidance

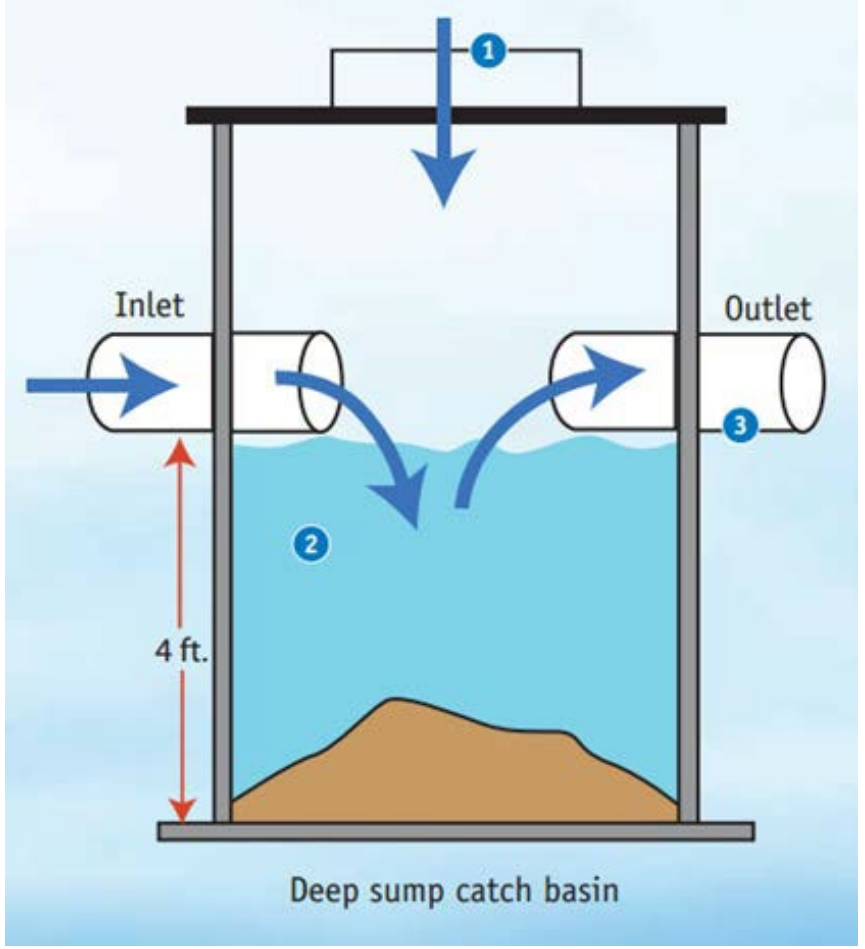
- Lake Mendota Dr. does not meet criteria for successful shared street
  - Higher traffic volumes
  - Too many access points (intersections) & considerably too long
  - Required for access to destinations (school, beach)
  - Low density with adjacent open spaces
    - US example (Somerville, MA) is approx. 12 units/acre; LMD is about 2.2 units/acre
- Incorporating several aspects of shared street design
  - Narrow width
  - Additional traffic calming measures such as curves, narrowed intersections, and bumpouts to break up straight lines
  - Maintaining adjacent tree canopy
  - More intermittent parking that switches sides of the street

General Water Quality Approach on Street Projects

- Water Quality improvement is a consideration with all projects
- Streets without curb or defined ditches can be problematic
  - Stormwater drains along street edge that is not stabilized, resulting in erosion
  - Runoff from this areas carries sediment & pollutants
- Install physical improvements with projects to limit erosion and collect sediment

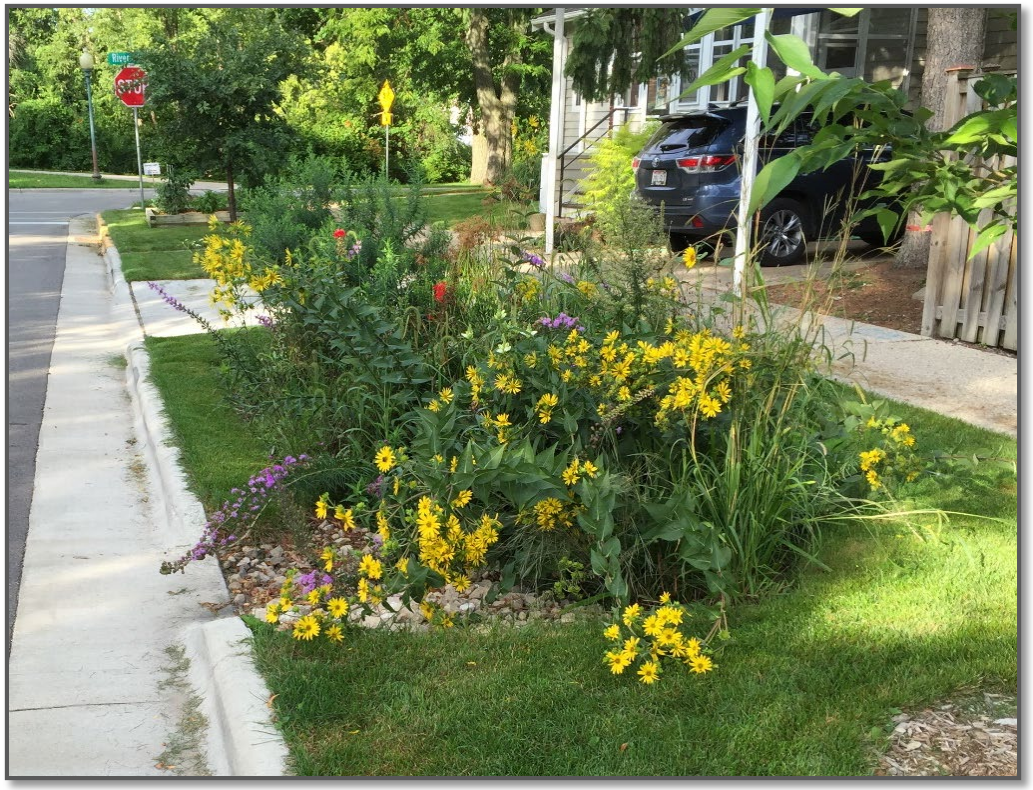
Water Quality & Environment

- Curb and gutter
  - Provides stable surface for stormwater
  - Limits erosion by keeping vehicles and equipment on street
- Install Catchbasins
  - Underground storm sewer structures
  - 1 per every 4 acres on average
  - Clean twice a year with a Vactor Truck as part routine structure cleaning
  - Effective at trapping larger particles (sand) ~ 10% TSS removal
- New pavement and curb will help improve effectiveness of sweeping



Water Quality & Environment

- Impervious surfaces
  - Existing: 25,900 Square Yards
  - Preliminary Plan: 24,800 Square Yards
    - Reduced further since last meeting
- Opportunities for additional treatment features
  - Wide terrace space near school
  - Remove excess pavement at Spring Ct
  - Remove excess pavement at Merrill Springs
  - **Possible opportunities adjacent to Parks lands**
  - Would need volunteers to help with maintenance
- Bend sidewalk to create terrace rain gardens where requested & feasible
- Maintain tree canopy



Water Quality & Environment

- If sidewalks approved, can install pervious sidewalk panels in select locations
  - Allows water to infiltrate through
  - Installed over 18”-24” stone base
  - Best in flatter areas at lower ends of slopes
  - Through driveways that drain to street
- Final locations & types of stormwater features to be determined with final plans for each project.
  - Identify opportunities with preliminary plan
- Several interested property owners on survey #2

Water Quality & Environment – Salt Use

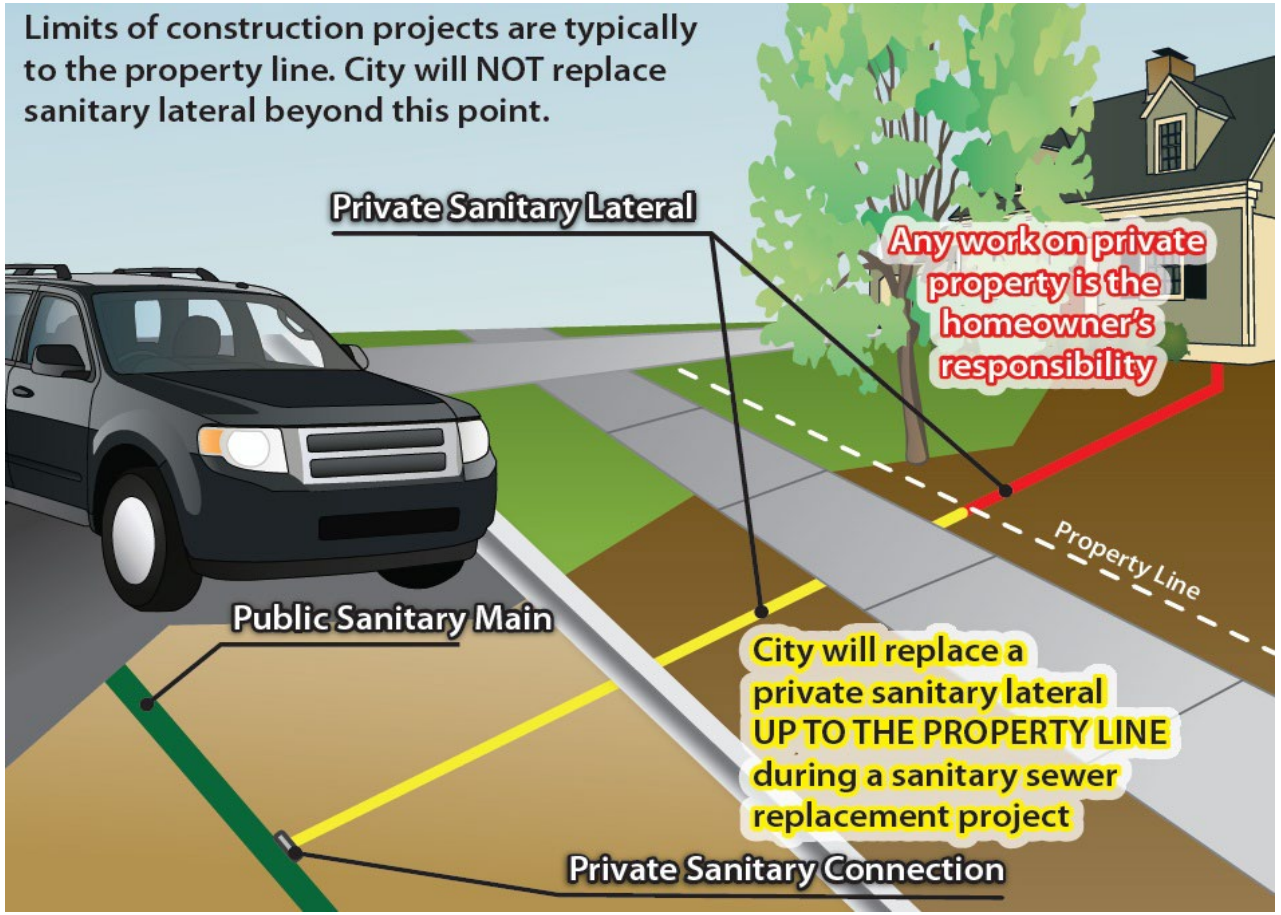
- Investigating option to significantly reduce street salt use on LMD
- Engineering, Metro, Streets & Water Utility staff met to discuss current salt route on LMD
  - Metro has a supplemental school route through neighborhood
- Potential to relocate supplemental school route to University Ave.
  - Allow for significant reduction in salt route along LMD
- Sidewalks through neighborhood would be even more important as students would need to walk out to University Ave.
- Educational opportunities in the future on SaltWise program and City Salt Certification for contractors

Design Decision Making Process

- Next Steps: Approve “Geometrics” for Lake Mendota Dr.
  - Establishes base street design – curb & sidewalk locations, provides more certainty to proceed with detailed design of grades, drainage, etc.
  - Board of Public Works: 4/6/22
  - Transportation Commission: 4/13/22
  - Common Council: 4/19/22
- Resolution still allows for small modifications through detailed design
  - Protect additional trees or create tree planting opportunities
  - Stormwater treatment features, such as terrace rain gardens
  - Specific traffic calming measures & locations for each project
- Hold additional meetings & hearings prior to each reconstruction project

Utility Work with 2022 Project

- Replace existing 18” MMSD sanitary sewer from Baker to Laurel Crest
  - Other portions of main within project limits has been lined
  - Replace sewer laterals from main to property line with main replacement
  - Too much ground water intrusion in this area for main to be lined
    - Primarily from cracked laterals



Utility Work with 2022 Project

- Evaluate storm sewer throughout project to provide adequate drainage
- Install new storm sewer around Baker & LMD intersection
  - Collect runoff from SE on LMD and from SW on Baker
  - Will ultimately drain into the adjacent greenway
- Install flood mitigation solutions identified with watershed study
  - Upsizing pipes downstream from existing sediment control structure on University Ave. that ultimately drain to Capital Ave.
- Upsize pipe down Capital Ave. street end from 36” to 60” equivalent
- Existing ditches along Capital street end to remain, and design storm sewer to ensure some flow is still directed to ditches
- Redesign storm sewer around Epworth intersection to improve drainage and minimize erosion

2022 Project Schedule

- 4/29/22: Mail Estimated Assessments, Public Hearing Notice
- 5/11/22: BPW Public Hearing
- 5/24/22: Common Council Hearing
- 6/9/22: Advertise for Bids
- 8/15/22: Begin Construction
- 11/10/22: End Construction

Contact Information & Resources

- Engineering
  - Jim Wolfe, Project Manager, 266-4099, jwolfe@cityofmadison.com
  - Daniel Olivares, City Engineering – Sewers, 261-9285 or daolivares@cityofmadison.com
  - Renee Callaway, Ped & Bike Administrator, 266-6225, recallaway@cityofmadison.com
  - Tom Mohr, Traffic Engineering, 267-8725, tmohr@cityofmadison.com
  - Adam Wiederhoeft, Water Utility, 266-9121, awiederhoeft@madisonwater.org
  - Carissa Wegner, Terrace Rain Gardens, (608) 261-9822, cwegner@cityofmadison.com

➢ Project Website: www.cityofmadison.com/engineering/projects/lake-mendota-drive
  - Sign-up for project email updates on the website
  - Updates on closures & work progress will be posted to the project website
  - Recording for this meeting will be posted on project webpage

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