



# Lake Mendota Dr. Reconstruction - Geometrics



# Project Locations



# Approving Street Geometrics

- Reconstruction projects planned over the next 3 years
- Establish a more cohesive, connected street layout
- Provides base framework to proceed with detailed design work
- Resolution allows for small changes resulting from detailed design
  - Additional tree protection
  - More opportunities for rain gardens and/or property owner requests
  - Updates to traffic calming, such as speed hump locations
  - Adjustments due to topography
- Goal of project is to develop a plan consistent with City policies and transportation goals while incorporating input from the neighborhood

# Existing Conditions

- Failing pavement
- Rutting & Erosion along edge
- Disconnected sidewalks



# Public Involvement Process

- 3 Public Informational Meetings
  - 1/11/22, 2/24/22, and 4/4/22
- Sent 2 surveys
  - Prior to each of the first 2 PIMs
  - Results attached to legistar file
- Initial meeting with Spring Harbor N'hood Assoc. Ad Hoc Committee
  - 3/23/22
- Transportation Commission
  - 1/12/22 and 3/9/22 for initial input on project and preliminary design
  - Back as part of geometrics approval on 4/13/22
- Responded to dozens of emails and phone calls

# Priorities Identified by Neighborhood Input

- Protection of tree canopy
- Environmental impact
  - Impervious surface area
  - Salt use and impacts on Lake Mendota and Well 14
  - Improvements to stormwater quality
- Traffic calming needs
- Protection of areas of cultural & historical significance
- Preserving character of street
- General concerns about disturbance of right-of-way

# General Concepts of Proposed Design

- Narrow street as much as possible
  - Reduce impervious surfaces & traffic calming
- Install sidewalks
  - One side on east & west ends, both sides from Spring Ct. to Capital Ave.
  - Improve safety & accessibility, consistent with adopted City plans
- Tree protection
  - Align street and sidewalk to protect as many trees as possible
- Install bumpouts throughout
  - Protect trees
  - Protect known burial mound areas
  - Traffic calming
  - Possible rain garden opportunities

# General Design Concepts

- Create storm water treatment opportunities
  - Bends in sidewalk for terrace rain gardens where feasible & requested
  - Modified intersection designs to create more opportunities
  - Continue to look for more opportunities with each project
- Include additional traffic calming measures
  - Speed humps
  - Raised pedestrian crossing (location may shift)
  - Traffic circle
- Install non-standard curb to better fit aesthetics
  - More sloped curb head (Village of Shorewood Hills standard curb)
- Reduce speed limit on street to 20 mph



# Measured Areas

- Existing impervious area: approx. 25,900 S.Y.
  - Includes street and private parking areas created in right-of-way
- Impervious area with Proposed design: approx. 24,800 S.Y.
  - Includes 20,200 S.Y. for street & 4,600 S.Y. for new sidewalk
- All of Lake Mendota Dr. R/W: approximately 46,000 S.Y.
- Spring Harbor Watershed – 3.5 square miles (10,800,000 S.Y.)

# Additional Environmental Considerations

- Items related to project work, but not specific to geometrics
  - Project will also include installation of catch basins
  - Will review for suitable locations for portions of pervious sidewalk
  - Reviewing with Streets, Metro, and WU opportunity to reduce or remove salt route along LMD by redirecting supplemental school bus route
    - Would make sidewalk connections even more important
- Future educational opportunities
  - Saltwise & contractor salt certification program
  - Private rain garden installation
- See attachment for more information on the City's approach to stormwater quality on street improvement projects