City Engineering/LMD AHC Meeting 2023 LMD Eastern Segment Meeting on Stormwater Features/Rain Gardens September 30, 2022 at 11 am - Zoom Meeting

Participants: AHC - Leslie Herje, Jeff Bauer, and Faith Fitzpatrick; City - Jim Wolfe (project manager), Sarah Lerner (landscape architect/vegetation), Phil Gaebler (lead raingarden designer), Dan Oliveras (sewers), and Janet Schmidt (principal stormwater engineer).

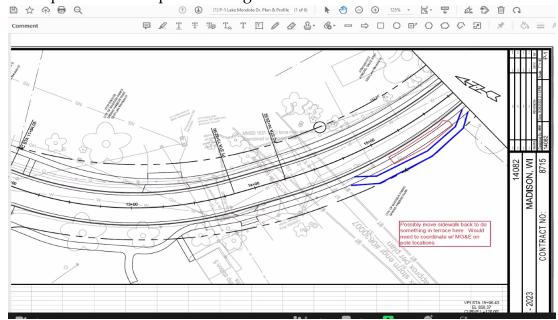
Overall introduction of 2023 project by Jim:

Extent of 2023 Project – Scope of project will be modified go from the Village of Shorewood Hills limit to extend beyond Spring Harbor Drive intersection. Previous limit was Spring Harbor. Possibility for multiple "community" rather than terrace rain gardens. Topography will likely limit terrace rain garden opportunities. Possible location screen shots below.

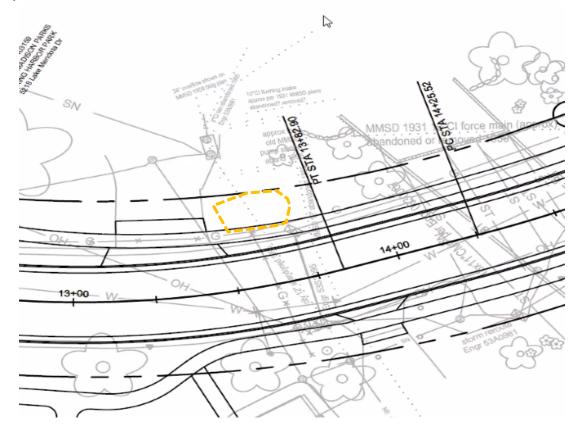
1. <u>Spring Harbor Drive/School</u> – Bioretention stormwater feature instead of rain garden. Need to confirm suitable soils. Two feet of special soil (70% Sand/30% compost) will be added. There will be an underdrain to tie into stormwater underdrain pipe. Must include low-growing plants for visibility for corners/vehicles. The other half of this feature will be constructed in 2024, and will be connected by a pipe. Faith mentioned the area should be designed to support turtle habitat. She mentioned that the City needs to install turtle access ramp that didn't get put in at boat ramp; also noting that lakeshore property owners had hardened their shoreline preventing turtles from accessing nesting areas (alder's property included). Good opportunity to work with school on this area.



2. <u>Spring Harbor Park Bioswale (South)</u> – At AHC's request, the City explored adding additional stormwater features on public assets. This allowed the City, after discussion with Parks, to add a 50 foot bioswale at park. There is space to push the sidewalk back to accommodate this feature. Faith suggested making it longer and connect to apron drain. Emphasized vegetated swales and filters over infiltration.



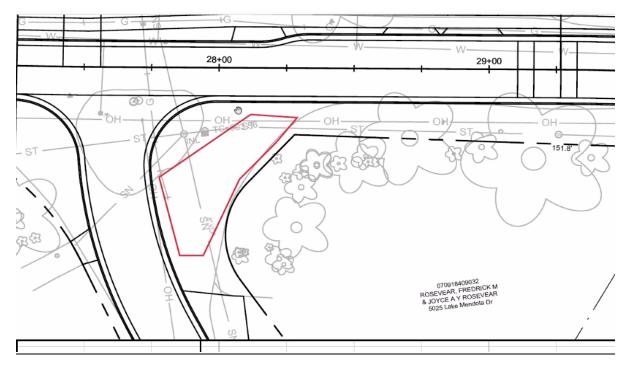
3. <u>Spring Harbor Boat Launch</u> – City will examine the possibility of adding to the community rain garden list. Janet Schmidt confirmed that wall revegetation plan had initial location earmarked. Phil mentioned that there is significant piping and old lines, so they will need to check to see what is beneath this area.



4. <u>Spring Harbor Court (a/k/a Turtle Rain Garden) Expansion</u> – Proposal is to remove excess pavement on the northside adjacent to Boyette property. City will add an inlet, and it could also include a sump. Could have bioretention too? Faith offered that the turtle shaped mound could be modified to connect areas if it would improve water quality properties of area. Phil thought that it would be better to leave existing vegetation in place, but will do a site visit with Jim and Faith. Sediment from existing runoff results in about 6" of fill in existing garden. That could change when street layout/elevations change, so specifics are on hold until grades determined.



5. <u>Merrill Spring Road/LMD Northeast Corner</u> – Another opportunity to narrow unnecessary pavement and create community rain garden. This rain garden is a "maybe" because of the steep slope. Phil needs to make sure that the grading can work. Faith mentioned possibility for mazed area to reduce velocity. Length would be about 50 feet. City will try to make it work, otherwise, it would be a grass area to be maintained by adjacent property owner.



Further Discussion

1. <u>Community Garden Maintenance</u> – Extended discussion regarding maintenance requirements and limitations of work, including the following:

- City requests that SHNA sign maintenance agreements for these areas to ensure long-term maintenance (see <u>adopt-a-median program</u>);
- City will bear the cost of the stormwater/community rain garden areas (i.e., SHNA will not have to pay for build-out);
- SHNA has agreed to such arrangements in the past;
- Maintenance must be done by volunteers, but volunteers can subcontract their responsibilities (e.g., if work is weeding or trimming, you could hire someone to do, just like someone hiring to mow terrace grass);
- If any major work or digging to a depth of more than 12" is required, work performed would likely need a City permit; and
- Certain work would need to be performed by a licensed city contractor (e.g., burning of area).

2. <u>Terrace Rain Gardens</u> – Limited options on Eastern Segment. Discussion about whether Risser Road is a possibility. Jim mentioned that because the area was limited, it would be an adjacent property owner area if interested (Rickman side possibility). Jeff Bauer also requested that the City evaluate the Bauer property if it's a viable location.

3. <u>Rain Garden Planning and Development</u> – AHC request for SHNA involvement in the community rain garden creation and planning. Phil committed working collaboratively on community rain gardens. He noted, however, that if plant selection must be kept low for visibility, we would be required to comply with height-limitation requirement or City could come and cut it to appropriate height. Phil will provide us with a schedule for design process once he has the curb/gutter grades. Schedule usually includes 60% and 90% check-in meetings. Phil noted that City has set plant mixes depending on soil and sunlight, and that not all plant selections are always available. We noted that SHNA understands that it will need to be flexible regarding such issues.

4. <u>Rain Garden Educational Meeting</u> – At the AHC's request, Phil has agreed to lead a Zoom or other educational meeting regarding neighbors interested in either terrace rain gardens or community rain garden maintenance. This will include raingarden benefits and design process.

5. <u>LMD Future Project Management</u> – Jim noted that he will be assuming the position of City Engineer, and also has a baby due later this month. As such, he noted that he will stay on as project manager for this next design phase, but that he will likely be transferring the project manager position going forward. No decision has been made yet as to who will assume the project manager position.