

TO: Department of Planning & Development
City of Madison

FROM: Nancy Ellison
Lake Mendota Steward, Spring Harbor Neighborhood Association

RE: proposed demolition and building new house at 5438 - 5440 Lake Mendota Drive, Madison

Greetings,

As a former neighbor of the late Ms. Tierney, I visited her lakefront property on many occasions. She took great care to capture all rainwater runoff from her impervious surroundings. Strategies used included rain barrels, pervious brick paver driveway, rain gardens and maintaining trees and shoreline buffers. Jeannette knew that her house would be demolished upon her leaving. As neighbors, we also know that the door doesn't shut behind as we move into the neighborhood. This letter is a welcome to our new neighbors and a reminder of the responsibilities of the Planning Department to educate new neighbors about demolition and building a new home on the shores of Lake Mendota. It's also the current resident neighbors' responsibility to share specific recommendations that honors the integrity of Lake Mendota. As more and more lakefront homes are built on a larger scale than the original cabins along Lake Mendota, each new home adds to a cumulative effect of impacting the waters of Lake Mendota.

Here are my recommendations to be considered by the Madison Planning and Development:

1. The current brick paver driveway was installed intentionally to be pervious. Notice on the topographic maps of the lot that this parcel has a sizeable slope down toward Lake Mendota. Keep permeable driveways on this development.

"Depending on design, paving material, soil type and rainfall, permeable paving can infiltrate as much as 70% to 80% of annual rainfall." (1) Combining permeable pavement with other Low Impact Development (LID) strategies, such as vegetated swales, increases the overall effectiveness of permeable paving. According to Mark W. Clark and Glenn A. Acomb (Reference 2) the percent of rainfall converted to runoff volume for various pavement scenarios is:

Asphalt with no swale--51%
Asphalt with swale--34%
Cement with swale--32%
Permeable pavement with swale—10%

2. The current shoreline includes various vegetation at the shoreline. This shoreline buffer serves as a filter to all stormwater runoff immediately prior to the stormwater enters Lake Mendota. Keep a vegetative shoreline to provide habitat for pollinators, fish and birds. Consider native plantings along the edge to not only filter the water with their deep roots, but also as both a beautiful visual garden and buffer to guard the shoreline from erosion.
3. Keep the rain garden that is currently installed next to the road on the southwest corner of the property. Rain gardens use native plantings with deep roots that filter stormwater runoff, hold stormwater runoff to slow the flow and add habitat for pollinators and bees

Thank you for considering these recommendations. I appreciate the willingness of Madison Planning and Development to accept public comments.

NOTES

(1) Massachusetts Low Impact Development Toolkit—Fact Sheet #6 Permeable Paving. Metropolitan Area Planning Council http://www.mapc.org/sites/default/files/LID_Fact_Sheet_-_Permeable_Paving.pdf
(2)University of Florida, Mark W. Clark and Glenn A. Acomb-Water Resources Roundtable Low Impact Development Presentation http://publicfiles.dep.state.fl.us/dwrm/stormwater/stormwater_rule_development/docs/fl_asla_presentation.pdf

From: stewart ellison
To: Prusak, Sydney
Cc: Keith Furman; Tucker, Matthew; Aaron Crandall; Herman Felstehausen; Roy Christianson; Faith Fitzpatrick; stewart ellison; Spring Harbor Planning; Jussi Snellman; Mark Fucinato; Roger Smith
Subject: 5438 & 5440 Lake Mendota Drive - SHNA Planning & Development Committee Comments
Date: Thursday, August 09, 2018 4:48:27 PM

Hello Sydney,

We, the SHNA Planning & Development Committee are forwarding you and the Planning Commission the following comments for consideration while completing the review of this project:

- 1) Show location of replacement trees with species and size. Need to maintain as much ground stabilizing and water absorbing trees as possible. Also, rain garden(s) dimensions should be included in landscape drawing showing how storm water drainage will be handled.
- 2) We request that the owner substitute concrete driveway and sidewalks with pervious materials to help mitigate the volume of storm water runoff. Also, this will help in filtering runoff before entering the lake.
- 3) Current plan to build a basement into ground water seepage is not economically nor environmentally wise. While the neighborhood does not regulate these practices, we are calling for detailed plans showing how excavation and dewatering will be performed so as not to endanger adjoining property owners and avoid polluting Lake Mendota. Please also show on drawing specifically approximate sump pump discharge volume and location and how that stream is to be managed so not to cause lakeshore erosion.
- 4) Current boat house is being demolished and replaced by a 40% larger one that calls for increasing the width from 11' to 16' and adding a 6/12 pitch roof. This will further block neighbors view toward the lake. We strongly urge the owner/builder to shift to a flat roof with minimum side overhang to reduce the appearance of a large obstruction on the lakeshore.

Thank you for your consideration,

Stewart Ellison
-on behalf of the SHNA Planning & Development Committee