From: Chuck Nahn
To: All Alders; Figueroa Cole, Yannette; Guequierre, John; Mayor; Plan Commission Comments
Cc: Mary Umbeck; jeff western; Fries, Gregory; Schmidt, Janet; Tim Burns
Subject: Please Post as Public Comments for 82950, 82972, 83477, 82979 and 84123, 6610-6706 Old Sauk Rd
Date: Friday, July 5, 2024 1:34:13 PM

Dear Mayor Rhodes-Conway, President Cole and All Alders,

My name is Chuck Nahn and I reside at 5623 Sandhill Drive in Middleton. I am a registered Civil Engineer, with over 40 years of experience, retained by the adjacent neighboring property owners to review and comment on the Stormwater Management and Erosion Control Plan for the Old Sauk Road Apartments.

My overall stormwater review of this development is that a high-density multi-family residential development with corresponding greatly increased paved surfaces is being proposed into a small undeveloped area with existing flooding problems caused primarily by inadequate storm sewer infrastructure along Old Sauk Road. To meet City ordinances and achieve the high-density development, the developer is implementing novel, untested underground practices to meet the runoff rate, water quality, infiltration and oil and grease requirements of the City ordinance. I have a number of concerns as detailed in my review comments based on two revisions of the stormwater plan dated April 8, April 22 and May 24 including but not limited to:

- Underground Tank Infiltration Rate-
  - The infiltration rates used in the report are too high and do not have a correction factor applied to account for soil compaction during construction. Please note the design infiltration rate is integral toward meeting City ordinance for runoff rate control, water quality and infiltration requirements.
  - Soil compaction during construction is inevitable based on the weight of rock and concrete vault structure on top of native soil interface for underground tanks.
  - Mixing the soils 5 feet below the native soil interface will not increase infiltration based on Dr. John Norman's (professor emeritus of soil science) comments.
  - Sodium Chloride used for winter deicing of street, driveway and parking lot may cause soil clogging and immediate infiltration failure based on Dr. Norman's comments.
- Pre-existing Detention not applied to on-site discharge- City ordinance requires pre-existing detention applied to on-site discharge. Stormwater plan applies pre-existing detention to off-site discharge from Old Sauk Road flooding and not on-site discharge from paved area increase associated with proposed development.
- Potential Increased Flooding to Lower basements for North Property Owners- Underground Tank infiltration can potentially cause groundwater mounding and increased groundwater flow to the north inundating northern property owner's household lower level and basement. Please note these basements are 7 feet below the native soil interface of Underground Tank #1 which is located 40 feet from the native soil interface.
- Proposed Underground Tank Outflow pipes elevations- If underground infiltration tanks should not infiltration as designed, the outflow pipe elevation will negate ¾ of the existing storage of the underground tanks.

I have numerous additional stormwater management plan comments that I submitted to City Engineering on June 4, 2024 with no response received. I request an in-person meeting with City Engineering and the developer's engineer to review these additional issues. Given the uncertainties

that exist at this time, we ask that you defer a decision on the zoning change until further detail becomes available regarding the proposed stormwater practices for this development. The risk of increasing flooding in an already flooded area if these practices do not perform as designed definitely should be considered in more detail before a decision to change the zoning and demolish existing structures is made. For example, if the underground tanks remain filled with water, flood protection volume is lost which is needed to protect downstream property owners

Thank you for your consideration of these issues.

Chuck
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