

From: [Jeffrey Walsh](#)
To: [Hopedale Planning Board](#)
Subject: RE: Stormwater Report and Revised Plans for Overdale Parkway
Date: Wednesday, February 15, 2023 4:38:04 PM

Good afternoon Steve,

A little earlier today I issued my follow-up definitive review letter and in doing so incorporated two comments from the ConCom member for which I wanted to also communicate directly with the design engineer. Feel free to share that letter with the Commission.

I'm responding below to the other comments from the commissioner in red. Please excuse the brevity of my responses – I'm trying to respond succinctly. The Commission certainly can refer to my comments below and could ask for action by the applicant/design engineer if they so choose.

Would you please pass this email along to that person?

Thank you,

Jeff

JEFFREY M. WALSH, P.E.
Principal

GRAVES ENGINEERING, INC.
100 GROVE ST | WORCESTER, MA 01605
T 508-856-0321 ext 109 | F 508-856-0357
www.gravesengineering.com

From: Hopedale Planning Board <PlanningBoard@hopedale-ma.gov>
Sent: Wednesday, February 8, 2023 1:26 PM
To: Jeffrey Walsh <JWalsh@gravesengineering.com>
Subject: Fw: Stormwater Report and Revised Plans for Overdale Parkway

Hi Jeff:

I had meant to send this to you sooner and sorry for the delay. I am forwarding concerns raised by the conservation commission. Can you review these concerns and make sure they are accounted for in the most recent plan set? Thank you.

Best regards,

Steve

From: Hopedale Conservation Commission <Conservation@hopedale-ma.gov>
Sent: Tuesday, January 31, 2023 6:41 PM

To: Hopedale Planning Board <PlanningBoard@hopedale-ma.gov>
Subject: Re: Stormwater Report and Revised Plans for Overdale Parkway

Hi Steve,

Dave checked the mailbox last Friday and it was not present. I swung by tonight and did receive the calculations. The Commission obviously cannot meet to provide comment prior to tomorrow due to the posting requirements. Your email is the first indication we have received as to the calculations being available at the Town Hall.

With that in mind, I would personally like to call attention again to the peer reviewer's comments that there is no compelling circumstance why a sewer connection cannot be made to the existing sewer facility, and would request the Planning Board keep that in mind when deciding on the sewer waiver.

Additionally, from my own review based on my experiencing reviewing such plans as Conservation Agent for another town, I would add the following notes separate from the Conservation Commission:

1. The swale while named in the report is not specifically called out on the Drainage Plan and the plan should be revised to show it.

I was able to easily find the roadside swales on the Proposed Drainage Plan and on Sheet G-1 of the definitive plan set.

2. Cast Iron pipes are generally discouraged due to the likelihood of rusting resulting in rotted bottoms. HDPE pipes are generally preferred due to the durability. Alternatively, presuming these pipes are the connections of the swale under driveways, arches may be preferable.

The driveway culverts are proposed to be ductile iron pipe, not cast iron. Ductile iron is less brittle than cast iron and is stronger, especially when tensile (pulling as opposed to compression/pushing) forces are applied. Furthermore, the interior of ductile iron pipe is cement-lined for corrosion resistance. Ductile iron pipe is used most often for water supply systems and sewer force mains, but it is not unusual that it is used for drainage applications where conditions warrant strong pipe – e.g., limited soil cover conditions.

3. Culvert 8R from DI to DMH may be undersized (24" pipe with a 15.69cfs capacity) to handle the flow from both culverts 4R (16.61) and 7R (7.97) and subcatchment 8S which amounts to over a 24.58cfs capacity according to the report. This may cause a backup of water at this location resulting in chronic flooding in the area.

Commented in GEI's 02/15/23 follow-up review letter.

4. Operations and Maintenance Plan is generally lacking. It does not identify specifically all stormwater features and the number of each feature or location, nor does it provide inspection checklists.

Commented in GEI's 02/15/23 follow-up review letter.

5. The information for the pipes is lacking, and manufacturer information could not be found. This information is important to ensure pipes are installed and maintained correctly in the system.

Each type of pipe material proposed is manufactured by various companies. Unlike proprietary stormwater treatment units and subsurface infiltration/detention systems, a pipe specific manufacturer is not customarily called out on plans.

6. To mitigate surface runoff, it is recommended to incorporate roof drain infiltration connecting to the drainage system.

I have no issue with the Commission or the Planning Board requiring roof runoff infiltration systems. The systems wouldn't have to connect to the drainage system – any overflow from those systems would flow overland to the drainage system where lot topography allows. The roof runoff was modeled in the hydrology computations and the tributary areas, including individual lots, can be viewed on the Proposed Drainage Plan. The hydrology computations show that the subdivision can be supported by the infiltration basin but if the design engineer did add roof recharge systems, I don't feel it is necessary for the hydrology computations to be revised to include the roof recharge systems. If the roof recharge systems were eliminated by future lot owners, compromised or became no longer functional, then we'd know that stormwater could still be mitigated by the stormwater system currently proposed.

7. Cape Cod berms should be implemented along edges of road to prevent traffic from entering the swale and damaging it.

Any type of berm or curb would diminish the amount of water that flows to the roadside swales or even redirect the water to the "older" section of Overdale Parkway. Berms/cubs are not customarily used on roads with roadside swales.

8. The report states the Town of Hopedale will become owner of stormwater systems after completion of site construction. From experience, such requirements should include a bond held by the Planning Board equal to the valuation of the roads and the stormwater systems to guarantee completion of the roads and stormwater features, or alternatively the language changed to transfer ownership upon the acceptance of the road as a public way by the Town.

I defer to the Planning Board relative to the details of bonding procedures in Hopedale. It is my experience in other communities that a performance guarantee is required. The performance guarantee often starts out as a covenant and is then replaced with financial surety such as a bond when the developer wants to have the lots released by the Planning Board.

Additionally, I would remind the Planning Board of my previous letter as Tree Warden regarding the waiver request for tree planting. If you need me to resend the email letter, please let me know.

I unfortunately work tomorrow during the time of your meeting. If I am able to adjust my schedule and attend I will endeavor to do so to answer questions, but I cannot guarantee my presence.

Thank you,
-Becca

From: Hopedale Planning Board <PlanningBoard@hopedale-ma.gov>
Sent: Monday, January 30, 2023, 11:38 AM
To: Hopedale Conservation Commission <Conservation@hopedale-ma.gov>
Subject: Re: Stormwater Report and Revised Plans for Overdale Parkway

Hi Becca:

Mark Allen indicated in an email last week that the requested drainage analysis had been dropped off at Town Hall per Conservation's request. Please confirm receipt. Thank you.

Best regards,

Steve

From: Hopedale Conservation Commission <Conservation@hopedale-ma.gov>
Sent: Tuesday, January 24, 2023 5:23 PM
To: Hopedale Planning Board <PlanningBoard@hopedale-ma.gov>
Subject: Stormwater Report and Revised Plans for Overdale Parkway

To the Planning Board,

The Conservation Commission is looking to provide the requested comments concerning the proposed Overdale Parkway plan; however, we have still not received the request stormwater calculations from which we could provide review. The peer review provided is not adequate for this Commission to understand the proposed systems as it does not include the calculations that support the reviewed material.

The Commission held off on holding a meeting to provide a formal review requested last year, as the necessary materials were not provided; however, recognizing the short timeline, we included the discussion on our agenda for the January 17th meeting. During that meeting, we still did not have the calculations and were thus unable to provide adequate comment.

We are again asking for a copy of the stormwater calculations, as well as a copy of the newly revised plans so that we may hold an off cycle meeting to provide comment prior to your next meeting on February 1st.

Thank you,
-Becca Solomon
Conservation Commission
conservation@hopedale-ma.gov