Questions Submitted for Peer Reviewer

Hydrogeological Assessment Study

Page 11/376 of the OTO Hydrogeological Assessment Study says: "Thousands of cubic yards of sand and gravel are anticipated to be removed from the Site to support the subdivision development."

- This is one of the few, perhaps the only, reference in the OTO narrative about the quantity of earth removal planned for the development. In your opinion, does the OTO study adequately account for the 500,000 cubic yards of material proposed to be removed in their analysis and does it address the potential consequences/concerns with said removal?

The HAS appears to be based on an outdated grading plan (since the perc testing issue, etc.)

- For accuracy and reliability purposes, do you believe that the report should be revised to be based on the most current grading plan for the 9 lot subdivision and not a hypothetical build-out?

In light of the repeated references to the 23 acres of open space (for a hypothetical buildout and not the development under review) as an asset, additional safety measure for protecting the water as well as its association with the report's conclusion,

- Do you feel the analysis should be reviewed to reflect the 9 lot subdivision with no set aside OS?

The HAS contains a disclaimer indicating that it cannot be relied upon by "third parties" and was prepared for their client's "exclusive benefit" only.

- In your experience, is such a disclaimer typical or standard for this type of study? Please explain. Does this clause nullify use by the PB (or any other entity except their client) in making any determination on this project?

Traffic Study

- Have your concerns re: sight distance obstructions/lines been resolved to your satisfaction when the matter was discussed at a previous public hearing in the spring?

A member of the public highlighted a discrepancy regarding the number of trucks entering/leaving site presently vs. during future development. In a PH, the applicant stated that the amount of traffic will be roughly the same w/approx. 1 truck every 25 minutes. However, when looking at the amount of cubic yards proposed to be removed and divided by the 3 year time frame which is planned for excavation, it appears there will be a truck leaving/entering roughly every 3 minutes during business hours.

- Do you feel this analysis is accurate, and if so, should the traffic study be revised to reflect this information? Are there other impacts/consequences that might this have on the traffic study?

Definitive Plan

Regarding the question of whether application conforms to Agricultural Zoning District Definition, in a memo to the PB dated 9/14/2020, the applicant stated: "The grading proposed is incidental to the construction of the road and proposed subdivision lots. No revised grading is warranted."

- Do you agree with this statement? Please explain why / why not.

~~Regarding Water Supply Protection District Section 255-35(1)(b) – You have indicated that leaving the replanting of lots "up to individual landowners" does not comply w/the requirements for development within this district.~~

- ~~Based on the 9/14/20 memo, applicant contends that "applying 4-6" of loam and seed to all exposed surfaces. Vegetative plantings will be incorporated into the landscape" suffices to meet this standard. Do you agree that this approach meets the requirement? Please explain why / why not.~~ ***Addressed 2020-10-05 Public Hearing***

~~Condition g. Construction Staging/Operation Planning – a plan for ensuring construction equipment and operations do not adversely impact the groundwater supply. You noted that construction staging or operations appear to be lacking from the proposal (and not addressed in the O & M Plan). In particular, you noted that the O&M plan does not indicate where the equipment will be stored nor does it provide for facilities such as solid waste disposal, containment, hazardous materials storage, equipment refueling or equipment washing.~~

- ~~It appears the applicant has submitted the same O&M plan from 1/2020 in 3/2020; promised to "discuss" it at a PH to address this concern. Based on hearings and submittals to date, has this issue been addressed to your satisfaction?~~ ***Mostly Addressed 2020-10-05 Public Hearing. Rob Levesque to provide a written staging plan as described at 2020-10-05 Public Hearing.***

~~Conditions h and i. Vegetative Maintenance/Reveg. Plan – h. requires Phasing plan for tree cutting to prevent destabilization of slopes, erosion throughout site and prevent stormwater basins from becoming overwhelmed during construction / i. requires that the disturbance of the land be remediated with plantings and anti-erosion measures (during and post-construction) to ensure that long term degradation (esp. on steep slopes) does not occur.~~

- ~~Applicant asserts that condition h. has been addressed in the Stormwater O&M plan and condition i. with loam/seed while the rest is left to lot owners/builders. Does this adequately address your concerns and satisfy conditions h and i?~~ ***Addressed 2020-10-05 Public Hearing***

~~Condition 12 Prior Contamination – Operated as pit, travelled on by heavy trucks and equipment for decades, used as a shooting range: applicant must address how will test the site for contaminants. Applicant's response has been 'there are no contaminants' despite previous PH discussions that it is common knowledge that the parcel was once used for shooting practice; hence the condition in the Preliminary Plan.~~

- ~~Please confirm that the provision of a testing protocol and an approach to mitigation to address potential contamination found remains to be a sound, reasonable and accepted practice to address such concerns.~~ ***Mostly Addressed 2020-10-05 Public Hearing. Rob Levesque to provide the Phase 1 report (to the extent they can)***

~~Condition 16 Peer Review by Berkshire Design re: steep slopes and drainage easement. Part c. Given extensive clearing and excavation, a phasing plan should be provided to ensure adequate loam/seed/plantings are provided to stabilize the site. Applicant responds w/'see construction phase O&M plan' but neither their Jan. 2020 O&M submittal nor the O&M section of their Stormwater Report document such a plan. When asked about this again by the PB, on Sept. 14th, the applicant responded with "Please see sheets C-3 through C-5 detailing construction sequence."~~

- ~~Does the applicant's most recent explanation resolve the concerns you outlined on March 4th?~~ ***Addressed 2020-10-05 Public Hearing. Jim to review sheets as to where it is specified – Rob said it was on the sheets. Rob will provide plan for review.***

360-33 (B) of the Subdivision Regulations says:
"Due regard shall be shown for all natural features such as large trees, watercourses, scenic points, historic spots and similar community assets, which, if preserved, will add to the attractiveness and value of the subdivision and the Town."

- Given this requirement/definition, would you consider Dry Brook Hill to be a "natural feature" of South Hadley, and if so, would you consider the excavation of 500,000 cubic yards from the feature to demonstrate "due regard"?

~~Zoning Bylaw Section 255-84 Earth removal, extraction and fill regulations Part A.(1) states, "In any zoning district, removal or addition of sod, loam, clay, gravel, quarried stone, or kindred materials shall not be undertaken if such removal or addition results in a change in the contours of the land, except by an earth removal, excavation, and/or fill permit from the Building Commissioner."~~

- ~~Based on your review of the proposed project plans and supplementary materials, do you believe that the excavation for this proposed development results in a change of "the contours of the land"?~~ ***At 2020-10-05 Public Hearing. Richard said it is not an issue – it is a change in the contours of the land. Whether it is incidental is not a question before the Board at this time.***

Questions submitted for Applicant

1. It is difficult for the Board to determine conformance with subdivision design standard 360-33,B with the current project documents. Please provide a 24"x36" drawing at a scale of 1"=120' showing an aerial or satellite view (i.e. Google Earth) of the entire site with the following items overlaid:
    a. Existing contours
    b. Proposed contours Proposed lot lines for lots 1-9
    c. Proposed Frosty Way
    d. Footprints of proposed new houses (as depicted in definitive subdivision plan set)
    e. Location and extent of grandfathered sand/gravel extraction operations on newly created lot 4.

2. Please provide a narrative for how the location of Frosty Way and the new houses on lots 2 & 3 are consistent with subdivision design standard 360-31,A,1 that states *" ...Due consideration shall also be given by the subdivider to the attractiveness and design of the street layout in order to obtain the maximum livability and amenity of the subdivision."* In this narrative, please address the following:
    a. The applicant's representative has stated on several occasions that the layout of Frosty Way was chosen because it is advantageous to the applicant. From the standpoint of a residential subdivision, what is advantageous about locating the terminus of Frosty Way and the first two houses of the subdivision at the bottom of a decommissioned sand/gravel extraction pit adjacent to an active sand/gravel extraction operation when the site affords many possible locations with no such disadvantages?
        i. Why not use the design strategy showed by Preliminary Subdivision Plan or the previously permitted 2006 Dry Brook Hill Mulit-family Housing project that located new housing on the Northern half of the site that is outside of the gravel pit in a comparatively level area with good views and a natural topographic and vegetative buffer between the proposed subdivision and the sand/gravel mine?

3. Please provide an explanation for why Frosty Way curves to the North at station point 5+00. Other than necessitating a large amount of site disturbance by pushing the cul-de-sac further into the undisturbed portion of the site at an elevation that requires a considerable amount of cut, how is this curve contributing to the attractiveness, livability and amenity of this subdivision? How is this curve and the resultant amount of cut consistent with subdivision design standard 360-31,A,1 and 360-33,B? If a curve in Frosty Way was desired for aesthetic or other reasons, why not curve to the South such that no additional cut into the undisturbed portion site is necessary?

4. The septic drain field for the house on lot 6-7 is shown almost 150' from the new house while the septic drain field for the adjacent house at lot 8 is shown within 30' of the new

house. Other than necessitating a much larger amount of site disturbance, what is gained by locating the septic drain field this far away from the house? How is this amount of site disturbance along Hadley Street consistent with the Master Plan and subdivision design standards 360-31,A,1 and 360-33,B?

5. It would appear that the bottom of the newly created 3:1 slope to the North of Frosty Way could be brought much closer to Frosty Way while still affording the same backyard and septic drain field location opportunities for lots 6-7 as newly created lot 8 and other similar residences on this side of Hadley Street. How is the width of the cut for Frosty Way consistent with subdivision design standards 360-31, A,1 and 360-33,B?

6. The bottom of the newly created 3:1 slopes in the area of the proposed cul-de-sac are over 100' away from the edge of the cul-de-sac, necessitating a large amount of additional site disturbance. If having a buffer between the cul-de-sac and the bottom of a steep slope was desired, why not curve Frosty Way to the South (see question 3, above) and use some of the cut from the roadway to create a more gentle, remediated slope at the edge of the decommissioned sand/gravel pit? How does creating a new 3:1 slope of greater height than the existing in a previously undisturbed part of site contribute to the attractiveness, livability and amenity of the subdivision? How is this degree of unnecessary site disturbance consistent with subdivision design standards 360-31,A,1 and 360-33,B?

7. The applicant's representative has indicated that the reason the proposed cul-de-sac elevation is at 212.64(approximately 20' below existing grade of 232) is because the septic drain fields were required to have be perc'd and constructed in native soil. However, the existing topography in lot 3 ranges in elevation from 211' to 227' while existing topography in lot 2 ranges in elevation from 212' to 248'. The proposed septic drain field for lot 3 is shown at approximately 213' elevation while the proposed septic drain field for lot 2 is shown at approximately 216' elevation. Please explain why higher elevations for the septic drain fields for lots 2 and 3 could not be employed given that it appears that there are other areas of native ground of adequate size on each lot that would support a septic drain field at a considerably higher elevation than the areas chosen by the applicant. Please also explain why the proposed houses at lots 2 and 3 could not employ walk out basements to allow for an even higher F.F.E. for these new houses - using the change in elevation from front to back yard to create greater amenity for the proposed houses? If it is possible to site the septic drain fields at elevations higher than what is shown and/or employ walkout basements to allow for higher F.F.E.s at the proposed houses at lots 2&3 (and a resulting higher elevation at the cul-de-sac), please explain how the additional 20' of cut at the low point of Frosty Way is consistent with subdivision design standard 360-31,A,1. Please also explain how creating a new depression in an already artificially depressed landscape contributes to the attractiveness, livability and amenity of the proposed subdivision.