

September 10, 2020

Town of Hingham Conservation Commission 210 Central Street, Hingham, MA 02043 Attn: Ms. Loni Fournier, Senior Planner

RE: Response to Comments Notice of Intent – Hingham Gas 19 & 27 Whiting St, Hingham, MA 02043

Dear Ms. Fournier and Members of the Commission:

CHA is in receipt of the Conservation Commission Staff Memorandum dated May 18, 2020 related to the above referenced site as well as comments received via email. We have prepared the enclosed plans and documents to address the received comments. Original comments are listed below in standard text followed by our responses in **bold text**.

Comments:

- NOI form & fees
 - Project location should specify both 19 & 27 Whiting St.
 - Under part D. Additional Information, box 5 is checked indicating that there is more than one property owner and a list is attached, however there was no list included with the filing as far as I can tell. Has ownership of the property at 19 Whiting St. changed at this point or is it still a different owner? We need either documentation of the sale with proof that the owner is now the same at both 19 & 27 Whiting St., or we need written permission from the current owner of 19 Whiting St., if different, for filing the NOI and allowing any work to proceed.
 - As a reminder, the filing fees need to be adjusted to include the demolition of the existing single-family house, which is another \$110 for Category 1(a) under the WPA (to be divided into a state and town portion) and another \$100 for Category 1(a) under the bylaw (town only).

The project location has been updated to specify both 19 & 27 Whiting St. CHA had previously sent information regarding the Applicants Offer to Purchase the 27 Whiting Street parcel. The Applicant has purchased the property and the updated NOI Form is included in the updated Notice of Intent. The Filing Fees were updated and previously supplied in a package dated April 11, 2020.

• Wetland Resource Areas. The plans should specify who did the delineation and when. On the plans or separately, please provide the name of the PWS that did the delineation for our records.

Note 9 on the Existing Conditions plan notes "Wetland Flags shown hereon are based on field locations by CHA Consulting, Inc. in January of 2020. Wetland flags were delineated by CHA Consulting, Inc. Scientist in January of 2020."

A note has been added to the Wetland Resources plan, Sheet G-002, indicating that James Hall, PWS delineated the wetland flags in January 2020.

- Erosion controls & limit of work
 - Given the amount of proposed disturbance and slopes on site, it would be preferable to have both a silt fence and the proposed silt sock (on the inside), for both erosion and sedimentation control and visibility during construction.

The callout for silt fence with filter sock has been added to the Demolition & Sediment Control Plan, Sheet C-003. A detail for the installation has been added to Site Details, Sheet C-601.

• Where are temporary sediment basin(s) proposed to be located? Also, the Commission does not allow straw or hay products due to concerns over spreading invasive plants seeds, so if it is located within the buffer zone, it should be surrounded by a filter sock vs straw wattles or bales as shown on the plans.

A temporary sedimentation basin would likely be located at the lowest elevation prior to the wetland resource which is proximate to the existing shed to be removed. The potential location has been indicated on the Demolition & Sediment Control Plan, Sheet C-003. The detail on Site Details, Sheet C-601 referencing straw or hay bales has been edited to indicate the use of filter socks.

- Buffer Zone impacts
 - Is it possible to move the proposed overflow spillway and outlet/energy dissipator fully out of the 50ft no disturb or is this not feasible?

The stormwater has been redesigned so that there is no proposed encroachment into the 50foot no disturb buffer beyond regrading after removal of the existing shed, house, and driveway and planting as indicated on the Landscape Plan, Sheet C-501.

• I understand there is currently ~1285 sf of impact in the 50ft buffer zone, presumably referring to impervious surface which will be removed. It would be helpful to have a breakdown of existing impervious surfaces and structures in the 50ft and the 100ft, versus proposed in both 50 and 100ft buffers.

The table presented on Wetland Resources Plan, Sheet G-002 has been updated to provide additional breakdown of the structure vs. impervious areas located within the buffer areas.

- Stormwater
 - Any comments from the peer review engineer hired by the Planning Board should also be addressed. The Commission relies on this review to ensure compliance with Stormwater Standards in addition to staff review.

A separate response letter to the peer review engineer's comments are being submitted and a copy provided with this submission.

• There should be a quantification of areas that are being considered redevelopment vs new development.

In the discussion of redevelopment vs. new development, we have utilized the Stormwater Management Handbook reference meaning that any increase on the site of impervious is new development. As presented in Section 4 of the Stormwater Report, there is an increase in 8,651 sq. ft. of impervious.

• In Section 1.8 of the Stormwater Report, the Summary of Design Point 1 table should indicate that runoff volume will decrease, i.e. numbers should be negative.

The Stormwater Report has been updated to reflect a reduction in runoff with a negative number.

• Is there any opportunity to recharge the other half of the rooftop runoff, perhaps to the east side of the site?

The stormwater design has been modified so that the entire roof is being discharged to UG-1 which is a recharge/detention system with multiple isolator rows.

o TSS. More documentation is needed to confirm whether the standard is met. Thank you for providing some references for pollutant removal, as independent testing results or TARP/STEP data are required for all proprietary BMPs. Note that MassDEP only allows a maximum of 25% TSS removal for the Stormceptor 450i. Pretreatment requirements are not met for runoff to the water quality swale or for runoff to CB2, so 90% TSS removal cannot be taken for the bioretention area for these two drainage areas. Note that there must be at least 44% pre-treatment TSS removal since this site is both a LUHPLL and is within a Critical Area.

The Stormceptor 450i has been removed from the stormwater design as has the bioretention area and water quality swale. Catch basins, oil/water separators, and underground recharge/detention systems consisting of stormtech chamber units utilizing an isolator row for treatment are utilized on the site for stormwater treatment.

• LUHPLL & Critical Area. The project is located in and does drain to a Critical Area as the site is within a Zone II. See comments above under TSS and also ensure all proposed BMPs are appropriate for these areas per Stormwater Handbook.

The proposed stormwater system has been redesigned. The updated design includes an oil/water separator as part of the treatment train after collection by catch basins and prior to discharge to the underground recharge/detention systems which utilize an isolator row for treatment. The Stormtech Chambers have been previously approved for the project located at 141 Derby Street for use on a LUHPPL. The isolator rows were utilized as part of the pretreatment prior to recharge as well. The stormwater treatment device, CDS units, proposed on that project were removed and replaced with the Stormtech Chambers with Isolator Row. The current stormwater design utilizes the same design principle utilized for that approval.

• Thank you for including LID measures, which are recommended for all sites if possible, but are particularly appropriate here. The locations of the bioretention area and subsurface infiltration system should be protected during construction to avoid compaction and this should be indicated on plans.

The stormwater system design no longer includes the bioretention system due to the issues with the LUHPPL associated with a gas station. The note regarding protecting the proposed recharge areas from compaction has been added to the plans on the Notes & Legend, Sheet C-002 and Grading & Drainage Plan, Sheet C-201.

• It appears one of the snow storage areas would be partially within the bioretention area which is not allowed, or at least on the adjacent slope. An alternative location should be considered.

The bioretention area has been removed from the stormwater design. The snow storage area is located adjacent to a swale created by the proposed grading. We have already discussed with the client that snow removal from the site will be required should the snow storage areas be full, and this condition is noted in the O&M plan.

• The O&M BMP matrix should include inspecting vegetation and reseeding/replacing plants in the bioretention area as needed. Note that any replacement plantings within the buffer zone shall be native species and no cultivars, non-native species or invasive species shall be allowed.

The bioretention system has been removed from the stormwater system design.

• Due to the proximity of the site to Accord Brook, which is a state-listed 303(d) impaired waterway, the Commission will likely condition a prohibition on pesticides, herbicides and fertilizers, as well as a prohibition on de-icing chemicals, except for calcium magnesium acetate, or other alternative approved by the Commission. The O&M plan should be updated to reflect this.

The O&M Plan has been updated to indicate the use of calcium magnesium acetate or other alternative approved by the Conservation Commission.

- Plantings/Landscaping
 - The narrative says a wetland seed mix will be used to vegetate the area to be restored on 19 Whiting St., following demolition of the house, driveway, shed, etc., however the landscape plan shows a turf grass seed mix around the trees to be planted in this area.

The Landscape Plan, Sheet C-501 has been updated to reflect the use of a wetland seed mix within the 50' buffer and a wildflower seed mix will be utilized for areas within the 100-foot buffer.

• Turf grass is proposed within the bioretention area and water quality swale. Please consider adding low maintenance plantings, such as native shrubs, in the bioretention area for better treatment and wildlife habitat. In addition for the surrounding area and the water quality swale, please consider specifying a wildlife seed mix or at least a conservation seed mix with a mix of native grass species.

The Landscape Plan, Sheet C-501 has been updated to reflect the use of a wetland seed mix within the 50' buffer and a wildflower seed mix will be utilized for areas outside of the 50' buffer but within the 100-foot buffer. The bioretention area and water quality swale have been removed from the stormwater design.

• The proposed tree replacement plantings look good overall, however if it's possible to use a straight species for the Red Maple (Acer rubrum) as opposed to a cultivar (i.e. 'October Glory') that would be preferable in the buffer zone.

The Landscape Plan, Sheet C-501 has been updated to reflect the straight species.

• I agree with the wetland delineation, however I also note the presence of a likely intermittent stream within the BVW, flowing north and off property, and some of the flags also represent bank flags. The Commission may make a finding relative to this.

The intermittent swale/stream has been noted on the plans. Please see the updated plans.

- The project summary does mention a historically modified/cleared drainage swale and I did observe this near the existing shed. I found the 4" PVC pipe outlet that appears to carry garage runoff and possibly house runoff, to the east of the shed. It is noted on the plans right at the proposed E&SC line and I'd like to confirm that this will be removed during demolition. In addition, there is some rip rap beyond the end of the pipe. I think it would be beneficial to carefully rake away at least some of this riprap, by hand to avoid excessive disturbance, to allow this area to fully revegetate in the future. This may require moving the E&SC control line slightly further out just in this area.
- Behind the shed, there is a small amount of trash and man-made debris, for example small concrete pieces, metal pipe, plastic flower pots, etc., that should be removed by hand (without moving E&SC control line).

A callout in the plan view and a note has been added to the Demolition & Sediment Control Plan, Sheet C-003.

• I confirmed the trees to be removed within Commission jurisdiction and I agree with what is shown on the plans.

No response necessary.

• I considered the area within the 50ft buffer that has historically been maintained as lawn and the best way to restore this area. While I agree that it doesn't make sense to disturb this area any more than necessary, I do think some woody plantings would be very beneficial in this area, for example a few trees and possibly some shrubs. These plantings could be done by hand, without moving the E&SC line into this area but taking care to leave the remaining area alone.

Additional planting within the 50-foot buffer has been proposed, please see the Landscape Plan, Sheet C-501.

• Just beyond the northwest corner of 19 Whiting St., between the stockade fence and the stone wall that runs along the east side of 27 Whiting St., there is a small amount of trash and an old stockade fence section that should be removed.

A callout in the plan view and a note has been added to the Demolition & Sediment Control Plan, Sheet C-003.

We appreciate your time and attention to this matter. We trust that the attached plans and documents address your comments. Should you have any questions, please do not hesitate to contact me at (781) 792-2238.

Sincerely, CHA Consulting, Inc.

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Donald Rose, P.E. Senior Engineer