

Chessia Consulting Services LLC



May 7, 2021

Planning Board
Town of Hingham
210 Central Street
Hingham, MA 02043

RE: Supplemental As-Built Review
Red Tail Lane (aka Crane Drive)
Definitive Subdivision

Dear Members of the Board:

In response to your request, Chessia Consulting Services, LLC has reviewed the revised As-Built Plan prepared by Morse Engineering Co. Inc. The data reviewed included the following information:

Plans entitled

- “Definitive Subdivision Modification Plan of Land “Crane Drive” formerly “Red Tail Lane” Hingham, Mass” dated July 20, 2017, 3rd Modification plan date of 10/7/2020 prepared by Morse Engineering Co, Inc. consisting of 7 sheets. (Plans)
- “Crane Drive Definitive Subdivision Hingham, Massachusetts Roadway As-Built Plan” dated 12/7/2020 last revised 1/18/2021 prepared by Morse Engineering Co, Inc. (As-Built)

This project has been substantially constructed at this time. I visited the site on May 4, 2021 to observe existing conditions. At the time of my initial review of the As-Built Plan, the ground was covered with snow and the site was not visible. There have been no changes to the As- Built plan since my review of February 16, 2021. The issues listed in the February 16 letter remain to be addressed and additional data has been added based on my site visit. I note that the project was approved prior to the 2018 revision to the Subdivision Rules and Regulations. I used the 2014 version of the Rules and Regulations.

General Comments from February 16, 2021 letter as modified based on the site visit:

1. The storm sewer pipe between DMH 3, DMH 4 and a small part of the isolator row into the Cultec system is not located in the drainage easement. Either the Applicant should submit a modification or field change to relocate the easement to encompass the pipes or relocate the pipes. I have included the cost to add a manhole, the approved catch basin and associated piping from the Stormceptor to the existing

- manhole at the upper end of the isolator row to put the pipe in the easement. There is also a small portion of the isolator row outside the easement. I have not estimated moving the entire row as the area out of the easement is very small.
2. The landscape berm and small low area approved for runoff from the rear of the lot has not been indicated on the plans and has not been constructed. This work should be completed as it was required to conform to stormwater requirements.
 3. Pipes connecting the roof to the subsurface drywell systems should be indicated.
 4. CB 4 has not been installed.
 5. The inverts for DMH 2 have not been identified on the profile but are listed on the plan. Based on field observation all of the manholes outside of the pavement are buried and will need to be raised to grade.
 6. There appears to be a typo on the invert out of the Stormceptor as it would not be 6 feet lower than the invert in.
 7. DMH 3, DMH 4 and DMH 5 have been installed in different locations so the inverts do not match. The pipe slope between the Stormceptor and DMH 3 appears to be flatter than the minimum approved slope on the plans assuming that the invert is a typo of 131.02 (As-built) versus 137.13 (Plan). Using an invert of 137.02 results in a 0.002 ft/ft slope where 0.01 was approved. Either the pipe should be installed correctly or calculations demonstrating that the slope is sufficient should be provided and a field change or plan modification requested. I carried a cost to replace this section in the cost estimate.
 8. There is a larger paved area between the garage and workshop than approved. This may affect overall runoff conditions.
 9. The plans indicate trees all around the property. These trees are all arborvitae and would not be "Street Trees". I noted two that had died in the required planted buffer that should be replaced. There are many added outside of the required planting area.

C Definitive Plan

(16) As-Built Plans

1. The plans have the required Registry of Deeds note and the plans are stamped as required.
2. The required block for use by the Registry of Deeds is included on the plans.
3. The plans indicate metes and bounds for the roadway.
4. The required signature lines for the Planning Board under this section are on the plans. I note that it is not proposed to put the roadway up for acceptance so it may not be required to have a signature line for the Selectmen or Town Clerk. I defer this issue to the Board.
5. Easements are indicated as required. As noted, a section of drainage pipe is not in the easement.
6. Map and Block information is not indicated on the subdivision lot as required. The lot Owner and abutting data is on the plans.
7. It does not appear that any of the land on the locus is registered.
8. The plan does not include a legend as required.

9. The Certification should be completed by the Engineer in addition to the Land Surveyor.

Additional site observations from May 4, 2021:

- There is a large concrete pad over much of the easement for the subsurface drainage infiltration system. There are also pole mounted lights adjacent to this pad. This was not permitted as part of the subdivision approval and adds impervious area to the lot that should be accounted for in the drainage calculations. This is indicated on the as-built but is screened and partially obscured by the drainage system.
- A pool house has also been added to the site and the future garage has been constructed. These features were not included in the initial approval relative to runoff from the site. It is unclear if there are drainage facilities installed for these buildings.

I appreciate the opportunity to assist the Planning Board on this project and hope that this information is sufficient for your needs. This report is for the Hingham Planning Board and associated Hingham land use agencies only and provides no engineering, planning or other advice that may be relied upon by any party or agency other than the Town of Hingham. I would be pleased to meet with the Board or the design engineer to discuss this project at your convenience. If you have any questions please do not hesitate to contact me.

Very truly yours,
Chessia Consulting Services, LLC

John C. Chessia, P.E.
JCC/jcc