

July 12, 2019 April 2, 2021

Aaron Lindo East Greenwich Planning Department 111 Pierce Street East Greenwich, RI 02818

RE: **Highland Woods**

> East Greenwich, RI Project #: 2406-001

Dear Mr. Lindo:

DiPrete Engineering has received comments from Mark Conboy dated June 12, 2019. We have reviewed these comments and offer the following in response. The original comments are provided in italics with responses in bold.

Additional responses are provided for actions already taken or to be taken for items #3, 4, 5 and 7 in blue. Per recent conversations with Mr. Conboy, we understand all other comments below have been addressed.

- 1. Proposed roads are required to be designed and constructed to Town standards:
 - a. The maximum centerline grades within 150' of the centerline intersections must be no greater than 2.5%. The proposed grade along Princess Pine Drive is 3.4% at the intersection of Tipping Rock Drive and the proposed grade along Highland Woods Drive is 3.1% at the intersection of Amore Lane.
 - b. The minimum required length for vertical curves is 100'. A 50' vertical curve is proposed at the beginning of Amore Lane.

Minimal changes are needed to bring the road design to Town standards. Public Works Department does not support a waiver request from the requirements.

Response: The roads have been redesigned to meet the Town standards.

Previously addressed.

The proposed street light pole at the end of the Princess Pine Drive extension conflicts with the storm drain culvert in the vicinity of DCB-29.

Response: The street light has been moved.

Previously addressed.

3. The stormwater basin/pond embankments must be designed with adequately graded slopes. Many of the basin embankment side slopes are shown at a 2:1 grade. Side slopes to the basins shall not exceed a 3:1 grade, as required in the Rhode Island Stormwater Management, Design and Installation Rules (RISMDIR).

Response: The stormwater management analysis and design, including the proposed basins, has been reviewed and approved by RIDEM.

The RISDISM requirement is specifically related to safety. Basins have been designed with safety in mind. All basins that have slopes greater than 3:1 in any location also have other locations where the slopes are less than 4:1, providing safe exit from the storage area.

BMP A was modified to have 3:1 slopes inside the basin and 2:1 slopes outside. We are revising BMP B now to address this comment. BMP C is to be revised in the phase 2 submission.

4. Woody vegetation must not be allowed to grow within 15 feet of the toe of the stormwater basin/pond embankments or within 25 feet of the principal spillway outlets, as required in the RISMDIR. This will require additional land clearing, expansion of the limit of disturbance into the wetlands, additional permitting, expansion of the drainage easement areas and/or stormwater basin redesigns for Drainage System A, B and C. Maintenance of the basin setbacks and easement areas must also be added to the Operation & Maintenance Plan and the Stormwater Facility Maintenance Agreement.

Response: The stormwater management analysis and design, including the proposed basin locations with respect to woody vegetation, has been reviewed and approved by RIDEM.

Per discussion via email on February 9, 2021, the limit of disturbance is to stop a minimum of 10' from the wetland line/buffers for BMP A and B. BMP C is to be revised in phase 2 submission.

5. Some of the proposed street trees located adjacent to the proposed street intersections may need to be relocated in order to provide adequate sight distance.

Response: Street trees at the intersections of Princess Pines Drive with Tipping Rock Drive and Princess Pines Drive with Amore Lane have been relocated to improve sight distance.

Street tree locations will be coordinated with the engineering department to provide adequate sight distance.

6. Fire cisterns must be labelled on the site plans and construction details must be provided and approved by the Fire Marshal.

Response: A note has been added to the plans requiring the contractor to finalize the specifics of the cisterns with the Fire Marshal at the time of construction (see sheets 8, 9, and 10).

Previously addressed.

7. The proposed driveway on Lot 11 is over 600 feet long and does not provide adequate fire and emergency vehicle access to the proposed dwelling.

Response: We're not aware of any Town standard or requirement which limits a driveway to 600 feet. Driveways of this length are not uncommon and can be designed and built to safely provide emergency access. The developer of Lot 11 should take this into consideration with their design.

Fire / emergency vehicle access to lot 11 (to be constructed in phase 2) will be reviewed with the fire marshal.

8. The 12' wide gravel access drive for maintenance of Sediment Forebay and Sand Filter A should be located outside of the street right-of-way area of Tipping Rock Drive. The right-of-way area must be graded to drain towards the street pavement as illustrated in the Road Cross-Section detail.

Response: The gravel access drive has been relocated and the right-of-way area regraded to drain towards the street.

Previously addressed.

9. Guardrail is required along the roadway right-of-way line in front of Sediment Forebay A, B & C and Sand Filter A and C.

Response: Guardrail has been added as requested.

Previously addressed.

10. The Post-Watershed Map does not illustrate accurate watershed areas in the vicinity of Drainage Systems A and C.

Response: The Post-Watershed Map has been revised.

Previously addressed.

11. A catch basin subcatchment watershed map shall be required for review.

Response: A Catchbasin-Watershed Map has been created and is included in this submission.

Previously addressed.

12. The drainage easement lines and building setback lines must be illustrated differently on the site plans.

Response: The drainage easement and building setback lines are shown differently on the revised site plans.

Previously addressed.

13. The configuration of Drainage Easement 'A' on the Record Plan is shown differently on site plans.

Response: Drainage Easement 'A' is shown consistently on the Site and Record Plans.

Previously addressed.

14. The Operation & Maintenance Plan and the Sample Stormwater Facility Maintenance Agreement must both be finalized and approved by EG DPW prior to construction. The Operation & Maintenance Plan must address the responsibilities of the Landowner, include a maintenance schedule and record keeping requirements, and must be legally binding upon the Landowner (its successors and assigns). The plan and agreement shall be recorded in the Town's land evidence records and referenced or made part of the property deeds prior to issuance of a Certificate of Occupancy.

Response: Acknowledged.

Previously addressed.

15. Upon completion of the installation of the stormwater management systems, written certification from a registered professional engineer that the systems have been installed in accordance with the approved site plans must be submitted to the EG DPW and Building Department. As-builts shall be required.

Response: Acknowledged.

Previously addressed.

16. A Stormwater Management and Soil Erosion and Sediment Control Plan permit must be obtained from the EGDPW/Building Dept. prior to any site disturbance or lot development.

Response: Acknowledged.

Previously addressed.

Please, feel free to contact me if you have any further questions regarding this matter.

Sincerely,

DiPrete Engineering Associates, Inc.

Audie Osgood, PE, LEED AP Senior Project Manager aosgood@diprete-eng.com

cc: Mark Conboy, PE. Town of East Greenwich