## TRANSPORTATION ENGINEERS & PLANNERS



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October 15, 2021

Northeast Survey Consultants 3 Ferry Street, Suite 1 East Easthampton, MA 01027 Attn: Mr. Brian Franetovich, PLS, Partner

RE: VZW Pembroke 5 MA, Stormwater Report (Rev 1)
Project Y21318.31

Dear Mr. Franetovich:

In response to Northeast Survey Consultants and NEXIUS request, please find attached the revised Stormwater Report for the proposed Verizon Wireless communication facility known as Pembroke 5 MA, located at 85 Washington Street in Pembroke, MA. The revisions to the Stormwater Report were completed in response to Merrill Engineers & Land Surveyors peer review letter report (7/12/21).

Referencing Merrill's peer review and comments of the previous Site Plan and other documentation submission, our responses are provided below. Please note that our written responses are limited to our scope of services and area of expertise which primarily consist of providing a Stormwater Report or drainage analysis with supporting documentation.

Section V. Requirements

## 5.3 Stormwater Calculations

- 1. In-field or on-site soil identification and testing was completed on 9/20/21 by Costa Consulting Engineers. The field testing was performed according to the MA DEP Stormwater Management Standards and ASTM standards and included one (1) deep soil excavation for soil identification and one (1) shallow excavation with infiltration test. Based on the field results, no redoximorphic features or evidence of an annual high groundwater table were observed, nor were any standing water or seeps visible for the seven (7) hours of open excavation. The double-ring infiltration test results indicate a rate of 1.4. inches / hour. As applicable, the detailed test results have been incorporated into the site design and stormwater analysis. The entire field test results report completed by Costa Consulting has been added to the revised Stormwater Report and in Appendix G.
- 2. Predevelopment or Existing Conditions and Post Development or Proposed Conditions Watershed (drainage area) maps or plans were previously submitted with the original stormwater report but have been updated to include sub watersheds or catchment areas with applicable times of concentration (Tc).
- 3. No formal outlet weir is proposed for the 50'x50' by 1-foot deep crushed stone compound. The elevations within the HydroCAD model reflect the anticipated means of an outlet for modeling purposes in the event the infiltration and voids storage is exceeded.

4. The ten (10) MA DEP Stormwater Standards were previously submitted and addressed the meeting, not meeting, or non-applicability of a specific standard for the proposed limited project. However, and in summary, MA DEP Stormwater Standards 1, 2, 3, 8, 9, and 10 have been met. Standards 4, 5, 6, and 7 do not apply to the project. The complete response to each MA DEP Stormwater Management Standard is provided in the revised stormwater report.

We trust this information will be helpful to you and the Town of Pembroke in the review of the revised and update Stormwater Report and other submitted materials for the NEXIUS and VZW Pembroke 5 MA project. Please contact me at our office if you have any questions or comments regarding our revised Stormwater Report.

Sincerely,

Mark McClusky, P.E.

**Project Manager**