



DiPrete Engineering

July 31, 2024

Ms. Brianna Valcourt
Senior Planner
Cranston Planning Commission
869 Park Avenue
Cranston, RI 02910

RE: Orchard Meadows
Cranston, Rhode Island
AP 28, Lots 31 & 45
DE Project #: 2953-001

Dear Ms. Valcourt,

On behalf of the applicant, NKC Investments LLC / Cersosimo Construction LLC, we respectfully submit this letter and attached materials for review of four single-family residential lot stormwater systems.

There is a small (770 SF) wetland within Lot 45, which contains all four of the proposed single-family homes. Based on the current RIDEM Wetland regulations, no buffer is required for this wetland, and no construction is proposed within the wetland; the Limit of Disturbance is at least 15 feet away. Three larger wetlands are within Lot 31; no construction is proposed on that lot, and it will retain its existing OWTS and private well.

The proposed work includes construction of four single-family homes and driveways, installation of drainage best management practices (BMP), and associated utilities. There is no new road creation.

Stormwater management and treatment is required for all new impervious areas and roof areas greater than 600 square feet. The *State of Rhode Island Stormwater Management Guidance for Individual Single-Family Residential Lot Development* document was used for the design of stormwater management practices.

Each proposed home's footprint is approximately 2,880 SF, and runoff will be treated by individual rain gardens, with rain gutters routed to the rain gardens using underground roof leader systems. Section C, Table 7 of the *State of Rhode Island Stormwater Management Guidance for Individual Single-Family Residential Lot Development* document was used for sizing the rain gardens; calculations are detailed on the design plans. Driveways will be permeable pavement or permeable pavers (Lots 3 and 4), or regular asphalt graded to rain gardens (Lots 1 and 2). Note that Lots 1 and 2 have larger rain gardens, as their driveways will be graded to their respective lot's rain garden.

As designed, the site meets the requirements set forth by Rule 1.9 of the RIDEM Rules and Regulations Governing the Administration of the RI Freshwater Wetlands Act. The stormwater management design meets the State of Rhode Island Stormwater Management Guidance for Individual Single-Family Residential Lot Development document with the stormwater BMPs designed to capture and treat the water quality volume or one inch of runoff from all new contributing impervious surfaces.

If you have any further questions on this matter, please feel free to contact me at your earliest convenience.

Sincerely,
DiPrete Engineering Associates, Inc.



Eric Prive, PE
Senior Project Manager

