



COMPREHENSIVE
ENVIRONMENTAL
INCORPORATED

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February 7, 2023

Ms. Kristin Kearney, Chair
Town of Seekonk Conservation Commission
100 Peck Street
Seekonk, MA 02771

**RE: Oldcastle APG Redevelopment, 0 Allen Avenue, Seekonk MA
Peer Review of Notice of Intent Applicant**

Dear Ms. Kearney,

As requested by the Seekonk Conservation Commission, Comprehensive Environmental Inc. (CEI) has provided a technical review of the Notice of Intent (the Application) submitted by Oldcastle Architectural Products Group and Roux Associates, Inc. (the Applicant) for 0 Allen Ave (the Site). Proposed construction at the Site includes paving of existing pervious areas, upgraded storage material areas, and construction of stormwater treatment structures. This letter includes the findings of our review for the civil engineering and stormwater design components for the Site.

A site walk was conducted by CEI on October 12, 2022. CEI's review is based on the observed site features and the provided Application materials listed below:

1. Stormwater Management Plans: 0 Allen Avenue, dated 1/26/2023, prepared by Roux Associates, Inc.
2. Stormwater Report, dated 1/26/2023, prepared by Roux Associates, Inc.

CEI's review findings and comments are provided below.

I. Compliance with Stormwater Management Standards

The Application meets the criteria set by the ten Standards as follows:

Standard 1: No New Untreated Stormwater Discharges

It appears that the Applicant is proposing two wet basins with sediment forebays, which are capable of achieving 80% TSS removal in stormwater runoff. However, as detailed in the comments under Standard 4 and Standard 5, it appears that the proposed Site activities and potential high pollutant load of stormwater entering wet basins and ultimately discharging to surface waters may not be receiving the full treatment required for industrial sites. Additionally, as outlined in comments under Standard 5, there are not adequate controls to prevent emergency spill contaminant from entering stormwater structures.

Additionally, it appears that the proposed drainage channel and outfall discharging from Wet Basin 1 will require grading up to and within delineated Bordering Vegetated Wetlands, between wetland flags WB-09 and WB-10. Confirm that the all information for stabilization and erosion prevention after the proposed filling/grading of existing wetland is accurate and complete, as the indicated conveyance does not have labeled contour elevations, nor are there wetland-specific construction phase details

on sheet C-5 or in the Stormwater Report. Standard 1 prohibits scour and sedimentation at conveyance discharge points within wetland resource areas.

Standard 1 is not met.

Standard 2: Peak Rate Control

Based on review of the submitted materials, it appears that the design meets the requirements for Standard 2.

Standard 3: Groundwater Recharge

The Applicant is seeking a waiver to Standard 3 due to high groundwater table (ESHGW). While the Applicant did provide a BMP alternatives analysis that cited high groundwater as a constraint, no Required Recharge Volume was calculated, nor were any leaching structures or shallow subsurface structures proposed within the more upland portion of the paved areas onsite (all exploratory test pits were dug within 100 feet of the Bordering Vegetated Wetland and stream). The provided test pits were conducted where the ground elevation is between EL: 113 and 114, and the narrative indicates that all ESHGW is within 3-5 feet of the surface elevation. However, there are existing contours at 117 within the site that may be feasible for infiltration. CEI does not believe the design has met the requirements for Maximum Extent Practicable (MEP) waiver.

Standard 3 is not met.

Standard 4: Water Quality

a. Water Quality Volume Calculations

A Water Quality Volume calculation was not provided for review. Please review the requirements of Standard 4 in the MA Stormwater Handbook and provide the requisite materials and calculations. Ensure that the 1-inch rule for industrial sites/Wellhead Protection Areas is reflected in the calculation.

b. TSS Removal

As this Site is industrial and a production facility, and within a Wellhead Protection Zone, 44% TSS removal is required via pretreatment BMPs prior to discharge to a wet basin. No pretreatment BMPs are proposed.

Standard 4 is not met.

Standard 5: Land Uses with Higher Potential Pollutant Loads (LUHPPL)

The Applicant identified the Fuel Storage Area as the sole LUHPPL activity onsite. However, it appears that there is existing and proposed external storage of raw materials and masonry, a manufacturing building with a metallic roof, and various vehicle/equipment storage occurring throughout the Site. In addition, as a facility subject to NPDES Industrial Sector Permitting, this Site is considered a LUHPPL and must meet the requirements set forth by Standard 5, including 44% TSS removal via pretreatment and requirements for managing emergency spill controls. Metal roofs may not be directly discharged to ground or surface water in Wellhead Protection Areas or at industrial sites.

It appears that raw materials are proposed to be stored directly adjacent to the lined drainage channel, with no methodologies to prevent accidental releases from entering wet basins and, eventually, the onsite resource areas. Ensure that all areas where LUHPPL activities are occurring have the highest form of treatment and protection, as detailed in Standard 5 of the Handbook.

Standard 5 is not met.

Standard 6: Critical Areas

Standard 6 is not applicable.

Standard 7: Redevelopment

Standard 7 requires the Applicant to meet Standards 2, 3, 4, 5, and 6 to the maximum extent practicable (MEP). MEP is defined in the Stormwater Handbook by:

- (1) Proponents of redevelopment projects have made all reasonable efforts to meet the applicable Standard;
- (2) They have made a complete evaluation of possible stormwater management measures including environmentally sensitive site design that minimizes land disturbance and impervious surfaces, low impact development techniques, and stormwater BMPs; and,
- (3) If not in full compliance with the applicable Standard, they are implementing the highest practicable level of stormwater management.

As the current design proposes increasing impervious coverage from 6.118 acres to 11.157 acres and has not provided sufficient information to address the requested waivers for the areas not increasing in impervious coverage, MEP has not been met for the Site.

Standard 8: Construction Phase Erosion and Sediment Controls

Plans should indicate stabilization methods for construction entrance areas and proposed vehicle and fleet staging areas. Sedimentation controls were not indicated around the temporary stockpile area on sheet C-4.

Standard 9: Operation and Maintenance

The Operations and Maintenance (O&M) Plan should include details for snow storage, including appropriate onsite storage locations (outside resource buffer areas and away from drain inlets) and methods for ice treatment and snow removal. Provide a BMP map with the O&M plan, indicating all onsite BMP and stormwater features.

Standard 10: Prohibition of Illicit Discharges

Standard 10 is met.

II. Stormwater Management Design

1. It appears that several design criteria for wet basins that have not been met, as follows:

- a. Wet basins require a vegetative buffer of 25 feet to ensure proper functioning. The current design appears to propose impervious surface up to the basin edge.
 - b. When implementing wet basins on LUHPPL sites, pools are required to be lined. However, the current design does not meet the minimum contributing drainage areas (under 10 acres for each proposed basin), and is relying on intersection with the groundwater table for proper functioning.
 - c. It appears that the side slopes of Wet Basin 1 exceed the 3:1 maximum slope requirement.
 - d. As neither the Required Recharge Volume nor the Water Quality Volume calculation were provided, CEI is unable to confirm that the storage capacity provided in the Wet Basins is sufficient to meet the standards, as well as the design criteria for wet basins (Vol. 2, Ch. 2)
2. Both Wet Basin 1 and Wet Basin 2 have 24-inch outlet pipes that are proposed to have less than 1-foot of freeboard in a 25-year storm. This may indicate future surcharging or turbulent flow during large storm events.

III. General Civil Design and Permitting

1. The stormwater report and site plans should specify the final destination of any stockpiled material. If the stockpiled material will not be used onsite, the applicant should remove the material according to regulations.
2. The site plans should also specify any proposed practices to stabilize temporary soil stockpiles. If the practices do not provide for routine covering of soils stockpiles with tarps, we recommend a condition of approval that, in the event the specified practices do not adequately control wind and water-borne erosion of the stockpiles, the Town may require the applicant to cover stockpiles at the end of each working day with anchored tarps which should remain in place when the stockpiles are not being actively used.

If you have any questions or comments regarding this review letter, please contact Bob Hartzel or Elisha Musgraves at 508-281-5160.

Sincerely,

COMPREHENSIVE ENVIRONMENTAL, INC.



Robert Hartzel, CLM
Principal



Elisha Musgraves
Review Engineer