

Horsley Witten Group

Sustainable Environmental Solutions

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September 22, 2022

Ms. Jacki Byerley, Planner
Andover Planning Board
Town Office
36 Bartlett Street
Andover, MA 01810

Re: Initial Stormwater Peer Review
Burt Road Development – Executive Place
Andover, MA

Dear Ms. Byerley and Board Members:

The Horsley Witten Group, Inc. (HW) is pleased to provide the Andover Planning Board with this letter report summarizing our initial peer review of the stormwater management for the proposed construction of a 167,610 square foot (sf) warehouse building on Burt Road in Andover, Massachusetts. MCP/Howland Burt Owner, LLC (Applicant) has submitted an application to develop a 50-acre parcel with a warehouse, 294 parking spaces, grading, utilities, and stormwater management. The proposed stormwater management includes deep sump catch basins and three surface infiltration basins and pervious pavement. The project site was previously approved in 2020 with two buildings and five infiltration basins.

The Site is located within an Industrial A Zoning District and the Medical Marijuana Overlay District within Andover. It is also partially located in Tewksbury in a Heavy Industrial Zoning District and the Wireless Communication Facility Overlay District. A Site Plan Review certificate of approval from the Planning Board is required for major non-residential projects proposing to construct buildings in excess of ten thousand gross square feet (sf). A portion of the Site is located within the 50-foot buffer of a bordering vegetated wetland (BVW). The proposed development will require a permit from the Andover Conservation Commission for work within the buffer zone of a BVW.

The following documents and plans were received by HW:

- Cover letter to Jacki Byerley, regarding Burt Road Development – Revised Plans to 3, 3R, and 4 Executive Place, Andover, MA, prepared by TEC, Inc., dated August 31, 2022 (1 page);
- Certification of Abutters, Petition #C22-11, Burt Road Redevelopment, Andover, MA, submitted by TEC, Inc., dated August 25, 2020 (2 pages);
- Applicant for Special Permit for Burt Road Development, Andover, Massachusetts, prepared by TEC, Inc., dated August 31, 2022 (3 pages);
- Plot Plan, Burt Road Development, Andover, MA, submitted by TEC, Inc., dated December 26, 2018 (1 Sheet);
- Plot Plan with topography, Burt Road Development, Andover, MA, submitted by TEC, Inc., dated December 26, 2018 (1 Sheet);

- Drainage Report for Burt Road Development, Andover and Tewksbury, Massachusetts, prepared by TEC, Inc., dated August 30, 2022 (191 pages);
- Lighting Layout for Burt Road Development, Andover, Massachusetts, prepared by TEC, Inc., dated August 31, 2022 (1 Sheet); and
- Site Plans, 3, 3R, 4 Executive Place, Burt Road Development, Burt Road, Andover, MA, prepared by TEC, Inc., dated August 30, 2022, which contains:
 - Title and Index Sheet C-1
 - Legend and General Notes C-2
 - Layout & Materials Plan C-3
 - Grading & Drainage Plan C-4
 - Utility Plan C-5
 - Erosion & Sediment Control Plan C-6
 - Drainage Plan & Profile C-7
 - Drainage Plan & Profile C-8
 - Drainage Plan & Profile C-9
 - Landscaping Plan C-10
 - Fire Truck Access Plan C-11
 - WB-67 Tractor Trailer Access Plan C-12
 - Wetland Restoration Plan C-13
 - Construction Details C-14
 - Construction Details C-15
 - Construction Details C-16

Stormwater Review

HW has reviewed the documents listed above and has the following comments concerning the stormwater management design in accordance with the Massachusetts Stormwater Handbook (MSH) dated February 2008, and the Town of Andover Stormwater Management and Erosion Control Bylaw and Regulations dated February 10, 2009 (Stormwater Bylaw).

In accordance with Section VI. B. of the Andover Stormwater Bylaw the Stormwater Management Permit and Narrative provided by an Applicant shall contain sufficient information to verify compliance with the local Stormwater Bylaw and the MassDEP Stormwater Management Handbook (MSH). Below are comments relating to the standards as presented in the MSH. Where the more stringent requirements of the Andover Stormwater Regulations are applicable, those comments are included.

1. *Standard 1 states that no new stormwater conveyances (e.g. outfalls) may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth.*
 - a. The Applicant has proposed no new untreated discharges. The proposed development has 3 infiltration basins with outfalls discharging outside of the 25-foot no disturbance zone. Riprap apron sizing calculations for each outfall have been provided in Appendix B of the Drainage Report. The Applicant has illustrated the size of the riprap aprons on Sheet C-5 with a detail on Sheet C-16. The Applicant complies with Standard 1.

2. *Standard 2 requires that post-development runoff does not exceed pre-development runoff off-site.*
 - a. The Applicant describes four design points in the Pre-Development Runoff narrative. It appears based on the HydroCAD model and the Pre-development watershed map, that there are 3 design points. HW recommends that the Applicant clarify the narrative to avoid confusion.
 - b. The Applicant describes multiple subcatchments in the Pre-Development Runoff narrative that do not appear in the watershed map or the HydroCAD model. HW recommends that the Applicant clarify the narrative to avoid confusion.
 - c. HW recommends that the Applicant include the contours on the Drainage Plan & Profile sheets (C-7 to C-9).
 - d. The Applicant states in the Regulatory Compliance section of the narrative that the proposed storm water management system utilized five infiltration basins. The current plan set shows three infiltration basins and a permeable pavement infiltration system. HW recommends that the Applicant clarify the narrative to avoid confusion.
 - e. The Applicant has provided test pit data for the site. It is unclear where these test pits are located on the plans. It appears that the test pit symbol has been left off the plans. HW recommends that the Applicant verify that all test pits and boring locations are shown on the Grading and Drainage Plan.
 - f. The Applicant has provided details of all the overflow control structures on Sheet C-16 of the plan set. HW recommends that the Applicant include a debris grate over the 2-inch orifice located at the bottom of each of these structures to prevent clogging of the orifice.
 - g. The Applicant has designed three (3) infiltration basins. It appears that Infiltration Basin 3 (P3) does not have an overflow spillway. HW recommends that the Applicant revise the plans and the HydroCAD model to include an emergency spillway for Basin 3.
 - h. HW recommends that the Applicant include an additional detail for the spillway area.
3. *Standard 3 requires that the annual recharge from post-development shall approximate annual recharge from pre-development conditions.*
 - a. In Section X. of the Stormwater Management Report, the Applicant has listed the recharge volumes provided by each of the infiltration basins. The Applicant has provided the HydroCAD stage storage print out for each basin to confirm the volume provided below the outlets. HW has no further comment.
 - b. The Applicant has provided a mounding analysis for three of the basins. The analysis provided shows the infiltration basins can attenuate the design storm as intended. HW has no further comment.

The Applicant appears to comply with Standard 3.

4. *Standard 4 requires that the stormwater system be designed to remove 80% Total Suspended Solids (TSS) and to treat 0.5-inch of volume from the impervious area for water quality.*
 - a. The Applicant has chosen to size the infiltration basins to provide water quality treatment as well as recharge volume. The Applicant has provided the HydroCAD stage storage print outs for each basin to confirm the water quality volume provided below the outlets. No further action required.
 - b. The Applicant has proposed catch basins, sediment forebays and infiltration basins to provide adequate TSS removal. No further action required.

The Applicant appears to comply with Standard 4.
5. *Standard 5 is related to projects with a Land Use of Higher Potential Pollutant Loads (LUHPPL).*
 - a. The site is not considered a LUHPPL, therefore Standard 5 is not applicable.
6. *Standard 6 is related to projects with stormwater discharging into a critical area, a Zone II or an Interim Wellhead Protection Area of a public water supply.*
 - a. The site is not within a critical area, therefore Standard 6 is not applicable.
7. *Standard 7 is related to projects considered Redevelopment. A redevelopment project is required to meet the following Stormwater Management Standards only to the maximum extent practicable: Standard 2, Standard 3, and the pretreatment and structural best management practice requirements of Standards 4, 5, and 6. Existing stormwater discharges shall comply with Standard 1 only to the maximum extent practicable. A redevelopment project shall also comply with all other requirements of the Stormwater Management Standards and improve existing conditions.*
 - a. The proposed project is considered a new development. Therefore, Standard 7 does not apply.
8. *Standard 8 requires a plan to control construction related impacts including erosion, sedimentation or other pollutant sources.*
 - a. HW recommends that the Applicant include a note on the Erosion & Sediment Control Plan that states catch basins within 100 feet of the construction entrance shall have silt sacks in them for the duration of the construction.
 - b. HW recommends that the Applicant add fencing around the infiltration basins to prevent heavy vehicles from compacting the soil.
 - c. HW recommends that the Applicant clarify the number of large trees (greater than 12" diameter) that will be removed as part of the proposed layout. Per Section IX.F.14. of the Andover Stormwater Regulations, tree removal shall be minimized.
 - d. HW further recommends that the Applicant verify it has reviewed and complies with Section IX.F. of the Andover Stormwater Regulations.
 - e. The proposed project requires land disturbance of greater than 1 acre. Therefore, a Stormwater Pollution Prevention Plan (SWPPP) per the EPA NPDES Construction General Permit will be required. HW recommends that the Applicant provide a copy of

the SWPPP to the Town a minimum of 14 days prior to land disturbance.

9. *Standard 9 requires a Long-Term Operation and Maintenance (O & M) Plan be provided.*
 - a. The Applicant has provided a Long-Term Pollution Prevention Plan in the Stormwater Management Report as required. HW recommends that the document become a standalone document to be signed by the property owner prior to occupancy.
 - b. The Applicant has provided a Long-Term Operation and Maintenance (O&M) Plan. HW recommends that the Applicant have the owner and/or responsible party review and sign the O&M Plan.
 - c. HW recommends the Applicant provide a simple exhibit illustrating where all of the stormwater practices and items that need to be maintained as listed in the O&M Plan are located on the project site. This exhibit should also include locations for snow storage and the components of the septic system.
10. *Standard 10 requires an Illicit Discharge Compliance Statement to be provided.*
 - a. The Applicant has provided an illicit discharge statement. HW recommends that a signed Illicit Discharge Compliance Statement be provided to the Planning Board and Conservation Commission prior to the discharge of any stormwater to post-construction best management practices (BMPs).
11. Additional comments per Andover Stormwater Bylaw.
 - a. The Town of Andover Conservation Commission Wetland Protection Regulations states that Access Roads shall maintain a 35-foot set back from “Any bank, bordering vegetated wetland, isolated vegetated wetland, marsh, wet meadow, bog, swamp, reservoir, pond, creek, river or stream, or any land under said waters”. It appears that the access road is located within 25 feet of wetland C which is proposed to be restored.

Conclusions

HW recommends that the Planning Board require the Applicant to provide a written response to address these comments as part of the permitting review process. The Applicant is advised that provision of these comments does not relieve him/her of the responsibility to comply with all Town of Andover Codes and By-Laws, Commonwealth of Massachusetts laws, and federal regulations as applicable to this project. Please contact Janet Bernardo at 857-263-8193 or at jbernarado@horsleywitten.com if you have any questions regarding these comments.

Sincerely,

HORSLEY WITTEN GROUP, INC.



Janet Carter Bernardo, P.E.
Associate Principal



Steve Stanish, P.E.
Senior Engineer

CC: Andover Conservation Commission