

SOILS

1. Excavate a minimum of 5 test pits within the softball field and provide test pit logs prepared by a Massachusetts Soil Evaluator in order to determine the Rawls rate for infiltration and the depth to groundwater.
2. Excavate a minimum of 2 test pits within the infiltration trench at the tennis courts and provide logs prepared by a Massachusetts Soil Evaluator in order to determine the Rawls rate for infiltration and the depth to groundwater. The test pits should extend a minimum of 4-ft. below the bottom of stone or the bottom of the drywell structures.
3. Add a plan note requiring that a Massachusetts Civil Professional Engineer inspect the subgrade of each synthetic turf field prior to placement of the gravel layer.

MASSACHUSETTS STORMWATER STANDARDS

Standard 1: No New Untreated Discharges.

4. Calculate the discharge velocity from each level spreader and determine the erosive properties of the soil at the point of discharge.
5. Inspect the existing level spreader to be reused west of the proposed tennis courts for any signs of erosion. Modify the existing level spreader if required to control erosion.

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation

Control.

6. Submit a detailed phasing of construction plan which limits the extent of the site disturbed at any one time. Each phase should be stabilized prior to initiating work on the next phase. Perimeter erosion controls and other measures should be provided for each phase as sediment and erosion are best controlled at the source.
7. Include a plan note requiring the stormwater contractor to attend a preconstruction conference with the Conservation Agent and the Town Planner.
8. Note to provide fencing or other barriers around the synthetic turf fields to prevent compaction of the subgrade by precluding use of the synthetic turf field areas by construction equipment and trucks.
9. Note to provide erosion controls to prevent sediment laden water from washing onto the artificial turf fields.
10. Show one or more refueling areas, each being level and underlain by an impervious surface with a berm of graded to provide containment of a fuel spill.
11. Stockpiles should not be located within any synthetic turf field to avoid compaction of the subgrade.
12. Add a plan note requiring sweeping of the on-site access drives connecting to the Project Site and proximate segments of Bay Road whenever sediment is visible. Daily sweeping is likely required during export of topsoil and demolition debris.

13. Due to the proximity of wetlands, add a plan note that dust control during earthwork is to be controlled by the application of potable water. Sodium chloride shall not be used to control dust.
14. In order to limit dust during transport, add a plan note requiring that all trucks carrying earth materials or demolition debris be covered prior to entering or leaving the site.
15. Provide a plan for preparing and stabilizing the site in advance of a larger storm event (2-inches in 24 hours).

Standard 9: Operation and Maintenance Plan.

Section II: Post-Development Activities

16. Provide a plan drawn to scale that shows the location of all stormwater BMPs in each treatment train along with the discharge point.
17. Provide a description and delineation of public safety features.
18. Provide an estimated operations and maintenance budget.
19. Include maintenance requirements for the level spreaders.
20. Specify maintenance requirements for artificial turf including washing, vacuuming, and brushing including the required frequency for each task.
21. Protectorant may be required that is sprayed on artificial turf to maintain color. If applicable, specify frequency of application. Specify the chemical composition of the protectorant and any related human health and environmental issues.

Section III: Long Term Pollution Prevention Plan

22. Revise the Long Term Pollution Prevention Plan to state that use of road salt (sodium chloride) within the limits of the Athletic Campus portion of the site is prohibited.

STORMWATER MANAGEMENT SYSTEM AND BMPS.

Athletic Field Infiltration System

23. Add a plan note specifying the minimum allowable permeability of the artificial turf.
24. Add a plan note requiring submittal of laboratory test reports of permeability for the artificial turf prior to installation.
25. Provide specifications or a construction detail for the 12-in flat panel drains.
26. Specify whether geotextile wrap is required for the flat panel drains.
27. Show a detail of the flat panel drain connections to the collector pipes.

Outlet Control Structures.

28. For Outlet Control Structure #1, update the pipe riser horizontal orifice elevation and the invert out elevation.
29. For Outlet Control Structure #2, update the pipe riser horizontal orifice elevation.
30. For Outlet Control Structure #3, update the pipe riser horizontal orifice elevation.
31. For Outlet Control Structure #4, update the pipe riser horizontal orifice elevation and the invert out elevation.

Tennis Court Infiltration Trench

32. A minimum of two test pits is required.
33. Based upon the supplemental test pit ESHGW data, redesign the infiltration trench as required to provide a minimum 2-ft. separation to seasonal high groundwater.
34. Based upon the supplemental test pit saturated hydraulic conductivity data, redesign the infiltration trench as required providing a time to drain of 72 hours or less.
35. Provide a construction detail for the infiltration trench showing all components.
36. Provide fencing or other barriers around the trench to prevent compaction of the subgrade by construction equipment and trucks.
37. Add a plan note requiring that construction of the trench be deferred until the rest of the site is stabilized.
38. If feasible, provide some pretreatment.

OTHER BMPS.

39. Raise the invert of the 6-inch HDPE roof drain from the amenities Building to approximately 91.25 so that it is above the crown of the 24-in. diameter drain because the angle of the connection is made counter to flow in the though pipe.
40. Specify that all HDPE pipe is smooth interior wall.
41. The HWRSD page 52 drainage system plan shows a drainline extending from structure 761 across the softball field to outfall at the east edge of the softball field. The diameter, pipe material, and inverts of this line should be shown in order to avoid construction conflicts.

PFAS

42. Based upon criteria to be provided by a consultant having specialized expertise, specify artificial turf having the lowest practicable levels of PFAS.

MILES RIVER

43. Evaluate the impacts of the Proposed Project on runoff and groundwater for the above water contaminants.