CONSTRUCTION PERIOD POLLUTION PREVENTION & EROSION SEDIMENTATION CONTROL PLAN

located at

8 ANDREW AVENUE WAYLAND, MASSACHUSETTS



Prepared for:

Town of Wayland 41 Cochituate Road Wayland, Massachusetts 01778

Prepared by:

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> December 7, 2022 March 17, 2023 May 15, 2023

	8 Andrew Avenue	
	Wayland, MA 01778	
Applicant Name:	Town of Wayland	
	41 Cochituate Road	
	Wayland, MA 01778	
(Contractor) Party	Responsible for Maintenance of the Stormwater Ma	nagement System
	During Construction:	
	Insert Name:	
	Insert Address:	
	Insert Town:	
	Insert Name:	
	Signature	Date

Council on Aging Community Center

Conservation Commission and Town Access to the Site:

Project Name:

Provisions for the Conservation Commission or its designee to enter the property at reasonable times and in a reasonable manner for the purpose of inspection of the stormwater management system, shall be provided by the property owner and the Contractor, during construction.

Project Description:

The former Raytheon facility in Wayland occupied approximately 83 acres of land at 430 Boston Post Road from circa 1955 through 1996. It was developed into the 'Wayland Town Center' between 2012 and 2015. The subject property is located at 8 Andrew Avenue and is located within the "Wayland Town Center'. The subject property includes four (4) individual parcels with a combined total area of approximately 4.16 acres The project site previously contained two buildings used for radar equipment testing. The buildings were demolished in 1999 and the current 12,759 sf building was constructed in 2000. The intention was to use this building as a daycare center for the tenants of Raytheon's former main building but the building was never completed or occupied. The unoccupied building is connected to sanitary sewer, domestic and fire water services, natural gas, electric, telephone and data service connections.

The project site also includes several easements for existing sanitary sewer and stormwater drainage utilities. The western portion of the project site is adjacent to the Sudbury River and the one hundred (100) foot and two hundred (200) foot riverfront Riparian Zones extend onto the site. There are bordering vegetated wetlands downhill of the project site adjacent to the Sudbury River and there is a small area of bordering vegetated wetlands between the building and the Boston Post Road. A portion of the project site contains priority habitats of rare species as mapped by Natural Heritage and is partially located within the one hundred (100) year flood plain. Per the Town of Wayland Zoning Map, the project site is located within the Limited Commercial District Zoning District and the Aquifer Protection District (Zone IIs Wellhead Protection Area).

The topography on the eastern and northern portions of the project site gradually slopes towards the Sudbury River while the topography west of the building slopes more steeply towards the Sudbury River. The area surrounding the building and to the west towards the Sudbury River contains woods. The area on the eastern and northern portions of the project site is covered by grass. There is an existing drainage basin between the project site and the Boston Post Road that collects the stormwater runoff flowing from the Boston Post Road.

The Town of Wayland is proposing renovations and additions to the existing unoccupied building and other improvements including parking areas, sidewalks that connect to Andrew Avenue and Lillian Way, patio, stormwater management system, site grading, utility connections, stone dust trails, landscaping, hardscaping and lighting.

Construction Sequence

- A. Contact Digsafe (888-344-7233) and obtain clearance at least 72 hours before initiating an excavation.
- B. Coordinate an onsite pre-construction conference at least 5 business days prior to initial site work which shall be held with the applicant, applicant's contractor, consulting engineer, and representatives of the city departments having an interest in the plan.
- C. Install the erosion control sock and catch basin filters and construction entrance.
- D. Excavate for the building additions foundations.
- E. Begin constructing the building additions.
- F. Install the subsurface infiltration facility and install the drain lines, catch basins and drain manholes, filter media unit and level spreader.
- G. Install the water services and fire hydrant.
- H. Install the transformer and electric duct bank.
- I. Replace the existing sewer line.
- J. Pave the parking area with the binder course.
- K. Install the granite curbing.
- L. Install the concrete walkways, patio and stone dust trails.
- M. Install the guardrail and lighting.
- N. Apply loam and seed to all the disturbed areas and plant the trees and shrubs.
- O. Pave the parking area with the wearing course.
- P. Remove perimeter erosion control barriers, only upon approval of the Wayland Conservation Commission.

CONSTRUCTION PERIOD POLLUTION PREVENTION AND EROSION SEDIMENTATION CONTROL PLAN

Surface Stabilization

The surface of all disturbed areas shall be stabilized during and after construction activities on a daily basis. Temporary measures shall be taken during construction to prevent erosion and siltation. All disturbed slopes will be stabilized with a permanent vegetative cover. Some or all of the following measures will be utilized on this project as conditions may warrant.

- a. Temporary Seeding;
- b. Temporary Mulching;
- c. Permanent Seeding;
- d. Placement of Sod;
- e. Hydroseeding;
- f. Placement of weed free straw mulching;
- g. Placement of Jute Netting;

Catch Basin Filter (Silt Sack)

The catch basin filter is designed to trap excessive sediment that may enter the stormwater management system during the construction process. Temporary storm drain inlet protection filter will be placed in each of the catch basin units. The purpose of the filter is to prevent the inflow of sediments into the storm drain system. The filter shall remain in place until a permanent vegetative cover is established and the transport of sediment is no longer visibly apparent.

The filter shall be inspected and maintained on a weekly basis and after every storm of 0.25 inches or more of rainfall/precipitation during construction.

The filter should be cleaned of debris and sediment. Typically, the filter is cleaned by first removing the catch basin grate, and then removing the filter. The filter can be washed off or scrapped by hand using hand tools such as a small shovel, rake, broom or other similar devices. Once cleaned the filter should be immediately placed back into the catch basin as designed. Any sediment removed from the filter should be disposed of in accordance with any local, State and Federal regulations. At no time, should any sediment or debris be swept, raked, washed, placed or in any other matter directed into the stormwater management system.

Erosion Control Sock

Erosion control socks are proposed to be installed, as shown on the Site Plan set and in accordance with the applicable detail and according to manufacturers specifications. The socks are burlap fabric mitts filled with compost blends and shall be installed prior to the commencement of any work on-site and in accordance with the design plans. An additional supply of socks shall be on-site to replace and/or repair erosion control socks that have been disturbed.

The lines of socks shall be inspected and maintained on a weekly basis and after every storm of 0.25 inches or more of rainfall/precipitation during construction.

Should there be tears or places where the sock has been compromised, new sock should be installed immediately in those locations. Generally, the compromised sock would be removed, then the area would be cleared of loose debris and sediment using a hand shovel and then the new sock would be placed and staked in the previously compromised location. Deposited sediments shall be removed when the level of deposition reaches approximately one-third the height of the erosion control sock. Typically, the sock is

cleaned by using hand using hand tools such as a small shovel, rake, broom or other similar devices. Any sediment removed from the filter should be disposed of in accordance with any local, State and Federal regulations. At no time, should any sediment or debris be swept, raked, washed, placed or in any other matter directed into the stormwater management system or the resource areas.

Construction Entrance

The contractor shall install the construction entrance as shown on the Site Plan set and in accordance with the applicable detail. The entrance should be installed prior to any land disturbance activities. The entrance is typically installed using machinery to clear the existing top soil and then install the fabric which would then be topped with the stone entrance material as described in the applicable detail on the Site Plan set.

The entrance should be maintained in a condition that will prevent tracking or flowing of sediment onto public rights-of-way. As such, the entrance is to be inspected throughout each day during the construction process. To maintain this condition, the entrance may require periodic topdressing with additional stone.

Inspect entrance/exit pad and sediment disposal area weekly and after heavy rains or heavy use. Mud and soil particles will eventually clog the voids in the gravel and the effectiveness of the gravel pad will not be satisfactory. When this occurs, first remove mud and sediment tracked or washed onto public roads and on the stone entrance immediately. Mud can be removed from the adjacent roadways and the stone entrance using a powered push broom, machine driven spinning broom or other similar tools that may be required to adequately remove the mud. The stone pad should then be top dressed with new stone. Complete replacement of the pad may be necessary when the pad becomes completely clogged. If this is required, the pad should be removed using machinery and reinstalled per the applicable detail shown on the Site Plan set.

If washing facilities are used, the sediment traps should be cleaned out as often as necessary to assure that adequate trapping efficiency and storage volume is available. Vegetative filter strips should be maintained to insure a vigorous stand of vegetation at all times. Reshape pad as needed for drainage and runoff control. Repair any broken road pavement immediately.

At no time, should any sediment, mud or debris be swept, washed, placed or in any other matter directed into the stormwater management system or the resource areas.

Subsurface Infiltration Facility

The performance of the subsurface infiltration facility shall be checked weekly and after every major storm event during construction. No construction period runoff should be directed into the subsurface infiltration facility. Additionally, under no circumstances is the storage of materials, equipment or soils to be located on or in the vicinity of the proposed subsurface infiltration system. The subsurface infiltration system is to be protected from stormwater and storage and excessive vehicular traffic.

Inspections typically occur by opening the observation ports, using a flat head screw driver, pick, crow bar or other similar hand held tools, and looking into the system to look for sediment build up. The inspector should use a flashlight to help to see the bottom of the infiltration system. Should sediment be observed, it should be measured. If there is any sediment then the system should be cleaned. The Owner shall contact a qualified professional sewer and drain cleaning company to flood the system via pump truck so the water is forced back to the upstream cleanout where sediment can be vacuumed out.

Level Spreader

Inspect rip rap outlet structures weekly and after heavy rains for erosion at sides and ends of structures and for stone displacement.

Eroded areas should be removed of eroded materials and immediately make repairs using appropriate stone sizes such that the area will cease the current erosion and prevent further erosion from occurring. Eroded areas can be cleaned and/or cleared using handheld shovels, rakes, picks and pry bars. The new rip rap stones will typically be placed by hand and compacted into place using a small 'Bobcat' style excavator. Do not place stones above finished grade, stones must be installed 'into' the ground.

Rip rap areas that have been repaired, should be inspected on a weekly basis until these areas have been deemed to be stabilized. Eroded areas created from the installation of the new rip rap should be immediately revegetated or stabilized with loam and seed, jute netting, tackifier or other similar methods that will cease the current erosion and prevent further erosion from occurring.

Stockpile

All unused debris, soil, and other material shall be stockpiled in locations of relatively flat grades, away from any trees identified to be saved and upgradient of the erosion control sock and generally in the locations shown on the Site Plan set. Stockpile side slopes shall not be greater than 2:1. All stockpiles shall be surrounded by erosion control sock, and shall be placed outside the 100-foot buffer to any bordering vegetated wetland. Surrounding erosion control sock shall be inspected and maintained on a daily basis in accordance with the 'Erosion Control Sock' requirements described above.

When stockpiles are not anticipated to be disturbed for long periods of time, they should be covered in jute netting and/or watered on a regular basis to prevent dust from forming and potentially blowing off site. Should the surfaces of the piles appear to be dry and dust is being created, the piles should be covered or watered immediately.

Dust Control

Provide dust control as needed. Dust should be prevented by the use of water or other means of moistening or covering the site.

STORMWATER MANAGEMENT POST CONSTRUCTION PHASE INSPECTION SCHEDULE AND EVALUATION CHECKLIST

PROJECT LOCATION

8 Andrew Avenue, Wayland, Massachusetts

Inspection Date	Inspector	Area Inspected	Best Management Practice (yes/no)	Required Inspection Frequency if BMP	Comments	Recommendation	Follow-up Inspection Required (yes/no)
		Erosion Control Sock	Yes	Weekly and After			
				Major Storm Events			
		Subsurface Infiltration	Yes	Weekly and After			
		Facility		Major Storm Events			
		Stockpile	Yes	Weekly and After			
				Major Storm Events			
		Construction Entrance	Yes	Weekly and After			
				Major Storm Events			
		Catch Basin Filter	Yes	Weekly and After			
				Major Storm Events			
		Level Spreader	Yes	Weekly and After			
		_		Major Storm Events			

⁽¹⁾ Refer to the Massachusetts Stormwater Handbook, Volume Two: Stormwater Technical Handbook (February 2008) for recommendations regarding frequency for inspection and maintenance of specific BMP's.

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(2)	Inspections to be conducted	by a qualified professiona	I such as an environmental	I scientist or civil engineer.

Limited or no use of sodium chloride salts, fertilizers or pesticides recommended.

Stormwater Control Manager:	
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