Connecticut Proton Therapy Center

932 Northrop Road

Wallingford, Connecticut

Maintenance and Inspection Plan

December 1, 2020

Revised December 30, 2020

Section 1
Introduction

The following Stormwater Pollution Prevention Plan has been prepared for the stormwater management system at the proposed Apollo North facility. The purpose of the plan is to provide guidance and procedures for proper stormwater management following construction completion.

The proposed project has been designed in compliance with the Connecticut Department of Transportation Stormwater Standards and the Town of Wallingford Watershed Protection Standards to maintain or improve stormwater runoff quality and quantity.

Section 2
Ownership and Responsibilities

Proton International is responsible for maintaining and servicing the proposed Connecticut Therapy Center, its appurtenances and the proposed stormwater management facilities post construction.

During construction the contractor will be responsible for stormwater management system maintenance.

Property Owner:

Proton International, LLC
922 Hawkhorn Court
Alpharetta, Georgia 30005

Maintenance Contact:

Peter Carbone
Senior Vice President - Facility Development
Proton International, LLC
922 Hawkhorn Court
Alpharetta, Georgia 30005
617-640-8145

Section 3
Stormwater Pollution Prevention Plan

3.1 Good Housekeeping

The goal of the good housekeeping policy is to keep the site in a clean orderly condition. A disorderly site can lead to improper materials management, and can reduce the efficiency of any response to potential pollution problems.

The following good housekeeping measures will be followed at the site to aid in pollution prevention:

- The property is located in the Town of Wallingford Watershed area. The use of sodium chloride for ice control is prohibited.
- Promptly clean and remove any spills or contamination from vehicles.
- Perform preventative maintenance on all equipment and on the structural components of the stormwater system.
- Avoid or minimize the application of fertilizers and pesticides on green spaces which are in close proximity to connected impervious areas.
- Minimize applications of sand and/or deicing agents to large connected impervious areas, such as parking lots.
- Weekly sweep large connected impervious areas during the seasons when sand is applied to these surfaces.
- Promptly clean out of catch basin sumps during the spring after the snowmelt season.

Section 4
Stormwater Management System

The on-site stormwater management system is comprised of a series of catch basins, area drains, manholes, roof leaders, subsurface infiltration, oil/sediment separators, sand filter basins and stormwater outfalls. In general, runoff from the proposed development is collected via catch basin inlets, and area drains. Roof leaders discharge through to one of two underground infiltration systems. Stormwater is then piped from west to east via series of underground storm sewers to an infiltration basin at the western end of the site before it is discharged to the 24" culvert on the southern property line.

4.1 Inspections

The following stormwater management system features will be evaluated during each inspection:

4.1.1 Vegetated Surfaces

Inspection Frequency: Bi-annually in Summer and Winter

Special Inspection Event(s): Spring Snow Melt

All vegetative surfaces will be observed to identify locations of settlement, erosion and other impacts from construction.

4.1.2 Driveway and Walkway Sweeping

Inspection Frequency: Quarterly

Special Inspection Event(s): Spring Snow Melt

All pavement surfaces should be inspected annually for deterioration or spalling. Additionally, the pavement surface should be regularly monitored to make sure it drains properly after storms. Cleanings should be conducted on a quarterly basis to prevent clogging. For best management practices, vacuum sweeping machines should be used to clean and maintain the surface.

4.1.3 Oil/Sediment Separator

Inspection Frequency: Monthly

Special Inspection Event(s): Rainfall greater than 0.5 inches

Oil/Sediment separators are underground storage tanks with internal chambers designed to remove heavy particulates, floating debris and hydrocarbons from stormwater. Hydrodynamic separators should be inspected at least on a monthly basis and after every major storm. The Visual inspection should ascertain that the storage tanks are functioning properly (i.e. no blockages or obstructions to the inlets) and to measure the amount of solid materials that have accumulated in the sump. This can be done with a calibrated dipstick, tape measure or other measuring instrument so that the depth of deposition in the sump can be tracked. Inspections should be completed visually from the ground level. If further investigation is warranted that requires entering the structure, all applicable

Confined Space Entry safety regulations and procedures must be followed per 29 CFR 1910.146. Hydrodynamic separators should be cleaned at least twice per year at a minimum. The more frequent the cleaning, the less likely sediments will be resuspended and subsequently discharged. In addition, frequent cleaning also makes more volume available for future storms and enhances overall performance. Cleanings include removal of accumulated oil and grease and sediment using a vacuum truck or other ordinary catch basin cleaning device. Polluted water or sediments removed from an oil grit separator should be disposed of in accordance with all applicable local, state and federal laws and regulations including C.G.S. 22A-325 through 22A-329.

4.1.4 Sand Filter Basins

Inspection Frequency: Bi-annually

Special Inspection Event(s): Rainfall greater than 0.5 inches

Sand Filter Basins should be inspected after every major storm in the first few months following construction. The filter should be inspected at least every 6 months thereafter. Inspections should focus on:

- Checking the filter surface for standing water or other evidence of clogging, such as discolored or accumulated sediments.
- Checking the sedimentation chamber or forebay for sediment accumulation, trash, and debris.
- Checking inlets, outlets, and overflow spillway for blockage, structural integrity, and evidence of erosion.

Sediment should be removed from the sedimentation basin when it accumulates to a depth of more than 12 inches or 10 percent of the pretreatment volume. The sedimentation basin outlet devices should be cleaned when drawdown times exceed 36 hours.

Sediment should be removed from the filter bed when the accumulation exceeds one inch or when there is evidence that the infiltration capacity of the filter bed has been significantly reduced (i.e., observed water level above the filter exceeds the design level or drawdown time exceeds 36 to 48 hours). As a rule-of-thumb, the top several inches of the filter bed (typically dis-colored material) should be removed and replaced annually, or more frequently if necessary. The material should be removed with rakes where possible rather than heavy construction equipment to avoid compaction of the filter bed. Removed sediments should be dewatered (if necessary) and disposed of in accordance with all applicable local, state and federal laws and regulations including C.G.S. 22A-325 through 22A-329.

4.1.5 Subsurface Infiltration Systems

Inspection Frequency: Bi-annually

Special Inspection Event(s): Rainfall greater than 0.5 inches

Subsurface infiltration systems should be inspected bi-annually for standing water. If standing water is observed for longer than 72 hours, a pump should be placed in the basin and discharged through the outlet pipe. After the system is dewatered, it should be observed by a Professional Engineer. A Professional Engineer should provide an opinion as to why the infiltrations system is not draining and provide recommendations to restore

infiltration capacity to the system. Additionally, subsurface infiltration systems shall be observed to identify depths of sediment and occurrence of debris which would impact functionality.

4.1.6 Stormwater System Outfalls

Inspection Frequency: Bi-annually

Special Inspection Event(s): Rainfall greater than 0.5 inches

System outfalls should be inspected twice a year as well as after every major storm, for slope integrity, soil moisture, vegetated health, soil stability, soil compaction, soil erosion, ponding and sediment accumulation. If the rip rap has been displaced, undermined or damaged, it should be replaced immediately. The channel immediately below the outlet should be checked to see that erosion is not occurring. The downstream channel will be kept clear of obstructions, such as fallen trees, debris, leaves and sediment that could change flow patterns and/or tail water depths in pipes. Repairs must be carried out immediately to avoid additional damage to the outlet protection apron.

4.1.7 24" Culvert Inlet

Inspection Frequency: Bi-annually

Special Inspection Event(s): Rainfall greater than 0.5 inches

The inlet of the 24" Culvert is protected with a scour hole. A scour hole is the principal structural component that provides energy dissipation for peak runoff flows. The scour hole is lined with filter fabric and riprap. Stormwater runoff should be able to flow in and out of the scour hole. Inspect the filter fabric to verify that it is undamaged, remains in place as installed, and appears adequate to protect the area from erosion. Check to ensure that the filter fabric is buried below ground and if any wire staples or anchor pins have been removed causing the edges to be exposed. Verify that there is a depression within the scour hole and it is not filled with unwanted trash or debris. Inspect the riprap for a well-graded mixture of stone.

Typically, the device should need minimal maintenance. However, if any sediment, trash or debris is noted, it should be removed promptly. If there is damage to the filter fabric and erosion is visible underneath the riprap plated portion of the scour hole, restore the compacted fill and repair filter fabric. Any damage to the filter fabric should be repaired by removing the riprap and placing another piece of filter cloth over the damaged area and securing it using wire staples or anchor pins. Once repair is completed, replace the riprap. If the wire staples or anchor pins are missing exposing the edges, pull the edge of the filter fabric underground and place new wire staples or anchor pins to provide stability. If the stone gradation seems inadequate use the smaller-sized stones to fill voids. If the riprap appear moved or erosion is visible, schedule maintenance to make repairs and prevent further damage.

Stormwater Operation and Maintenance Log

Report Number:	Page:

Inspection Report Form for:

Vegetated Surfaces

Inspection Frequency: Bi-annually in Summer and Winter

Special Inspection Event(s): Spring Snow Melt

Inspector: _____ **Date:** _____

Reason for Inspection (Routine / Significant Rainfall): _____

Comments:

Maintenance and Other Actions Required:

To be performed by: _____ **On or before:** _____

Stormwater Operation and Maintenance Log

Report Number:	Page:

Inspection Report Form for:

Driveway & Walkway Sweeping

Inspection Frequency: Quarterly

Special Inspection Event(s): Spring Snow Melt

Inspector: _____ **Date:** _____

Reason for Inspection (Routine / Significant Rainfall): _____

Comments:

Maintenance and Other Actions Required:

To be performed by: _____ **On or before:** _____

Stormwater Operation and Maintenance Log

Report Number:	Page:

Inspection Report Form for:

Deep-Sump, Hooded Catch Basins

Inspection Frequency: Quarterly

Special Inspection Event(s): Rainfall greater than 0.5 inches

Inspector: _____ **Date:** _____

Reason for Inspection (Routine / Significant Rainfall): _____

Comments:

Maintenance and Other Actions Required:

To be performed by: _____ **On or before:** _____

Stormwater Operation and Maintenance Log

Report Number:	Page:

Inspection Report Form for:

Hydrodynamic Separator (Oil/Sediment Separator)

Inspection Frequency: Monthly

Special Inspection Event(s): Rainfall greater than 0.5 inches

Inspector: _____ **Date:** _____

Reason for Inspection (Routine / Significant Rainfall): _____

Comments:

Maintenance and Other Actions Required:

To be performed by: _____ **On or before:** _____

Stormwater Operation and Maintenance Log

Report Number:	Page:

Inspection Report Form for:

Subsurface Infiltration Systems

Inspection Frequency: Bi-annually

Special Inspection Event(s): Rainfall greater than 0.5 inches

Inspector: _____ **Date:** _____

Reason for Inspection (Routine / Significant Rainfall): _____

Comments:

Maintenance and Other Actions Required:

To be performed by: _____ **On or before:** _____

Stormwater Operation and Maintenance Log

Report Number:	Page:

Inspection Report Form for:

Rain Gardens & Bio Retention

Inspection Frequency: Monthly (first year), Quarterly (thereafter)

Special Inspection Event(s): Rainfall greater than 0.5 inches

Inspector: _____ **Date:** _____

Reason for Inspection (Routine / Significant Rainfall): _____

Comments:

Maintenance and Other Actions Required:

To be performed by: _____ **On or before:** _____

Stormwater Operation and Maintenance Log

Report Number:	Page:

Inspection Report Form for:

Stormwater Outfalls

Inspection Frequency: Bi-annually

Special Inspection Event(s): Rainfall greater than 0.5 inches

Inspector: _____ **Date:** _____

Reason for Inspection (Routine / Significant Rainfall): _____

Comments:

Maintenance and Other Actions Required:

To be performed by: _____ **On or before:** _____

Stormwater Operation and Maintenance Log

Report Number:	Page:

Inspection Report Form for:

24" Diameter Culvert Inlets

Inspection Frequency: Bi-annually

Special Inspection Event(s): Rainfall greater than 0.5 inches

Inspector: _____ **Date:** _____

Reason for Inspection (Routine / Significant Rainfall): _____

Comments:

Maintenance and Other Actions Required:

To be performed by: _____ **On or before:** _____