
September, 03, 2024

Attn: Charles Tirone,
Conservation Administrator
Conservation Commission
Reading Town Hall
16 Lowell Street, Reading, MA 01867

**Re: Stormwater Management Standards Compliance Report - Revised
Replacement of Fuel Dispensers and Associated Underground Piping
DEP File #270-0777: #87 Walkers Brook Drive Reading, MA
CMG ID 2022-306**

Dear Conservation Commission Members,

On behalf of Leigh Enterprises LTD, (Applicant), CMG is writing you this letter to provide a summary of the proposed site improvements located at #87 Walkers Brook Drive in Reading, MA (the "Site") as it relates to compliance with the Massachusetts Stormwater Management Standards as a "redevelopment" project.

The Site currently contains a "Shell" branded gas station (constructed 1950) with a Dunkin Donuts coffee shop with drive through lane, four (4) underground storage tanks (UST) with protective concrete mat, four (4) fuel dispensers on top of a separate concrete mat, associated canopy, paved driveway, and an offsite DOT drainage swale along Walkers Brook Drive across the frontage of the lot.

Applicant is proposing to replace the existing piping, fuel dispensers, and concrete canopy mat. The four (4) existing USTs will remain in place while the piping associated with the tanks are replaced. A new protective concrete mat located on top of the USTs will also be installed. The existing fuel canopy, convenience store, and paved parking areas will remain. All impacted areas, surfaces, and grading will be restored to their existing conditions.

The current gas station, in operation circa 1970, currently does not utilize stormwater BMP's due to the site limitations as it relates to high groundwater and minimal topographic pitch between the site and adjacent wetlands. Stormwater runoff is conveyed via sheet flow to multiple discharge points throughout the property. Existing curb break swales are located along the front driveways of the property within the Walkers Brook Drive right-of-way, which is owned by MassDOT.

The front portions of the site discharges to the curb break swales, which is ultimately conveyed to the MassDOT drainage system within the Walkers Brook right-of-way discharging to a culvert

leading to Walkers Brook. The remainder of the site is discharged via overland flow to the south and west. The western property boundary is directly adjacent to a delineated resource area.

At the request of the Conservation Commission, the Applicant is proposing several drainage improvements including on-site and off-site stormwater management system maintenance:

- A gutter inlet catch basin will be installed at the Site's western curbcut to direct Site stormwater runoff to the existing swale located within the MassDOT right-of-way at the front of the Site;
- Additional buffer zone plantings will be installed along the front portion of the Site's western property line adjacent to the western curbcut;
- Existing accumulated sediment will be removed from the grass swale located within MassDOT right-of-way and it will be restored with new loam and seed;
- Gravel inlet channels will be restored at the existing curb inlets to the grass swale;
- A gravel strip will be placed along the existing edge of pavement along the western property boundary. The gravel strip will act as a flow dissipator and deter any scouring of the vegetation in close proximity to the delineated wetlands.
- A Long-Term Stormwater Operation and Maintenance (O&M) Plan is provided for the Site

Applicant will seek permission from MassDOT for removing sediment within the previously mentioned stormwater swale (located within the MassDOT right-of-way). Additional information regarding the improvements/ maintenance are detailed in the enclosed Plan Set, subject to MassDOT review.

The proposed fueling system improvements will not create additional impervious areas and are generally considered as maintenance. Additionally, no increase in stormwater runoff or changes in stormwater flow paths will occur as a result of the proposed improvements. It is CMG's belief the proposed project scope is in compliance with the Massachusetts Stormwater Management Standards as noted below.

Stormwater Management Standards

The following is a summary of the project's compliance with the MA Stormwater Management Standards as a "redevelopment" project:

Standard 1: No New Untreated Discharges

- There will be no new stormwater discharges as a result of this project.
- Proposed development meets this standard as there are no proposed changes to the stormwater discharges.

Standard 2: Peak Rate Attenuation

- Post-development peak discharge rates will not exceed pre-development peak discharge rates as there are no changes to the sites Site impervious or other land coverage areas.
- Proposed development meets this standard to the greatest extent practicable as it is considered re-development.

Standard 3: Recharge

- Final stormwater recharge volumes will match existing conditions recharge as there is no net increase to Site impervious areas and there are currently no on-site infiltration measures utilized on-site.
- Proposed development meets this standard to the greatest extent practicable as it is considered re-development.

Standard 4: Water Quality

- The proposed gravel diaphragm and maintenance of the existing swale will improve stormwater runoff quality by deterring scouring and transportation of sediment
- Proposed development meets this standard to the greatest extent practicable as it is considered re-development.

Standard 5: Land Uses with Higher Potential Pollutant Loads

- There is no proposed change in use for the site, and no LUHPPL specific stormwater management standards are currently employed at the site.
- Proposed development meets this standard to the greatest extent practicable as it is considered re-development.

Standard 6: Critical Areas

- The proposed site improvements are located within a Wetland Protection Act Jurisdictional Area and a FEMA Flood Zone AE. Erosion control practices are in place to deter any detriment to bordering resource areas as a result of the proposed site improvements. Details of the proposed erosion control procedures are included in the associated plan set and attached Construction Phase SWPPP.
- Proposed development meets this standard to the greatest extent practicable as it is considered re-development.

Standard 7: Redevelopment and Other Projects Subject to the Standards only to the Maximum Extent Practicable

- The project will comply with the Stormwater Management Standards to the maximum extent practicable as no new impervious areas are proposed and no changes to the existing stormwater management system are proposed. All proposed work is located within existing disturbed/paved areas.
- Standards 1, 8, 9, & 10 are fully met

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control

- A Site specific “Construction Period Pollution Prevention Plan” is provided as Appendix B outlining erosion control procedures for the contractor to follow during construction.
- Proposed site improvements are < 1 Acre therefore the EPA NPDES Construction Stormwater General Permit is not required.
- Proposed development meets this standard.

Standard 9: Operation and Maintenance Plan

- A “Long Term Operation and Maintenance Plan” is provided as Appendix C for the Commission’s review outlining long term stormwater management best management practices for the existing Site.
- Proposed development meets this standard.

Standard 10: Prohibition of Illicit Discharges

- An illicit discharge statement is provided within the Long-Term Operation and Maintenance Plan and will be signed by the Owner upon completion of the project.
- Proposed development meets this standard.

CMG believes the project is in compliance with the Massachusetts Stormwater Management Standards as a “redevelopment” project and will result in an improvement to Site stormwater. A copy of the “Checklist for Stormwater Report” is provided as an Attachment to this letter.

Please do not hesitate to contact me at (774)-241-0901 with any questions.

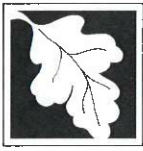
Sincerely,
CMG



David T. Faist, PE
Principal Engineer

Appendix A

MA-DEP Stormwater Checklist



Checklist for Stormwater Report

B. Stormwater Checklist and Certification

The following checklist is intended to serve as a guide for applicants as to the elements that ordinarily need to be addressed in a complete Stormwater Report. The checklist is also intended to provide conservation commissions and other reviewing authorities with a summary of the components necessary for a comprehensive Stormwater Report that addresses the ten Stormwater Standards.

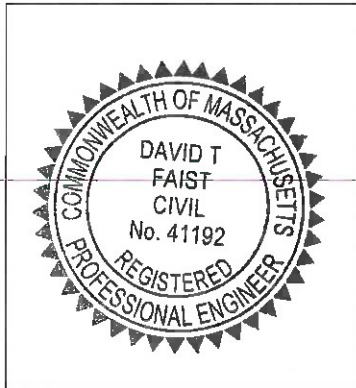
Note: Because stormwater requirements vary from project to project, it is possible that a complete Stormwater Report may not include information on some of the subjects specified in the Checklist. If it is determined that a specific item does not apply to the project under review, please note that the item is not applicable (N.A.) and provide the reasons for that determination.

A complete checklist must include the Certification set forth below signed by the Registered Professional Engineer who prepared the Stormwater Report.

Registered Professional Engineer's Certification

I have reviewed the Stormwater Report, including the soil evaluation, computations, Long-term Pollution Prevention Plan, the Construction Period Erosion and Sedimentation Control Plan (if included), the Long-term Post-Construction Operation and Maintenance Plan, the Illicit Discharge Compliance Statement (if included) and the plans showing the stormwater management system, and have determined that they have been prepared in accordance with the requirements of the Stormwater Management Standards as further elaborated by the Massachusetts Stormwater Handbook. I have also determined that the information presented in the Stormwater Checklist is accurate and that the information presented in the Stormwater Report accurately reflects conditions at the site as of the date of this permit application.

Registered Professional Engineer Block and Signature



David T. Faist 9-3-24

Signature and Date

Checklist

Project Type: Is the application for new development, redevelopment, or a mix of new and redevelopment?

- New development
- Redevelopment
- Mix of New Development and Redevelopment



Checklist for Stormwater Report

Checklist (continued)

LID Measures: Stormwater Standards require LID measures to be considered. Document what environmentally sensitive design and LID Techniques were considered during the planning and design of the project:

- No disturbance to any Wetland Resource Areas
- Site Design Practices (e.g. clustered development, reduced frontage setbacks)
- Reduced Impervious Area (Redevelopment Only)
- Minimizing disturbance to existing trees and shrubs
- LID Site Design Credit Requested:
 - Credit 1
 - Credit 2
 - Credit 3
- Use of "country drainage" versus curb and gutter conveyance and pipe
- Bioretention Cells (includes Rain Gardens)
- Constructed Stormwater Wetlands (includes Gravel Wetlands designs)
- Treebox Filter
- Water Quality Swale
- Grass Channel
- Green Roof
- Other (describe): _____

Standard 1: No New Untreated Discharges

- No new untreated discharges
- Outlets have been designed so there is no erosion or scour to wetlands and waters of the Commonwealth
- Supporting calculations specified in Volume 3 of the Massachusetts Stormwater Handbook included.



Checklist for Stormwater Report

Checklist (continued)

Standard 2: Peak Rate Attenuation

- Standard 2 waiver requested because the project is located in land subject to coastal storm flowage and stormwater discharge is to a wetland subject to coastal flooding.
- Evaluation provided to determine whether off-site flooding increases during the 100-year 24-hour storm.
- Calculations provided to show that post-development peak discharge rates do not exceed pre-development rates for the 2-year and 10-year 24-hour storms. If evaluation shows that off-site flooding increases during the 100-year 24-hour storm, calculations are also provided to show that post-development peak discharge rates do not exceed pre-development rates for the 100-year 24-hour storm.

Standard 3: Recharge

- Soil Analysis provided.
- Required Recharge Volume calculation provided.
- Required Recharge volume reduced through use of the LID site Design Credits.
- Sizing the infiltration, BMPs is based on the following method: Check the method used.
 - Static
 - Simple Dynamic
 - Dynamic Field¹
- Runoff from all impervious areas at the site discharging to the infiltration BMP.
- Runoff from all impervious areas at the site is *not* discharging to the infiltration BMP and calculations are provided showing that the drainage area contributing runoff to the infiltration BMPs is sufficient to generate the required recharge volume.
- Recharge BMPs have been sized to infiltrate the Required Recharge Volume.
- Recharge BMPs have been sized to infiltrate the Required Recharge Volume *only* to the maximum extent practicable for the following reason:
 - Site is comprised solely of C and D soils and/or bedrock at the land surface
 - M.G.L. c. 21E sites pursuant to 310 CMR 40.0000
 - Solid Waste Landfill pursuant to 310 CMR 19.000
 - Project is otherwise subject to Stormwater Management Standards only to the maximum extent practicable.
- Calculations showing that the infiltration BMPs will drain in 72 hours are provided.
- Property includes a M.G.L. c. 21E site or a solid waste landfill and a mounding analysis is included.

¹ 80% TSS removal is required prior to discharge to infiltration BMP if Dynamic Field method is used.



Checklist for Stormwater Report

Checklist (continued)

Standard 3: Recharge (continued)

- The infiltration BMP is used to attenuate peak flows during storms greater than or equal to the 10-year 24-hour storm and separation to seasonal high groundwater is less than 4 feet and a mounding analysis is provided.
- Documentation is provided showing that infiltration BMPs do not adversely impact nearby wetland resource areas.

Standard 4: Water Quality

The Long-Term Pollution Prevention Plan typically includes the following:

- Good housekeeping practices;
 - Provisions for storing materials and waste products inside or under cover;
 - Vehicle washing controls;
 - Requirements for routine inspections and maintenance of stormwater BMPs;
 - Spill prevention and response plans;
 - Provisions for maintenance of lawns, gardens, and other landscaped areas;
 - Requirements for storage and use of fertilizers, herbicides, and pesticides;
 - Pet waste management provisions;
 - Provisions for operation and management of septic systems;
 - Provisions for solid waste management;
 - Snow disposal and plowing plans relative to Wetland Resource Areas;
 - Winter Road Salt and/or Sand Use and Storage restrictions;
 - Street sweeping schedules;
 - Provisions for prevention of illicit discharges to the stormwater management system;
 - Documentation that Stormwater BMPs are designed to provide for shutdown and containment in the event of a spill or discharges to or near critical areas or from LUHPPL;
 - Training for staff or personnel involved with implementing Long-Term Pollution Prevention Plan;
 - List of Emergency contacts for implementing Long-Term Pollution Prevention Plan.
- A Long-Term Pollution Prevention Plan is attached to Stormwater Report and is included as an attachment to the Wetlands Notice of Intent.
 - Treatment BMPs subject to the 44% TSS removal pretreatment requirement and the one inch rule for calculating the water quality volume are included, and discharge:
 - is within the Zone II or Interim Wellhead Protection Area
 - is near or to other critical areas
 - is within soils with a rapid infiltration rate (greater than 2.4 inches per hour)
 - involves runoff from land uses with higher potential pollutant loads.
 - The Required Water Quality Volume is reduced through use of the LID site Design Credits.
 - Calculations documenting that the treatment train meets the 80% TSS removal requirement and, if applicable, the 44% TSS removal pretreatment requirement, are provided.



Checklist for Stormwater Report

Checklist (continued)

Standard 4: Water Quality (continued)

- The BMP is sized (and calculations provided) based on:
 - The ½" or 1" Water Quality Volume or
 - The equivalent flow rate associated with the Water Quality Volume and documentation is provided showing that the BMP treats the required water quality volume.
- The applicant proposes to use proprietary BMPs, and documentation supporting use of proprietary BMP and proposed TSS removal rate is provided. This documentation may be in the form of the propriety BMP checklist found in Volume 2, Chapter 4 of the Massachusetts Stormwater Handbook and submitting copies of the TARP Report, STEP Report, and/or other third party studies verifying performance of the proprietary BMPs.
- A TMDL exists that indicates a need to reduce pollutants other than TSS and documentation showing that the BMPs selected are consistent with the TMDL is provided.

Standard 5: Land Uses With Higher Potential Pollutant Loads (LUHPPLs)

- The NPDES Multi-Sector General Permit covers the land use and the Stormwater Pollution Prevention Plan (SWPPP) has been included with the Stormwater Report.
- The NPDES Multi-Sector General Permit covers the land use and the SWPPP will be submitted **prior to** the discharge of stormwater to the post-construction stormwater BMPs.
- The NPDES Multi-Sector General Permit does **not** cover the land use.
- LUHPPLs are located at the site and industry specific source control and pollution prevention measures have been proposed to reduce or eliminate the exposure of LUHPPLs to rain, snow, snow melt and runoff, and been included in the long term Pollution Prevention Plan.
- All exposure has been eliminated.
- All exposure has **not** been eliminated and all BMPs selected are on MassDEP LUHPPL list.
- The LUHPPL has the potential to generate runoff with moderate to higher concentrations of oil and grease (e.g. all parking lots with >1000 vehicle trips per day) and the treatment train includes an oil grit separator, a filtering bioretention area, a sand filter or equivalent.

Standard 6: Critical Areas

- The discharge is near or to a critical area and the treatment train includes only BMPs that MassDEP has approved for stormwater discharges to or near that particular class of critical area.
- Critical areas and BMPs are identified in the Stormwater Report.



Checklist for Stormwater Report

Checklist (continued)

Standard 7: Redevelopments and Other Projects Subject to the Standards only to the maximum extent practicable

- The project is subject to the Stormwater Management Standards only to the maximum Extent Practicable as a:
 - Limited Project
 - Small Residential Projects: 5-9 single family houses or 5-9 units in a multi-family development provided there is no discharge that may potentially affect a critical area.
 - Small Residential Projects: 2-4 single family houses or 2-4 units in a multi-family development with a discharge to a critical area
 - Marina and/or boatyard provided the hull painting, service and maintenance areas are protected from exposure to rain, snow, snow melt and runoff
 - Bike Path and/or Foot Path
- Redevelopment Project
- Redevelopment portion of mix of new and redevelopment.
- Certain standards are not fully met (Standard No. 1, 8, 9, and 10 must always be fully met) and an explanation of why these standards are not met is contained in the Stormwater Report.
- The project involves redevelopment and a description of all measures that have been taken to improve existing conditions is provided in the Stormwater Report. The redevelopment checklist found in Volume 2 Chapter 3 of the Massachusetts Stormwater Handbook may be used to document that the proposed stormwater management system (a) complies with Standards 2, 3 and the pretreatment and structural BMP requirements of Standards 4-6 to the maximum extent practicable and (b) improves existing conditions.

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control

A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan must include the following information:

- Narrative;
 - Construction Period Operation and Maintenance Plan;
 - Names of Persons or Entity Responsible for Plan Compliance;
 - Construction Period Pollution Prevention Measures;
 - Erosion and Sedimentation Control Plan Drawings;
 - Detail drawings and specifications for erosion control BMPs, including sizing calculations;
 - Vegetation Planning;
 - Site Development Plan;
 - Construction Sequencing Plan;
 - Sequencing of Erosion and Sedimentation Controls;
 - Operation and Maintenance of Erosion and Sedimentation Controls;
 - Inspection Schedule;
 - Maintenance Schedule;
 - Inspection and Maintenance Log Form.
- A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan containing the information set forth above has been included in the Stormwater Report.



Checklist for Stormwater Report

Checklist (continued)

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control (continued)

- The project is highly complex and information is included in the Stormwater Report that explains why it is not possible to submit the Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan with the application. A Construction Period Pollution Prevention and Erosion and Sedimentation Control has **not** been included in the Stormwater Report but will be submitted **before** land disturbance begins.
- The project is **not** covered by a NPDES Construction General Permit.
- The project is covered by a NPDES Construction General Permit and a copy of the SWPPP is in the Stormwater Report.
- The project is covered by a NPDES Construction General Permit but no SWPPP been submitted. The SWPPP will be submitted BEFORE land disturbance begins.

Standard 9: Operation and Maintenance Plan

- The Post Construction Operation and Maintenance Plan is included in the Stormwater Report and includes the following information:
 - Name of the stormwater management system owners;
 - Party responsible for operation and maintenance;
 - Schedule for implementation of routine and non-routine maintenance tasks;
 - Plan showing the location of all stormwater BMPs maintenance access areas;
 - Description and delineation of public safety features;
 - Estimated operation and maintenance budget; and
 - Operation and Maintenance Log Form.
- The responsible party is **not** the owner of the parcel where the BMP is located and the Stormwater Report includes the following submissions:
 - A copy of the legal instrument (deed, homeowner's association, utility trust or other legal entity) that establishes the terms of and legal responsibility for the operation and maintenance of the project site stormwater BMPs;
 - A plan and easement deed that allows site access for the legal entity to operate and maintain BMP functions.

Standard 10: Prohibition of Illicit Discharges

- The Long-Term Pollution Prevention Plan includes measures to prevent illicit discharges;
- An Illicit Discharge Compliance Statement is attached;
- NO Illicit Discharge Compliance Statement is attached but will be submitted **prior to** the discharge of any stormwater to post-construction BMPs.

Appendix B

Construction Period Stormwater Pollution Prevention Plan “SWPPP”

**Construction Period
Erosion and Sediment Control
Stormwater Pollution Prevention Plan
(SWPPP)
Underground Storage Tank Top Replacement Plan
#87 Walkers Brook Drive
Reading, MA 01867**

September 2024

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Attachment A Weekly Inspection and Maintenance Report Form &
Stormwater Inspection Figure

**Stormwater Pollution Prevention Plan (SWPPP)
For Construction Activities
Underground Storage Tank Top Replacement
#87 Walkers Brook Drive
Reading, MA 01867
September 2024**

Responsible Party/ Property Owner:

87 Walkers Brook Drive, LLC
87 Walkers Brook Drive
Reading, MA 01867
p. (978) 846-0255

Site Contractor/:	William Camuso	Site Engineer:	CMG
Project Supervisor	Property Owner (978) 846-0255 billcamuso@gmail.com		67 Hall Road Sturbridge, MA 01566 Tel: (774) 241-0901

Project Description:

The applicant is proposing to replace the existing piping, fuel dispensers, and concrete canopy mat. The four (4) existing USTs will remain in place while the piping associated with the tanks are replaced. A new protective concrete mat located on top of the USTs will also be installed. The existing fuel canopy, convenience store, and paved parking areas will remain. All impacted areas, surfaces, and grading will be restored to their existing conditions.

Soil disturbing activities will include: installing erosion and sediment controls; concrete/pavement removal, and replacement of concrete/pavement.

Supporting Documents:

- “Underground Storage Tank Top Replacement – Reading Filling Station, #87 Walkers Brook Drive, Reading, MA”, drawn by CMG, dated 11/21/2023, Revise Date 9/03/24.

Sequence of Major Activities:

The order of activities will be as follows:

1. Confirm that all required permits are in place.
2. Contact “DIG-SAFE” for utility demarcation prior to commencement of construction.
3. Confirm that all overhead and subsurface utilities are shut off or otherwise made safe for construction.
4. Install 12” erosion control mulch socks with silt fence backing.
5. Hold preconstruction conference on the site.
6. Demolish and remove existing pavement/concrete and subsurface material.
7. Install subsurface fuel piping and conduit per the design plans.
8. Construct concrete mats and re-establish pavement which was removed.
9. Construct drainage improvements.
10. Install proposed plantings and final loam & seed disturbed areas.
11. Perimeter erosion and sediment controls may be removed once approved by the Sturbridge Conservation Commission.

Designation of Project Supervisors:

Stormwater Team – Project Contractor will be the designated “Project Supervisor” and responsible for compliance with erosion control inspections, stormwater system protection, and maintenance of entrance driveway & drainage system during construction until completion of the project.

Erosion and Sediment Controls:

All on-site Construction Activities and Erosion & Sediment Controls are to be conducted, installed, and maintained in accordance with the Order of Conditions.

Sediment/Silt Fence – Install silt fence at various locations shown on the plans and details. Embed the silt fence into the ground and firmly anchor it as shown on the plan details. Repair and/or replace silt fence immediately if damaged or deteriorated.

Stockpiling or Storage of Excavated Materials – All stock piles shall be placed on top of 6 mil poly and covered with 6 mil poly in accordance with DEP standards for reuse. Completely surround temporary material stockpiles with mulch socks to prevent transportation of sediment.

Dust Control – Precautions shall be taken to prevent dust from becoming a nuisance to abutting property owners. Pavements adjoining the excavation shall be broomed on a daily basis. All earth stockpiles should be covered and/or kept moist at all times. To further control dust, calcium chloride (ASTM D-98, Type I) may be used over certain areas of the site, as directed by the engineer. Additionally, all dump trucks hauling material to and from the site shall be covered with a tarpaulin. The contractor shall maintain and inspect, on a daily basis, the adequacy of dust control measures and correct any deficiencies immediately.

Temporary Stabilization – Top soil stock piles and disturbed portions of the site where construction activity ceases for at least 21 days will be stabilized with temporary seed and mulch no later than 14 days from the last construction activity in that area. The temporary seed and mulch procedures and specifications shall be in accordance with the landscape architect’s recommendations. Areas of the site which are to be paved will be temporarily stabilized by applying geotextile and stone sub-base until bituminous pavement can be applied.

Pavement Maintenance – The contractor shall sweep paved roadways adjacent to the site on a routine basis to prevent tracking of mud onto public roadways and washing of mud into waterways.

Permanent Stabilization – Disturbed portions of the site where construction activities permanently cease shall be stabilized with permanent seed no later than 14 days after the last construction activity. The permanent seed & mulch specifications and procedure shall be in accordance with the landscape architect’s recommendations.

Waste Disposal:

Waste Materials – All waste materials will be collected and stored in a securely lidded metal dumpster. The dumpster shall meet all Commonwealth of Massachusetts solid waste management regulations. The dumpster will be emptied a minimum of once per week or more often if necessary. No construction waste materials will be buried on-site. All personnel will be instructed regarding the correct procedure for waste disposal. Notices stating these practices will be posted in the office trailer and the contractor will be responsible for seeing that these procedures are followed.

Hazardous Waste – All hazardous waste materials will be disposed of in the manner specified by the Commonwealth of Massachusetts regulations. Site personnel will be instructed in these practices and the contractor will be responsible for seeing that these procedures are followed.

Sanitary Waste – All sanitary waste will be collected from the portable unit a minimum of three times per week by a licensed sanitary waste management contractor as required by local regulation.

Maintenance/Inspection Requirements:

- All control measures will be **inspected** by site contractors at least **following every runoff-producing rainfall, but in no case less than once a week.**
- Any mud or sediment that is tracked onto public roadways will be removed immediately.
- All measures will be maintained in good working order; if a **repair** is necessary, it will be initiated **within 24 hours** of report.
- Following the final removal of any erosion and sediment control devices, sediment deposits shall be graded in a manner to meet existing topography.
- A **maintenance inspection report** will be completed **weekly** by the Site contractor. Copies of the weekly inspection reports will be kept in a folder on-site and be made available to State MassDEP & Town of Reading personnel upon request.

Daily Site Contractor Visual Inspection:

- **Sediment/Erosion control berms and/or wattles** will be visually inspected by site contractors daily for depth of sediment, tears, to see if the fabric is securely attached to the fence posts, and to see that fence posts are firmly in the ground.

Weekly Site Contractor Inspection:

- **Sediment/Erosion control berms and/or mulch socks** will be inspected and recorded by site contractor weekly for depth of sediment, tears, to see if the fabric is securely attached to the fence posts, and to see that fence posts are firmly in the ground. *Built up sediment will be removed from the Sediment/Silt Fence when it has reached $\frac{1}{4}$ of the effective height of the fence.
- **Temporary and permanent seeding and planting** will be inspected **weekly**, at a minimum, by site contractors for bare spots, washouts, and healthy growth.

Compliance w/ Long Term Operation & Maintenance Plan:

- Refer to Site specific “Long Term Operation and Maintenance Plan” for post-construction stormwater management requirements.

Attachment A

Inspection and Maintenance Report Form & Stormwater Inspection Figure

Weekly Storm water Construction Site Inspection Report #87 WALKERS BROOK DRIVE - READING, MA

General Information				
Project Name	Underground Storage Tank Top Replacement			
MassDEP File Number:	DEP FILE No. 270-0777			
Date of Inspection		Start/End Time		
Inspector's Name(s) & Contact Information				
Type of Inspection: <input type="checkbox"/> Regular <input type="checkbox"/> Pre-storm event <input type="checkbox"/> During storm event <input type="checkbox"/> Post-storm event				
Weather Information				
Has there been a storm event since the last inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, provide: Storm Start Date & Time: Storm Duration (hrs): Approximate Amount of Precipitation (in):				
Weather at time of this inspection? <input type="checkbox"/> Clear <input type="checkbox"/> Cloudy <input type="checkbox"/> Rain <input type="checkbox"/> Sleet <input type="checkbox"/> Fog <input type="checkbox"/> Snowing <input type="checkbox"/> High Winds <input type="checkbox"/> Other: Temperature:				
Have any discharges occurred since the last inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe:				
Are there any discharges at the time of inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe:				
	Site – Specific BMPs	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
1	Erosion Control Silt Fence & Straw Bales	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2	Roadway Sweeping	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	

CERTIFICATION STATEMENT

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

Print name and title: _____

Signature: _____ **Date:** _____

Overall Site Issues

Below are some general site issues that should be assessed during inspections. Customize this list as needed for conditions at your site.

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
1	Slopes and disturbed areas not actively being worked properly stabilized?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2	Natural Resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3	Perimeter Controls and sediment barriers adequately installed (keyed into substrate) and maintained?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	*Surround Stockpiles w/ straw bales if > 1 week
4	Discharge Points and receiving waters free of any sediment deposits?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
5	Storm Drain Inlets properly protected?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
6	Construction exit preventing sediment from being tracked into the street?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
7	Trash / Litter from work areas collected and placed in covered dumpsters?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
8	Washout Facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	*No Washout Allowed within 100 ft. of Wetlands
9	Vehicle and Equipment Fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	*No Vehicle Fueling within 100 ft. of Wetlands
10	Materials that are potential stormwater contaminants stored inside or under cover?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
11	Non-stormwater discharges (wash water, dewatering) properly controlled?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Appendix C

Long-Term Operation & Maintenance Plan

**STORM WATER MANAGEMENT SYSTEM
LONG-TERM OPERATION & MAINTENANCE PLAN**

September 03, 2024

**Underground Storage Tank Top Replacement
#87 Walkers Brook Drive
Reading, MA**

Prepared For:

Leigh Enterprises LTD
87 Walkers Brook Drive
Reading, MA 01867

Prepared By:

CMG Environmental, Inc.
67 Hall Road
Sturbridge, MA 01566
Phone: (774) 241-0901

CMG ID 2022-306

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**Long Term Operation & Maintenance Plan
Site Stormwater Management System
Underground Storage Tank Top Replacement
#87 Walkers Brook Drive
Reading, MA 01867**

Operation and Maintenance (O&M) Plan

The purpose of this Storm Water Management System Operation and Maintenance Plan is to prevent erosion, sedimentation, pollution or other deterioration of the storm water management system and resource areas located on and adjacent to the site property located at **#87 Walkers Brook Drive in Reading, MA** (the “Site”). The storm water management system shall be maintained properly to assure its continued performance.

Responsible Party:

87 Walkers Brook Drive, LLC.
87 Walkers Brook Drive
Reading, MA 01867
p. (978) 846-0255

Storm water Management System Owner: (same as above)

Site subject to Wetlands Protection Act: YES

The “Responsible Party” Shall:

- Prepare and submit an “**Operation and Maintenance (O & M) Compliance Statement**” (see **Attachment #1**) upon completion of site construction activities.
- Implement the routine and non-routine operation, maintenance, and inspection tasks in accordance with the procedures specified in this document to ensure that all storm water management systems function as designed;
- Maintain a log of all operation and maintenance (O & M) activities for the last five (5) years, including inspections, repairs, replacement and disposal (for disposal, the log shall indicate the type of material and disposal location);
- Make this log available to **Town of Reading** official representatives upon request;
- Agree to notify in writing all “future property owners” of the presence of the storm water management system and the requirement for proper operation and maintenance.

“87 Walkers Brook Drive, LLC.” maintains a contract with the following companies:

Landscaping & Pavement Maintenance: _____

Snow Removal & Plowing: _____

Storm Water System Maintenance: _____

Table No. 1
#87 Walkers Brook Drive, Reading, MA
Underground Storage Tank Top Replacement

STORMWATER SYSTEM INSPECTION AND MAINTENANCE SCHEDULE		
Best Management Practice (BMP)	Inspection Frequency	Maintenance Frequency
STRUCTURAL BMPs		
Drainage Basin (MassDOT Right-of-way)	Two (2) Times /Year	Drainage basin shall be inspected and cleaned at least two (2) times annually, in the early Spring after the snow melt and in the Fall.
Drainage Culverts (MassDOT Right-of-way)	Four (4) Times / Year	Sediments and debris shall be removed as needed in accordance with all applicable federal, state, and local laws.
Rip-rap Outlet Control Structures	Two (2) Times /Year	All rip-rap outlet control structures shall be inspected at least two (2) times annually and cleaned and repaired as needed.
Canopy Roof Drain System	Two (2) Times /Year	The roof of the canopy, downspouts, and outlet pipes shall be inspected and cleaned at least two (2) times annually.
Gutter Inlet Catch Basin with 8" CI Outlet Pipe	Four (4) Times / Year	Remove Sediment Four (4) Times / Year (Including End of Foliage & Snow Removal Seasons)
18" Width Gravel Strip along Wester Parking Edge	Four (4) Times / Year	Remove Sediment Four (4) Times / Year (Including End of Foliage & Snow Removal Seasons)
NON-STRUCTURAL STORMWATER CONTROLS		
Street / Driveway Sweeping	Four (4) Times / Year	All paved surfaces shall be swept twice per month preferably with a vacuum sweeper
Snow Plowing	Two (2) Times /Year	Sediment shall be removed from snow storage areas in Early Spring
Pavement Surfaces	Two (2) Times /Year	Inspect in Spring and Fall and repair or replace as needed
Landscaping	Four (4) Times / Year	Seasonally As Needed
Snow Removal	Seasonally As Needed	In Accordance with M.G.L. Title XIV. Public Ways and Works; Chapter 85

STRUCTURAL STORMWATER BMP MAINTENANCE:

Drainage Basin (MassDOT Right-of-way)

- Inspect basin and inlets twice per year for signs of accumulation of sediment or debris. Any debris or sediment that could potentially clog the system shall be removed as needed to ensure proper working status of the basin.
- Inspection shall also involve visual observations of failure apparent in the area surrounding the basins perimeter and outlet structure.
- Drainage basin shall be inspected and cleaned at least twice annually, in the early Spring after snow melt and in the Fall.
- Accumulated sediments, leaves, branches, and other debris shall be removed and disposed of in accordance with all applicable federal, state, and local laws.
- Vegetated and rip-rapped surfaces shall be repaired or replaced as needed to prevent erosion, sedimentation, and slumping.
- Vegetation shall be mowed at least twice per year to prevent the growth of woody species.

Following maintenance removal of accumulated sediment, any vegetation damaged within the Basin area shall be repaired by re-seeding or re-sodding. When re-seeding, practices such as hydroseeding with a tackifier, blanket or similar practice should be incorporated to eliminate scour while the seeds germinate and develop roots.

Drainage Culverts (MassDOT Right-of-way)

- All culverts shall be inspected at least four (4) times per year
- Sediment and debris shall be removed and disposed of in accordance with all applicable federal, state, and local laws
- Any culvert that becomes damaged shall be repaired or replaced immediately upon discovery

Rip-rap Outlet Control Structures

- All rip-rap outlet control structures shall be inspected at least twice annually for evidence of clogging, scouring, slumping, erosion or other problems and shall be cleaned and repaired as needed to maintain proper functioning.
- The outlets shall also be inspected at least annually during a heavy rain storm to detect any problems in function and any problems corrected upon discovery;
- Note and repair any erosion & sediment buildup at the Rip-Rap outlet protection.

Canopy Roof Drain System

- The roof of the canopy, downspouts, and outlet pipes shall be inspected and cleaned at least twice annually to prevent clogging of the system.
- All components of the system shall be repaired or replaced upon discovery they have been damaged.

One (1) Gutter Inlet Catch Basin:

- Inspect or clean catch basin(s) at least four (4) times per year, including the end of the foliage and snow removal seasons.
- Inspection shall occur by probing the structure with a rod to determine the depth of accumulated sediment.
- Sediments must be removed four (4) times per year or whenever the depth of sediment is greater than or equal to one half of the depth from the bottom of the invert of the lowest pipe in the basin.
- The structure will be cleaned of water and sand/debris with the use of a vacuum truck. Material removed from the structure will be disposed of legally off-site by the vendor.
- Unless there is evidence that they have been contaminated by a spill or other means, catch basin cleanings may be taken to a landfill or other facility permitted by MassDEP to accept solid waste.

18" Width Gravel Strip along Western Parking Lot Edge

- Inspect regularly, especially after large rainfall events;
- Note and repair any erosion & sediment buildup at the gravel diaphragm.

NON- STRUCTURAL STORM WATER MANAGEMENT CONTROLS:

Non-Structural Control Measures & Stormwater Treatment

Street / Driveway Sweeping

- All pavement surfaces shall be swept, preferably with a vacuum sweeper, at least twice per month.
- Pavement areas will be swept seasonally as necessary to remove accumulated winter sand and salt and fall leaves, and shall be swept as required to remove litter. Collected material will be properly disposed of off-site.

Snow Plowing

- If snow is plowed into stockpiles on site during the winter, sediments shall be removed from snow storage areas in the early Spring.

Pavement Surface

- Paving and curbing shall be maintained in good condition to channel surface runoff into the storm water treatment systems.
- Vegetation within the basin in the Massachusetts Department of Transportation right of way and along the northwestern edge of the parking lot shall be maintained in healthy condition to prevent erosion and sedimentation in the drainage system and wetland resource areas.
- These areas shall be inspected in the Spring and Fall, and repaired or replaced as needed.

Landscape Maintenance:

- **No debris, refuse or other materials**, including but not limited to landscaping debris, leaves, shrubs and tree trimmings, logs, bricks, stone or trash shall be deposited within the vegetated wetland.
- The use of pesticides, herbicides, and fertilizers on the site shall be minimized to the maximum extent practicable and shall be applied in accordance with manufacture recommendations by experienced and if applicable, licensed personnel.

Trash Removal

- Inspect on-site area for litter and trash as needed. Any accumulated trash, litter, and discarded materials in this area will be removed and will be disposed of at a suitable location on a weekly basis.

Materials & Waste Storage

- Non-hazardous materials are to be stored within the limits of the secured/ fenced-in “storage yard” as shown on the enclosed Site Plans. Non-hazardous waste will be discarded in refuse containers. Any combustibles are to be stored inside the building in fire rated cabinets. No other hazardous materials or waste is to be stored on premise.

HAZARDOUS WASTE / OIL SPILL RESPONSE PROCEDURE

Initial Notification. In the event of a spill of hazardous waste or oil the facility manager or supervisor will be notified immediately by telephone.

Assessment – Initial Containment. The supervisor or manager will assess the incident and initiate control measures. The supervisor will first contact the **Town of Reading Fire Department** and then notify the **Town of Reading Police Department**. The Fire Department is ultimately responsible for matters of public health and safety and should be notified immediately.

Fire Department Telephone: 911 (Emergency); (781) 944-3132 (Non-Emergency)

Police Department Telephone: 911 (Emergency); (781) 944-1212 (Non-Emergency)

Further Notification. Based on the assessment by the Fire Chief, additional notification to a clean up contractor may be made. The Massachusetts Department of Environmental Protection and the EPA may be notified depending upon the nature and severity of the spill. The Fire Chief will be responsible for determining the level of clean up and notification required.

SNOW MANAGEMENT PLAN:

- No snow storage shall be located within or “deposited” within wetland resource areas on or off-site.
- No salt shall be used to treat unpaved areas during snow and ice conditions. The storage of all “de-icing” chemicals and treatment products is to be inside the building.
- If Site snow storage interferes with driveway maneuvers or sight distances (i.e. blocking of travel aisles, sight distance, or parking) the snow pile will be either removed or reduced legally in a legal manner by the snow plow vendor within 24-hours.
- Pavement areas will be swept seasonally as necessary to remove accumulated winter sand and salt and fall leaves, and shall be swept as required to remove litter. Collected material will be properly disposed of off-site.

INSPECTIONS / RECORDKEEPING:

Routine Inspections:

Routine inspections and maintenance to be conducted with the frequency described in this Operation and Maintenance Plan. All repairs and maintenance activities regarding the stormwater management system should be recorded and provided to the Reading Conservation Commission upon request. The Reading Conservation Commission and the Conservation Administrator shall have the right to enter the Site to inspect for compliance with these conditions.

Recordkeeping

Records of all drainage system inspections and maintenance shall be kept on file for a period of at least **five (5) years**. An example inspection form is provided in **Attachment #2**.

PUBLIC SAFETY FEATURES:

- All cast iron storm water structure grates and covers shall be kept in good condition and kept closed at all times. Any damaged or broken structures will be replaced immediately upon discovery;
- A safety grate shall be installed at flared end sections as required.

OPERATION & MAINTENANCE BUDGET ESTIMATE:

- The responsible party agrees to maintain an adequate annual budget to provide for the routine maintenance activities detailed in this document including but not limited to:
 - Landscape Maintenance;
 - Storm Water Management System Inspection & Maintenance;
 - Snow Plowing & Removal.

Attachment #1

Illicit Discharge Compliance Statement

**Illicit Discharge Compliance Statement
Site Storm Water Management System
Underground Storage Tank Top Replacement
#87 Walkers Brook Drive
Reading, MA**

Responsible Party:
87 Walkers Brook Drive, LLC.
87 Walkers Brook Drive
Reading, MA 01867
p. (978) 846-0255

Storm Water Management System Owner: (same as above)

Site subject to Wetlands Protection Act: YES DEP File #270-0777

The above listed “responsible party” is responsible for implementation of this “Long-Term Operation and Maintenance Plan” and certifies that:

- The site has been inspected for erosion and appropriate steps have been taken to permanently stabilize any eroded areas;
- All aspects of storm water BMPs have been inspected for damage, wear and malfunction, and appropriate steps have been taken to repair or replace the system or portions of the system so that the storm water at the site may be managed in accordance with:
 - MA-DEP Stormwater Management Standards, revise date January 2, 2008;
- There is no record or knowledge of illicit discharges to the on-site stormwater management system;
- All “future property owners” must be notified of their continuing legal responsibility to operate and maintain the Site Stormwater Management System.
- The “Long-Term Operation and Maintenance Plan” for the storm water BMPs is being implemented.

Signature of Responsible Party:

87 Walkers Brook Drive, LLC.

Date

Attachment #2

Stormwater Management System Quarterly Inspection Form

**Inspection Form - Storm Water Management System
Underground Storage Tank Top Replacement
#87 Walkers Brook Drive, Reading, Massachusetts**

QUARTERLY INSPECTION AND MAINTENANCE REPORT

Jan.-Mar. Apr.-Jun. July-Sep. Oct. – Dec.

Note: This Log should be copied prior to use. Note Additional Comments on back of Form.

Inspector's Name: _____ Date: _____ Time: _____ am/pm

Inspector's Qualifications: _____

Days Since Last Rainfall: _____

Amount of Last Rainfall: _____ inches

Item/Condition to be Checked	Maintenance Required		Corrective Action & Date
	No	Yes	
Drainage Basin (MassDOT Right-of-way)			
Drainage Culverts (MassDOT Right-of-way)			
Rip-rap Outlet Control Structures			
Canopy Roof Drain System			
Gutter Inlet Catch Basin with 8"-Diameter CI Outlet Pipe			
18" Width Gravel Diaphragm			
Street / Driveway Sweeping			*Sweep Seasonally – As Needed
Pavement Surfaces			
Landscaping / Trash Removal			
Snow Plowing & Snow Removal (seasonal)			*All De-icing chemical storage to be inside building *Sediment removal from snow storage area Early Spring

Additional Comments: _____