

## SHERMAN & FRYDRYK, LLC

*Land Surveying and Engineering*

www.shermanfrydryk.com



September 1, 2015

Town of South Hadley  
Planning Board  
116 Main Street  
South Hadley, MA 01705

RE: Quality Fleet Services, Inc.  
Site Re-Development  
548 New Ludlow Road, South Hadley  
MassDEP #288-0436

Dear Board Members:

Enclosed please find ten copies of the revised Operation & Maintenance Plan for the above project. This document has been updated to address comments received in the correspondence dated August 28, 2015 from Fuss & O'Neill.

For tracking and clarification purposes the original comment numbers are the same. Responses made by Sherman & Frydryk, LLC. have been italicized, the newest comments by Fuss & O'Neill are in bold lettering and our updated response is underlined for each item below.

Please note that the most recent comments and responses have not required any updates to the previous set of plans revised on 8/18/2015.

### Project Manual & Drainage Report

9. The Operation and Maintenance Plan (O&M) does not provide a schedule for the sediment forebay. The forebay should be included within the O&M. Please provide the required operation and maintenance for the forebay.

*The O&M Plan has been revised to include a maintenance schedule for the sediment forebay.*

**Per Volume 2 Chapter 2 of the Mass Stormwater Handbook, after initial months of inspection, the forebay must be inspected monthly and sediment removed a minimum of four times per year. The provided O&M indicates inspection a minimum of twice a year. Please consider revising the O&M to meet the Mass Handbook.**

The O&M Plan has been updated to include monthly monitoring and sediment removal a minimum of four times per year for the forebay.

### Stormwater Management Bylaw

14. Per Section 16-4, 6, D, of the Stormwater Management Bylaw, final inspection shall include a full TV inspection of the stormwater pipes installed. The applicant has requested a waiver due to the few proposed pipes and the fact that the facility will remain privately owned, will be maintained by the applicant, and will not

be the responsibility of the Town of South Hadley. Fuss & O'Neill agrees with the applicant that there does not appear to be any proposed stormwater piping within the project and the project will remain privately owned and the responsibility of the owner. It is the discretion of the Planning Board to allow a waiver.

*No action required.*

**Planning Board to review**

**No additional response required**

21. Per Section 16-6, H, of the Stormwater Management Bylaw, runoff from parking lots shall be treated by an oil and water separator or other controls to remove oil and sediment. A stormwater treatment device that removes oils has not been provided for the paved parking area. A stormwater device that treats oil shall be provided for the paved parking area.

*A stone filter strip to help remove oils is included along the edge of the paved parking area. The paved area is of limited size, 2,640 square feet with space for nine employee vehicles, and is not served by a closed drainage system. There is no closed drainage system available on site or within New Ludlow Road for connection of an outlet from an oil and water separator.*

**Fuss & O'Neill understands there is no closed system to outlet to an oil and water separator. We feel the use of a stone filter strip will suffice as a device to treat runoff. To ensure the stone filter strip will function properly it is recommend that operation and maintenance be provided within the O&M Plan.**

**The O&M Plan has been updated to include a section regarding the stone filter strip previously shown on the last plan revision.**

**Stormwater Management Standards**

23. Standard 1: No new untreated discharges have been created. Addressed.

24. Standard 2: Above comments may require revisions to the peak discharge calculations

*Addressed above*

**Comments addressed – Standard has been addressed.**

25. Standard 3: Above comments may require revisions to the required groundwater recharge and 72 hour draw down calculations.

*Addressed above*

**Comments addressed – Standard has been addressed.**

26. Standard 4: Above comments may require revisions to the required water quality volume and the TSS removal.

*Addressed above*

**Comments addressed – Standard has been addressed.**

27. Standard 5: The project is considered a land use with as a higher potential pollutant loads. Per the Mass Stormwater Handbook, 44% TSS pretreatment must be provided prior to discharge to the infiltration basin.

*44% TSS pretreatment provided*

**Pretreatment has been provided. Standard has been addressed.**

28. Standard 6: The site does not discharge to critical areas. Not applicable.
29. Standard 7: The project is a redevelopment project. The applicant has stated the project meets new development standards; however comments above will require changes to meeting the standards.

*Addressed above*

**Comments addressed – Standard has been addressed.**

30. Standard 8: Comments above require revision to the erosion and sedimentation.

*Addressed above*

**Comments addressed – Standard has been addressed.**

31. Standard 9: Comments above require revision to the O&M.

*Addressed above*

**Comment above require revision to the O&M**

**O&M Plan has been revised to address the above comments.**

32. Standard 10: An illicit discharge state has been provided. – Addressed.

We appreciate everyone's assistance with this project and look forward to meeting with you to discuss this project in detail.

Very truly yours,



Donald J. Frydryk, P.E., P.L.S.

C DEP – Wetlands  
South Hadley Conservation Commission  
Quality Fleet Services, Inc.  
Fuss & O'Neill

## OPERATION & MAINTENANCE PLAN

“Quality Fleet Services, Inc.”

### SITE DEVELOPMENT

548 New Ludlow Road

South Hadley, MA

June 10, 2015

Revised August 31, 2015

It is anticipated that Quality Fleet Services, Inc. will retain responsibility for the operation and maintenance of the stormwater system upon completion of construction. An annual budget cost of approximately \$1,500 is anticipated for the operation and maintenance of the stormwater system. Until such time, the contractor of the project will be responsible for operation and maintenance.

The contractor selected to complete the site work construction will be responsible for the operation and maintenance of the temporary erosion control measures during construction and the stormwater management system during the construction phase of the project. Erosion control measures shall be installed and maintained as shown on site plans for the project in accordance with details shown on the plan. Erosion control shall be maintained as detailed on the site plans.

The following maintenance and inspection recommendations are taken from DEP's Stormwater Management Technical Handbook and shall become part of the operation and maintenance plan for the stormwater management system located on the site:

**All stormwater management devices shall be thoroughly cleaned immediately after any spill which may occur on site.**

All stormwater management components shall be inspected on a monthly basis during the first six months of operation after the completion of construction. At least three monthly inspections of the stormwater management system must take place during the first growing season after the completion of construction.

**Infiltration Basin:** Once the infiltration system goes on-line, inspections shall occur after every major storm for the first six months to ensure proper stabilization and function. Standing water in the basin 48 to 72 hours after the storm indicates the infiltration capacity may be compromised due to clogging of the soil. Sediment shall be removed as necessary to maintain infiltration and capacity of the components.

After the initial six-month period, the infiltration basin shall be inspected at least twice per year. Items to check include standing water, differential settlement, erosion, and sediment

accumulation. Sediment shall be removed from the infiltration basin as necessary. Removal procedures should not take place until the infiltration basin is thoroughly dry.

At least twice per year, the buffer area, side slopes, and basin bottom shall be mowed. Grass clippings and accumulated organic matter shall be removed to prevent the formation of an impervious organic mat. Trash and debris shall also be removed at this time. Deep tilling can be used to break up a clogged surface area. Any tilled areas on the slopes of the basin shall be revegetated immediately.

The infiltration basin is equipped with a sediment indicator pad. At the time of inspection, the inspector shall locate the pad by probing the bottom of the basin and sediment shall be removed when 1 inch of sediment covers the indicator pad. Sediment shall be removed across the basin to 1 inch below the level of the indicator pad. Removal procedures should not take place until the floor of the basin is thoroughly dry. Light equipment, which will not compact the underlying soil, should be used to remove the top layer. The remaining soil should be deeply tilled, and revegetated as soon as possible.

**Sediment Forebay:** Once the infiltration system goes on-line, inspections shall occur after every major storm for the first six months to ensure proper stabilization and function. Standing water in the basin 48 to 72 hours after the storm indicates the infiltration capacity may be compromised due to clogging of the soil. Sediment shall be removed as necessary to maintain capacity of the forebay.

After the initial six-month period, the sediment forebay shall be inspected monthly. Items to check include standing water, differential settlement, erosion, and sediment accumulation. Sediment shall be removed from the forebay a minimum of four times per year. Removal procedures should not take place until the forebay is thoroughly dry.

At least twice per year, the side slopes and forebay bottom shall be mowed. Grass clippings and accumulated organic matter shall be removed to prevent the formation of an impervious organic mat. Trash and debris shall also be removed at this time. Deep tilling can be used to break up a clogged surface area. Any tilled areas on the slopes of the forebay shall be revegetated immediately.

The sediment forebay is equipped with a sediment indicator pad. At the time of inspection, the inspector shall locate the pad by probing the bottom of the forebay and sediment shall be removed when 1 inch of sediment covers the indicator pad. Sediment shall be removed across the forebay to 1 inch below the level of the indicator pad. Removal procedures should not take place until the floor of the forebay is thoroughly dry. Light equipment, which will not compact the underlying soil, should be used to remove the top layer. The remaining soil should be deeply tilled, and revegetated as soon as possible.

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Grass Swale: Mow on an as-needed basis during the growing season so that the grass height does not exceed 6 inches. Remove accumulated trash and debris prior to mowing. Inspect swale semi-annually the first year and at least once a year thereafter. Inspect the grass for growth and the side slopes for signs of erosion and formation of rills and gullies. Plant an alternative grass species if the original grass cover is not successfully established. If grass growth is impaired by winter road salt or other deicer use, re-establish the grass in the spring.

Check grass swale on a yearly basis for sediment and clean as needed. Use hand methods when cleaning to minimize disturbance to vegetation and underlying soils.

Stone Filter Strip: Maintenance of the stone filter strip is essential for the strip to remain effective and to ensure the runoff from the paved area does not short-circuit the system. Over time, the strip may become sediment laden and decrease the filtration capacities of the filter strip. The stone filter strip shall be inspected at least once a month for the first three months after placement to ensure the area drains properly after storms. After the first three months, inspect the filter strip after all major storms and on regular intervals every three months after that.

If the above observations note a reduced capacity for sediment trapping and infiltration of runoff, it is likely the stone filter strip has become clogged. Once this reduced filtration capacity is observed, the stone filter strip shall be replaced with washed stone and regraded to match the original grades. The original stone which is removed shall be disposed of properly off site.

If a spill occurs on the paved area draining to the filter strip, the filter strip and surrounding soils shall be immediately removed and properly disposed of by qualified personnel.

**Mosquito Prevention and Control:** Clear debris and vegetation from the roof leader connections and the general site area to limit standing pools of water. Larvicides shall be applied as necessary to the catch basins and infiltration basin if ponding remains over 72 hours. All larvicides shall be applied by a licensed pesticide applicator and in compliance with all pesticide label requirements. The larvicide *Bacillus sphaericus (Bs)* or approved equal shall be hand broadcast during or immediately after wet weather, when the detention or infiltration basin has a standing pool of water, unless the product used can withstand extended dry periods.

**Public Safety Features:** All differential settlement shall be graded smooth and seeded.

**Maintenance Responsibility**

- A. The owner of the property on which work has been done pursuant to this Ordinance for private stormwater management facilities, or any other person or agent in control of such property, shall maintain in good condition and promptly repair and restore all grade surfaces, walls, drains, dams and structures, vegetation, erosion and sediment control measures and other protective devices. Such repairs or restoration and maintenance shall be in accordance with approved plans.
- B. Quality Fleet Services, Inc. will retain responsibility for the operation and maintenance of the stormwater system, the infiltration basin shall be inspected at least twice per year. Items to check include standing water, differential settlement, erosion, and sediment accumulation.
- C. A record of installation and a rolling log of operation and maintenance activities shall be retained for a minimum of three years. The log shall be made available to the Authorized Enforcement Agency upon request.
- D. Failure to properly maintain practices during and post construction is considered a violation of the stormwater permit.
- E. There are no proposed easements associated with the operation of the Stormwater Management System. Quality Fleet Services, Inc. will allow access to the public officials or their agents for inspection of the system at reasonable times.
- F. Quality Fleet Services, Inc. will notify the Town of South Hadley Planning Board if the facility were to change ownership to signify the end of their responsibility for operation and maintenance of the facility.
- G. Quality Fleet Services, Inc. acknowledges that after notice by the Permit Granting Authority to correct a violation requiring maintenance work, satisfactory correction are not made by Quality Fleet Services, Inc., within thirty days, the Department of Public Works may perform all necessary work to place the facility in proper working condition and place a municipal lien on the affected property as security for all of the cost assumed by the Town to perform the work.

**Operator Information**

Name(print): \_\_\_\_\_ Signature: \_\_\_\_\_  
 \_\_\_\_\_  
 Address: Quality Fleet Services, Inc. Date: \_\_\_\_\_  
625 State Street, Belchertown, MA  
 Telephone: \_\_\_\_\_

**Owner Information**

Name(print): Nick Moynihan Signature: \_\_\_\_\_  
 \_\_\_\_\_  
 Address: The Moynihan Realty Group, LLC Date: \_\_\_\_\_  
625 State Street, Belchertown, MA  
 Telephone: (413) 695 - 3232

**South Hadley Planning Board**

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



“Quality Fleet Services, Inc.”  
**SITE DEVELOPMENT**  
 548 New Ludlow Road  
 South Hadley, MA

**OPERATION AND MAINTENANCE LOG FORM**

INSPECTOR: \_\_\_\_\_ DATE: \_\_\_\_\_

INSPECTORS QUALIFICATIONS: \_\_\_\_\_

\_\_\_\_\_

DAYS SINCE LAST RAINFALL: \_\_\_\_\_ AMOUNT OF LAST RAINFALL \_\_\_\_\_ INCHES

**STRUCTURAL CONTROLS**

BMP	CONDITION	EVIDENCE OF SEDIMENT LEAVING SITE OR CONTROL	NEEDS MAINTENANCE (NOTE BELOW)
SEDIMENT BASIN			
SEDIMENT FOREBAY			
INFILTRATION BASIN			
GRASS SWALE			
ADDITIONAL MEASURES RECOMMENDED			
ADDITIONAL MEASURES RECOMMENDED			
ADDITIONAL MEASURES RECOMMENDED			
FILTER STRIP AT PAVEMENT			

**MAINTENANCE REQUIRED:** \_\_\_\_\_  
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**TO BE PERFORMED BY:** \_\_\_\_\_ **ON OR BEFORE:** \_\_\_\_\_