

Stormwater BMP Operation & Maintenance Manual

Douglas Corner

Lot 1B

150 NE Tudor Road

Prepared For:

Capital Builders, LLC

1507 NE Wall Street

Lee's Summit, MO 64086

Prepared By:

Hg Consult, Inc.

1533 Locust

Kansas City, MO 64108



Table of Contents

Stormwater Management Facilities Description

Site Contacts and Change of Ownership Plan

Maintenance Procedures

Inspection Procedures

BMP Waste Disposal

Appendices

Exhibits

Forms and Checklists

Stormwater Management Facilities Description

General Site Description

The storm water management facility for the Douglas Corner Commercial building site is an open pond, located behind and east of the building. The pond serves as a regional detention facility for the new building site on Lot 1B, but for the existing building sites in the Douglas Corner complex as well. As designed and built, there are two locations for discharge of stormwater into the pond through underground piping systems and one discharge point out of the pond, through a pipe into an offsite piping system to the east. Details of the system are shown on the as-built plan in the appendix.

Stormwater Management Facility

The function of the pond as a BMP, is to regulate the storm water flow for the various storm events from the site and reduce the flow to required levels as it exits the site.

Features of this BMP are a pond sized for the volume needed to accumulate for discharge regulation, rip rap at the discharge pipes and turf reinforcement mat on the interior slopes for erosion control.

The general characteristics of the pond are 3 to 1 slope, 2% bottom drainage toward the outlet pipe and erosion control measures in and around the pond until revegetation occurs.

Site Contacts and Requirements for Change of Ownership or Manual Revision

Site Contacts:

Matt Hendrickson (owner/developer)- 816-609-8633

Kevin Sterrett, PE (engineer)- 816-703-7098

BMP Owner:

Matt Hendrickson (Property Owner)-816-609-8633

Manual Changes

In the event that changes need to be made to this manual, initiated by the owner or engineer, the city will be advised of such changes. The city must approve the changes and the latest version be in the possession of the owner and be provided to any new owner in the event of the sale of the property. The city will be notified of any change of ownership.

Maintenance Procedures

Routine Maintenance

The grass area within the pond will need to be cut on a bi-weekly basis, the growing season of April through September.

Removal of trash and debris is to be performed as needed, but at least yearly.

Outlet piping to be kept free of blockage materials on an ongoing basis.

Non-Maintenance Activities

Sediment removal shall be provided on an as needed basis but at least quarterly.

Slopes are to be repaired on an as needed basis. Revegetate as necessary, with sod or TRM.

Erosion areas are to be repaired as needed and revegetated with sod or TRM.

Maintenance Materials

Any material used for repair should be the same as originally installed such as:

N-12 HDPE pipe

Tensar Turf Reinforcement Mat

D50 6" Rip Rap

Safety

Care should be taken when conducting maintenance activities. Hazards should be anticipated and avoided. Confined spaces should not be entered without proper training, monitoring, and equipment.

Inspection Procedures

Inspections shall be performed by qualified personnel familiar with the operation of the BMP facility. Inspections during the first year of operation will be required every three months using the Inspection Checklist in the Appendix. Inspections after the first year of operation will be required annually using the Inspection Checklist in the Appendix, with inspection forms retained for 10 years from the inspection date.

BMP Waste Disposal

BMP waste is any loose material generated from the movement of storm water through the basin. This includes silt, trash, grass clippings, brush, or tree branches.

These types of waste may be removed by hand, hand equipment (shovel, rake, or chain saw) or if needed, wheelbarrow or small skid steer if the amount requires the use.

If the basin is plugged and water is standing, remove any floating debris with the appropriate tools such as a rake or screened net and discard it in an appropriate container and vehicle. Once the basin drained, remove any residual sediment and discard in container. All waste to be removed from the site and discarded at a site that allows for said material.

Appendices

Exhibits

-As-Built Drawings

Checklist

-Inspection Checklist