

Mountain View's Stormwater Treatment BMP Maintenance and Inspection Tracking Program

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Purpose

- Provide an overview of the process from design -> construction -> tracking
- Describe "Operating Permit"
- Show an example of a completed project

Process Overview

- Development Review Process – Conditions of Approval (and sooner)
- Stormwater Management Plan review – FEPD and Public Works Department
- Inspections of BMPs during construction
- Project completion – Maintenance Agreements and establish maintenance responsibility

Process Overview Continued

- Permit Application - owner, property manager, HOA
- Issue "Operating Permit," which lists inspection and maintenance requirements
- Permitted location added to Stormwater BMP database for tracking

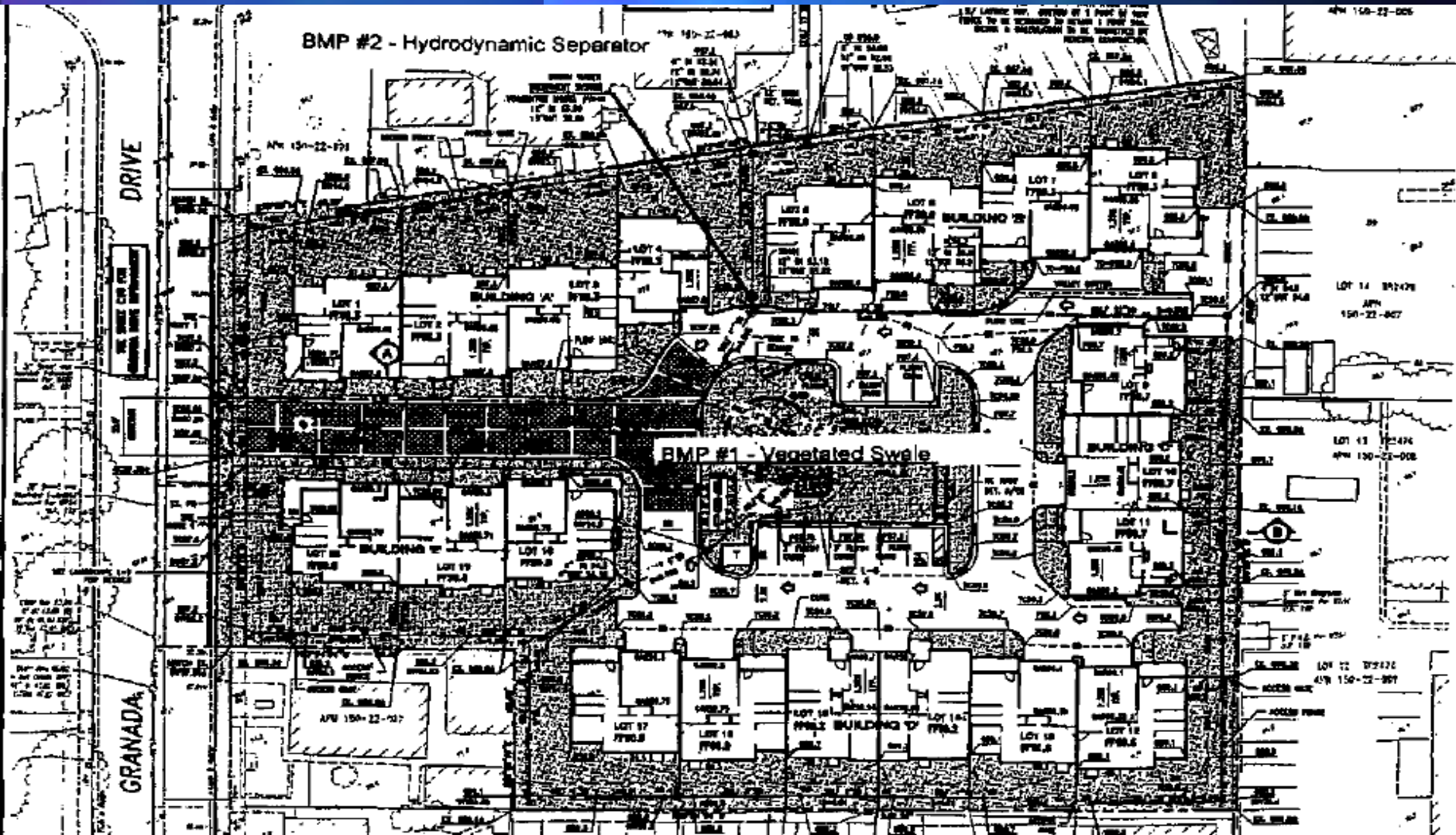
Process Overview Continued

- Annual letter to be sent to permittees requiring submittal of maintenance records and self-inspection logs
- Permits re-issued annually
- City will inspect BMPs annually
- Maintenance and inspections will be tracked on the database

Example – Granada Park

- 20 Townhomes and a small park on 1.77 acres – 1 acre of impervious surface
- BMPs include:
 - Disconnected Roof Downspouts
 - Central Vegetated Swale
 - Hydrodynamic Separator

Site Plan



Granada Park



Granada Park



Disconnected Downspouts



Vegetated Swale



Hydrodynamic Separator



Pretreatment?



Operating Permit Compliance Package Includes:

- Operating Permit describing inspection and maintenance requirements.
- Directory
- Map
- Inspection log sheets

**STORMWATER TREATMENT BMP
OPERATING PERMIT**

Permitted **Granada Park**
Facility **233 Granada Drive**

Date Issued: **5/9/2008**
Date Revised:
Date Expires: **6/30/2009**
Permit ID: **0016**

Nathan Matson
One Annabel Lane, Ste 217
San Ramon, CA 94583

Jaymae Wentker
Jaymae Wentker, Fire Marshal

Reference: **MVCC 35.32.23/NPDES Permit CAS029718**

I. BMP Type and Location(s):

ID	BMP Type	BMP Location
1	Vegetated Swale	Park located in the center of the development.
2	Hydrodynamic Separators	in the Landscape between 233 and 235 Granada Park Dr.

II. BMP Maintenance Requirements:

ID	BMP Maintenance Frequency	Comments
1	As needed	Landscape maintenance and repairs as needed.
2	Semi-annually	Pump out twice a year before and after the rainy season.

III. Special Conditions/Requirements:

- * All BMPs shall be inspected at least quarterly.
- * An inspection log shall be maintained and submitted to the City upon request.
- * No standing water shall be allowed to remain longer than 72 hours.
- * If mosquitoes or mosquito larvae are present in the separator, control mosquitoes with approved abatement product.
- * All BMPs shall be maintained in accordance with the schedule listed in Section II above.
- * Maintenance documentation shall be submitted to the City annually, or upon request.

Facility ID:	0016
Updated:	

I. SITE INFORMATION

Site Name: Granada Park

Site Address: 233 Granada Drive

II. OWNER INFORMATION

Owner Name: Granada Park Owner's Association

Owner Phone: 925-824-2888

Owner Mailing Address: One Annabel Lane, Ste 217

City: San Ramon

State: CA

Zip: 94583

III. PRIMARY CONTACT INFORMATION

Primary Contact: Nathan Matson

Title: Property Manager

Business Phone: 925-824-2888

24-Hour Phone: 800-490-8115

Mailing Address: One Annabel Lane, Ste 217

City: San Ramon

State: CA

Zip: 94583

IV. SECONDARY CONTACT INFORMATION

Secondary Contact: Karla Roeseler

Title: Property Manager

Business Phone: 925-824-2888

24-Hour Phone: 800-490-8115

V. PROPERTY OWNER INFORMATION

Property Owner: Granada Park Owner's Association

Phone: 925-824-2888

Based on my inquiry of those individuals responsible for obtaining the information, I certify under penalty of law that I have personally examined and am familiar with the information submitted and believe the information is true, accurate, and complete.

Signature of Owner/Operator	Date	Name of Document Preparer
Name of Signer (print)	Title of Signer	

Stormwater Treatment BMP Inspection and Maintenance Guidelines: Vegetated Swale

Facility: *Granada Park*

Inspection Log: Year _____

Inspection Item	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Comment/action
Drainage area - Litter, debris, or sediment													
Swale - inlet blockage - leaves, debris, sediment													
Swale - inlet erosion													
Swale condition - erosion													
Swale condition - established vegetation													
Swale - drains within 72 hours													

Maintenance Guidelines:

- *Remove litter, debris, and accumulated sediments in the drainage area.*
- *Remove accumulated material clogging the inlet or repair inlet to ensure flow will enter the swale.*
- *Perform routine landscape maintenance to maintain healthy, well-established vegetation, including irrigation, mowing, and soil conditioning. Maintain turf height or 3-4 inches.*
- *Fertilizer or pesticide applications are prohibited, since applied products will be flushed to the storm drain.*
- *Repair eroded soil, as needed. Install rock or cobble and the inlets to dissipate runoff energy and minimize erosion.*
- *Rototill or aerate the surface of the swale if swale does not draw down within 72 hours.*
- *Repair the swale to prevent ponding, as needed.*
- *If applicable, unclog the underdrain, as needed.*

Stormwater Treatment BMP Inspection and Maintenance Guidelines: Hydrodynamic Separators

Facility: *Granada Park*

Inspection Log: Year _____

Inspection Item	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Comment/action
Drainage area - Litter, debris, or sediment													
Separator - inlet blockage - leaves, debris, sediment													
Separator - accumulation of sediment, debris, or other pollutants (oil)													
Separator condition - evidence of deterioration													
Separator - Mosquitoes or mosquito larvae present													

Maintenance Guidelines:

- *Remove litter, debris, and accumulated sediments in the drainage area.*
- *Remove accumulated material clogging the inlet or repair inlet to ensure flow will enter the separator.*
- *Flush and vacuum the separator at least semi-annually to remove accumulated sediments and trapped pollutants. At a minimum, the routine flushing and vacuuming operations must occur before the rain season and after the rain season. Additional maintenance must be conducted as needed.*
- *Repair the separator as needed.*
- *Add mosquito abatement product, such as Mosquito Dunks, Mosquito Bits, or Vectobac, as needed.*

STORMWATER BMPs

Facility ID: 0016
Updated:

Site Name:

Site Address:

ACTIONS COMPLETED

<u>Date</u>	<u>Reason for Inspection</u>	<u>BMP Type</u>	<u>Inspection Results 1</u>	<u>Inspection Results 2</u>	<u>Inspection Results 3</u>	<u>Inspection Results 4</u>	<u>Enforcement Acti</u>

ACTIONS SCHEDULED

<u>Date</u>	<u>Follow-Up Actions Scheduled</u>	<u>Comments</u>	<u>Del</u>
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Questions?

