Stormwater Pollution Prevention Plan (SWPPP)

Mixed Use Development

# **Stormwater Pollution Prevention Plan**

# For:

Commercial Street & Maple Street
Mixed Use Development
321 Commercial Street
Portland, ME

# Operator:

Opechee Construction Corporation (OCC)
11 Corporate Drive
Belmont, NH 03220
Office Phone: (603) 527-9090
Office Fax: (603) 527-9191

## **SWPPP** Contact:

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**SWPPP Preparation Date:** 

10-22-12

updated - grob mitted

Estimated Project Dates:

Start of Construction: February 2013 Completion of Construction: May 2014



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#### SECTION 1

## Project/Site Information

## 1.1 - Project Name and Location: (Latitude, Longitude, or Address)

Commercial & Maple Street Mixed Use Development 321 Commercial Street Portland, Cumberland County, ME Lat: 43° 39' 34.51" N

Long: -070° 15' 04.29" W

## 1.2 - Owner Name and Address:

J B Brown & Sons 36 Danforth Street Portland, ME 04101

## 1.3 - Operators Name, Address, Phone Number:

Opechee Construction Corporation Steve Long 11 Corporate Drive Belmont, NH 03220 Office Phone: (603) 527-9090

Office Fax: (603) 527-9191 Email: stevel@opechee.com

#### Description of Operator's Control:

Opechee Construction Corporation (OCC) has been hired by the applicant to design and permit the project and oversee all aspects of the construction phase of the project, including preparation and implementation of the SWPPP to meet Maine's Construction General Permit. OCC will be responsible for general oversight of the project and will retain operational control over construction plans and specifications, including review of the SWPPP and any amendments, inspection reports, corrective actions and changes to stormwater conveyance or control designs. OCC will implement and maintain the best management practices (BMPs) specified in Sections 2 and 3, conduct inspections (Section 5) and address stormwater over the entire site including all areas disturbed by construction activities, areas used for materials storage, discharge points, and construction exits.



#### 1.4 - Nature of Construction Activity:

J.B. Brown & Sons is proposing a mixed-use development at the corner of Maple Street and Commercial Street. The site is shown on the site plan which is attached to this application. The proposal includes a 131 room hotel, 7,000 sf of restaurant use, and 14 residences. The proposed development is located on the west side of Commercial Street on the site of an existing gravel surface parking lot (#311-331 Commercial Street). The site is bordered by Commercial Street to the east, Maple Street to the south, a commercial building and parking lot to the north and a parking lot to the west. The project site is identified on City of Portland tax maps as Map 40, Block E, Lot 3. The site is surrounded by a mix of business, commercial, and residential uses including; hotels, parking lots, restaurants, office space, apartments, condominiums and other commercial uses.

The project's on-site drainage system will discharge runoff into the City's municipal system located in Commercial Street. The drainage flows enter a manhole at the intersection of Maple and Commercial Street and are directed to Casco Bay. During large storm events overflow from the combined sewer system enters the drainage system via a sewer manhole with a weir. This manhole is located in front of the lumberyard entrance on Maple Street. Flows that go above the weir are diverted to the drain manhole located at the intersection of Commercial Street via two 15" RCP pipes. This manhole directs flows to Casco Bay.

Soil disturbing activities will include following: Demolition, minimal clearing & grubbing, excavation for sewer, storm drainage, underground utilities, building foundations, cuts and fills, grading, and preparation for final seeding and plantings.

## 1.5 - Project Area:

The site is approximately 0.89 acres size and is currently a surface parking lot. This project proposes a six-story mixed-use building containing 7,460 sf of restaurant space, 84,280 sf of hotel space, and 14 residential units. The project will disturb approximately 1.3 acres.

#### 1.6 - Construction Site Estimates:

Total Project Area (area of parcel):

Construction Site Area to be disturbed (including right-of-way):

Impervious area before construction:

Runoff coefficient before construction (SCS Method):

Impervious area after construction:

Runoff coefficient after construction (SCS Method):

95

Solution:

Supervious area after construction:

#### 1.7 - Receiving Waters:

The impervious surfaces of the site drain into the municipal system surrounding the site and then discharge into the Fore River near the entrance to Casco Bay (Atlantic Ocean).



# 1.8 - Sequence and Timing of Major Activities:

- 1. Clear & grub, and demolish as necessary to install a stabilized construction exit, and the sediment barriers as indicated in the construction details in the site plans.
- 2. Install stabilized construction exit, sediment barriers, and sediment traps as specified in the construction details.
- 3. Continue to clear & grub, and perform demolition as required.
- Construct temporary drainage and/or erosion control facilities as necessary (i.e. sediment traps, and/or dandy sacks).
- 5. Strip and remove any loam, unsuitable materials, and unsuitable soils from the site. Then where necessary, replace with a clean backfill as specified by a Geotechnical Engineer.
- 6. Perform cuts and fills as required.
- Temporary stabilize any exposed soils that will not be worked for more than 7 days with seed, mulch or other non-erodable cover. See Section 2.2 below for direction on temporary stabilization practices.
- 8. Construct any additional temporary sediment and erosion control facilities as required. (i.e. stone check dams and/or dandy sacks).
- 9. Begin constructing municipal sewer and drainage systems
- 10. Begin constructing building foundation.
- 11. Finishing constructing stormwater conveyance systems as required.
- 12. Finish constructing wastewater conveyance systems as required.
- 13. Install all other utilities as required.
- 14. Place bank run gravel course in areas to be paved.
- 15. Loam, and permanently seed (or sod) all areas that are not to be worked for more than one year or that has been brought to final grade. See Section 2.2 below for direction on permanent stabilization practices.
- 16. Place crush gravel and construct pads for exterior concrete flatwork and pavement areas.
- 17. Finish grade, construct, and place all areas of concrete and base course pavement.
- 18. Install catch basin inlet sediment traps (i.e. silt sacks).
- 19. Complete loaming, permanent seeding (or sod), and mulching. Reseed any areas that have not been established from prior seeding.
- 20. Complete final paving (wearing course).
- 23. When all construction activity is complete and the site is stabilized, remove temporary erosion control measures and reseed (or sod) any areas disturbed by their removal.

#### 1.9 - Potential Sources of Pollution

Potential sources of sediment to stormwater runoff:

- Demolition
- Clearing and grubbing operations
- Topsoil stripping and stockpiling
- Grading and site excavation operations
- Vehicle tracking
- Landscaping operations



Potential pollutants and sources, other than sediment, to stormwater runoff:

- Combined Staging Area small fueling activities, minor equipment maintenance, sanitary facilities, and hazardous waste storage.
- Materials Storage Area general building materials, solvents, adhesives, paving materials, paints, aggregates, trash, and so on.
- Construction Activity paving, curb installation, concrete pouring,/mortar
- Concrete Washout Area

Inventory of Potential construction site pollutants:

- Concrete
- Detergents
- Paints
- Metal Studs
- Steel Beams
- Asphalt
- Fertilizers
- Pesticides
- Cleaning solvents

- Wood Preservatives
- Masonry block
- Roofing Material
- Glue, adhesives
- Brick
- Insulation
- Curing compounds
- Hydraulic oil/fluids
- Sheetrock

- Plaster
- Gasoline
- Diesel fuel
- Kerosene
- Antifreeze/coolant
- Sanitary toilets

## 1.10 - Non-Stormwater Discharges:

It is expected that the following non-stormwater discharges will occur from the site during the construction period:

- Fire hydrant flushing;
- · Potable water including uncontaminated water line flushing;
- Sprinkler testing;
- Pavement & concrete wash waters where spills or leaks of toxic or hazardous materials have not
  occurred (unless all spilled material has been removed) and where detergents are not used;
- Uncontaminated groundwater or spring water;
- Waters used to wash vehicles where detergents are not used;
- Water used to control dust;
- Uncontaminated air conditioning or compressor condensate;
- Uncontaminated excavation dewatering;
- Landscape irrigation;
- Foundation or footing drains where flows are not contaminated with process materials such as solvents.

All non-storm water discharges will be directed through sediment control measures before discharge.

## 1.11 - Endangered Species Certification

The Maine Department of Inland Fisheries and Wildlife, US Fish and Wildlife Service, Maine Natural Areas Program databases were checked for records of rare species and exemplary natural communities near the project area. The species considered include those listed as threatened or endangered by either the State of Maine or the federal government. Currently there are no recorded occurrences for sensitive species near this project area. Please see Appendix C for supporting documentation.



# 1.12 - Applicable State, Tribal, or Local Programs

- Local City of Portland Planning Board Approval is required.
- A Certificate of Appropriateness is required from the Portland Historic Preservation Commission is required.
- The city of Portland is the designated authority for approval of Stormwater Management.

#### 1.12 - Maps

Please see Appendix K – For the Demolition, Site, Grading and Erosion Control Plans

#### SECTION 2

#### **Erosion and Sediment Control BMPS**

## 2.1 - Overview of the Stormwater Management System:

Stormwater runoff from the newly constructed impervious areas will be controlled and conveyed by the use of curbing, catch basins with sumps, and drainage manholes. This on-site drainage system will discharge the runoff into the City's municipal system located in Commercial Street. The drainage flows enter a manhole at the intersection of Maple and Commercial Street and are directed to Casco Bay. During large storm events overflow from the combined sewer system enters the drainage system via a sewer manhole with a weir. This manhole is located in front of the lumberyard entrance on Maple Street. Flows that go above the weir are diverted to the drain manhole located at the intersection of Commercial Street via two 15" RCP pipes. This manhole directs flows to Casco Bay.

The proposed project only slightly increase the on-site impervious cover. Thus detention of stormwater runoff for purposes of mitigating peak flow rates is not required.

Open space areas will be graded as per the site plan and will have permanent seeding or plantings. When construction is completed and the site is stabilized, all accumulated sediment and temporary erosion control devices will be removed from the site and be properly disposed of.

#### 2.2 - Stabilization Practices:

• Temporary Stabilization measures shall be performed with mulch or other non-erodable cover any exposed soils that will not be worked for more than 7 days. Stabilize areas within 75 feet of a wetland or water body within 48 hours of the initial disturbance of the soil or prior to any storm event, whichever comes first.

If temporary seeding is being utilized, the mixture will vary based on time of seeding:

oats	2.0 lbs/1,000 sq.ft.
sudangrass	1.0 lbs/1,000 sq.ft.
annual ryegrass	2.0 lbs/1,000 sq.ft.
winter rye	2.5 lbs/1,000 sq.ft.
winter rye (protect	2.5 lbs/1,000 sq.ft.
	sudangrass annual ryegrass winter rye



Prior to seeding, all stones and trash that will interfere with the seeding should be removed, the soil should be tilled to a depth of 3 inches (where feasible), and the area should be fertilized with a minimum 7 pounds per 1,000 sq.ft. of a 10-10-10 fertilizer. After seeding, the area is to be mulched with straw.

- Winter Stabilization is necessary when construction activity is performed during the period from November 1st through April 15<sup>th</sup>. If disturbed areas are not stabilized with permanent measures by November 1<sup>st</sup> or new soil disturbance occurs after November 1<sup>st</sup>, but before April 15<sup>th</sup>, then these areas must be protected and runoff from them must be controlled by additional measures and restrictions.
- •Permanent Stabilization measures shall be performed if an area will not be worked for more than one year or has been brought to final grade, then permanently stabilize the area within 7 days by planting vegetation, seeding, sod, or through the use of permanent mulch, or riprap, or road sub-base. If using vegetation for stabilization, select the proper vegetation for the light, soil, and moisture conditions; amend areas of disturbed subsoils with topsoil, compost, or fertilizers; protect seeded areas with mulch or, if necessary, erosion control blankets; and schedule sodding, planting, and seeding to avoid die-off from summer drought and fall frosts. Newly seeded or sodded areas must be protected from vehicle traffic, excessive pedestrian traffic, and concentrated runoff until the vegetation is well-established. If necessary, areas must be seeded and mulched again if germination is sparse, plant coverage is spotty, or topsoil erosion is evident. One or more of the following may apply to a particular.

An area shall be considered permanently stable if:

- (a) Seeded Areas shall have a 90% cover of healthy plants with no evidence of washing or rilling of the topsoil.
- (b) Sodded Areas shall have a complete binding of the sod roots into the underlying soil with no slumping of the sod or die-off.
- (c) Permanent Mulched areas shall have a total coverage of the exposed area with an approved mulch material. Erosion control mix may be used as mulch for permanent stabilization according to the approved application rates and limitations.
- (d) *Riprap* used to stabilize slopes shall have an appropriate backing of well-graded gravel or approved geotextile to prevent soil movement from behind the stone. The stone must be sized appropriately. It is recommended that angular stone be used.
- (e) Paved areas shall have competed installing the compacted gravel subbase.
- (f) Ditches, Channels, and Swales shall have 90% cover of healthy vegetation, with a well-graded riprap lining, or with another non-erosive lining such as concrete or asphalt pavement. There must be no evidence of slumping of the channel lining, undercutting of the channel banks, or down-cutting of the channel.

Use permanent seed mixes and rates between 5/15 and 9/30. Permanent lawn mixtures shall be as follows:

Sun areas:

7 to 9 pounds per 1,000 sq.ft.

50% fine fescue

20% perennial ryegrass 20% Kentucky bluegrass 10% Dutch white clover

Shade areas:

4 to 5 pounds per 1,000 sq.ft.

70% fine fescue

20% perennial ryegrass 10% Kentucky bluegrass \* \*(shade tolerant variety)



Prior to seeding, apply 100 lbs/1,000 sq.ft. of lime and till into the upper 3 inches of soil. Then rake a starter-type fertilizer into the upper inch of soil that delivers 1 lb. of actual Nitrogen per 1000 sq.ft. After seeding, areas shall be mulched with straw.

## 2.3 - Temporary Erosion Control Devices:

- Compost Filled Silt Socks are a type of contained compost filter berm. It is a mesh tube filled with composted material that is placed perpendicular to sheet-flow runoff to control erosion and retain sediment in disturbed areas. The filter sock can be used in place of a traditional sediment and erosion control tool such as a silt fence or straw bale barrier.
- <u>Dandy Sacks</u> are sediment trap devices to be used with catch basin grates to filter out all the sediment-laden stormwater. The suspended solids are allowed to settle out of the slowed flow and are captured by the sack after entering the catch basin inlet.
- <u>Stabilized Construction Exit</u> are a stone stabilized pad located where vehicles leave a construction site. They provide an area where mud can be dislodged from tires before the vehicle leaves the construction site to reduce the amount of mud transported onto paved roads.
- <u>Dandy Curbs</u> are sediment by-pass devices to be placed at an inlet to prevent sediment-laden stormwater from entering a stormwater device. The suspended solids will by-pass the stormwater planter.

#### 2.4 - Schedule of Controls/Measures:

- Prior to construction, properly install the Stabilized Construction Exit
- Prior to construction, properly install sediment barriers at the edge of any down gradient disturbed area and adjacent to any drainage channels within the disturbed area.
- Prior to construction, properly install dandy sacks in inlets of any down gradient catch basins from the disturbed area.
- Maintain the sediment controls until the disturbed area is permanently stabilized.
- Once construction activity ceases permanently in an area, that area will be stabilized with permanent seed or mulch. After the entire site is stabilized, all accumulated sediment will be removed from any grassed swales, catch basins, riprap, and silt fences.
- Remove any temporary sediment control measures within 30 days after permanent stabilization is attained
- A log shall be kept to document the timing and description of grading and stabilization activities. Please see Appendix I for the Grading and Stabilization Activities Log.



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## SECTION 3

## Good Housekeeping BMPS

#### 3.1 - Waste Management:

#### Construction waste materials

All waste materials will be collected and stored securely in a metal dumpster rented from a local solid waste management company. The dumpster will meet all local and state solid waste management regulations. The dumpster will be emptied as necessary, and the trash will be hauled to the local dump or transfer center. No waste materials generated by construction will be buried onsite. 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 site superintendent managing the day-to-day site operations; 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 local or state regulation or by the manufacturer. Site personnel will be instructed in these practices and the site superintendent will be responsible for seeing that these practices are followed.

#### Sanitary Waste

A local licensed sanitary waste management contractor will collect all sanitary waste from the portable units.

#### 3.2 - Offsite Vehicle Tracking:

A stabilized construction entrance will be provided to help reduce vehicle tracking of sediments. The paved street into to the site entrance will be swept as necessary (could be as frequent as daily during heavy earth hauling operations) to remove any excess mud, dirt or rock tracked from the site. Dump trucks hauling material from the construction site will be covered with a tarpaulin.

#### 3.3 - Concrete Washout Area:

Concrete trucks shall only discharge washed out surplus concrete or drum wash water into an above grade concrete washout area. The temporary concrete washout area will be constructed with sufficient quantity and volume to contain all liquid and concrete waste generated by washout operations. The washout area shall be lined with plastic sheeting at least 10 mils thick and free of any holes or tears. Concrete mixer trucks and chutes will be washed in the designated area or concrete wastes will be properly disposed of off-site. The washout area will be cleaned out once the area is filled to 75 percent of the holding capacity or when the temporary washout area is no longer needed for the construction project. The concrete wastes will be allowed to harden; the concrete wastes will be broken up, removed and taken to a landfill for disposal. If the washout area is needed, the plastic sheeting will be replaced if tears occur during the removal of concrete wastes.

The wash water is alkaline and contains high levels of chromium, which can leach into the ground and contaminate groundwater. It can also migrate to a storm drain, which can increase the pH of area waters and harm aquatic life. Solids that are improperly disposed of can clog storm drain pipes and cause flooding. Installing concrete washout facilities not only prevents pollution but also is a matter of good housekeeping at your construction site.



## 3.4 - Spill Prevention:

- The following are material management practices that will be followed onsite during the construction project to reduce the risk of spills or other accidental exposures of material and substances to stormwater runoff.
  - o An effort will be made to store only enough product required to do the job
  - o All materials stored onsite will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure
  - o Products will be kept in their original containers with the original manufacturer's label
  - Substances will not be mixed with one another unless recommended by the manufacturer
  - o Whenever possible, all of a product will be used up before disposing of the container
  - o Manufacturer's recommendations for proper use and disposal will be followed
  - o The site superintendent will inspect daily to ensure proper use and disposal of materials
  - Products will be kept in original containers unless they are not re-sealable
  - Original labels and material safety data will be retained; they contain important product information
  - If surplus product must be disposed of, manufacturers' or local and State recommended methods for proper disposal will be followed.
- The following product specific practices will be followed onsite:
  - o Petroleum Products:

All onsite vehicles will be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Petroleum products will be stored in tightly sealed containers which are clearly labeled. Any asphalt substances used onsite will be applied according to the manufacturer's recommendations.

o Fertilizers:

Fertilizers used will be applied only in the minimum amounts recommended by the manufacturer. Once applied, fertilizer will be worked into the soil to limit exposure to stormwater. Storage will be in a covered shed or trailer. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

- o Paints:
  - All containers will be tightly sealed and stored when not required for use. Excess paint will not be discharged to the storm sewer system but will be properly disposed of according to manufacturers' instructions or State and local regulations.
- In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following practices will be followed for spill prevention and cleanup:
  - Manufacturers' recommended methods for spill cleanup will be clearly posted and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.
  - o Materials and equipment necessary for spill cleanup will be kept in the material storage area onsite. Equipment and materials will include but not be limited to brooms, dustpans, mops, rags, gloves, goggles, absorbent (i.e. clay kitty litter), sand, sawdust, and plastic and metal trash containers specifically for this purpose.
  - o All spills will be cleaned up immediately after discovery.
  - o The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
  - Spills of toxic or hazardous material shall be reported to the appropriated state or local government agency, regardless of the size of the area involved or the quantity of material spilled.



- The spill prevention plan shall be adjusted to include measures to prevent this type of spill from reoccurring and how to cleanup the spill if it recurs.
- O The site superintendent responsible for the day-to-day site operations will be the spill prevention and cleanup coordinator. All site sub-contractors are responsible for providing at least one site personnel apiece who will receive spill prevention and cleanup training. These individuals will each become responsible for a particular phase of prevention and cleanup. The names of responsible spill personnel will be posted in the material storage area and in the office trailer onsite.

## **SECTION 4**

## Inspections

## 4.1 - Inspection Personnel

Opechee Construction Corporation's on-site project manager is the compliance officer for OCC
and is responsible for site compliance with the SWPPP and EPA's Construction General Permit.
Opechee Construction Corporation's on-site project manager will conduct inspections for all
areas of the site disturbed by construction activities, areas used for storage of materials that are
exposed to precipitation, discharge points, and construction exits.

In absence of an Opechee Construction Corporation's on-site project manager, the SWPPP contact for the operator (OCC) will conduct inspections

## 4.2 - Inspection Schedule and Procedures:

#### Schedule:

 Inspections of the site will be performed once every 14 days and within 24-hours of the end of a storm event of one-half inch or greater. The inspections will verify that all BMPs required in this SWPPP are implemented, maintained, and effectively minimizing erosion and preventing stormwater contamination from construction materials. For a copy of the inspection report, see Appendix J.

#### Procedures:

- The contractor shall remove all accumulated sediment and debris from the Dandy Pop
  panels and surface and vicinity of unit after each rain event or as directed by
  engineer/inspector. Dispose of unit no longer in use at an appropriate recycling or solid
  waste facility.
- Accumulated sediment shall be removed from the dandy sacks when the containment sack is one-third full. Remove the sacks with lifting straps and empty using dumping straps.
- The catch basin sumps will be inspected for sediment build-up and cleaned when sediment has accumulated within 12" of the outlet.
- Temporary and permanent seeding and planting will be inspected for bare spots, washouts and healthy growth
- A maintenance inspection report will be made after each inspection
- All necessary repairs to erosion control measures must be made as soon as possible.



#### Corrective Actions:

- If corrective actions are identified by OCC's on-site project manager during the inspection, they will notify and submit a copy of the inspection report to the OCC's project manager. For corrective actions identified, OCC's on-site project manager will be responsible for initiating the corrective action within 24-hours of the report and completing maintenance as soon as possible or before the next storm event. For any corrective actions requiring a SWPPP amendment or change to a stormwater conveyance or control design, OCC's on-site project manager will notify the project manager as soon as possible before initiating the corrective action.
- When corrective actions are completed, a log will be kept to describe the repair, replacement, and maintenance of BMPs undertaken as a result of the inspections and maintenance procedures described above. The log entry should reference the specific inspection report related to finding the deficiencies. Please see Appendix H for the Corrective Action Log.
- If changes and updates of the SWPPP are necessary, a log will be kept to describe any additions
  of new BMPs, replacement of failed BMPs, significant changes in the activities or their timing on
  the project, changes in personnel, changes in inspection and maintenance procedures, updates to
  site maps, and so on. Please see Appendix G for the Corrective Action Log.

# 4.3 - Post Construction Inspection Schedule and Procedures:

## Per Chapter 32 of the City of Portland Code of Ordinances:

Any person owning, operating, or otherwise having control over a BMP required by a post construction stormwater management plan shall maintain the BMPs in accordance with the approved plan and shall demonstrate compliance with that plan as follows:

- (a) *Inspections*. The owner or operator of a BMP shall hire a qualified post-construction stormwater inspector to at least annually, inspect the BMPs, including but not limited to any parking areas, catch basins, drainage manholes, pipes and related structures, in accordance with all municipal and state inspection, cleaning and maintenance requirements of the approved post-construction stormwater management plan.
- (b) Maintenance and repair. If the BMP requires maintenance, repair or replacement to function as intended by the approved post-construction stormwater management plan, the owner or operator of the BMP shall take corrective action(s) to address the deficiency or deficiencies as soon as possible after the deficiency is discovered and shall provide a record of the deficiency and corrective action(s) to the department of public services ("DPS") in the annual report.
- (c) Annual report. The owner or operator of a BMP or a qualified post-construction stormwater inspector hired by that person, shall, on or by June 30 of each year, provide a completed and signed certification to DPS in a form provided by DPS, certifying that the person has inspected the BMP(s) and that they are adequately maintained and functioning as intended by the approved post-construction stormwater management plan, or that they require maintenance or repair, including the record of the deficiency and corrective action(s) taken.



- (d) Filing fee. Any persons required to file and annual certification under this section shall include with the annual certification a filing fee established by DPS to pay the administrative and technical costs of review of the annual certification.
- (e) Right of entry. In order to determine compliance with this article and with the post-construction stormwater management plan, DPS may enter upon property at reasonable hours with the consent of the owner, occupant or agent to inspect the BMPs.

#### Maintenance Schedule:

- The dumpster area shall be inspected routinely for spillage and should be cleaned as necessary. All outside waste receptacles provided for public use should be routinely emptied.
- The catch basins and drain manholes shall be inspected at least twice annually and after major storm events to ensure they are functioning properly. At a minimum the catch basins on site shall be cleaned biannually. Sediment shall be removed when it approaches half of the sump depth. If floating hydrocarbons are observed during an inspection, the materials shall be removed immediately by skimming, absorbent materials, or other method and disposed in conformance with applicable state and federal regulations.
- The Stormwater Planter shall be inspected at least twice annually and after major storm events to ensure it is functioning properly. If the stormwater planter does not drain within 72-hours following a rainfall event, a qualified professional shall assess the condition of the facility to determine measures required to restore filtration function, including but not limited to removal of accumulated sediments or reconstruction of filter media. The highest maintenance burden occurs during the first two years of operation as the vegetation grows and the system begins to stabilize. Once vegetation is established, maintenance decreases and becomes very predictable, similar to what is required for standard landscaping. Common maintenance tasks include, raking, and pruning of vegetation.
- The preferred method of removing and cleaning the sediments, debris, and hydrocarbons from the drainage structures is by a vacuum truck. Other reasonable methods will be allowed.

## Inspection & Maintenance Overview:

- All sediments and hydrocarbons shall be properly handled and disposed, in accordance with local, state and federal guidelines and regulations.
- The dumpster areas shall be inspected routinely for spillage and shall be routinely emptied. All outside waste receptacles provided for public use shall be routinely emptied.



Stormwater Pollution Prevention Plan (SWPPP)
Mixed Use Development

# SECTION 5 CERTIFICATION AND NOTIFICATION

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.

Name:	Steve Long	Title:	Project Manager	
Signature:		Date:		

