

Operation and Maintenance Plan

Town of Reading
Center for Active Living
and
Community Pickleball Courts

0 Haverhill Street / Symonds Way
Reading, MA, 01867

DRAFT

Owner:

Town of Reading
16 Lowell Street
Reading, MA 01867

Submitted To:

Town of Reading
16 Lowell Street
Reading, MA 01867

Community Planning and
Development Commission

Conservation Commission

Civil Engineer/ Landscape Architect:

Activitas, Inc.
70 Milton Street
Dedham, MA 02026
(781) 355-7040

Surveyor:

Control Point Associates, Inc.
352 Turnpike Road
Southborough, MA 01772
(508) 948-3000

Architect:

Bargmann Hendrie + Archetype, Inc.
9 Channel Center Street
Suite 300
Boston, MA 02210
(617) 350-0450

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1.0 Operation and Maintenance Plan

The Town of Reading Center for Active Living and Community Pickleball Courts project site is subject to Standard 9 - Operation and Maintenance Plan of the Massachusetts Stormwater Handbook. This Operation and Maintenance Plan details management recommendations for long-term pollution prevention.

The project site is located on Symonds Way. The project scope is limited to an area of approximately 3.30 acres. The project consists of constructing a new Center for Active Living building, parking area, a seven (7) court pickleball facility, ADA accessible walkways leading to all courts and the Center for Active Living, formalized handicap parking, and landscape improvements.

The surfacing types within the limit of work consist of post-tension concrete, non-filled synthetic turf, cement concrete, bituminous asphalt, and grassed /landscaped areas.

1.1 Subsurface Detention System

The subsurface chamber systems should be inspected monthly within the first year of installation and annually thereafter. Inspections should begin with upstream and downstream structures for signs of sediment or other debris and standing water in the upstream manhole. Use of a pipe camera is recommended to inspect the pipes and chambers. The recharge systems have been designed with inspection ports at the end of each row of chambers.

- The owner shall keep a maintenance log which shall include details of any events which would have an effect on the system's operational capacity.
- The operation and maintenance procedure shall be reviewed periodically and changed to meet site conditions.
- Maintenance of the stormwater management system shall be performed by qualified workers and shall follow applicable occupational health and safety requirements.

Debris removed from the stormwater management system shall be disposed of in accordance with state and local guidance.

1.2 Outlet Control Structure

There will be two outlet control structure on site to control the flow out of the subsurface drainage systems. The outlet control structures should be inspected twice each year and cleaned twice per year. The outlet control structures should be checked at least four times a year and at the end of the foliage and snow-removal season.

- Record all maintenance and repairs. Submit reports every year for compliance.
- Inspect the outlet control structure every storm (or at least four times a year) and at the end of the foliage and snow-removal season.
- If sediment is more than six inches deep and/or there are floatable pollutants, they will be removed from the outlet control structure and disposed of.

1.3 Area Drains

Area drains should be cleaned twice per year. Area drains should be checked at least four times a year and at the end of the foliage and snow-removal seasons.

- Record all maintenance and repairs. Submit reports every year for compliance.
- Inspect all area drains after every storm (or at least four times a year) and at the end of the foliage and snow-removal seasons.
- If sediment is more than six inches deep and/or there are floatable pollutants, they will be removed from the drain and disposed of.

- During colder periods, area drain grates shall be kept free of ice and snow.
- During warmer periods, area drain grates shall be kept free of leaves, litter, sand, and other debris.

1.4 Catch Basins

Catch basins on site will have sumps a minimum of 4 feet deep and hooded outlets to trap debris, sediment, and floating contaminants. Catch basins should be cleaned twice per year. Catch basins should be checked after every storm event, typically within 72 hours after the end of the rainfall event.

- Record all maintenance and repairs. Submit reports every year for compliance.
- Inspect all catch basins after every storm (or at least four times a year) and at the end of the foliage and snow-removal seasons.
- If sediment is more than six inches deep and/or there are floatable pollutants, they will be removed from the basin and disposed of.
- During colder periods, basin grates shall be kept free of ice and snow.
- During warmer periods, basin grates shall be kept free of leaves, litter, sand, and other debris.

1.5 Water Quality Unit Maintenance

See Appendix for an example of water quality unit maintenance manual. Final manual will be per installed unit.

1.6 Vegetated Areas Maintenance

Although not a structural component of the drainage system, the maintenance of vegetated areas may affect the function of stormwater management practices. This includes the health/density of vegetative cover and activities such as the application and disposal of lawn and garden care products, disposal of leaves and yard trimmings.

- Inspect planted areas on a semi-annual basis and remove any litter.
- Maintain planted areas adjacent to pavement to prevent soil washout.
- Immediately clean any soil deposited on pavement.
- Re-seed bare areas: install appropriate erosion control measures when native soil is exposed or erosion channels are forming.

1.7 Vegetation Management

Restoration and Native Plantings

- All restoration plantings within the buffer zone shall use **native, non-invasive species** suited to site hydrology and soil conditions.
- Replacement plantings shall occur in the same season if plant mortality is observed.
- After two years, plantings must demonstrate at least **75% survival**; otherwise supplemental planting will be required.
- Plant alternative mixture of grass species in the event of unsuccessful establishment.

Invasive Species Management

- Invasive species (e.g., bittersweet, multiflora rose, Japanese knotweed, Phragmites) shall be identified and removed annually from the buffer zone and landscaped areas.
- Mechanical/manual removal methods are preferred. If chemical treatment is required, a licensed applicator must be used and Conservation Commission approval obtained prior to application.

- Invasive removal shall be followed by replanting with appropriate native species to prevent recolonization.

Ongoing Vegetation Maintenance

- Turf and ornamental landscape areas near the courts shall be maintained with minimal inputs:
 - No pesticides or herbicides within 100 feet of wetlands.
 - Fertilizer use shall be limited to slow-release, phosphorus-free products applied outside the 35-foot buffer zone.
- Mulched beds shall be replenished annually with organic mulch (not dyed or rubber mulch) to suppress weeds and conserve soil moisture.
- Infiltration swales and bioretention areas shall be maintained with dense vegetative cover; bare areas shall be re-seeded promptly.

1.8 Spill Prevention and Control Plan

The Property Owner will be responsible for training of people in the proper handling and cleanup of spilled materials. No spilled hazardous materials or hazardous wastes will be allowed to come in contact with stormwater discharges. If such contact occurs, the stormwater discharge will be contained on site until appropriate measures in compliance with state and federal regulations are taken to dispose of such contaminated stormwater.

In order to minimize the potential for a spill of hazardous materials to come into contact with stormwater, the following steps will be implemented:

1. All materials with hazardous properties (such as pesticides, petroleum products, fertilizers, detergents, construction chemicals, acids, paints, paint solvents, cleaning solvents, additives for soil stabilization, concrete curing compounds and additives, etc.) will be stored in a secure location, with their lids on, preferably under cover, when not in use.
2. The minimum practical quantity of all such materials will be kept on the site.
3. A spill control and containment kit (containing, for example, absorbent materials, acid neutralizing powder, brooms, dustpans, mops, rags, gloves, goggles, plastic and metal trash containers, etc.) will be provided at the maintenance area of the site.
4. Manufacturers recommended methods for spill cleanup will be clearly posted and site personnel will be trained regarding these procedures and the location of the information and cleanup supplies.

In the event of a spill, the following procedures should be followed:

1. All spills will be cleaned up immediately after discovery.
2. The spill area will be kept well-ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with hazardous substances.
3. The Owner will be notified immediately.
4. Spills of toxic or hazardous materials will be reported to the appropriate federal, state, and/or local government agency, regardless of the size of the spill.

The Property Owner will be the spill prevention and response coordinator. He will designate the individuals who will receive spill prevention and response training. These individuals will each become responsible for a particular phase of prevention and response. The names of these personnel will be posted in the material storage area and other applicable areas onsite.

2.0 Appendices

2.1 Operations and Maintenance Logs

2.2 Example of Water Quality Unit Maintenance Manual