

Maintenance Guide for Field House Parking Lot

Uconn Project No.: 901318-D BL Companies Project No.: 08c2926-006

Introduction

Maintenance and care of the porous concrete lot is key to its longevity. Routine cleanings of the Field House parking lot will ensure that pore obstruction is minimized, allowing higher rates of infiltration and better overall performance of the lot's hydrology. Additionally, regular monitoring should be implemented to evaluate the impact of the weather, wear on the condition of the porous pavement structure and its effectiveness as a drainage media.

The following shall serve as maintenance guidelines for University of Connecticut Facilities and staff.

General Maintenance

Weeding

Weed seeds can be blown onto the porous parking surface and become lodged within the surface pores. If this happens in a shady, moist area, weeds may sprout and will need to be eradicated by manually removing them. Weeds and grasses encroaching on the perimeter of the lot should also be removed to prevent overgrowth and damage to the lot. Herbicides should not be used since the decaying organic matter of the plant could help new seeds become established.

Overseeding Adjacent Areas

Care should be taken whenever overseeding areas adjacent to the lot. It is important that grass seed and/or other organic matter are not spread onto the porous lot, clogging the open pores.

Organic Debris

Leaves and other organic debris can decompose, or be ground down by vehicle tires, causing the pores within the pavement structure to become clogged. Periodically, and as conditions require, blowers should be used to remove leaves and other organic debris, prior to the debris being ground down by vehicle tires.



Topcoating

Topcoating and/or seal coats shall not be applied unless approved by the Engineer.

Biannual Maintenance

Autumn Maintenance

During and after leaf abscission, the parking lot should be cleaned well, beginning with removal of all leaves and surface debris by using a blower. A vacuum truck should be utilized to removed sand and other pore-clogging material from the porous pavement. Once the lot has been well-vacuumed, if any surface pores remain visibly clogged with debris, pressure-washing of these areas should be employed. Pressure washing should be done using a power head cone nozzle.

The aforementioned maintenance procedure will assist in preserving the integrity of the lot's hydrology.

Spring Maintenance

Once the ground has thawed and no further snow removal for the season is anticipated, the lot should undergo another significant cleaning. Leaves, sand and other debris should be removed from the porous lot, followed by sweeping of the entire lot to remove sand and loose particles. Once the lot has been swept, it should be vacuumed and pressure washed as noted above (see Autumn Maintenance).

During cleaning, areas that are visibly clogged may require concentrated efforts of cleaning. These areas should be identified during the maintenance so that they can be addressed properly.

Snow and Ice Removal

Snow Removal

Special care should be taken when snowplowing the porous lot. Maintenance crews should be informed of the experimental nature of the porous lot and be trained to take special care with plow blades, particularly in the vicinity of the stone trenches and timber edging. It is recommended that snowplow blades be equipped with a flexible rubber edge or rollers that keep the blade half an inch to one inch above the porous surface. This will reduce the amount of wear and tear on the pavement due to snowplow damage.



Deicing/Sanding

The void structure of porous pavement tends to provide a faster rate of snow/ice melting than traditional pavement structures. Therefore, the use of deicing chemicals is less needed and should be avoided whenever possible. If deicing chemicals are required, they should be used as sparingly as possible.

Sand and salt (NaCl) shall be prohibited from being applied to the porous concrete lot. CMA (Calcium Magnesium Acetate) may be applied to the porous concrete surface as and alternative to traditional road salt.



Maintenance Guide for Towers Porous Parking Lot

Uconn Project No.: 901318-C BL Companies Project No.: 08c2926-005

Introduction

Maintenance and care of the porous asphalt lot is key to its longevity. Routine cleanings of the Towers parking lot will ensure that pore obstruction is minimized, allowing higher rates of infiltration and better overall performance of the lot's hydrology. Additionally, regular monitoring should be implemented to evaluate the impact of the weather, wear on the condition of the porous pavement structure and its effectiveness as a drainage media.

The following shall serve as maintenance guidelines for University of Connecticut Facilities and staff.

General Maintenance

Weeding

Weed seeds can be blown onto the porous parking surface and become lodged within the surface pores. If this happens in a shady, moist area, weeds may sprout and will need to be eradicated by manually removing them. Weeds and grasses encroaching on the perimeter of the lot should also be removed to prevent overgrowth and damage to the lot. Herbicides should not be used since the decaying organic matter of the plant could help new seeds become established.

Overseeding Adjacent Areas

Care should be taken whenever overseeding areas adjacent to the lot. It is important that grass seed and/or other organic matter are not spread onto the porous lot, clogging the open pores.

Organic Debris

Leaves and other organic debris can decompose, or be ground down by vehicle tires, causing the pores within the pavement structure to become clogged. Periodically, and as conditions require, blowers should be used to remove leaves and other organic debris, prior to the debris being ground down by vehicle tires.



Topcoating

Topcoating and/or seal coats shall not be applied unless approved by the Engineer.

Biannual Maintenance

Autumn Maintenance

During and after leaf abscission, the parking lot should be cleaned well, beginning with removal of all leaves and surface debris by using a blower. A vacuum truck should be utilized to removed sand and other pore-clogging material from the porous pavement. Once the lot has been well-vacuumed, if any surface pores remain visibly clogged with debris, pressure-washing of these areas should be employed. Pressure washing should be done using a power head cone nozzle.

The aforementioned maintenance procedure will assist in preserving the integrity of the lot's hydrology.

Spring Maintenance

Once the ground has thawed and no further snow removal for the season is anticipated, the lot should undergo another significant cleaning. Leaves, sand and other debris should be removed from the porous lot, followed by sweeping of the entire lot to remove sand and loose particles. Once the lot has been swept, it should be vacuumed and pressure washed as noted above (see Autumn Maintenance).

During cleaning, areas that are visibly clogged may require concentrated efforts of cleaning. These areas should be identified during the maintenance so that they can be addressed properly.

Snow and Ice Removal

Snow Removal

Special care should be taken when snowplowing the porous lot. Maintenance crews should be informed of the experimental nature of the porous lot and be trained to take special care with plow blades, particularly in the vicinity of the stone trenches and timber edging. It is recommended that snowplow blades be equipped with a flexible rubber edge or rollers that keep the blade half an inch to one inch above the porous surface. This will reduce the amount of wear and tear on the pavement due to snowplow damage.



Deicing/Sanding

The void structure of porous pavement tends to provide a faster rate of snow/ice melting than traditional pavement structures. Therefore, the use of deicing chemicals is less needed and should be avoided whenever possible. If deicing chemicals are required, they should be used as sparingly as possible.

Sand shall be prohibited from being applied to the porous asphalt lot. When necessary, salt (NaCl) may be applied to lot.