The Bunyan Filtration Restoration Device

The B.I.R.D. is connected to a vacuum truck system and used to extract contaminants and restore permeability to pervious pavement.

Pervious concrete pavement is exposed to various sources of contamination which may clog the void structure and reduce the permeability during the service life of the pavement. We have developed ways to resolve these clogging issues and restore the permeability of pervious pavement if the pavement was originally built with sufficient voids. This cleaning process is also used to prepare the pavement for overlays and other surface repairs.

Truck mounted vacuum equipment can be used to extract contaminants from pervious concrete pavement using a Bunyan Infiltration Restoration Device (BIRD, for short), to apply the vacuum force to the pavement surface. In order to manage this vacuum force, and move slowly over the surface, certain objectives become apparent.

This extraction process for pervious service pulls air through the voids. Performance is at best with a tight seal maintained around the perimeter of the vacuum hood. The hood behaves like the inverse of a hovercraft and represents significant drag, as the hood travels. A drive system propels the device which is tethered to the vacuum source with an extension hose. The height of the hood is set in contact with the surface and adjusted as the rubber belting of the lips wears away. The BIRD is configured on a triangular wheel base and covers a swath that is 42 inches wide.

We invite you to join Owen Equipment and Bunyan Springs for a demonstration of the BIRD

Pierce County
10am - Tuesday, March 26th
Sprinker Park (see map attached)

Bellevue
10am - 12pm; Wednesday, March 27th
16600 Northup Way, Bellevue (see map attached)

For more information, please contact
Dave Armstrong, Washington Regional Manager
Owen Equipment Company
(206) 304-1185 cell | (253) 852-5819 office
Sprinker Recreation Center  
14824 S. “C” Street.  
Tacoma, WA 98444  
(253)798-4000

Directions to Pierce County Sprinker Recreation Center:

From the north:
- Take I-5 South.
- Take Exit #127 (Puyallup/Mt Rainier) and turn left onto Highway 512 going east.
- Take the second exit (Parkland/Spanaway) and at the stoplight turn right onto Pacific Avenue. Go south on Pacific Avenue for 2.7 miles and turn right at the stoplight on Military Road (also known as 152nd St).
- Go 1½ blocks, Sprinker Center is on the right.

From the south:
- Take I-5 North
- Take Exit #127 (Puyallup/Mt Rainier) and take the first ramp off to the right, Highway 512 going east.
- Take the second exit (Parkland/Spanaway) and at the stoplight turn right onto Pacific Avenue. Go south on Pacific Avenue for 2.7 miles and turn right at the stoplight on Military Road (also known as 152nd St).
- Go 1½ blocks, Sprinker Center is on the right.

From the east:
- Go west on Highway 512
- Take the Mt. Rainier/Highway 7 exit and follow the off ramp around to your left.
- At the stoplight turn left onto Pacific Avenue. Go south on Pacific Ave for 2.7 miles and turn right at the stop light onto Military Road also known as 152nd Street.
- Go 1½ blocks, Sprinker Center is on the right.