



Standards Oversight Council (SOC)

Supporting Technical Standards for Urban and Rural Soil and Water Conservation

702 E. Johnson Street, Madison, Wisconsin 53703
(608) 441-2677 || Fax (608) 441-2676 || soc@wlwca.org || socwisconsin.org

DRAFT PERMEABLE PAVEMENT MEETING NOTES

September 17, 2013 || 9:30am – 3:30pm

Attendees: John McCarthy, Bob Roehrig, Pete Wood, Kate Gleason, Laura Fenley, Michelle Reynolds, Bob Givens, Josh Harder, Chris Homburg, Tim Troester, Scot Schwandt, Gini Knight, and Bill Selbig.

Welcome / Team Member Updates

Research Plot Update (Bob R., John, Bill)

The Costco Research Plot is moving ahead with construction/installation to begin in the next month or so. The researchers have asked the team if there are any other pollutants that should be monitored? Other pollutants could include pH, bacteria, or heavy metals...Real time sensors will be placed throughout the system collecting temperature data and testing for chloride and clogging. The system will collect temperature inflow and outflow. There was a question about measuring the temperature of pavement system itself, both the parking lot pavement that water is running off of and the permeable pavements? The run-on ratio will start with 7:1, and the researchers could decide to increase it to as high as 15:1. Most studies have a 1:1, 2:1, or 3:1 run-on ratio.

Review full draft standard

The team completed a full review of the draft standard, including the rest of the Criteria, Considerations, O & M, and Plans and Specs. We noted several sections that still may need some additional discussion at the next meeting. Key points or changes:

- Insert definition for 'Surface Cleaning' in V.F. to clarify regular maintenance versus restorative cleaning.
- Criteria G. Aggregate Storage Reservoir
 - Vehicular Traffic Applications was deleted because it was determined as redundant or not applicable to the users of this standard.
 - The 5% specification of open graded base will remain, because it is a more common specification and more available across the state. Although 3% is finer, the 5% will be equally cleaned after a couple of rainfall events.
- Criteria H. Pavement System Drainage
 - Full agreement was not reached on whether observation wells should be required. Observation wells provide 'insurance' and an ability to diagnose problems without deconstructing the whole system, and also add some additional cost and may not be used.
- Criteria I. Native Soil Design Infiltration rate
 - This section was simplified with more reference to WDNR Standard 1002.
- Criteria J. Underdrains
 - Pipe protection was revised and was discussed as a potential consideration.
- Criteria K. Pollutant Removal Credit
 - The maximum pavement surface void ratio was changed to 25% from 30%.

WI Department of Agriculture, Trade and Consumer Protection • WI Department of Natural Resources •
Natural Resources Conservation Service • University of WI Extension • WI Land & Water Conservation Association

DATCP
Richard
Castelnuovo
(608) 224-4608

WDNR
Gretchen Wheat
& Mary Anne
Lowndes
(608) 264-6273

NRCS
Pat Murphy &
John Ramsden
(608) 662-4422

UWEX
Ken Genskow
(608) 262-8756

WLWCA Reps
Perry Lindquist
(262) 548-7867
& Bruce Olson
(608) 785-9867

WLWCA Staff
Jim
VandenBrook
(608) 441-2677

- Based on current understanding of available data, the TSS Removal Credit was reduced to 55% and TP Removal Credit reduced to 35%.
- Criteria N. Thermal Mitigation.
 - The team will revisit this section at the next meeting to clarify accepted computational methods.
- Considerations
 - The team developed two new stand alone considerations about 1) larger run-on ratios may result in a shorter design life and 2) encouraging even distribution of run-on across permeable pavement surface.
 - Team will review the verification of surface infiltration rates by the ASTM 1701 test.
 - More discussion may be needed at next meeting about conducting a sub-grade inspection to verify compliance with design.
- Plans & Specs
 - Team will re-evaluate the language requiring training documentation/certification of contractors.
- Figure 1. The team will work on developing three details of the common permeable pavement systems.

Initial Review Process.

All of the selected initial reviewers were contacted and invited to provide comments on the latest draft. On Thursday, September 19th, on Thursday, September 19th Gini will send a specific invite and the draft standard to all reviewers with instructions to submit comments. The reviewers will have two weeks to respond with comments, and submit them to Gini by Wednesday, Oct 2nd. Gini will compile all of the responses and send them to the entire team for review before the next team meeting on Oct 9th.

Team Process Evaluation

The team completed a brief evaluation of the process so far to facilitate improvements in the future.

Next Meetings: Wed, Oct 9, & Wed, Dec 11

Action Items:

- Pete to make revisions to the standard based on discussion.
- Chris and Bob to review the Pipe Protection under Criteria J. Underdrains.
- Michelle to review DOT standards to determine any changes with referenced DOT specifications.
- Pete, Bob, and others to draft three details of the various pavement systems.
- Pete, Roger, and Gini to work on References and Resources section.
- Gini will send out current draft standard to initial reviewers.
- All team members to review the compiled comments, once received, before the next meeting.

DATCP Richard Castelnuovo (608) 224-4608	WDNR Gretchen Wheat & Mary Anne Lowndes (608) 264-6273	NRCS Pat Murphy & John Ramsden (608) 662-4422	UWEX Ken Genskow (608) 262-8756	WLWCA Reps Perry Lindquist (262) 548-7867 & Bruce Olson (608) 785-9867	WLWCA Jim VandenBrook (608) 441-2677
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