

Creative Solutions for Stormwater Management at Marine Terminals



 **PORT OF PORTLAND**
Possibility. In every direction.™

By

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for

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Our Region, Our Mission -

“To enhance the region’s economy and quality of life by providing efficient cargo and air passenger access to national and global markets.”



Port Properties



Environmental Constraints

- **NPDES Permits:**
 - **MS4**
 - **Industrial**
- **ESA**
- **Superfund**
- **Wetlands**
- **Green Ways**



Terminal 5 – Stormwater Infiltration

- Columbia Grain



T5 Stormwater Infiltration



T5 Stormwater Infiltration



2014/09/10

T5-Stormwater Infiltration



T5- Stormwater Infiltration



2014/09/10

T5- Stormwater Infiltration -West



T5 - Stormwater Infiltration East



2014/09/10

T5 – Stormwater Infiltration



2014/09/10

T5- Stormwater Infiltration



Terminal 6 – Porous Pavement



T6 - Porous Pavement



T-6 Porous Pavement



- Designed by – Century West, Green Works and Cahill Associates



T6 - Porous Pavement



T6 – Porous Pavement



- Adaptive management during construction.
- Compaction, compaction, but not too much compaction.



T6 - Porous Pavement



And breath...

