

Providing Quality Engineering For Our Water Resources Since 2002

Client

Wisconsin Department of Transportation, SE District
 (SSE was a subconsultant to MTP, LLC)
 Contact: Bill Mohr, WisDOT, (414) 548-5666

Project

The Airport Spur is to be reconstructed with added aesthetic features.

Overview/Description

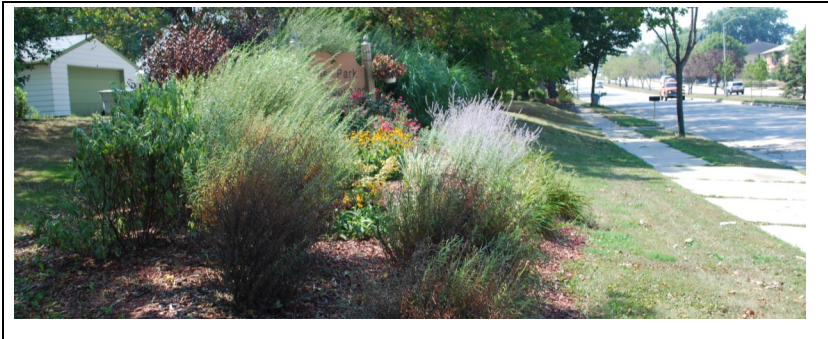
Stormwater Solutions Engineering, LLC contracted with the WisDOT to design the **ONLY** Green stormwater treatment on the entire I-94 North/South corridor. WisDOT desired to incorporate Green stormwater devices to passively treat and store stormwater runoff from the new Airport Spur roadway.

Concerns/Challenges

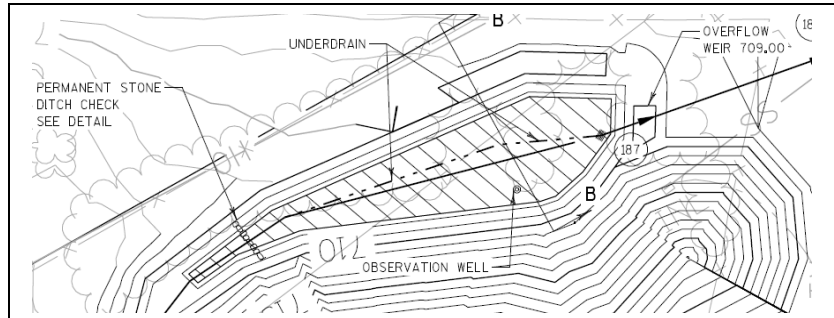
- Existing **neighborhoods** surround the Airport Spur, therefore any increased in runoff quantity as a result of expanded roadway surface would could cause drainage concerns.
- Decreased water quality as a result of the increased hard surface and increased traffic volumes.
- Limited land available and no acquisitions allowed for water quality-only projects
- Within 5-mile radius of Mitchell International **Airport** requires no ponding water for longer than 48 hours

Actions Addressing Challenges

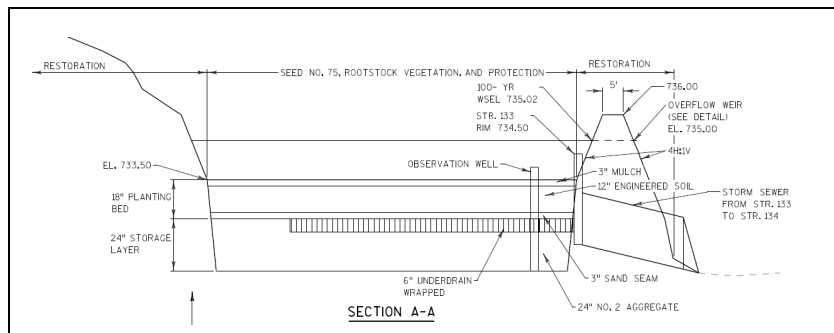
- Three Biofiltration devices were designed for the Airport Spur area, to collect and **treat** stormwater runoff with drain down time of less than 48 hours.
- Excess **infiltrated** water is collected through a 6" underdrain and connected to the existing storm sewer.
- Biofiltration** areas are designed to fit within existing DOT right-of-way so no additional land is needed to control and treat stormwater.
- Use of Wisconsin **native** landscaping within Biofiltration devices allows for low-maintenance landscaping with water treatment through the engineered soils and root systems.



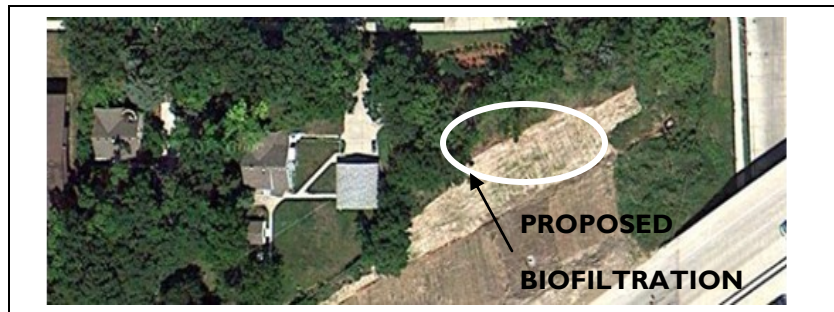
Existing neighborhood gardens



Proposed Biofiltration Site Plan



Proposed Biofiltration Profile



Biofiltration Location after Phase I of Construction

