



## Solids Stormwater Interceptors

HT-2512

The Solids Stormwater Interceptor (SSI) is a simple, inexpensive hydrodynamic separation device designed to remove debris and settleable and suspended solids from stormwater runoff through gravitational settling and trapping of pollutants.

The SSI performs a key role in removing floating debris and settleable solids from a stormwater stream prior to its entry into a detention basin, constructed wetland or collection system.

The SSI is designed to slow the flow velocity through the interceptor, thereby allowing solids and associated pollutants to settle and accumulate on the bottom.

The SSI contains a series of settling chambers separated by baffles to capture sand, sediment and grit. It also has integral specially designed trash-screens to capture larger materials, trash and debris that floats.

**Solids Stormwater Interceptors Perform a Key Role in Removing Floating Debris and Settleable Solids**

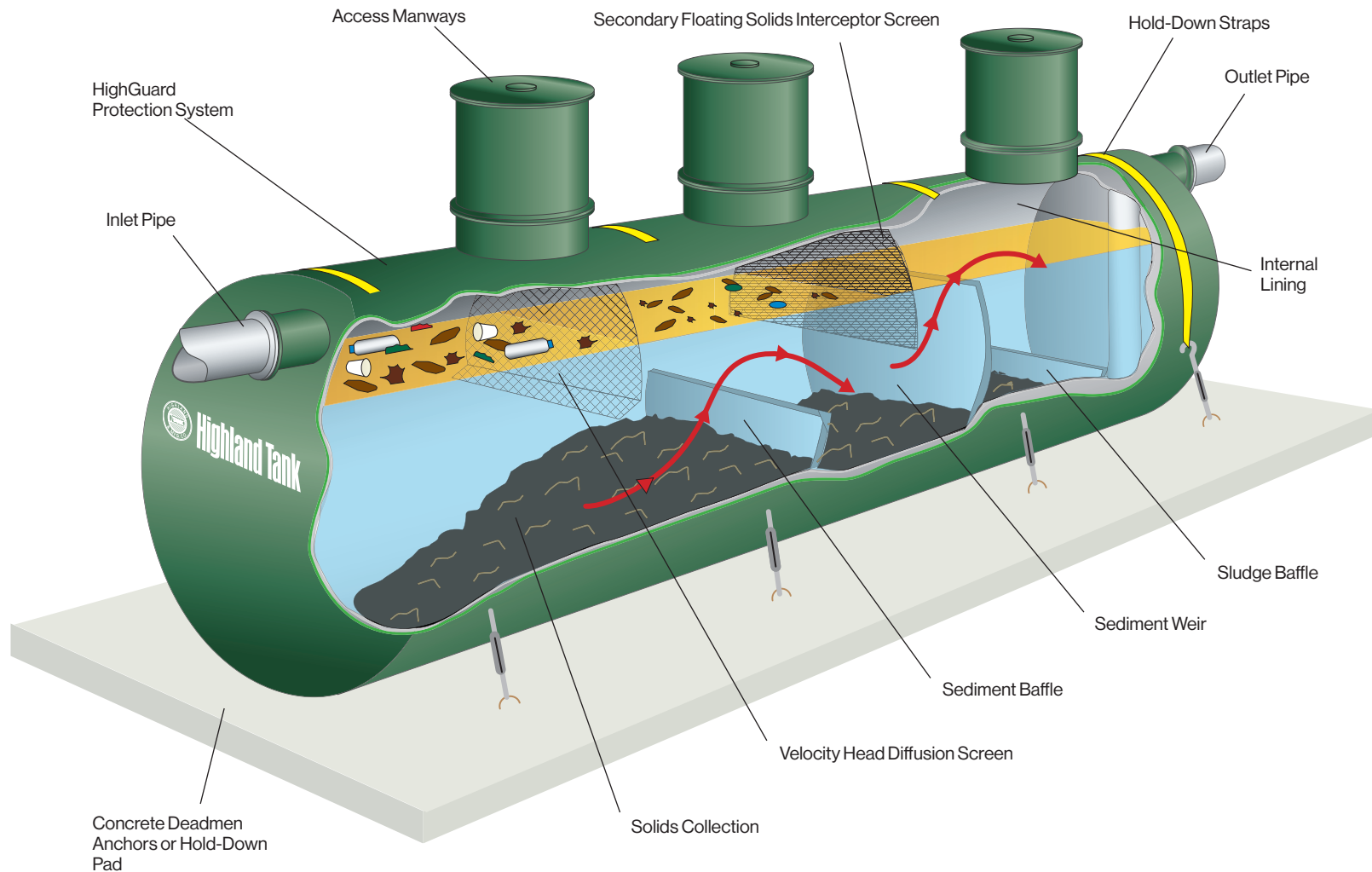


### How It Works

In operation, stormwater enters the interceptor by gravity flow and encounters the velocity head diffusion screen. Floating solids are trapped, and the flow velocity decreases, allowing particles to settle. The baffles impede particle movement — as suspended solids strike the baffles they begin to settle.

Large particles settle out first and accumulate in the first chamber while smaller particles usually settle out in subsequent chambers.

**Solids Stormwater Interceptor - cleaner. safer. smarter.**



**Highland Tank®**

# Drawing & Details

The SSI system is typically designed to bypass runoff flows in excess of the design flow rate. A diversion structure installed ahead of the SSI as well as an outfall adapter can be provided to allow flows in excess of the "first flush" to bypass the SSI, preventing wash out.

SSIs are constructed from protected steel, meeting ASTM specifications. Industry and factory specifications are followed to assure complete internal and external corrosion protection.

## Features

Large access manways allow maintenance personnel to inspect and remove the accumulated waste from grade level. We offer complete interior and exterior blast and finish coatings, including Highland Tank's HighGuard protective coating. An additional internal polyurethane lining assures years of continuous service. Stainless steel and/or double-wall construction are available.

Drainage Model SSI	Required Area Acres	Flow *WQTV Gallons	Total Rate Gal/Min-Ft <sup>3</sup> /s	Sediment Volume Gallons	Volume Cubic Feet	Nominal Dimensions Dia / Length	Inlet & Outlet Diameter
2,000	.125	1,700	300 - 0.668	2,000	186.2	5'-4" x 12'-0"	6"
4,000	.25	3,400	500 - 1.114	4,000	361.7	5'-4" x 24'-0"	8"
8,000	.50	6,800	1,000 - 2.228	8,000	746.2	8'-0" x 21'-4"	10"
12,000	.75	10,200	1,500 - 3.342	12,000	1,128.5	10'-0" x 20'-6"	12"
15,000	1.00	13,600	1,700 - 3.787	15,000	1,382.1	10'-0" x 25'-6"	14"
20,000	1.25	17,000	2,500 - 5.570	20,000	1,836.8	10'-6" x 31'-0"	16"
25,000	1.50	20,400	3,000 - 6.684	25,000	2,312.3	10'-6" x 38'-9"	18"
30,000	2.00	27,200	3,500 - 7.798	30,000	2,710.2	10'-6" x 46'-6"	18"
40,000	2.50	34,000	4,500 - 10.026	40,000	3,551.0	12'-0" x 47'-9"	24"
50,000	3.00	40,800	5,200 - 11.585	50,000	4,425.1	12'-0" x 59'-6"	24"
60,000	4.00	54,400	6,100 - 13.591	60,000	5,361.5	13'-0" x 60'-6"	24"

Standard SSI will provide efficient removal of pollutant particles (.50" inch solids/sieve size 200 sediment) for the majority of site conditions. WQTV\* is the Water Quality Treatment Volume ("FirstFlush") or the first .50" of rain water runoff from the drainage area. 24" dia. manways are standard; 30", 36", and large rectangular EZ-Access manways are available.



# Highland Tank®



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