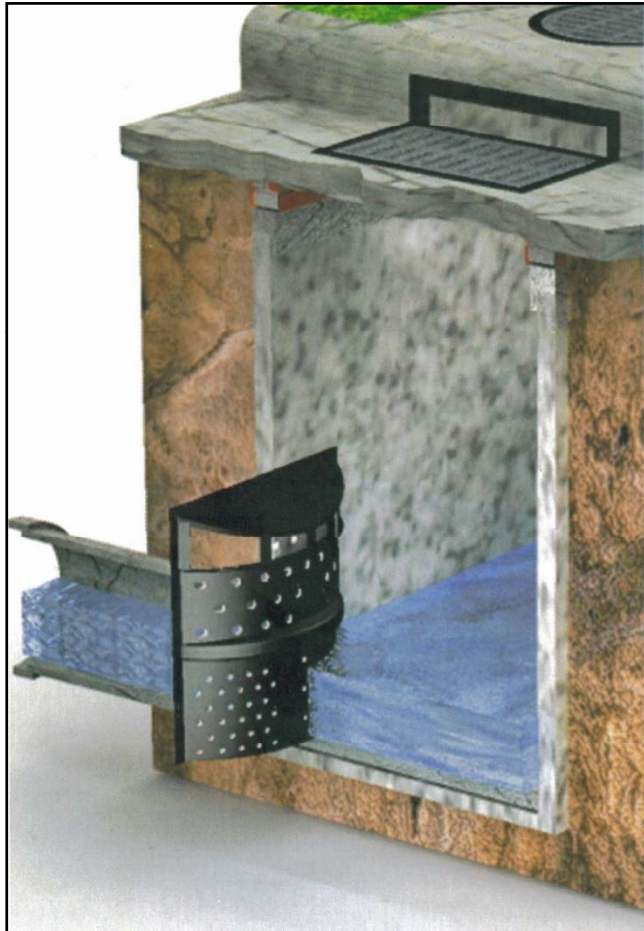




TrashGuard

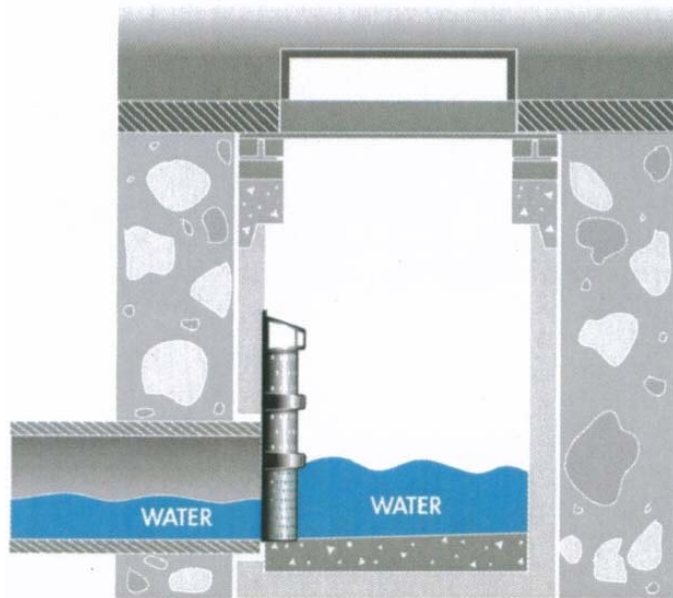
Trash Free Stormwater Discharge



TrashGuard is a patented stormwater pretreatment device that captures debris, sediment and floatables.



TrashGuard Benefits

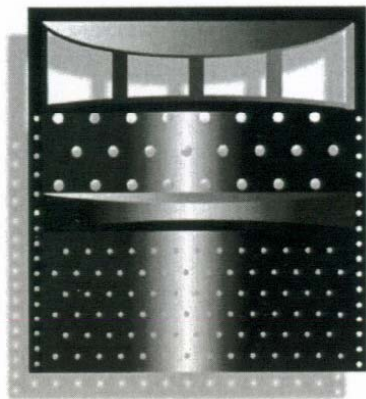


- Captures debris, sediments and floatables
- Simple retrofits to existing catch basins
- Installs without heavy equipment
- Adjusts to irregular catch basin bottoms and/or walls
- Eliminates eyesore stormwater trash at public parks, beaches, and waterways
- Sediment reduction protects fish, shell fish, aquatic life

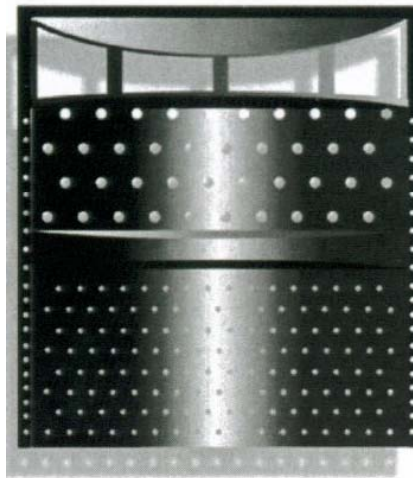


TrashGuard

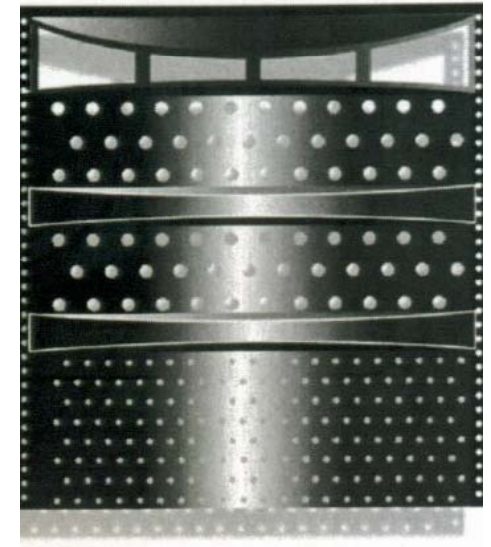
TrashGuard is easy to install and maintain and costs a fraction of other pretreatment devices currently available.



23" Insert

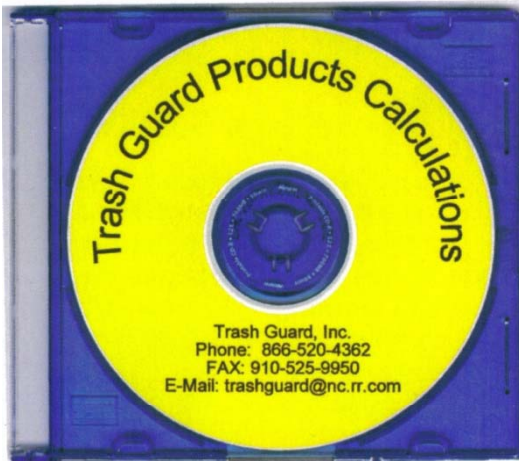


28" Insert



34" Insert

TrashGuard is available in three guard screen sizes for in-place or newly formed catch-basins that utilize discharge pipes of 24 inches or less in diameter. Each screen can be adjusted at installation to accommodate low flow stormwater events of 10 cfs or more.



TrashGuard has extensive testing and an available calculator to assist design professionals in selecting the correct screen size for their particular project.

TrashGuard Product Calculations

Runoff Calculations

Rational Method

Stormwater Discharge: $Q = CiA$

where:

Q is Runoff Discharge (ft³/hr)

i is the Rainfall Intensity (in/hr) or (ft/hr)

A is the drainage Area (ft²)

Table 1: Stormwater Runoff Calculations

DESIGN STORM EVENTS	RAINFALL INTENSITY, i		RUNOFF, Q 1/2-acre Parking Lot		RUNOFF, Q 1-acre Parking Lot		RUNOFF, Q -acre			
	(in/hr)	(ft/hr)	(ft ³ /hr)	(ft ³ /sec)	(ft ³ /hr)	(ft ³ /sec)	(ft ³ /hr)	(ft ³ /sec)	(ft ³ /hr)	(ft ³ /sec)
1-year, 5-minute Storm	4.15	0.346	7159.09	1.99	14318.17	3.98	27215	7.56	27215	7.56
2-year, 5-minute Storm	5.19	0.433	8948.86	2.49	17897.72	4.97	34018	9.45	34018	9.45
5-year, 5-minute Storm	6.35	0.529	10948.99	3.04	21897.98	6.08	41622	11.56	41622	11.56
10-year, 5-minute Storm	7.14	0.595	12311.15	3.42	24622.29	6.84	46800	13.00	46800	13.00

INPUT

Assumptions:

Runoff Coefficient, $C = 0.95$ for paved, urban areas 0.95

1-year, 5-minute storm estimated as 80% of 2-year, 5-minute storm

1/2 acre = 21,780 ft²

1 acre = 43,560 ft²

82795 user-specified area (SF)

82,795 user-specified area (SF)

Use these columns to calculate runoff for a different size drainage area. Simply type the watershed area (in sq ft) for cell H19.

* Rainfall intensity data from NOAA's National Weather Service Hydrometeorological Design Studies Center (<http://www.nws.noaa.gov/ohd/hdsc/index.html>) for Raleigh-NCSU station, Intensity-Duration Frequency, Annual Maxima table

Burlington, NC



198 lbs of gross solids were captured in seven months including nitrogen, phosphorus and regulated metals.



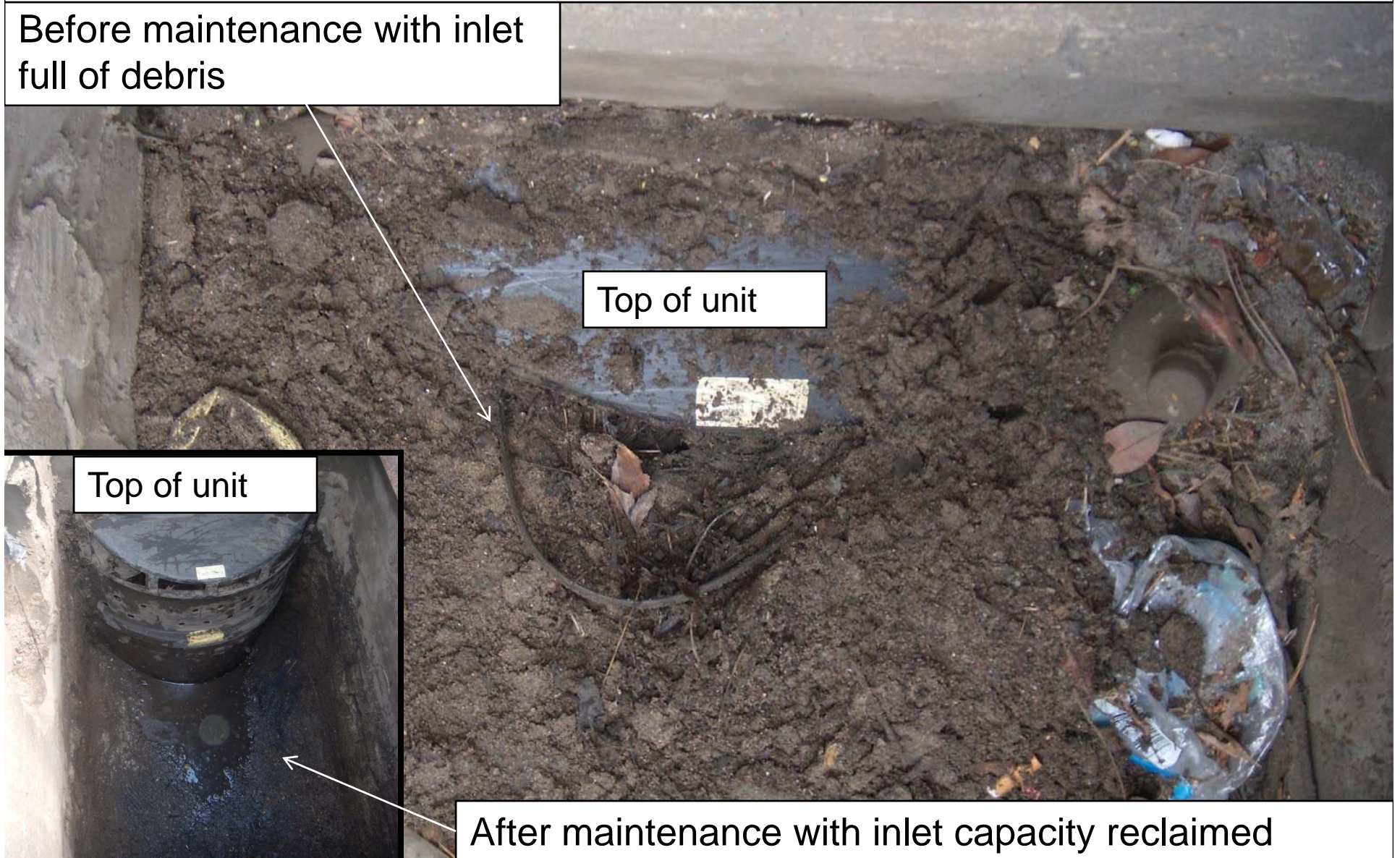
1,190 lbs of gross solids were captured in eleven months including phosphorus, regulated metals (copper, lead, nickel, zinc, etc.) and some nitrogen.

Before maintenance with inlet full of debris

Top of unit

Top of unit

After maintenance with inlet capacity reclaimed



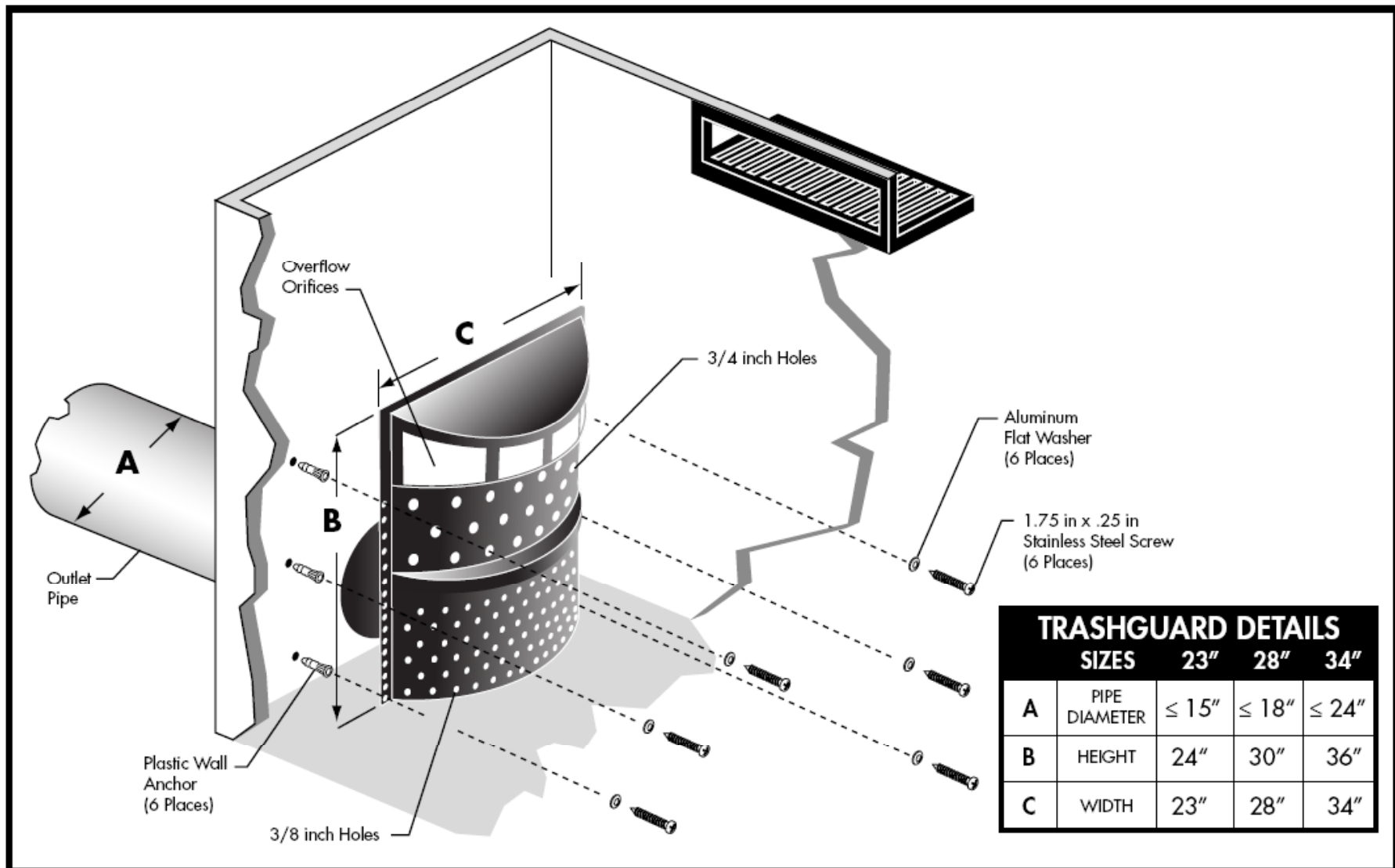
796 lbs of gross solids were captured in five months including phosphorus, regulated metals (copper, lead, nickel, zinc, etc.) and some nitrogen.

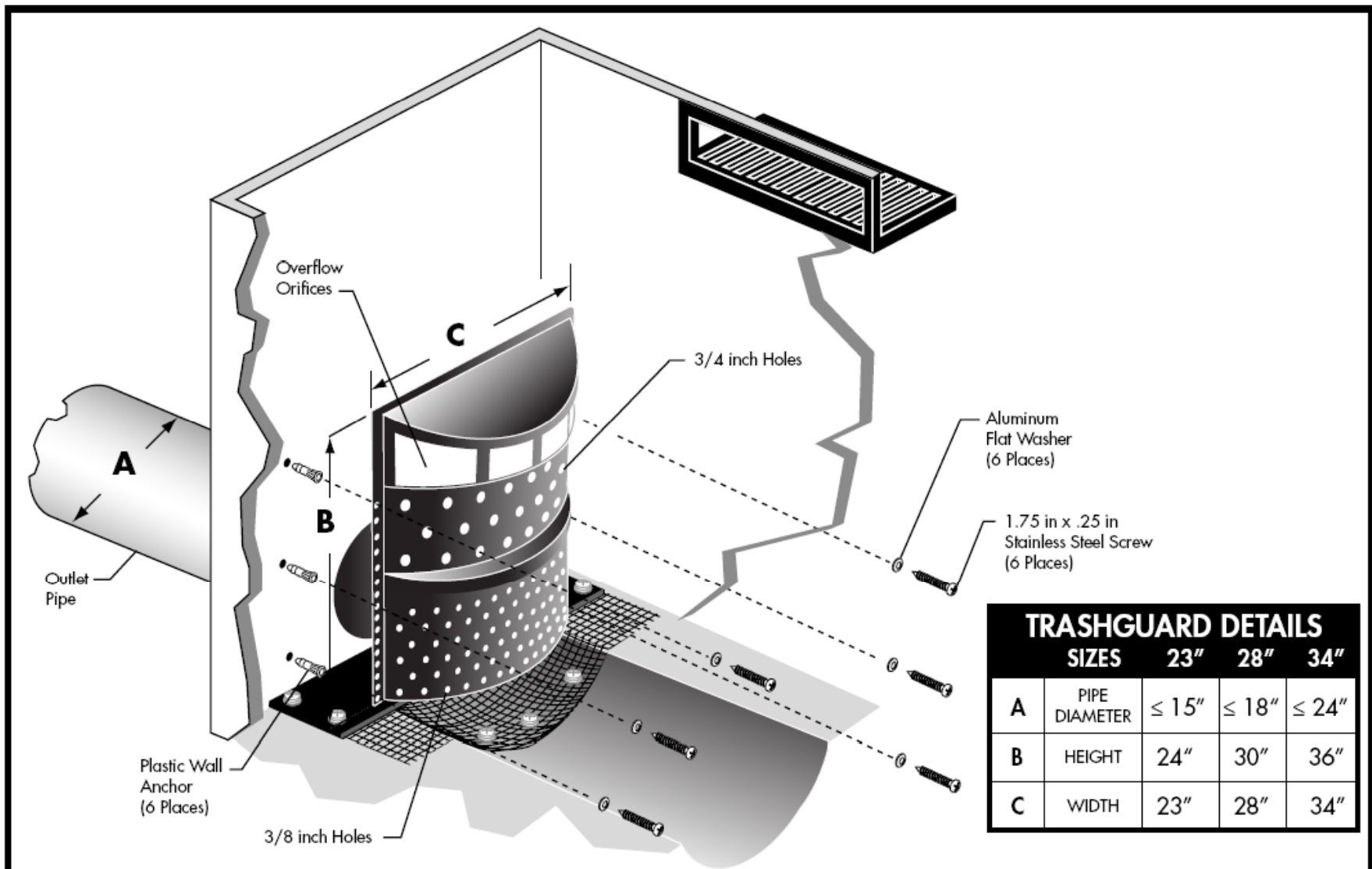


Before maintenance
with inlet full of debris

After initial installation







TRASHGUARD

STANDARD DETAIL FOR
ROUNDED-BOTTOM CATCH BASINS

