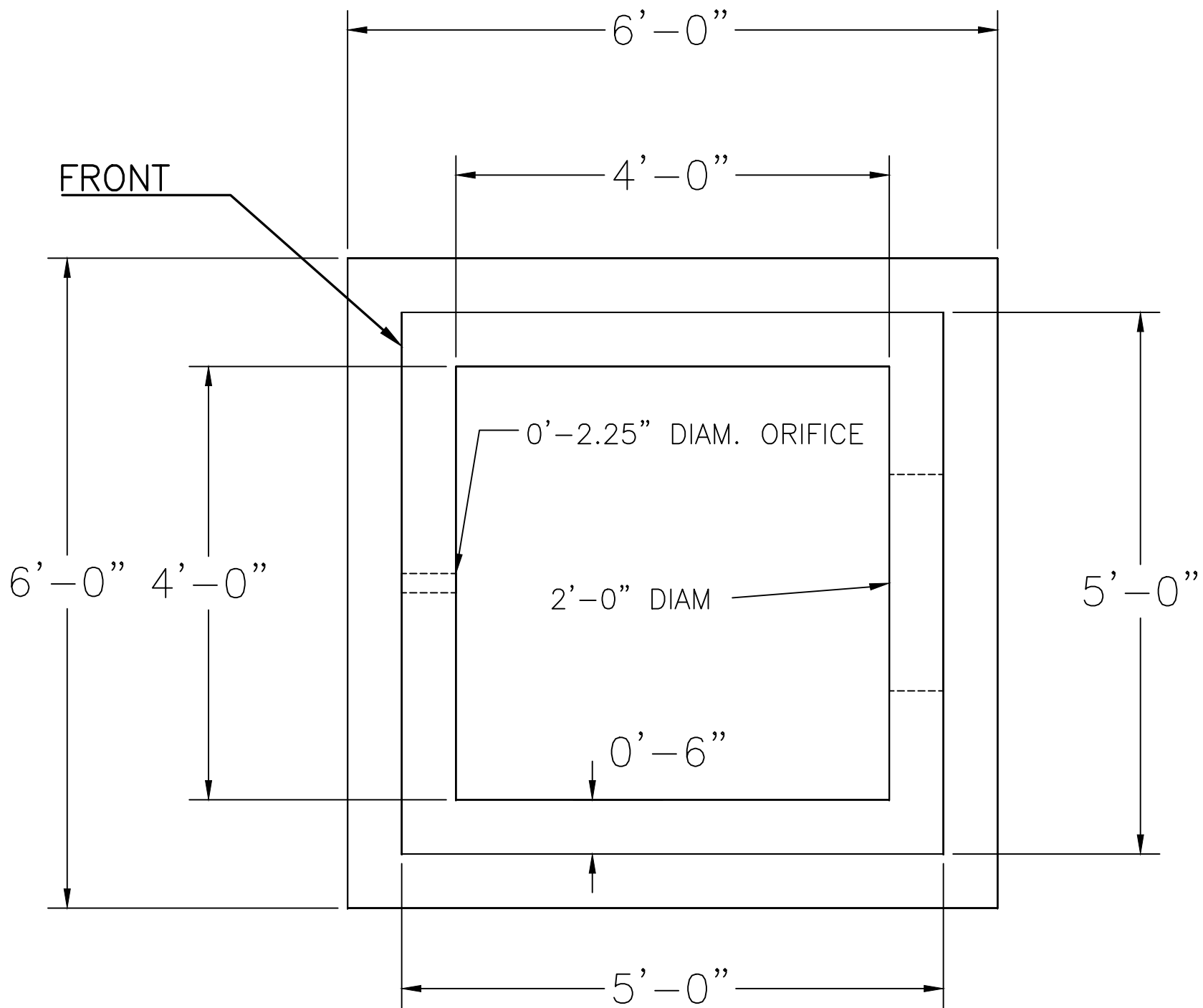
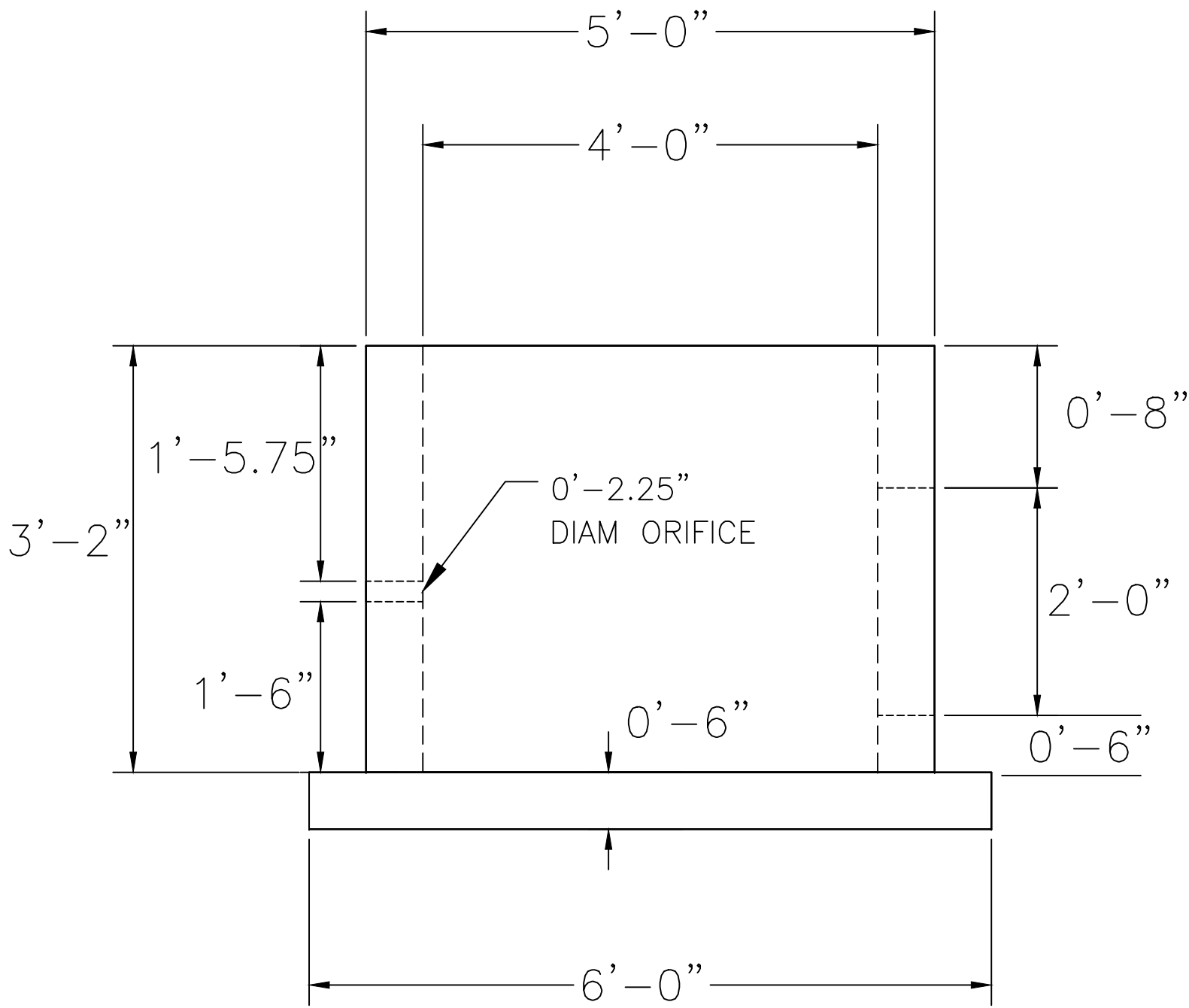


WATER QUALITY OUTLET STRUCTURE DETAILS

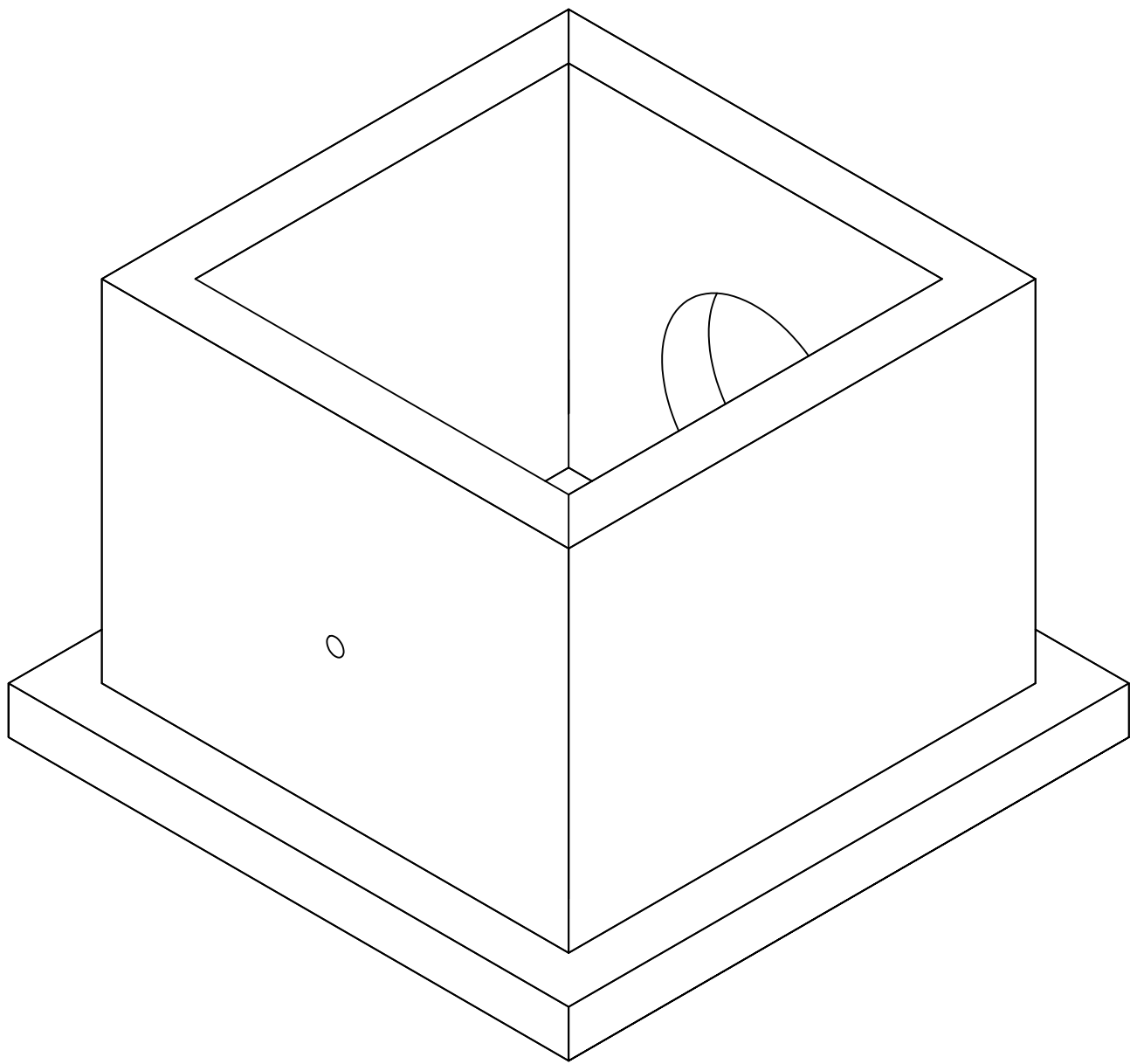
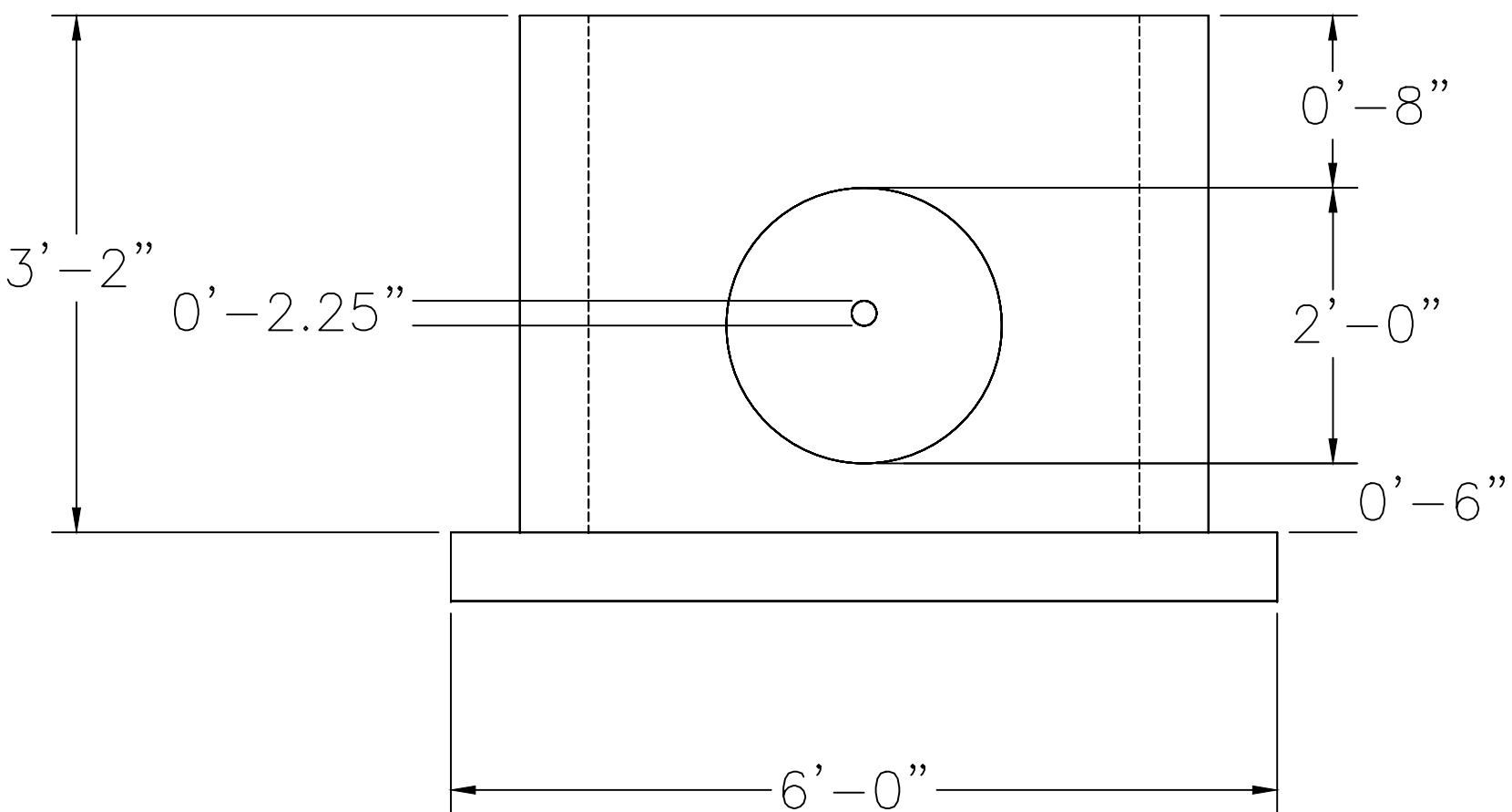
PLAN



SIDE

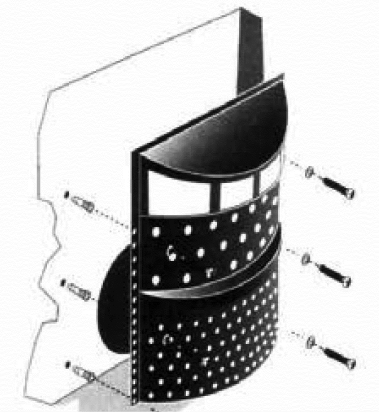


FRONT



TRASH GUARD PLUS  
STORMWATER PRETREATMENT DEVICE

INLET PROTECTION



Trash Guard Plus® is a patented stormwater pretreatment device that captures debris, sediment and floatables.

Trash Guard Plus® is easy to install and maintain and costs a fraction of other pretreatment devices currently available. Trash Guard Plus® has extensive testing and an available calculator to assist design professionals in selecting the correct screen size for their particular project.

Trash Guard Plus® is available in three 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.



ADVANTAGES:

- Captures debris, sediments and floatables
- Simple retrofits to existing catch basin
- Installs without heavy equipment
- Quick and easy assembly
- Adjusts to irregular catch basin bottoms and/or walls
- Eliminates eyesore stormwater trash at public parks, beaches, and waterways
- Removes harmful nutrients and regulated metals

For more information about Inlet Protection, contact Inside Sales at 800.448.3636 email at info@acfenv.com



INSTALLATION

LET'S GET IT DONE

Trash Guard Plus® Installation Instructions

Trash Guard Plus® can be installed in a variety of catch basin configurations (or field conditions). In general the Trash Guard Plus® is mounted on the catch basin wall, centered over the outlet pipe.

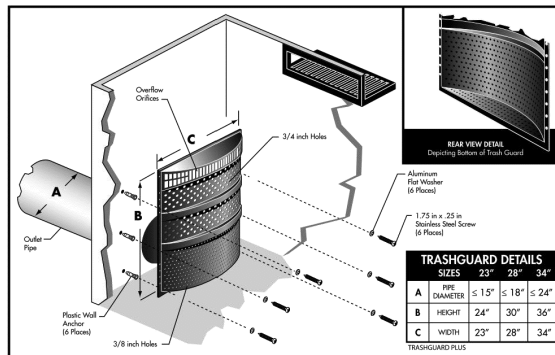
Before installing Trash Guard Plus® a hydraulic calculation should be performed to determine maximum flow rate based on depth of the catch basin and size of Trash Guard Plus® used. This calculated model will determine maximum flow rate with no obstructions or varying amounts of trash build up, and determine drainage area required to support the calculated flow rate. Allowable trash build up and drainage area required for trash build up will determine maintenance frequency.

If catch basin conditions allow and increased flow rate and additional vertical capacity are desired, a model can be calculated to determine flow rate when extending TrashGuard Plus® from one inch to seven inches from the catch basin wall. As above, this calculated model will determine maximum flow rate with no obstructions or varying amounts of trash build up. Contact Trash Guard Plus® for assistance in determining flow rate and drainage areas under varying field conditions.

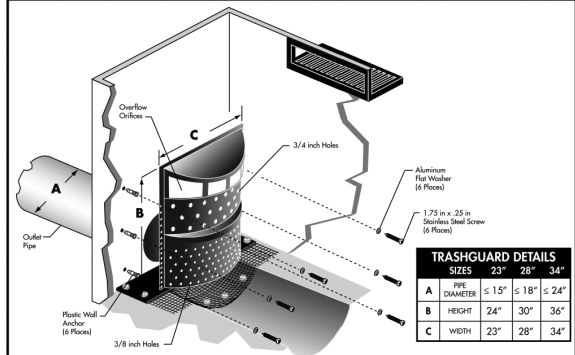
The following instructions are organized in sections described as follows:

- Section 1 - Trash Guard Plus® installed on a flat perpendicular wall with a flat bottom
- Section 2 - Bottom Plate installed on an rounded bottom
- Section 3 - Trash Guard Plus® installed on a flat perpendicular wall with an rounded bottom
- Section 4 - Trash Guard Plus® installed on tiered brick wall escalating width from top to bottom with an rounded on flat bottom
- Section 5 - Trash Guard Plus® installed on concaved wall reasonable flat top and bottom with an rounded or flat bottom.
- Section 6 - Trash Guard Plus® installed extended from wall to increase flow capacity with an rounded or flat bottom.

Flat-Bottom Catch Basin



Rounded Bottom Catch Basin



Several other installation options are available.

WARNING: Improper installation of the Trash Guard Plus® or failure to keep the area around the Trash Guard Plus® free from sediment, debris and litter after installation may result in clogging of the stormwater drainage system and increase the risk of flooding during times of heavy rainfall. It is important to clear sediment, debris and litter from around the Trash Guard Plus® at least four (4) times a year and more frequently in areas with large amounts of vegetation or litter. Please contact your local Trash Guard Plus® distributor with any questions regarding the installation or regular maintenance requirements of the Trash Guard Plus®.

SIMILAR PRODUCTS IN THIS FAMILY:



GRATEMASTER



GRATEMASTER PLUS

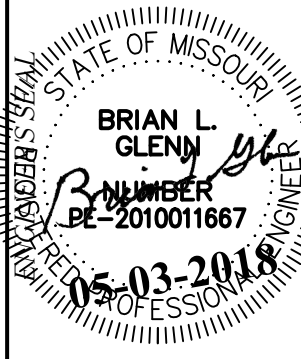


WHISPERING WOODS  
LEE'S SUMMIT, JACKSON COUNTY, MO  
STREET & STORM SEWER PLANS  
OUTFALL STRUCTURE DETAILS

DESIGNED  
BLG  
DRAWN  
JRT  
SCALE  
NOTED  
DATE  
09-01-2018  
JOB NO.  
04078  
SHEET

28 OF 29

REVISION



PHOENIX ENGINEERING  
& SURVEYING, LLC  
3834 S. NORTHERN BLVD.  
INDEPENDENCE, MO 64602  
(816) 743-9000 FAX: (816) 743-9700  
ENGINEERING CERTIFICATE NO: MO E-2000151302-D  
SURVEYING CERTIFICATE NO: MO LS-2000151303-D