

Section 02634 Connector Pipe Screen (CPS)

Contract Number _____

PART 1.00 SCOPE

The Connector Pipe Screen (CPS) prevents trash and debris from entering the storm drain system during dry weather and moderate storm flows by keeping the trash and debris inside the catch basin.

1.1 Submittals

The contractor and/or municipality shall be provided with engineering details or standardized top drawings of the CPS device and, when specified, utilize these drawings for approval. Drawings shall be annotated to indicate overall physical dimensions (WXLXH), all materials to be used, design assumptions and performance characteristics.

1.2 Manufacturer

The manufacturer of said system shall have been regularly engaged in the engineering design and production of systems for physical treatment of stormwater runoff for a minimum of 5-years and shall have greater than five-hundred (500) installation in two or more municipalities. The CPS shall be supplied by FABCO Industries, Inc., 66 Central Avenue, Farmingdale, NY 11735, phone 631.393.6024 or an approved Distributor/Representative of the product.

PART 2.00 PRODUCT DETAILS

The CPS shall be designed to retain all trash larger than 5 mm (0.197 inches) in the catch basin, and shall comply with the following items:

1. The CPS shall be sized, fabricated and installed conforming to the configurations shown in the CPS Sizing Table found in Attachment A.
2. The CPS unit shall have a sufficient structural integrity to withstand a lateral force of standing water (62.4 lb/ft³).
3. The CPS shall be configured with deflector plates or screens preventing trash from falling between the screen and connector pipe. The deflector plate shall be designed to withstand a vertical load of 10 lbs per square foot within the catch basin area when the screen becomes 100% clogged. The CPS unit shall be bolted to the catch basin walls.
4. The gap at the bottom, sides, and joints of the CPS unit shall not exceed 5 mm (0.197 inches).
5. The perimeter of the CPS shall include a structural frame for stiffness, a bolting surface to fasten the CPS to the wall of the catch basin, and support for the upper portion of the CPS unit referred to as the "bypass".
6. All parts/components of the CPS unit must be sized to fit through the catch basin's manhole opening.
7. The CPS frame shall be fabricated from S-304 stainless steel, or an Agency approved equal stainless steel alloy. The Structural members shall have a minimum thickness of 3/16 inches.

8. The CPS screen shall be fabricated from perforated metal of Type S-304 stainless steel, or an Agency approved equal stainless steel alloy. The screen shall have a minimum thickness of fourteen (14) gauge (0.0781 inches). The geometrical opening shape shall have a diameter of 5mm (0.197 inches).
9. The screen material used shall have at least 45% open area.
10. Any edge of the CPS that is not flush with the wall or floor of the catch basin shall be smooth with no prongs or jagged edges.
11. The assembly bolts, screws, nuts, and washers shall be fabricated entirely from S-316 stainless steel. The concrete anchor bolts shall use a Red Head Multi-Set II drop-in anchor, SSRM-38, with Type 316 stainless steel threaded rods, nuts and washers, or Agency approved equal.

PART 3.00 INSTALLATION and PRE-CLEANING

3.1 Preliminary Measurement

Detailed measurements of each catch basin, including the size and location of the connector pipe, shall be performed for the proper fabrication of the devices by the Manufacturer. Written records of measurements and photos will be kept on file by the Town or County Engineer for review and approval prior to fabrication of the CPS units.

3.2 Cleaning of Existing Catch Basins

Prior to commencing with installation, (preferably as part of the Catch Basin Sizing Survey), the catch basin structure shall be pre-cleaned such that it is free from obstructions and gross pollutants.

3.3 Method of Removal

All trash and debris required to be removed from the catch basins shall be removed according to industry standards. No trash or debris shall be allowed to enter the connector pipe or main line as a result of the cleanout operations.

3.4 Debris Disposal

Material removed from the drain will be disposed of according to Municipal standards.

The appropriate Animal Care and Control Agency will be contacted for pickup and disposal of dead animal and the Contractor shall be responsible for removing any dead animal from inside a catch basin.

END OF SECTION