ITEM 010130

Item 0101301 - HARTFORD TYPE "C" CATCH BASIN/GRANITE INLET
Item 0101302 - HARTFORD TYPE "C" CATCH BASIN/CONCRETE INLET
Item 0101303 - HARTFORD TYPE "CL" CATCH BASIN
Item 0101304 - HARTFORD TYPE "C" CATCH BASIN DOUBLE GRATE TYPE I-GRANITE INLET
Item 0101305 - HARTFORD TYPE "C" CATCH BASIN DOUBLE GRATE TYPE II-GRANITE INLET

DESCRIPTION

This item shall include excavating and furnishing all materials including Hartford Type "C" and "CL" Catch Basin frames and grates for the construction of a catch basin to line and grade in the location shown on plans, and backfilling to subgrade.

REFERENCED ITEMS

Item 0100101, 0100102, and 0103501

REQUIRED SUBMITTALS

Shop Drawings:

Submit 5 copies of shop drawings for catch basin frames, inlets and pre-cast units in accordance with the contract general requirements.

MATERIALS

The construction materials shall be as specified in "Specifications for the Construction of Sewer and Drain and Similar Structures" of the Metropolitan District (Bureau of Public Works).

The catch basin shall be built of brick, concrete block or pre-cast concrete units. The concrete shall be as specified in Section M.08.02-4 of the State of Connecticut, Department of Transportation, Standard Specifications for Roads, Bridges and Incidental Construction Form 816, 2004.

Mortar shall be composed of one part Portland cement and two parts of surface dry fine aggregate. Portland cement, Type I must conform to the requirements of AASHTO M85-04 and shall not have a temperature exceeding 160 °F at the time of delivery to the mixer. Water shall conform to the requirements of Article M.03.01 of

the State of Connecticut, Department of Transportation, Standard Specifications for Roads, Bridges, and Incidental Construction Form 816, 2004.

Bank run gravel used for backfilling shall conform to Item 0103501.

Granite curb inlet for catch basin shall conform to Item 0100101 or 0100102-New Straight Granite Curb on New Foundation. Dimensions of the inlet shall conform to those shown on the Standard Construction Detail.

CONSTRUCTION METHODS

The construction methods shall be as specified in "Specifications for the Construction of Sewer and Drain and Similar Structures" of the Metropolitan District (Bureau of Public Works). When brick or concrete block is used, the outside shall be covered with a coat of mortar not less than 1/4" in thickness.

Graduation requirements of fine aggregate:

Square Mesh Sieves	Total Percent Passing By Weight
3/8	100
No. 4	95-100
No. 8	80-100
No. 16	50-85
No. 30	25-60
No. 50	10-30
No. 100	2-10

The structure shall be backfilled with bank run gravel from the invert of the pipe to subgrade in 6" layers and thoroughly compacted. In the walls of the catch basin, four weep holes shall be provided. Weep holes shall be 2" minimum diameter or drainage openings should be constructed if built with masonry units by leaving two vertical masonry joints open in the masonry in each wall. The weep holes or vertical joints exterior shall be covered with Stainless Steel hardware cloth (1/8" mesh and diameter 0.035" wire) and backfilled with coarse material to prevent washing through the backfill.

METHOD OF MEASUREMENT

This work will be measured for payment by each "Hartford Type "C" and "CL" Catch Basin" constructed including excavation and backfill completed and accepted.

BASIS OF PAYMENT

This work will be paid for at the Contract Unit Price per each "HARTFORD TYPE "C" AND "CL" CATCH BASIN" of the type constructed, which price shall include excavation, backfill, disposal of unused excavated material, equipment, tools, all materials, labor and incidental expenses.

PAY ITEM	DESCRIPTION	PAY UNIT
0101301	Hartford Type "C" Catch Basin/ Granite Inlet	EA
0101302	Hartford Type "C" Catch Basin/ Concrete Inlet	EA
0101303	Hartford Type "C-L" Catch Basin	EA
0101304	Hartford Type "C" Catch Basin Double Grate Type I-Granite Inlet	EA
0101305	Hartford Type "C" Catch Basin Double Grate Type II-Granite Inlet	EA