PART 1 - GENERAL

1.1 DESCRIPTION

.1 This section specifies the requirements for supply and installation of pre-cast concrete catch basins and associated piping for surface water control on the uplands portion of the property.

1.2 MEASUREMENT FOR PAYMENT

.1 Catch Basin – Type 1: The supply and installation of the Type 1 catch basins and associated piping will be measured by the unit. Include all material, equipment and labour costs including but not limited to, excavation, catch basin, discharge piping (including trenching), grating cover, ladder rungs, etc.

.2 Catch Basin – Type 2: The supply and installation of the Type 2 catch basins and associated piping will be measured by the unit. Include all material, equipment and labour costs including but not limited to, excavation, catch basin, discharge piping (including trenching), grating cover, ladder rungs, etc.

PART 2 - PRODUCTS

2.1 MATERIALS

.1 Pre-cast catch basin sections: as noted on the drawings. Submit shop drawing of pre-cast unit for Departmental Representative's review.

.2 Concrete mix design as shown on the drawings and as per Section 03 30 00.

.3 Joints: to be made watertight using rubber ring gaskets, bituminous compound, epoxy resin cement or cement mortar.

.4 Mortar:
- .1 Aggregate: to CSA A82.56.
- .2 Cement: to CAN/CSA-A8.

.5 Frames, gratings, covers to dimensions as indicated and following requirements:
- .1 Metal gratings and covers to bear evenly on frames. A frame with grating or cover to

constitute one unit. Assemble and mark unit components before shipment.

.2 Grey iron castings: as noted on the drawings.

.3 Castings to be coated with two applications of asphalt varnish, sand blasted or cleaned and ground to eliminate surface imperfections.

.4 Catch basin frames and covers: heavy duty municipal type for road service. Standard catch basin 204 kg per set.

.6 High density polyethylene pipe, as noted on the drawings: 345 kPa load rating.

.7 Granular backfill:
.1 Crushed or screed stone, gravel or sand.
.2 Gradations to be

Sieve Size	% by Weight Passing
56 mm	100
16 mm	45-80
4.75 mm	25-55
1.25 mm	10-35
0.300 mm	5-15
0.075 mm	3-8

PART 3 - EXECUTION

3.1 GENERAL

.1 Obtain approval of Departmental Representative before installing catch basins. Do not backfill any catch basins prior to acceptance by Departmental Representative.

3.2 INSTALLATION

.1 Construct units in accordance with details indicated, plumb and true to alignment and grade.

.2 Successive joints to be watertight with approved rubber rings gaskets. Each lifting ring hole to be grouted with non-shrink grout. Clean surplus grout and joint compounds from interior surface of unit as work progresses.

.3 Place frame and cover on top section to required elevation. If adjustment required use concrete,

concrete ring or other riser system to approval of Departmental Representative.

.4 Do not backfill trenches or re-ballast cribs until pipe grade and alignment have been checked and approved by departmental Representative. Confirm that positive drainage towards waterlot property can be achieved.

.5 Lay and join pipes in accordance with manufacturer’s recommendations. Make watertight connections to catch basin ensuring pre-cast holes in catch basin are of sufficient size to accommodate pipe outside diameter, as shown on the drawings.