

OUTLET STUB ID: 30" (750 mm)
 OUTLET STUB OD: 36" (900 mm)



IF IN DOUBT ASK

COMMENTS:
 1. MANHOLE WALL AND SLAB THICKNESSES ARE NOT TO SCALE.
 2. CONTACT HYDRO INTERNATIONAL FOR A BOTTOM OF STRUCTURE ELEVATION PRIOR TO SETTING DOWNSTREAM DEFENDER MANHOLE.

DATE: 11/8/2019 SCALE: NTS
 DRAWN BY: GW CHECKED BY: APPROVED BY:

Title
 10ft-DIAMETER
 DOWNSTREAM DEFENDER



hydro-int.com
 HYDRO INTERNATIONAL

DO NOT SCALE DRAWING
STEEL FABRICATION TOLERANCES
 UNLESS OTHERWISE SPECIFIED,
 DIMENSIONS ARE IN INCHES.

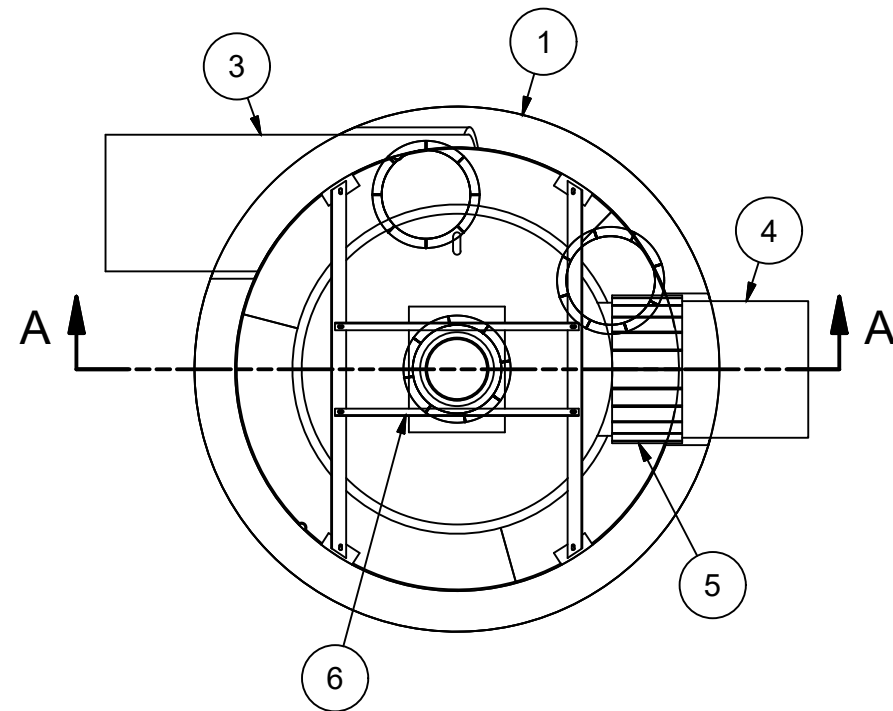
LINEAR: 000 - 012in = ±0.04in, 012 - 024in = ±0.06in, 024 - 048in = ±0.08in, 048 - 120in = ±0.12in, 120in >>> = ±0.20in
 ANGULAR: 000 - 120in = ±1°, 120 - 240in = ±0.5°, 240in >>> = ±0.25°

WEIGHT: N/A MATERIAL:

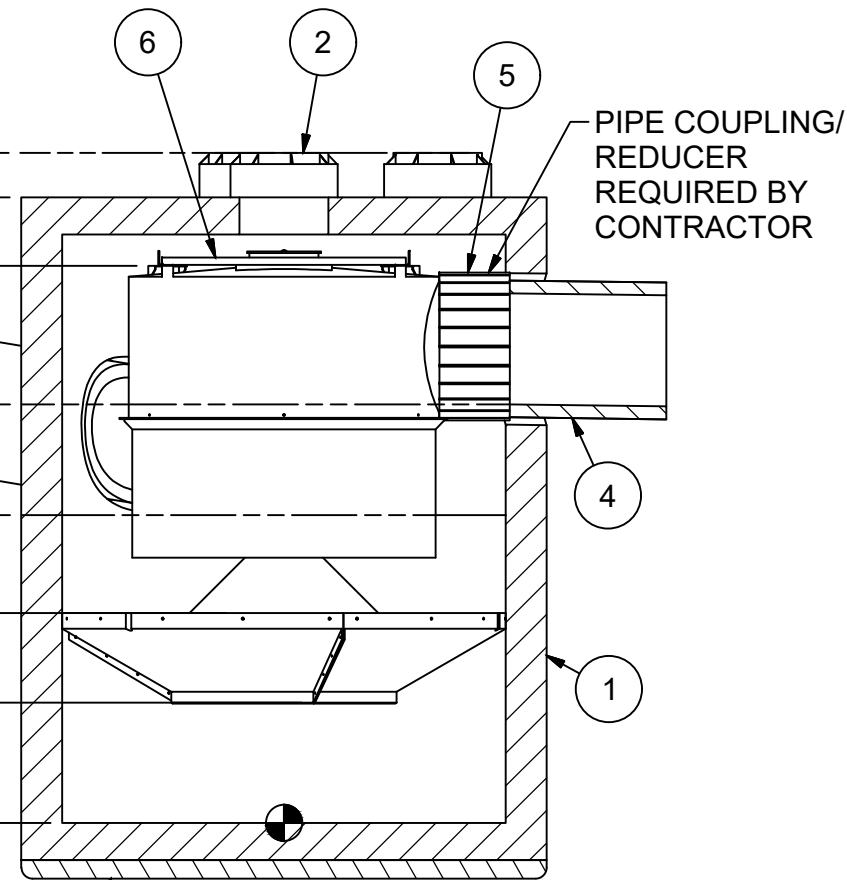
REFERENCE NUMBER:

DRAWING NO.:

SHEET SIZE: B SHEET: 1 OF 1 Rev: -



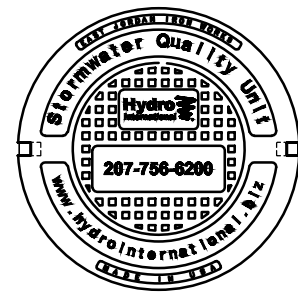
RIM: VARIES
 T.O.S.: 14.1 ft [4.299 m] (MINIMUM)
 LEDGER: 12.56 ft [3.829 m]
 OUTLET: 9.44 ft [2.877 m] (MINIMUM)
 INLET: 6.94 ft [2.115 m]
 SKIRT: 4.73 ft [1.441 m]
 BOTTOM OF INTERNALS: 2.71 ft [.826 m]
 SUMP: 0 ft [.000 m]



STONE BASE
 PER PROJECT
 SPECIFICATIONS

SECTION A-A

NOTE: NOT FOR CONSTRUCTION.
 CONTACT HYDRO FOR SITE
 SPECIFIC DETAIL



HYDRO FRAME AND COVER (INCLUDED)
 GRADE RINGS BY OTHERS
 AS REQUIRED

EQUIPMENT PERFORMANCE

The stormwater treatment unit shall adhere to the hydraulic parameters given in the chart below and provide the removal efficiencies and storage capacities as follows:

1. The treatment system shall use an induced vortex to separate pollutants from stormwater runoff.
2. Peak Hydraulic Capacity: 25.0 cfs (708 l/s)
3. Sediment Storage Capacity: 8.70 cu. yd. (6.65 cu. m)
4. Continuous Oil Storage Capacity: 1050 gal. (3975 liters)
5. Sediment shall be stored in a zone that is isolated from the main flow path and protected from reentrainment by a benching skirt.
6. For more product information including regulatory acceptances, please visit <https://hydro-int.com/en/products/downstream-defender>

PARTS LIST

ITEM	QTY	SIZE (in)	SIZE (mm)	DESCRIPTION
1	1	120	3000	PRECAST MANHOLE (BY HYDRO VIA PRECASTER)
2	3	24	600	FRAME AND COVER (QTY 3)
3	1	30 (MAX)	750 (MAX)	INLET PIPE (BY OTHERS)
4	1	30 (MAX)	750 (MAX)	OUTLET PIPE (BY OTHERS)
5	1			PIPE COUPLING (BY OTHERS)
6	1			INTERNAL COMPONENTS (PRE-INSTALLED)

ANY WARRANTY GIVEN BY HYDRO INTERNATIONAL WILL APPLY ONLY TO THOSE ITEMS SUPPLIED BY IT. ACCORDINGLY HYDRO INTERNATIONAL CANNOT ACCEPT ANY RESPONSIBILITY FOR ANY STRUCTURE, PLANT, OR EQUIPMENT, (OR THE PERFORMANCE THERE OF) DESIGNED, BUILT, MANUFACTURED, OR SUPPLIED BY ANY THIRD PARTY. HYDRO INTERNATIONAL HAVE A POLICY OF CONTINUOUS DEVELOPMENT AND RESERVE THE RIGHT TO AMEND THE SPECIFICATION. HYDRO INTERNATIONAL CANNOT ACCEPT LIABILITY FOR PERFORMANCE OF ITS EQUIPMENT, (OR ANY PART THEREOF), IF THE EQUIPMENT IS SUBJECT TO CONDITIONS OUTSIDE ANY DESIGN SPECIFICATION. HYDRO INTERNATIONAL OWNS THE COPYRIGHT OF THIS DRAWING, WHICH IS SUPPLIED IN CONFIDENCE. IT MUST NOT BE USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT IS SUPPLIED AND MUST NOT BE REPRODUCED, IN WHOLE OR IN PART, WITHOUT PRIOR PERMISSION IN WRITING FROM HYDRO INTERNATIONAL.