



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.  
 3. CONTRACTOR TO CONFIRM RIM, PIPE INVERTS, PIPE DIA. AND PIPE ORIENTATION PRIOR TO RELEASE OF UNIT TO FABRICATION.

REVISION HISTORY			
REV	BY	DESCRIPTION	DATE
-		FIRST RELEASE	

DATE: 9/20/2016 SCALE: VARIES  
 DRAWN BY: KDO CHECKED BY: APPROVED BY:

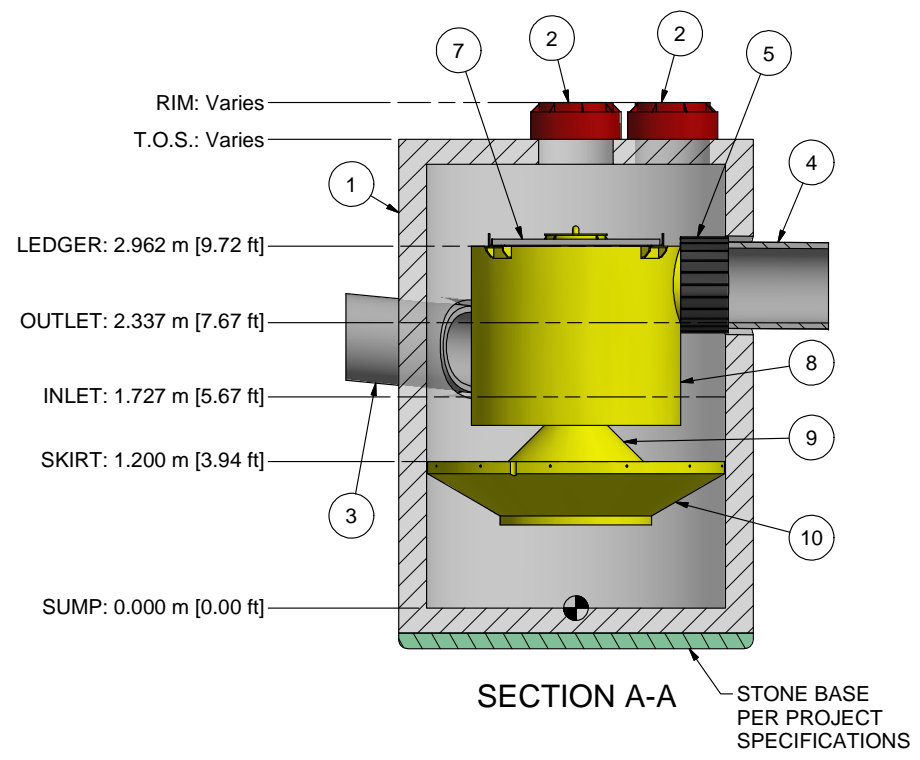
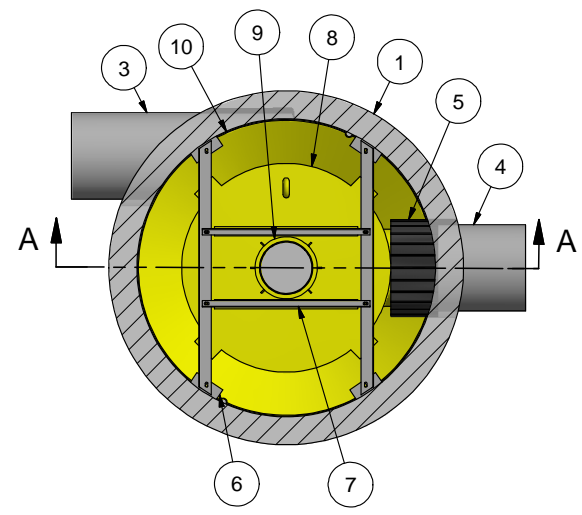
Title  
 2400mm DIAMETER  
 DOWNSTREAM DEFENDER

GENERAL ARRANGMENT



94 Hutchins Drive  
 Portland, ME 04102  
 Tel: +1 (207) 756-6200  
 Fax: +1 (207) 756-6212  
 hydro-int.com

APPROX WEIGHT: N/A	MATERIAL:
NEXT ASSEMBLY: 12-34567-NEXT ASSY	
DRAWING NO.: 12-34567-DD GA	
SHEET SIZE: B	SHEET: 1 OF 1
Rev:	-



PARTS LIST

ITEM	DESCRIPTION	SIZE (mm)
1	PRECAST MANHOLE (BY HYDRO VIA PRECASTER)	2400
2	FRAME AND COVER	600
3	INLET PIPE (BY OTHERS)	600
4	OUTLET PIPE (BY OTHERS)	600
5	PIPE COUPLING (BY OTHERS)	
6	LEDGER ANGLE	
7	SUPPORT FRAME	
8	DIP PLATE	
9	CENTER SHAFT AND CONE	
10	BENCHING SKIRT	

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:

- Performance objectives: The unit shall be capable of treating the peak flow rate listed below.
- Peak Treatment Flow: 15.0 cfs (425 l/s)
- Sediment Storage Capacity: 4.65 cu. yd. (3.52 cu. m.)
- Continuous Oil Storage Capacity: 540 gal. (2044 liters)
- Sediment shall be stored in a zone that is isolated from the main flow path and protected from reentrainment by a benching skirt.

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.  
 ©2017 HYDRO INTERNATIONAL

**DO NOT SCALE DRAWING**  
 UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. TOLERANCES ARE:  
 FRACTIONS ± 1/16  
 DECIMALS ± .06  
 ANGLES ± 1°