

Web: www.env21.com

PROJECT NAME	ENV21 UNISTORM STORMWATER PRETREATMENT CHAMBER WITH STIRRING POWER DISSIPATION
OWNER NAME	XXX
ENGINEER NAME	XXX
CONTRACTOR NAME	XXX
ENV 21 AFFILIATE NAME	ENV21 UNISTORM STORMWATER PRETREATMENT CHAMBER WITH STIRRING POWER DISSIPATION
PRODUCT DESIGNATION	ENV21 UNISTORM STORMWATER PRETREATMENT CHAMBER WITH STIRRING POWER DISSIPATION
LOCATION NAME	XXX
SCALE	1/4" = 1'-0"
DWG. NO.	ENV21-PT-DWG
DATE	6-17-24



- GENERAL DESIGN GUIDELINES FOR UNISTORM PRETREATMENT CHAMBER**
- (1) BAFFLE WALL AND FLOW VANES USED TO DISSIPATE INLET FLOW STIRRING POWER. THIS ELIMINATES THE NEED TO BYPASS HIGH FLOW EVENTS.
 - (2) MAXIMUM INLET PIPE DIAMETER = 1/4 OF UNISTORM DIAMETER.
 - (3) TYPICAL INTERNAL HEAD LOSS FOR DESIGN STORM IS 0.20 FT.
 - (4) MAXIMUM INLET VELOCITY FOR DESIGN STORM = 4.0 FT/SEC.
 - (5) DESIGN OF FLOW CONTROL BAFFLE WALL AND FLOW VANES BASED ON ENVIRONMENT 21 ANALYSIS OF SITE-SPECIFIC STORM SEWER HYDRAULICS.
 - (6) SITE-SPECIFIC AUTOCAD DRAWING DETAIL PREPARED BY ENVIRONMENT 21.

ENV 21 FLOW VANE (TFP)

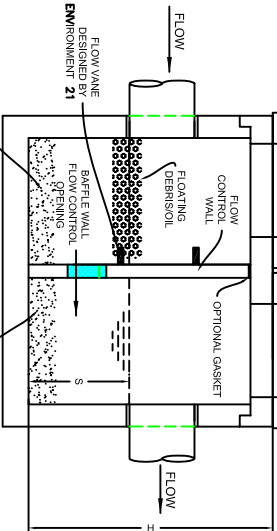
UNISTORM MODEL #	D (ft.)	H (ft.)	S (ft.)
UPSAS5R	5	7.2	4.54
UPSAS6R	6	8.2	4.84
UPSAS7R	7	9.2	5.14
UPSAS8R	8	10.2	5.54
UPSAS10R	10	11.4	6.14
UPSAS12R	12	12.2	6.84

UNISTORM MODEL #	IMPERVIOUS AREA, ACRES	*DESIGN STORM, CFS
UPSAS5R	1.0±	4.3±
UPSAS6R	1.4±	6.2±
UPSAS7R	2.0±	8.5±
UPSAS8R	2.7±	11.1±
UPSAS10R	4.2±	17.0±
UPSAS12R	6.0±	25.0±

*BASED ON 4.77IN DESIGN STORM INTENSITY

NOTE: SITE PLAN VALUES USED FOR (a) RIM ELEVATIONS, AND (b) INLET AND OUTLET PIPE MATERIALS, DIAMETERS AND INVERTS

GASKET NOTE: GASKET SHOULD EXTEND TO CEILING



GENERAL NOTES:
 MANHOLE DESIGN SPECIFICATIONS CONFORM TO LATEST A.S.T.M. C478
 SPEC. FOR PRECAST REINFORCED CONCRETE MANHOLE SECTIONS.
 DESIGN LOADS: AASHTO HS20-44

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