



ONLINE SYSTEM / ADAPT TO SITE LAYOUT

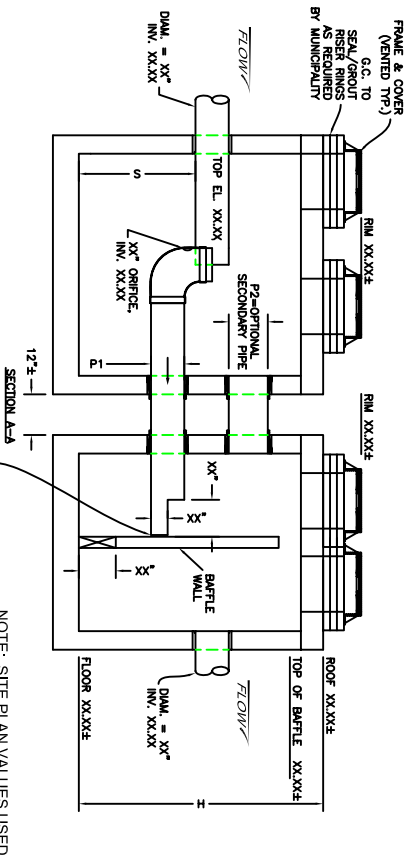
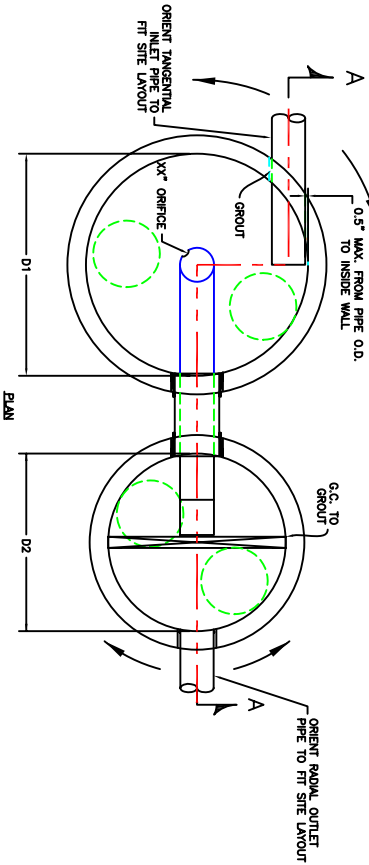
DATE: 11-04-03
 DWG. NO.: STD DRAIN-1

VZB1 SIZING TABLE							
VZB1 MODEL #	IMPERVIOUS AREA ACRES	D1 (ft)	D2 (ft)	H (ft)	S (ft)	P1 (in.)	P2 (in.)
3	0.3-1.3	4	4	7.2	4.12	*	*
4	1.3-2.0	5	5	7.2	4.42	*	*
6	2.0-3.0	6	5	8.2	4.72	*	*
9	3.0-4.0	7	5	8.2	4.92	*	*
11	4.0-5.3	8	6	9.2	5.12	*	*
17	5.3-8.3	10	7	10.2	5.32	*	*
25	8.3-11.7	12	8	11.2	5.52	*	*

SIZING GUIDELINE FOR TREATMENT:
 - AREA RAINFALL INTENSITY = 0.30" /HR
 - SWIRL CHAMBER(1) AREA = 10-15 SF /IMPERVIOUS ACRE

MANUFACTURING NOTES:
 1) DESIGN OF INTERNALS PROVIDED TO LICENSED MANUFACTURER BY ENVIRONMENT 21, LLC.
 2) LOCATION AND SIZE OF MANHOLE PROVIDED TO BE ADJUSTED BY LICENSED MANUFACTURER.

NOTES: (1) PRELIMINARY DESIGN. ASSUME SWIRL CHAMBER DIAMETER (D1) = 3-4 TIMES INLET PIPE DIAMETER.
 (2) CONNECT MANHOLES USING BOOTED CONNECTIONS.



GENERAL NOTES:
 MANHOLE DESIGN SPECIFICATIONS CONFORM TO LATEST A.S.T.M. C478 SPEC. FOR PRECAST REINFORCED CONCRETE MANHOLE SECTIONS.
 DESIGN LOADING: ASHTO HS20-44
 PROPRIETARY INFORMATION: PATENTS PENDING - ALL RIGHTS TO ENVIRONMENT 21, LLC.

NOTE: SITE PLAN VALUES USED FOR (1) RIM ELEVATIONS, AND (2) INLET AND OUTLET PIPE MATERIALS, DIAMETERS AND INVERTS