

MODEL #	W1	W2	H1	H2	T1	K.O.	GRATE SIZE	WEIGHT IBS
CBDG-36	48"	36"	42"	36"	6"	36"	22"Ø	4,585
CBDG-48	60"	48"	54"	48"	6"	48"	22"Ø	8,900
CBDG-60	72"	60"	66"	60"	6"	60"	22"Ø	13,650
CBDG-72	84"	72"	78"	72"	6"	72"	22"Ø	19,000
CBDG-84	96"	83"	78"	72"	6"	84"	22"Ø	23,000

HYDRAULIC CALCULATIONS

$Q = CA\sqrt{2gd}$ TO SOLVE FOR MAX FLOW - Q (cfs)

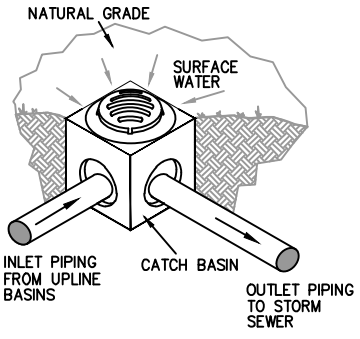
WHERE $Q = 2.376\sqrt{d}$

Q = FLOW, cfs
 C = ORIFICE COEFFICIENT, .67
 A = CLEAR OPENING, 220 in²
 g = GRAVITY, 32.2 ft/sec²
 d = DEPTH OF WATER, in

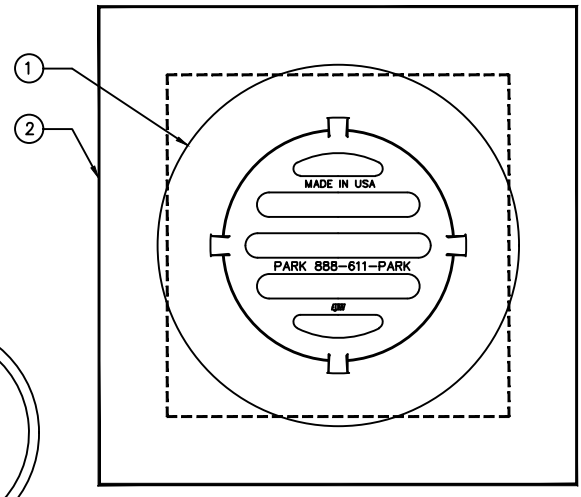
TO SOLVE FOR HEIGHT OF WATER - d (in)

$d = \left(\frac{Q}{2.376}\right)^2$

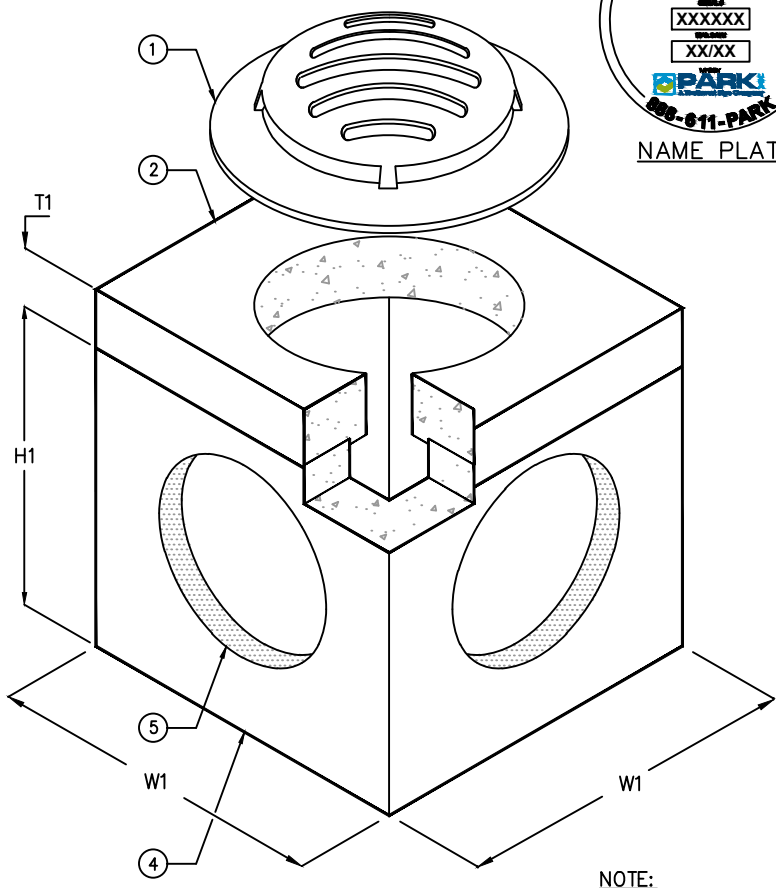
NOTE: THIS EQUATION IS VALID FOR WATER DEPTHS 4" OR GREATER, AND DOES NOT COMPENSATE FOR ANY REDUCTION IN FLOW DUE TO CLOGGING BY DEBRIS.



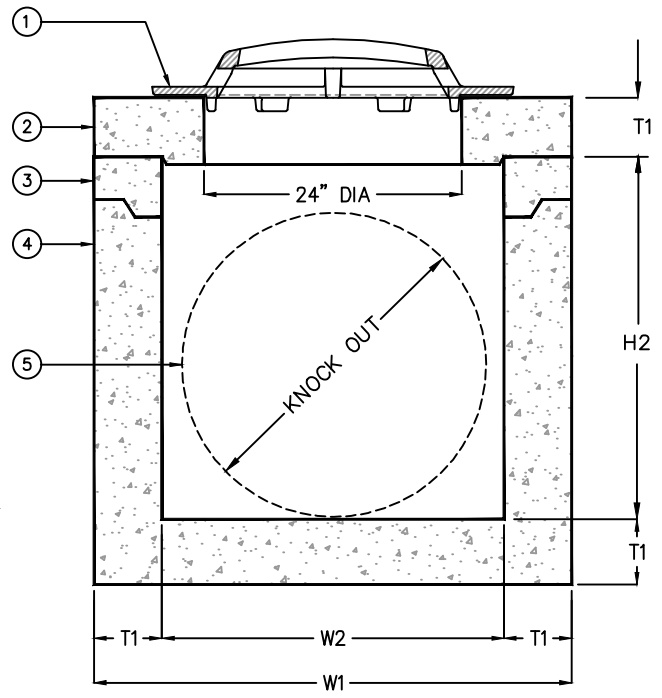
KEYED NOTES		
MARK	QTY	DESCRIPTION
1	1	22" HD CAST IRON FRAME & GRATE (EJW #6489)
2	1	TOP SECTION
3	1	RISER SECTION
4	1	BASIN SECTION
5	4	36"-84" DIAMETER KNOCK OUT
6	1	NAMEPLATE MFG: ParkUSA 888-611-PARK WWW.PARKUSA.COM DATE MANUFACTURED MODEL: CBDG3684



PLAN VIEW



ISOMETRIC



ELEVATION VIEW

NOTE:
RISER SECTION AVAILABLE
IN 6" TO 12" DEPTHS.

SPECIFICATIONS

CONCRETE : Class I/II concrete with of design strength of 4500 PSI at 28 days. Unit is of monolithic construction at floor and first stage of wall with sectional riser to required depth. Rated for H-20 Loading.

REINFORCEMENT: Grade 60 reinforced with steel rebar to conform to ASTM A615 on required centers or equal.

C.I. CASTINGS: Cast iron frames and grates are manufactured of grey cast iron conforming to ASTM A48-76 Class 35.



DITCH GRATE INLET					
MODEL CBDG - 36" THRU 84"					
PM	PC	DRN	ENG	DWG. NO.	REV.
DATE	2023			CBDG3684	A

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