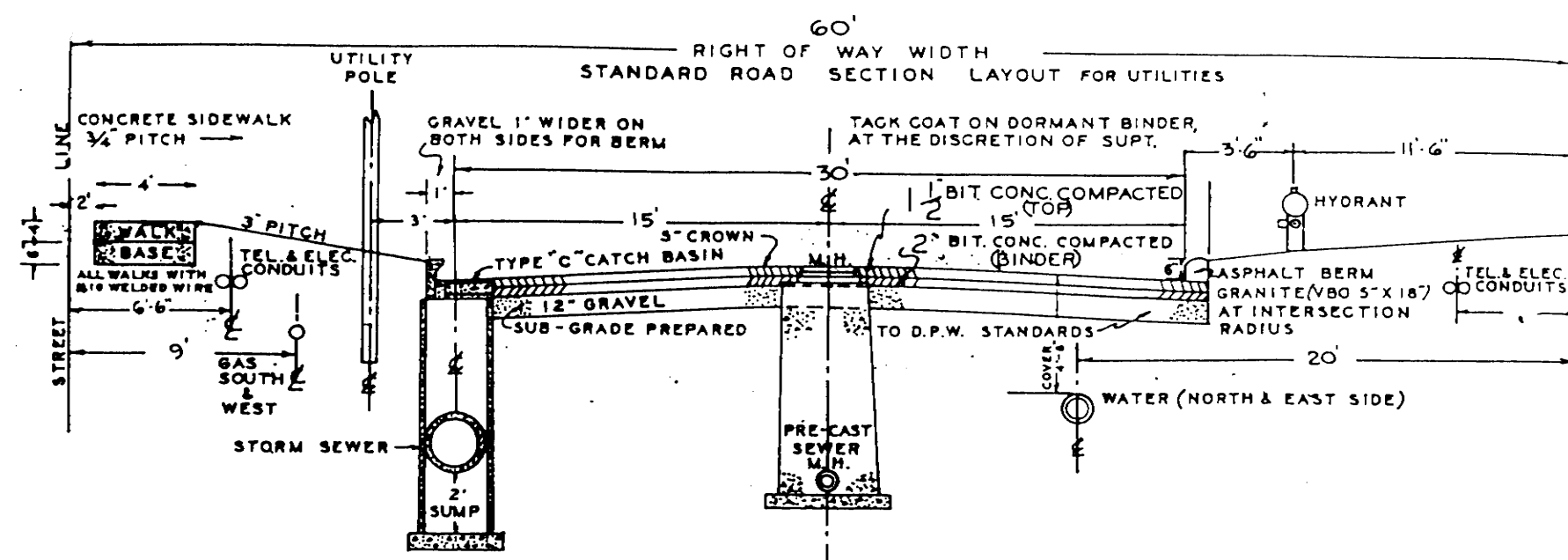
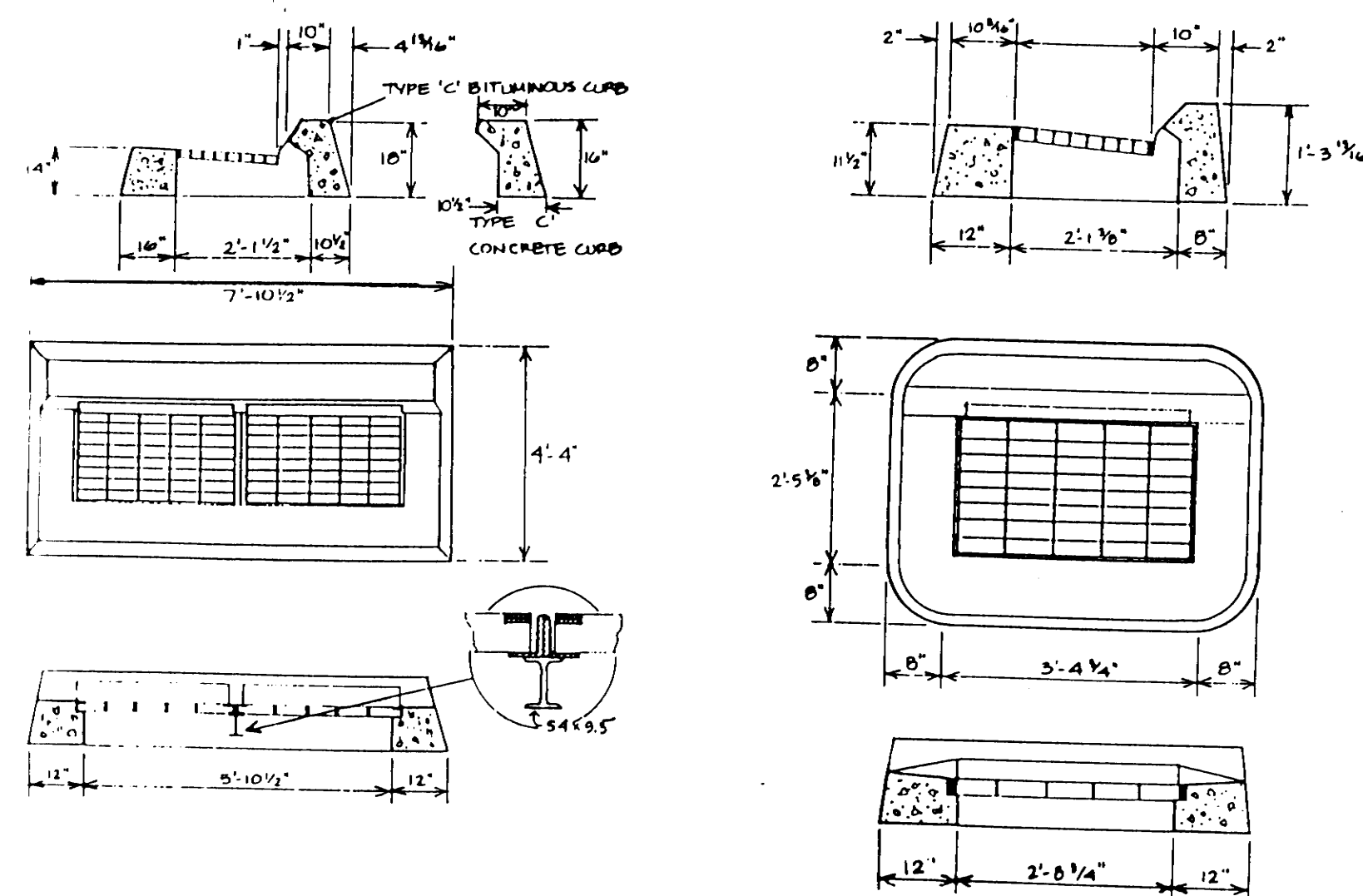




TO BE STABILIZED WITH CALCIUM CHLORIDE AND
COMPACTED WITH ROLLER WEIGHING 8 TON OR MORE

6" WALK
2"
2"
10 W.W.
10 W.W.
6" BASE
DRIVEWAY X-SECTION



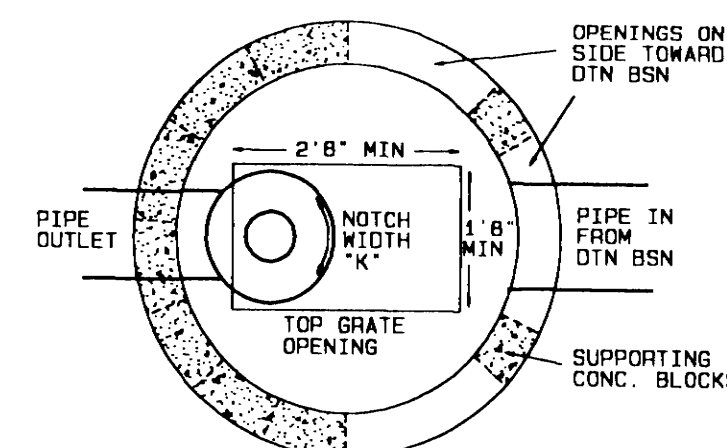
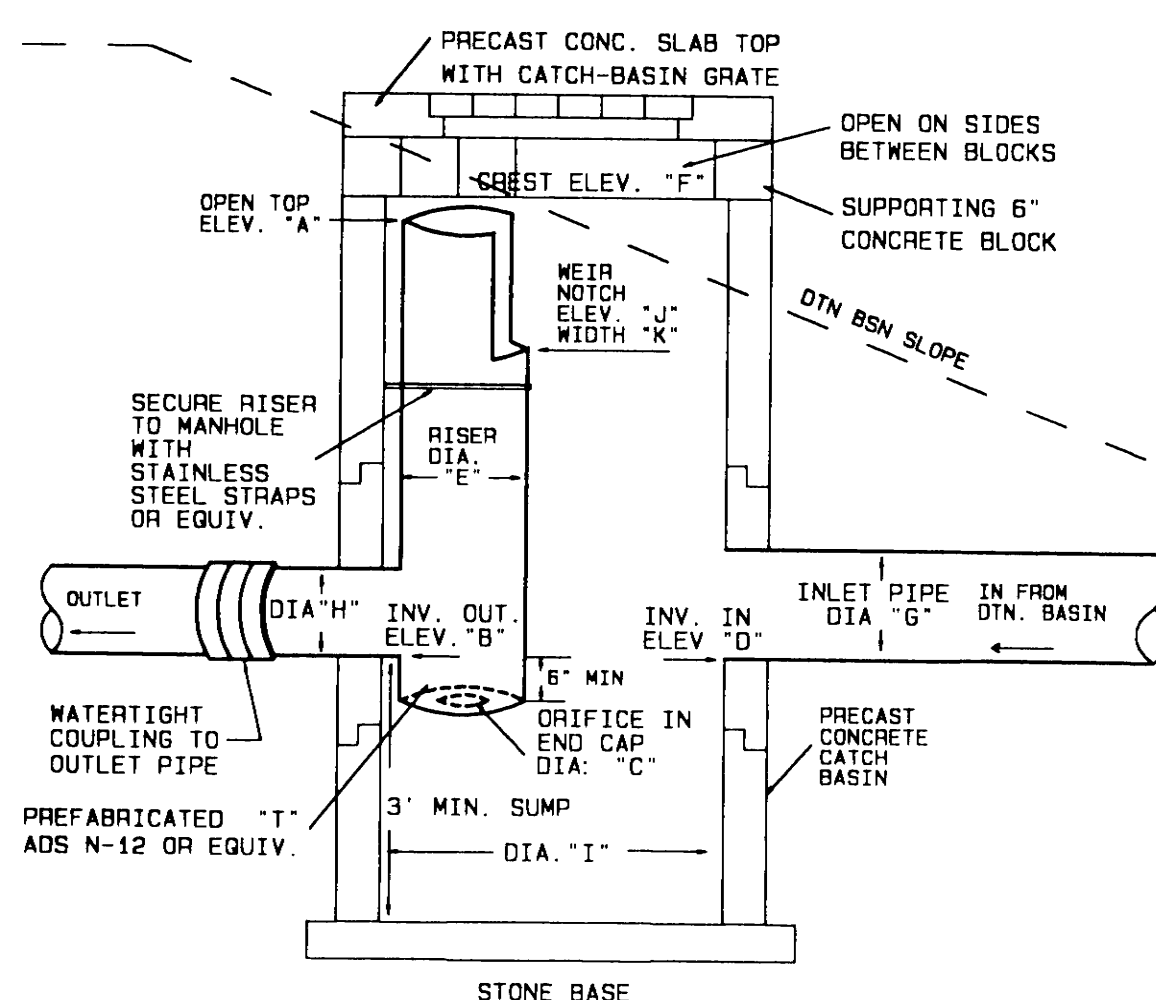
- DESIGN NOTES**
1. Concrete - 4000 p.s.i., 28 days
 2. Reinforcement - ASTM A-615, Grade 60

AC - DOUBLE
"C" TYPE II

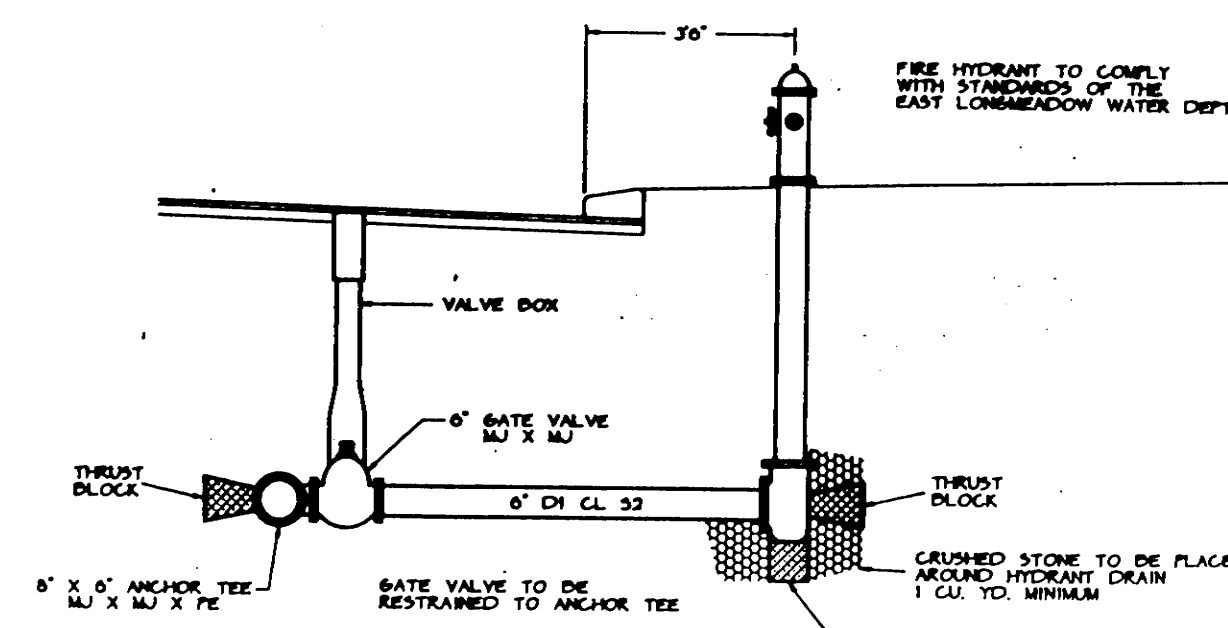
- DESIGN NOTES**
1. Concrete - 4000 p.s.i., 28 days
 2. Reinforcement - ASTM A-615, Grade 60

AC - CATCH BASIN
MASSACHUSETTS TYPE "C"

NO SCALE

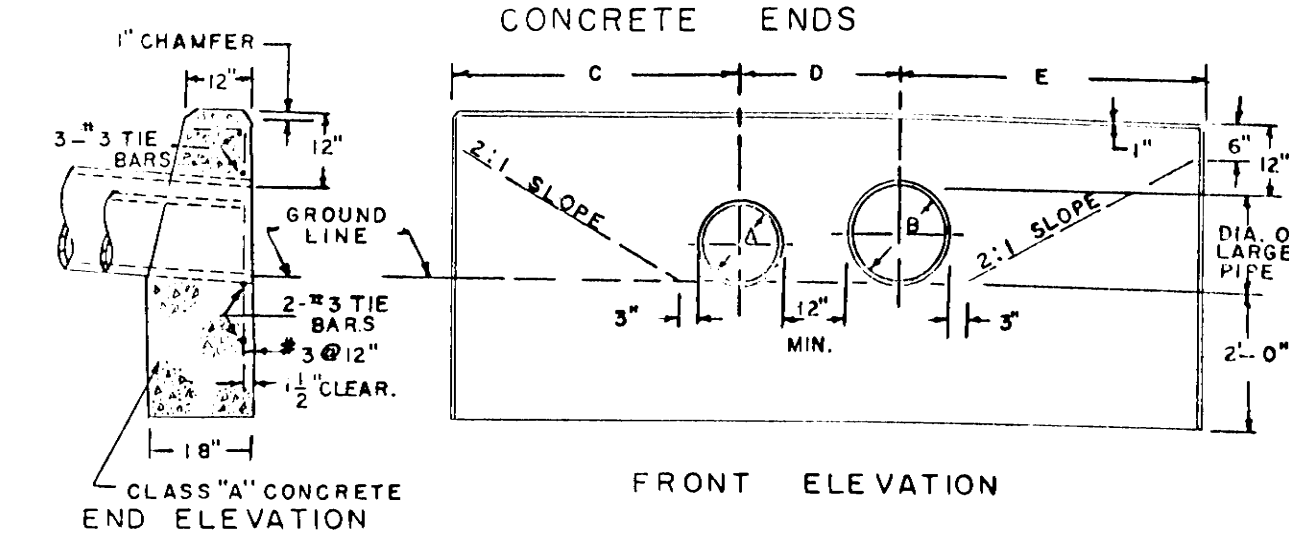


DTN BSN ID:	DTN BSN 1
TOP OF RISER "A"	216.0
INVERT OUT "B"	213.6
ORIFICE DIA. "C"	6 IN.
INVERT IN "D"	213.6
RISER DIA. "E"	30 IN.
CREST ELEV. "F"	216.5
INLET DIA. "G"	30 IN.
OUTLET DIA. "H"	24 IN.
BASIN DIA. "I"	5 FT.
WEIR ELEV. "J"	215.0
NOTCH WIDTH "K"	1.0 FT



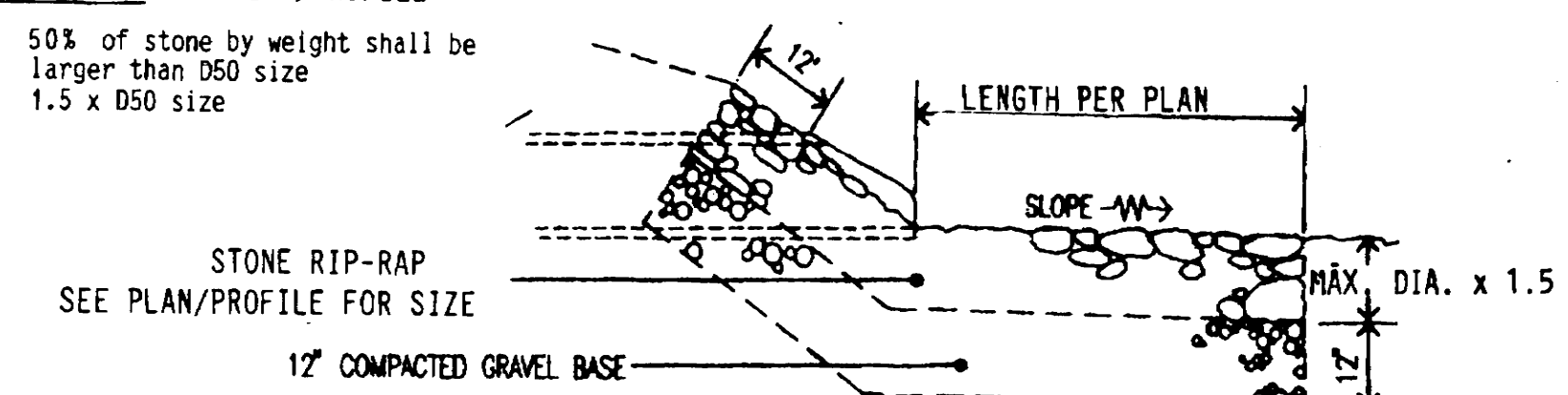
HYDRANT DETAIL

CONCRETE
COMBINATION ENDS FOR PIPES UP TO 30" DIAMETER

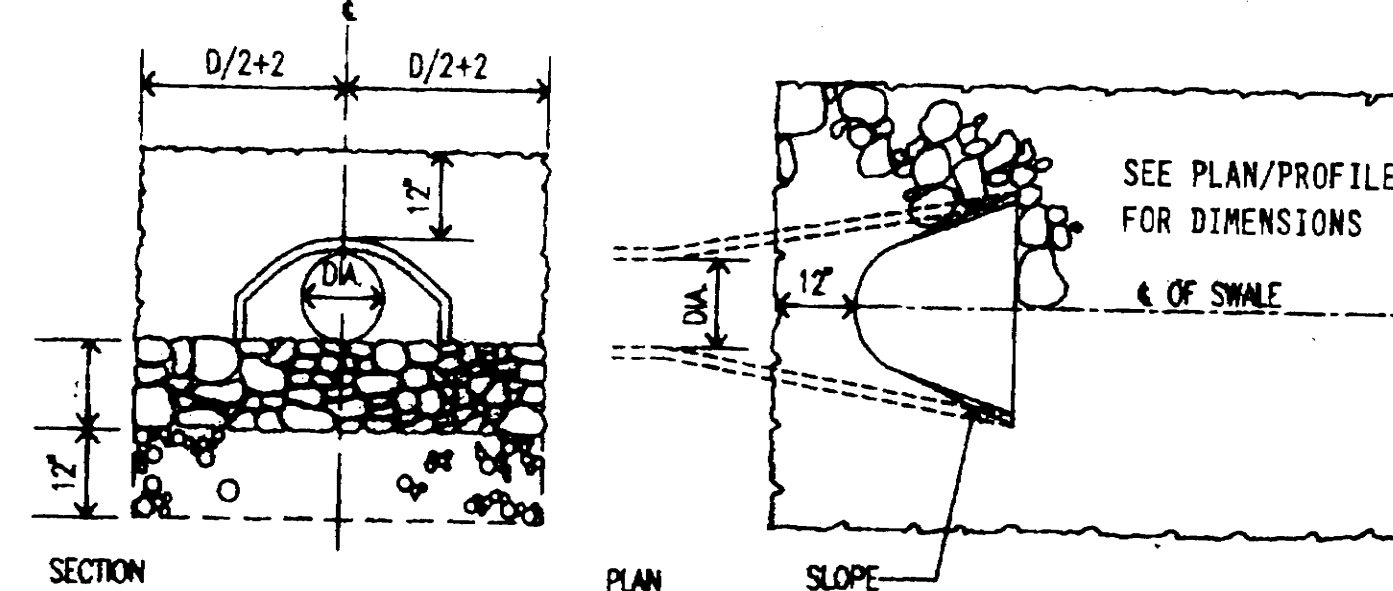


DESIGN NO.	DIAMETER IN INCHES		LENGTHS					CUBIC YARDS OF MASONRY	POUNDS OF STEEL	CUL. FT. TRENCH EX. 10' DEPTH
	1"	2"	3"	4"	5"	6"	7"			
1	12"	12"	3'-9"	2'-2"	3'-9"			1.89	37	40.85
2	12"	15"	4'-3"	2'-4"	4'-5"			2.27	42	45.56
3	12"	18"	4'-3"	2'-6"	5'-0"			2.66	48	49.88
4	12"	21"	5'-4"	2'-8"	5'-8"			3.12	54	54.85
5	12"	24"	5'-9"	2'-10"	6'-3"			3.54	59	58.91
6	12"	30"	6'-9"	3'-0"	7'-6"			4.48	71	67.38
7	15"	15"	4'-5"	2'-6"	4'-5"			2.32	41	46.66
8	15"	18"	4'-11"	2'-8"	5'-0"			2.72	48	51.03
9	15"	21"	5'-5"	2'-10"	5'-8"			3.16	54	55.72
10	15"	24"	5'-11"	3'-0"	6'-3"			3.60	60	60.00
11	15"	30"	6'-11"	3'-2"	7'-6"			4.54	72	68.53
12	18"	18"	5'-0"	2'-8"	5'-0"			2.72	48	51.35
13	18"	21"	5'-7"	2'-10"	5'-8"			3.17	52	56.28
14	18"	24"	6'-0"	3'-0"	6'-3"			3.58	60	60.38
15	18"	30"	7'-0"	3'-2"	7'-6"			4.53	72	68.85
16	21"	21"	5'-8"	3'-0"	5'-8"			3.20	53	57.19
17	21"	24"	6'-2"	3'-4"	6'-3"			3.69	61	62.13
18	21"	30"	7'-2"	3'-6"	7'-6"			4.65	73	70.60
19	24"	24"	6'-3"	3'-4"	6'-3"			3.67	61	62.40
20	24"	30"	7'-3"	3'-8"	7'-6"			4.69	74	64.47
21	30"	30"	7'-6"	4'-0"	7'-6"			4.76	75	73.50

D50: 50% of stone by weight shall be
larger than D50 size
Dmax: 1.5 x D50 size



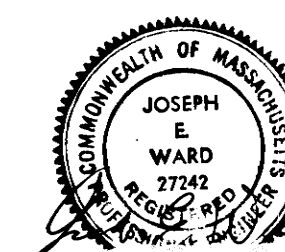
STONE APRON AT PIPE OUTLETS



PREPARED FOR
DAN ROULIER & ASSOCIATES INC.

DATE- JULY 1996

**SMITH ASSOCIATES
SURVEYORS, INC.**



50 246