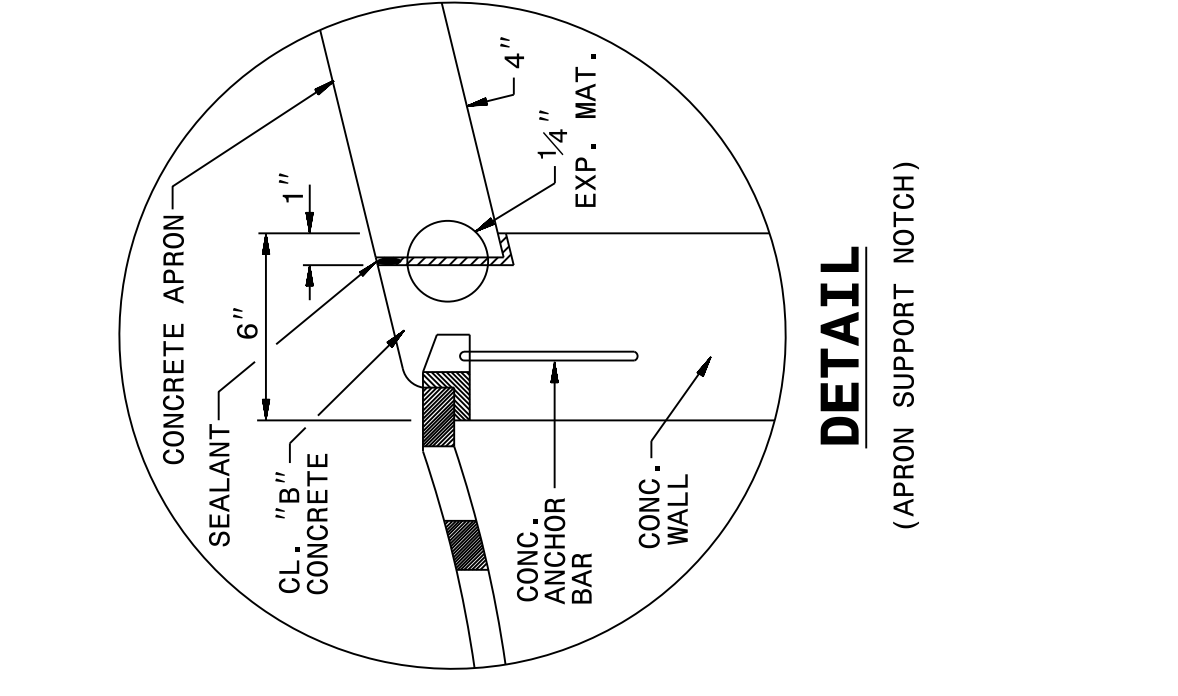
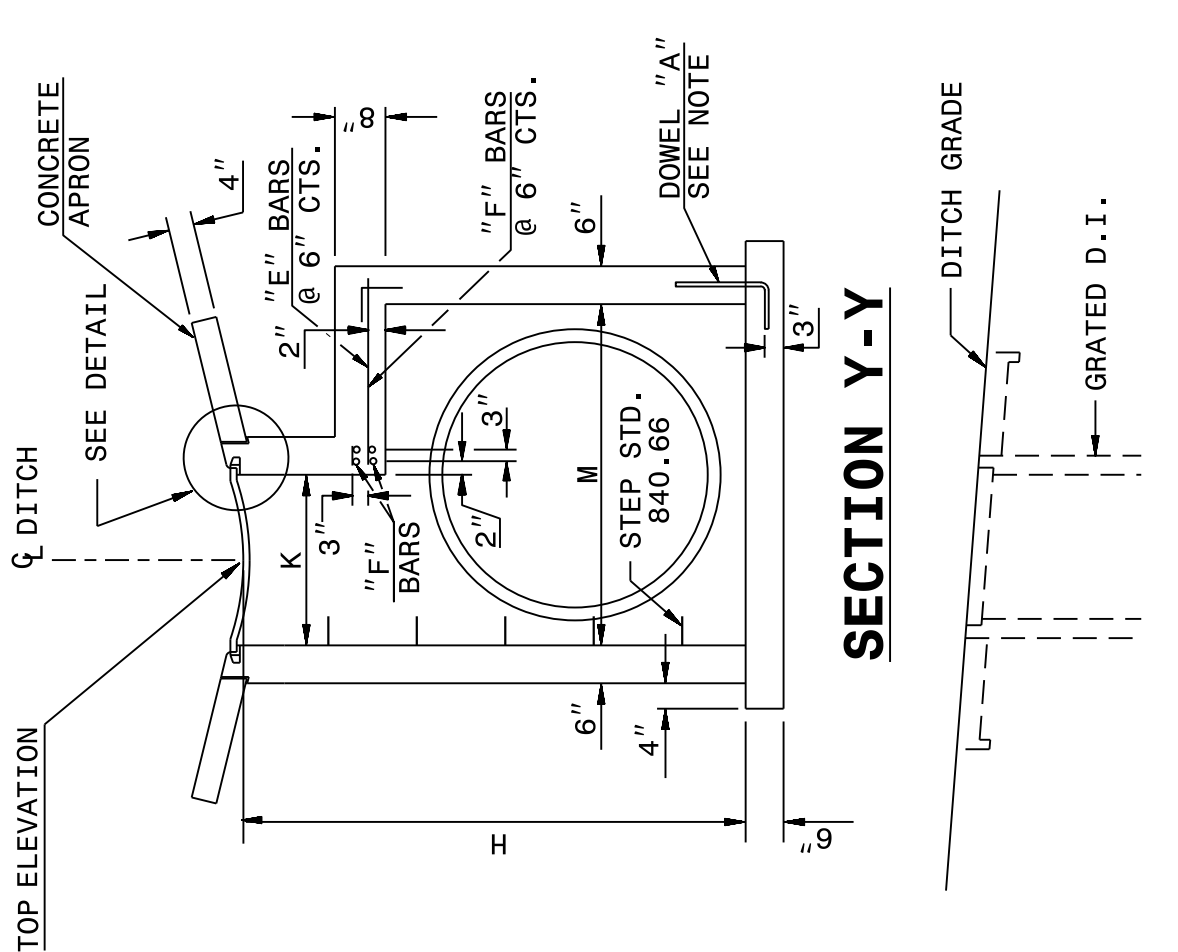
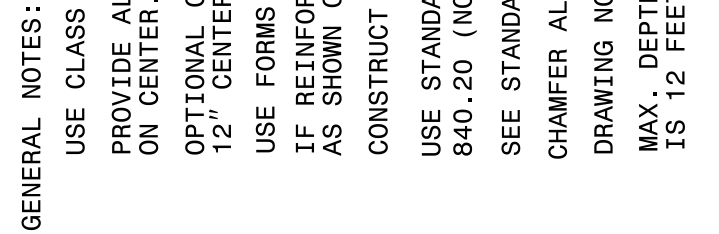
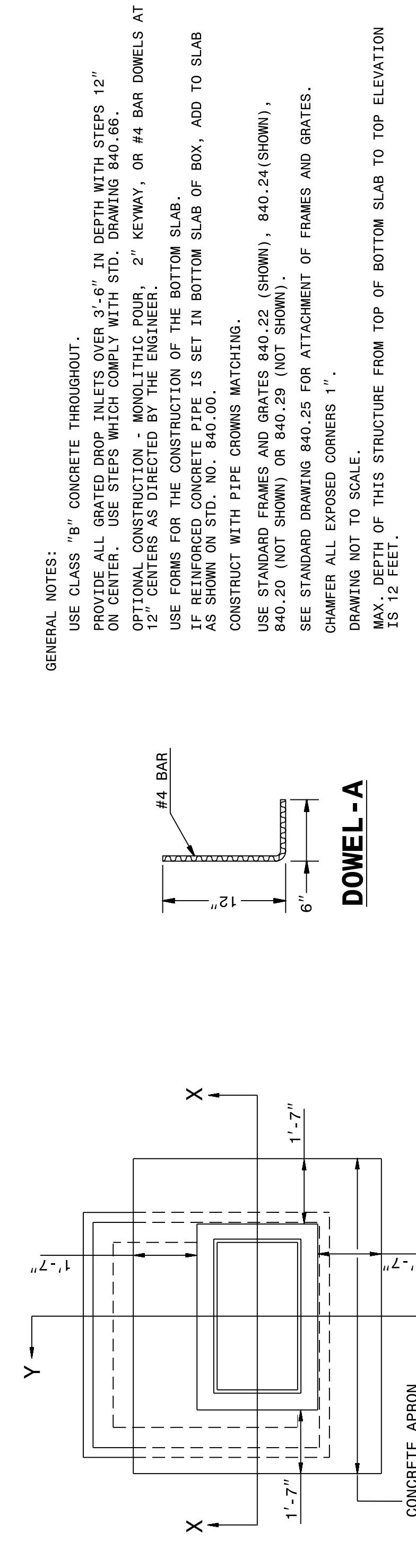


STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
CONCRETE GRATED DROP INLET TYPE 'A'
12" THRU 72" PIPE

SHEET 1 OF 2
840d17



GENERAL NOTES:
USE CLASS "B" CONCRETE THROUGHOUT.
PROVIDE ALL GRATED DROP INLETS OVER 3'-6" IN DEPTH WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840.66.
OPTIONAL CONSTRUCTION - MONOLITHIC POUR, 2" KEYWAY, OR #4 BAR DOWELS AT 12" CENTERS AS DIRECTED BY THE ENGINEER.
USE FORMS FOR THE CONSTRUCTION OF THE BOTTOM SLAB.
IF REINFORCED CONCRETE PIPE IS SET IN BOTTOM SLAB OF BOX, ADD TO SLAB AS SHOWN ON STD. NO. 840.00.
CONSTRUCT WITH PIPE CROWNS MATCHING.
USE STANDARD FRAMES AND GRATES 840.22 (SHOWN), 840.24 (SHOWN), 840.20 (NOT SHOWN) OR 840.29 (NOT SHOWN).
SEE STANDARD DRAWING 840.25 FOR ATTACHMENT OF FRAMES AND GRATES.
CHAMFER ALL EXPOSED CORNERS 1".
DRAWING NOT TO SCALE.
MAX. DEPTH OF THIS STRUCTURE FROM TOP OF BOTTOM SLAB TO TOP ELEVATION IS 12 FEET.

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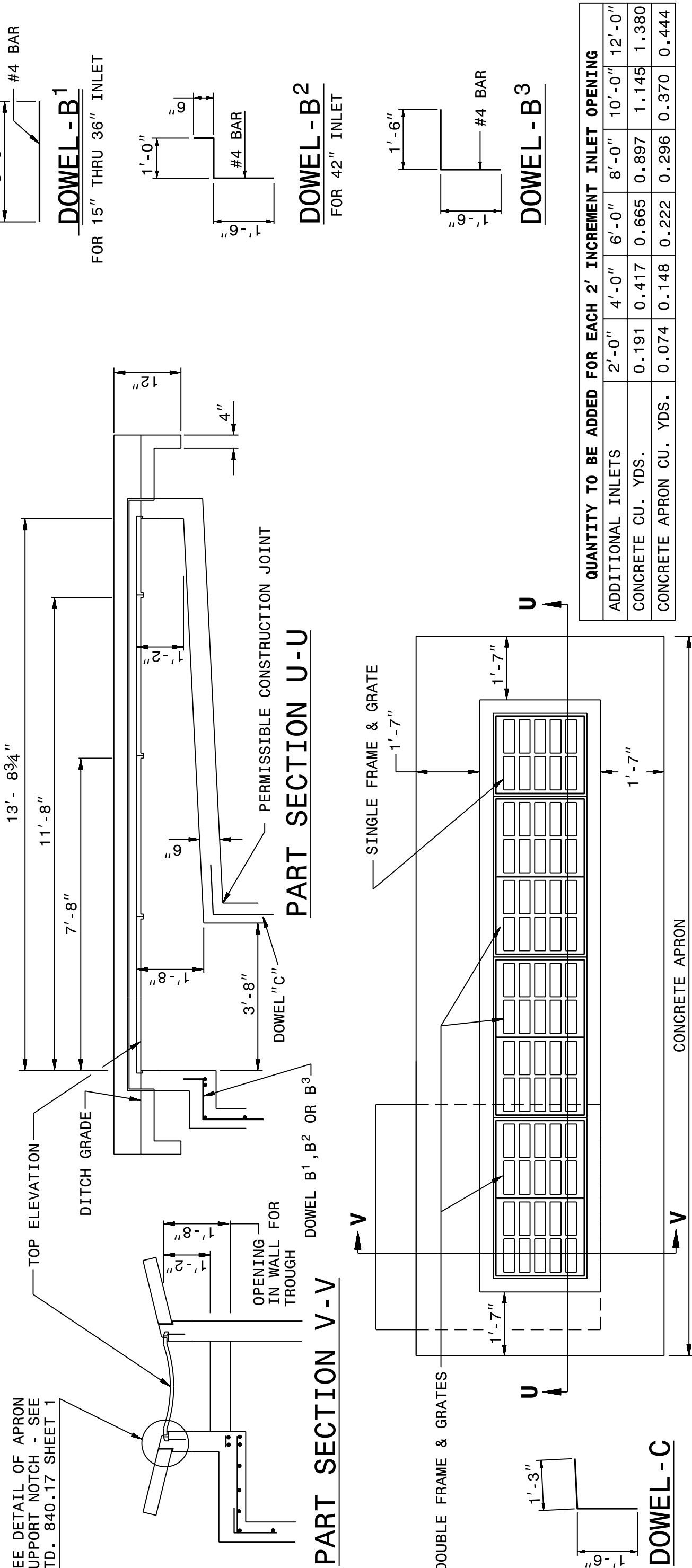
ENGLISH DETAIL DRAWING FOR
CONCRETE GRATED DROP INLET TYPE 'A'
MINIMUM DEPTH
12" THRU 72" PIPE

SHEET 1 OF 2
840d17

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ENGLISH DETAIL DRAWING FOR
CONCRETE GRATED DROP INLET TYPE 'A'
12" THRU 72" PIPE

SHEET 2 OF 2
840d17



PIPE	DIMENSIONS OF BOX AND PIPE				MIN. DIMENSIONS AND QUANTITIES FOR CONCRETE GRATED DROP INLET (BASED ON MIN. HEIGHT, H)												
	SPAN	WIDTH	DEPTH	HEIGHT	BARS E	BARS F	BARS G	BARS H	TOTAL BOTTOM SLAB	H PER FT	APRON TOTAL	DEDUCTIONS FOR ONE PIPE					
12"	3'-8"	2'-0"	2'-0"	2'-3"	—	—	—	—	—	—	0.362	0.926	0.247	0.395	1.683	0.015	0.024
15"	3'-8"	2'-0"	2'-0"	2'-5"	—	—	—	—	—	—	0.362	0.988	0.247	0.395	1.745	0.023	0.036
18"	—	—	—	—	—	—	—	—	—	—	0.362	1.050	0.247	1.807	0.033	0.049	
24"	—	—	—	—	—	—	—	—	—	—	0.444	1.362	0.278	2.201	0.059	0.085	
30"	—	—	—	—	—	—	—	—	—	—	0.502	1.644	0.288	2.541	0.082	0.127	
36"	—	—	—	—	—	—	—	—	—	—	0.560	1.931	0.321	2.920	0.132	0.178	
42"	—	—	—	—	—	—	—	—	—	—	0.704	2.500	0.370	3.677	0.180	0.243	
48"	—	—	—	—	—	—	—	—	—	—	0.823	3.013	0.407	4.315	0.235	0.317	
54"	—	—	—	—	—	—	—	—	—	—	0.951	3.589	0.444	5.072	0.287	0.401	
60"	—	—	—	—	—	—	—	—	—	—	1.311	4.539	0.494	6.170	0.367	0.495	
66"	—	—	—	—	—	—	—	—	—	—	1.136	5.061	0.537	6.901	0.444	0.599	
72"	—	—	—	—	—	—	—	—	—	—	1.500	5.860	0.580	8.395	0.528	0.713	

QUANTITY TO BE ADDED FOR EACH 2' INCREMENT INLET OPENING	2'-0"	4'-0"	6'-0"	8'-0"	10'-0"	12'-0"
ADDITIONAL INLETS	0.191	0.417	0.665	0.897	1.145	1.380
CONCRETE CU. YDS.	0.074	0.148	0.222	0.296	0.370	0.444

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 5/14/2021