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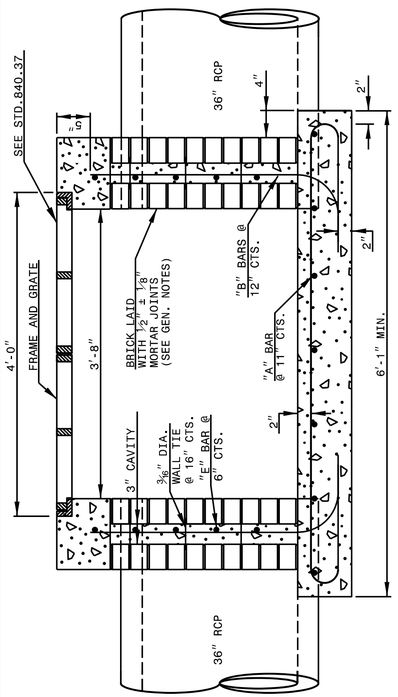
PROJECT REFERENCE NO.	SHEET NO.
U-5809	2D-4

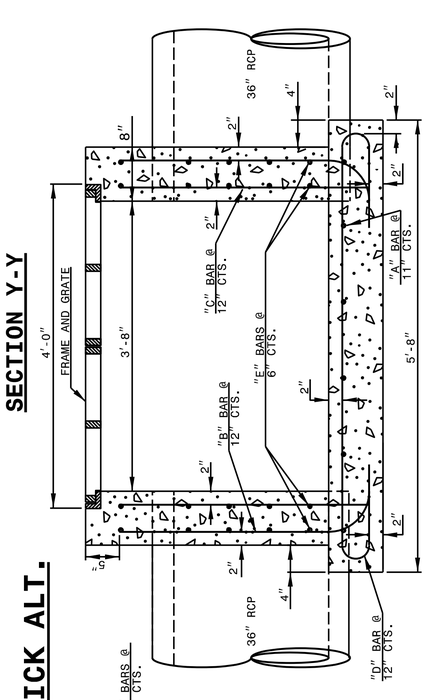
STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
TRAFFIC BEARING DROP INLET
FOR DOUBLE FRAME AND GRATES

SHEET 1 OF 2 **840D35**



BRICK ALT.



CONCRETE ALT.

NOTES;
-HORIZONTAL AND VERTICAL DIMENSIONS MAY BE ADJUSTED AS THE FIELD CONDITIONS AND/OR ALTERNATE DESIGNS REQUIRE.
-MAXIMUM HEIGHT FOR THIS STRUCTURE SHALL BE 14'-0".
-ALL ADJUSTMENTS ARE TO BE MADE AS DIRECTED BY THE ENGINEER.
-DEPTH OF STEEL GRATE WILL REQIURE DEEPER SEAT ALONG SHORT WALLS.

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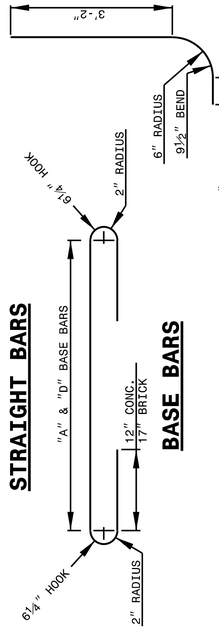
SHEET 2 OF 2 **840D35**

BILL OF MATERIALS

COMMON		CONCRETE ALT.			BRICK ALT.		
BAR	SIZE	LENGTH	QUANTITY	WEIGHT	LENGTH	QUANTITY	WEIGHT
A	#5	6'-10"	6	66	9'-4½"	6	94
B	#5	5'-3"	12	65	5'-4½"	12	76
C	#5	4'-7"	12	57	0	12	0
D	#5	8'-0"	6	50	9'-3½"	6	58
E	#5	5'-6"	24	138	4'-9"	12	69
F	#5	4'-8"	24	117	4'-8"	12	58
G	#5	3"	16	6	2'-3½"	4	12
H	#4	1'-9"	5	6	1'-9"	5	6
REINF. STEEL (TOTAL WEIGHT LBS.)				505			345
CONCRETE IN TOP SLAB (CU.YDS.)				0.31			0.33
CONCRETE IN BASE (CU.YDS.)				0.89			1.02
CONCRETE IN WALLS (CU.YDS.)				2.22			0.80
BRICK IN WALLS (CU.YDS.)				-0-			0.90
CONCRETE TOTAL (CU.YDS.)				3.42			2.15
BRICK & CONCRETE TOTAL (CU.YDS.)				3.42			3.05
CONC. CU.YDS. IN WALL/FOOT OF HEIGHT				0.35			0.11
BRICK CU.YDS. IN WALL/FOOT OF HEIGHT				-0-			0.15
LBS. OF REINF. STEEL IN WALL/FOOT OF HEIGHT				103.2			72.0

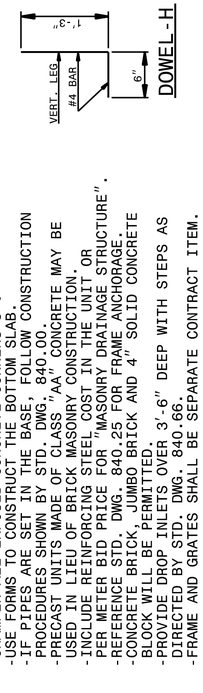
"C", "E", "F" & "G" HORIZONTAL BARS
"A" & "D" VERTICAL BARS

STRAIGHT BARS



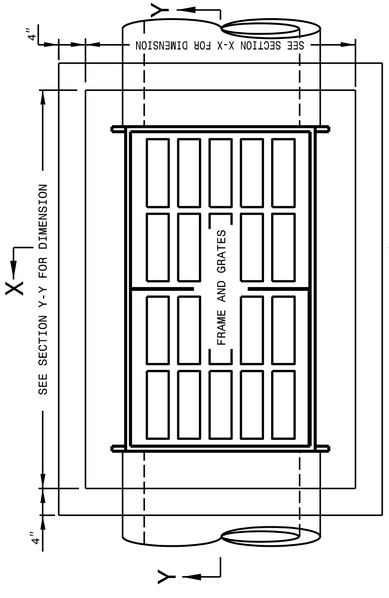
BASE BARS

CORNER BARS

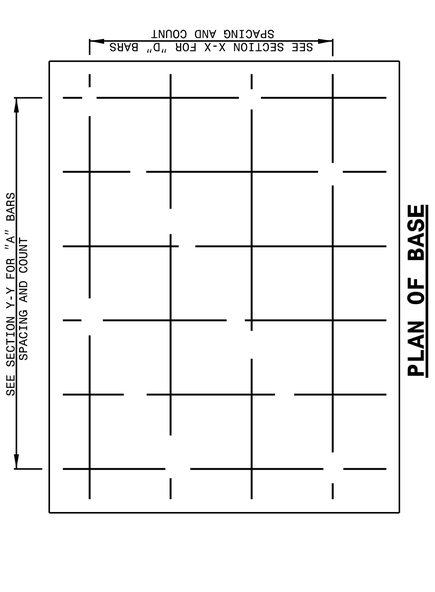


DOWEL-H

GENERAL NOTES:
-CHAMFER ALL EXPOSED CONCRETE CORNERS 3".
-USE FORMS TO CONSTRUCT THE BOTTOM SLAB.
-IF PIPES ARE SET IN THE BASE, FOLLOW CONSTRUCTION PROCEDURES SHOWN BY STD. DWG. 840.00.
-PRECAST UNITS MADE OF CLASS "AA" CONCRETE MAY BE USED IN LIEU OF BRICK MASONRY CONSTRUCTION.
-INCLUDE REINFORCING STEEL COST IN THE UNIT OR PER METER BID PRICE FOR MASONRY DRAINAGE STRUCTURE".
-REFERENCE STD. DWG. 840.25 FOR FRAME ANCHORAGE.
-CONCRETE BRICK, JUMBO BRICK AND 4" SOLID CONCRETE BLOCK WILL BE PERMITTED.
-PROVIDE DROP INLETS OVER 3'-6" DEEP WITH STEPS AS DIRECTED BY STD. DWG. 840.66.
-FRAME AND GRATES SHALL BE SEPARATE CONTRACT ITEM.



PLAN



PLAN OF BASE

CONTRACT STANDARDS AND DEVELOPMENT UNIT
Office 919-707-6950 FAX 919-250-4119

SEE PLATE FOR TITLE

ORIGINAL BY: T.S.Spell DATE: Sept.2000
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