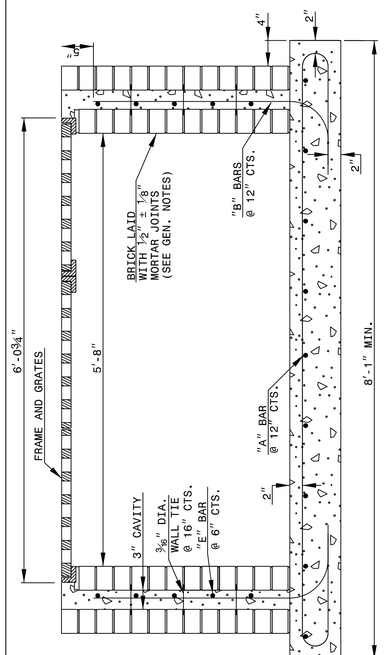
PROJECT REFERENCE NO.	SHEET NO.
R-2915C	2C-13

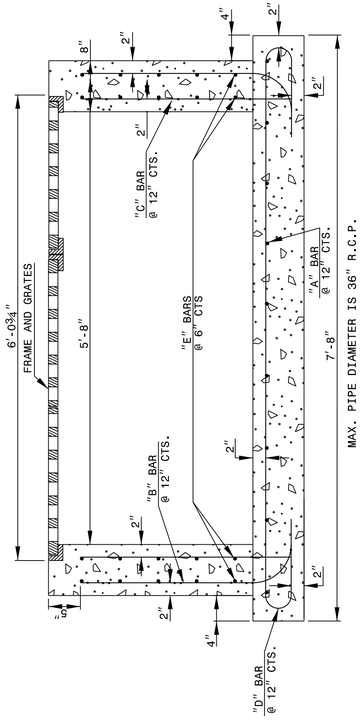
STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH SPECIAL DETAIL FOR
TRAFFIC BEARING GRATED DROP INLET
FOR CAST IRON DOUBLE FRAME AND GRATES

SHEET 1 OF 2 **840D35**

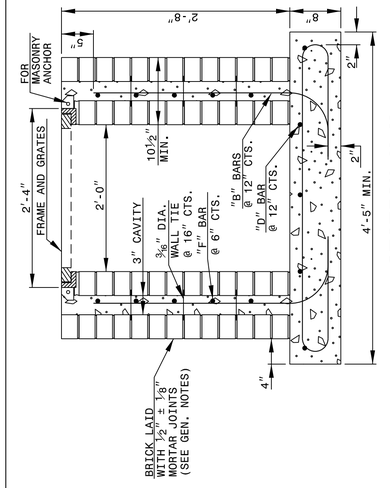


SECTION Y-Y
BRICK ALT.

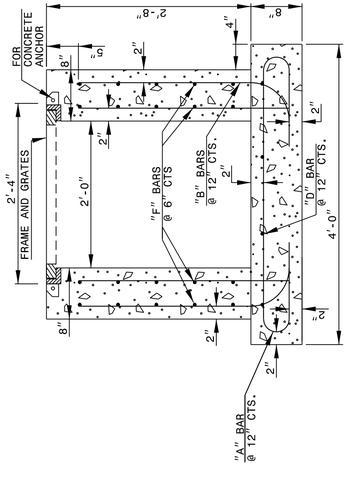


SECTION Y-Y
CONCRETE ALT.

NOTES:
-HORIZONTAL AND VERTICAL DIMENSIONS MAY BE ADJUSTED AS THE FIELD CONDITIONS AND/OR ALTERNATE DESIGN REQUIRE.
-MAXIMUM HEIGHT OF THIS STRUCTURE IS 14'.
-WALL ELEVATIONS TO BE DIRECTED BY THE ENGINEER.
-DEPTH OF STEEL GRATE WILL REQUIRE DEEPER SEAT ALONG SHORT WALLS.



SECTION X-X
BRICK ALT.



SECTION X-X
CONCRETE ALT.

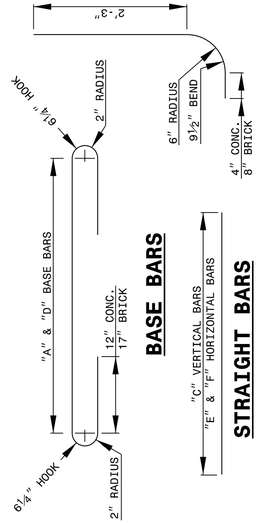
STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH SPECIAL DETAIL FOR
TRAFFIC BEARING GRATED DROP INLET
FOR CAST IRON DOUBLE FRAME AND GRATES

SHEET 2 OF 2 **840D35**

BILL OF MATERIALS

COMMON		CONCRETE ALT.			BRICK ALT.		
BAR	SIZE	LENGTH	QUANTITY	WEIGHT	LENGTH	QUANTITY	WEIGHT
A	#5	6'-4½"	8	53.2	7'-7½"	8	63.6
B	#5	3'-4½"	16	56.3	3'-4½"	16	56.3
C	#5	2'-8"	14	38.9	-0-	-0-	-0-
D	#5	10'-0½"	4	41.9	11'-3½"	4	47.1
E	#5	3'-0"	20	62.6	3'-0"	10	31.3
F	#5	4'-8"	20	97.3	4'-8"	10	48.7
REINF. STEEL (TOTAL WEIGHT LBS.)				350.2			247.0
CONCRETE IN BASE CLASS 'AA' (CUBIC YARDS)				0.78			0.88
CONCRETE IN WALLS CLASS 'AA' (CUBIC YARDS)				1.18			
CONCRETE IN WALLS CLASS 'B' (CUBIC YARDS)				-0-			0.46
BRICK IN WALLS (CUBIC YARDS)				-0-			1.09
CONCRETE TOTAL (CUBIC YARDS)				1.94			1.34
BRICK & CONCRETE TOTAL (CUBIC YARDS)				1.94			2.43

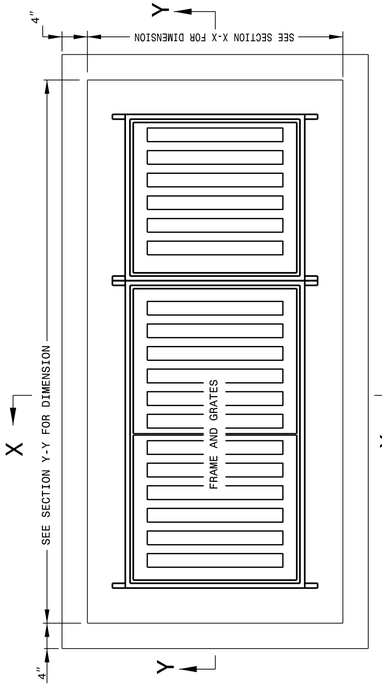


BASE BARS

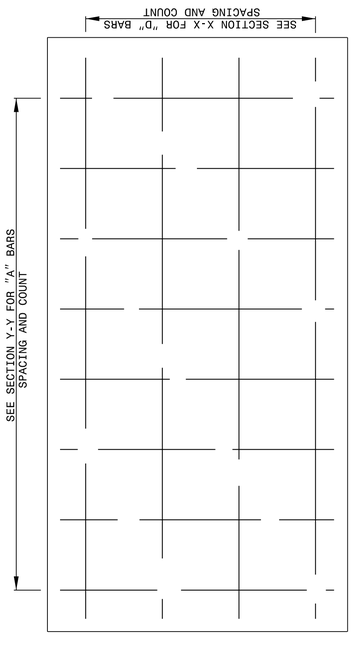
STRAIGHT BARS

CORNER BARS

GENERAL NOTES:
-USE CLASS 'AA' CONCRETE FOR CAST IN PLACE CONCRETE BOX.
-USE CLASS 'B' CONCRETE IN THE WALL CAVITY FOR REINFORCED BRICK CONSTRUCTION AND CLASS 'AA' FOR THE FOOTING BASE.
-CHAMFER ALL EXPOSED CONCRETE CORNERS 1".
-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 LINEAR FOOT 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.
-CONCRETE FOR BRICK BOX REFER TO SECTION 832 OF THE STANDARD SPECIFICATIONS.
-PROVIDE GRATED DROP INLETS OVER 3'-6" DEEP WITH STEPS SPACED 12" ON CENTER AS DIRECTED BY STD. DWG. 840.66.
-FRAME AND GRATES ARE SEPARATE CONTRACT ITEMS.



PLAN



PLAN OF BASE

9/1/2016

NORTH CAROLINA PROFESSIONAL SEAL 022966 ENGINEER JOEL S. HOWERTON

DocuSigned by:
Joel S. Howerton
873F3D17DCDC45F...

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

SEE TITLE PLATE

ORIGINAL BY: _____ DATE: _____
MODIFIED BY: K.Kempf DATE: 8/2016
CHECKED BY: _____ DATE: _____
FILE SPEC.: detail\english\R2915C_840D35.dgn

01-AUG-2016 13:33
S:\Contracts\Contracts\Special Details\kkempf\english\R2915C_840D35.dgn
$$$$USERNAME$$$$