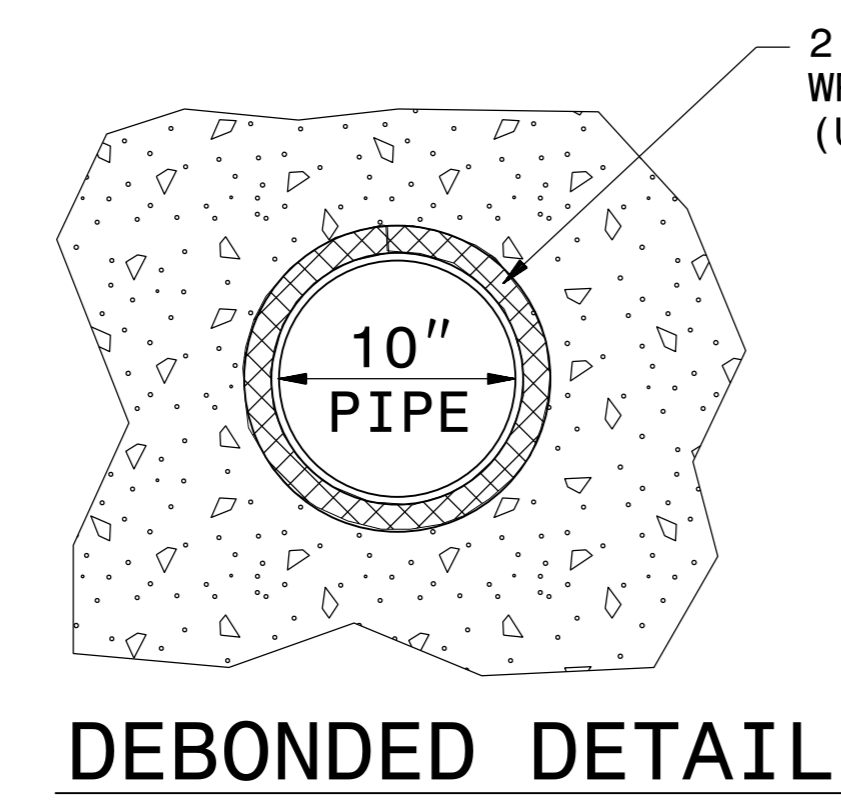
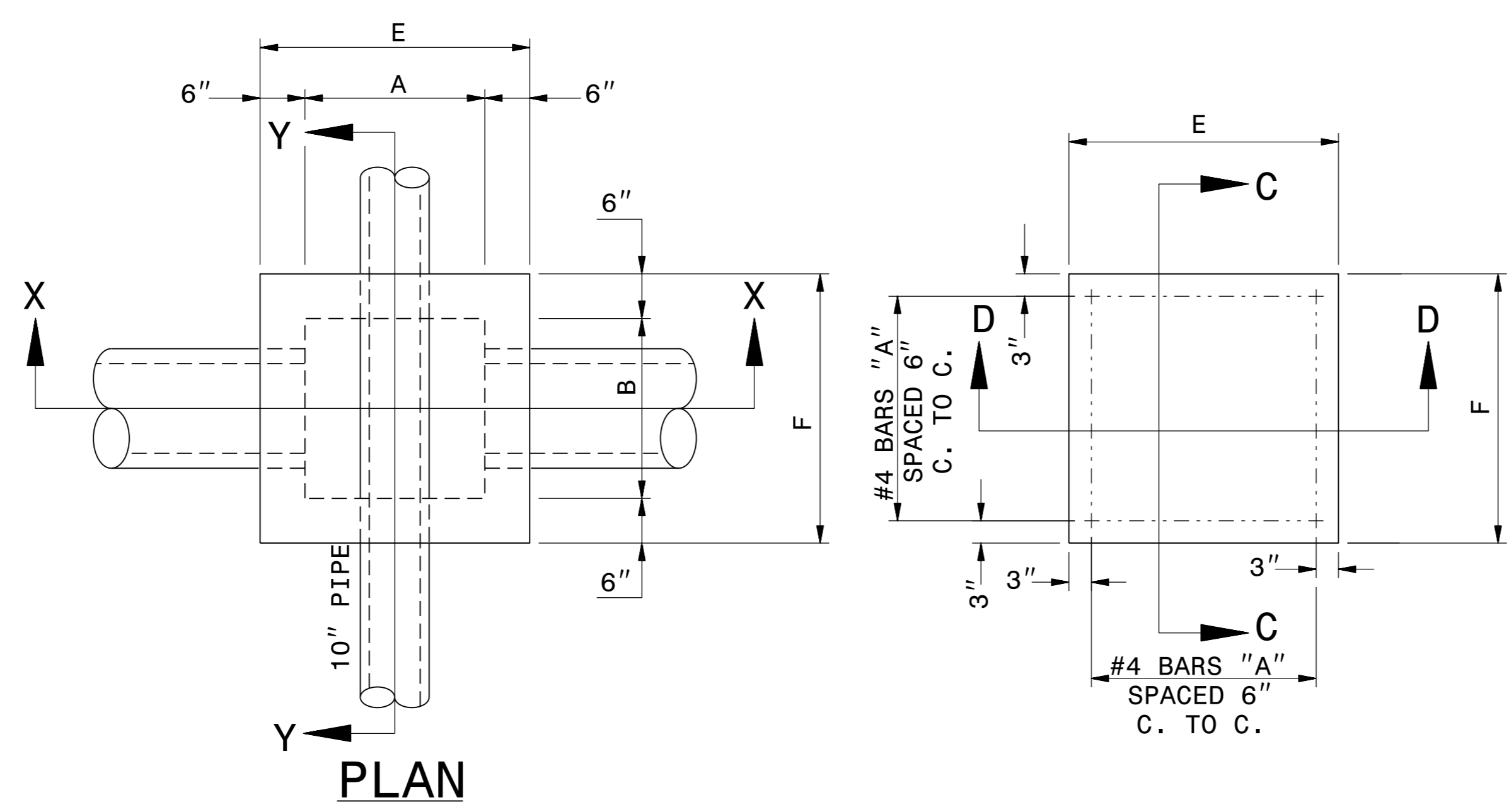


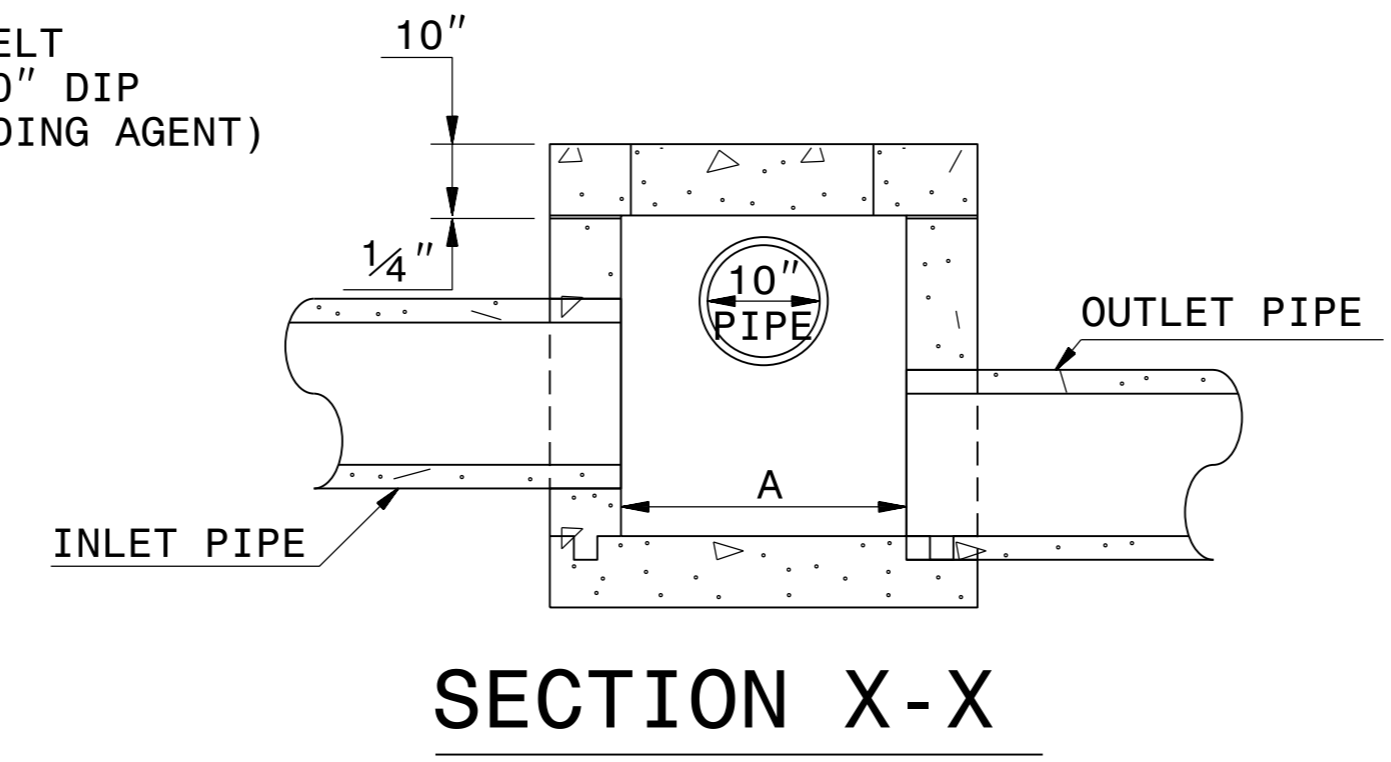
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
**CONCRETE JUNCTION BOX WITH
10" PIPE PASSING THRU
12" THRU 66" PIPE**

SHEET 1 OF 1
840D31

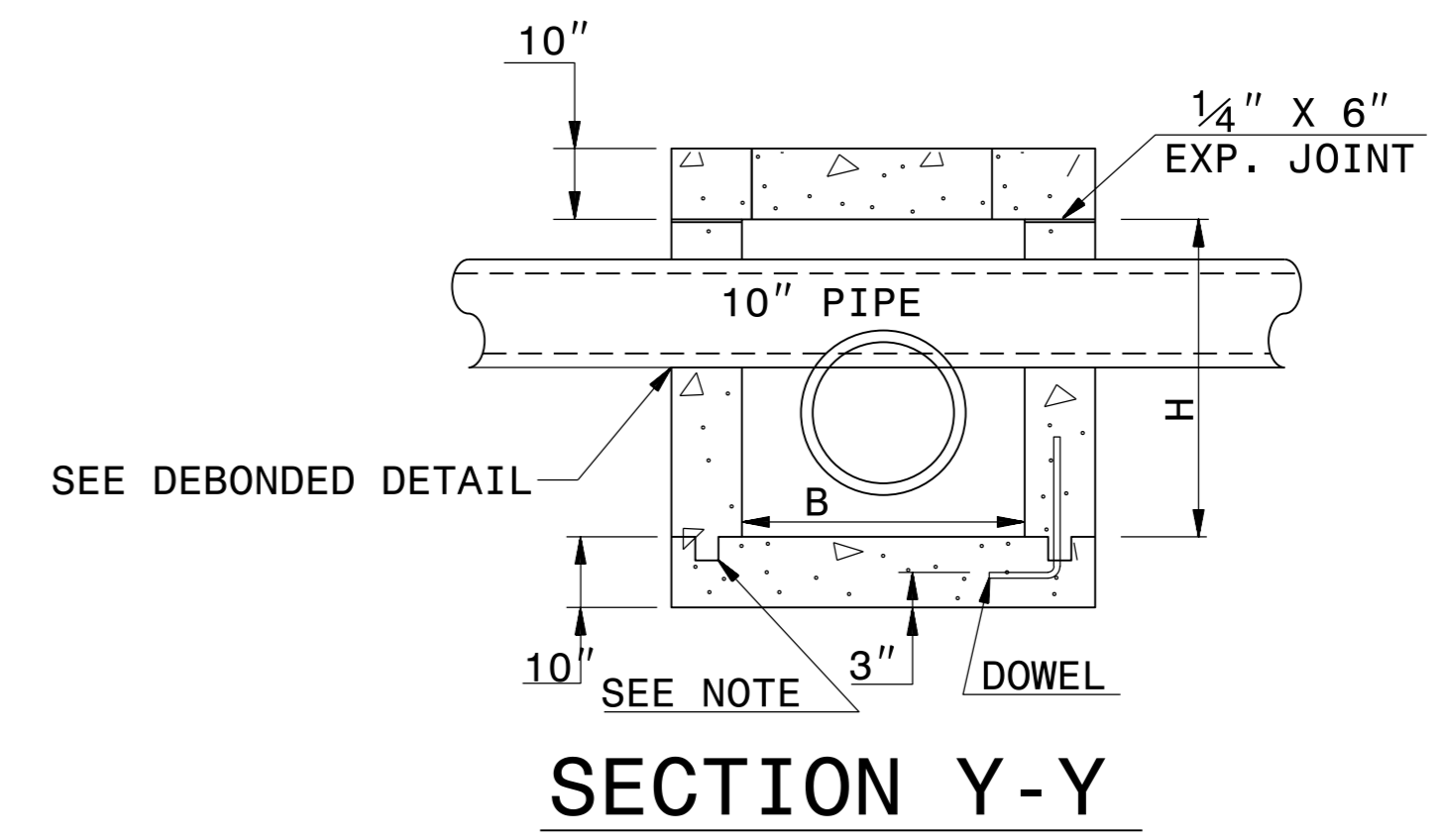


2 PIECES 30 lb FELT
WRAPPED AROUND 10" DIP
(USED AS A DEBONDING AGENT)



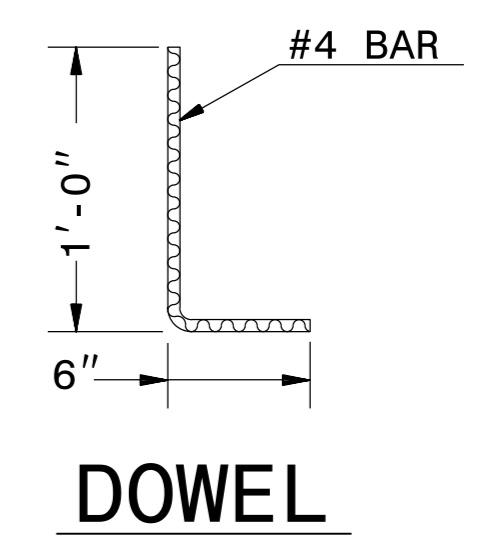
SECTION X-X

GENERAL NOTES:
USE CLASS "B" CONCRETE THROUGHOUT.
OPTIONAL CONSTRUCTION - MONOLITHIC POUR, 2" KEYWAY, OR #4 BAR DOWELS AT 12" CENTERS AS DIRECTED BY THE ENGINEER.
USE FORMS TO CONSTRUCT THE BOTTOM SLAB.
IF REINFORCED CONCRETE PIPE IS SET IN BASE SLAB OF BOX, ADD TO BASE AS SHOWN ON STANDARD NO. 840.00.
REFER TO R.S.D.N. 840.31 FOR PLACEMENT OF MANHOLE COVER IN JUNCTION BOX.



SECTION Y-Y

DIMENSIONS AND QUANTITIES FOR CONCRETE JUNCTION BOXES														
DIMENSIONS OF BOX AND PIPE				REINFORCEMENT BARS "A"		COVER DIMENSIONS		CUBIC YARDS IN BOX			TOTAL QUANTITIES BOX AND COVER		DEDUCTIONS FOR ONE PIPE CU.YDS.	
PIPE	SPAN	WIDTH	HEIGHT	NO.	LENGTH	E	F	COVER	FLOOR	WALL/ FT. OF HT.	LBS. REINF.	CU. YDS. MIN. "H"	C.S.	R.C.
12"	2'-0"	2'-0"	2'-3"	12	2'-9"	3'-0"	3'-0"	0.222	0.222	0.185	22	0.750	0.015	0.024
15"	2'-3"	2'-3"	2'-6"	12	3'-0"	3'-3"	3'-3"	0.261	0.261	0.204	24	0.902	0.023	0.036
18"	2'-6"	2'-6"	2'-9"	14	3'-3"	3'-6"	3'-6"	0.302	0.302	0.222	30	1.065	0.033	0.049
24"	3'-0"	3'-0"	3'-3"	16	3'-9"	4'-0"	4'-0"	0.395	0.395	0.259	40	1.434	0.059	0.091
30"	3'-6"	3'-6"	3'-9"	18	4'-3"	4'-6"	4'-6"	0.500	0.500	0.296	51	1.860	0.092	0.138
36"	4'-0"	4'-0"	4'-3"	20	4'-9"	5'-0"	5'-0"	0.617	0.617	0.333	64	2.341	0.132	0.196
42"	4'-6"	4'-6"	4'-9"	22	5'-3"	5'-6"	5'-6"	0.747	0.747	0.370	77	2.878	0.180	0.284
48"	5'-0"	5'-0"	5'-3"	24	5'-9"	6'-0"	6'-0"	0.889	0.889	0.407	92	3.471	0.235	0.364
54"	5'-6"	5'-6"	5'-9"	26	6'-3"	6'-6"	6'-6"	1.043	1.043	0.444	109	4.283	0.297	0.440
60"	6'-0"	6'-0"	6'-3"	28	6'-9"	7'-0"	7'-0"	1.210	1.210	0.481	127	5.090	0.367	0.546
66"	6'-6"	6'-6"	6'-9"	30	7'-3"	7'-6"	7'-6"	1.389	1.389	0.518	146	5.917	0.444	0.655



DOWEL

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ENGLISH DETAIL DRAWING FOR
**CONCRETE JUNCTION BOX WITH
10" PIPE PASSING THRU
12" THRU 66" PIPE**

SHEET 1 OF 1
840D31

5/14/99
C:\TIME\SS\CONFLICT\CONFLICT_BOX.DGN
\$\$\$\$\$USERNAME\$\$\$\$\$

2/4/2015
Professional Engineer Seal: JOEL HAWKINS, No. 022966, State of North Carolina.
DocuSigned by: Joel Hawkins, #79F3D17DCC49F...

CONTRACT STANDARDS AND DEVELOPMENT UNIT
Office 919-707-6950 FAX 919-250-4119
SEE PLATE FOR TITLE
ORIGINAL BY: E.E. WARD DATE: 3-12-98
MODIFIED BY: DATE:
CHECKED BY: DATE:
FILE SPEC.:usr/details/stand/conflict_box.dgn