

10-AUG-2017 10:41
 S:\Contracts\Special Details\jhowerton\840d02 Min Depth CB.dgn
 jhowerton AT CSD-292595

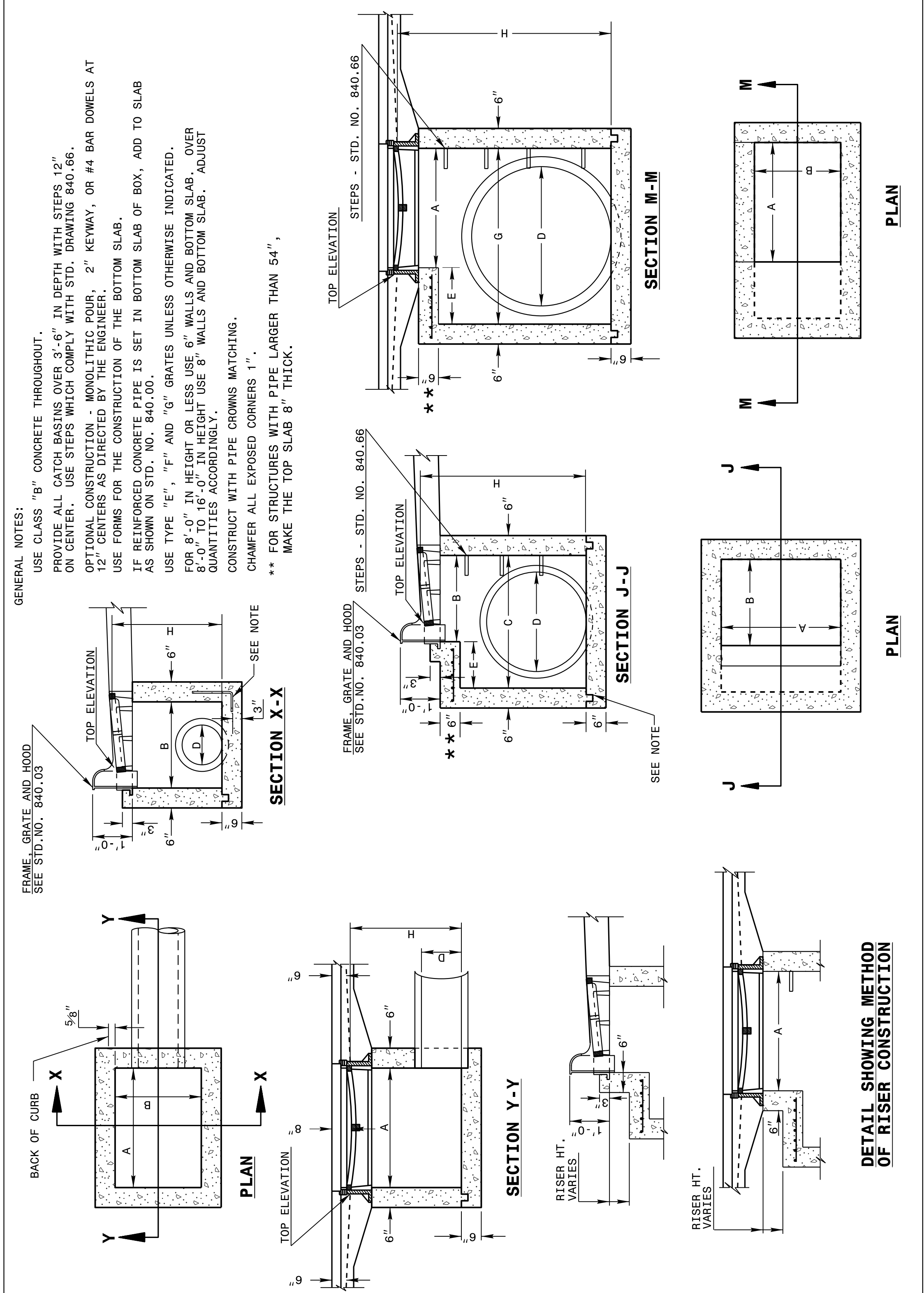
5/14/99

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

ENGLISH DETAIL DRAWING FOR
**MINIMUM DEPTH
CONCRETE CATCH BASIN**
12" THRU 84" PIPE

SHEET 1 OF 2
840D02

GENERAL NOTES:
USE CLASS "B" CONCRETE THROUGHOUT.
PROVIDE ALL CATCH BASINS 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.
USE TYPE "E", "F" AND "G" GRATES UNLESS OTHERWISE INDICATED.
FOR 8'-0" IN HEIGHT OR LESS USE 6" WALLS AND BOTTOM SLAB. OVER 8'-0" TO 16'-0" IN HEIGHT USE 8" WALLS AND BOTTOM SLAB. ADJUST QUANTITIES ACCORDINGLY.
CONSTRUCT WITH PIPE CROWNS MATCHING.
CHAMFER ALL EXPOSED CORNERS 1".
** FOR STRUCTURES WITH PIPE LARGER THAN 54", MAKE THE TOP SLAB 8" THICK.



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

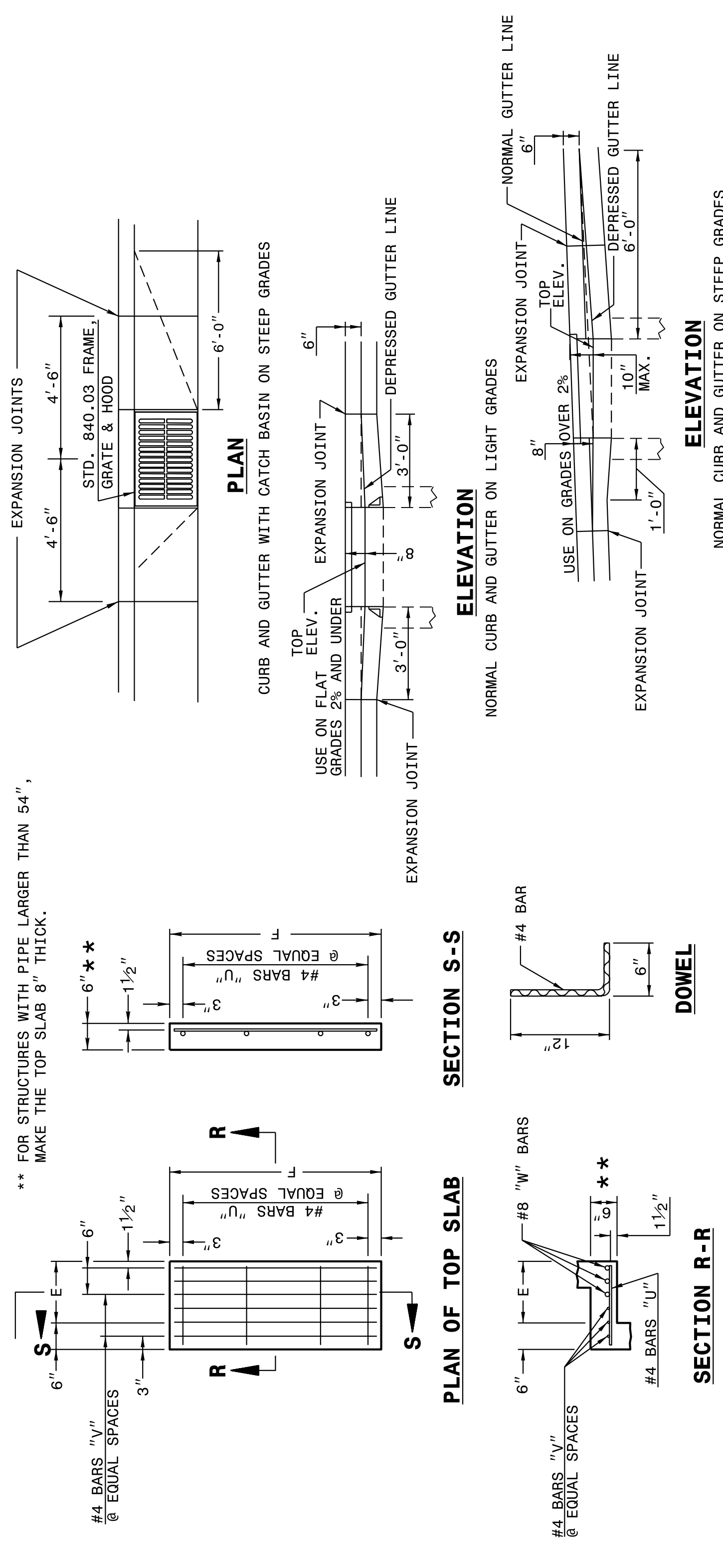
ENGLISH DETAIL DRAWING FOR
**MINIMUM DEPTH
CONCRETE CATCH BASIN**
12" THRU 84" PIPE

SHEET 1 OF 2
840D02

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

ENGLISH DETAIL DRAWING FOR
**MINIMUM DEPTH
CONCRETE CATCH BASIN**
12" THRU 84" PIPE

SHEET 2 OF 2
840D02



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

ENGLISH DETAIL DRAWING FOR
**MINIMUM DEPTH
CONCRETE CATCH BASIN**
12" THRU 84" PIPE

SHEET 2 OF 2
840D02

* RISER HAS .228 CUBIC YARDS OF CONCRETE PER FOOT HEIGHT

PIPE D.	DIMENSIONS OF BOX AND PIPE			COVER DIMENSION			BARS-U			BARS-V			BARS-W			TOTAL LBS.	CU. YDS. CONC. IN BOX	DEDUCTIONS		
	SPAN	WIDTH	HEIGHT	E	F	H	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	TOP SLAB			BOTTOM SLAB	TOT. CONC. FOR MINIMUM HEIGHT, H	C. M.	R. C.
12"	3'-0"	2'-2"	2'-0"	..	..	2'-0"	..	..	..	..	..	..	..	..	0.285	0.772	0.015	0.026	0.026
15"	3'-0"	2'-2"	2'-3"	..	..	2'-3"	..	..	..	..	..	..	..	..	0.295	0.829	0.023	0.036	0.036
18"	3'-0"	2'-2"	3'-1"	..	..	3'-1"	..	..	..	..	..	..	..	..	0.295	0.887	0.033	0.049	0.049
24"	3'-0"	2'-2"	3'-10"	..	..	3'-10"	..	..	..	..	..	..	..	..	0.235	1.001	0.059	0.085	0.085
30"	3'-0"	2'-2"	3'-4"	..	..	3'-4"	..	..	..	..	..	..	..	..	0.123	0.347	1.433	0.092	0.127
36"	3'-0"	2'-2"	3'-10"	..	..	3'-10"	..	..	..	..	..	..	..	..	0.161	0.432	1.714	0.132	0.178
42"	3'-0"	2'-2"	4'-5"	..	..	4'-5"	..	..	..	..	..	..	..	..	0.200	0.543	1.738	0.180	0.243
48"	3'-0"	2'-2"	5'-0"	..	..	5'-0"	..	..	..	..	..	..	..	..	0.235	0.667	2.052	0.235	0.317
54"	3'-0"	2'-2"	5'-7"	..	..	5'-7"	..	..	..	..	..	..	..	..	0.289	0.802	2.387	0.287	0.401
60"	3'-0"	2'-2"	6'-3"	..	..	6'-3"	..	..	..	..	..	..	..	..	0.340	0.973	2.722	0.363	0.546
66"	3'-0"	2'-2"	6'-11"	..	..	6'-11"	..	..	..	..	..	..	..	..	0.391	1.160	3.057	0.440	0.655
72"	3'-0"	2'-2"	7'-6"	..	..	7'-6"	..	..	..	..	..	..	..	..	0.442	1.340	3.392	0.524	0.774
78"	3'-0"	2'-2"	8'-1"	..	..	8'-1"	..	..	..	..	..	..	..	..	0.493	1.530	3.727	0.615	0.893
84"	3'-0"	2'-2"	8'-9"	..	..	8'-9"	..	..	..	..	..	..	..	..	0.544	1.760	4.062	0.713	1.010

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

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

SEE PLATE FOR TITLE

ORIGINAL BY: 2002 Std.840.01 DATE: _____
 MODIFIED BY: E.E. WARD DATE: 3-1-02
 CHECKED BY: _____ DATE: _____
 FILE SPEC.: s:Special Details/jhowerton/840d02.dgn



8/24/2011