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 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

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

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.

SECTION X-X

SECTION Y-Y

SECTION J-J

SECTION M-M

PLAN

PLAN

DETAIL SHOWING METHOD OF RISER CONSTRUCTION

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SECTION S-S

SECTION R-R

PLAN OF TOP SLAB

DOWEL

ELEVATION

ELEVATION

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

MINIMUM DIMENSIONS AND QUANTITIES FOR CONCRETE CATCH BASIN (BASED ON MIN. HEIGHT, H, WITH NO RISER) *		COVER DIMENSION		BARS-V		BARS-W		TOTAL LBS.		DEDUCTIONS							
PIPE D.	SPAN	WIDTH	SPAN	MIN.	HEIGHT	NO.	LENGTH	NO.	LENGTH	CUL. YDS. CONC. IN BOX	TOTAL LBS.	TOP SLAB	BOTTOM SLAB	TOT. CONC. HEIGHT, H	ONE PIPE	R.C.	
12"	3'-0"	2'-2"	2'-2"	2'-0"	2'-3"	..	..	..	..	..	..	0.235	0.772	0.015	0.026	0.015	0.026
15"	3'-0"	2'-2"	2'-2"	2'-0"	2'-3"	..	..	..	..	..	..	0.235	0.829	0.023	0.036	0.023	0.049
18"	3'-0"	2'-2"	2'-2"	2'-0"	2'-3"	..	..	..	..	..	..	0.235	0.887	0.033	0.049	0.033	0.049
24"	3'-0"	2'-2"	2'-2"	2'-0"	2'-3"	..	..	..	..	..	..	0.235	1.001	0.059	0.085	0.059	0.085
30"	3'-0"	2'-2"	2'-2"	2'-0"	2'-3"	..	..	..	..	..	..	0.235	1.115	0.085	0.127	0.085	0.127
36"	3'-0"	2'-2"	2'-2"	2'-0"	2'-3"	..	..	..	..	..	..	0.235	1.230	0.111	0.178	0.111	0.178
42"	3'-0"	2'-2"	2'-2"	2'-0"	2'-3"	..	..	..	..	..	..	0.235	1.345	0.137	0.243	0.137	0.243
48"	3'-0"	2'-2"	2'-2"	2'-0"	2'-3"	..	..	..	..	..	..	0.235	1.460	0.163	0.317	0.163	0.317
54"	3'-0"	2'-2"	2'-2"	2'-0"	2'-3"	..	..	..	..	..	..	0.235	1.575	0.189	0.401	0.189	0.401
60"	3'-0"	2'-2"	2'-2"	2'-0"	2'-3"	..	..	..	..	..	..	0.235	1.690	0.215	0.485	0.215	0.485
66"	3'-0"	2'-2"	2'-2"	2'-0"	2'-3"	..	..	..	..	..	..	0.235	1.805	0.241	0.569	0.241	0.569
72"	3'-0"	2'-2"	2'-2"	2'-0"	2'-3"	..	..	..	..	..	..	0.235	1.920	0.267	0.653	0.267	0.653
78"	3'-0"	2'-2"	2'-2"	2'-0"	2'-3"	..	..	..	..	..	..	0.235	2.035	0.293	0.737	0.293	0.737
84"	3'-0"	2'-2"	2'-2"	2'-0"	2'-3"	..	..	..	..	..	..	0.235	2.150	0.319	0.821	0.319	0.821

**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: _____

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