

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

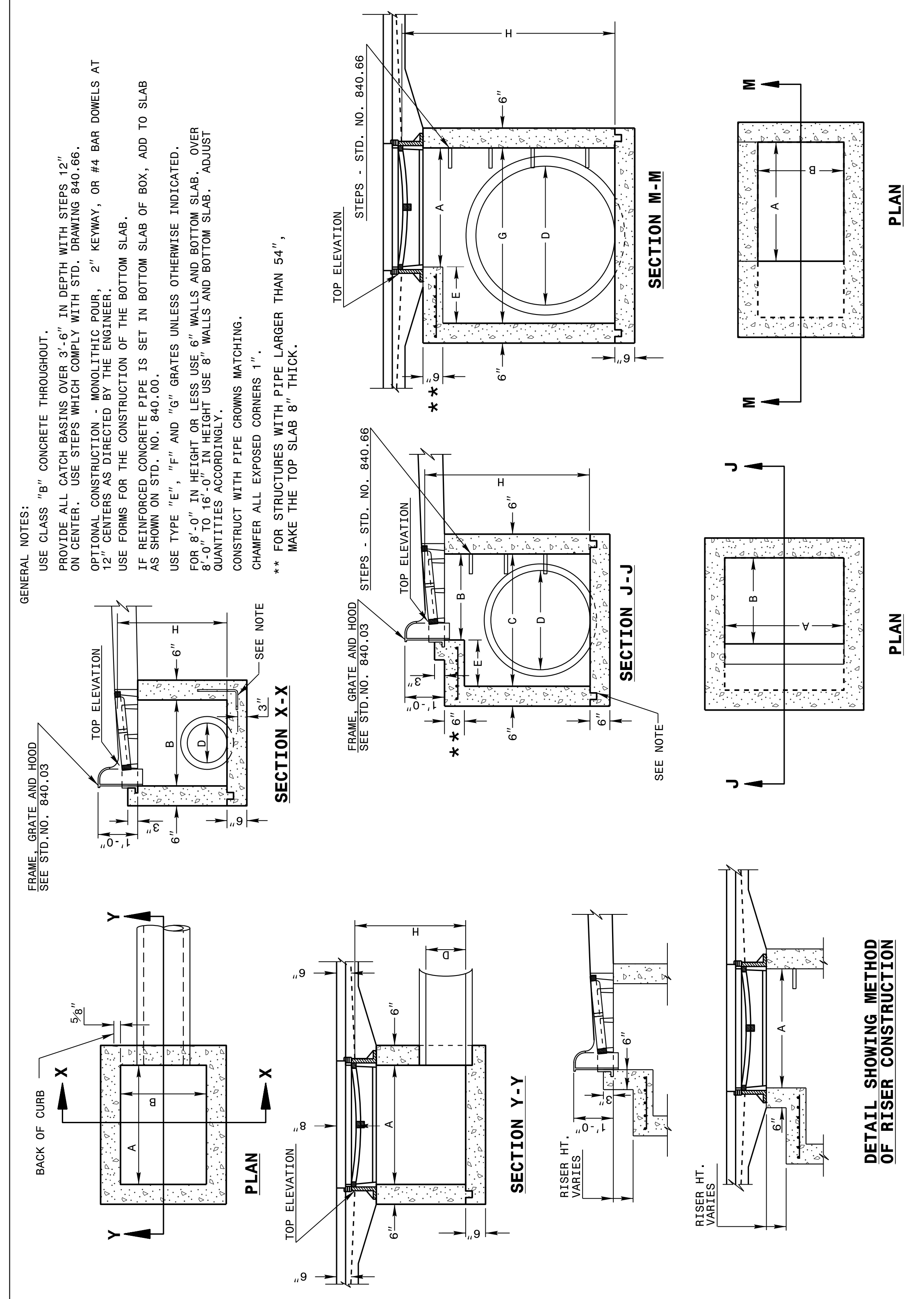
ENGLISH DETAIL DRAWING FOR
**MINIMUM DEPTH
 CONCRETE CATCH BASIN**
 12" THRU 84" PIPE

SHEET 1 OF 2
840D02

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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.

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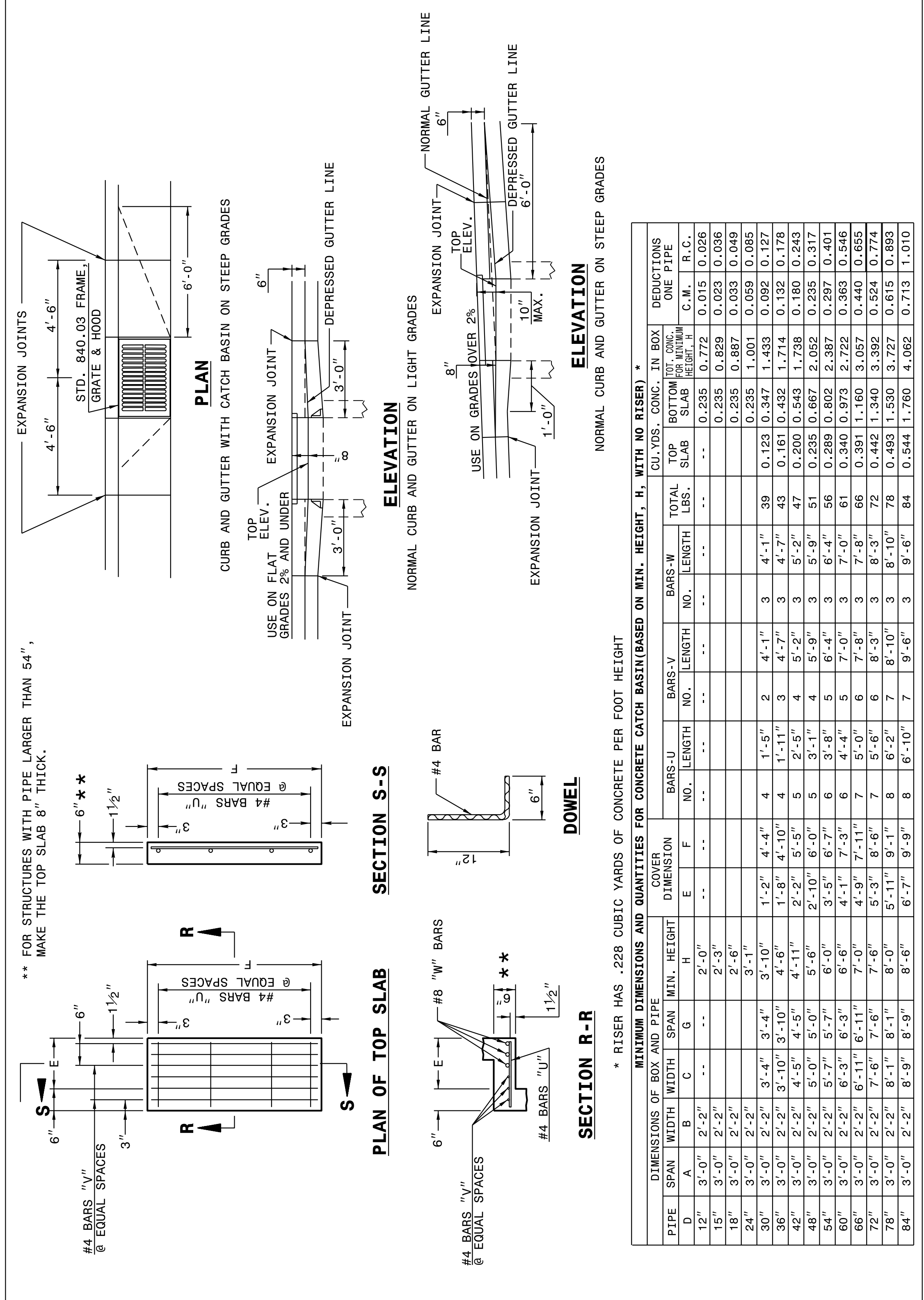
ENGLISH DETAIL DRAWING FOR
**MINIMUM DEPTH
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 12" THRU 84" PIPE

SHEET 2 OF 2
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**MINIMUM DEPTH
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 12" THRU 84" PIPE

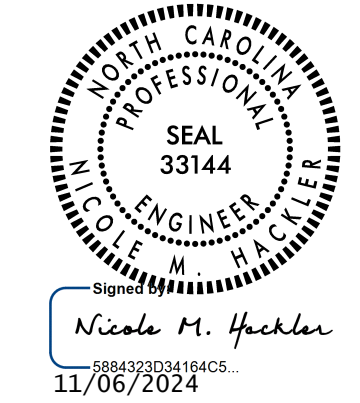
SHEET 2 OF 2
840D02



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.

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

| PIPE D. | DIMENSIONS OF BOX AND PIPE | | | COVER DIMENSION | | BARS-V | | | BARS-W | | | BARS-U | | BARS-Y | | TOTAL LBS. | TOP SLAB FOR MINIMUM HEIGHT, R.C.M. | DEDUCTIONS ONE PIPE R.C. | CU. YDS. CONC. IN BOX | |
|---------|----------------------------|-------|--------|-----------------|----|--------|--------|-----|--------|-----|--------|--------|--------|--------|--------|------------|-------------------------------------|--------------------------|-----------------------|-------|
| | SPAN | WIDTH | HEIGHT | E | F | NO. | LENGTH | NO. | LENGTH | NO. | LENGTH | NO. | LENGTH | NO. | LENGTH | | | | | |
| 12" | 3'-0" | 2'-2" | 2'-0" | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 0.285 | 0.772 | 0.015 | 0.026 | |
| 15" | 3'-0" | 2'-2" | 2'-3" | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 0.235 | 0.829 | 0.023 | 0.036 | |
| 18" | 3'-0" | 2'-2" | 2'-6" | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 0.235 | 0.887 | 0.033 | 0.049 | |
| 24" | 3'-0" | 2'-2" | 3'-1" | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 0.235 | 1.001 | 0.059 | 0.085 | |
| 30" | 3'-0" | 2'-2" | 3'-4" | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 0.123 | 0.347 | 1.433 | 0.092 | 0.127 |
| 36" | 3'-0" | 2'-2" | 3'-10" | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 0.161 | 0.432 | 1.714 | 0.132 | 0.178 |
| 42" | 3'-0" | 2'-2" | 4'-5" | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 0.200 | 0.543 | 1.738 | 0.180 | 0.243 |
| 48" | 3'-0" | 2'-2" | 5'-0" | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 0.235 | 0.667 | 2.052 | 0.235 | 0.317 |
| 54" | 3'-0" | 2'-2" | 5'-7" | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 0.289 | 0.802 | 2.387 | 0.297 | 0.401 |
| 60" | 3'-0" | 2'-2" | 6'-3" | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 0.340 | 0.973 | 2.722 | 0.363 | 0.546 |
| 66" | 3'-0" | 2'-2" | 6'-11" | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 0.391 | 1.160 | 3.057 | 0.440 | 0.655 |
| 72" | 3'-0" | 2'-2" | 7'-6" | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 0.442 | 1.340 | 3.392 | 0.524 | 0.774 |
| 78" | 3'-0" | 2'-2" | 8'-1" | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 0.493 | 1.530 | 3.727 | 0.615 | 0.893 |
| 84" | 3'-0" | 2'-2" | 8'-9" | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 0.544 | 1.760 | 4.062 | 0.713 | 1.010 |



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

SEE PLATE FOR TITLE

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