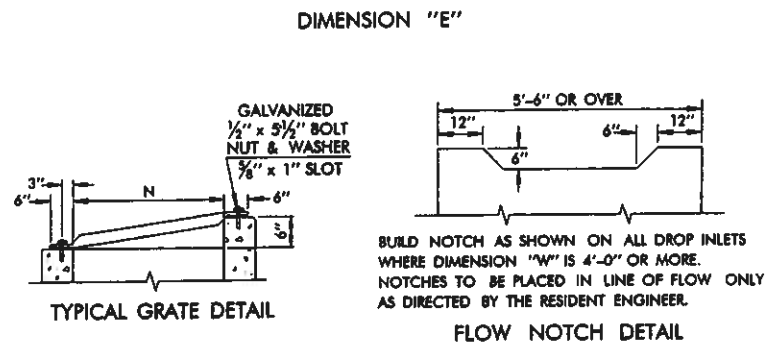
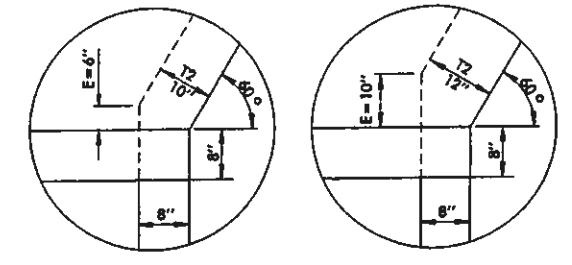
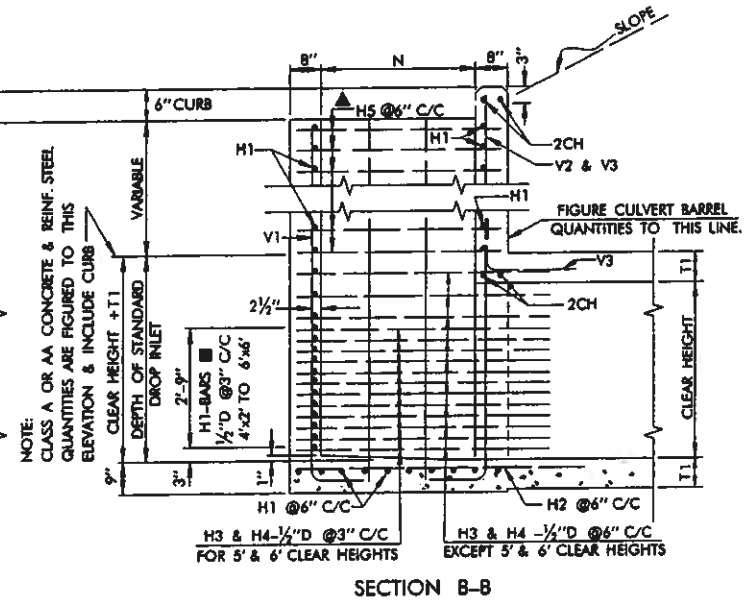
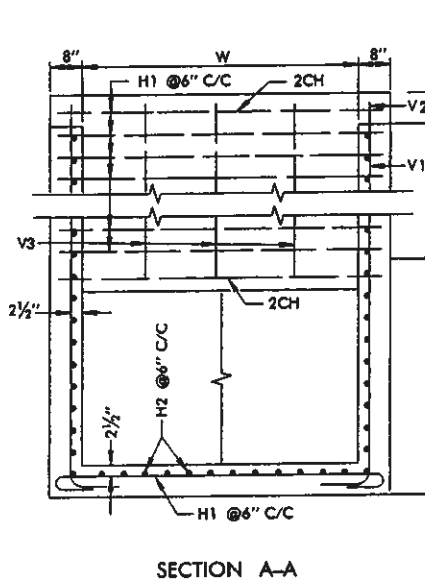


DESIGN NO.	DIMENSION			REINFORCING STEEL												CLASS A/AA CONC. CU. YDS.		REINFORCING STEEL LBS.		PIPE GRATES									
	CLEAR SPAN	CLEAR HEIGHT	AREA OF OPENING SQ. FT.	N	W	E	CH-BARS STRAIGHT		H1-BARS BENT		H2-BARS BENT		H3-BARS BENT		H4-BARS BENT		H5-BARS BENT		V1-BARS BENT		V2-BARS BENT		V3-BARS BENT		STANDARD DROP INLET INCLUDING CURB	PER FOOT OF ADDITIONAL DEPTH	STANDARD DROP INLET INCLUDING CURB	PER FOOT OF ADDITIONAL DEPTH	NO. OF PIPE GRATES
							NO.	LGTH.	NO.	LGTH.	NO.	LGTH.	NO.	LGTH.	NO.	LGTH.	NO.	LGTH.	NO.	LGTH.	NO.	LGTH.	NO.	LGTH.					
1	2'-0"	2'-0"	4	1'-9"	2'-6 3/4"	3 3/4"	4	3'-5"	12	5'-5"	7	5'-1"	5	5'-8"	5	6'-2"	2	4'-7"	5	4'-1"	2	5'-1"	1	3'-4"	1.16	0.323	146	32.15	1
2	3'-0"	2'-0"	6	1'-9"	3'-8 3/4"	3 3/4"	4	4'-11"	12	6'-7"	9	5'-1"	5	5'-8"	5	6'-2"	4	4'-7"	6	4'-1"	2	5'-1"	2	3'-4"	1.40	0.388	171	30.01	2
3	3'-0"	2'-6"	7.5	2'-3"	3'-8 3/4"	3 3/4"	4	4'-11"	14	6'-7"	9	5'-7"	6	6'-2"	6	6'-8"	5	5'-1"	6	4'-7"	2	5'-7"	2	3'-4"	1.70	0.416	188	37.95	2
4	3'-0"	3'-0"	9	2'-6"	3'-8 3/4"	3 3/4"	4	4'-11"	16	6'-7"	9	5'-10"	7	6'-5"	7	6'-11"	5	5'-4"	6	5'-1"	2	6'-1"	2	3'-4"	1.95	0.429	222	38.02	2
5	4'-0"	2'-0"	8	1'-9"	4'-10 1/2"	3 3/4"	4	6'-0"	16	7'-8"	11	5'-1"	5	5'-8"	5	6'-2"	4	4'-7"	7	4'-2"	2	5'-2"	3	3'-5"	1.67	0.451	218	40.06	3
6	4'-0"	2'-6"	10	2'-3"	4'-10 1/2"	3 3/4"	4	6'-0"	19	7'-8"	11	5'-7"	6	6'-2"	6	6'-8"	5	5'-1"	7	4'-8"	2	5'-8"	3	3'-5"	2.01	0.479	251	42.20	3
7	4'-0"	3'-0"	12	2'-6"	4'-10 1/2"	3 3/4"	4	6'-0"	22	7'-8"	11	5'-10"	7	6'-5"	7	6'-11"	5	5'-4"	7	5'-2"	2	6'-2"	3	3'-5"	2.28	0.493	283	42.87	3
8	4'-0"	4'-0"	16	3'-6"	5'-1"	3 3/4"	4	6'-3"	26	7'-11"	12	6'-10"	9	7'-9"	9	7'-11"	6	6'-4"	9	6'-2"	2	7'-2"	3	3'-5"	3.15	0.560	307	47.56	3
9	5'-0"	2'-0"	10	1'-9"	6'-0 1/2"	3 3/4"	4	7'-3"	17	8'-10"	14	5'-1"	5	5'-8"	5	6'-2"	4	4'-7"	7	4'-3"	2	6'-3"	3	3'-6"	1.96	0.516	252	43.90	4
10	5'-0"	3'-0"	15	2'-6"	6'-0 1/2"	3 3/4"	4	7'-3"	22	8'-10"	14	5'-10"	7	6'-5"	7	6'-11"	5	5'-4"	7	5'-2"	2	6'-2"	3	3'-5"	2.63	0.558	317	45.90	4
11	5'-0"	4'-0"	20	3'-6"	6'-2 1/4"	3 3/4"	4	7'-5"	26	9'-1"	14	6'-10"	9	7'-9"	9	7'-11"	6	6'-4"	10	6'-3"	2	7'-3"	4	3'-6"	3.56	0.624	409	52.02	4
12	5'-0"	5'-0"	25	4'-6"	6'-5"	4 3/4"	4	7'-7"	30	9'-3"	14	7'-10"	17	9'-1"	17	8'-11"	7	7'-4"	10	7'-3"	2	8'-3"	4	3'-6"	4.62	0.690	504	50.19	4
13	5'-0"	6'-0"	30	5'-3"	6'-5"	4 3/4"	4	7'-7"	33	9'-3"	14	8'-7"	19	9'-10"	19	9'-8"	8	8'-1"	12	8'-3"	2	9'-3"	4	3'-6"	5.59	0.791	653	58.49	4
14	6'-0"	2'-0"	12	1'-9"	7'-2 1/4"	3 3/4"	4	8'-4"	17	10'-0"	16	5'-1"	6	5'-8"	6	6'-2"	4	4'-7"	8	4'-4"	2	5'-4"	4	3'-7"	2.25	0.580	291	48.44	5
15	6'-0"	3'-0"	18	2'-6"	7'-4 1/4"	3 3/4"	4	8'-6"	22	10'-2"	16	5'-10"	8	6'-9"	8	6'-11"	5	5'-4"	8	5'-4"	2	6'-4"	4	3'-7"	3.03	0.632	367	50.91	5
16	6'-0"	4'-0"	24	3'-6"	7'-4 1/4"	3 3/4"	4	8'-6"	26	10'-2"	16	6'-10"	10	7'-9"	10	7'-11"	6	6'-4"	10	6'-4"	2	7'-4"	4	3'-7"	3.99	0.687	452	54.92	5
17	6'-0"	5'-0"	30	4'-6"	7'-7"	4 3/4"	4	8'-9"	30	10'-3"	17	7'-10"	17	9'-1"	17	8'-11"	7	7'-4"	11	7'-4"	2	8'-4"	5	3'-7"	5.13	0.755	618	59.01	5
18	6'-0"	6'-0"	36	5'-3"	7'-7"	4 3/4"	4	8'-9"	33	10'-5"	17	8'-7"	9	9'-10"	9	9'-8"	8	8'-1"	13	8'-4"	2	9'-4"	5	3'-7"	6.15	0.769	709	62.96	5



NUMBER OF H1-BARS @ 3" C/C IN FRONT WALL OF DROP INLETS ARE AS FOLLOWS:

SIZE OF CULVERT	4'x2'	4'x2 1/2'	5'x2'	6'x2'
NO. OF H1 @ 3" C/C	9	11	10	10

FOR ALL OTHER SIZES, EXCEPT 24" & 36" CLEAR SPANS, USE 12 H1-BARS @ 3" C/C IN FRONT WALL OF DROP INLET AND SPACE ADDITIONAL H1-BARS @ 6" C/C, AS REQUIRED. IN DROP INLETS FOR 24" & 36" CLEAR SPAN CULVERTS ALL H1-BARS ARE SPACED @ 6" C/C.

USE H5-BARS IN SIDEWALLS OF DROP INLETS ONLY WHEN DEPTH OF DROP INLET EXCEEDS CLEAR HEIGHT + T1. "PER FOOT OF ADDITIONAL DEPTH" QUANTITIES INCLUDE THE WEIGHT OF 4 H5-BARS PER FOOT OF ADDITIONAL DEPTH OF DROP INLET.

- GENERAL NOTES**
- ALL CONSTRUCTION AND MATERIAL REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE 1999 ENGLISH STANDARD SPECIFICATIONS.
  - UNLESS OTHERWISE SPECIFIED, ALL EXPOSED CONCRETE SURFACES SHALL HAVE A FINISH IN ACCORDANCE WITH THE 1999 ENGLISH STANDARD SPECIFICATIONS.
  - ALL EXPOSED CONCRETE EDGES SHALL HAVE 3/4" CHAMFER.
  - ALL REINFORCING STEEL SHALL BE 1/2" D EXCEPT CH BARS WHICH ARE 5/8" D. HORIZONTAL BARS SHALL BE SPACED AT 6" CENTERS EXCEPT AS OTHERWISE INDICATED. VERTICAL BARS ARE TIE BARS SPACED AS SHOWN (APPROX 18" C/C).
  - CLASS A OR AA CONCRETE AND REINFORCING STEEL QUANTITIES FOR STANDARD DROP INLETS, AS SHOWN IN TABLE, ARE FIGURED TO TOP OF CULVERT SLAB AND INCLUDE CURB. FOR DROP INLETS OF GREATER DEPTH, MULTIPLY THE FIGURE IN THE PER FOOT COLUMN BY THE DIFFERENCE IN HEIGHT FROM THE TOP OF CULVERT SLAB TO TOP OF DROP INLET AND ADD THE RESULT TO THE STANDARD DROP INLET QUANTITY.
  - MAXIMUM DEPTH OF DROP INLETS FOR 4' x 2' TO 6' x 6' REINFORCED CONCRETE BOXES SHALL BE AS FOLLOWS:
- | CLEAR SPAN OF CULVERT    | 4'-0" | 5'-0" | 6'-0" |
|--------------------------|-------|-------|-------|
| MAX. DEPTH OF DROP INLET | 19'   | 14'   | 12'   |
- INLET TOP OPENING SHALL HAVE 3" x 7.50 LBS./FT. STD. WEIGHT STEEL, GALVANIZED, SCHEDULE 40, PIPE SAFETY GRATES INSTALLED PERPENDICULAR TO THE DIRECTION OF TRAFFIC AT 12" (MAXIMUM) CENTERS. COST OF PIPE SAFETY GRATES ALL HARDWARE NEEDED FOR INSTALLATION SHALL BE INCLUDED IN THE PRICE BID FOR THE INLET.
  - PIPE GRATE ENDS SHALL BE HELD DOWN WITH 1/2" x 5 1/2" GALVANIZED BOLT, WASHER & NUT MEETING THE REQUIREMENTS OF ASTM-A-325. BOLT THREADS, 1 3/4", SHALL REMAIN EXPOSED FOR INSTALLING GRATE.
  - DROP INLET WALLS, FLOOR & CURB CONSTRUCTION SHALL CONSIST OF THE SAME CLASS OF CONCRETE USED FOR THE REINFORCED CONCRETE BOX.

**BASIS OF PAYMENT**

ITEM NO.	ITEM	UNIT
611.06(E)	INLET	EA.
611.06(F)	ADDITIONAL DEPTH IN INLET	V.F.

INLET TYPE & DESIGN NO. SHALL BE SPECIFIED.

APPROVED BY ROADWAY ENGINEER *C.M. Subandi* DATE 4/6/05

OKLAHOMA DEPT. OF TRANSPORTATION  
 ROADWAY STANDARD (ENGLISH)  
 REINFORCED CONCRETE DROP INLETS FOR  
 REINFORCED CONCRETE BOXES (30° SKEW)  
 2' x 2' TO 6' x 6'

1999 SPECIFICATIONS CD13-1 01E R-48E