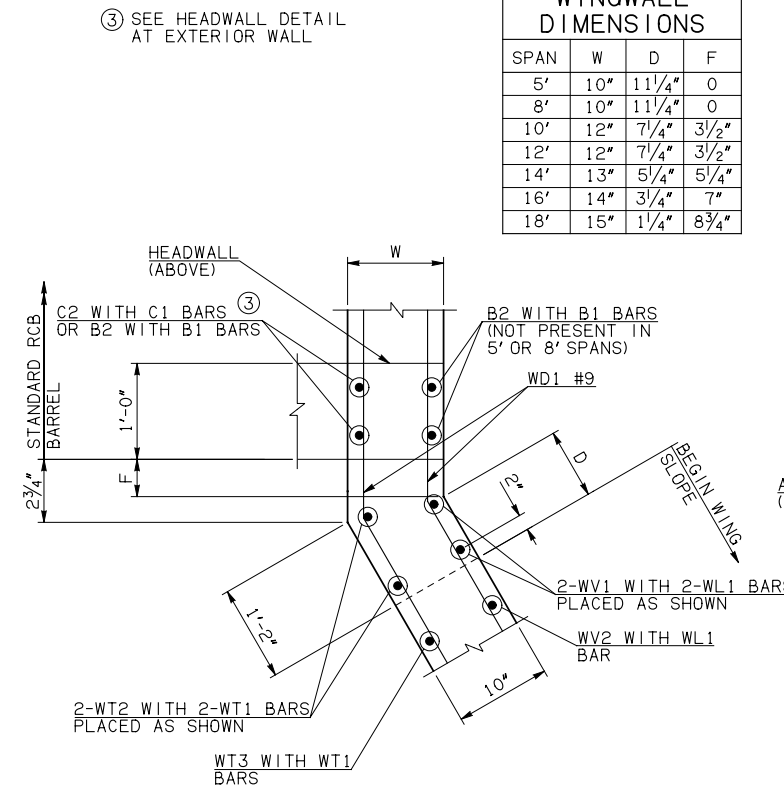


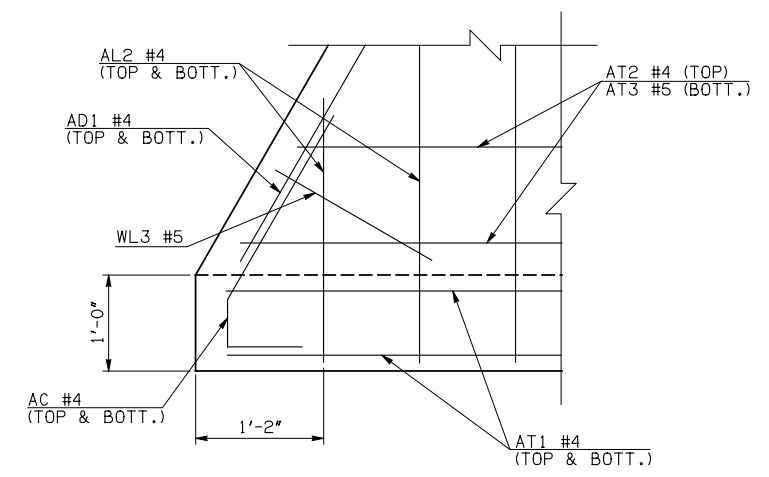
DESCRIPTION	REVISIONS	DATE

WINGWALL DIMENSIONS			
SPAN	W	D	F
5'	10"	11 1/4"	0
8'	10"	11 1/4"	0
10'	12"	7 1/4"	3 1/2"
12'	12"	7 1/4"	3 1/2"
14'	13"	5 1/4"	5 1/4"
16'	14"	3 1/4"	7"
18'	15"	1 1/4"	8 3/4"



PLAN OF WING AT BARREL

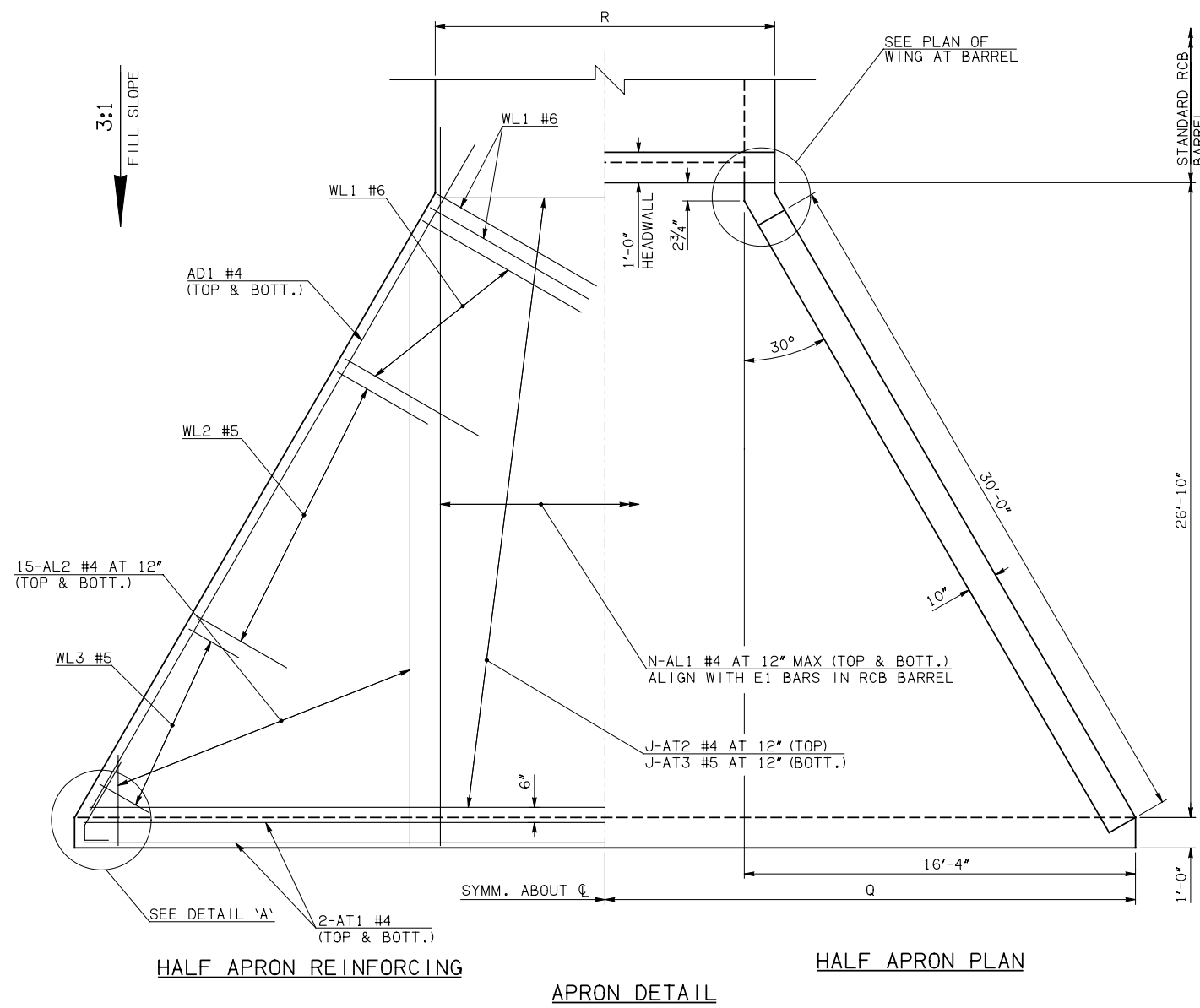
APRON VARIABLES					
SPAN	DIM. R	DIM. Q	QTY. J	QTY. N	
5'	6'-8"	18'-10"	27	7	
8'	9'-8"	20'-4"	27	10	
10'	12'-0"	21'-4"	27	14	
12'	14'-0"	22'-4"	27	16	
14'	16'-2"	23'-4"	27	18	
16'	18'-4"	24'-4"	27	20	
18'	20'-6"	25'-4"	27	22	



DETAIL 'A'

WINGWALL BAR LIST					
ONE WINGWALL SHOWN; TWO REQUIRED					
MARK	SIZE	QTY.	FORM	REMARKS	
WD1	#9	16	BNT	8'-4"	
WH1	#4	2	STR	31'-0"	
WH2	#4	16	STR	16'-1 1/2" AVG.	4'-0" TO 28'-3"
WH3	#5	2	STR	31'-0"	
WL1	#6	7	BNT	12'-9"	
WL2	#5	24	BNT	10'-0"	
WL3	#5	11	BNT	4'-7" AVG.	3'-2" TO 6'-0"
WT1	#4	21	STR	2'-10"	
WT2	#4	2	STR	9'-0"	
WT3	#4	19	STR	6'-3" AVG.	3'-8" TO 8'-10"
WT4	#4	11	STR	2'-7" AVG.	1'-2" TO 4'-0"
WV1	#5	2	STR	9'-0"	
WV2	#5	19	STR	6'-3" AVG.	3'-8" TO 8'-10"
U1	#4	1	BNT	2'-6"	

- ① 4-SETS OF 15-AL2 BARS REQUIRED
- ② 2-SETS OF 8-WH2 BARS REQUIRED



HALF APRON REINFORCING
APRON DETAIL
HALF APRON PLAN

APRON AND HEADWALL BAR LIST

ONE APRON AND ONE HEADWALL SHOWN																							
MARK	SIZE	FORM	5' SPAN			8' SPAN			10' SPAN			12' SPAN			14' SPAN			16' SPAN			18' SPAN		
			QTY.	LENGTH	REMARKS	QTY.	LENGTH	REMARKS	QTY.	LENGTH	REMARKS	QTY.	LENGTH	REMARKS	QTY.	LENGTH	REMARKS	QTY.	LENGTH	REMARKS	QTY.	LENGTH	REMARKS
AC	#4	BNT	4	3'-8"		4	3'-8"		4	3'-8"		4	3'-8"		4	3'-8"		4	3'-8"		4	3'-8"	
AD1	#4	STR	4	33'-0"		4	33'-0"		4	33'-0"		4	33'-0"		4	33'-0"		4	33'-0"		4	33'-0"	
AL1	#4	STR	14	29'-8"		20	29'-8"		28	29'-8"		32	29'-8"		36	29'-8"		40	29'-8"		44	29'-8"	
AL2	#4	STR	60	14'-7" AVG.	2'-6" TO 26'-8"	60	14'-7" AVG.	2'-6" TO 26'-8"	60	14'-7" AVG.	2'-6" TO 26'-8"	60	14'-7" AVG.	2'-6" TO 26'-8"	60	14'-7" AVG.	2'-6" TO 26'-8"	60	14'-7" AVG.	2'-6" TO 26'-8"	60	14'-7" AVG.	2'-6" TO 26'-8"
AT1	#4	STR	4	37'-4"		4	40'-4"		4	42'-4"		4	44'-4"		4	46'-4"		4	48'-4"		4	50'-4"	
AT2	#4	STR	27	21'-9 1/2" AVG.	6'-9" TO 36'-10"	27	24'-9 1/2" AVG.	9'-9" TO 39'-10"	27	26'-9 1/2" AVG.	11'-9" TO 41'-10"	27	28'-9 1/2" AVG.	13'-9" TO 43'-10"	27	30'-9 1/2" AVG.	15'-9" TO 45'-10"	27	32'-9 1/2" AVG.	17'-9" TO 47'-10"	27	34'-9 1/2" AVG.	19'-9" TO 49'-10"
AT3	#5	STR	27	21'-9 1/2" AVG.	6'-9" TO 36'-10"	27	24'-9 1/2" AVG.	9'-9" TO 39'-10"	27	26'-9 1/2" AVG.	11'-9" TO 41'-10"	27	28'-9 1/2" AVG.	13'-9" TO 43'-10"	27	30'-9 1/2" AVG.	15'-9" TO 45'-10"	27	32'-9 1/2" AVG.	17'-9" TO 47'-10"	27	34'-9 1/2" AVG.	19'-9" TO 49'-10"
CH	#4	STR	4	6'-4"		4	9'-4"		4	11'-8"		4	13'-8"		4	15'-10"		4	18'-0"		4	20'-2"	
CL1	#4	BNT	7	4'-4"		10	4'-4"		14	4'-4"		16	4'-4"		18	4'-4"		20	4'-4"		22	4'-4"	
CL2	#4	BNT	7	4'-3"		10	4'-3"		14	4'-3"		16	4'-3"		18	4'-3"		20	4'-3"		22	4'-3"	

QUANTITIES								
ITEM	UNIT	5' SPAN	8' SPAN	10' SPAN	12' SPAN	14' SPAN	16' SPAN	18' SPAN
CLASS AA CONCRETE	CY	31.50	34.40	36.40	38.30	40.30	42.10	44.10
REINFORCING STEEL	LB	5070.00	5360.00	5660.00	5860.00	6050.00	6250.00	6440.00

NOTE: QUANTITIES ABOVE ARE FOR ONE END SECTION, WHICH IS COMPRISED OF ONE HEADWALL, ONE APRON, AND TWO WINGWALLS. INCLUDED IN REINFORCING STEEL PAY ITEM QUANTITY IS THE WEIGHT OF ADDITIONAL RCB BARREL REINFORCING STEEL REQUIRED AS SHOWN.

APPROVED BY BRIDGE ENGINEER *Robert J. Nusch* DATE 4/09/09

OKLAHOMA DEPT. OF TRANSPORTATION
BRIDGE STANDARD (ENGLISH)
RCB CULVERTS - END SECTION DETAILS
SINGLE CELL - 7'-0" HEIGHT - 0°
SHEET NO. 1 OF 2

1999 SPECIFICATIONS RCB-E1-H7-0-1 OOE B-580E