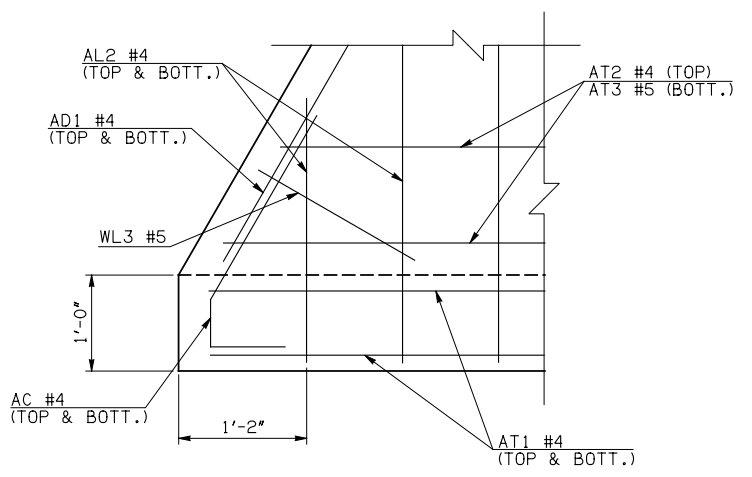
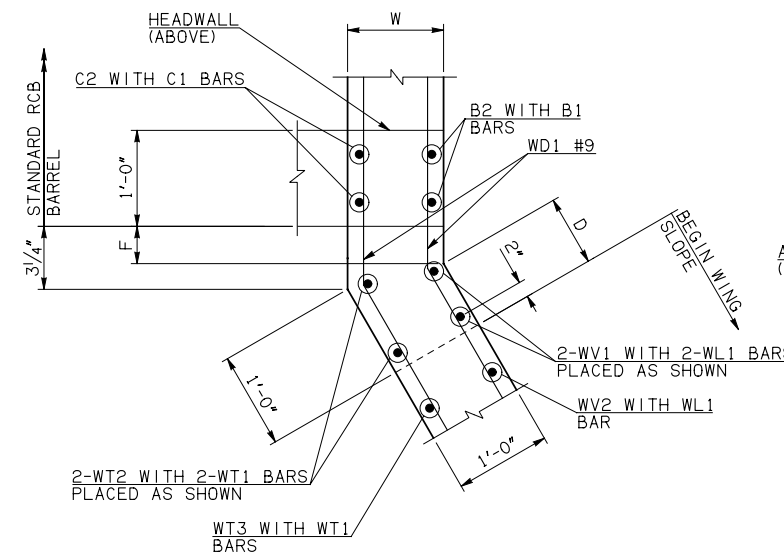
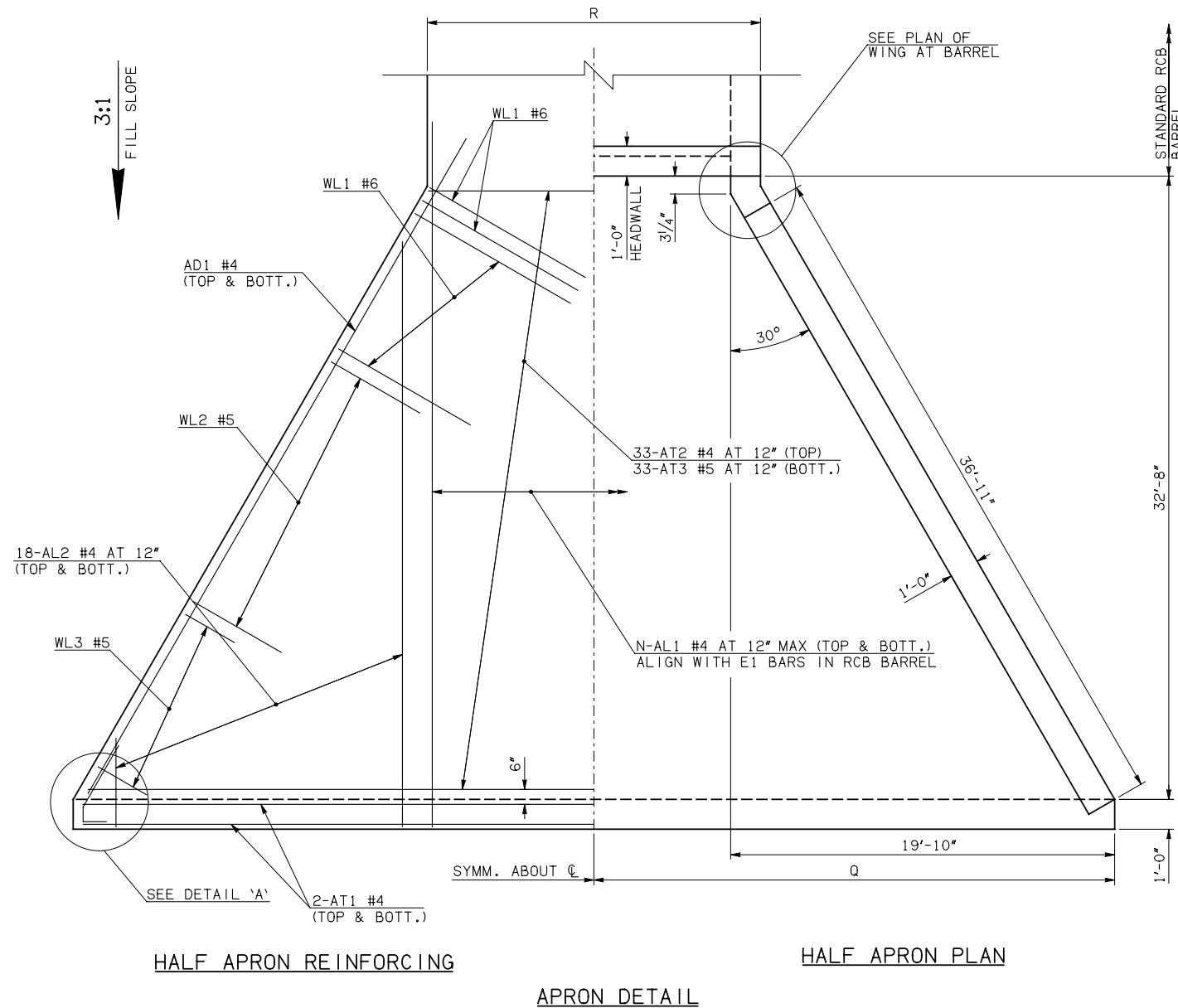
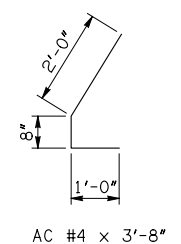


DESCRIPTION	REVISIONS	DATE

WINGWALL DIMENSIONS			
SPAN	W	D	F
10'	12"	8 3/4"	0
12'	12"	8 3/4"	0
14'	13"	6 3/4"	1 3/4"
16'	14"	4 3/4"	3 1/2"
18'	15"	2 3/4"	5 1/4"
20'	15"	2 3/4"	5 1/4"



APRON VARIABLES			
SPAN	DIM. R	DIM. Q	QTY. N
10'	12'-0"	24'-10"	14
12'	14'-0"	25'-10"	16
14'	16'-2"	26'-10"	18
16'	18'-4"	27'-10"	20
18'	20'-6"	28'-10"	22
20'	22'-6"	29'-10"	24



WINGWALL BAR LIST					
ONE WINGWALL SHOWN; TWO REQUIRED					
MARK	SIZE	QTY.	FORM	LENGTH	REMARKS
WD1	#9	20	BNT	8'-4"	
WH1	#4	2	STR	37'-9"	
WH2	#4	20	STR	19'-5" AVG.	3'-10" TO 35'-0"
WH3	#5	2	STR	38'-3"	
WL1	#6	13	BNT	13'-10"	
WL2	#5	31	BNT	10'-3"	
WL3	#5	11	BNT	4'-8 1/2" AVG.	3'-3" TO 6'-2"
WT1	#4	28	STR	2'-10"	
WT2	#4	2	STR	11'-0"	
WT3	#4	6	STR	10'-1 1/2" AVG.	9'-5" TO 10'-10"
WT4	#4	20	STR	6'-5" AVG.	3'-8" TO 9'-2"
WT5	#4	11	STR	2'-8 1/2" AVG.	1'-3" TO 4'-2"
WV1	#5	2	STR	11'-0"	
WV2	#5	11	STR	10'-1 1/2" AVG.	9'-5" TO 10'-10"
WV3	#5	20	STR	6'-5" AVG.	3'-8" TO 9'-2"
U1	#4	1	BNT	3'-0"	

- ① 4-SETS OF 18-AL2 BARS REQUIRED
- ② 2-SETS OF 10-WH2 BARS REQUIRED

APRON AND HEADWALL BAR LIST																				
ONE APRON AND ONE HEADWALL SHOWN																				
MARK	SIZE	FORM	10' SPAN			12' SPAN			14' SPAN			16' SPAN			18' SPAN			20' SPAN		
			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"	
AD1	#4	STR	4	39'-9"		4	39'-9"		4	39'-9"		4	39'-9"		4	39'-9"		4	39'-9"	
AL1	#4	STR	28	35'-5"		32	35'-5"		36	35'-5"		40	35'-5"		44	35'-5"		48	35'-5"	
AL2	#4	STR	72	17'-2 1/2" AVG.	2'-6" TO 31'-11"	72	17'-2 1/2" AVG.	2'-6" TO 31'-11"	72	17'-2 1/2" AVG.	2'-6" TO 31'-11"	72	17'-2 1/2" AVG.	2'-6" TO 31'-11"	72	17'-2 1/2" AVG.	2'-6" TO 31'-11"	72	17'-2 1/2" AVG.	2'-6" TO 31'-11"
AT1	#4	STR	4	49'-4"		4	51'-4"		4	53'-4"		4	55'-4"		4	57'-4"		4	59'-4"	
AT2	#4	STR	33	30'-4" AVG.	11'-10" TO 48'-10"	33	32'-4" AVG.	13'-10" TO 50'-10"	33	34'-4" AVG.	15'-10" TO 52'-10"	33	36'-4" AVG.	17'-10" TO 54'-10"	33	38'-4" AVG.	19'-10" TO 56'-10"	33	40'-4" AVG.	21'-10" TO 58'-10"
AT3	#5	STR	33	30'-4" AVG.	11'-10" TO 48'-10"	33	32'-4" AVG.	13'-10" TO 50'-10"	33	34'-4" AVG.	15'-10" TO 52'-10"	33	36'-4" AVG.	17'-10" TO 54'-10"	33	38'-4" AVG.	19'-10" TO 56'-10"	33	40'-4" AVG.	21'-10" TO 58'-10"
CH	#4	STR	4	11'-8"		4	13'-8"		4	15'-10"		4	18'-0"		4	20'-2"		4	22'-2"	
CL1	#4	BNT	14	4'-4"		16	4'-4"		18	4'-4"		20	4'-4"		22	4'-4"		24	4'-4"	
CL2	#4	BNT	14	4'-3"		16	4'-3"		18	4'-3"		20	4'-3"		22	4'-3"		24	4'-3"	

QUANTITIES							
ITEM	UNIT	10' SPAN	12' SPAN	14' SPAN	16' SPAN	18' SPAN	20' SPAN
CLASS AA CONCRETE	CY	59.70	62.50	65.20	67.90	70.70	73.40
REINFORCING STEEL	LB	7810.00	8040.00	8270.00	8500.00	8730.00	8960.00

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. Nisch* DATE 4/09/09

OKLAHOMA DEPT. OF TRANSPORTATION  
BRIDGE STANDARD (ENGLISH)  
RCB CULVERTS - END SECTION DETAILS  
SINGLE CELL - 9'-0" HEIGHT - 0°  
SHEET NO. 1 OF 2

1999 SPECIFICATIONS	RCB-E1-H9-0-1	OOE
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B-584E