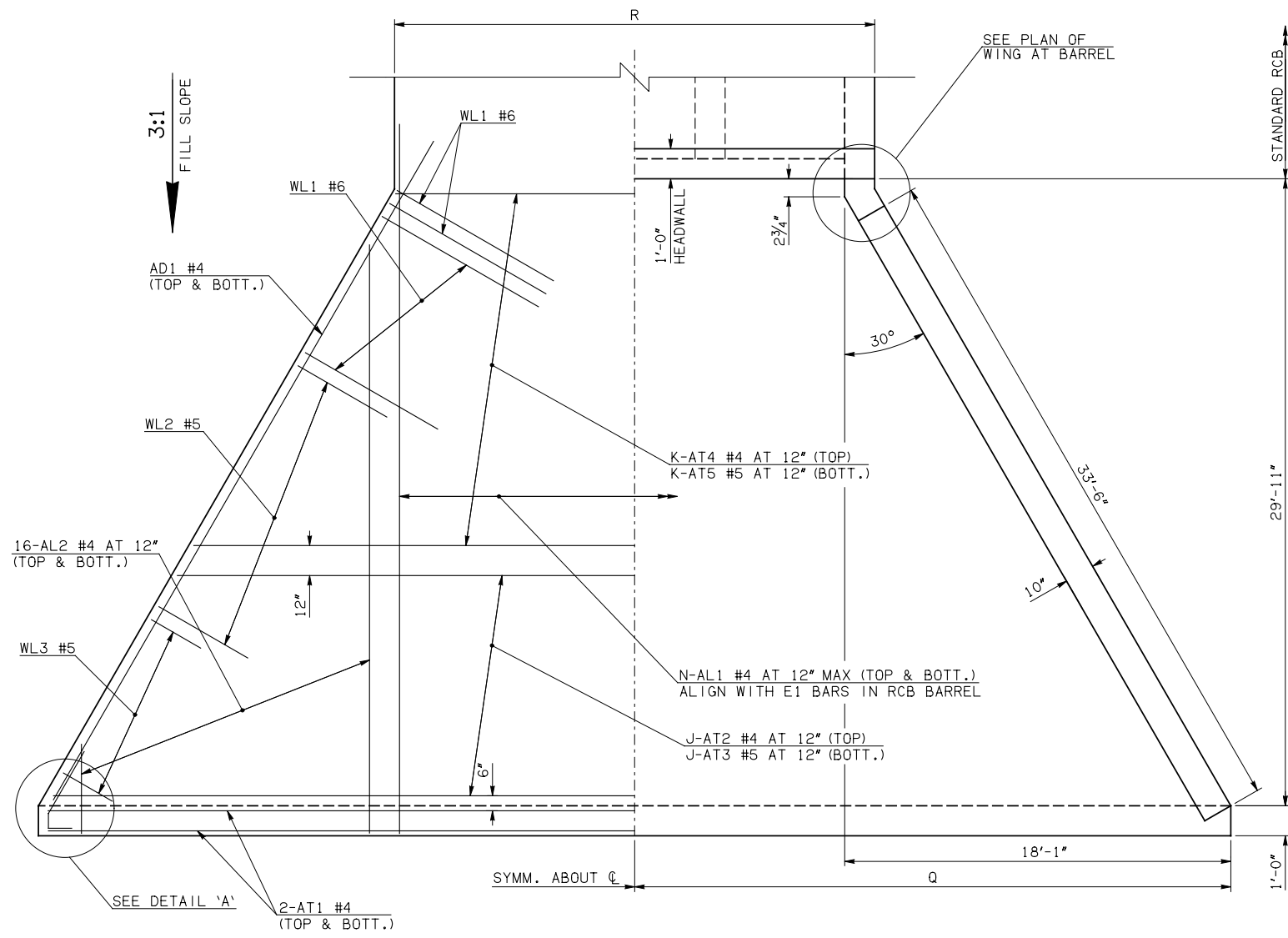
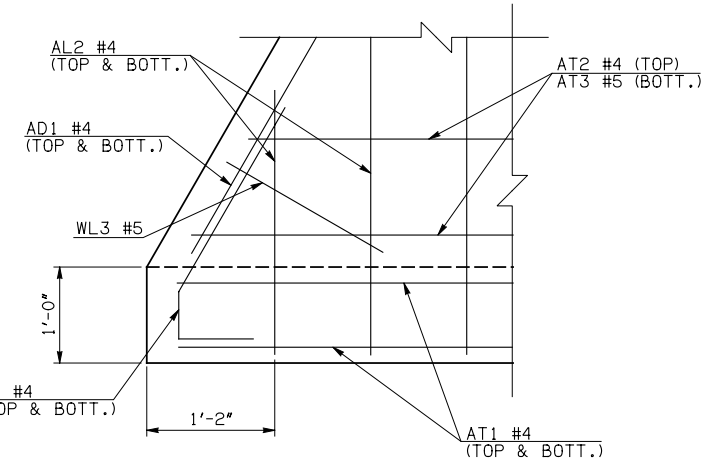
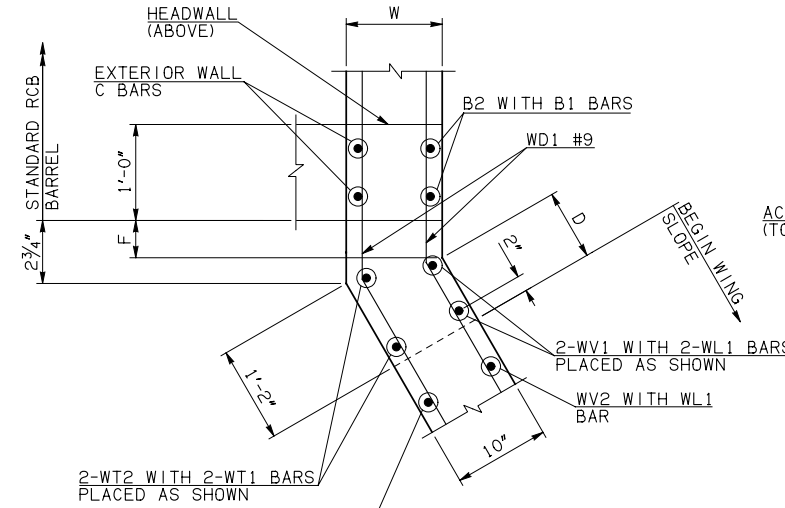


DESCRIPTION	REVISIONS	DATE

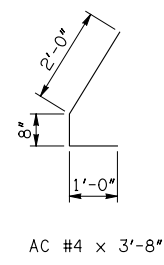


WINGWALL DIMENSIONS			
SPAN	W	D	F
8'	12"	7 1/4"	3 1/2"
10'	12"	7 1/4"	3 1/2"
12'	12"	7 1/4"	3 1/2"
14'	12"	7 1/4"	3 1/2"
16'	13"	5 1/4"	5 1/4"



WINGWALL BAR LIST					
ONE WINGWALL SHOWN; TWO REQUIRED					
MARK	SIZE	QTY.	FORM	LENGTH	REMARKS
WD1	#9	18	BNT	8'-4"	
WH1	#4	2	STR	34'-6"	
WH2	#4	18	STR	17'-10 1/2" AVG.	4'-0" TO 31'-9"
WH3	#5	2	STR	34'-8"	
WL1	#6	10	BNT	12'-9"	
WL2	#5	29	BNT	10'-0"	
WL3	#5	10	BNT	4'-8" AVG.	3'-4" TO 6'-0"
WT1	#4	25	STR	2'-10"	
WT2	#4	2	STR	10'-0"	
WT3	#4	23	STR	6'-8" AVG.	3'-6" TO 9'-10"
WT4	#4	10	STR	2'-8" AVG.	1'-4" TO 4'-0"
WV1	#5	2	STR	10'-0"	
WV2	#5	23	STR	6'-8" AVG.	3'-6" TO 9'-10"
U1	#4	1	BNT	2'-8"	

APRON VARIABLES						
SPAN	DIM. R	DIM. Q	QTY. J	QTY. K	QTY. N	
8'	28'-0"	31'-1"	2	28	32	
10'	34'-0"	34'-1"	7	23	38	
12'	40'-0"	37'-1"	12	18	44	
14'	46'-0"	40'-1"	17	13	50	
16'	52'-2"	43'-1"	22	8	56	



APRON AND HEADWALL BAR LIST

ONE APRON AND ONE HEADWALL SHOWN																			
8' SPAN				10' SPAN				12' SPAN				14' SPAN				16' SPAN			
MARK	SIZE	FORM	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"			
AD1	#4	STR	4	36'-6"		4	36'-6"		4	36'-6"		4	36'-6"		4	36'-6"			
AL1	#4	STR	64	32'-8"		76	32'-8"		88	32'-8"		100	32'-8"		112	32'-8"			
AL2	#4	STR	64	15'-5 1/2" AVG.	2'-6" TO 28'-5"	64	15'-5 1/2" AVG.	2'-6" TO 28'-5"	64	15'-5 1/2" AVG.	2'-6" TO 28'-5"	64	15'-5 1/2" AVG.	2'-6" TO 28'-5"	64	15'-5 1/2" AVG.	2'-6" TO 28'-5"		
AT1	#4	STR	4	64'-4" ③		4	70'-4" ③		4	76'-4" ③		4	82'-4" ③		4	88'-4" ③			
AT2	#4	STR	2	63'-3" AVG.	62'-8" TO 63'-10" ③	7	66'-4" AVG.	62'-10" TO 69'-10" ③	12	69'-5 1/2" AVG.	63'-1" TO 75'-10" ③	17	72'-7" AVG.	63'-4" TO 81'-10" ③	22	75'-8 1/2" AVG.	63'-7" TO 87'-10" ③		
AT3	#5	STR	2	63'-3" AVG.	62'-8" TO 63'-10" ③	7	66'-4" AVG.	62'-10" TO 69'-10" ③	12	69'-5 1/2" AVG.	63'-1" TO 75'-10" ③	17	72'-7" AVG.	63'-4" TO 81'-10" ③	22	75'-8 1/2" AVG.	63'-7" TO 87'-10" ③		
AT4	#4	STR	28	43'-5" AVG.	27'-10" TO 59'-0"	23	46'-6 1/2" AVG.	33'-10" TO 59'-3"	18	49'-7 1/2" AVG.	39'-10" TO 59'-5"	13	52'-9" AVG.	45'-10" TO 59'-8"	8	55'-10 1/2" AVG.	51'-10" TO 59'-11"		
AT5	#5	STR	28	43'-5" AVG.	27'-10" TO 59'-0"	23	46'-6 1/2" AVG.	33'-10" TO 59'-3"	18	49'-7 1/2" AVG.	39'-10" TO 59'-5"	13	52'-9" AVG.	45'-10" TO 59'-8"	8	55'-10 1/2" AVG.	51'-10" TO 59'-11"		
CH	#4	STR	4	27'-8"		4	33'-8"		4	39'-8"		4	45'-8"		4	51'-10"			
CL1	#4	BNT	32	4'-4"		38	4'-4"		44	4'-4"		50	4'-4"		56	4'-4"			
CL2	#4	BNT	32	4'-3"		38	4'-3"		44	4'-3"		50	4'-3"		56	4'-3"			

QUANTITIES

ITEM	UNIT	8' SPAN	10' SPAN	12' SPAN	14' SPAN	16' SPAN
CLASS AA CONCRETE	CY	64.70	71.80	78.80	85.80	92.80
REINFORCING STEEL	LB	8530.00	9150.00	9840.00	10540.00	11250.00

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.

- ① 4-SETS OF 16-AL2 BARS REQUIRED
- ② 2-SETS OF 9-WH2 BARS REQUIRED
- ③ INCLUDES 2'-6" LAP

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

OKLAHOMA DEPT. OF TRANSPORTATION
BRIDGE STANDARD (ENGLISH)
 RCB CULVERTS - END SECTION DETAILS
 TRIPLE CELL - 8'-0" HEIGHT - 0°
 SHEET NO. 1 OF 2

1999 SPECIFICATIONS	RCB-E3-H8-0-1	OOE
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B-638E