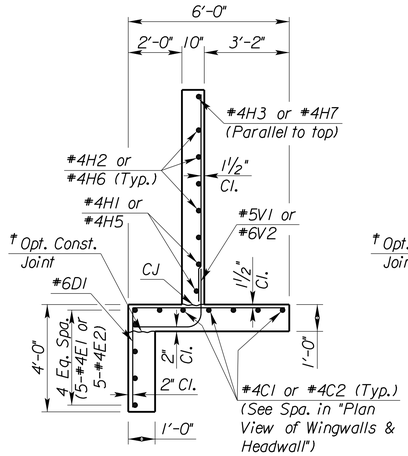
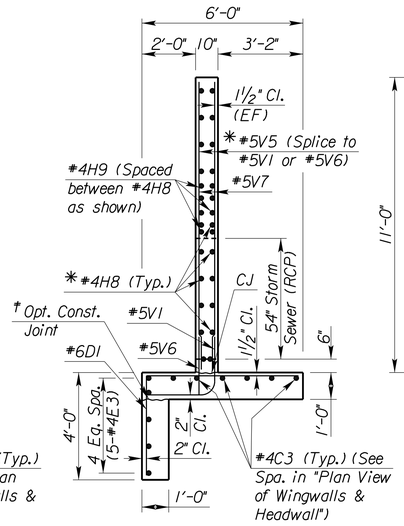


SECTION B-B

** Seal around 54" Storm Sewer (RCP) with an approved Grout.

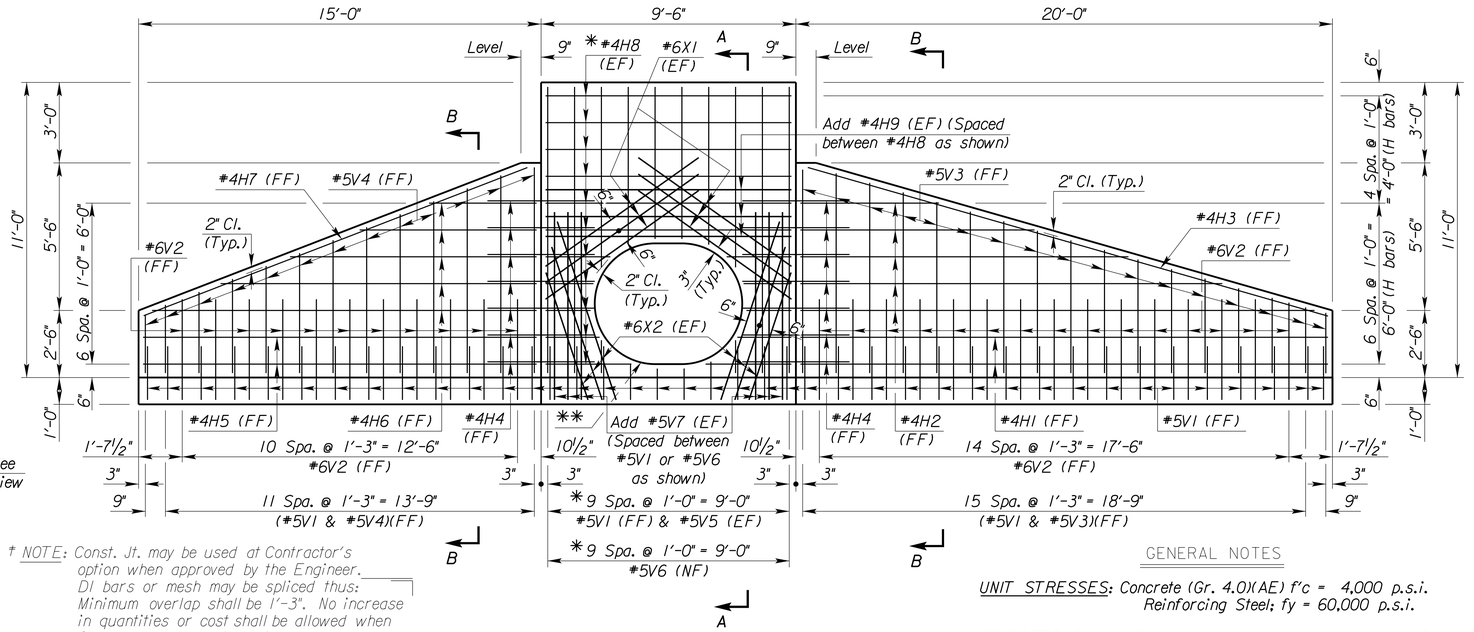
* Field cut bars as needed for 2" min. cl. around 54" Storm Sewer (RCP).



SECTION A-A

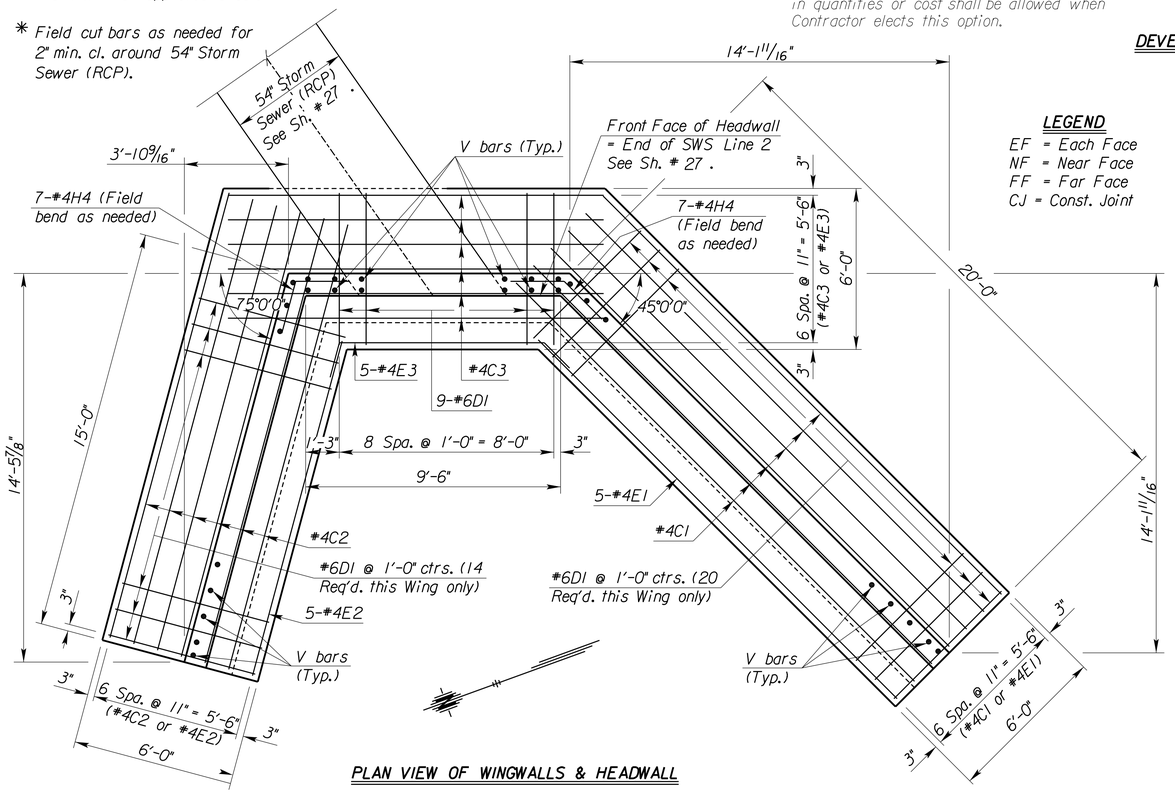
(#6X1 & #6X2 bars not shown for clarity.)

† NOTE: Const. Jt. may be used at Contractor's option when approved by the Engineer. D1 bars or mesh may be spliced thus: Minimum overlap shall be 1'-3". No increase in quantities or cost shall be allowed when Contractor elects this option.



DEVELOPED ELEVATION VIEW OF WINGWALLS & HEADWALL

(Front face of Headwall & Wingwalls shown)



PLAN VIEW OF WINGWALLS & HEADWALL

LEGEND

EF = Each Face
NF = Near Face
FF = Far Face
CJ = Const. Joint

WINGWALL & HEADWALL Bill of Reinforcing Steel							
Straight bars				Bent bars			
Mark	No.	Size	Length	Mark	No.	Size	Length
X1	#6	12	7'-0"	D1	#6	43	9'-4"
X2	#6	12	⊗	V2	#6	26	6'-3"
V3	#5	17	⊗	V1	#5	40	4'-6"
V4	#5	13	⊗				
V5	#5	20	10'-8"	E3	#4	5	10'-2"
V6	#5	10	2'-0"	H4	#4	14	4'-0"
V7	#5	12	7'-0"				
C1	#4	6	21'-0"				
C2	#4	6	17'-2"				
C3	#4	6	14'-0"				
E1	#4	5	18'-11"				
E2	#4	5	12'-11"				
H1	#4	2	19'-8"				
H2	#4	5	⊗				
H3	#4	1	20'-2"				
H5	#4	2	14'-8"				
H6	#4	5	⊗				
H7	#4	1	15'-4"				
H8	#4	22	9'-2"				
H9	#4	6	9'-2"				
Summary of Quantities							
Concrete (Gr. 4.0)(AE)			23.4 C.Y.				
Reinforcing Steel (Gr. 60)(Epoxy Coated)			2,450 Lbs.				

⊗ See Bending Diagrams.

GENERAL NOTES

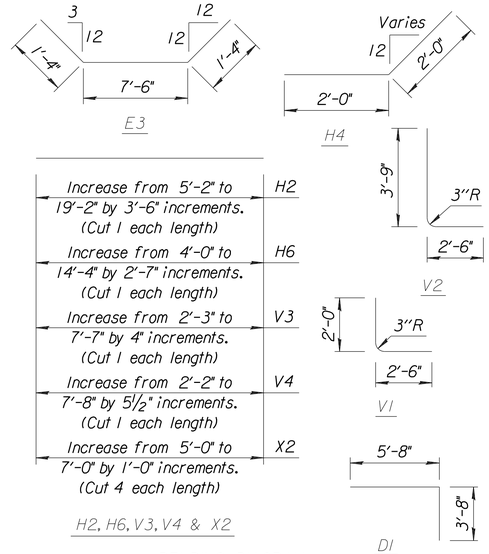
UNIT STRESSES: Concrete (Gr. 4.0)(AE) f'c = 4,000 p.s.i.
Reinforcing Steel: fy = 60,000 p.s.i.

CONCRETE: Grade 4.0 Concrete shall be used throughout. Bevel all exposed edges with a ¾inch triangular moulding.

REINFORCING: All reinforcing shall conform to ASTM A615, Grade 60. All dimensions relative to reinforcing steel shall be to centerline of bar unless otherwise noted.

QUANTITIES: All quantities shown are included in the respective road quantities. See Sh. # 85 .

EXCAVATION: Excavation shall not be paid for directly but shall be subsidiary to the bid item "Concrete (Gr. 4.0)(AE)" and shall be paid for as Class III Excavation.



Increase from 5'-2" to 19'-2" by 3'-6" increments. (Cut 1 each length)	H2
Increase from 4'-0" to 14'-4" by 2'-7" increments. (Cut 1 each length)	H6
Increase from 2'-3" to 7'-7" by 4" increments. (Cut 1 each length)	V3
Increase from 2'-2" to 7'-8" by 5½" increments. (Cut 1 each length)	V4
Increase from 5'-0" to 7'-0" by 1'-0" increments. (Cut 4 each length)	X2

H2, H6, V3, V4 & X2

BENDING DIAGRAM

(All dimensions are out to out of bars.)

CITY OF WICHITA

wsp

HARRY STREET BRIDGE OVER ARKANSAS RIVER

HEADWALL DETAILS FOR 54" RCP

REVISIONS

NO.	DATE	DESCRIPTION

PROJ NO:	35838B
SCALE:	AS NOTED
DATE:	.
DESIGNED BY:	--
DRAWN BY:	--
CHECKED BY:	-
YEAR:	2019

SHEET NO 28

SHEET 28 OF 135

Plotted : 10/3/2019 2:12:25 PM File : T:\35838A-COW_HarryStBridge\Cadd\Sheets\Drainage\8388WSB01.dgn