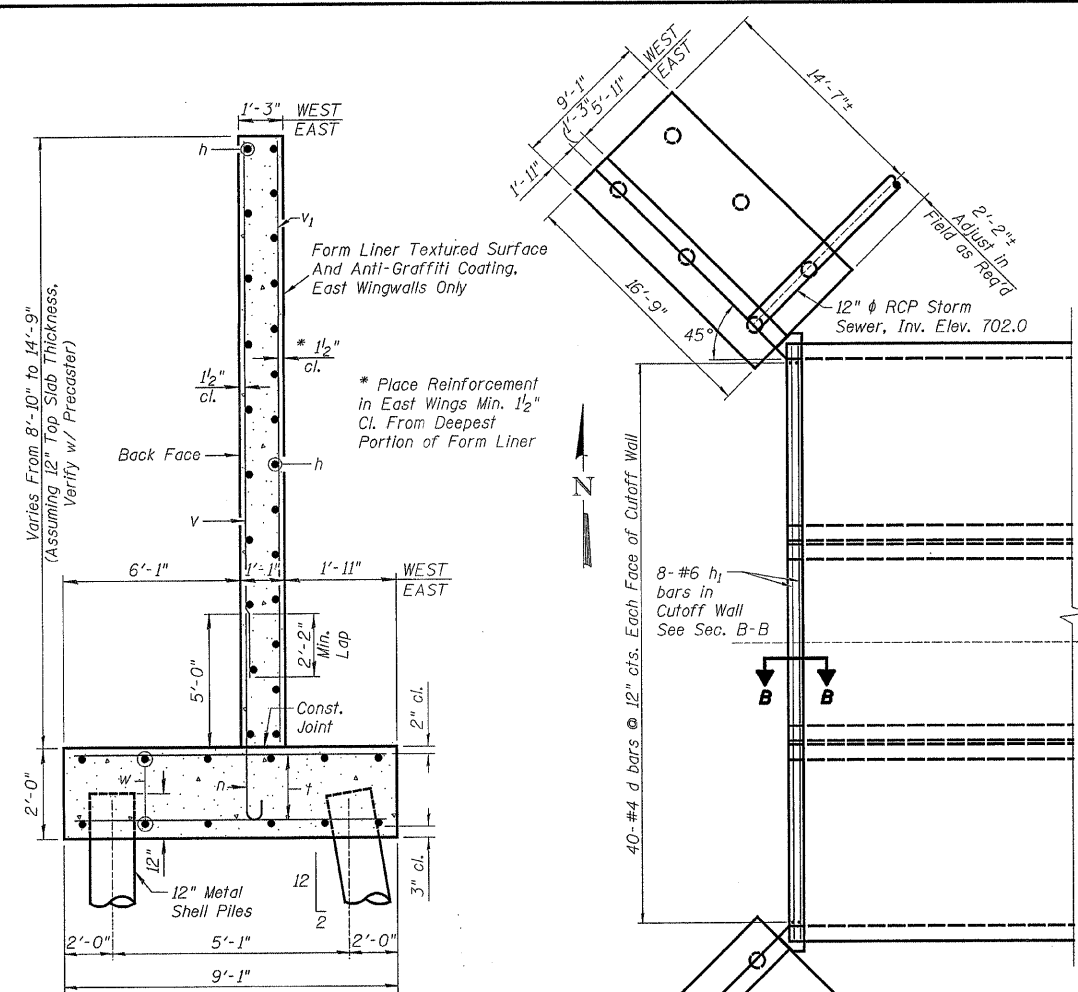
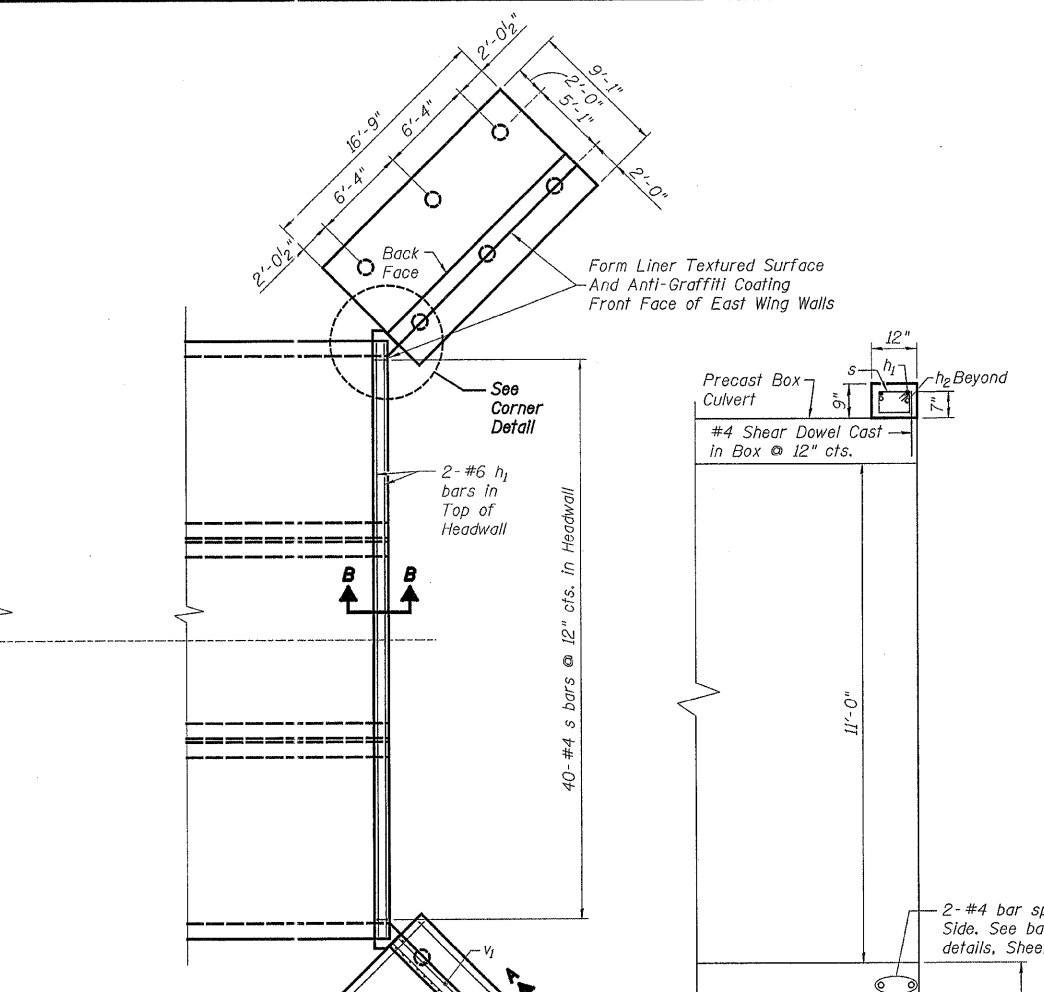


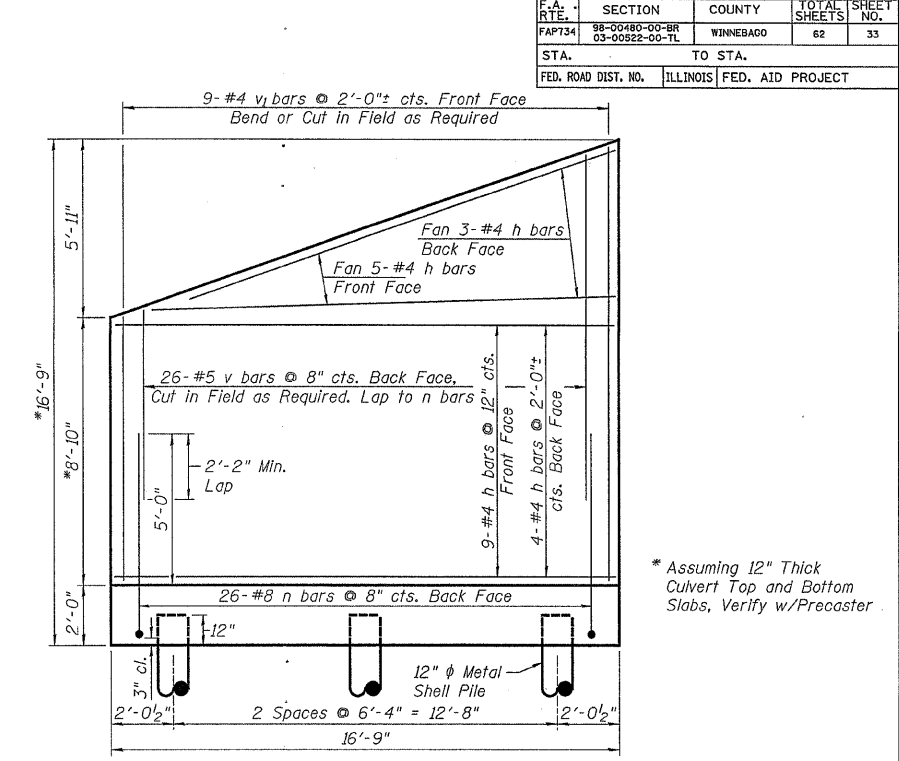
F.A. RT.:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PAP134	98-00480-00-BR 03-00222-00-TL	WINNEBAGO	62	33
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



**SECTION A-A**



**WINGWALL AND COLLAR PLAN**



**WINGWALL ELEVATION**

**Notes:**  
The NW and SW Wings require Penetrations for Storm Sewer. See Sheet 32 of 62 for Location and Invert.

**BILL OF MATERIAL-WINGWALLS AND COLLARS**

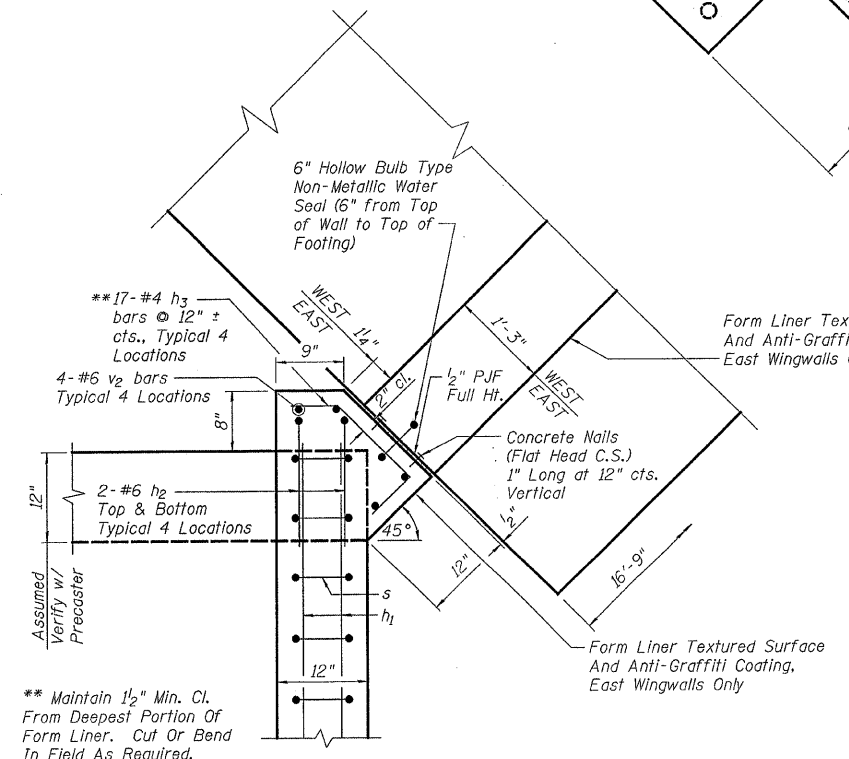
Bar	No.	Size	Length	Shape
d	160	#4	2'-6"	—
h	84	#4	16'-6"	—
h1	20	#6	39'-3"	—
h2	16	#6	7'-0"	—
h3	68	#4	2'-8"	—
h4	16	#8	5'-6"	—
h5	16	#4	5'-6"	—
n	104	#8	7'-8"	—
s	80	#4	3'-3"	—
t	208	#6	8'-9"	—
v	104	#5	12'-0"	—
v1	36	#4	14'-6"	—
v2	16	#6	16'-6"	—
w	40	#5	16'-6"	—
Concrete Structures			Cu. Yd.	91.6
Reinforcement Bars			Pound	10,730
Furnishing Metal Shell Piles			Foot	825
Driving Piles			Foot	825
Test Pile Metal Shells			Each	2
Form Liner Textured Surface			Sq. Yd.	47
Anti-Graffiti Coating			Sq. Ft.	424

**Notes:**  
Class SI concrete shall be used throughout.  
Exposed edges shall be beveled 3/4".  
For backfill & embankment, See Special Provisions.  
Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42, or M-53 Grade 60.  
For Bar Splicer Details See Structural Sheet 34 of 62.  
All Excavation Required for Wingwall Construction shall be Included in the Contract Unit Price per Foot for PRECAST CONCRETE BOX CULVERT 11'x11'.

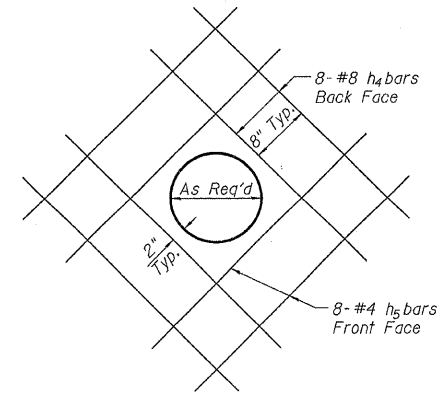
**WINGWALL AND COLLAR DETAILS**  
**KISHWAUKEE STREET OVER KEITH CREEK**  
**STA. 423+30 (S.N. 101-6160)**  
**SECTION 98-00480-00-BR**  
**ROCKFORD, ILLINOIS**  
WHA # 1158D03

**PILE DATA-WEST WINGWALLS**  
Type & Size: Metal Shell - 12 Inch Dia. X 0.179 Inch Walls  
Nominal Required Bearing: 252 Kips  
Allowable Resistance Available: 84 Kips  
Est. Length: 39'

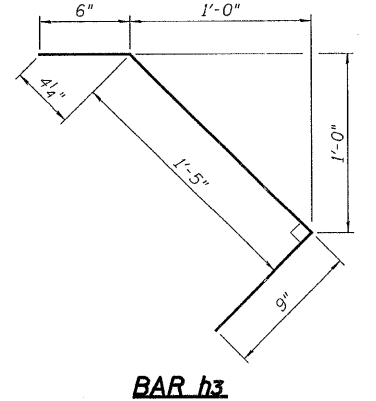
**PILE DATA-EAST WINGWALLS**  
Type & Size: Metal Shell - 12 Inch Dia. X 0.179 Inch Walls  
Nominal Required Bearing: 252 Kips  
Allowable Resistance Available: 84 Kips  
Est. Length: 39'



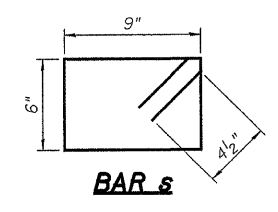
**CORNER DETAIL**



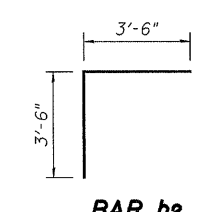
**PENETRATION DETAIL**



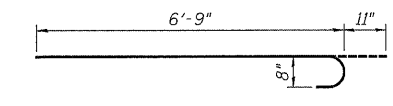
**BAR h3**



**BAR s**



**BAR h2**



**BAR d**