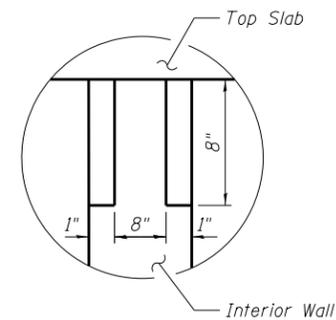


Coarse aggregate full length of both headwalls. To be placed by Grading Contractor. Cast included with Concrete Box Culverts.

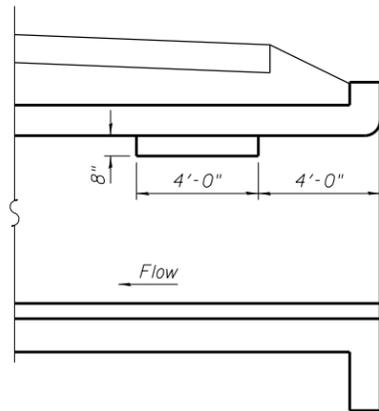
**DRAIN DETAIL**

**AT DOWNSTREAM END**

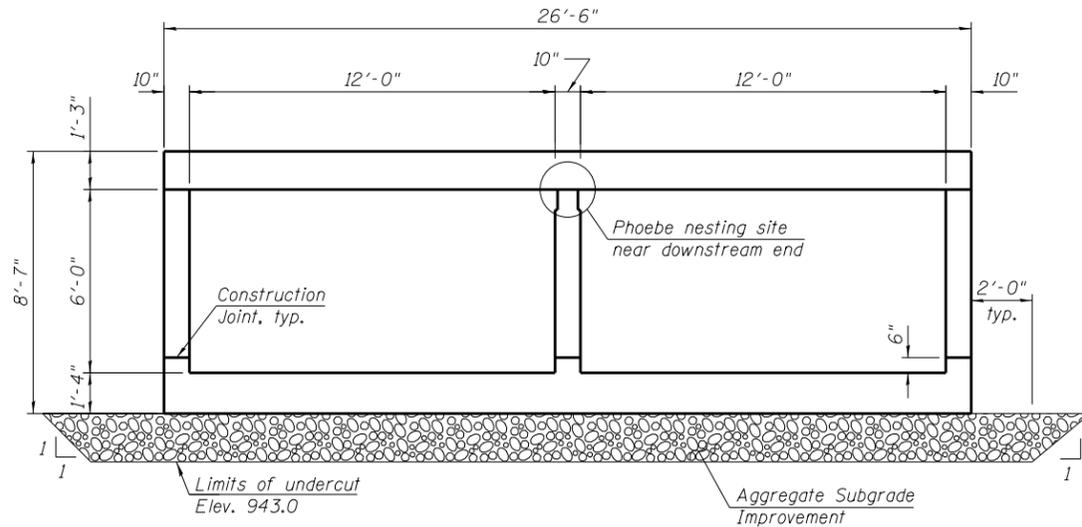


**NOTCH DETAIL**

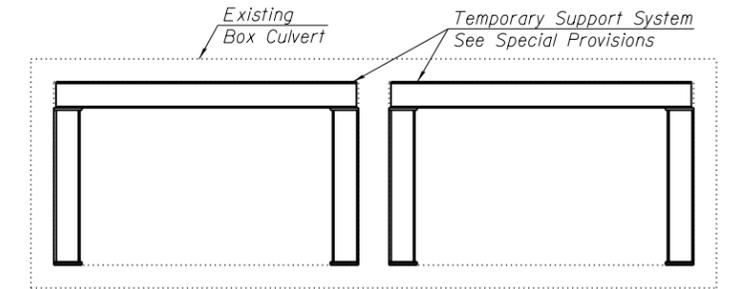
**PHOEBE NESTING SITE**  
(Near downstream end)



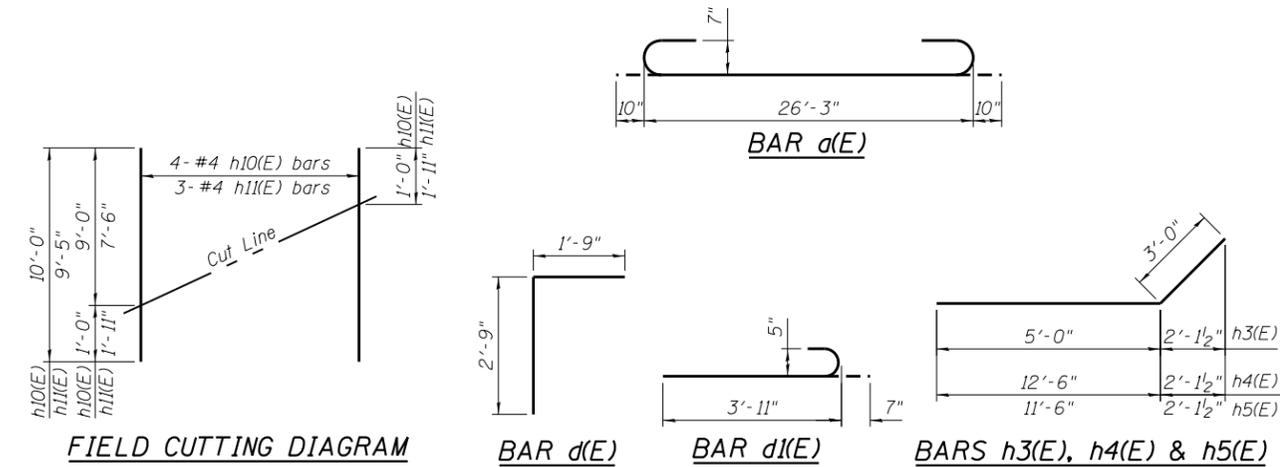
**LONGITUDINAL SECTION**



**SECTION THRU BARREL**

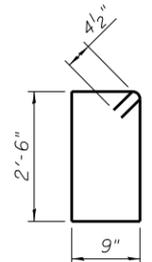


**SECTION THRU EXISTING CULVERT TEMPORARY SUPPORT SYSTEM**

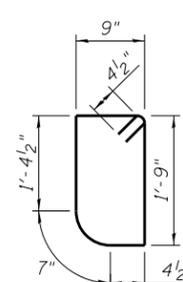


**FIELD CUTTING DIAGRAM**

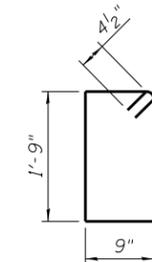
Order h10(E) & h11(E) full length. Cut as shown and use remainder of bars in the similar wingwall.



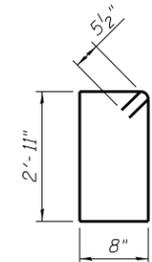
**BAR s(E)**



**BAR s1(E)**



**BAR s2(E)**



**BAR s3(E)**

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	252	#7	27'-11"	
a1(E)	252	#7	10'-0"	
a2(E)	256	#4	10'-9"	
d(E)	54	#4	4'-6"	
d1(E)	12	#5	4'-6"	
h(E)	165	#5	29'-9"	
h1(E)	165	#5	35'-9"	
h2(E)	16	#6	26'-3"	
h3(E)	70	#6	8'-0"	
h4(E)	32	#8	15'-6"	
h5(E)	30	#8	14'-6"	
h6(E)	26	#6	26'-0"	
h7(E)	4	#6	26'-0"	
h8(E)	16	#4	11'-9"	
h9(E)	16	#4	10'-9"	
h10(E)	4	#4	10'-0"	
h11(E)	3	#4	9'-5"	
h12(E)	6	#5	11'-8"	
s(E)	27	#4	7'-3"	
s1(E)	27	#4	5'-7"	
s2(E)	108	#4	5'-9"	
s3(E)	13	#5	8'-1"	
v(E)	208	#5	8'-4"	
v1(E)	52	#4	11'-6"	
v2(E)	48	#4	10'-9"	
Reinforcement Bars, Epoxy Coated		POUND		41,620
Concrete Box Culverts		CU YD		233.6
Steel Plate Beam Guardrail, Attached to Structures		FOOT		62.5
Temporary Support System		L SUM		1