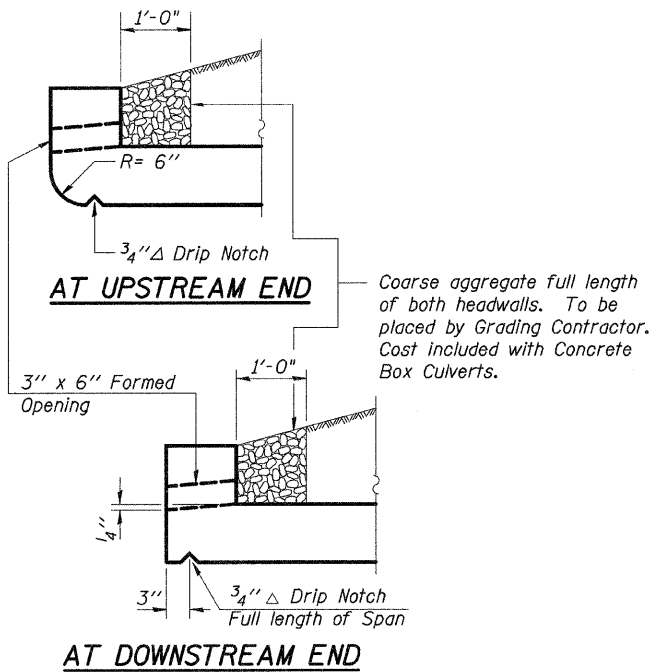
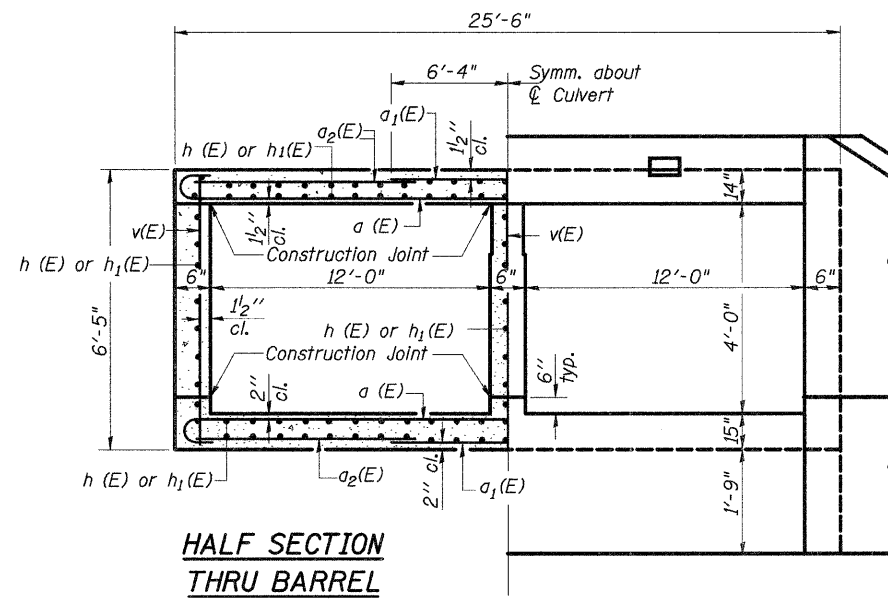


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

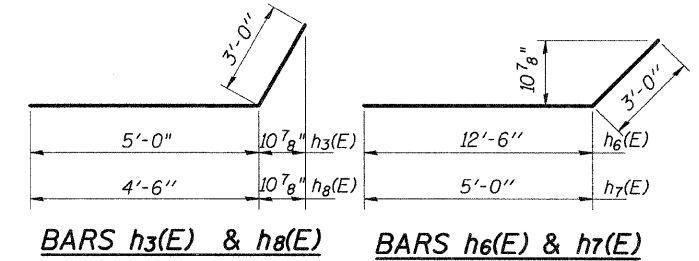
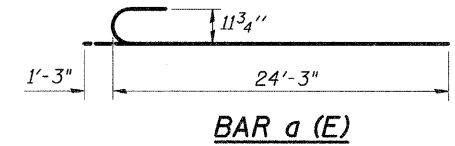
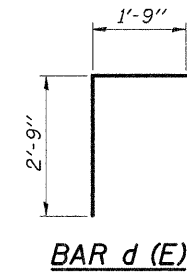
ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET	SHEET NO. 3 OF 4 SHEETS
331	(8-1A)	SALINE	220	117	
FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT	
CONTRACT NO. 78058					



DRAIN DETAIL



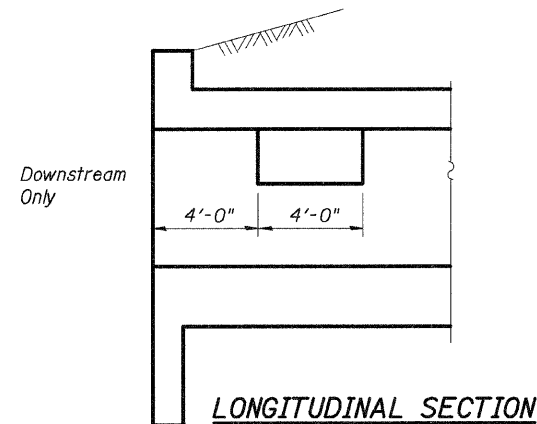
HALF END ELEVATION



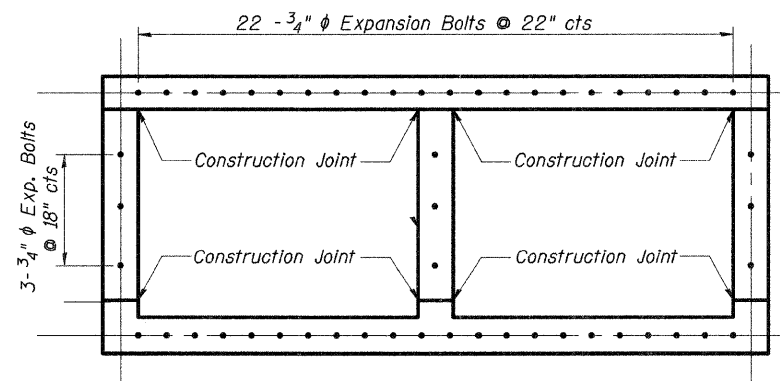
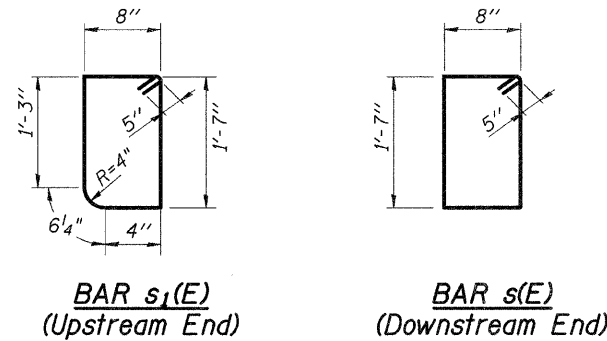
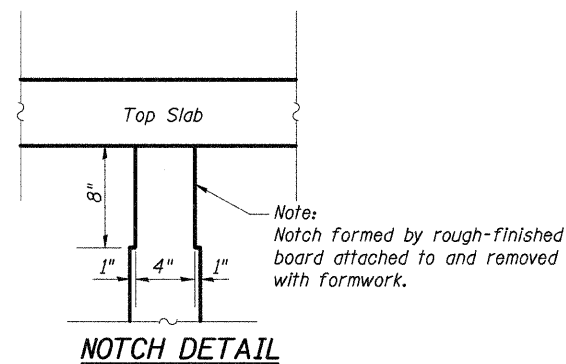
BILL OF MATERIAL

Bar	Lap
#4	1'-4"
#5	1'-8"
#6	2'-0"
#7	2'-9"
#9	4'-7"

Bar	No.	Size	Length	Shape
$a(E)$	308	#9	25'-6"	C
$a_1(E)$	186	#10	22'-2"	—
$a_2(E)$	372	#4	11'-7"	—
$d(E)$	86	#4	4'-6"	—
$h(E)$	262	#5	21'-9"	—
$h_1(E)$	262	#5	27'-3"	—
$h_3(E)$	16	#4	8'-0"	—
$h_4(E)$	36	#6	22'-9"	—
$h_5(E)$	48	#7	23'-2"	—
$h_6(E)$	16	#7	15'-6"	—
$h_7(E)$	18	#7	8'-0"	—
$h_8(E)$	14	#4	7'-6"	—
$v(E)$	385	#4	6'-0"	—
$v_1(E)$	20	#4	8'-6"	—
$s(E)$	215	#4	5'-4"	□
$s_1(E)$	43	#4	5'-3"	□
Concrete Box Culverts			Cu. Yd.	260
Reinforcement Bars Epoxy Coated			Pound	69,185

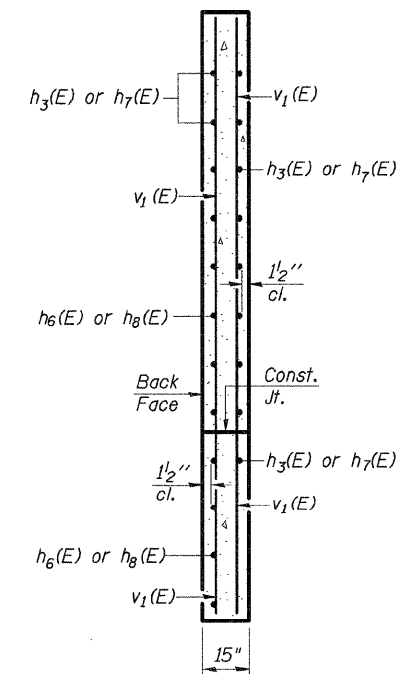


PHOEBE NESTING SITE DETAILS



EXPANSION BOLTS FOR CULVERT EXTENSION

Note: Expansion bolts shall be 3/4" dia. hooked bolts. Hooked bolts shall extend a minimum of 9" into new concrete.



SECTION A-A

HR
HURST - ROSCHE
ENGINEERS, INC.

DESIGNED	J.S.P.
CHECKED	M.E.B.
DRAWN	M.L.K.
CHECKED	J.S.P./M.E.B.

CULVERT DETAILS
E.A.P. RTE 331 SEC. (8-1A)
OVER HARRISBURG
DRAINAGE DITCH
SALINE COUNTY
STATION 958+28
STRUCTURE 083-2013