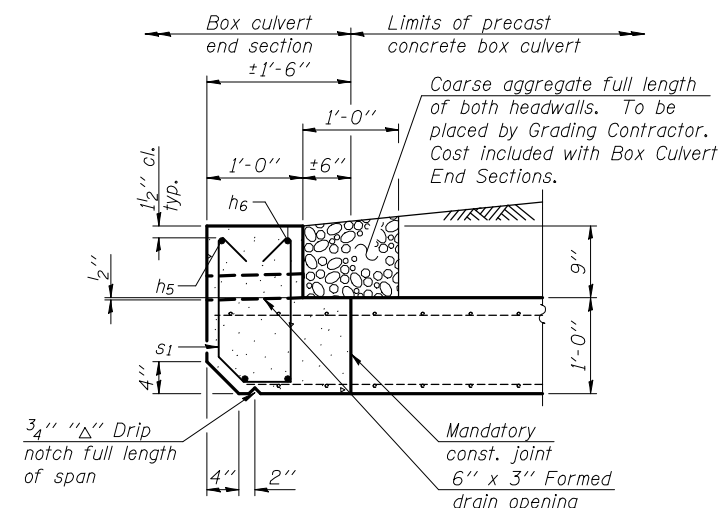
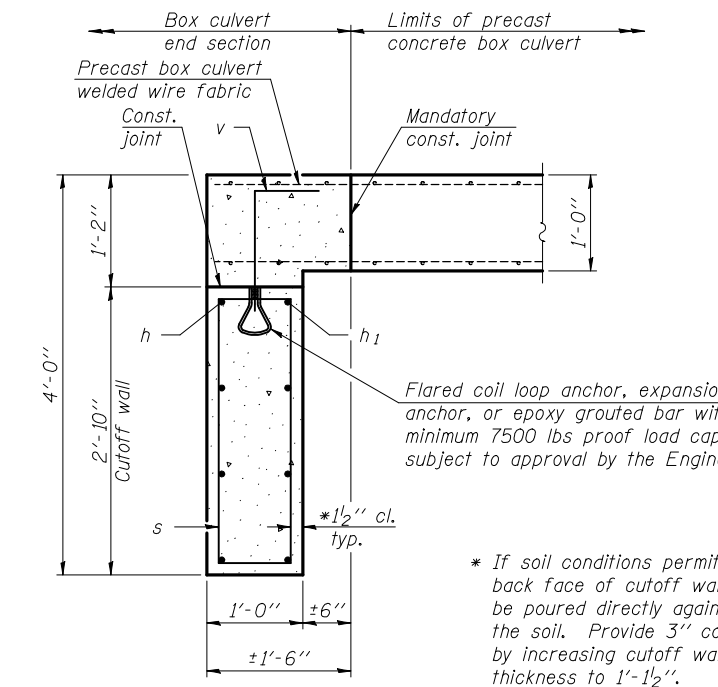


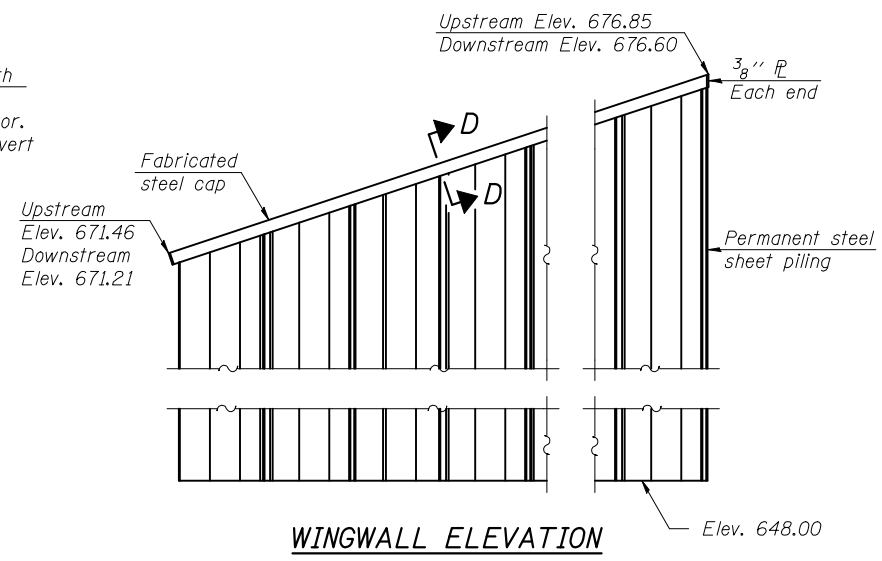
SECTION B-B
(Downstream end)



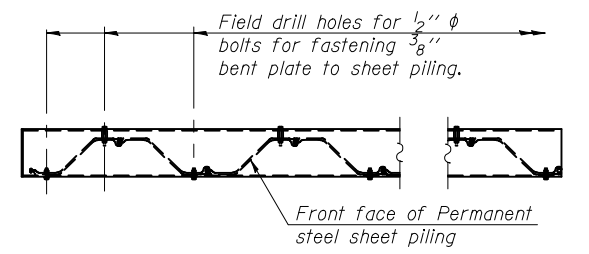
SECTION B-B
(Upstream end)



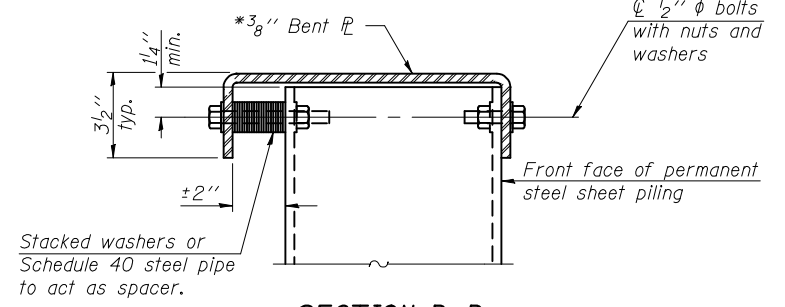
SECTION C-C



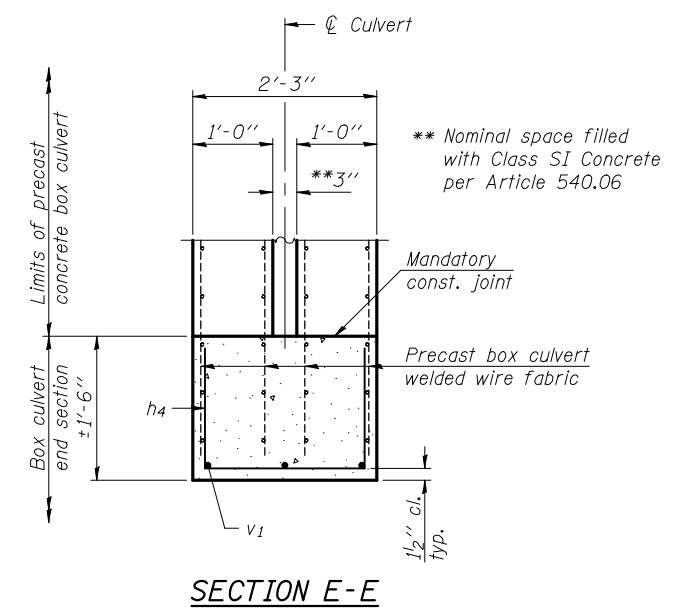
WINGWALL ELEVATION



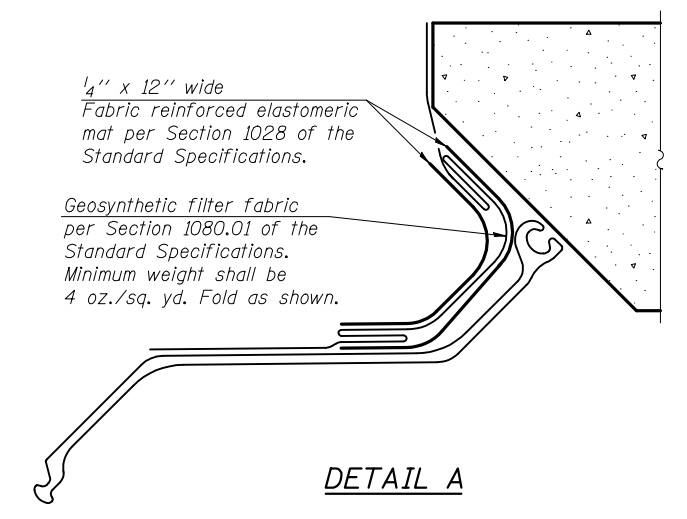
WINGWALL PLAN



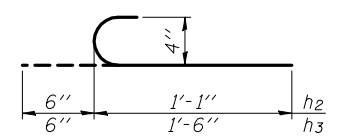
SECTION D-D
*AASHTO M270 Grade 50W



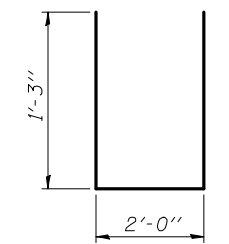
SECTION E-E



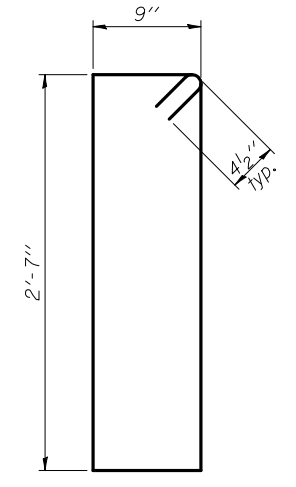
DETAIL A



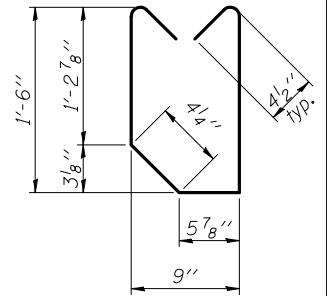
BARS h₂ and h₃



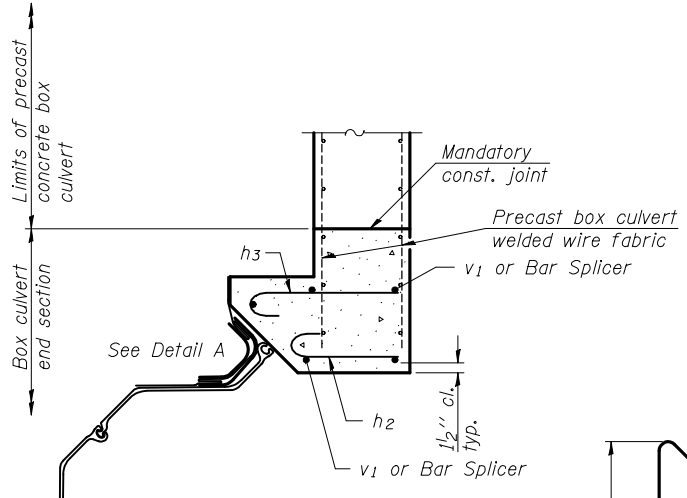
BAR h₄



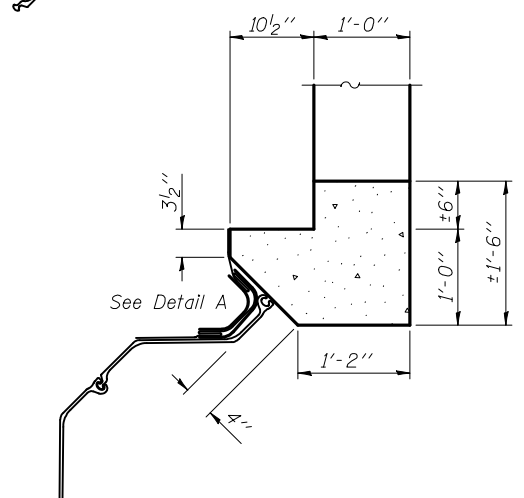
BAR s



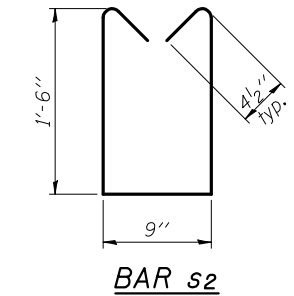
BAR s₁



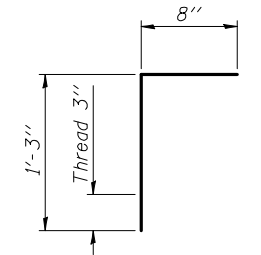
SECTION F-F
(Showing reinforcement)



SECTION F-F
(Showing dimensions)



BAR s₂



BAR v

ONE END SECTION BILL OF MATERIAL
(For information only)

Bar	No.	Size	Length	Shape
h	8	#5	22'-6"	—
h ₁	8	#5	23'-1"	—
h ₂	34	#4	1'-7"	U
h ₃	34	#4	2'-0"	U
h ₄	22	#4	4'-6"	—
h ₅	4	#6	22'-9"	—
h ₆	4	#6	23'-4"	—
s	42	#4	7'-5"	□
s ₁	42	#4	4'-4"	□
s ₂	42	#4	4'-6"	□
v	42	#5	1'-11"	—
v ₁	16	#5	11'-6"	—
Concrete Box Culverts			Cu. Yd.	15.0
Reinforcement Bars			Pound	1,410
Bar Splicers			Each	10
Permanent Steel Sheet Piling			Sq. Ft.	798

The cost of the fabricated steel cap, bolts, washers, geosynthetic filter fabric, and elastomeric mat shall be included in the cost of Box Culvert End Sections, Culvert No. 1.

** s₁ bar is to be placed on upstream end only. s₂ bar is to be placed on downstream end only.

DESIGNED - DAVID L. GREIFZU
CHECKED - MICHAEL D. ROLAPE
DRAWN - MICHAEL B. MOSSMAN
CHECKED - D.L.G. / M.D.R.

EXAMINED
PASSED

Thomas Damagaki
ENGINEER OF BRIDGE DESIGN

Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

DATE - DECEMBER 8, 2010

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BOX CULVERT END SECTION DETAILS
STRUCTURE NO. 074-2007

SHEET NO. 3 OF 5 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1531	10B-1 & 11B-1	PIATT	88	20
CONTRACT NO. 70458			ILLINOIS FED. AID PROJECT	