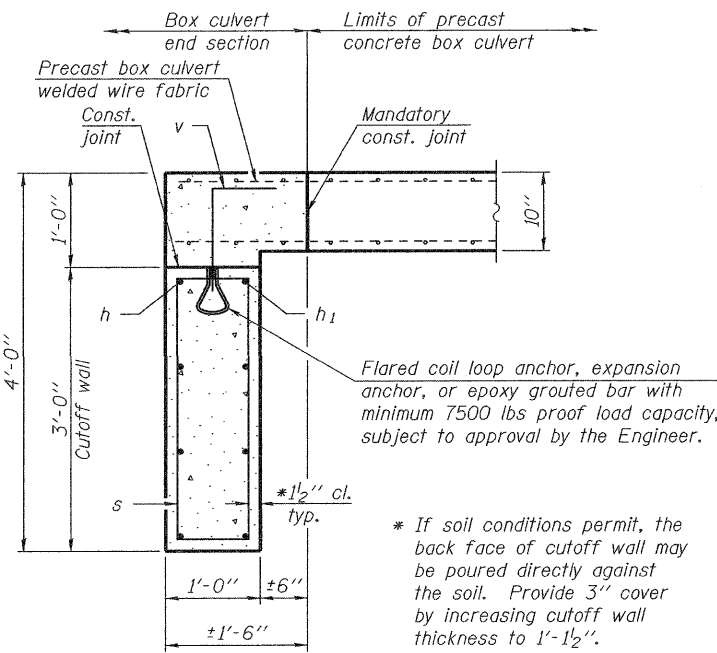
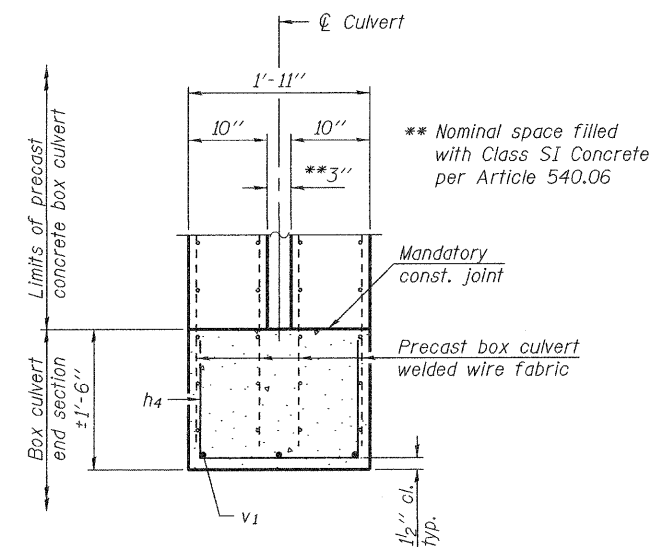


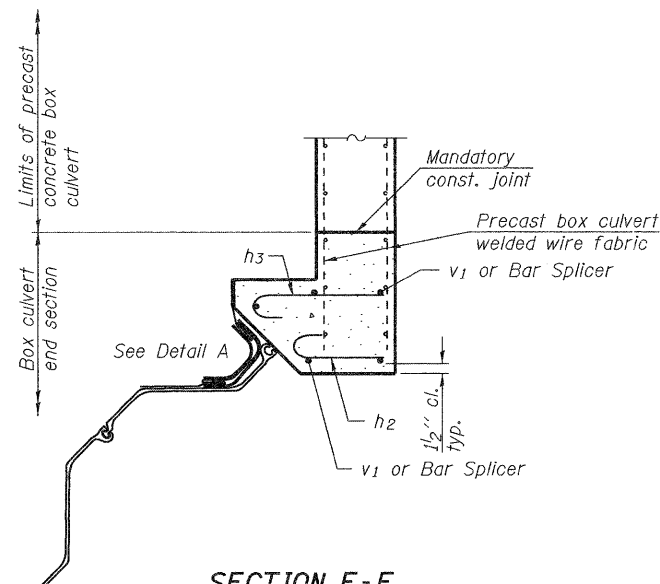
SECTION B-B



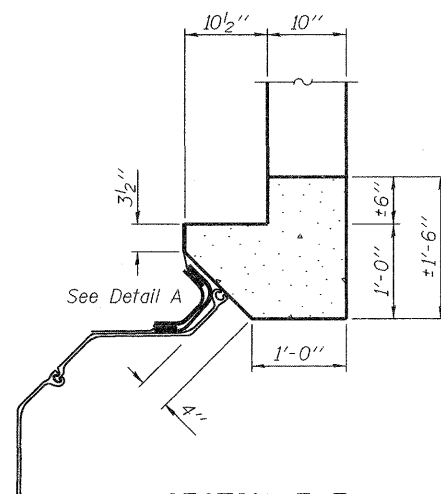
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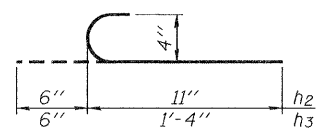
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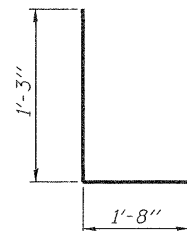
SECTION E-E
(Showing reinforcement)



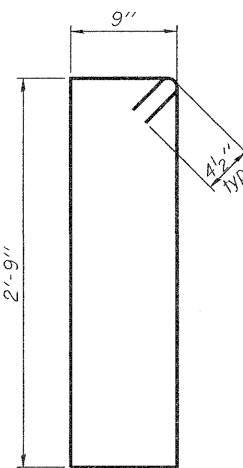
SECTION E-E
(Showing dimensions)



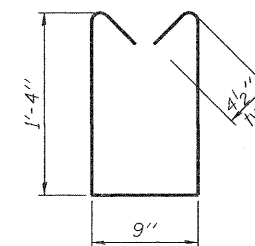
BARS h₂ and h₃



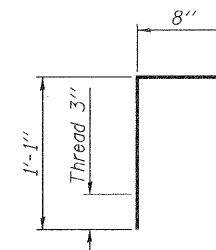
BAR h₄



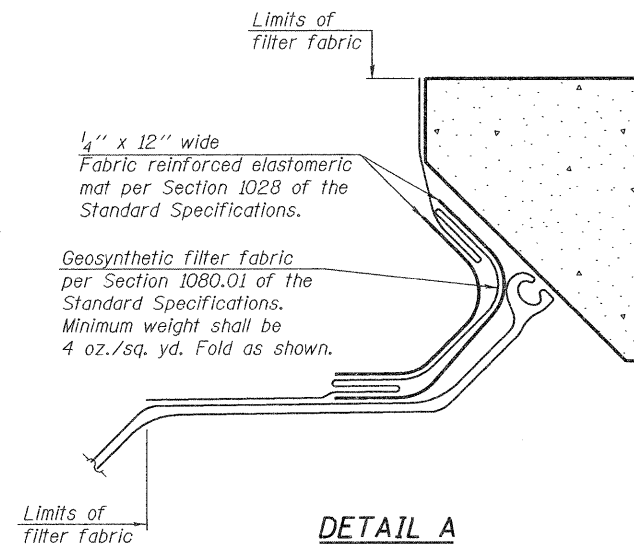
BAR s



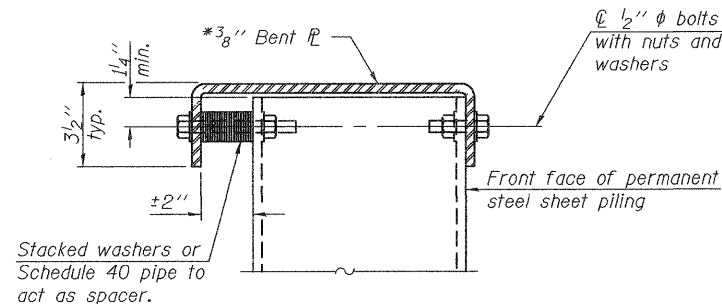
BAR s₁



BAR v

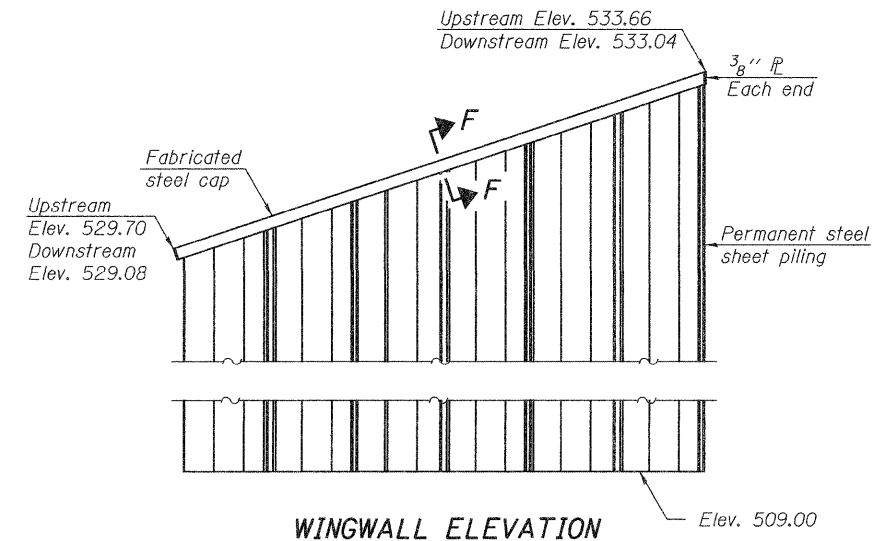


DETAIL A

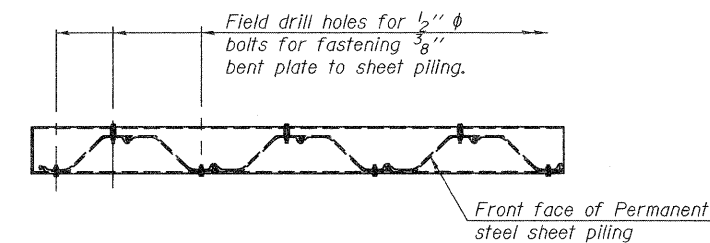


SECTION F-F

*AASHTO M270 Grade 50W



WINGWALL ELEVATION



WINGWALL PLAN

ONE END SECTION BILL OF MATERIAL

(For information only)

Bar	No.	Size	Length	Shape
h	4	#5	23'-7"	—
h ₁	4	#5	25'-0"	—
h ₂	24	#4	1'-5"	⌋
h ₃	24	#4	1'-10"	⌋
h ₄	7	#4	4'-2"	⌋
h ₅	2	#6	23'-7"	—
h ₆	2	#6	25'-0"	—
s	21	#4	7'-9"	⌋
s ₁	21	#4	4'-2"	⌋
v	21	#5	1'-9"	⌋
v ₁	13	#5	8'-4"	—
Concrete Box Culverts			Cu. Yd.	7.6
Reinforcement Bars			Pound	740
Bar Splicers			Each	10
Permanent Steel Sheet Piling			Sq. Ft.	501.0

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.

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

EXAMINED
PASSED
DATE - MARCH 9, 2011
ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BOX CULVERT END SECTION DETAILS
STRUCTURE NO. 013-2012

SHEET NO. 3 OF 5 SHEETS

F.A.S. RTE. 2704
SECTION 12B-1(1)
COUNTY CLAY
TOTAL SHEETS 39
SHEET NO. 28
CONTRACT NO. 74116
ILLINOIS FED. AID PROJECT