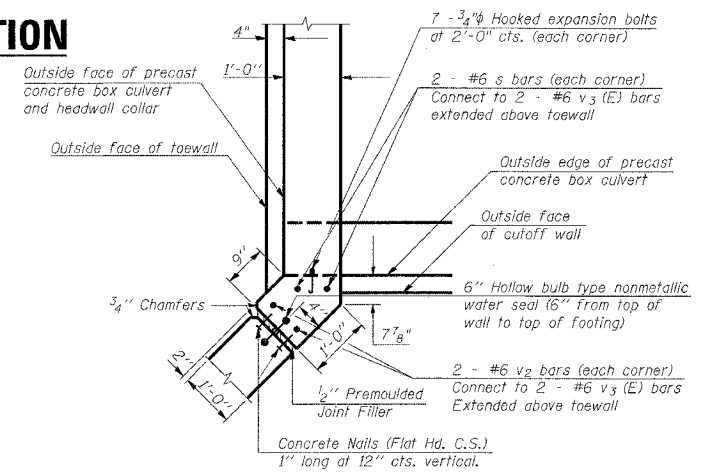
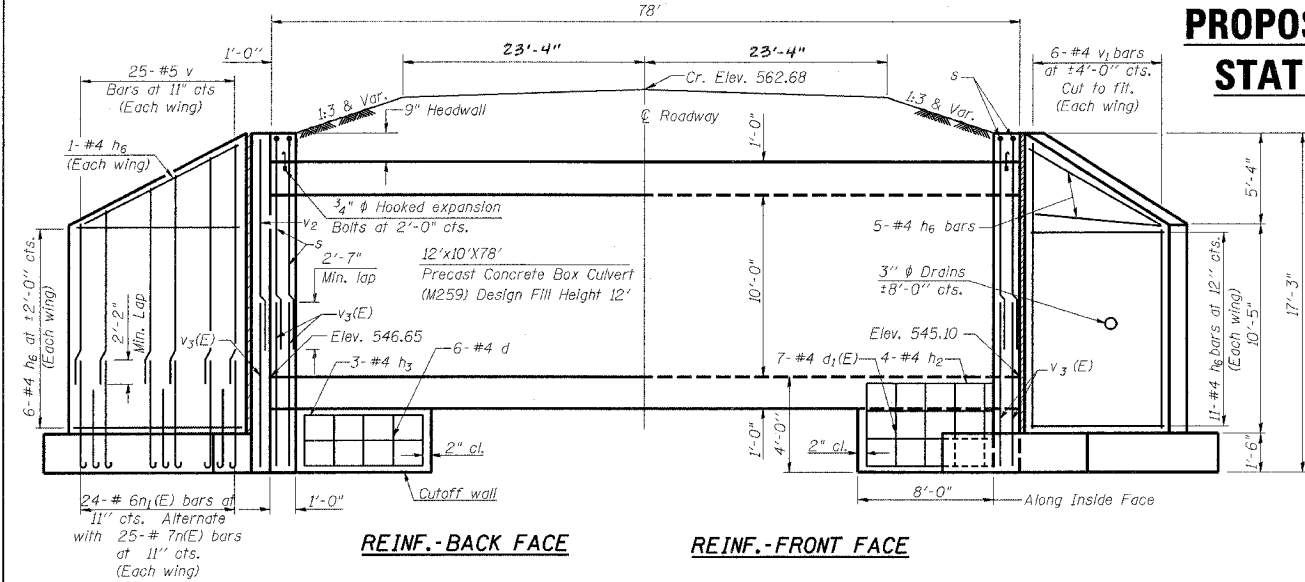


F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2796	(L,K)B	EFFINGHAM	35	11
STA. TO STA.				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

DETAIL OF CAST IN PLACE BOX CULVERT END SECTION

PROPOSED S.N. 025-7215
STATION 1222 + 43.32



CAST-IN-PLACE CORNER DETAIL FOR HEADWALL COLLAR

NOTES

- Concrete and Rebar quantities and lengths calculated for the cast-in-place End Sections will vary based on the precast box culverts supplied.
- End Sections will be paid for at the contract unit price each for BOX CULVERT END SECTION, as outlined in Art. 540.08, which prices shall include all concrete, rebar, and all other items necessary to complete the proposed work.
- Drain holes shall be provided in accordance with Art. 503.12.
- voids between the Precast Concrete Box Culvert and the Cast-in-place toewall / cutoff wall shall be filled with Non-shrink grout.
- Drawings not to scale.
- All bars shall conform to the requirements of Art. 1006.10 of Standard Specs.
- Class SI Concrete shall be used throughout.
- The Precast Concrete Box Culvert Sections shall conform to the requirements of AASHTO M259.
- Reinforcement bars designated (E) shall be epoxy coated.
- All construction joints shall be bonded.
- Expansion bolts shall be 3/4" # hooked bolts. Hooked bolts shall extend 6" into concrete collar. The cost of the bolts shall be included in the cost of Box Culvert End Section.
- All dimensions are in FEET (')-INCHES (") unless otherwise noted.

NAME PLATE

STATION 1222+43.32
BUILT - - - BY
STATE OF ILLINOIS
F.A.S. RTE. 2796 SEC. (L,K)B
LOADING HS 20-44
STR. NO. 025-7215

* See Highway Standard 515001-02 for dimensions and placement.

* Name Plate will be paid for at the contract unit price per "EACH" for "NAME PLATES".

DESIGN STRESSES

$f_y = 60,000 \text{ psi}$
 $f'_c = 3,500 \text{ psi}$

Max. Soil Pressure under footing = 3,575 psf

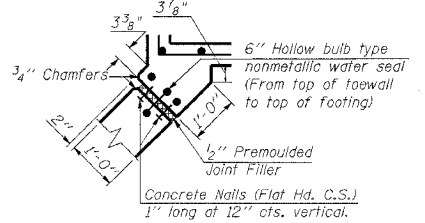
LOADING HS 20-44

BILL OF MATERIAL (ONE END SECTION)

Bar	No.	Size	Length	Shape
d	21	#4	2'-8"	
d ₁ (E)	23	#4	3'-8"	
h	3	#4	13'-0"	
h ₁	4	#4	14'-5"	
h ₂	8	#4	8'-10"	
h ₃	6	#4	8'-0"	
h ₄	16	#4	1'-2"	
h ₅	16	#4	9"	
h ₆	48	#4	21'-6"	
n(E)	50	#7	7'-6"	
n ₁ (E)	46	#6	4'-7"	
s	4	#6	19'-11"	
t	100	#5	8'-0"	
v	25	#5	19'-2"	
v ₁	12	#4	15'-6"	
v ₂	4	#6	12'-8"	
v ₃ (E)	8	#6	6'-10"	
w	28	#5	21'-6"	

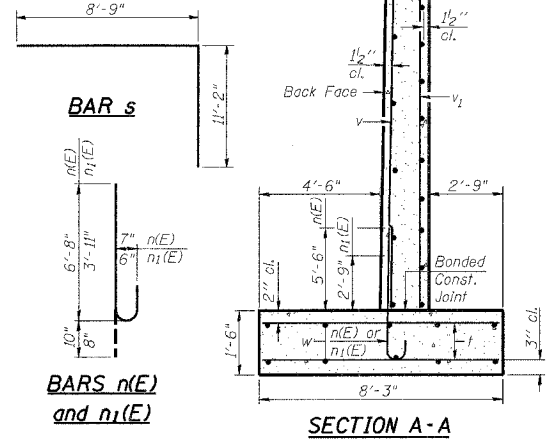
Concrete/End Section	Cu. Yd.	48.3
Reinforcement Bars, Epoxy Coated	Pound	931
Reinforcement Bars	Pound	3144
Expansion Bolt 3/4" #	Each	22

Pay Item	Unit	Qty.
Box Culvert End Sections	Each	2.0

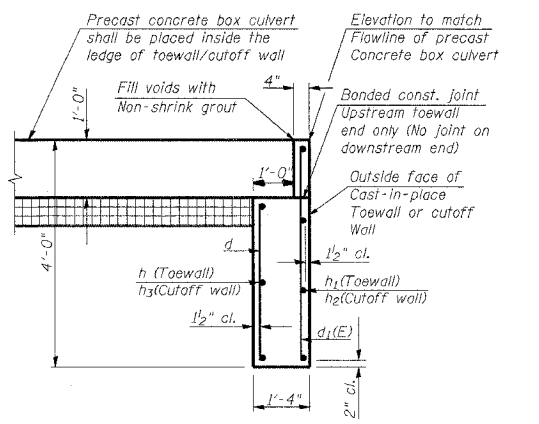
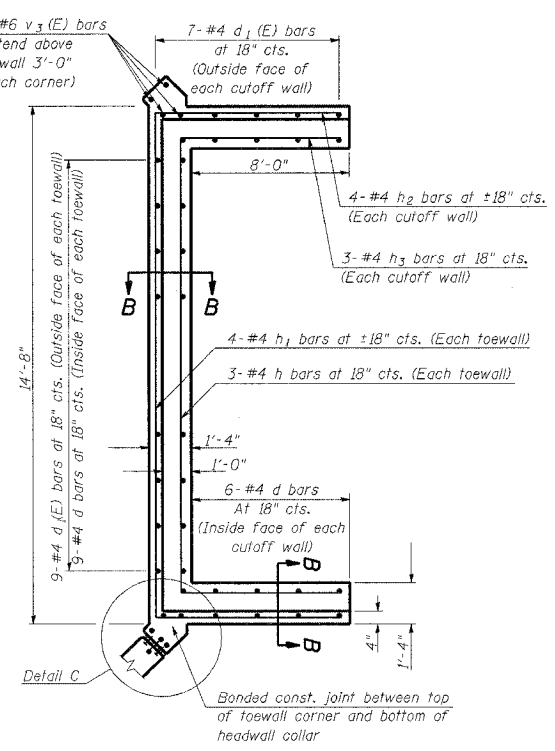
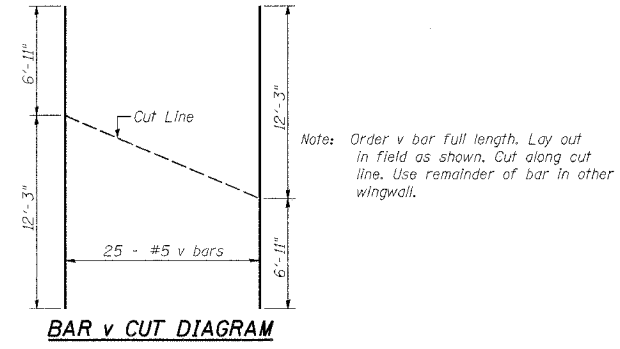


CORNER DETAIL C

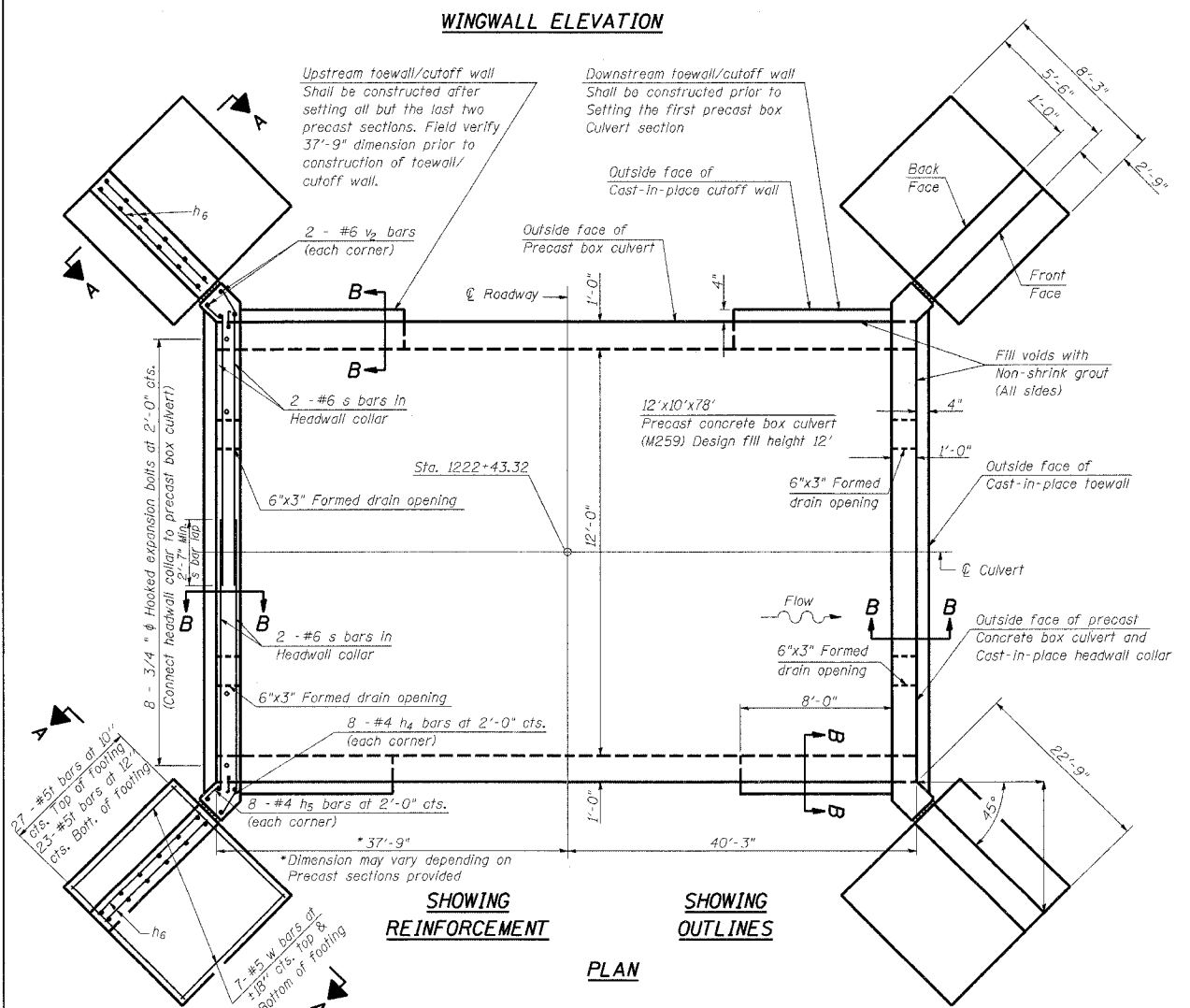
ILLINOIS DEPARTMENT OF TRANSPORTATION
BOX CULVERT END SECTION DETAIL
PROPOSED S.N. 025-7215
F.A.S. 2796
SECTION (L,K)B
EFFINGHAM COUNTY
SCALE: NOT TO SCALE
DATE: 07/17/06
DRAWN BY:
CHECKED BY:



BARS n(E) and n₁(E)



SECTION B-B TOEWALL/CUTOFF WALL DETAIL ONLY (SIDE WALL OF PRECAST BOX CULVERT NOT SHOWN)



PLOT DATE = 10/27/2006
FILE NAME = c:\projects\94942\vd0102ba.dgn
PLOT SCALE = 20.0000 1/16"
USER NAME = srichter\jw