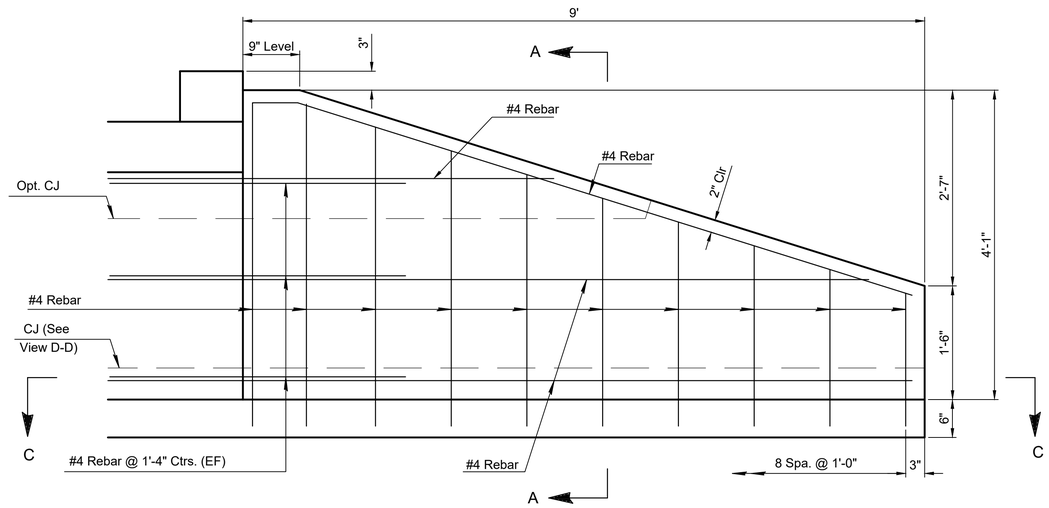
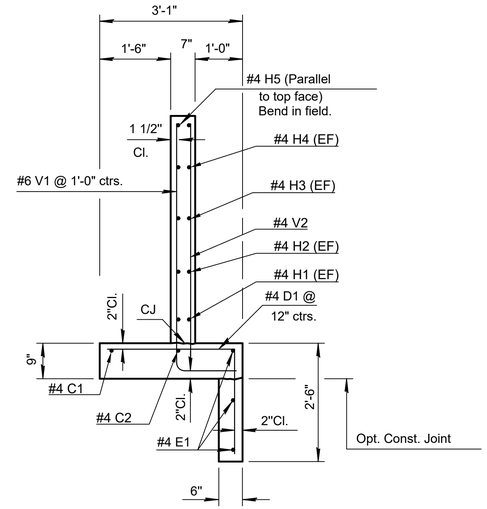


ELEVATION OF GREENBRIAR WINGWALL

(Backface Shown)



SECTION A-A

GENERAL NOTES

UNIT STRESSES: Grade 4.0 Concrete; f'c = 4,000 p.s.i.
Reinforcing Steel; fy = 60,000 p.s.i.

CONCRETE: Grade 4.0 Concrete shall be used throughout. Bevel all exposed edges with a 3/4" triangular moulding.

REINFORCING: All reinforcing shall conform to ASTM A615, Grade 60. Welded Wire Fabric shall conform to ASTM A185. All dimensions relative to reinforcing steel shall be to center-line of bar unless otherwise noted. Wire Reinforcing mesh shall be electrically welded and shall be composed of 6 x 6-W1.4 x W1.4 welded wire fabric and shall be classified as pounds of reinforcing. No epoxy coating is required on this project.

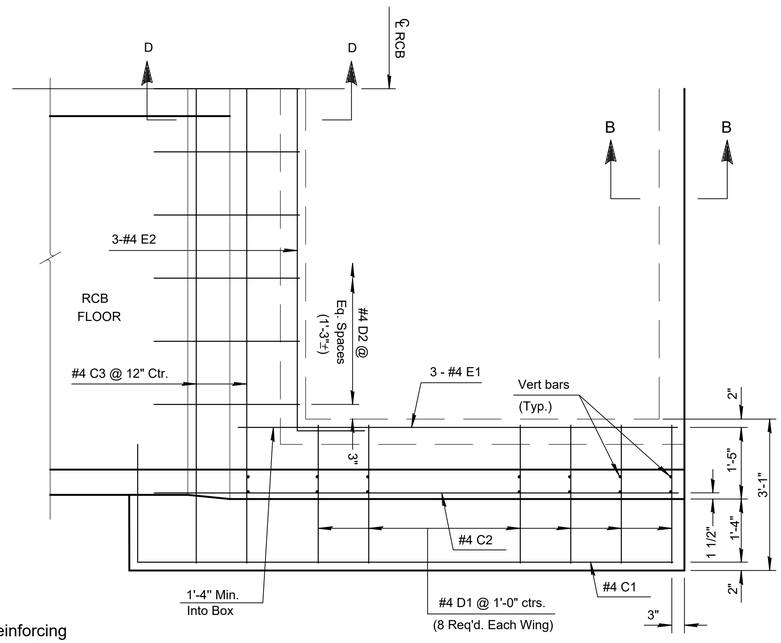
QUANTITIES: Wingwall Quantities include all quantities outside the neat lines of the box, excluding the hubguard.

APRON: A 5" concrete slab shall be constructed between wings in locations subject to scour as specified on the plans. The toe wall is required on both the apron and the footings. The scour apron may be poured monolithically with the base.

BACKFILL MATERIAL: Soils judged as high plasticity clays, fat clays, expansive clays, or organic clays are unsuitable for backfill material for wingwalls and will not be used. Where these conditions exist, use Granular Backfill (Wingwalls).

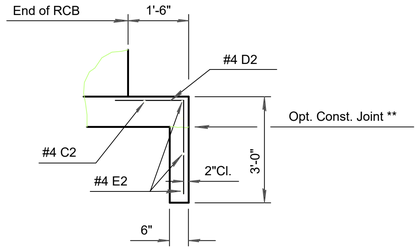
FOUNDATION STABILIZATION: Use Foundation Stabilization on all wingwalls unless founded on rock or granular material.

NOTE:
EF = Each Face
NS = Near Side
FS = Far Side
CJ = Const. Joint



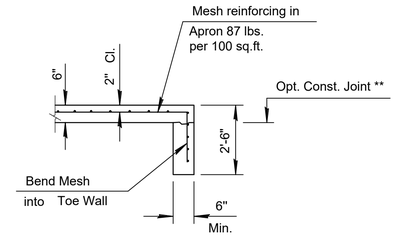
SECTION C-C

Note: Space weepholes to clear reinforcing steel. Refer to KDOT Standard Detail "RCB Aux. Details" sheet for additional weephole details.



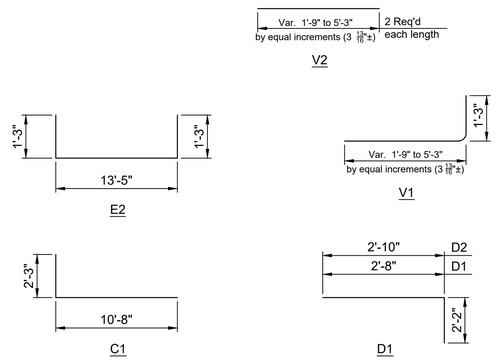
SECTION D-D

** NOTE: Const. Jt. may be used at Contractor's option when approved by the Engineer. D1 bars or mesh may be spliced thus: Minimum overlap shall be 1'-3". No increase in quantities or cost shall be allowed when Contractor elects this option.



SECTION THROUGH
SCOUR APRON TOEWALL

SECTION B-B



BENDING DIAGRAM

(all dimensions are out to out of bars)

NOTE: Reinforcing Bar List is for both wings at one end of box only.

✳ See Bending Diagram

	Mark	#4C1	#4C2	#4C3	#4D1	#4D2	#4E1	#4E2	#4V1	#5V2	#4H1	#4H2	#4H3	#4H4	#4H5
0° Skew	Number	2 ✳	2	2	16	11 ✳	6	3 ✳	24	24	4	4	4	4	4
	Length	12'-11"	10'-4"	18'-9"	4'-10"	5'-0"	7'-6"	15'-11"	✳	✳	11'-9"	11'-2"	7'-0"	2'-9"	11'-9"

FOR INFORMATION ONLY

WINGWALL QUANTITIES (One End Only)		
	Foundation Stabilization (C.Y.)	Concrete (Gr. 4.0) (C.Y.)
Wingwalls	2.00	5.28
Apron	1.63	3.33
Reinforcing Steel (Gr. 60)		492 Lbs.
Welded Wire Fabric (Apron)		77 Lbs.
Granular Backfill (Wingwalls)		15.15 C.Y.

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1995 Midfield Road
Wichita, Kansas 67209

KENNETH W. LEE LICENSED 15373 3-29-24 KANSAS PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION	BY

CITY OF WICHITA
KANSAS

GREENBRIAR BOX
REPLACEMENT

Wingwall
Details

JOB NO.: 19T41013
DATE: JUNE 2019
DESIGNED BY: KWL
DRAWN BY: KWL

BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

DRAWING NUMBER
■

SHEET NUMBER 5 OF 10

File: L:\2023\T41-2302463 - Greenbriar Box\Drawings\DESIGN\3886D Greenbriar Engineering Base.dwg Last Save: 3/29/2024 9:26 AM Last saved by: KWLee
Last plotted by: Lee, Ken W. Plot Style: ---- Plot Scale: 1:2.5849 Plot Date: 3/29/2024 11:33 AM Plotter used: None