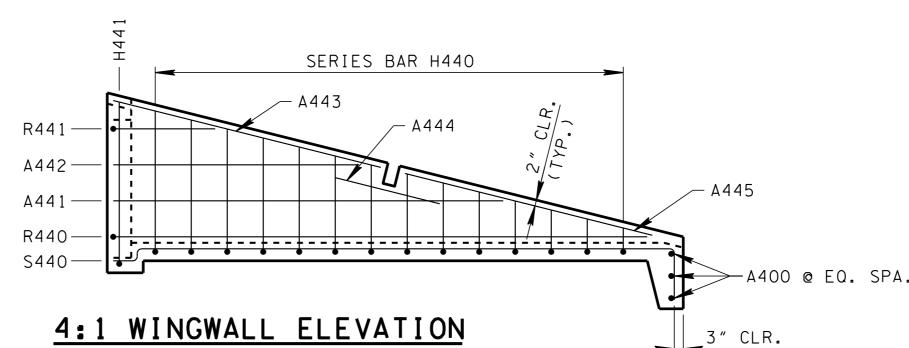


3:1 WINGWALL ELEVATION NOTE: A-BARS IN HEADWALL NOT SHOWN FOR CLARITY.



## GENERAL NOTES

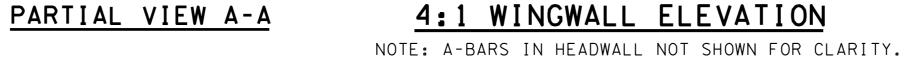
- A DRAWING TO BE USED FOR ALL CAST-IN-PLACE AND ALL PRECAST 36" CONCRETE ENDWALLS (TYPE "U") FOR CROSS DRAINS ONLY. "U" ENDWALL TO BE PLACED AT 90° SKEW TO CENTERLINE. SEE STD. DWG. D-PE-99 FOR SKEWED CONNECTION DETAIL WHEN CROSS DRAIN IS NOT PERPENDICULAR TO CENTERLINE. CAST-IN-PLACE CONCRETE ENDWALL SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD SPECIFICATIONS, SECTION 611 AND/OR SPECIAL PROVISIONS.
- (B) SEE STD. DWG. D-PE-36B FOR BILL OF STEEL & PRECAST NOTES.
- C "-" IN BAR DESIGNATION REPRESENTS 3, 4 OR 6 FOR 3:1, 4:1 OR 6:1 SLOPES, RESPECTIVELY.
- D SPLICING OF REINFORCEMENT IS ACCEPTABLE PROVIDED THAT A MINIMUM 21" SPLICE LENGTH IS USED.
- E TOEWALL BACK SLOPE MAY BE CONSTRUCTED VARIABLE FROM VERTICAL UP TO 15°.
- (F) PAYMENT WILL BE MADE UNDER:

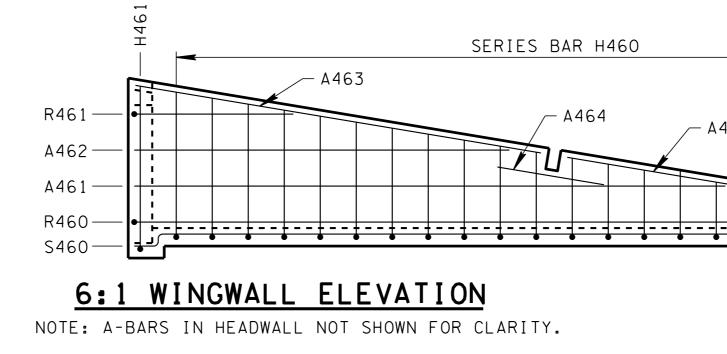
→ A400 @ EQ. SPA.

3" CLR.

36IN ENDWALL (CROSS DRAIN) EACH 611-07.64 36IN ENDWALL (CROSS DRAIN) EACH 611-07.65 36IN ENDWALL (CROSS DRAIN) EACH

- G THE CONTRACTOR MAY ELECT TO SUBSTITUTE AN APPROVED ALTERNATIVE DESIGN.
- (H) DIMENSIONAL AND REINFORCING TOLERANCES WILL BE AS SHOWN IN STANDARD OPERATING PROCEDURE (SOP) 5-3.





			DI	MENSIONS A	AND QUAI	NTITIES FOR (	ONE ENDWA	LL 36" PIPE		
SLOPE	CONCRETE ENDWALL DIMENSIONS					STRUCTURAL STEEL PIPE		ESTIMATED QUANTITIES		
						DIMENSIONS		CLASS "A"	STEEL BAR	STRUCTURA
	Н	$L_1$	$L_2$	L₃	W	LG	WG	CONC. CU. YD.	REINF. LB.	STEEL LB.
3:1		12' - 2"	12' - 9 %"	6' - 4 ¾''		12' - 8 ¾''		2.43	219	132
4:1	5' - 0"	16' - 0"	16' - 5 %"	8' - 21/2"	4' - 8"	16' - 5"	4' - 8''	3.08	276	160
6:1		23' - 8"	23' - 11 %"	12' - 0 1/4"		23' - 11 %"		4.39	388	217

◯ MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

> STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

36" CONCRETE ENDWALL CROSS DRAIN WITH STEEL PIPE GRATE

(FOR 3:1, 4:1 & 6:1 SLOPES)

D-PE-36A

NOTE: SEE STD. DWG. D-PE-99 FOR STRUCTURAL STEEL PIPE DIMENSIONS LG & WG.

3-01-12

NOT TO SCALE

(3:1 SHOWN, 4:1 & 6:1 SIMILAR) SEE GENERAL NOTE ©

- TOEWALL

- TOEWALL

-R4-1

— A 4 - 2

— A4-1

----|

A703-

A701-

(CENTER

IN HW)

8" WIDE HEADWALL-

WINGWALL

ISOMETRIC VIEW

NOTES: SEE STD. DWG. D-PE-99 FOR STEEL PIPE GRATE DETAILS

3/4" CHAMFER REQUIRED ON ALL EXPOSED EDGES

BOTTOM SLAB-

4", 1'-8"

(6) S4-0 BARS @ EQ. SPA.

**ELEVATION** 

ISOMETRIC HALF-SECTION

SHOWING REINFORCEMENT

— A4-3

HEADWALL -

SERIES BAR H4-0

A701-

BOTTOM SLAE

\* DIM. L, MEASURED TO CENTER OF PIPE

BLOCKOUT

2" CLR.

— R4-1

— A4-2

—— A4-1

— R4-0

HEADWALL DETAILS

NOTES: INSTALL BARS A701 AT 45° SEE GENERAL NOTE ©

A4-4 (PLACED ON THE INSIDE OF STEEL MESH)

WINGWALL