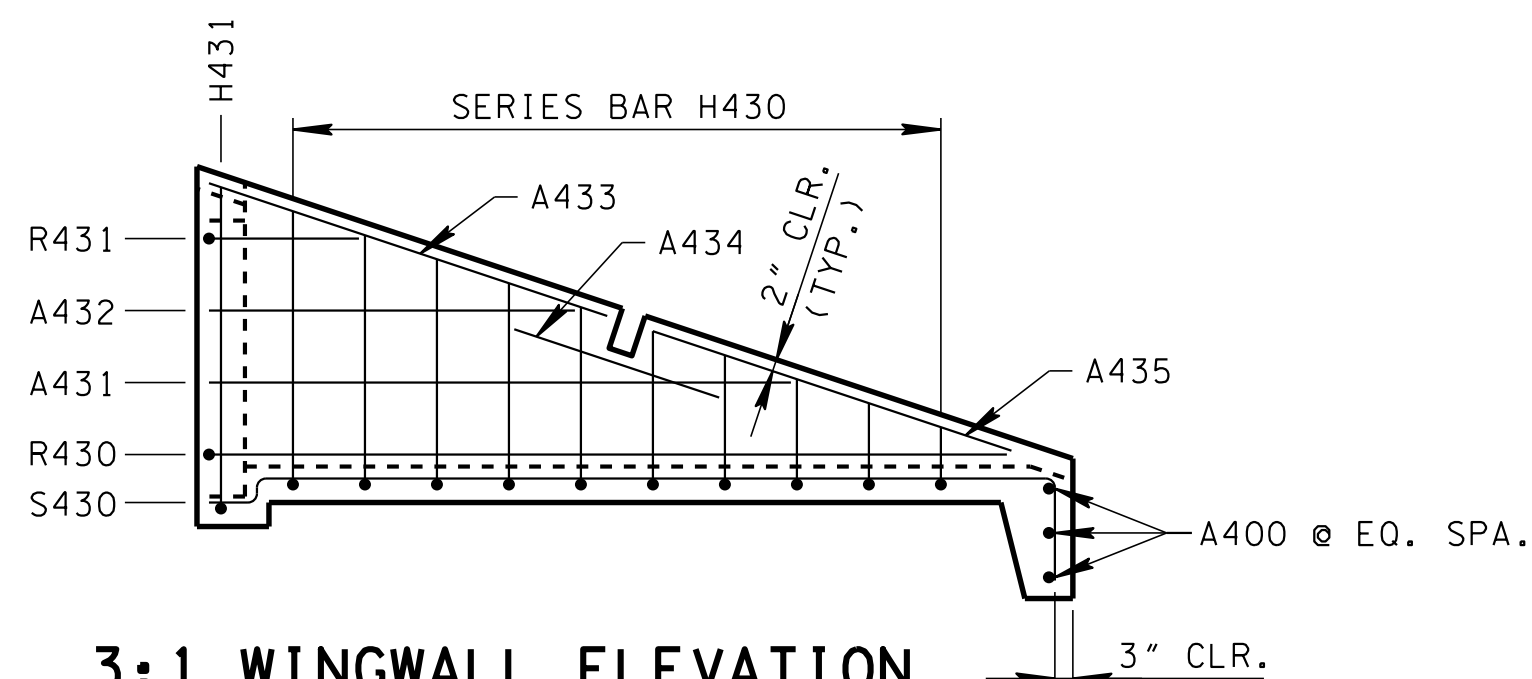
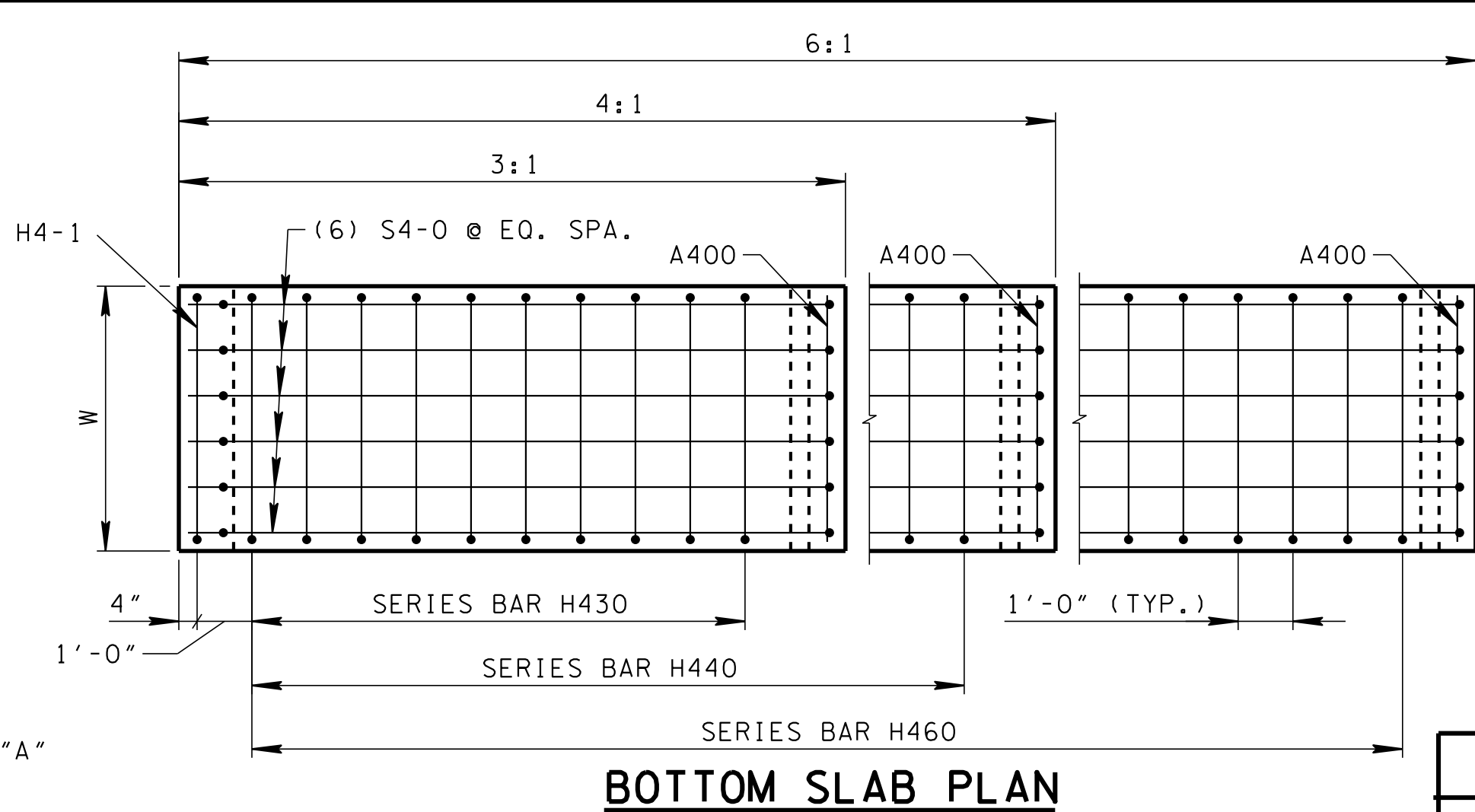
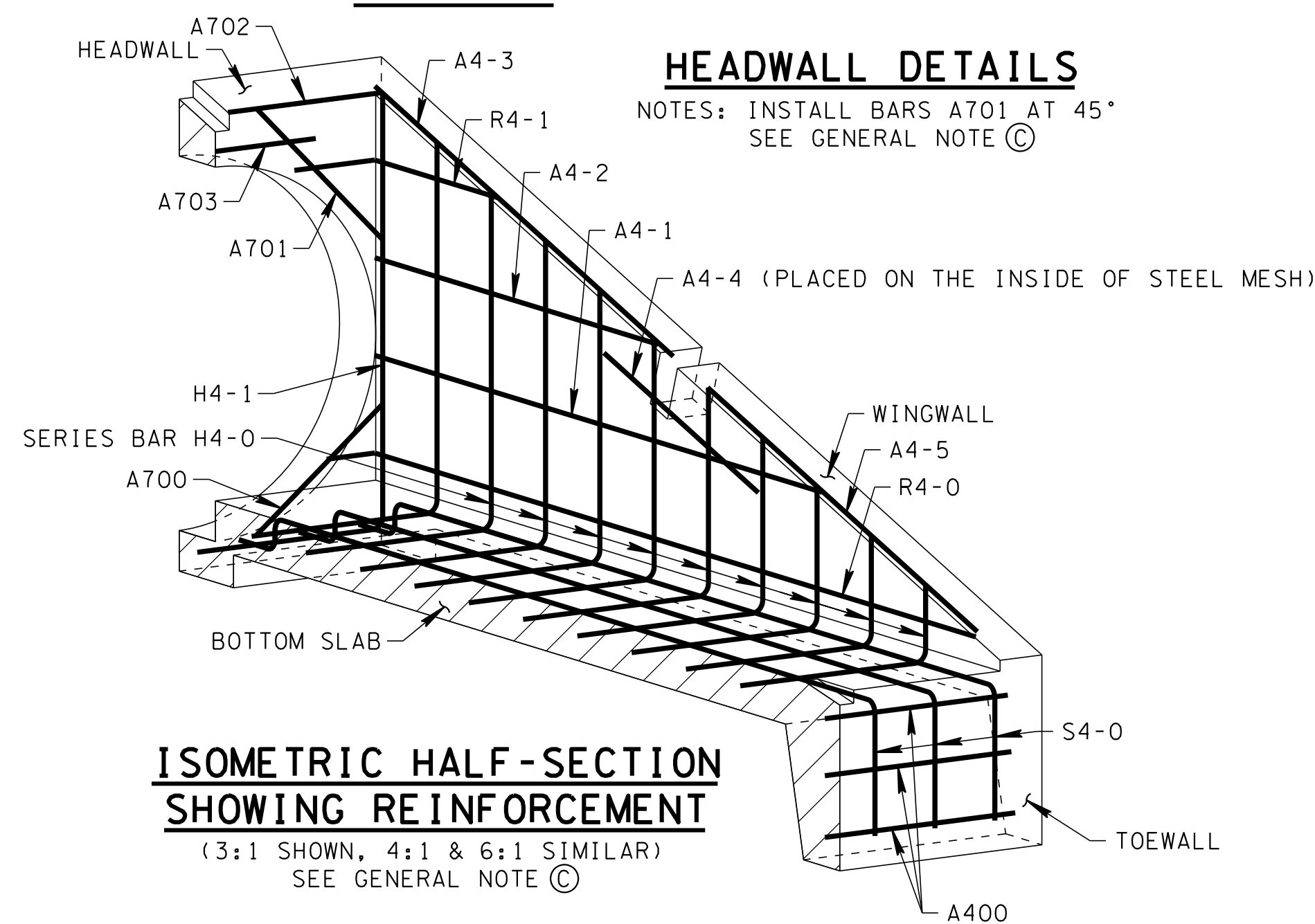
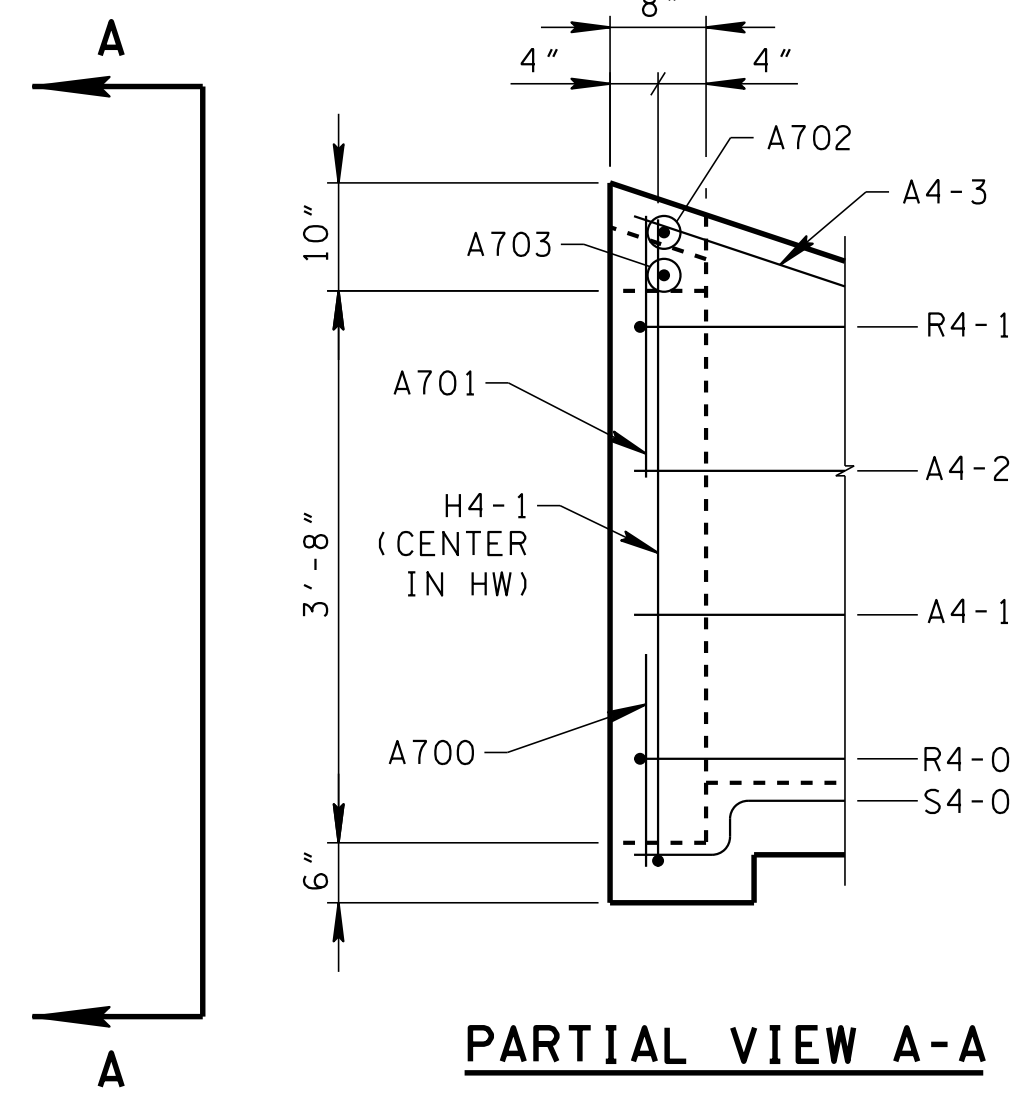
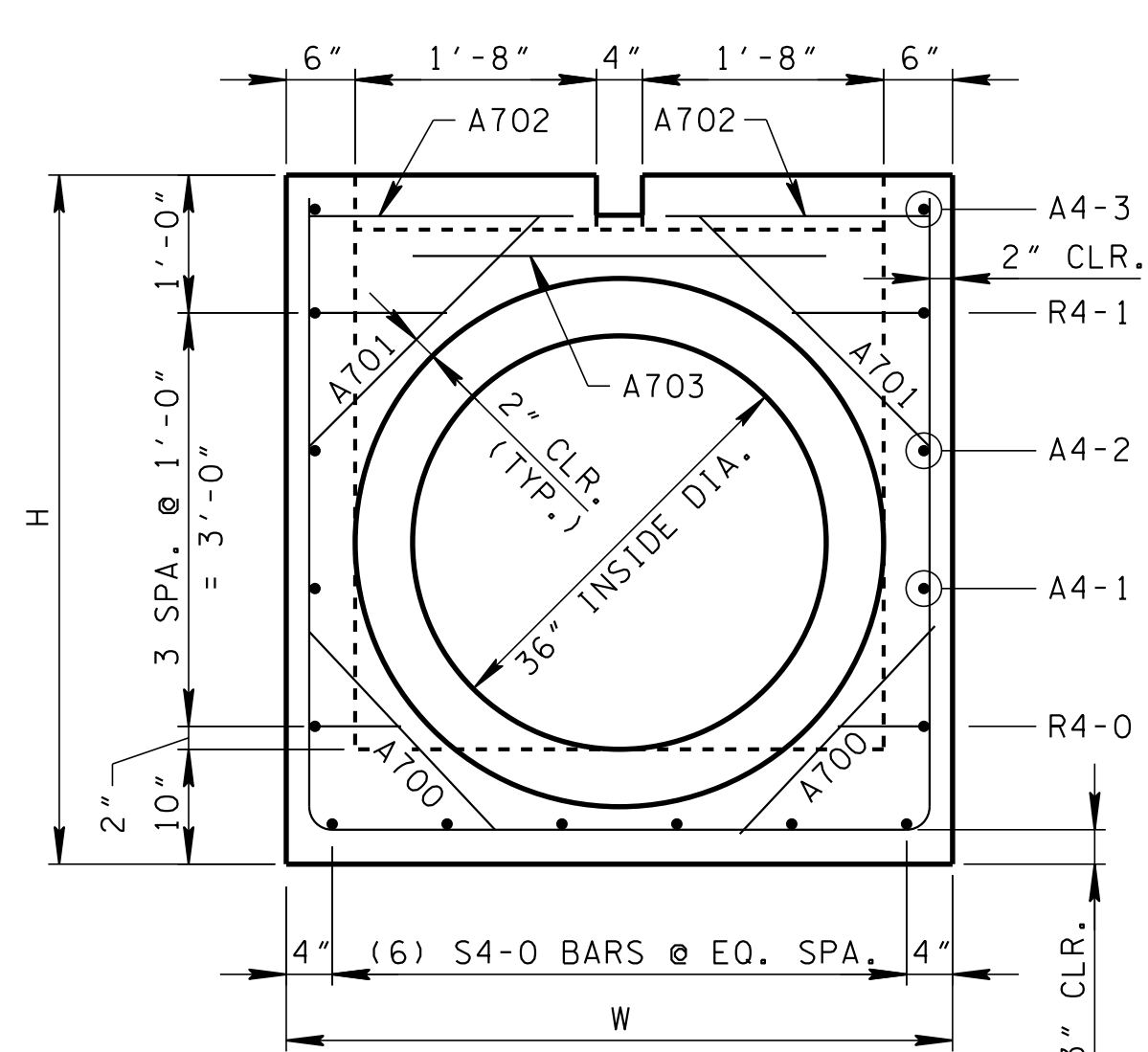
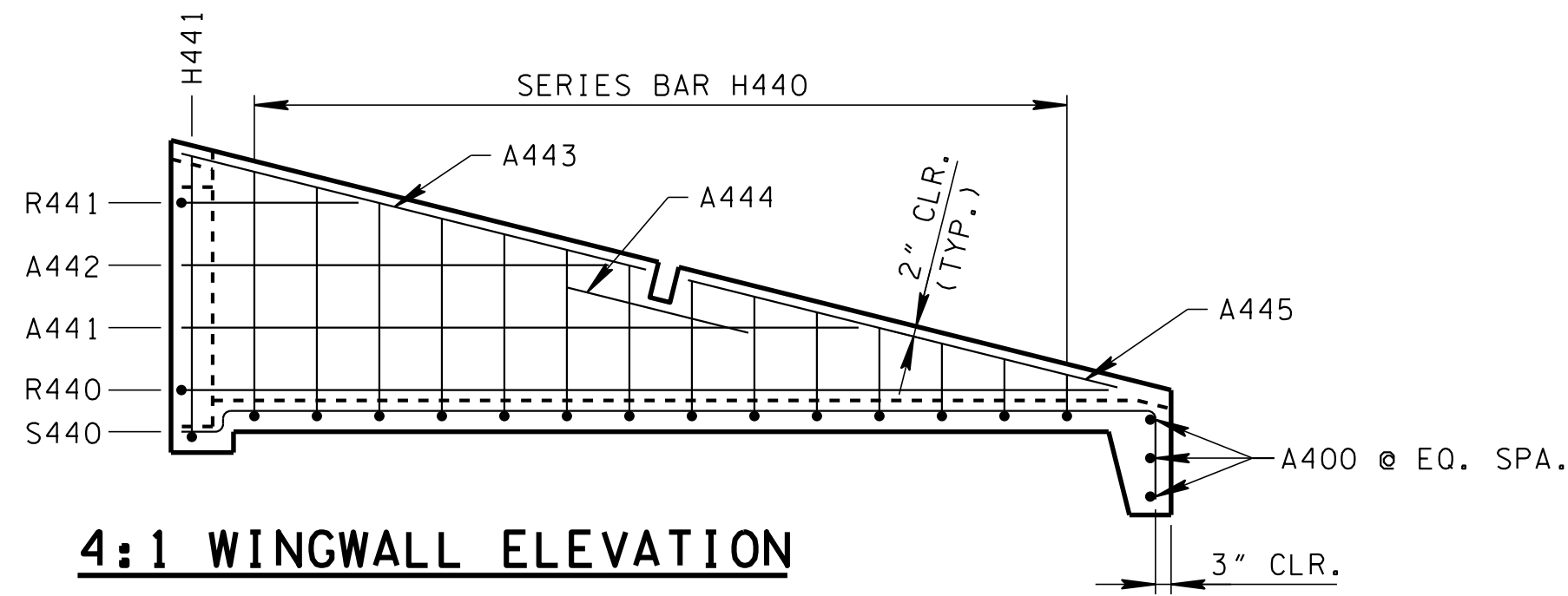


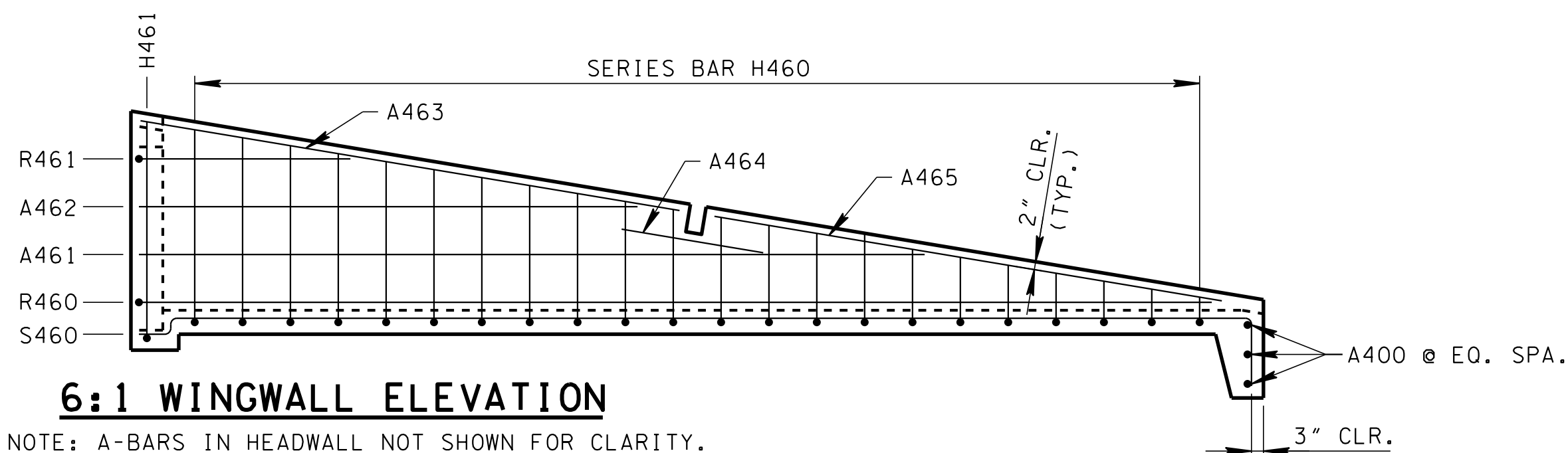
NOTES: SEE STD. DWG. D-PE-99 FOR STEEL PIPE GRATE DETAILS
3/4" CHAMFER REQUIRED ON ALL EXPOSED EDGES



NOTE: A-BARS IN HEADWALL NOT SHOWN FOR CLARITY.



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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:
- | | | |
|-----------|----------------------------|------|
| 611-07.63 | 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.

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)

DIMENSIONS AND QUANTITIES FOR ONE ENDWALL 36" PIPE										
SLOPE	CONCRETE ENDWALL DIMENSIONS					STRUCTURAL STEEL PIPE DIMENSIONS		ESTIMATED QUANTITIES		
								CLASS "A"	STEEL BAR	STRUCTURAL
	H	L ₁	L ₂	L ₃	W	LG	WG	CONC. CU. YD.	REINF. LB.	STEEL LB.
3:1	5' - 0"	12' - 2"	12' - 9 7⁄8"	6' - 4 3⁄4"	4' - 8"	12' - 8 3⁄4"	4' - 8"	2.43	219	132
4:1		16' - 0"	16' - 5 7⁄8"	8' - 2 1⁄2"		16' - 5"		3.08	276	160
6:1		23' - 8"	23' - 11 7⁄8"	12' - 0 1⁄4"		23' - 11 3⁄8"		4.39	388	217

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

NOT TO SCALE

3-01-12

D-PE-36A