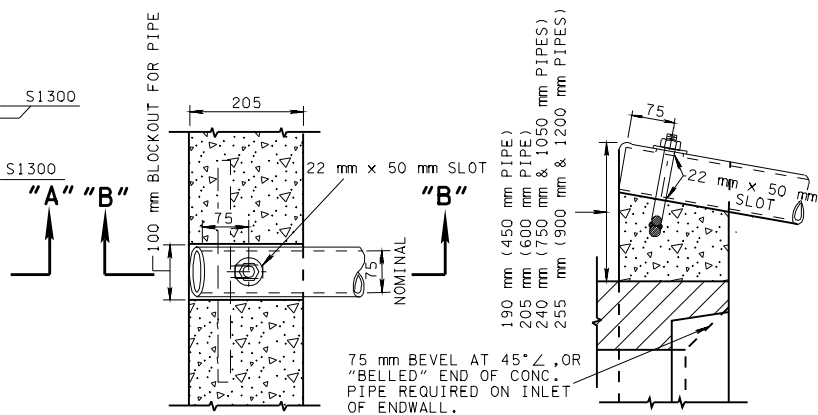
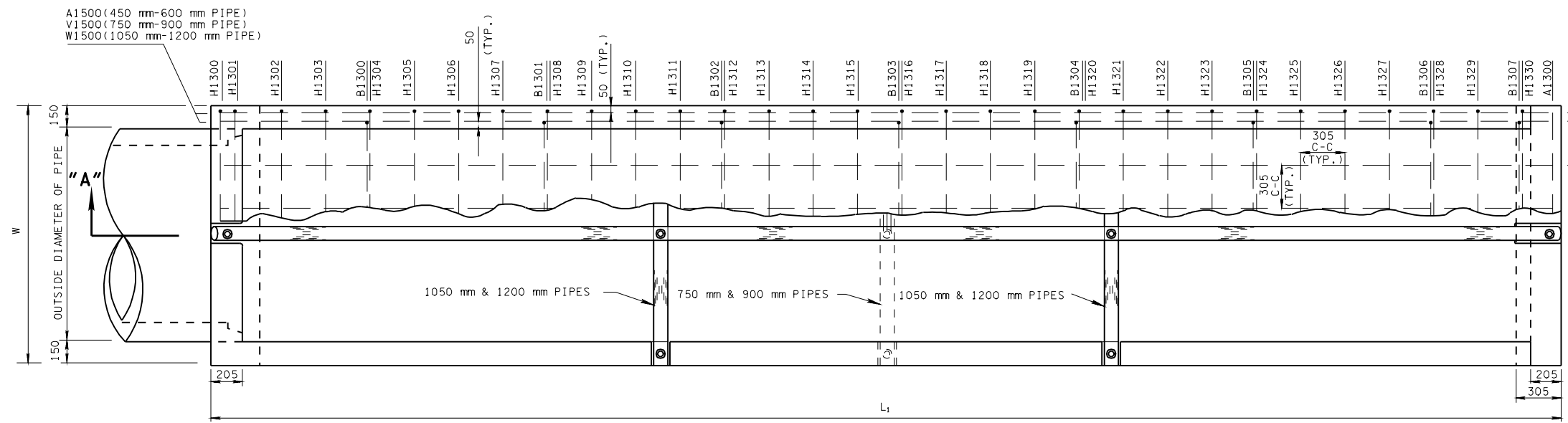
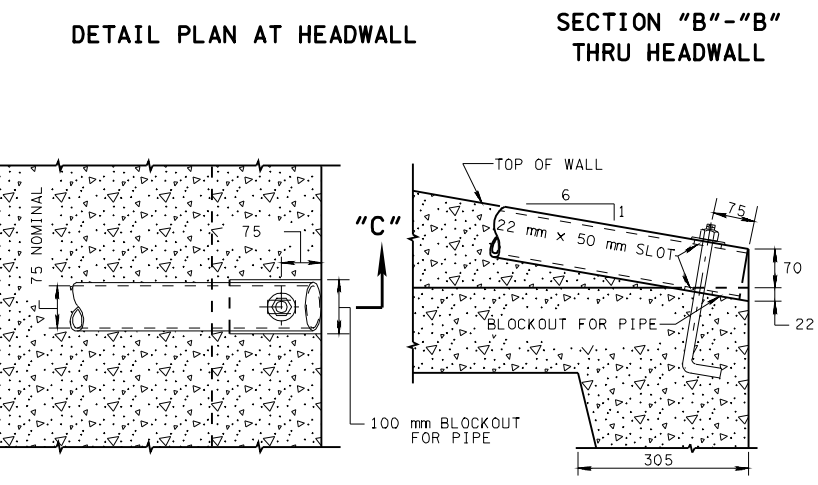
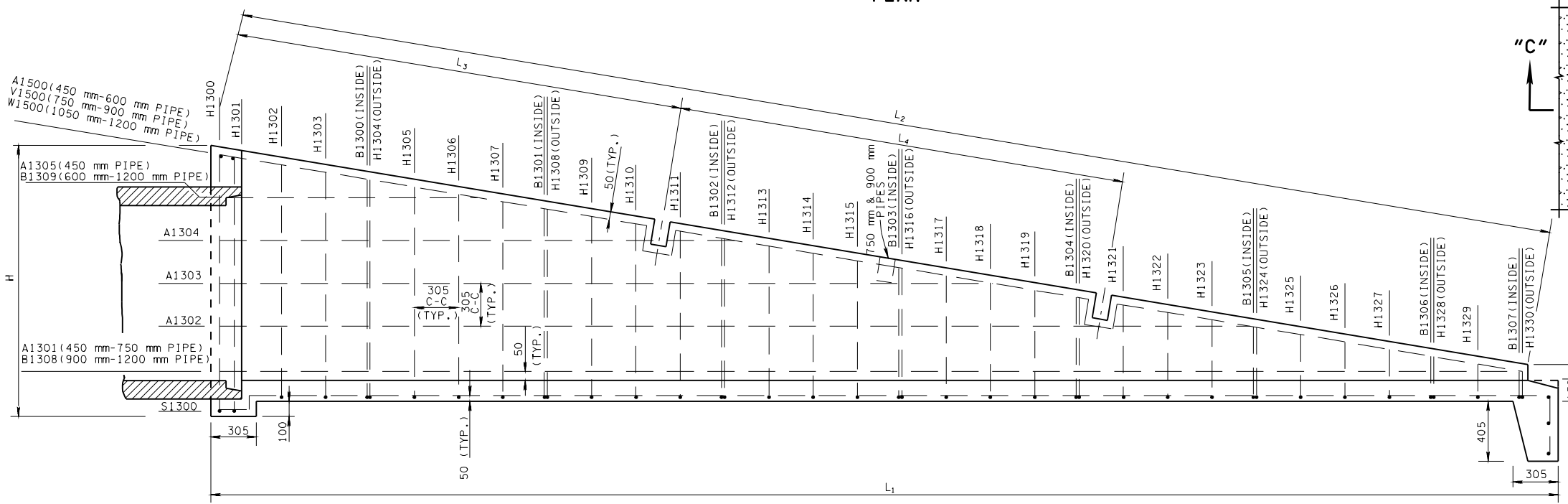


REV. 11-1-95: CHANGED TO METRIC.
REV. 3-30-00: MODIFIED TOE WALL
AND CLASS "A" CONCRETE QUANTITIES.

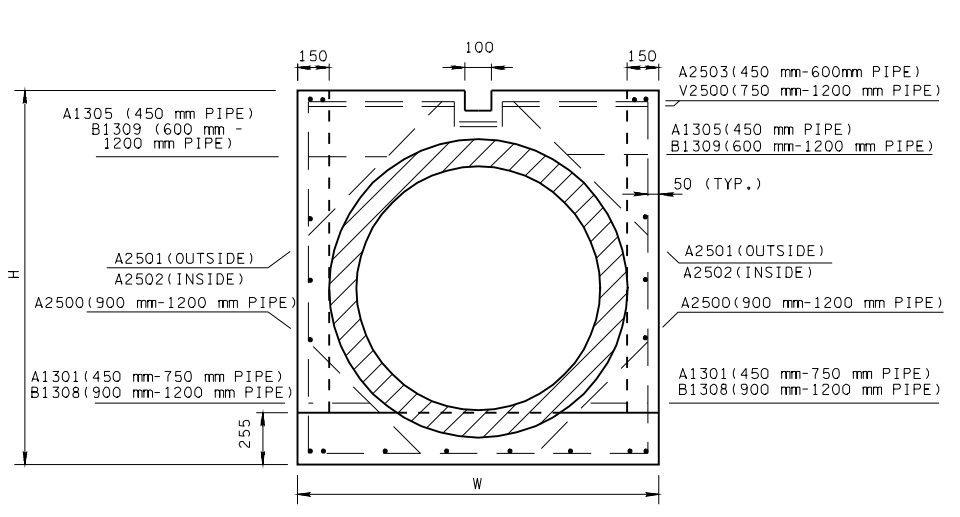


PLAN



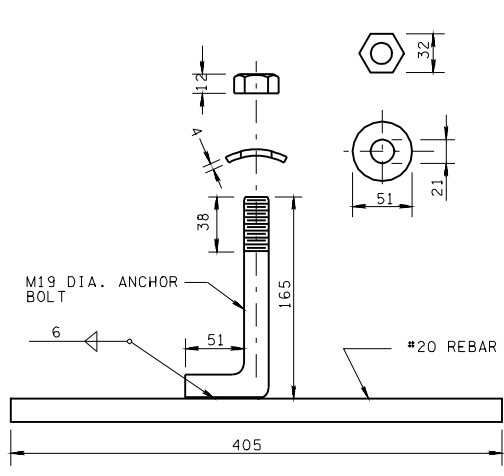
DETAIL PLAN AT TOEWALL

SECTION "C"- "C" THRU TOEWALL



HEADWALL ELEVATION

SECTION "A"- "A"



HEADWALL ANCHOR BOLT ASSEMBLY

GENERAL NOTES

- ANCHOR BOLT ASSEMBLY FOR TOEWALL AND WINGWALLS SHALL BE AS SHOWN, EXCEPT WITHOUT REBAR AND LONG SHANK OF BOLT TO BE 280 mm INSTEAD OF 165 mm.
- BOLTS SHALL NOT EXTEND MORE THAN 13 mm ABOVE TOP OF NUTS.

DETAIL PLAN AT WINGWALL

SECTION "D"- "D" THRU WINGWALL

PIPE CULV. DIA.	CONCRETE ENDWALL DIMENSIONS						STRUCTURAL STEEL PIPE DIMENSIONS		ESTIMATED QUANTITIES		
	H	L ₁	L ₂	L ₃	L ₄	W	LG	WG	CLASS "A" CONCRETE m ³	STEEL BAR REINF. kg	STRUCT. STEEL kg
450	965	3860	3710	—	—	890	—	—	1.12	90	① —
600	1145	4930	4790	—	—	1065	—	—	1.70	129	① —
750	1345	6145	6025	3125	—	1245	6215	1 @ 1245	2.47	191	84
900	1525	7215	7105	3665	—	1420	7300	1 @ 1420	3.35	246	98
1050	1675	8130	8035	2705	2690	1600	8225	2 @ 1600	4.18	294	129
1200	1855	9195	9115	3065	3050	1780	9305	2 @ 1780	5.25	363	145

- PIPE GRATE IS NOT REQUIRED FOR 450 mm OR 600 mm PIPE CULVERTS.
- SEE DM-PE-6B(B) FOR BILL OF STEEL.

ALL UNITS ARE IN MILLIMETERS
UNLESS NOTED OTHERWISE.

MINOR REVISION -- FHWA
APPROVAL NOT REQUIRED.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

CONCRETE ENDWALL
TYPE "U" WITH
STEEL PIPE GRATE
FOR 450 mm THRU 1200 mm
PIPES 6:1 SLOPE

11-1-95 DM-PE-6BA