


NOMINAL WIDTH (w)	NOMINAL HEIGHT (h)	SINGLE BOX					
		TYPE 1 SLOPE AT 1.5 : 1		TYPE 2 SLOPE AT 2 : 1		TYPE 3 SLOPE AT 3 : 1	
		CONC. VOLUME (m ³)	REINF. (m)	CONC. VOLUME (m ³)	REINF. (m)	CONC. VOLUME (m ³)	REINF. (m)
600	450	0.65	9.3	0.80	10.2	1.10	12.0
750	450	0.68	9.7	0.83	10.6	1.14	12.4
750	600	0.96	11.1	1.20	12.4	1.68	15.0
900	450	0.72	10.1	0.87	11.0	1.18	12.9
900	600	0.99	11.5	1.24	12.8	1.73	15.4
900	750	1.33	12.9	1.68	14.6	2.38	18.0
1200	450	0.78	10.9	0.94	11.8	1.26	13.7
1200	600	1.06	12.3	1.31	13.6	1.81	16.3
1200	900	1.80	15.1	2.29	17.1	3.27	21.4

NOMINAL WIDTH (w)	NOMINAL HEIGHT (h)	ADDITIONAL BOX	
		CONC. VOLUME (m ³)	REINF. (m)
600	450	0.12	1.6
750	450	0.14	2.0
750	600	0.14	2.0
900	450	0.17	2.3
900	600	0.17	2.3
900	750	0.17	2.3
1200	450	0.22	3.0
1200	600	0.22	3.0
1200	900	0.22	3.0

NOMINAL WIDTH (w)	NOMINAL HEIGHT (h)	TWIN BOX					
		TYPE 1 SLOPE AT 1.5 : 1		TYPE 2 SLOPE AT 2 : 1		TYPE 3 SLOPE AT 3 : 1	
		CONC. VOLUME (m ³)	REINF. (m)	CONC. VOLUME (m ³)	REINF. (m)	CONC. VOLUME (m ³)	REINF. (m)
600	450	0.77	10.9	0.92	11.8	1.22	13.6
750	450	0.83	11.7	0.98	12.5	1.28	14.4
750	600	1.10	13.1	1.34	14.3	1.83	16.9
900	450	0.89	12.5	1.04	13.4	1.35	15.2
900	600	1.17	13.9	1.41	15.2	1.90	17.8
900	750	1.50	15.3	1.85	16.9	2.56	20.4
1200	450	1.00	13.9	1.16	14.8	1.48	16.8
1200	600	1.28	15.3	1.53	16.6	2.03	19.3
1200	900	2.02	18.1	2.51	20.1	3.49	24.4

NOTES :

1. REFER TO SD 1841 FOR CULVERT DETAILS.
2. ALL REINFORCEMENT BARS ARE 12 mm DIAMETER.
3. 10% ALLOWANCE HAS BEEN MADE FOR ON-SITE CUTTING AND SPLICING OF BAR REINFORCEMENT

E				GENERAL NOTES / CROSS REFERENCES 1. THE QUANTITIES ARE PROVIDED AS A GUIDE ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTORS AND USERS OF THIS DRAWING TO CHECK AND ENSURE THAT THE QUANTITIES ARE ACCURATE BEFORE THEY ARE USED.	 PRINCIPAL ROAD DESIGN ENGINEER'S DEPARTMENT	STANDARD DRAWING MASS CONCRETE WINGWALL QUANTITIES BOX CULVERTS 450 TO 900 HIGH TYPES 1, 2 & 3					
D						APPROVED	DATE	SPEC. REF. No.	SHEET No.	DRAWING No.	AMENDMENT
C						<i>J. Cunningham</i>	12.95			SD 1842	
B											
A											
AMEND.	Appd.	Date		AMENDMENTS							