

SURVEYED BY _____
SUPERVISED BY _____
DESIGNED BY _____

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

REVISED	STATE	FEDERAL AID		STATE		SHEET NO.
		PROJECT	ROUTE	PROJECT	PROJECT	
	VA					

RW-3

3/4" PREMOLDED JOINT FILLER

3/4" SURFACE OF JOINT PAINTED WITH ASPHALT

EXPANSION JOINT

CONTRACTION JOINT

BACK OF WALL

1/8"X6" WATERSTOP

5/32"X9" WATERSTOP SEE DETAIL

TOP OF WALL

4"X4" KEYED JOINT

TOE OF WALL

CONTRACTION JOINTS AT INTERVALS NOT EXCEEDING 30'.
EXPANSION JOINTS AT INTERVALS NOT EXCEEDING 90'.
* WATER STOPS TO BE ELASTOMERIC OR OTHER APPROVED MATERIAL. DIMENSIONS SHOWN ARE ABSOLUTE MINIMUM.

INFINITE SURCHARGE

NOT LESS THAN 4'

H20 - S16 LIVE LOAD

DECK SURCHARGE - LOADED

12" POROUS BACKFILL @ 100 LBS./CU. FT.

H = HEIGHT IN FEET.
BASE = 6/10 H
A = 1/6 BASE, WITH MIN. OF 1'.
EARTH = 100 LBS.
CONCRETE = 150 LBS.
ANGLE OF REPOSE = 1/2:1

NOTE:
DEPTH OF WALL IN GROUND DETERMINED BY CONDITIONS. TO BE NOT LESS THAN 1'-6".

WATERSTOP DETAIL

WEEP HOLE WITH 12"X12" PLASTIC HARDWARE CLOTH 1/4" MESH OR OR GALVANIZED STEEL WIRE, MINIMUM WIRE DIAMETER 0.03", NUMBER 4 MESH HARDWARE CLOTH ANCHORED FIRMLY TO OUTSIDE OF STRUCTURE.

CLASS C1 CONCRETE

BATTER 1/2" PER FOOT

3" DRAIN PIPES 8' APART
B = 6/10 H

HEIGHT OF WALL "H" IN FEET	THICKNESS AT TOP "A" IN FEET	THICKNESS AT BASE B=.6H	COMPRESSION AT TOE LBS. SQ. FT.	AREA OF SECTION SQ. FT.
3	1'-0"	1'-9 5/8"	856	4.83
4	1'-0"	2'-4 3/4"	1141	7.43
5	1'-0"	3'-0"	1427	10.63
6	1'-0"	3'-7 1/4"	1712	14.43
7	1'-0"	4'-2 3/8"	1997	18.83
8	1'-0"	4'-9 5/8"	2283	23.83
9	1'-0"	5'-4 3/4"	2568	29.43
10	1'-0"	6'-0"	2853	35.63
11	1'-1 1/4 "	6'-7 1/4"	3139	42.98
12	1'-2 3/8 "	7'-2 3/8"	3424	51.03
13	1'-3 5/8 "	7'-9 5/8"	3709	59.78
14	1'-4 3/4 "	8'-4 3/4"	3995	69.23
15	1'-6"	9'-0"	4280	79.38

SAFE BEARING CAPACITY OF SOIL

ROCK MINIMUM	10,000 - 20,000 LBS. SQ. FT.
GRAVEL AND COARSE SAND, WELL CEMENTED	16,000 - 20,000 LBS. SQ. FT.
CLAY IN THICK BEDS, ALWAYS DRY	12,000 - 16,000 LBS. SQ. FT.
CLAY IN THICK BEDS, MODERATELY DRY	8,000 - 12,000 LBS. SQ. FT.
CLAY, SOFT	2,000 - 4,000 LBS. SQ. FT.
SAND, DRY, COMPACT, AND WELL CEMENTED	8,000 - 12,000 LBS. SQ. FT.
SAND, CLEAN, DRY	4,000 - 8,000 LBS. SQ. FT.
ALLUVIAL SOILS, ETC	1,000 - 2,000 LBS. SQ. FT.

NOTE: IF COMPRESSION AT TOE EXCEEDS SAFE BEARING CAPACITY OF SOIL, A SPECIAL FOOTING IS TO BE USED.

CONCRETE GRAVITY RETAINING WALLS

INFINITE SURCHARGE AND DECK SURCHARGE - LOADED

VIRGINIA DEPARTMENT OF TRANSPORTATION

REV. 9/06

401.02

SPECIFICATION REFERENCE

506