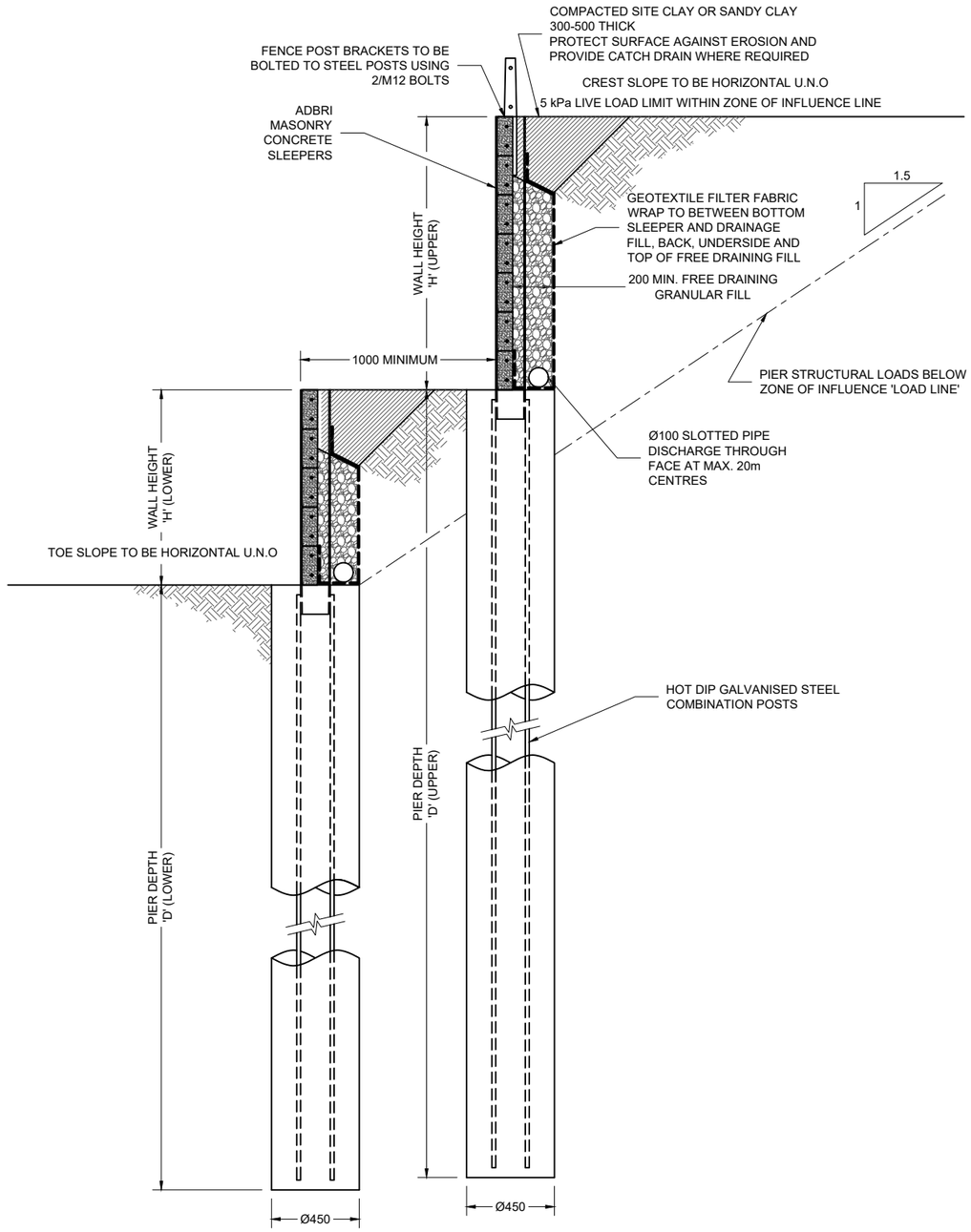
0 500 SCALE 1000 1500
1:30



TYPICAL CONCRETE SLEEPER WALL SECTION

1:30

DESIGN 2: DOUBLE TIERED CONCRETE SLEEPER RETAINING WALL (TOP TIER)

DESIGN LOADS:
Dead load, g = nil
Live load, q = 5kPa
Wind pressure to 1.8m high fence = 0.73kPa

Pier diameter = 450mm (uno)

SOIL PARAMETERS:
Characteristic retained internal friction angle, Φi = 28 degrees
*Retained soil density, γ*i = 18kN/m3*
Characteristic foundation internal friction angle, Φf = 28 degrees
Characteristic cohesion (for foundation), c = 2 kPa
*Foundation soil density, γ*f = 18kN/m3*

		2400 SLEEPER LENGTH			2000 SLEEPER LENGTH			
Design Height 'H' (mm)	Crest Slope (maximum)	Sleeper designation* (qty @ thickness in mm)	Steel Post Required	Pier Depth (mm)	Sleeper designation* (qty @ thickness in mm)	Steel Post Required	Pier Depth (mm)	Minimum Corner Post Detail~
400	Level	2 @ 80	B-2000	**1900**	2 @ 80	B-2000	**1800**	**100PFC**
600	Level	3 @ 80	B-2600	**2000**	3 @ 80	B-2600	**1900**	**100PFC**
800	Level	4 @ 80	B-2600	**2200**	4 @ 80	B-2600	**2100**	**100PFC**
1000	Level	5 @ 80	B-3200	**2400**	5 @ 80	B-2900	**2300**	**100PFC**
1200	Level	6 @ 80	C-3500	**2700**	6 @ 80	C-3500	**2500**	**100PFC**
1400	Level	7 @ 80	C-3900	**2900**	7 @ 80	C-3900	**2700**	**100PFC**
1600	Level	top 7 @ 80, 1 @ 100 btm	C-4400	**3200**	8 @ 80	C-4400	**3000**	**100PFC**

DESIGN 3: DOUBLE TIERED CONCRETE SLEEPER RETAINING WALL (BOTTOM TIER)

		2400 SLEEPER LENGTH			2000 SLEEPER LENGTH			
Design Height 'H' (mm)	Crest Slope (maximum)	Sleeper designation* (qty @ thickness in mm)	Steel Post Required	Pier Depth (mm)	Sleeper designation* (qty @ thickness in mm)	Steel Post Required	Pier Depth (mm)	Minimum Corner Post Detail~
400	Level	2 @ 80	B-2000^	**1200**	2 @ 80	B-2000^	**1200**	**100PFC**
600	Level	3 @ 80	B-2000	**1400**	3 @ 80	B-2000	**1300**	**100PFC**
800	Level	4 @ 80	B-2600	**1700**	4 @ 80	B-2600^	**1500**	**100PFC**
1000	Level	5 @ 80	B-2900	**2000**	5 @ 80	B-2600	**1800**	**100PFC**
1200	Level	6 @ 80	B-3200	**2300**	6 @ 80	B-3200	**2100**	**100PFC**

* THICKER SLEEPERS TO BE INSTALLED AT BOTTOM OF WALL PANEL.
Sleeper thickness designation in table refers to quantity of sleepers @ thickness (mm).
^ denotes steel reinforcement at base of post assembly will need to be trimmed to fit bored pier depth.
~ CORNER POST DETAIL TO BE 2 PFC POSTS AS DESIGNATED OR 1 PFC NESTED IN DESIGNATED UC
'' denotes steel assembly upgraded due to overall length and may be adjusted if reo extensions used instead
If sleeper thickness wider than post depth, use 80mm sleeper and install additional 80mm sleeper behind post.

REFER TO SHEET 001 FOR ALL SPECIFICATION NOTES

No.	DATE	AMENDMENT
-		
-		
C	04/11/22	DESIGNS UPDATED TO ASCT SOIL REPORT
B	14/09/22	UPDATE THE DESIGN TABLE
A	29/08/22	ISSUED FOR CONSTRUCTION

DESIGNED BY WK
DRAWN BY WK
APPROVED BY
QUALIFICATIONS RPEQ 08869

adbri MASONRY
Adbri Masonry Pty Ltd
ABN: 31 009 687 521
P.O. Box 623
Beenleigh, QLD 4207
Phone: (07) 3382 4100
Fax: (07) 3382 4185
Web: www.adbrimasonry.com.au

Fishwick (ACT):	(02) 6239 1255
Coffs Harbour (NSW):	(02) 6655 9972
Moorebank (NSW):	(02) 9822 6822
Newcastle (NSW):	(02) 4967 3611
Nowra (NSW):	(02) 4421 3500
Brisbane (QLD):	(07) 3382 4100
Cairns (QLD):	(07) 4051 6944
Gladstone (QLD):	(07) 4979 3355
Mackay (QLD):	(07) 4955 6966
Maroochdore (QLD):	(07) 5477 3300
Toowoomba (QLD):	(07) 4688 9600
Townsville (QLD):	(07) 4774 5155
Ottoway (SA):	(08) 8304 2323
Bendigo (VIC):	(03) 5447 8866
Cambellfield (VIC):	(03) 9305 0900
Essendon (VIC):	(03) 9375 8500
Hobart (TAS):	(03) 6244 3822
Ulverstone (TAS):	(03) 6425 1899

PROJECT TITLE
SUNVALE CALAMVALE RECONFIGURE LOT 3 ON SP186470
148 ALGESTER ROAD
CALAMVALE QLD 4116

SHEET TITLE
CONCRETE SLEEPER RETAINING WALLS DOUBLE TIERED WALL DESIGN TABLES

CLIENT
DAC CONSTRUCTIONS

DRAWING SCALE	ORIGINAL DRAWING SIZE	DRAWING No.	ISSUE
1:30	A3	CIV-3043-003	C