





SECTION VIEW

30mm COYER TO BAR

RETAINED SIDE

## TYPE A EITHER: 2/N12, 3N10, 2/12mm GFRP (60GPa) OR ALSO 2/N10 USING 60MPa CONCRETE EITHER: 2/N10, 2/10mm

GFRP (60GPa)

## TYPICAL SLEEPER RETAINING WALL DETAIL

ASSUMED SOIL PROPERTIES	
SOIL DENSITY (kN/m^3)	18
Ка	0.35
INTERNAL FRICTION ANGLE	30 DEGREE

SLEEPER SIZE = 1800 LONG X 200mm DEEP							
WALL TYPE	THICKNESS (t)	REINFORCEMENT	SOIL RETAINED (H) 5KPa	SOIL RETAINED (H) 10KPa			
1800-77-A	77mm	TYPE A	2.8m	2.4m			
1800-100-A	100mm	TYPE A	5.0m	4.8m			
1800-120-A	120mm	TYPE A	6.5m	6.0m			
1800-77-B	77mm	TYPE B	1.8m	1.4m			
1800-100-B	100mm	TYPE B	3.5m	3.0m			
1800-120-B	120mm	TYPE B	5.0m	4.5m			

TYPE B

## SPECIFICATIONS:

- 1. SLEEPER CONCRETE GRADE TO BE N40. CASTING EACH SLEEPER REQUIRES RIGID FORMWORK AND CONCRETE COMPACTION IN ACCORDANCE WITH AS3600
- 2. THESE SLEEPER WALLS SPECIFICATIONS ARE ONLY SUITABLE FOR USE WITH RETAINING WALLS WHICH SATISFY THE FOLLOWING CONDITIONS:
- THE WALL IS NOT SUBJECT TO HEAVY SURCHARGE LOADS, THE SURCHARGE LOADS THAT INCLUDED IN THIS CALCULATION IS 5kPA or 10 kPa
- THE FINAL SURFACE GRADIENT ABOVE THE WALL IS LEVEL OR ONLY SLIGHT (LESS THAN 1 VERTICAL RISE IN 10 HORIZONTAL)
- THE WALLS BACKFILL IS FREE DRAINING CONSISTING OF SAND &/OR GRAVEL
- ALL SUB-SURFACE WATER IS DRAINED BY MEANS OF AN AGRICULTURAL DRAIN, OR OTHER SUITABLE METHOD.
- SLEEPERS ARE HANDLED WITH DUE CARE DURING TRANSPORTATION AND ERECTION
- SLEEPER MINIMUM END BEARING LENGTH SHALL NOT BE LESS THAN 25mm EACH END

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CONCRETE SLEEPER RETAINING WALL (1800 LONG)

FOR CONSTRUCTION

PROJECT: CONCRETE SLEEPER DESIGN

CLIENT: SUNSET SLEEPERS			REVISION	AMENDED DESCRIPTION	DRAWN BY	DATE
		4	A	FOR CONSTRUCTION	B.E.	08.09.21
JOB No: 2109031	DRAWING No: S101		В	FOR CONSTRUCTION	B.E.	16.05.22
			С	FOR CONSTRUCTION	B.E.	23.05.22
	_		D	FOR CONSTRUCTION	B.E.	07.06.22
SCALE:						