







SECTION VIEW

REINFORCEMENT TYPES		
TYPE A	EITHER: 2/N12, 3N10, 2/12mm GFRP (60GPa) OR ALSO 2/N10 USING 60MPa CONCRETE	
TYPE B	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 = 2000 LONG X 200mm DEEP								
WALL TYPE	THICKNESS (t)	REINFORCEMENT	SOIL RETAINED (H) 5KPa	SOIL RETAINED (H) 10KPa				
2000-77-A	77mm	TYPE A	2.4m	2.2m				
2000-100-A	100mm	TYPE A	3.5m	3.3m				
2000-120-A	120mm	TYPE A	4.5m	4.3m				
2000-77-B	77mm	TYPE B	1.6m	1.4m				
2000-100-B	100mm	TYPE B	2.5m	2.3m				
2000-120-B	120mm	TYPE B	3.5m	3.3m				

SPECIFICATIONS:

1. SLEEPER CONCRETE GRADE TO BE N40. CASTING EACH SLEEPER REQUIRES RIGID FORMWORK AND CONCRETE COMPACTION IN ACCORDANCE WITH AS3600

REINFORCEMENT NOT CENTRAL. REFER TO SECTION

- 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 (2000 LONG)

FOR CONSTRUCTION

PROJECT: CONCRETE SLEEPER DESIGN

CLIENT: SUNSET SLEEPERS			REVISION	AMENDED DESCRIPTION	DRAWN BY	DATE	
		1	A	FOR CONSTRUCTION	B.E.	08.09.21	
JOB No: 2109031 DRAWING No: \$102	DDAWING No. 0400		В	FOR CONSTRUCTION	B.E.	16.05.22	
	DRAWING No: \$102		С	FOR CONSTRUCTION	B.E.	23.05.22	
SCALE:			D	FOR CONSTRUCTION	B.E.	07.06.22	