

FRONT ELEVATION
TYPICAL RETAINING WALL ELEVATION
 SCALE 1:20

CONCRETE :

$F'c > 25 \text{ MPa}$
 SLUMP = 80mm
 POUR IN MAX 0.4m LIFTS, EACH LAYER WELL VIBRATED OR RODDED.

BACKFILL :

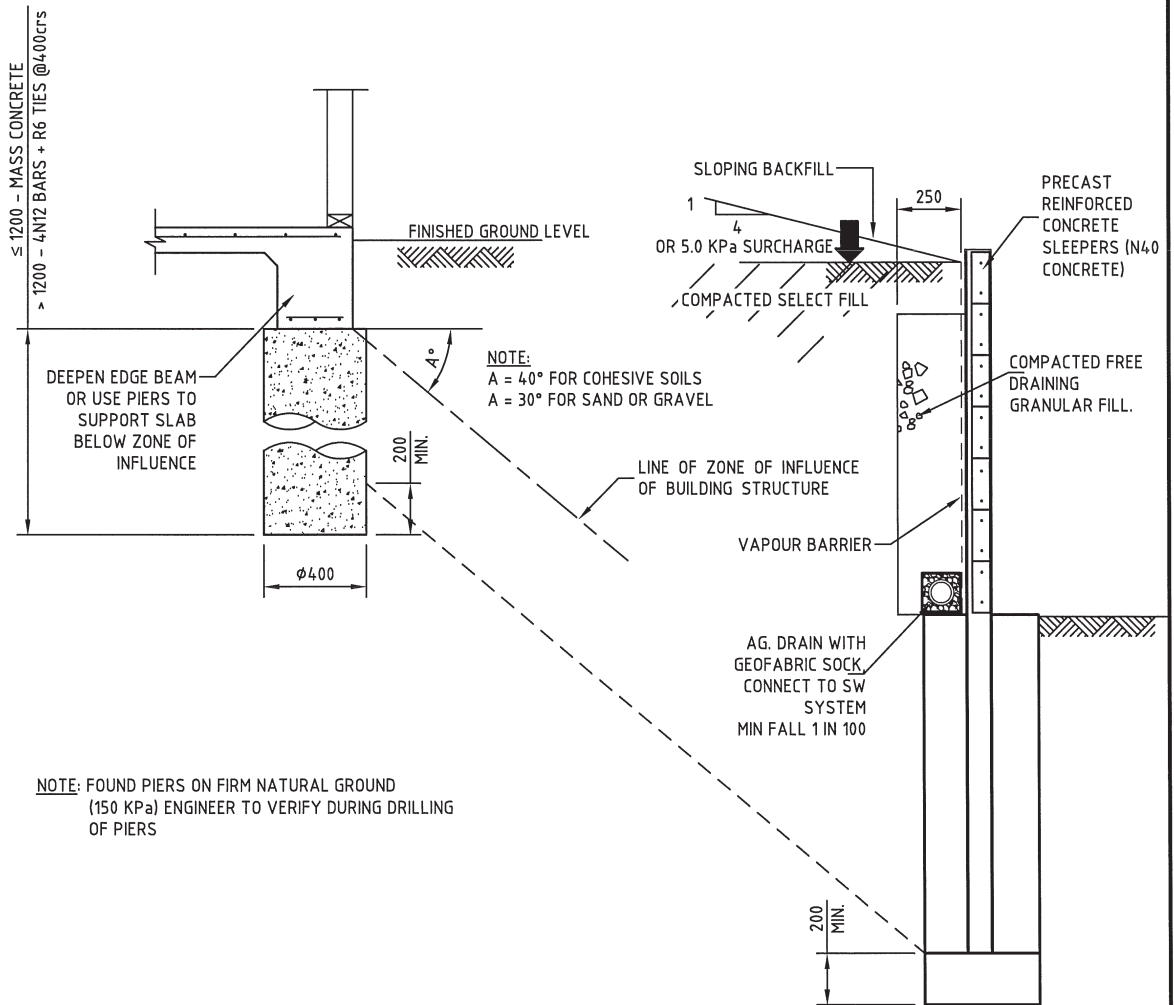
CLEAN GRANULAR MATERIAL AS SHOWN IN SIDE ELEVATION. (FREE DRAINING)

NOTES :

- NO JOINTS PERMITTED IN POSTS OR SLEEPERS.
- NO COMPACTION OF FILL TO BE CARRIED OUT WITHIN 2.0m OF TOP OF WALL, WITHOUT LATERAL SUPPORT OF WALL.
- ENSURE STABILITY OF ANY ADJACENT STRUCTURES IS NOT AFFECTED BY CONSTRUCTION.

DESIGN NOTES:

SOIL PARAMETERS:
 RETAINED SOIL - STIFF CLAY
 UNIT WEIGHT 18 kN/m^3
 INTERNAL FRICTION ANGLE 22°
 COHESION 10 kPa
 WALL FRICTION ANGLE 14.7°
 FOUNDATION SOIL - STIFF CLAY
 UNIT WEIGHT 18 kN/m^3
 INTERNAL FRICTION ANGLE 22°
 COHESION 10 kPa
 FOUNDATION BEARING CAPACITY 250 kPa



TYPICAL SECTION THROUGH RETAINING WALL
 SCALE 1:20

NOTE:

REFER TO SHEET S2 FOR TYPICAL WALL SUPPORT POST SECTIONS AND DIMENSION TABLES FOR PIER DEPTHS AND DIAMETERS AND SLEEPER REINFORCEMENT AND MAXIMUM WALL HEIGHTS

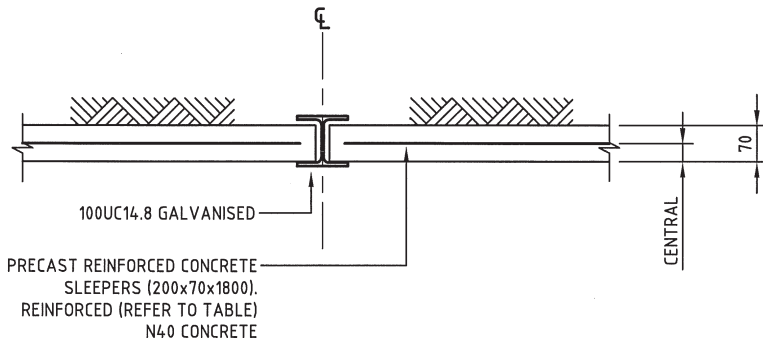
B	05-03-15	GENERAL NOTES	G.L.
A	12-3-13	ORIGINAL ISSUE	
Amendment	Date	Description	

BCP BUILDING PRODUCTS	
PRECAST SLEEPER RETAINING WALLS	
TYPICAL DETAILS	
STRUCTURAL DETAILS	

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Scale: AS SHOWN	Q Chk Sign:	Approve sign:	
CAD Ref: 12280			

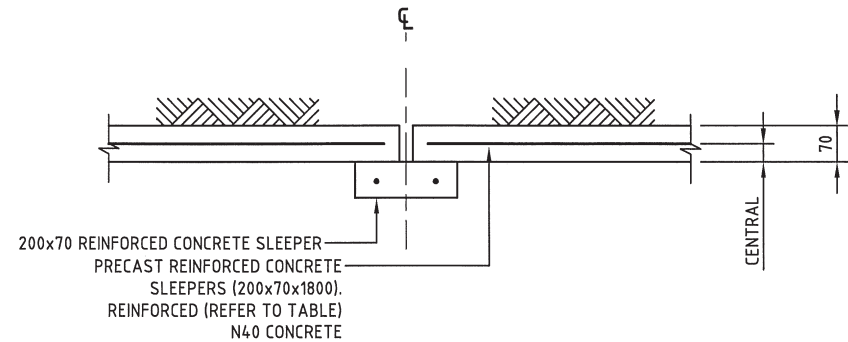
CALARE CIVIL	
CONSULTING ENGINEERS	
170 RANKIN STREET, BATHURST, N.S.W. 2795 Phone: (02) 63323343 Fax: (02) 63318210	

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No. in set	2



TYPICAL SECTION AT RETAINING WALL SUPPORTS
100UC14.8 POST

SCALE 1:10



TYPICAL SECTION AT RETAINING WALL SUPPORTS
200x70 PRECAST SLEEPER POST

SCALE 1:10

DIMENSION TABLE

MEMBER		WALL HEIGHT (NO SURCHARGE OR BACKFILL SLOPE)			
		400	600	800	1000
CONCRETE PRECAST SLEEPER POST 200x70	REINFORCEMENT	2-N12	2-N12	2-N12	2-N12
	PIER DIAMETER ϕ	300	400	400	400
	PIER DEPTH 'D'	600	850	1000	1200

DIMENSION TABLE

MEMBER		WALL HEIGHT (WITH 5.0KPa SURCHARGE OR BACKFILL SLOPE)	
		400	600
CONCRETE PRECAST SLEEPER POST 200x70	REINFORCEMENT	2-N12	2-N12
	PIER DIAMETER ϕ	300	400
	PIER DEPTH 'D'	750	1000

DIMENSION TABLE

MEMBER		WALL HEIGHT (NO SURCHARGE OR BACKFILL SLOPE)				
		20	1400	1600	1800	2200
100 UC 14.8 POST (GALVANISED)	REINFORCEMENT	2-N12	2-N12	2-N12	2-N12	-
	PIER DIAMETER ϕ	400	400	400	450	-
	PIER DEPTH 'D'	1500	1900	2300	2500	-
150 UC 23 POST (GALVANISED)	REINFORCEMENT	NOTE: PRECAST REINFORCED CONCRETE SLEEPERS SHOULD BE 100 mm THICK				2-N12
	PIER DIAMETER ϕ					600
	PIER DEPTH 'D'					2900

DIMENSION TABLE

MEMBER		WALL HEIGHT (WITH 5.0KPa SURCHARGE OR BACKFILL SLOPE)					
		800	1000	1200	1400	1600	2200
100 UC 14.8 POST (GALVANISED)	REINFORCEMENT	2-N12	2-N12	2-N12	2-N12	2-N12	-
	PIER DIAMETER ϕ	400	400	400	400	400	-
	PIER DEPTH 'D'	1300	1600	1800	2000	2400	-
150 UC 23 POST (GALVANISED)	REINFORCEMENT	NOTE: PRECAST REINFORCED CONCRETE SLEEPERS SHOULD BE 100 mm THICK					2-N12
	PIER DIAMETER ϕ						600
	PIER DEPTH 'D'						3600

Amendment	Date	Description
B	05-03-15	SLEEPERS THICKNES
B	05-03-15	GENERAL NOTES
A	12-3-13	ORIGINAL ISSUE

BCP BUILDING PRODUCTS
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