

ALTERATIONS AND ADDITIONS

at: 4 ELWYN CLOSE, MONA VALE

for: SEAN AND EMMA McGUINNESS

Architect: SPACE LANDSCAPE DESIGNS

Prepared By:

NB Consulting Engineers
STRUCTURAL - CIVIL - STORMWATER - REMEDIAL
A.C.N. 076 121 616 A.B.N. 24 076 121 616

Sydney: Ph: (02) 9984 7000

Suite 207, 30 Fisher Road Dee Why N.S.W. 2099

Gold Coast: Ph: (07) 5631 4744

Suite 1, 30B Griffith Street, Coolangatta QLD 4225

E : nb@nbconsulting.com.au W : www.nbconsulting.com.au

The copyright of these drawings remains with Northern Beaches Consulting Engineers Pty Ltd. Trading as NB Consulting Engineers

DRAWING SCHEDULE:

S01A - GENERAL NOTES

S02B - FOOTING PLAN AND DETAILS.

S03B - FOOTING AND SHORING WALL DETAILS.

S04B - FOOTING AND RETAINING WALL DETAILS.

S10B - SLAB AND SWIMMING POOL PLAN AND DETAILS.

S11A - SLAB DETAILS.

S20A - ROOF PLAN AND DETAILS.

S21A - STEEL FRAME DETAILS.

P01A - SWIMMING POOL SECTIONS AND DETAILS - 1.

P02A - SWIMMING POOL SECTIONS AND DETAILS - 2.

NB Consulting Engineers

2301101

IF IN DOUBT ASK

REV. B 2024-08-08

GENERAL

- ## FOOTINGS

U/S of Footing

1 - Typical
(2 - Sand)

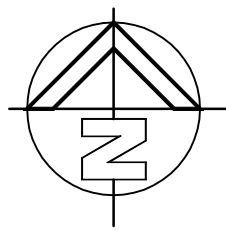
Backfilled trench
or other excavation

Influence Line

ELEMENT	INTERIOR	EXTERIOR	EXTERIOR CAST AGAINST GROUND
FOOTINGS	-		50
COLUMNS/PEDESTALS	30 UNO	REFER TO PLAN	-
SLABS/WALLS	25	REFER TO PLAN	40 ON MEMBRANE
BEAMS	25 UNO	REFER TO PLAN	50
BLOCKWORK	55 FROM APPROPRIATE FACE		

ASSUMED FOUNDATION CLASSIFICATION FOR DESIGN PURPOSES - 'A'
ASSUMED BEARING STRATA FOR DESIGN PURPOSES - ROCK, 600 kPa.
CONTRACTOR TO ENGAGE GEOTECHNICAL CONSULTANT TO VERIFY FOUNDATION CLASSIFICATION.
FOUNDATION CLASSIFICATION AND BEARING CAPACITY VERIFICATION
TO BE OBTAINED IF CERTIFICATION OF THESE ITEMS IS REQUIRED.

[illegible]



Scale check - 100mm when printed to scale

A2

FOOTING PLAN

SCALE = 1:100

LEGEND:

FPI - DENOTES 400 ϕ CONCRETE PIER. REFER TO DETAIL ON S03.

B FP2 - DENOTES 300 ϕ CONCRETE PIER. REFER TO DETAIL ON S03.

FBI - DENOTES FOOTING BEAM.
REFER TO DETAIL ON S03.

RW1, RW2, - DENOTES 190 REINFORCED BLOCK RETAINING WALLS.
REFER TO DETAIL ON S04.

B RW4 - DENOTES 190 REINFORCED BLOCK RETAINING WALLS.
REFER TO DETAIL ON S04.

NOTES:

CONCRETE STRENGTH

FOOTINGS:

f'c = 32 MPa, COVER = 50 mm

SHORING PIERS:

f'c = 25 MPa, COVER = 50 mm

SHOTCRETE:

f'c = 32 MPa.

NOTES:

1. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION IF THE ISSUE DATE PRECEDES THE ISSUE DATE ON THE ARCHITECTURAL DRAWINGS.
2. DO NOT SCALE FROM THIS DRAWING.
3. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE BY THE BUILDER BEFORE COMMENCING WITH ASSOCIATED WORK.
4. FOR GENERAL NOTES REFER TO DRAWING NUMBER: S01.

NOTE:

CONTRACTOR TO ENSURE ALL GEOTECHNICAL REPORT RECOMMENDATIONS AND PRELIMINARY INVESTIGATIONS ARE COMPLETED.

CONTRACTOR TO REFER/COMPLY TO GEOTECHNICAL REPORT; WHITE geotechnical group
Project No: J4381
DATED: 25 July 2022

NOTE:

ADDITIONAL GEOTECHNICAL ENGINEERING TESTING IS REQUIRED AS PER GEOTECHNICAL REPORT RECOMMENDATIONS

NOTE:

CONSISTENCY OF ROCK LEVELS TO BE CONFIRMED ON SITE. FOOTING DETAILS MAY BE REVISED BY ENGINEER TO SUIT.

NOTES:

ALL STEELWORK CORROSION PROTECTION SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF THE CURRENT NCC BUILDING CODE OF AUSTRALIA IN PARTICULAR SECTION 3.4.4.2 AND TABLE 3.4.4.2 AND AS 4100. A FINAL SPECIFICATION OF A PROPRIETARY TYPE COATING SYSTEM SHALL BE PREPARED TO EITHER:
AS/NZS 2312.1 - PART 1 - PAINT COATINGS
AS/NZS 2312.2 - PART 2 - HOT-DIP GALVANIZING.
ALL STEELWORK INCLUDING FIXING BRACKETS, BOLTS, SCREWS, NAILS ETC IN CONTACT WITH TREATED PINE TO HAVE A SUITABLE COATING TO PREVENT CORROSION CAUSED BY CONTACT WITH TREATED PINE.
NOTE: NORTHERN BEACHES CONSULTING ENGINEERS CAN LEND ASSISTANCE TO THE PROJECT SPECIFIER ON STEELWORK PROTECTION BUT DO NOT WARRANT OR CERTIFY THE DURABILITY OF ANY STEELWORK BY PROPRIETARY PAINT COATING SYSTEMS OR HOT-DIPPED GALVANIZING.

NOTE: EXCAVATION

EXCAVATION MUST NOT EXTEND BELOW NEIGHBOURING FOOTINGS. THE BUILDER MUST IMMEDIATELY NOTIFY THE STRUCTURAL AND GEOTECHNICAL ENGINEER IF, AT ANY TIME, EXCAVATION INADVERTENTLY EXTENDS BELOW NEIGHBOURING FOOTINGS. THE ENGINEERS WILL BOTH NEED TO COME OUT AND INSPECT AND IF NECESSARY PROVIDE UNDERPINNING OR ADDITIONAL SUPPORT DETAILS.

NOTE: NOTICE PRIOR TO COMMENCEMENT

AT LEAST SEVEN (7) DAYS BEFORE COMMENCEMENT OF ANY EXCAVATION OR DEMOLITION WORKS, THE BUILDER OR CLIENT MUST GIVE NOTICE TO THE OWNER(S) OF THE ADJOINING PROPERTY(S) AND PROVIDE DETAILS OF THE PROPOSED WORKS. FURTHER, THE ADJOINING OWNER MUST BE MADE AWARE OF THE RISK OF MINOR CRACKING DUE TO VIBRATIONS DURING CONSTRUCTION. THE BUILDER OR CLIENT IS RESPONSIBLE TO RECTIFY ANY DAMAGE WHICH MAY OCCUR AT THEIR OWN COST.

IF IN DOUBT ASK

DOCUMENT CERTIFICATION

Date: 08.08.2024

Stewart McGeady
BE(Civil), MIEAust., PDP, PRE, DEP.
(Director NB Consulting Engineers)

The copyright of this drawing remains with NB Consulting Engineers

NB Consulting Engineers

STRUCTURAL - CIVIL - STORMWATER - REMEDIAL
A.C.N. 076 121 616 A.B.N. 24 076 121 616

Sydney: Ph: (02) 9984 7000
Suite 207, 30 Fisher Road Dee Why N.S.W. 2099
Gold Coast: Ph: (07) 5631 4744
Suite 1, 30B Griffith Street, Coolangatta QLD 4225
E: nb@nbconsulting.com.au W: www.nbconsulting.com.au

Architect:

SPACE LANDSCAPE DESIGNS

Client:

SEAN AND EMMA McGUINNESS

Project:

ALTERATIONS AND ADDITIONS
4 ELWYN CLOSE, MONA VALE

Drawing Title:

FOOTING PLAN
AND DETAILS

Date:

JUNE '23

Design:

IV

Drawn:

NP

Job No:

2301101

Drawing No:

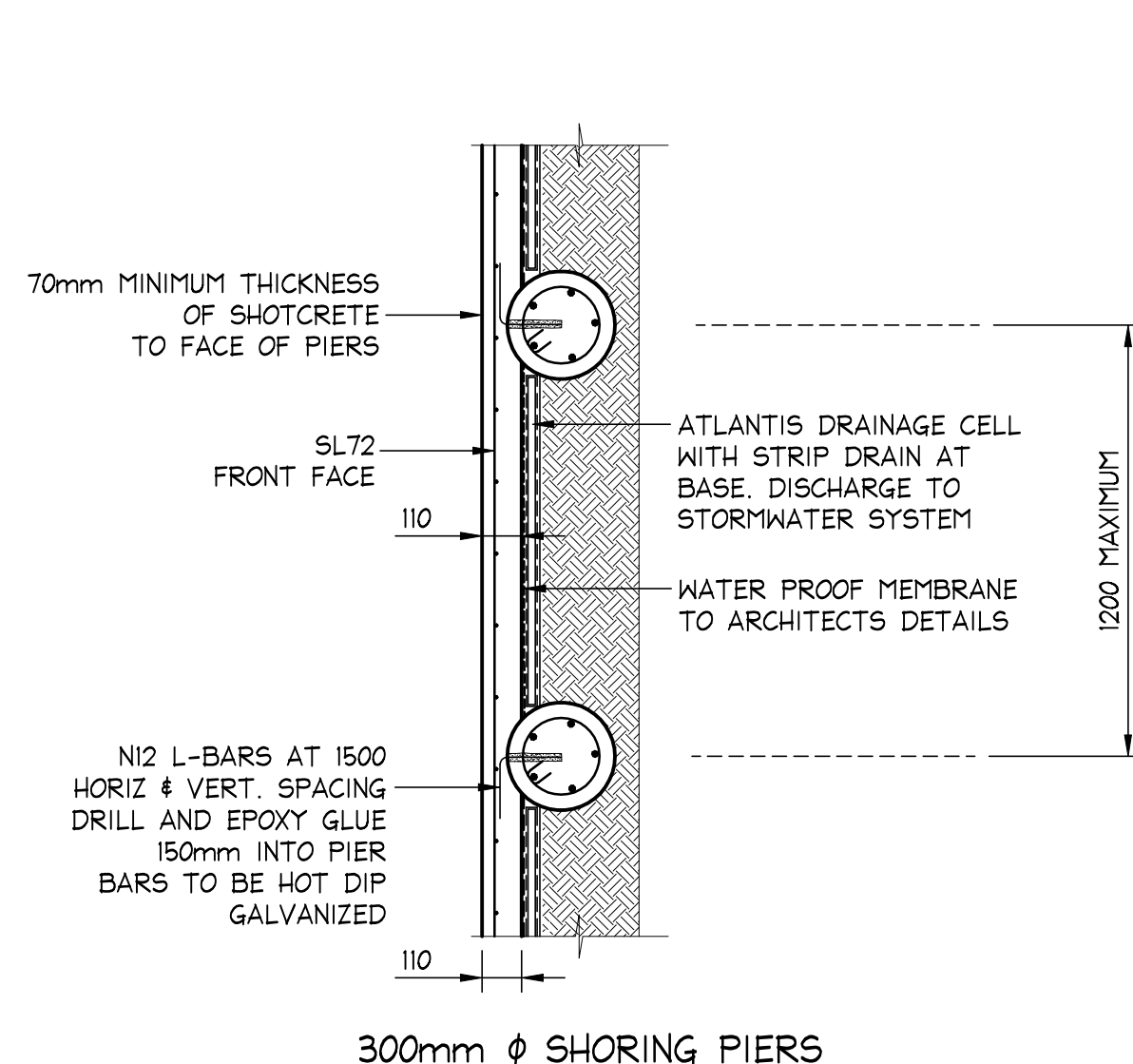
S02

Issue:

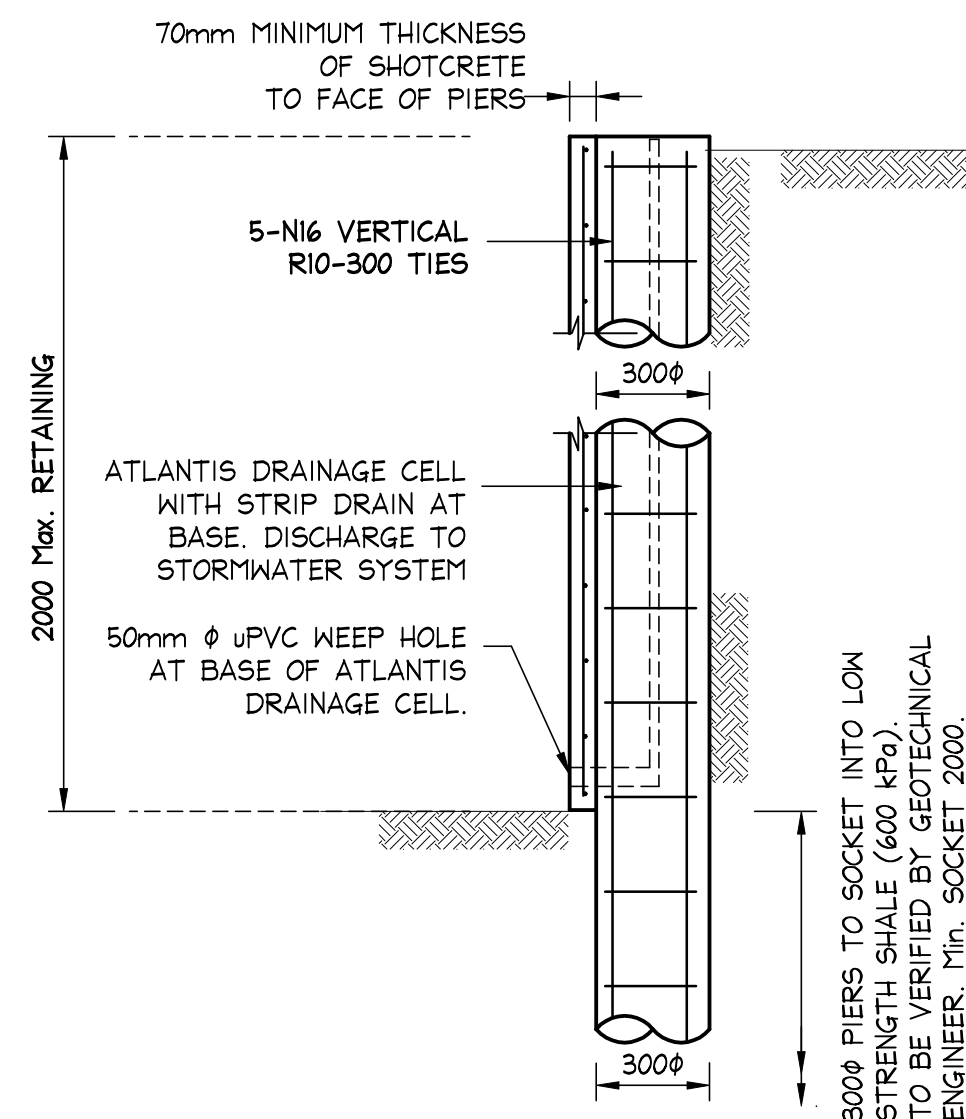
B

NB Consulting Engineers

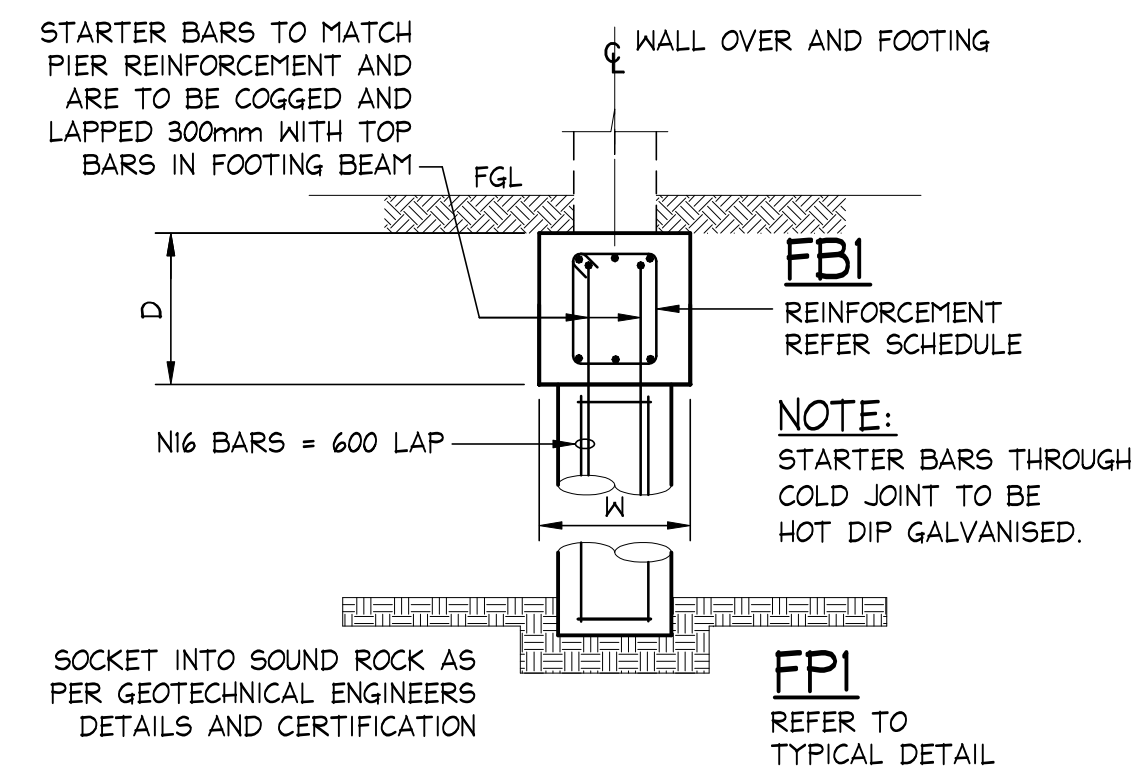
1. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION IF THE ISSUE DATE PRECEDES THE ISSUE DATE ON THE ARCHITECTURAL DRAWINGS.
2. DO NOT SCALE FROM THIS DRAWING.
3. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE BY THE BUILDER BEFORE COMMENCING WITH ASSOCIATED WORK.
4. FOR GENERAL NOTES REFER TO DRAWING NUMBER: S01.



TYPICAL SOLDIER PIER
SHORING WALL PLAN
SCALE = 1 : 20



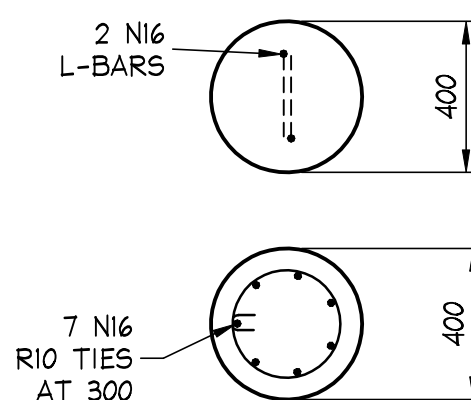
TYPICAL SHORING WALL
SECTION DETAIL
SCALE = 1 : 20



REFER TO FOOTING BEAM SCHEDULE
FOR FOOTING SIZE AND
REINFORCEMENT DETAILS

CONCRETE PIERS:

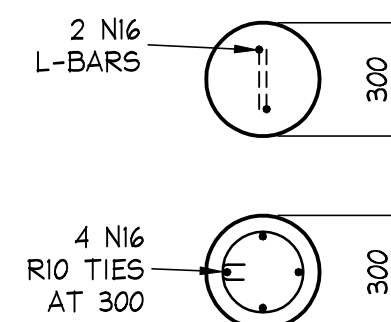
1. PIERS TO BE 400mm DIAMETER SOCKET INTO SOUND ROCK AS PER GEOTECHNICAL ENGINEERS DETAILS AND CERTIFICATION.
2. FOR DEPTH LESS THAN 1200mm
2 N16 L-BARS.
3. FOR DEPTH GREATER THAN 1200mm AND LESS THAN 4000mm.
7 N16, R10 TIES AT 300.
4. FOR DEPTH GREATER THAN 4000mm REINFORCEMENT TO BE CONFIRMED BY ENGINEER



TYPE 'FP1' FOOTING PIER SECTION

CONCRETE PIERS:

1. PIERS TO BE 300mm DIAMETER
 SOCKET INTO SOUND ROCK AS PER
 GEOTECHNICAL ENGINEERS DETAILS
 AND CERTIFICATION.
2. FOR DEPTH LESS THAN 1200mm
 2 N16 L-BARS.
3. FOR DEPTH GREATER THAN 1200mm
 AND LESS THAN 3000mm.
 4 N16, RIO TIES AT 300.



TYPE 'FP2' FOOTING PIER SECTION

FOOTING BEAM SCHEDULE				
TYPE	SIZE D x W	REINFORCEMENT		
		TOP	BOTTOM	TIES
FBI	400 x 450	3 N12	3 N12	N12-500

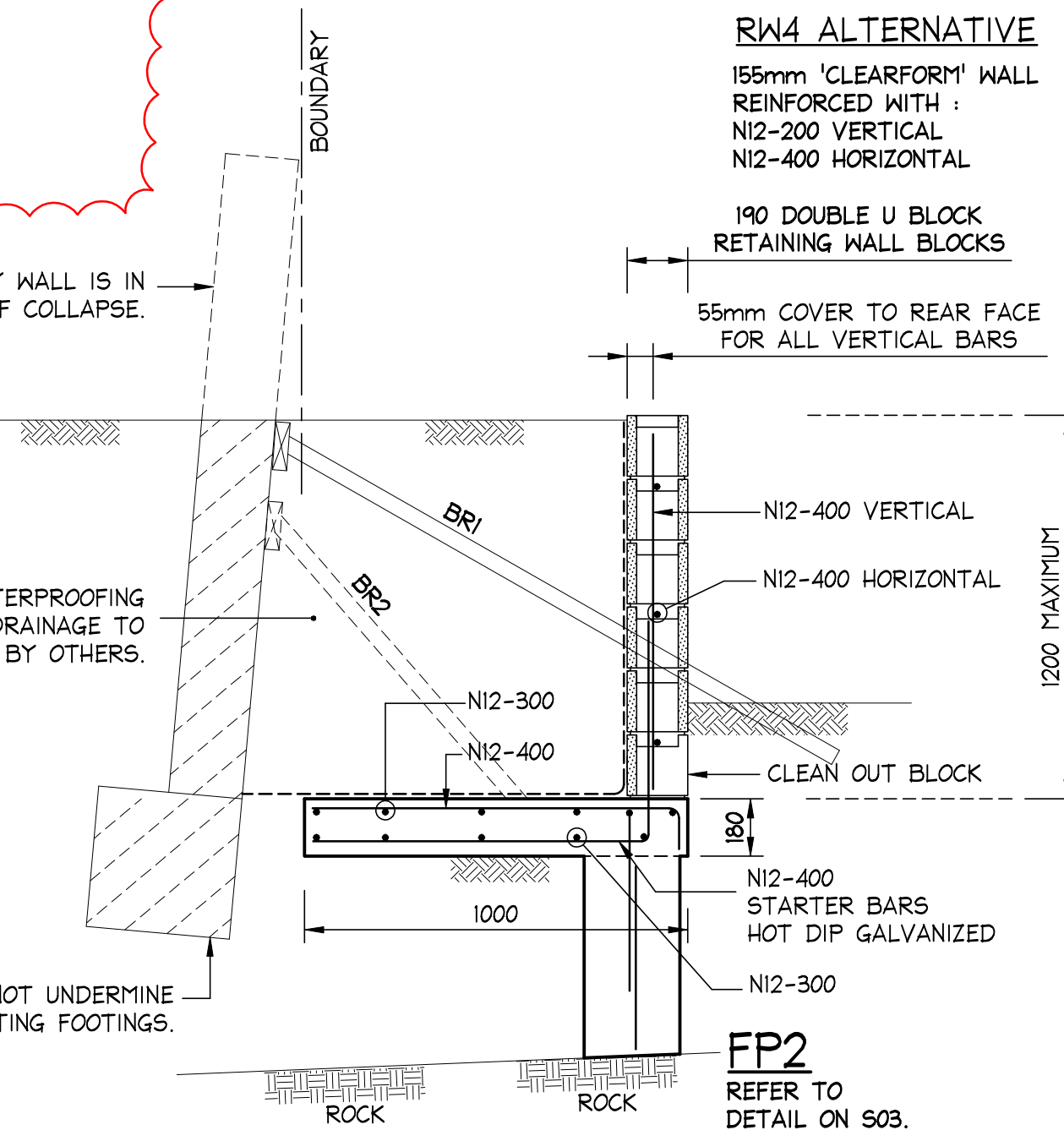
NOTE: BAR REINFORCEMENT
 CARRY BAR REINFORCEMENT ACROSS FULL WIDTH OF ADJOINING
 FOOTINGS AT ALL CORNERS AND COG ENDS, CARRY STRAIGHT
 THROUGH AT INTERSECTIONS. LAP BARS 600mm AS REQUIRED.

TYPICAL FOOTING BEAM
SECTION - FBI
SCALE = 1 : 20

IF IN DOUBT ASK

						DOCUMENT CERTIFICATION Date : 08.08.2024  Stewart McGeady BE(Civil),MIEAust.,PDP,PRE,DEP. (Director NB Consulting Engineers) The copyright of this drawing remains with NB Consulting Engineers	NB Consulting Engineers STRUCTURAL - CIVIL - STORMWATER - REMEDIAL A.C.N. 076 121 616 A.B.N. 24 076 121 616 Sydney: Ph: (02) 9984 7000 Suite 207, 30 Fisher Road Dee Why N.S.W. 2099 Gold Coast: Ph: (07) 5631 4744 Suite 1, 30B Griffith Street, Coolangatta QLD 4225 E : nb@nbconsulting.com.au W : www.nbconsulting.com.au	Architect: SPACE LANDSCAPE DESIGNS		Project: ALTERATIONS AND ADDITIONS 4 ELWYN CLOSE, MONA VALE		Date: JUNE '23		Design: IV		Drawn: NP		
2024-08-08	B	NEW FP2 DETAIL			NP			-	Client: SEAN AND EMMA McGUINNESS		Drawing Title: FOOTING AND SHORING WALL DETAILS		Job No: 2301101		Drawing No: S03		Issue: B	
2023-07-17	A	ISSUED FOR CONSTRUCTION			NP			NC										
Date:	Issue:	Description:			By:			Review:										

- NOTES:**
- 1. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION IF THE ISSUE DATE PRECEDES THE ISSUE DATE ON THE ARCHITECTURAL DRAWINGS.
 - 2. DO NOT SCALE FROM THIS DRAWING.
 - 3. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE BY THE BUILDER BEFORE COMMENCING WITH ASSOCIATED WORK.
 - 4. FOR GENERAL NOTES REFER TO DRAWING NUMBER: S01.

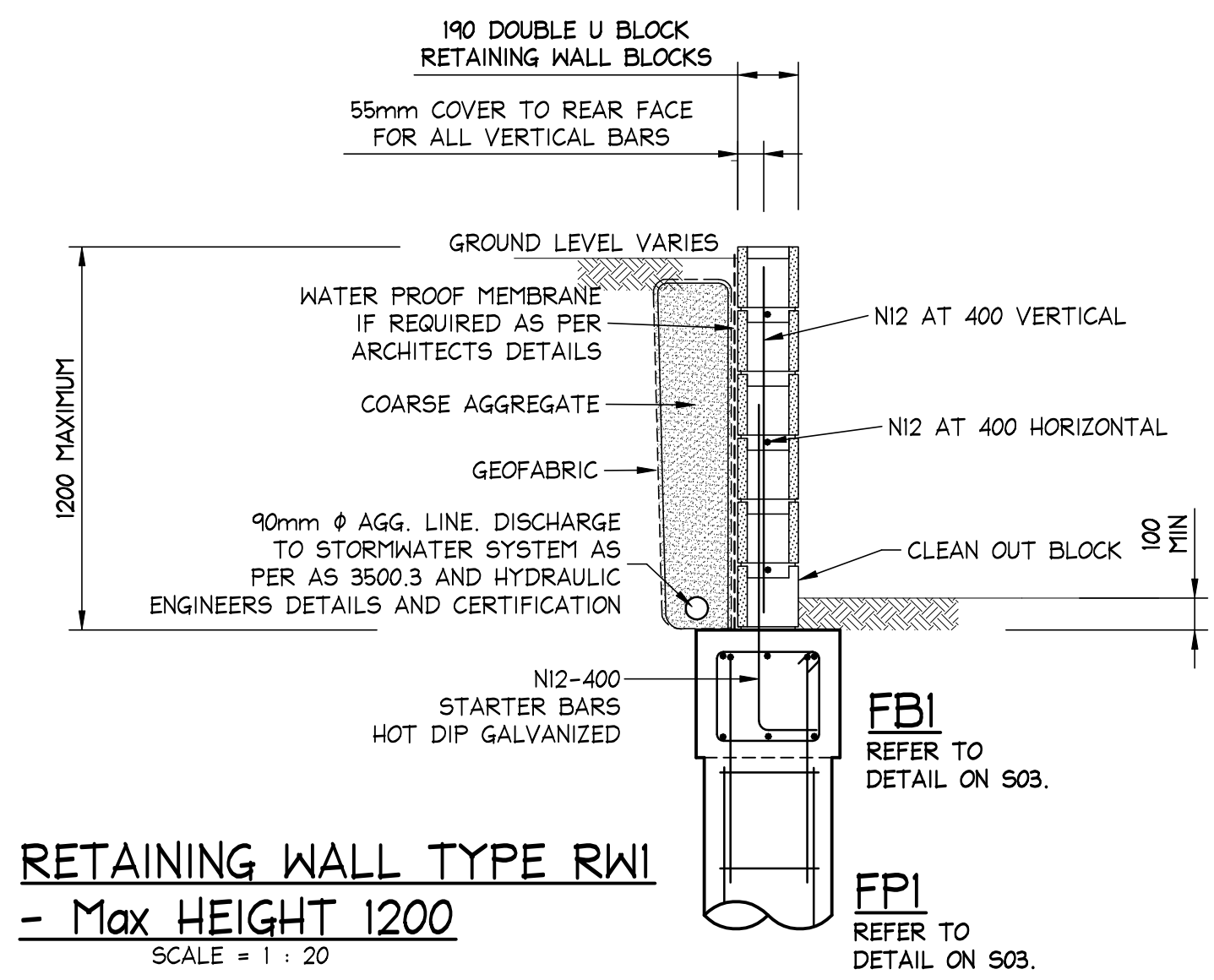


RETAINING WALL TYPE RW4
- Max HEIGHT 1200

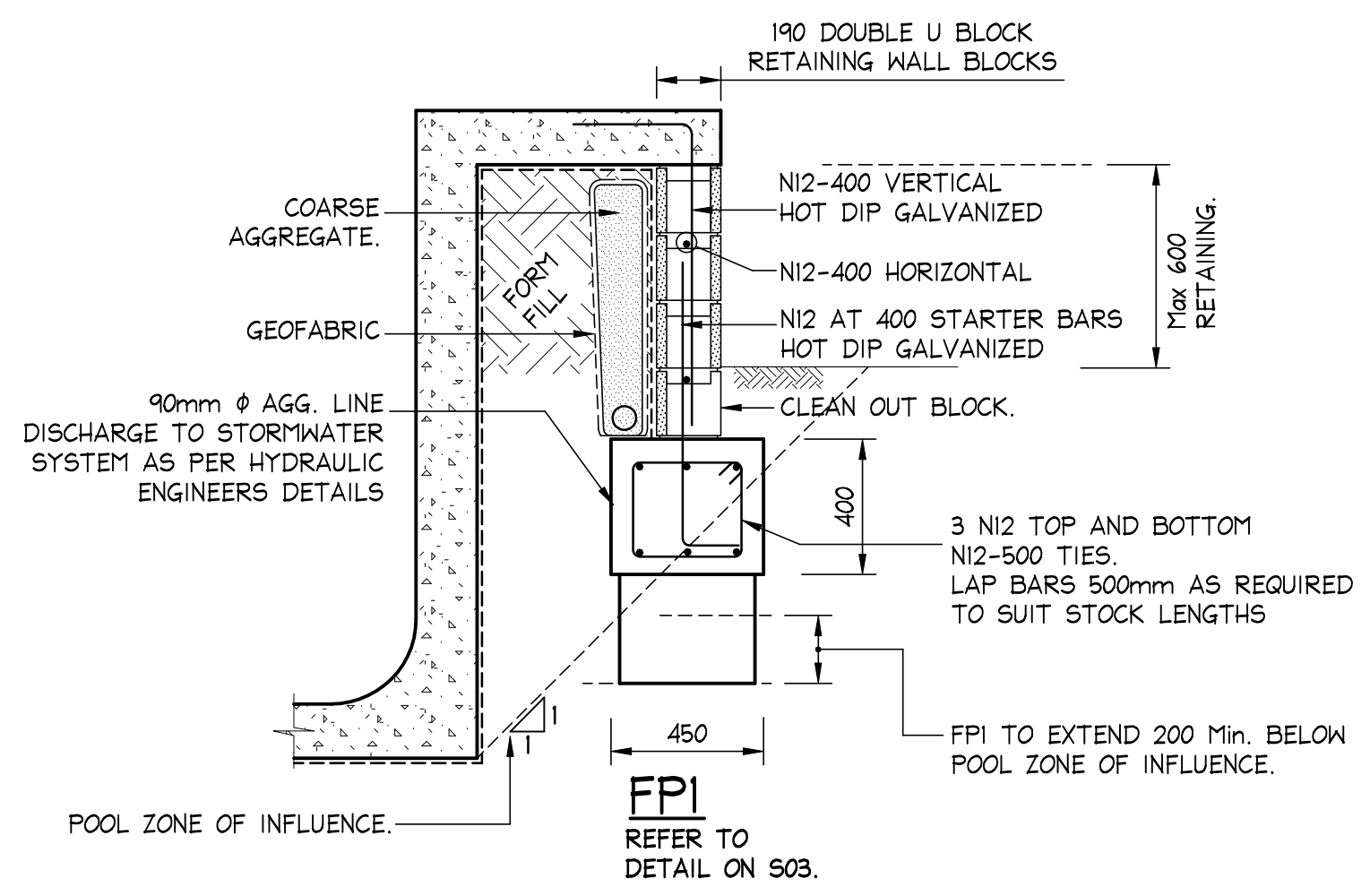
SECTION 1
SCALE = 1:20
S02

RW4 CONSTRUCTION PROCEDURE

1. PROP DEFECTIVE BOUNDARY WALL TO PREVENT COLLAPSE - BR1.
2. BUILD NEW FOOTING.
3. RELOCATE BRACING BR1 TO BR2 LOCATION.
4. PROGRESSIVELY BACKFILL AND REMOVE BR2.
5. DISMANTLE TOP COURSES OF EXISTING WALL ABOVE GROUND LEVEL.



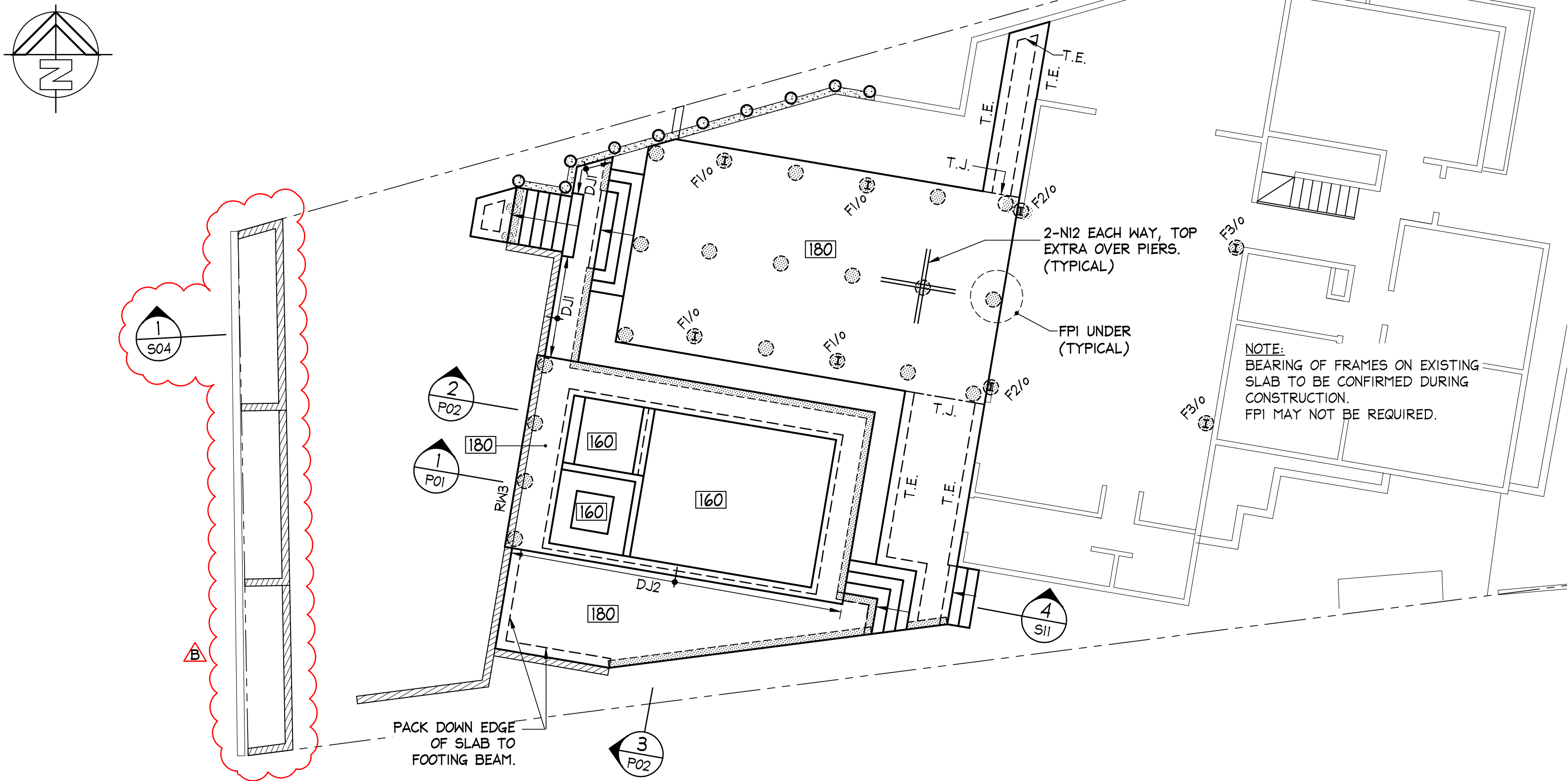
RETAINING WALL TYPE RW1
- Max HEIGHT 1200
SCALE = 1 : 20



RETAINING WALL TYPE RW2
SCALE = 1 : 20

IF IN DOUBT ASK

					DOCUMENT CERTIFICATION Date: 08.08.2024  Stewart McGeady BE(Civil), MIEAust., PDP, PRE, DEP. (Director NB Consulting Engineers) The copyright of this drawing remains with NB Consulting Engineers	 NB Consulting Engineers STRUCTURAL - CIVIL - STORMWATER - REMEDIAL A.C.N. 076 121 616 A.B.N. 24 076 121 616 Sydney: Ph: (02) 9984 7000 Suite 207, 30 Fisher Road Dee Why N.S.W. 2099 Gold Coast: Ph: (07) 5631 4744 Suite 1, 30B Griffith Street, Coolangatta QLD 4225 E: nb@nbconsulting.com.au W: www.nbconsulting.com.au	Architect:	Project:	Date:	Design:	Drawn:						
								SPACE LANDSCAPE DESIGNS	ALTERATIONS AND ADDITIONS 4 ELWYN CLOSE, MONA VALE	JUNE '23	IV	NP					
2024-08-08	B	RW4/SECTION AMENDED		NP			NC	Client:	Drawing Title:	Job No:	Drawing No:	Issue:					
2023-07-17	A	ISSUED FOR CONSTRUCTION		NP			NC						SEAN AND EMMA McGUINNESS	FOOTING AND RETAINING WALL DETAILS	2301101	S04	B
Date:	Issue:	Description:		By:			Review:										



SLAB AND SWIMMING POOL PLAN

SCALE = 1:100

LEGEND:

180 - DENOTES 180 THICK SUSPENDED SLAB REINFORCED WITH SL82 MESH TOP AND BOTTOM.

160 - DENOTES THICKNESS OF SPA AND POOL BASE. REFER TO SECTIONS FOR DETAILS

110 - 110mm THICK SLAB ON GRADE REINFORCED WITH SL92 MESH TOP.

T.E - DENOTES THICKENED EDGE. REFER TO DETAIL ON S11.

T.J - DENOTES TOOLED JOINT. REFER TO DETAIL TO S11.

DJI, DJ2 - DENOTES N16-600 GALVANISED DOWELS. REFER TO DETAIL.

F1, F2, F3 - DENOTES STEEL PORTAL FRAMES. REFER TO DETAILS ON S21.

RW3 - DENOTES 190 REINFORCED BLOCKWORK RETAINING WALL. REFER TO DETAIL ON P02.

----- DENOTES LOAD BEARING WALLS BELOW.

NOTES:

CONCRETE STRENGTH

INTERNAL SLABS:

f'c = 32 MPa, COVER = 30 mm

EXTERNAL SLABS:

f'c = 40 MPa, COVER = 45 mm

NOTES:

- FINISHES, FLASHING AND WATERPROOF MEMBRANES AS PER ARCHITECTS DETAILS
- FINISHED FLOOR LEVELS (FFL) AND THICKNESS OF FLOOR FINISH TO BE CONFIRMED WITH ARCHITECT.
- ANY REINFORCED CONCRETE SLAB THAT IS DESIGNED IN ACCORDANCE WITH AUSTRALIAN STANDARDS IS SUSCEPTIBLE TO SHRINKAGE CRACKING DUE TO THE NATURE OF THE HYDRATION PROCESS INVOLVED IN CURING. A CERTAIN LEVEL OF CRACKING IS THEREFORE CONSIDERED ACCEPTABLE IN THE STANDARDS. CONSEQUENTLY IF A CRACK FREE SURFACE IS NECESSARY THEN A PROPRIETARY TOPPING SYSTEM SHOULD BE CONSIDERED.
- CAST IN-SITU SLABS TO BE POLISHED: ALLOW ADDITIONAL THICKNESS IN SLAB AND EXTRA COVER TO REINFORCEMENT TO SUIT REAMING DEPTH FOR POLISHING (APPROXIMATE 10 TO 15mm REAMING DEPTH). REAMING DEPTH AND EXTENT OF POLISHED CONCRETE TO BE CONFIRMED WITH ARCHITECT.
- IF FLOOR FINISH IS T & G FLOOR ON BATTENS USE 40 MPa CONCRETE FOR SLAB. ALLOW TO CURE FOR 28 DAYS PRIOR TO LAYING FLOORING. LEAVE FLOOR BOARDS OVERTURNED AND IN POSITION FOR 6 WEEKS PRIOR TO TURNING AND FIXING INTO POSITION.

NOTES:

- BUILDER TO CONFIRM ALL DIMENSIONS ON SITE WITH ARCHITECT AND OWNER PRIOR TO COMMENCING CONSTRUCTION.
- FOR ALL POOL SKIMMER BOX, LIGHTS, DIMENSIONS, STEPS AND GENERAL LAYOUT REFER TO OWNER AND ARCHITECT FOR DETAILS.
- POOL OVERFLOW TO DISCHARGE TO SEWER. DETAILS BY OTHERS.

NOTES:

- THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION IF THE ISSUE DATE PRECEDES THE ISSUE DATE ON THE ARCHITECTURAL DRAWINGS.
- DO NOT SCALE FROM THIS DRAWING.
- ALL DIMENSIONS ARE TO BE VERIFIED ON SITE BY THE BUILDER BEFORE COMMENCING WITH ASSOCIATED WORK.
- FOR GENERAL NOTES REFER TO DRAWING NUMBER: S01.

CONCRETE POOL NOTES:

REINFORCEMENT:

All welded fabric shall be lapped as follows:

- 300mm minimum lap.
 - 50mm minimum concrete cover.
- Mild steel rods denoted S12 are 12mm diameter 250S Grade deformed bars.
- 450mm minimum lap.
 - 65mm minimum concrete cover.

Reinforcement to be held in its correct position at 800mm centres.

CONCRETE:

All workmanship and materials shall be carried out in accordance with AS 3600. Concrete design strength (f'c) at 28 days to be : 32 MPa.

FOUNDATION:

Piers to be provided as directed by the Engineer if rock or filled ground is encountered when the pool is excavated.

CONCRETE COVER:

Concrete placed in contact with the (excavation) ground to have 65mm minimum cover to reinforcement. 65mm minimum cover to pool face.

DESIGN:

Pool design and construction to be in accordance with AS 2783 (1992) and all other relevant Australian Standards.

PIER NOTES:

If pool floor is partially founded on solid rock provide 400mm Ø concrete piers at 1800mm maximum centres to remainder of pool floor.

All piers to be founded on rock.

Piers up to 1.0m deep to be mass concrete.

Piers between 1.0m and 2.0m deep provide 4 S12 bars with R6 Ties at 300mm centres.

Any piers over 2.0m deep to Engineers detail.

For any internal piers under pool floor provide 3 S12 bars (1500mm long) at 300mm centres each way directly over piers to pool floor.

WASTE WATER:

Waste water from pool will be discharged into Sydney Water's Sewerage System. Details by others.

IF IN DOUBT ASK

DOCUMENT CERTIFICATION

Date: 08.08.2024

Stewart McGeady
BE(Civil), MIEAust., PDP, PRE, DEP.
(Director NB Consulting Engineers)

The copyright of this drawing remains with NB Consulting Engineers

NB Consulting Engineers

STRUCTURAL - CIVIL - STORMWATER - REMEDIAL
A.C.N. 076 121 616 A.B.N. 24 076 121 616

Sydney: Ph: (02) 9984 7000
Suite 207, 30 Fisher Road Dee Why N.S.W. 2099
Gold Coast: Ph: (07) 5631 4744
Suite 1, 30B Griffith Street, Coolangatta QLD 4225
E: nb@nbconsulting.com.au W: www.nbconsulting.com.au

Architect:

SPACE LANDSCAPE DESIGNS

Client:

SEAN AND EMMA McGUINNESS

Project:

ALTERATIONS AND ADDITIONS
4 ELWYN CLOSE, MONA VALE

Drawing Title:

SLAB AND SWIMMING POOL
PLAN AND DETAILS

Date:

JUNE '23

Design:

IV

Drawn:

NP

Job No:

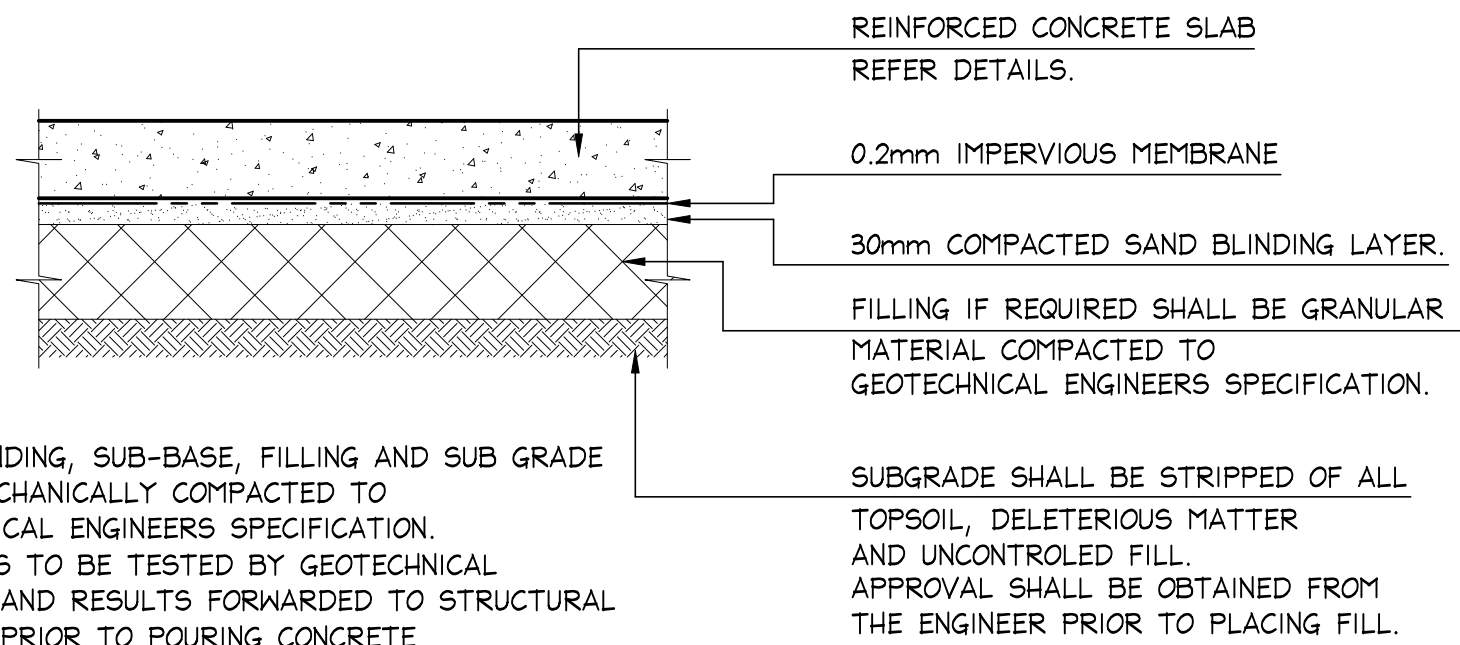
2301101

Drawing No:

S10

Issue:

B

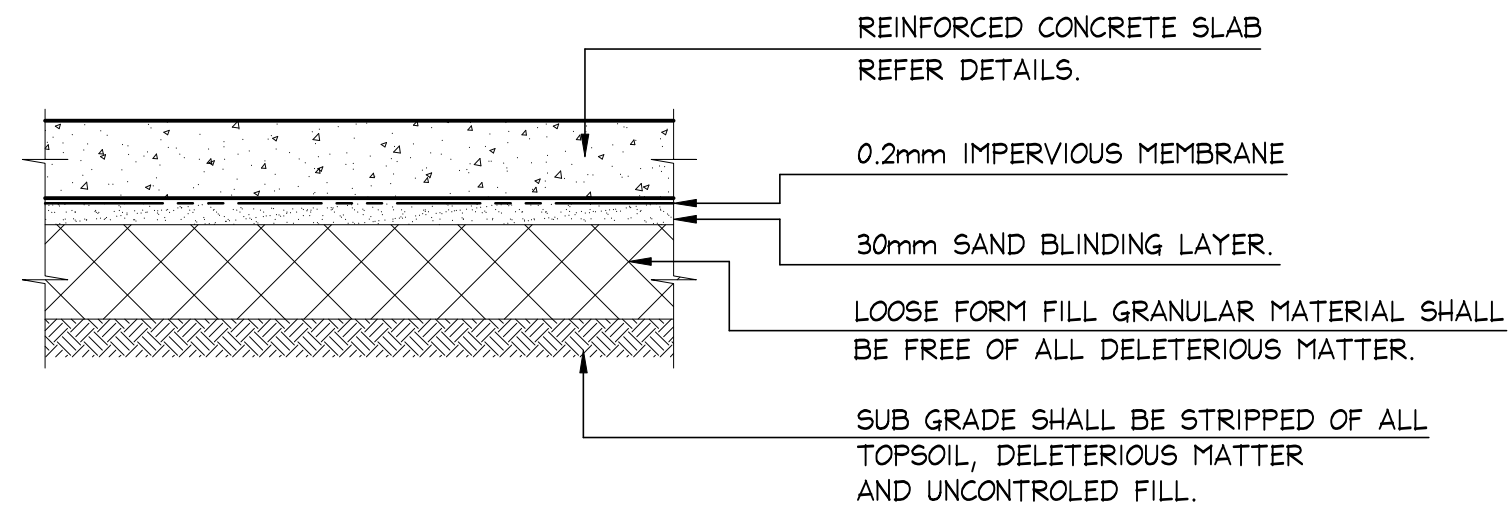


NOTE :

SAND BLINDING, SUB-BASE, FILLING AND SUB GRADE TO BE MECHANICALLY COMPACTED TO GEOTECHNICAL ENGINEERS SPECIFICATION. ALL AREAS TO BE TESTED BY GEOTECHNICAL ENGINEER AND RESULTS FORWARDED TO STRUCTURAL ENGINEER PRIOR TO POURING CONCRETE.

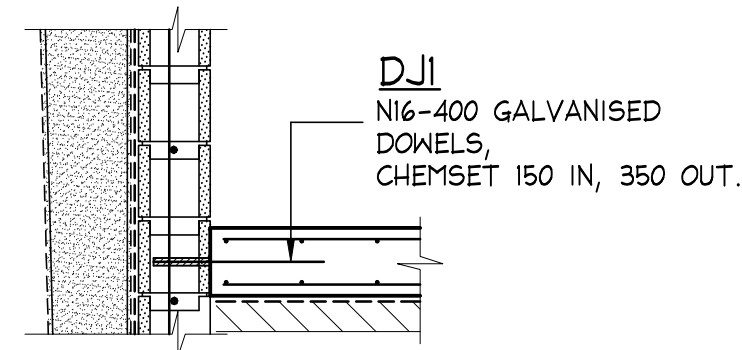
TYPICAL SLAB PREPARATION TYPE A SLAB ON GRADE

N.T.S.



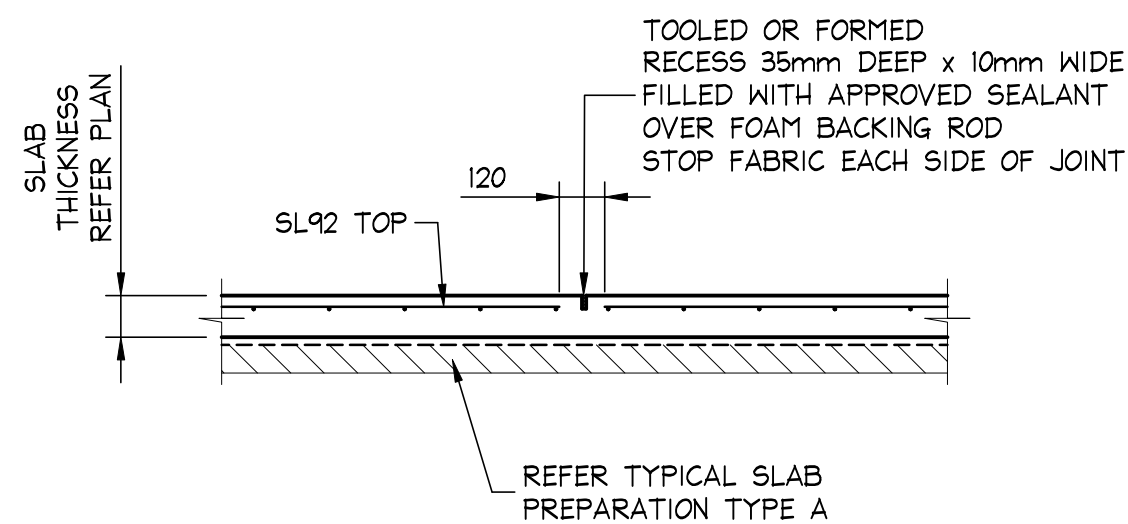
TYPICAL SLAB PREPARATION TYPE B SUSPENDED SLAB ON LOOSE FORM FILL

N.T.S.



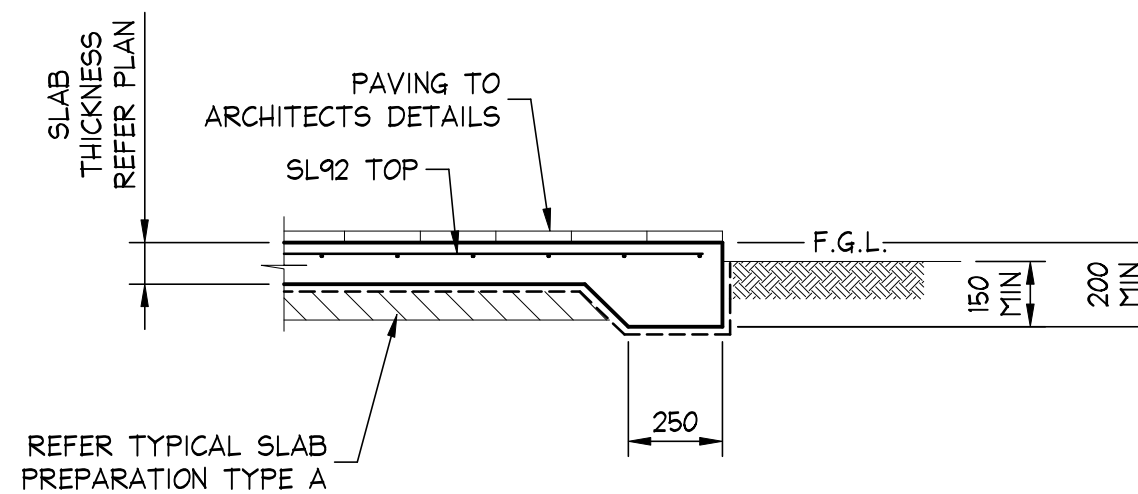
TYPICAL DOWEL JOINT DETAIL - DJI

SCALE = 1 : 20



TOOLED JOINT DETAIL DENOTED T.J. ON PLAN

SCALE = 1 : 20



THICKENED EDGE DETAIL DENOTED T.E. ON PLAN

SCALE = 1 : 20

NOTES:

1. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION IF THE ISSUE DATE PRECEDES THE ISSUE DATE ON THE ARCHITECTURAL DRAWINGS.
2. DO NOT SCALE FROM THIS DRAWING.
3. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE BY THE BUILDER BEFORE COMMENCING WITH ASSOCIATED WORK.
4. FOR GENERAL NOTES REFER TO DRAWING NUMBER: S01.

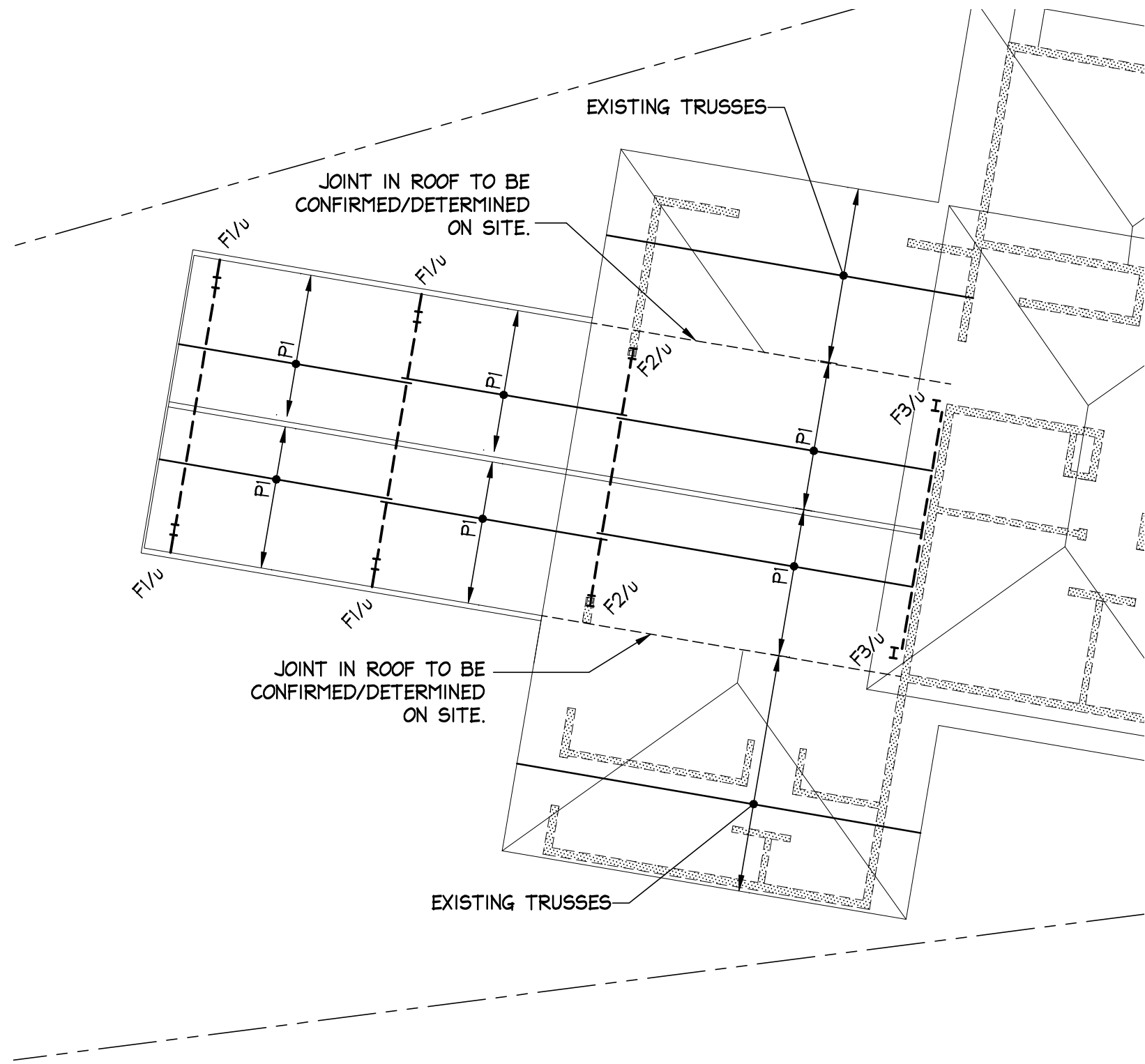
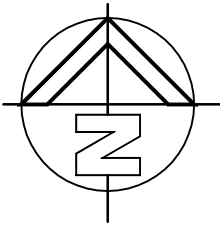
Scale check - 100mm when printed to scale

A2

IF IN DOUBT ASK

																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										</
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	----

NB Consulting Engineers



ROOF PLAN
SCALE = 1:100

LEGEND:

- /u - DENOTES MEMBERS UNDER.
- F1, F2, F3 - DENOTES STEEL PORTAL FRAMES. REFER TO DETAILS ON S21.
- PI - DENOTES 20015 'C' PURLINS AT 600 CT.

NOTE:

LOCATION AND SETOUT OF STRUCTURAL STEEL AND TIMBER MEMBERS SHOWN ON THIS DRAWING IS DIAGRAMMATIC ONLY. DIMENSIONAL SETOUT AND ALIGNMENT OF ALL STRUCTURAL STEEL AND TIMBER MEMBERS SHOWN ON THIS DRAWING IS TO BE AS PER ARCHITECTS DRAWINGS.

NOTES:

- THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION IF THE ISSUE DATE PRECEDES THE ISSUE DATE ON THE ARCHITECTURAL DRAWINGS.
- DO NOT SCALE FROM THIS DRAWING.
- ALL DIMENSIONS ARE TO BE VERIFIED ON SITE BY THE BUILDER BEFORE COMMENCING WITH ASSOCIATED WORK.
- FOR GENERAL NOTES REFER TO DRAWING NUMBER: S01.

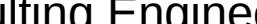
NOTES:

ALL STEELWORK CORROSION PROTECTION SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF THE CURRENT NCC BUILDING CODE OF AUSTRALIA IN PARTICULAR SECTION 3.4.4.2 AND TABLE 3.4.4.2 AND AS 4100. A FINAL SPECIFICATION OF A PROPRIETARY TYPE COATING SYSTEM SHALL BE PREPARED TO EITHER:
AS/NZS 2312.1 - PART 1 - PAINT COATINGS
AS/NZS 2312.2 - PART 2 - HOT-DIP GALVANIZING.
ALL STEELWORK INCLUDING FIXING BRACKETS, BOLTS, SCREWS, NAILS ETC IN CONTACT WITH TREATED PINE TO HAVE A SUITABLE COATING TO PREVENT CORROSION CAUSED BY CONTACT WITH TREATED PINE.
NOTE: NORTHERN BEACHES CONSULTING ENGINEERS CAN LEND ASSISTANCE TO THE PROJECT SPECIFIER ON STEELWORK PROTECTION BUT DO NOT WARRANT OR CERTIFY THE DURABILITY OF ANY STEELWORK BY PROPRIETARY PAINT COATING SYSTEMS OR HOT-DIPPED GALVANIZING.

Scale check - 100mm when printed to scale

A2

IF IN DOUBT ASK

						DOCUMENT CERTIFICATION Date : 21.07.2023  Stewart McGeady PER BE(Civil), MIEAust., PDP, PRE, DEP. (Director NB Consulting Engineers) The copyright of this drawing remains with NB Consulting Engineers	NB Consulting Engineers STRUCTURAL - CIVIL - STORMWATER - REMEDIAL A.C.N. 076 121 616 A.B.N. 24 076 121 616 Sydney: Ph: (02) 9984 7000 Suite 207, 30 Fisher Road Dee Why N.S.W. 2099 Gold Coast: Ph: (07) 5631 4744 Suite 1, 30B Griffith Street, Coolangatta QLD 4225 E : nb@nbconsulting.com.au W : www.nbconsulting.com.au	Architect:	SPACE LANDSCAPE DESIGNS	Project:	ALTERATIONS AND ADDITIONS 4 ELWYN CLOSE, MONA VALE		Date:	Design:	Drawn:																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												

NB Consulting Engineers

SCALE = 1 : 20

SCALE = 1 : 20

SCALE = 1 : 20

SCALE = 1 : 20

NOTES:

1. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION IF THE ISSUE DATE PRECEDES THE ISSUE DATE ON THE ARCHITECTURAL DRAWINGS.
2. DO NOT SCALE FROM THIS DRAWING.
3. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE BY THE BUILDER BEFORE COMMENCING WITH ASSOCIATED WORK.
4. FOR GENERAL NOTES REFER TO DRAWING NUMBER: S01.

SECTION 1
SCALE = 1:20 P01

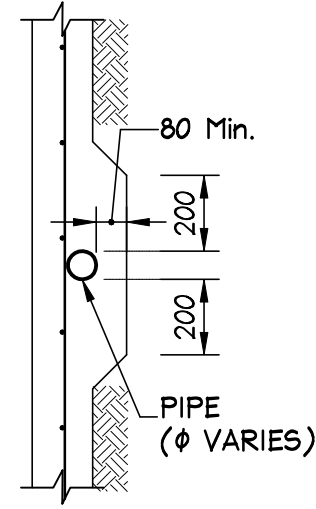
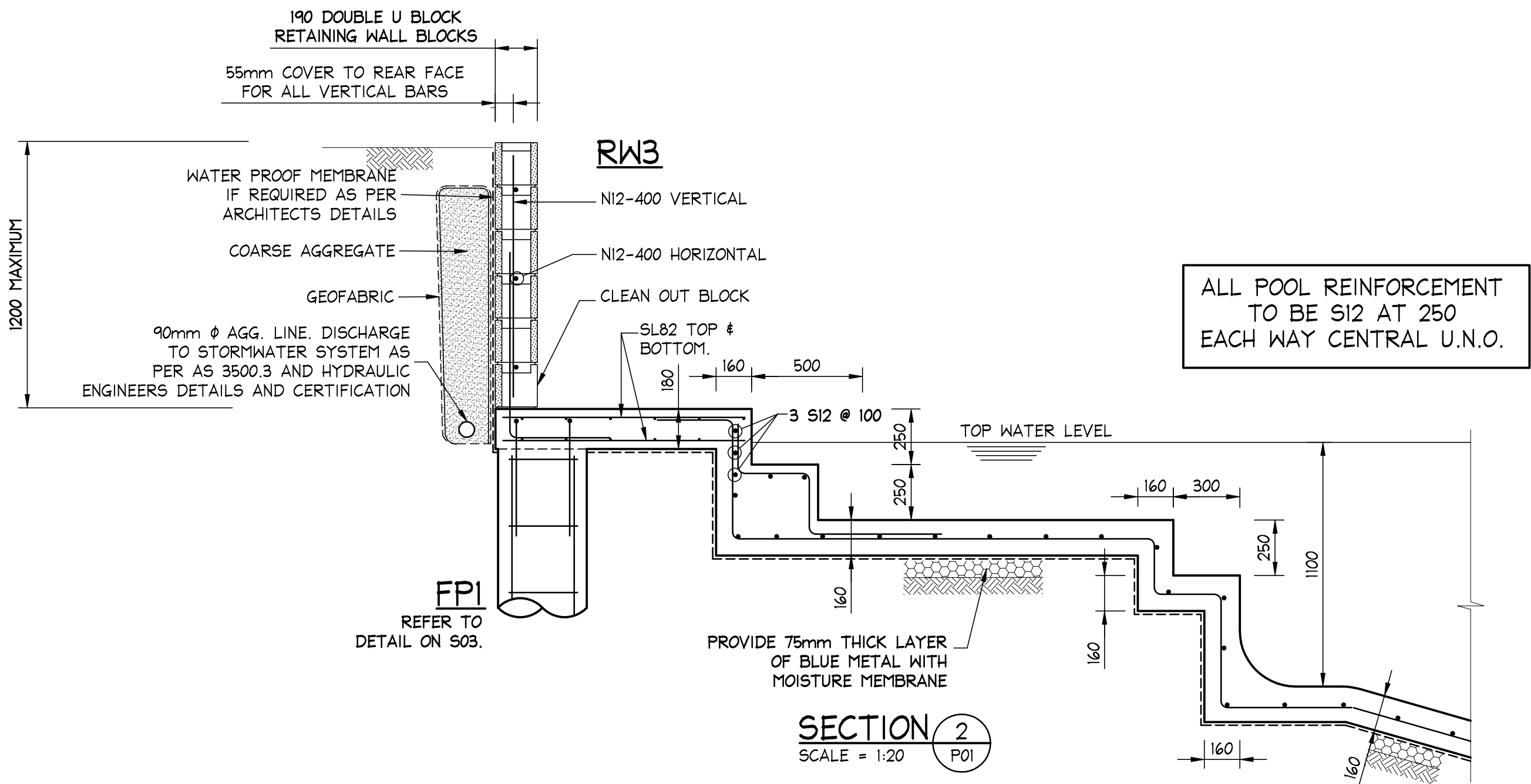
Scale check - 100mm when printed to scale -

A2

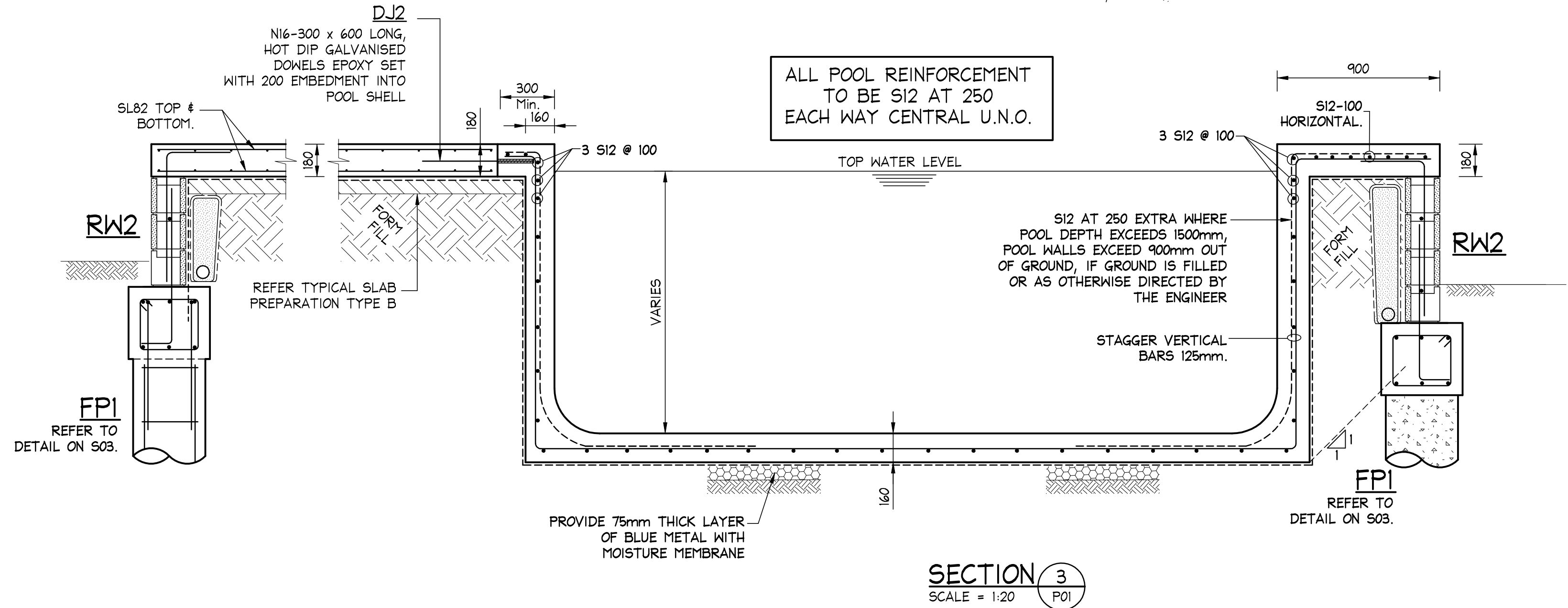
IF IN DOUBT ASK

[illegible]

- NOTES:**
- 1. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION IF THE ISSUE DATE PRECEDES THE ISSUE DATE ON THE ARCHITECTURAL DRAWINGS.
 - 2. DO NOT SCALE FROM THIS DRAWING.
 - 3. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE BY THE BUILDER BEFORE COMMENCING WITH ASSOCIATED WORK.
 - 4. FOR GENERAL NOTES REFER TO DRAWING NUMBER: S01.



TYPICAL PIPE IN POOL SHELL DETAIL
SCALE = 1 : 20



Scale check - 100mm when printed to scale

A2

IF IN DOUBT ASK

DOCUMENT CERTIFICATION Date: 21.07.2023 Stewart McGeady BE(Civil), MIEAust., PDP, PRE, DEP. (Director NB Consulting Engineers) The copyright of this drawing remains with NB Consulting Engineers				NB Consulting Engineers STRUCTURAL - CIVIL - STORMWATER - REMEDIAL A.C.N. 076 121 616 A.B.N. 24 076 121 616 Sydney: Ph: (02) 9984 7000 Suite 207, 30 Fisher Road Dee Why N.S.W. 2099 Gold Coast: Ph: (07) 5631 4744 Suite 1, 30B Griffith Street, Coolangatta QLD 4225 E: nb@nbconsulting.com.au W: www.nbconsulting.com.au		Architect: SPACE LANDSCAPE DESIGNS Client: SEAN AND EMMA McGUINNESS	Project: ALTERATIONS AND ADDITIONS 4 ELWYN CLOSE, MONA VALE Drawing Title: SWIMMING POOL SECTIONS AND DETAILS - 2	Date: JUNE '23	Design: IV	Drawn: NP	Job No: 2301101	Drawing No: P02	Issue: A
Date: 2023-07-17	Issue: A	Description: ISSUED FOR CONSTRUCTION	By: NP	Review: NC									

NB Consulting Engineers