

Proposed Alterations & Additions  
HI NOON SKI CLUB  
12 BANJO DRIVE THREDBO NSW 2625

PRACTICAL ENGINEERING SOLUTIONS P/L



ACN 157 931 069

# STRUCTURAL DRAWING LIST

| SHEET NO | TITLE                             |
|----------|-----------------------------------|
| S01      | COVER                             |
| S02      | SPECIFICATIONS                    |
| S03      | FOOTING, ACCESS PATH & FLOOR PLAN |
| S04      | PATH LONG SECTION                 |
| S05      | FRAMING PLAN                      |
| S06      | SECTIONS                          |

PRACTICAL ENGINEERING  
SOLUTIONS P/L

ABN 67 157 931 069

**Structural &  
Project Management ENGINEERS**

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**Drawing Name:**

Proposed Alterations & Additions  
HI NOON SKI CLUB  
12 BANJO DRIVE THREDBO NSW  
2625

**Client:**

HI NOON SKI CLUB

Structural Sheet No. S01 of 6

Scale: NTS  
Date: 15.07.2024  
Drawing No: 20230727A  
COVER PAGE

Sheet Size: A3  
Designed: O Boaru  
Drawn: A Sferle  
Checked: O Boaru

**Approved:**

Ovi Boaru MIEAust CPEng

| ISSUE | DATE     | AMENDMENT | INITIALS |
|-------|----------|-----------|----------|
| V1    | 08.08.24 | FOOTPATH  | OB       |
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All workmanship and materials to conform with latest edition of the Building Code of Australia and relevant Australian Standards.

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Refer to specification for other relevant information details.

**NOTES:**

1. All workmanship and materials to conform with the latest edition of the building code of Australia and relevant Australian standards.
2. It is not implied or guaranteed that all structural designs and details shown in these plans are complete. The scope of the work has been determined by the Engineer based on the information supplied by the client or the clients consultants. The Engineer will provide further designs if required, but is not responsible for any associated cost where design details have not been specifically requested.
3. All dimensions on these plans should be checked on site by the builder and verified using Architectural plans and other contract documents. Discrepancies to be referred to the Architect or Engineer.
4. **DO NOT SCALE FROM THESE DRAWINGS**
5. The structural details shown in these plans are applicable to the Architectural plans and building elements by TZ DESIGN Architect indicated therein:  
 Plans No. - 353 revision E  
 Plan date - 09.01.23  
 Roof Structure -  
 Wall Structure -  
 Floor Structure - BEARERS & JOISTS
6. Reference to UNO = Unless Noted Otherwise & NA = Not Applicable.
7. Handrail construction to BCA requirements. NA
8. Where disturbed existing building must have bracing and tie-down investigated by the builder and referred to the Engineer for compliance checking.

**SITE CONDITIONS:**

1. Stability/Vegetation - NA
2. Drainage - NA
3. Soil Type/profile - NA
4. AS2870 - 2011 site classification - Class 'P' See geotech report
5. AS4055 - 2012 wind classification N3 40m/s (Vh,u).
6. AS1170.3 - 2003 Ultimate Ground Design 1 / 150 Snow Load AT Thredbo - 9.3 KPa

**CONCRETE:**

1. All concrete works to be in accordance with AS3600 2001
2. Concrete strength cover and durability details (refer AS3600)  
 Footings - 32 MPa  
 Internal Slab Garage -25MPa  
 External Slab - 40 MPa (or 20MPa if weather proofed, ie tiling)  
 Beams/Columns - NA
3. All reinforcement to be adequately supported on bar chairs in correct positions.
4. Concrete to be formed as required by AS3610 and compacted in accordance with AS3600 and AS3610 to achieve specified or relevant density durability and strength.
5. All reinforced fabric to be lapped one mesh panel plus 25mm and reinforcement bars lapped 40 bar diameters, UNO.

**FOOTINGS:**

1. Footings and slabs on ground designs conform with AS 2870-2011.

**MASONRY:**

1. All masonry (clay, stone and concrete) to comply with AS3700 2011. masonry code.
2. Masonry control joints to AS3700.
3. Core fill grout mix for hollow block fill to be 20 MPa.

**TIMBER:**

1. All timber construction to comply with Australian Framing Code AS1684.2 - 2010.
2. Bracing and tie down as shown on These Sheets comply with AS 1684.2-2010.
3. For external use, use Class 1 or Class 2 HW or Treated Timbers.

**STEEL:**

1. All steel construction to comply with AS4100 steel structures code and AISC Connection Details.

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**Client:**

HI NOON SKI CLUB

**Structural Sheet No. S02 of 6**

**Scale:** NTS  
**Date:** 15.07.2024  
**Drawing No:** 12.07.2024  
 COVER PAGE

**Sheet Size:** A3  
**Designed:** O Boaru  
**Drawn:** A Sferle  
**Checked:** O Boaru

**Approved:**



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SECURE BR1 & BR1a TO PB3 & PB4

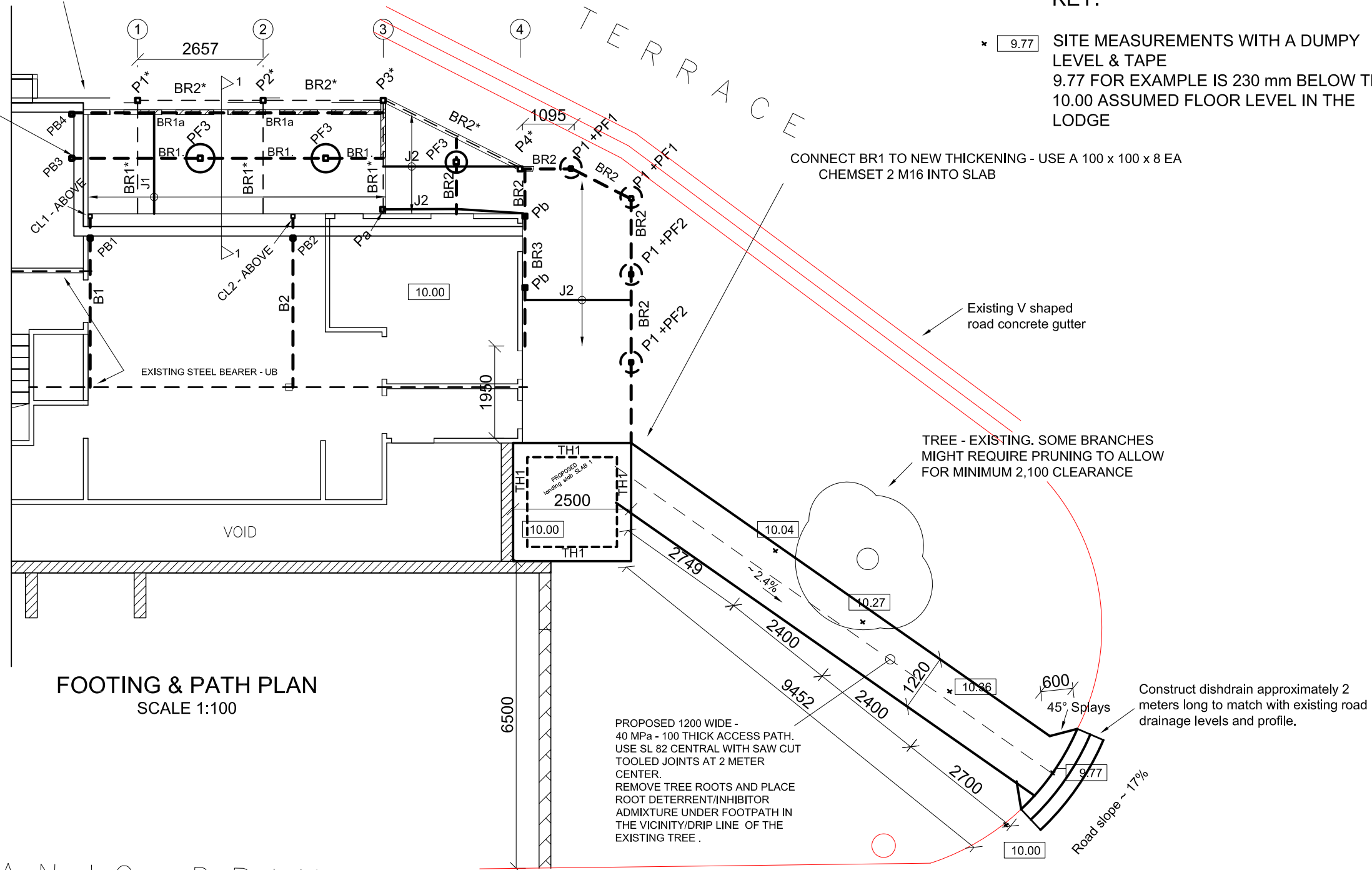
BOLT BR1a TO EXISTING TIMBER STUD WALL AND EXISTING P1\* - WITH MIN 2 M12 BUILDER TO COREFILL THE CORNER OF THE BESSER BLOCK BELOW, REINSTATE THE CURRENT DISCONTINUOUS M12 TIE DOWN ROD AND STRENGTHEN EXISTING WALL SUPPORTS AS NECESSARY. BUILDER TO ENGAGE ENGINEER AND CONFIRM FINAL UPGRADE AND CONNECTION METHODS ONCE CLADDING IS REMOVED.

\* THIS REPORT HAS USED INFORMATION FROM ASSETGEOENVIRO GEOTECHNICAL INVESTIGATION REPORT - REF 7404-R1 DATED 18 NOVEMBER 2023 - SITE CLASSIFICATION 'P'.

KEY:

\* 9.77 SITE MEASUREMENTS WITH A DUMPY LEVEL & TAPE  
9.77 FOR EXAMPLE IS 230 mm BELOW THE 10.00 ASSUMED FLOOR LEVEL IN THE LODGE

LINE OF HOLLOW - 200 SERIES BESSER BLOCK BELOW - SEE SECTION 1-1



FOOTING & PATH PLAN  
SCALE 1:100

BANJO DRIVE

| SYMBOL     | SPECIFICATION  | MAX SPAN |
|------------|--|----------|
| BR1        | 100 x 5.0 SHS SUPPORTED ON 89 x 5.0 SHS POSTS              | 2.60 m   |
| BR1a       | 100 x 5.0 SHS SUPPORTED BETWEEN EXISTING BR*               | 2.60 m   |
| BR2        | 100 x 5.0 SHS SUPPORTED ON 89 x 5.0 SHS POSTS              | 2.30 m   |
| BR3        | 100 x 8 EA or 100 x 5.0 SHS BEARER                         | 1.6 m    |
| P1, P2, P3 | 75 x 5.0 SHS - 4 M12 TO FOOTING                            | -        |
| Pa, Pb     | 75 x 3.0 SHS - 2 M12 TO EXISTING FOOTING.                  | -        |
| PB1 - PB2  | 75 x 6.0 SHS - 2 M12 TO EXISTING FOOTING.                  | -        |
| PB3 - PB4  | 75 x 5.0 SHS - 2 M12 TO EXISTING FOOTING.                  | -        |
| B1, B2     | 180 PFC - SECURED TO EXISTING - SEE SECTION 1-1            | -        |
| P*         | EXISTING POSTS   | -        |
| BR*        | EXISTING BEARERS 125 x 75 x 3.0 SHS                        | -        |
| J1         | 190 x 45 F7 TP @ 450 CRS - 2 M12 TO BEARERS                | 2.4 m    |
| J2         | 100 x 50 x 2.0 RHS or 75 x 50 x 3.0 RHS @ 450 CRS - WELDED | 2.4 m    |

KEY:

- PF1 THROUGH TO PF4 - 450 Ø CONCRETE PIERS BORED 400 mm INTO 150 KPa NATURAL GROUND AND REINFORCED AS FOLLOWS: FOR PIERS BETWEEN 600 & 1 METER DEEP PROVIDE 2 N12 VERTICAL BARS CENTRAL REINFORCED  
\* FOR PIERS BETWEEN 1 AND 2 METERS - SOCKET PIERS 300 mm INTO DECOMPOSED GRANITE AND PROVIDE A CAGE OF 4 N12 WITH R6 @ 220 CRS IN EACH PIER. UNDER FOOTINGS EXTEND BARS TO TOP MESH.  
PF5 - 600 Ø BORED 400 INTO NATURAL GROUND AND REINFORCED AS PER PF1

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Client:  
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Structural Sheet No. S03 of 6

Scale: 1:100  
Date: 15.07.2024  
Drawing No: 20230727A  
FOOTING AND PATH PLAN

Sheet Size: A3  
Designed: O Boaru  
Drawn: A Sferle  
Checked: O Boaru

Approved:

*Boaru*

Ovi Boaru MIEAust CPEng

| ISSUE | DATE     | AMENDMENT | INITIALS |
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Client:  
HI NOON SKI CLUB

Structural Sheet No. S04 of 6

Scale: 12:20, 1:100  
Date: 15.07.2024  
Drawing No: 20230727A  
PATH LONG SECTION

Sheet Size: A3  
Designed: O Boaru  
Drawn: A Sferle  
Checked: O Boaru

Approved:



Ovi Boaru MIEAust CPEng

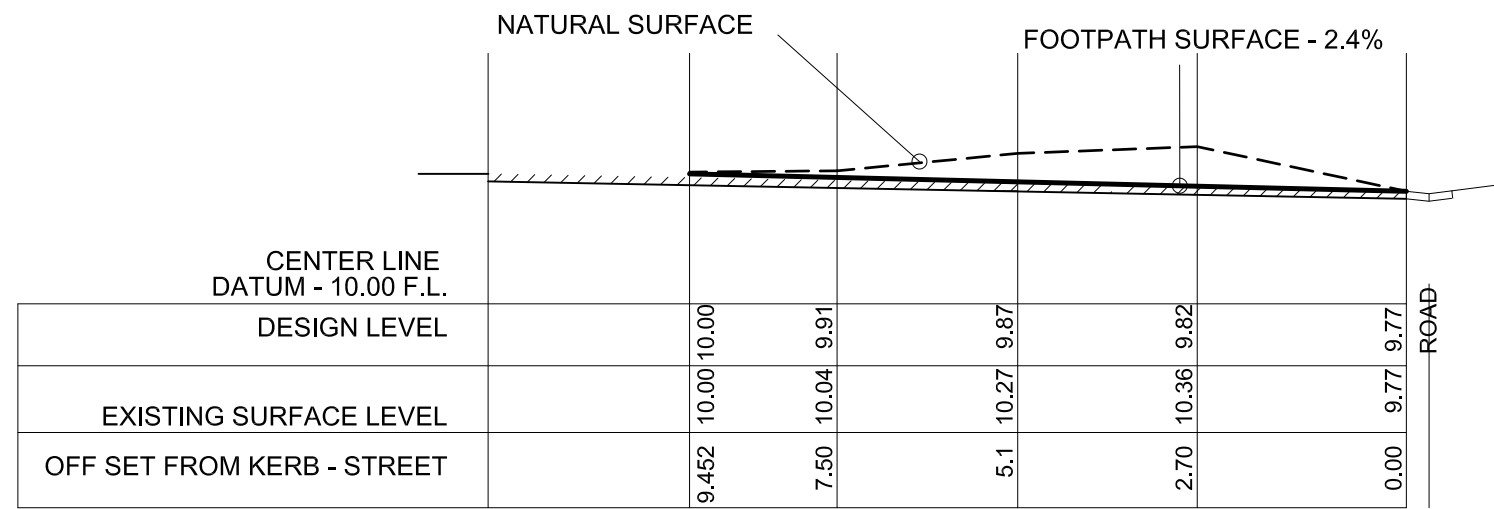
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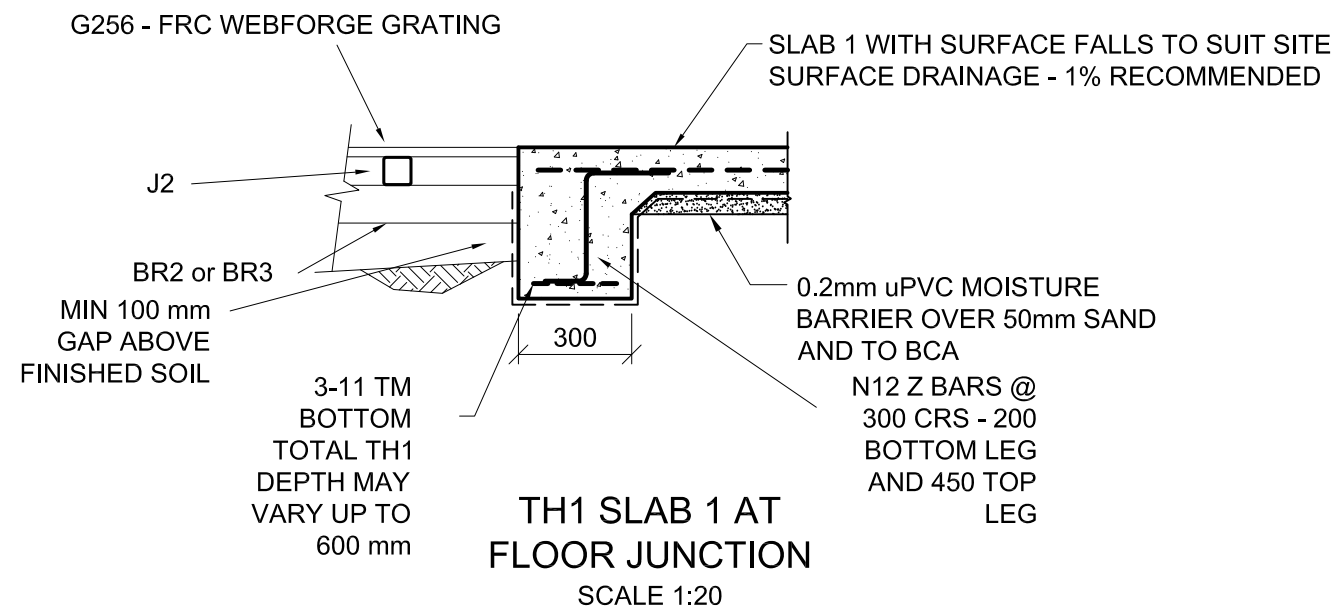
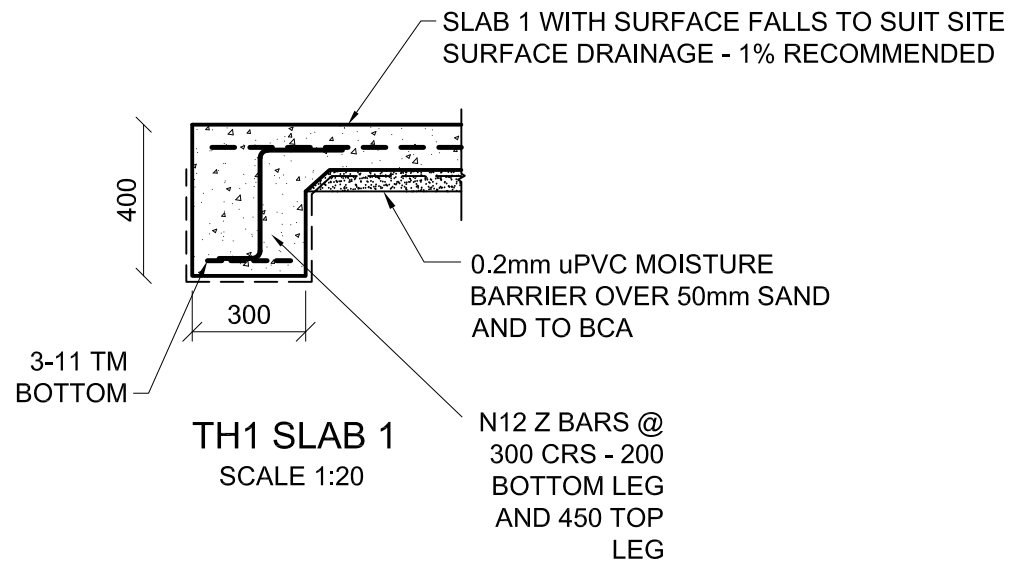
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PROPOSED FOOTPATH LONG SECTION ~  
2.1% GRADE  
SCALE 1:100



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2625

Client:

HI NOON SKI CLUB

Structural Sheet No. S05 of 6

Scale: 1:20, 1:100  
Date: 15.07.2024  
Drawing No: 20230727A  
FRAMING PLAN

Sheet Size: A3  
Designed: O Boaru  
Drawn: A Sferle  
Checked: O Boaru

Approved:

*Boaru*

Ovi Boaru MIEAust CPEng

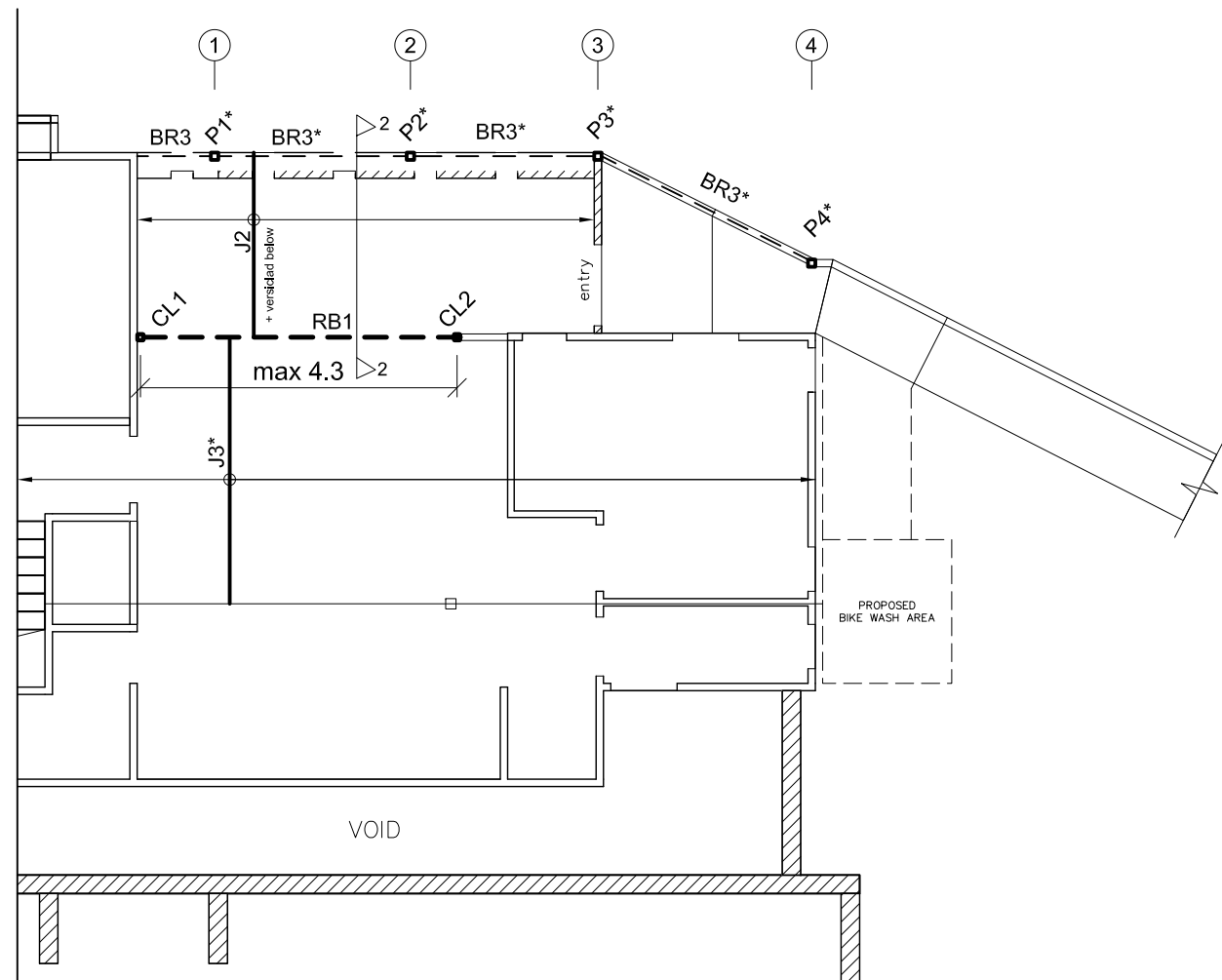
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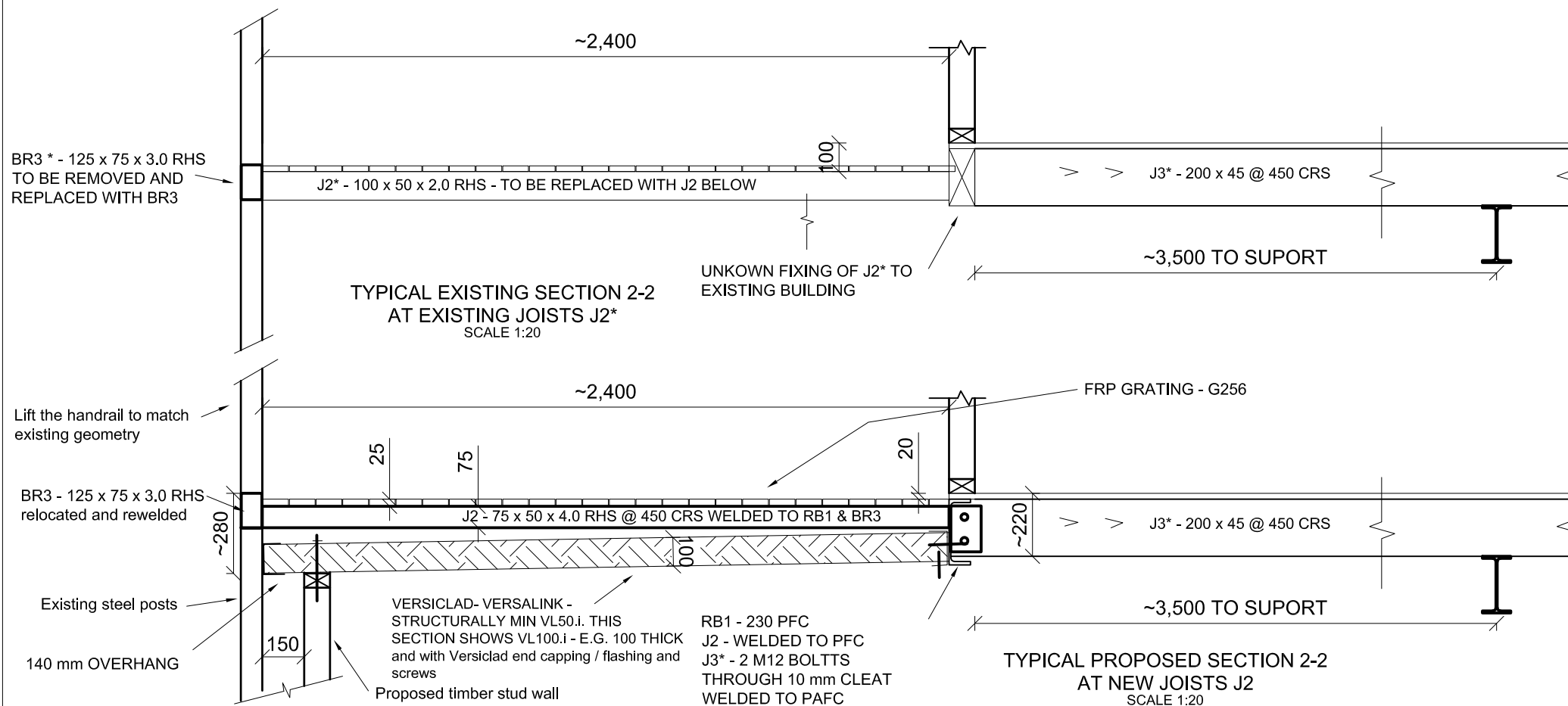
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FRAMING PLAN  
SCALE 1:100

| SYMBOL    | SPECIFICATION                    | MAX SPAN |
|-----------|----------------------------------|----------|
| RB1       | 230 PFC WELDED BETWEEN CL1 & CL2 | 4.3 m    |
| -         | -                                | -        |
| CL1 & CL2 | 89 x 6.0 SHS TO STEEL BEAM BELOW | -        |
| J*, BR*   | EXISTING STRUCTURE               | -        |
| -         | -                                | -        |
| -         | -                                | -        |



TYPICAL EXISTING SECTION 2-2  
AT EXISTING JOISTS J2\*  
SCALE 1:20

TYPICAL PROPOSED SECTION 2-2  
AT NEW JOISTS J2  
SCALE 1:20



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Client:  
HI NOON SKI CLUB

Structural Sheet No. S06 of 6

Scale: 1:20

Date: 15.07.2024

Drawing No: 20230727A

SECTIONS FLOOR

Sheet Size: A3

Designed: O Boaru

Drawn: A Sferle

Checked: O Boaru

Approved:



Ovi Boaru MIEAust CPEng

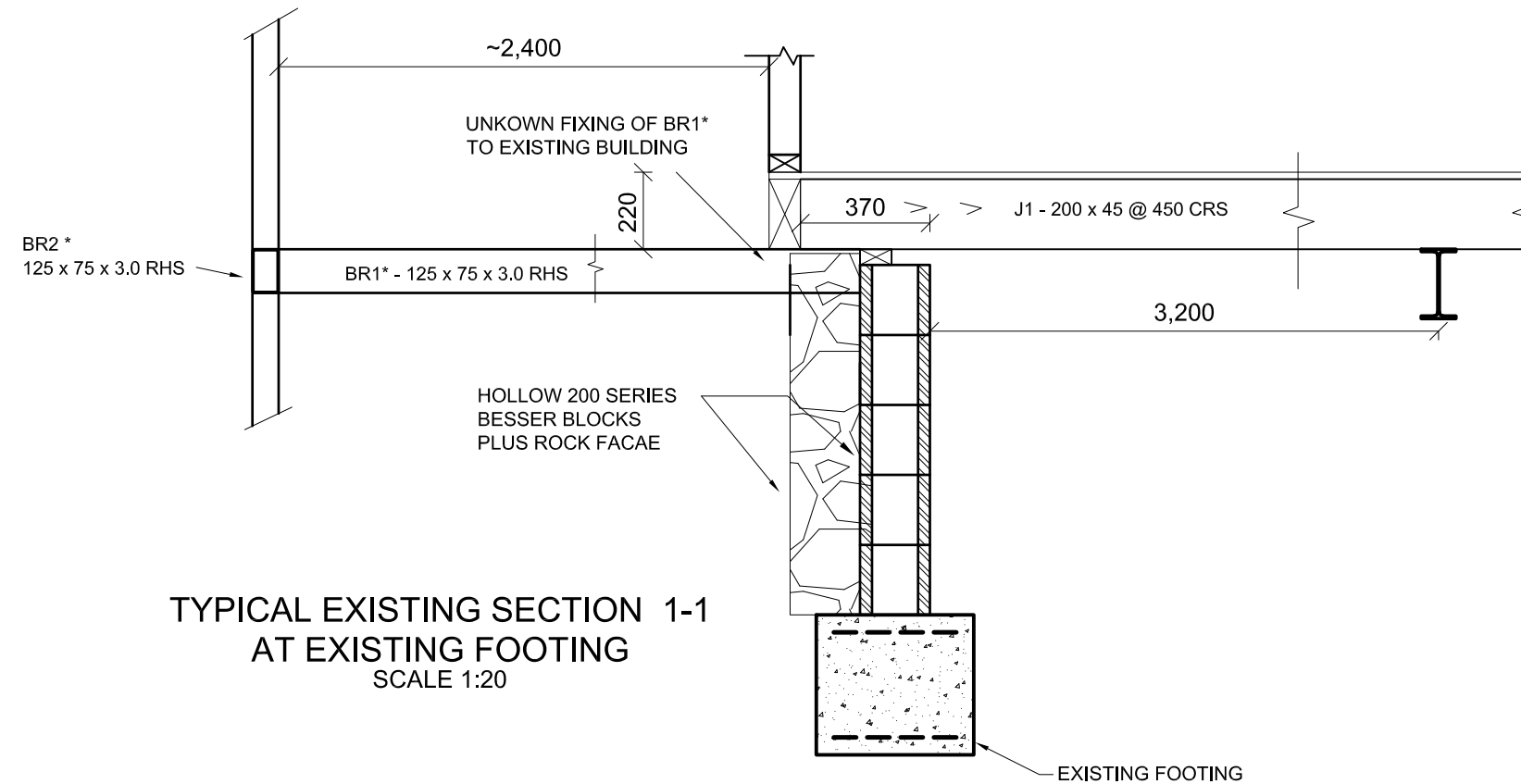
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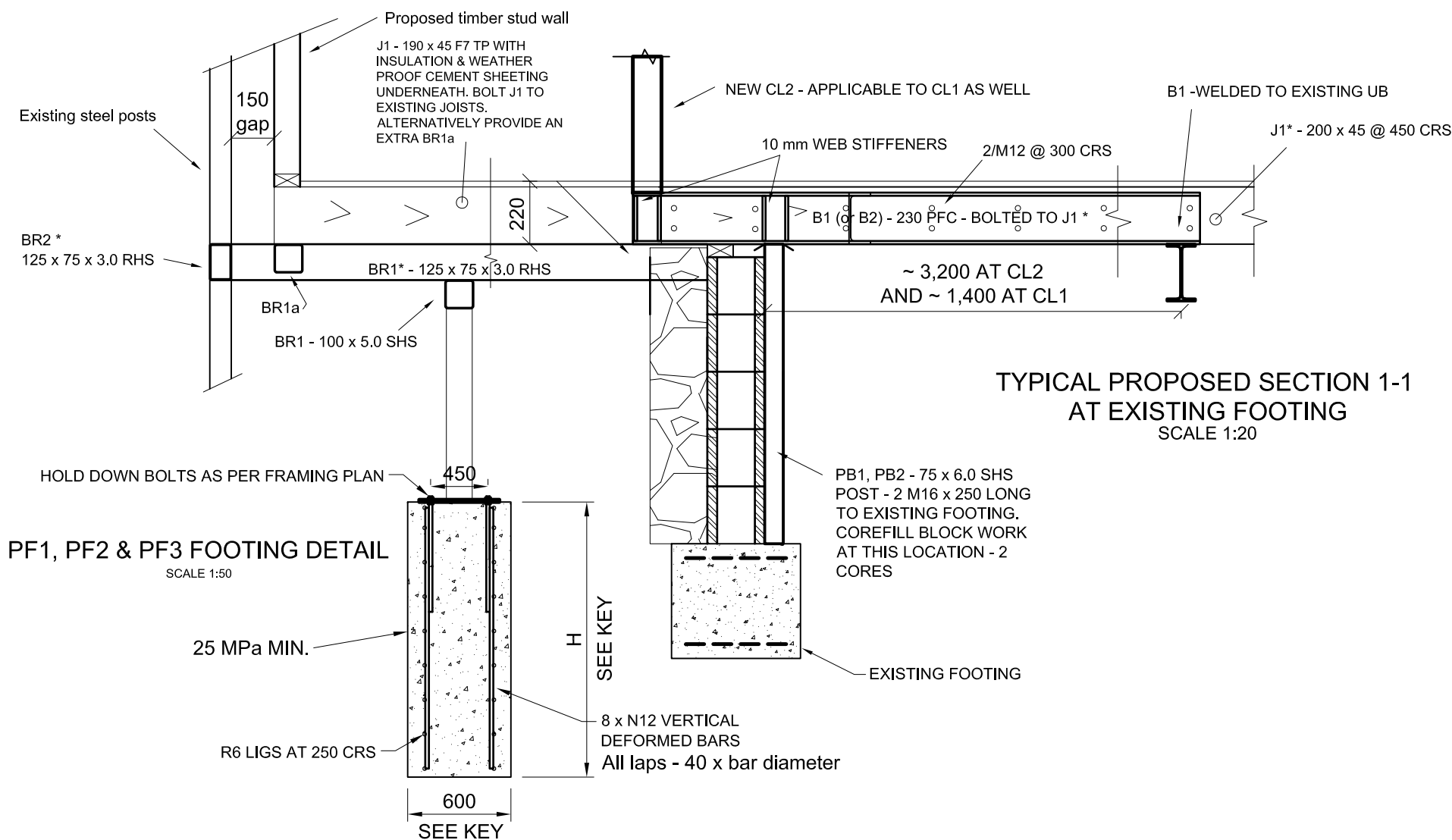
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TYPICAL EXISTING SECTION 1-1  
AT EXISTING FOOTING  
SCALE 1:20



TYPICAL PROPOSED SECTION 1-1  
AT EXISTING FOOTING  
SCALE 1:20

PF1, PF2 & PF3 FOOTING DETAIL  
SCALE 1:50

