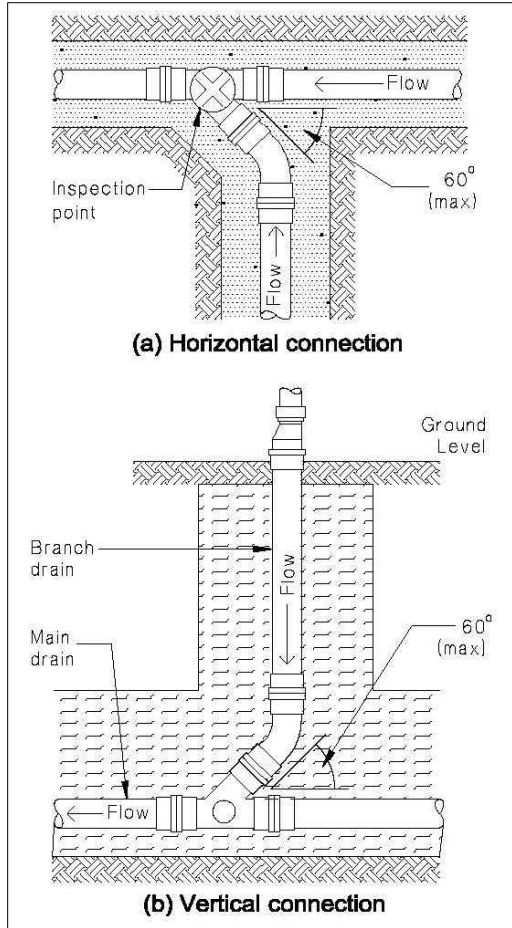


| SANITARY FIXTURE  | MIN PIPE DIA | MIN GRADE |
|-------------------|--------------|-----------|
| Basin             | 32mm         | 1:20      |
| Bath              | 40mm         | 1:40      |
| Washing Machine   | 40mm         | 1:40      |
| Kitchen Sink / DW | 50mm         | 1:40      |
| Laundry Sink & WM | 40mm         | 1:30      |
| Shower            | 40mm         | 1:40      |
| WC                | 100mm        | 1:60      |
| SEWER PIPE        | 100mm        | 1:60      |
| STORMWATER PIPE   | 100mm        | 1:120     |

All pipes in Concrete to have Denso Tape (synthetic fabric based tape impregnated and coated with organic petroleum based compounds) applied

Pipes shall incorporate expansion joints in accordance with Chapter 8 of NZS7643

Hot water pipes to be sized according to NZBC G12 & NZS 4305:1196.  
Mains Pressure: 15mm dia allows 12m max pipe length. Pipe length beyond this must be lagged



| FIXTURE     | MIN FLOW RATE/TEMP | PIPE DIA |
|-------------|--------------------|----------|
| Bath        | 0.3 at 45°C        | 15mm     |
| Sink        | 0.2 at 60°C (hot)  | 15mm     |
|             | 0.2 (cold)         | 15mm     |
| Laundry Tub | 0.2 at 60°C (hot)  | 15mm     |
|             | 0.2 (cold)         | 15mm     |
| Basin       | 0.1 at 45°C        | 10mm     |
| Shower      | 0.1 at 42°C        | 20mm     |

All drains that are to be laid at 1:120 to be laid with a verifiable leveling device

| PIPE DIAMETER    | MAXIMUM DISTANCE BETWEEN SUPPORTS (mm) |             |
|------------------|----------------------------------------|-------------|
|                  | VERTICAL PIPE                          | GRADED PIPE |
| 32 to 50         | 1000                                   | 500         |
| 65 to 100        | 1200                                   | 1000        |
| Greater than 100 | 1800                                   | 1200        |

Main Vent (MV) to terminate either:  
- 3.0m above ground level  
- 600mm above windows / openings  
- 150mm above roof  
- 600mm above eaves / parapets

VENT PIPES:  
Discharge Pipes upto 40mm dia = 32mm Vent Pipe  
Discharge Pipes over 40mm dia = 40mm Vent Pipe  
Main Drain Vent Pipe = 80mm Vent Pipe

Relief GT - top of GT to be 150mm below overflow level of lowest sanitary fixture.  
FGL around Relief GT to be no higher than 30.18 (30.25 if paved)

30.43 = FFL  
- 0.15 = Shower Recess to Top GT  
- 0.10 = Top GT to FGL  
30.18 = FGL

DPs:  
- 5 x DPs  
- Total Roof Area = 254.3m²

|                                                                        |                                        |                                                                                                                                                                             |                                                           |                                                                                                                                                                                                   |                                         |                                                     |
|------------------------------------------------------------------------|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-----------------------------------------------------|
| a . s . c . a . d .<br>limited<br>ascadltd@snap.net.nz<br>0272 838 775 | job title:<br><b>BADDOCK - LOT 115</b> | drawing title:<br><b>SERVICES PLAN</b><br>29/08/23 REV A - Levels updated<br>11/09/23 REV B - Notes updated<br>13/09/23 REV C - Notes updated<br>09/02/24 REV E - RWH added | legal description:<br><br>Lot 115<br>Townsend<br>RANGIORA | WORKING DRAWINGS<br>SUBJECT TO COUNCIL APPROVAL<br>ALL MEASUREMENTS TO BE CONFIRMED ON SITE BY CONTRACTOR PRIOR TO THE COMMENCEMENT OF WORK<br>DO NOT SCALE FROM DRAWINGS UNDER ANY CIRCUMSTANCES | scale:<br><b>1:100</b><br>Job No.:<br>- | page:<br><br><b>02e</b><br>of: 25<br>DATE: 18/07/23 |
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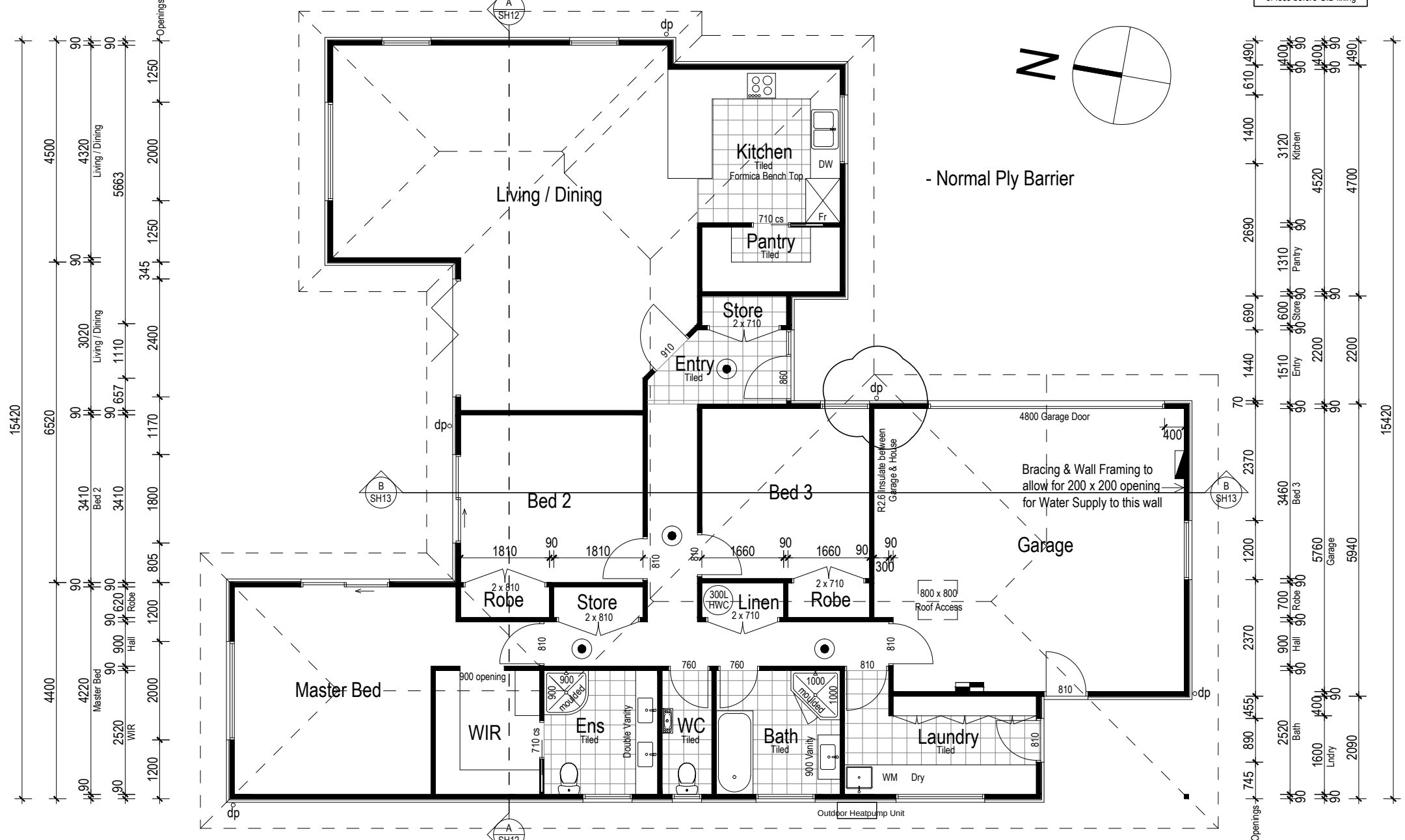
AMENDMENT ISSUED BC230758.02 27/02/2024 - Page 2 of 5

- Type 1 Smoke alarm to comply with NZBC clause F7, with Hush & Test facilities
- All Lintels SG8 unless otherwise stated
- All downlights to be IC Rated throughout
- GIB to all wet wall areas with 2 Coat Enamel

All Mech vents to terminate out soffit as per manufactures specifications

Mechanical Vents:  
Bath = 25l/s min  
Kitchen = 50l/s min

Timber Wall Framing to have a Moisture Content of 18% or less before GIB fixing



**SINGLE OR TOP STOREY  
SG8 STUDS TO LOAD BEARING WALLS**  
INTERNAL WALLS  
Light & Heavy Roof  
Wind Zone = All

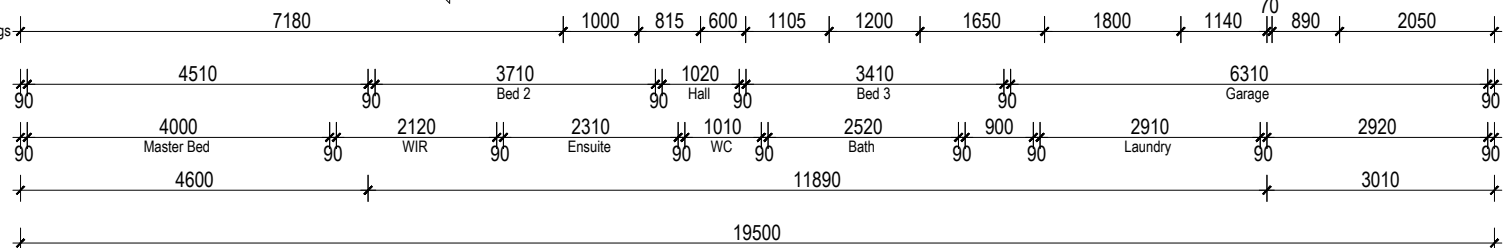
| Loaded Dimension of Wall | Stud Size for Max Height of: |               |               |               |
|--------------------------|------------------------------|---------------|---------------|---------------|
|                          | 3.0m @ 600crs                | 3.6m @ 300crs | 4.2m @ 400crs | 4.8m @ 400crs |
| 2.0                      | 90 x 45                      | 90 x 45       | 90 x 90       | 140 x 45      |
| 4.0                      | 90 x 45                      | 90 x 45       | 90 x 90       | 140 x 45      |
| 6.0                      | 90 x 45                      | 90 x 45       | 90 x 90       | 140 x 45      |

Note: Dwangs @ 800crs max

**SINGLE OR TOP STOREY  
SG8 STUDS TO LOAD BEARING WALLS**  
Light & Heavy Roof  
Wind Zone = High

| Loaded Dimension of Wall | Stud Size for Max Height of: |               |               |               |               |               |
|--------------------------|------------------------------|---------------|---------------|---------------|---------------|---------------|
|                          | 2.4m @ 600crs                | 2.7m @ 400crs | 3.0m @ 300crs | 3.6m @ 300crs | 4.2m @ 300crs | 4.8m @ 400crs |
| 2.0                      | 90 x 45                      | 90 x 45       | 90 x 45       | 90 x 90       | 140 x 45      | 140 x 90      |
| 4.0                      | 90 x 45                      | 90 x 45       | 90 x 45       | 90 x 90       | 140 x 45      | 140 x 90      |
| 6.0                      | 90 x 45                      | 90 x 45       | 90 x 45       | 90 x 90       | 140 x 45      | 140 x 90      |

Note: Dwangs @ 800crs max



199.5m² OVER FOUNDATION  
204.9m² OVER CLADDING

WAIMAKARIRI DISTRICT COUNCIL  
AMENDED Plan and/or Specifications APPROVED  
BC230758.02 27/02/2024 brennao  
Rain water head added and bracing updated

a.s.c.a.d.  
limited  
ascadltd@snap.net.nz  
0272 838 775

job title:  
BADDOCK - LOT 115

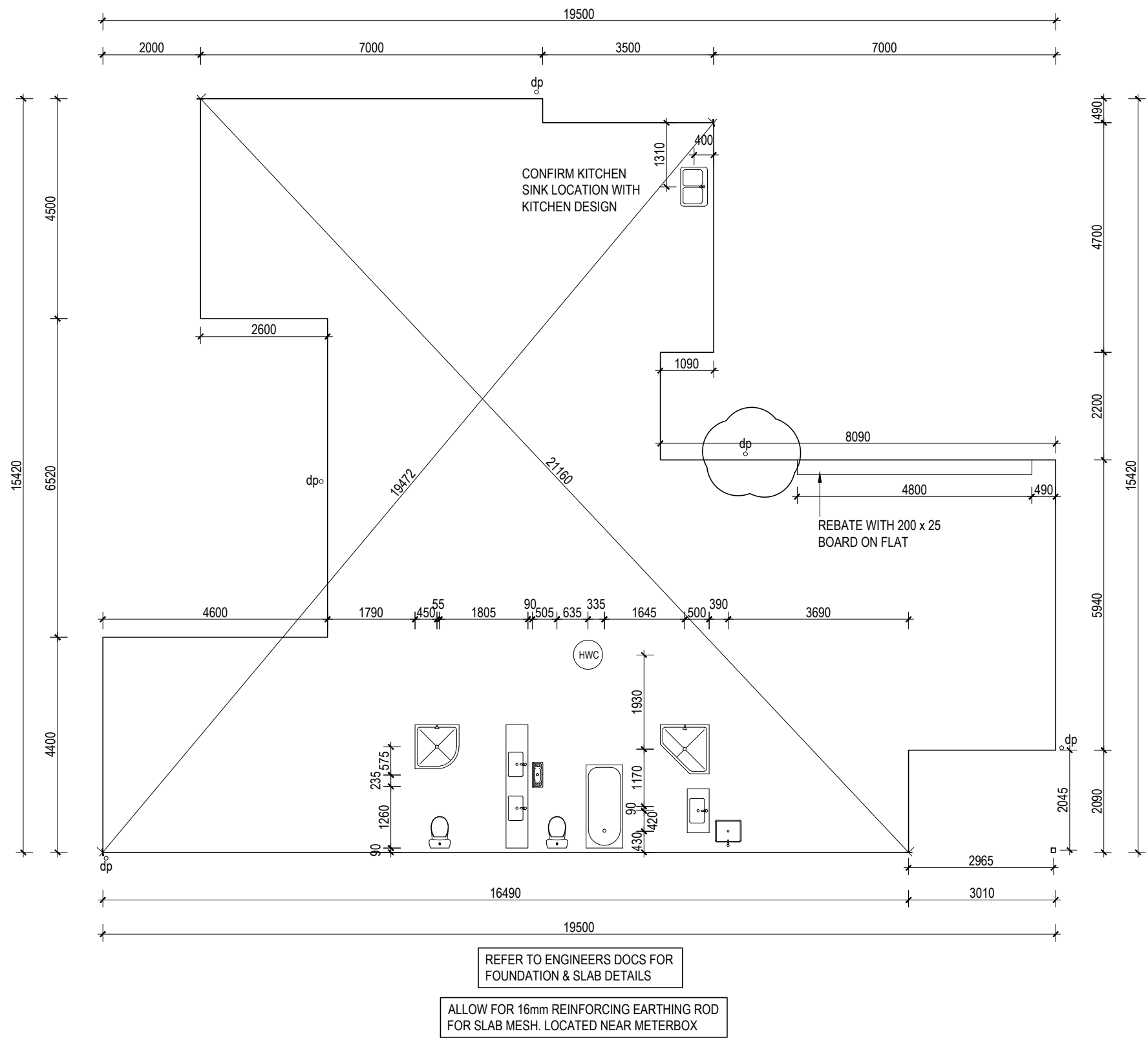
drawing title:  
FLOOR PLAN  
11/09/23 REV B - Notes updated  
13/09/23 REV C - Notes updated  
09/02/24 REV E - RWH added

legal description:  
Lot 115  
Townsend  
RANGIORA

WORKING DRAWINGS  
SUBJECT TO COUNCIL APPROVAL  
ALL MEASUREMENTS TO BE CONFIRMED  
ON SITE BY CONTRACTOR PRIOR TO  
THE COMMENCEMENT OF WORK  
DO NOT SCALE FROM DRAWINGS UNDER ANY  
CIRCUMSTANCES

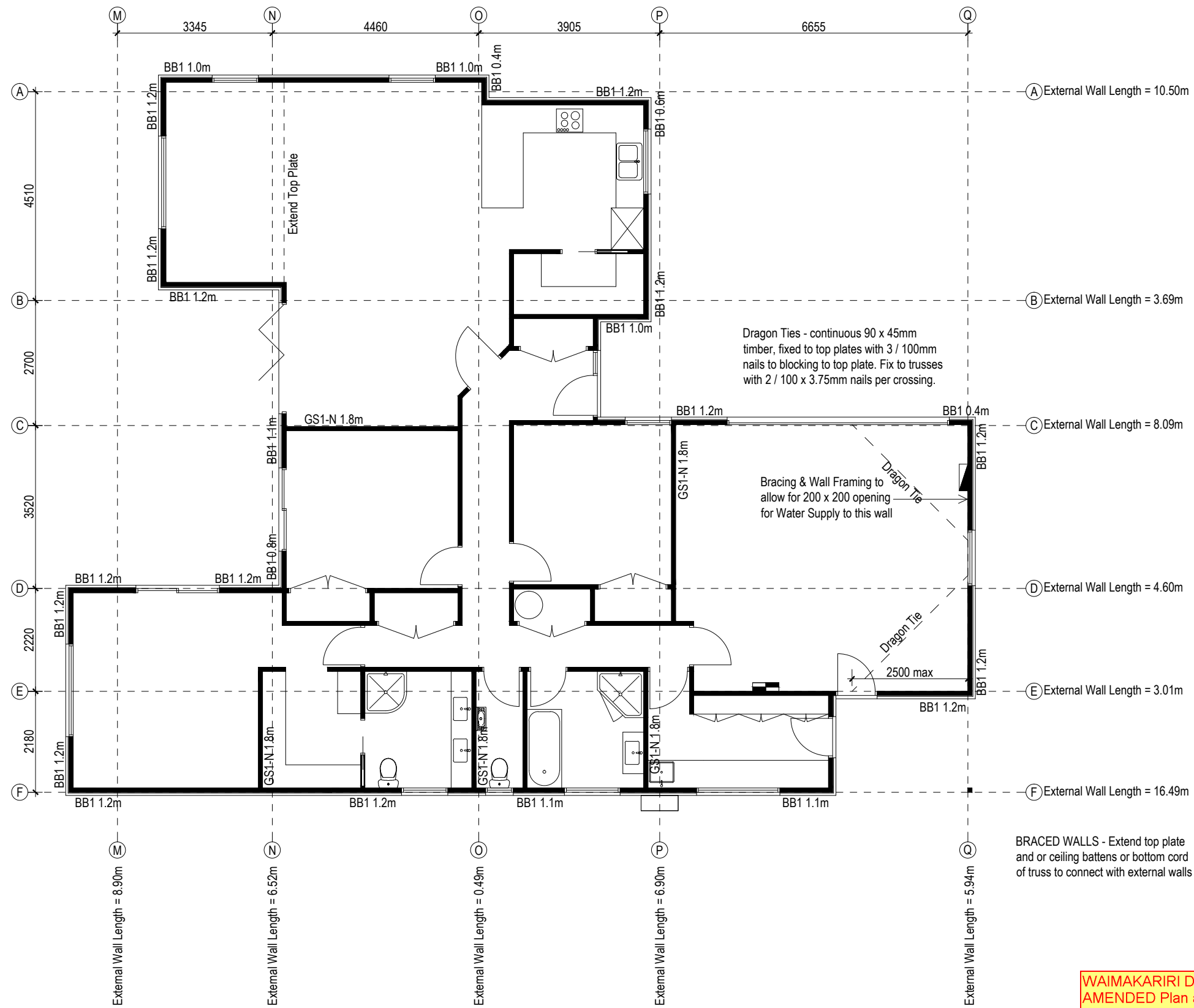
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of: 25  
DATE: 18/07/23



WAIMAKARIRI DISTRICT COUNCIL  
AMENDED Plan and/or Specifications APPROVED  
BC230758.02 27/02/2024 brennao  
Rain water head added and bracing updated

|                                                                               |                                     |                                                                                                       |                                                           |                                                                                                                                                                                                            |                                  |                                              |
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| <b>a . s . c . a . d .</b><br>limited<br>ascadltd@snap.net.nz<br>0272 838 775 | job title:<br><br>BADDOCK - LOT 115 | drawing title:<br><br>FOUNDATION PLAN<br>11/09/23 REV B - Notes updated<br>09/02/24 REV E - RWH added | legal description:<br><br>Lot 115<br>Townsend<br>RANGIORA | WORKING DRAWINGS<br>SUBJECT TO COUNCIL APPROVAL<br>ALL MEASUREMENTS TO BE CONFIRMED<br>ON SITE BY CONTRACTOR PRIOR TO<br>THE COMMENCEMENT OF WORK<br>DO NOT SCALE FROM DRAWINGS UNDER ANY<br>CIRCUMSTANCES | scale:<br>1:100<br>Job No.:<br>- | page:<br><br>08e<br>of: 25<br>DATE: 18/07/23 |
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WAIMAKARIRI DISTRICT COUNCIL  
AMENDED Plan and/or Specifications APPROVED  
BC230758.02 27/02/2024 brennao  
Rain water head added and bracing updated

|                                                                      |                                     |                                                                                                           |                                                           |                                                                                                                                                                                                            |                                  |                                              |
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| <b>a.s.c.a.d.</b><br>limited<br>ascadltd@snap.net.nz<br>0272 838 775 | job title:<br><br>BADDOCK - LOT 115 | drawing title:<br><br>BRACING PLAN<br>23/01/24 REV D - Bracing Unit removed<br>09/02/24 REV E - RWH added | legal description:<br><br>Lot 115<br>Townsend<br>RANGIORA | WORKING DRAWINGS<br>SUBJECT TO COUNCIL APPROVAL<br>ALL MEASUREMENTS TO BE CONFIRMED<br>ON SITE BY CONTRACTOR PRIOR TO<br>THE COMMENCEMENT OF WORK<br>DO NOT SCALE FROM DRAWINGS UNDER ANY<br>CIRCUMSTANCES | scale:<br>1:100<br>Job No.:<br>- | page:<br><br>09e<br>of: 25<br>DATE: 18/07/23 |
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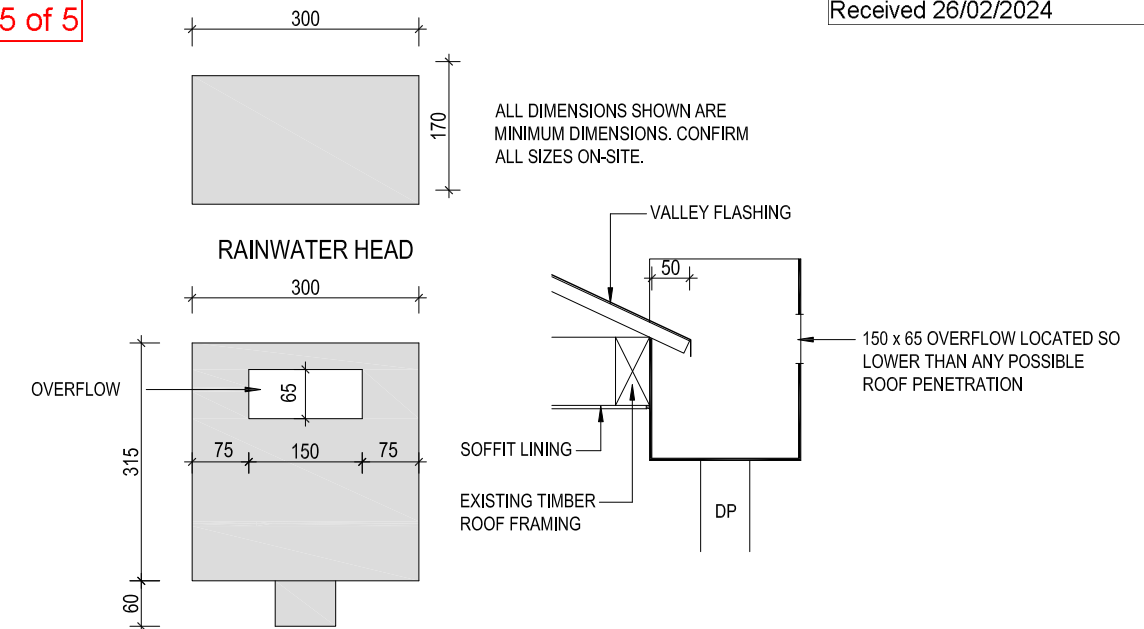


Diagram illustrating the cross-section of a roof structure showing the integration of a Rainwater Harvesting (RWH) system. The diagram includes the following components and labels:

- GUTTER**: The collection channel for rainwater.
- FASCIA**: The horizontal board at the edge of the roof.
- EXISTING TIMBER ROOF FRAMING**: The structural timber elements of the existing roof.
- PROPOSED RWH TIMBER SUPPORT**: The new structural support for the RWH system.
- EXISTING TIMBER ROOF FRAMING**: Another label pointing to the structural timber elements.
- dp**: A circular detail or joint within the gutter assembly.

|                                                                                               |                                            |                                                                                                                                                |                                                                    |                                                                                                                                                                                                                      |                                                      |                                                                 |
|-----------------------------------------------------------------------------------------------|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|-----------------------------------------------------------------|
| <p><b>a . s . c . a . d .</b></p> <p>limited</p> <p>ascadltd@snap.net.nz<br/>0272 838 775</p> | <p>job title:</p> <p>BADDOCK - LOT 115</p> | <p>drawing title:</p> <p>ROOF PLAN</p> <p>11/09/23 REV B - Notes updated<br/>09/02/24 REV E - RWH added<br/>21/02/24 REV F - Details added</p> | <p>legal description:</p> <p>Lot 115<br/>Townsend<br/>RANGIORA</p> | <p>WORKING DRAWINGS</p> <p>SUBJECT TO COUNCIL APPROVAL</p> <p>ALL MEASUREMENTS TO BE CONFIRMED ON SITE BY CONTRACTOR PRIOR TO THE COMMENCEMENT OF WORK</p> <p>DO NOT SCALE FROM DRAWINGS UNDER ANY CIRCUMSTANCES</p> | <p>scale:<br/><b>1:100</b></p> <p>Job No.:<br/>-</p> | <p>page:</p> <p><b>10f</b><br/>of: 25</p> <p>DATE: 18/07/23</p> |
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