

**PROJECT COMPLETION REPORT –
63 AYLESFORD STREET, MAIREHAU,
CHRISTCHURCH.**



Report Prepared For:



Ref: 23.388

02 February 2024

EXECUTIVE SUMMARY

Limestone Ltd has been engaged to carry out construction monitoring for repairing an existing dwelling at 63 Aylesford Street, Mairehau, Christchurch and to ensure the structural repairs and alteration to the dwelling have been undertaken, as recommended in our engineer’s report, releveling plan and alteration design dated 26 November 2023 (ref: 23.388).

The MBIE guidelines “Repairing and rebuilding houses affected by the Canterbury earthquakes” have been referenced where appropriate.

Our findings and recommendations are summarised below.

Mapped MBIE Technical Category	TC3	
Year Built	1940’s	
Number of Storey(s)	1	Residential Unit
Foundation Type	Type B	
Floor Area (Approx.)	132 m ²	
Wall Cladding	Timber Weatherboard	Light
Roof Cladding	Fibre Cement cladding	Medium
Floor Levels	26mm	
Conclusion	We confirm that structural repairs to the dwelling were observed to have been carried out as per the recommendation given in our Structural Assessment Report, Releveling Design dated 26 November 2023 (ref: 23.388) and our site instructions. Overall, we consider that the current state of the resident building is able to provide sufficient structural integrity for long-term occupancy.	

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1 INTRODUCTION

1.1 GENERAL

Limestone Ltd has been engaged to carry out construction monitoring for repairing an existing dwelling at 63 Aylesford Street, Mairehau and to ensure the structural repairs to the dwelling have been undertaken, as recommended in our Structural Assessment Report dated 26 November 2023 (ref: 23.388).

The MBIE guidelines “Repairing and rebuilding houses affected by the Canterbury earthquakes” have been referenced where appropriate.

1.2 SCOPE OF WORK

We confirm that Limestone carried out structural repair assessments through the following construction monitoring schedule,

22/12/2023 - Subfloor inspection and pile pad pre-pour inspection.

16/01/2024 - Ceiling Beam, Post and Preline Inspection.

01/02/2024 - Sign-off inspection, including final floor levels and structural repairs recommended in our structural report.

2. STRUCTURAL REPAIRS

2.1 FOUNDATION RE-LEVELLING

The dwelling is relevelled by over-pinning of concrete perimeter foundation walls with solid timber packing in accordance with our engineering design. We have inspected the over-pinning works prior to concealing it and verified the connection between the timber packer and concrete perimeter foundation. DPC sheets between the timber packers and concrete foundation were present.

The internal timber floor was re-levelled by carrying out jacking and packing repairs to piles in conjunction with performing minor notching to bearers. Internal piles were packed with single timber packers that were observed to be fixed to the bearers. Piles were observed with a damp-proof course and appropriate fixings at the pile-to-bearer interface in accordance with the MBIE guidelines.

The overall floor level variations were measured to be approximate as follows,

- 26mm over the dwelling timber floor

There are no major apparent local steep slopes exceeding 1V:200H identified. Please refer to the level survey plan attached. Based on the site measurements and levels taken on the site we consider that the re-levelling works are acceptable.

2.2 INTERIOR

Wall lining sheets previously assessed to have minor damage, were observed to have been repaired/replaced.

2.3 EXTERIOR

No damages have been observed to the external wall cladding during our site inspection.

2.4 STRUCTURAL ALTERATIONS

The structural alteration to the dwelling has been carried out as per our engineering plans and site instructions. We have inspected and verified the new beam, piles, column, bracing elements and connections before concealing them.

3. CONCLUSIONS

Overall, we confirm that structural repairs to the dwelling were observed to have been carried out per the recommendation in our Structural Assessment report, Releveling Plan and Alteration Design dated 26 November 2023 (ref: 23.388) and our site instructions. Overall, we consider that the current state of the resident building is able to provide sufficient structural integrity for long-term occupancy.

A structural engineer must re-assess the suitability for occupancy after any future moderate earthquakes.

4. LIMITATIONS

This report has been prepared on behalf of and for the exclusive use of Garnet developments LTD and its relevant building consent authority and is subject to and issued in accordance with the provisions of the contract between Limestone Engineers Ltd and Garnet Developments LTD. Limestone Engineers Ltd accepts no liability or responsibility, whatsoever, or in respect of any use or reliance upon this report by any third party.

This report is the copyright of Limestone Engineers Ltd. Except for the use of Garnet Developments LTD and subject to the conditions in the agreement, no part of this publication may be copied without express permission in writing from Limestone Engineers Ltd.

A floor level survey using Zip-Level Pro-2000 instrument of a typical accuracy of $\pm 3\text{mm}$ was carried out during the inspection and is presented in the Floor Level Plan attached to this report. It should be noted that the purpose of the floor-level survey is to assist in determining possible structural damage to the building and therefore should be treated as indicative only. Where a high-level dependence and an accurate and credible presentation of the survey information are required, a registered professional surveyor should be engaged to carry out the survey.

5. REFERENCES

- Canterbury Earthquake Recovery Authority, Christchurch City Council, Selwyn District Council and Waimakariri District Council: Canterbury Geotechnical Database (<https://canterburygeotechnicaldatabase.projectorbit.com/>)
- Limestone Engineers (2023) Structural Assessment report for 63 Aylesford Street, Mairehau, Christchurch.
- Limestone Engineers (2023) Structural Releveling Design for 63 Aylesford Street, Mairehau, Christchurch.
- Ministry of Business, Innovation and Employment (MBIE) (2012). Repairing and Rebuilding Houses affected by the Canterbury Earthquakes (<http://www.dbh.govt.nz/guidance-on-repairs-afterearthquake>).

6. CLOSURE

If you have any queries or you require any further clarification on any aspects of this report, please do not hesitate to contact the undersigned.

Action:	Name:	Signed:	Date:
Report Prepared:	Harvey Li <i>BEng (Hons), EPMEngNZ Structural Engineer</i>		02/02/2024
Report Reviewed:	Nero G <i>MEngSt(EQ) BScEng(Hons) MEngNZ Structural Engineer</i>		02/02/2024
Approved:	S. Amirthalingam <i>B.Sc.Eng (Hons) CPEng, CMEngNZ Senior Structural Engineer</i>		02/02/2024

APPENDICES

PHOTOS



Photo 1. View of the exterior.



Photo 2. View of perimeter foundation.



Photo 3. Beam installation on progress (Received photos)



Photo 4. Observed jack and pair repairs to the concrete pile in the subfloor.



Photo 5. Observed jack and pair repairs to the concrete pile in the subfloor.



Photo 6. Observed jack and pair repairs to the concrete pile in the subfloor.



Photo 7. Observed over-pinning fixings



Photo 8. Observed over-pinning fixings



Photo 9. Observed house interior



Photo 10. View of internal wall linings.



Photo 11. Observed house interior



Photo 12. View of internal wall linings.

FLOOR LEVEL PLAN

(NTS)

PROJECT : STRUCTURAL REPAIR ASSESSMENT

ADDRESS : 63 AYLESFORD STREET, MAIREHAU, CHRISTCHURCH

JOB NO : 23.388

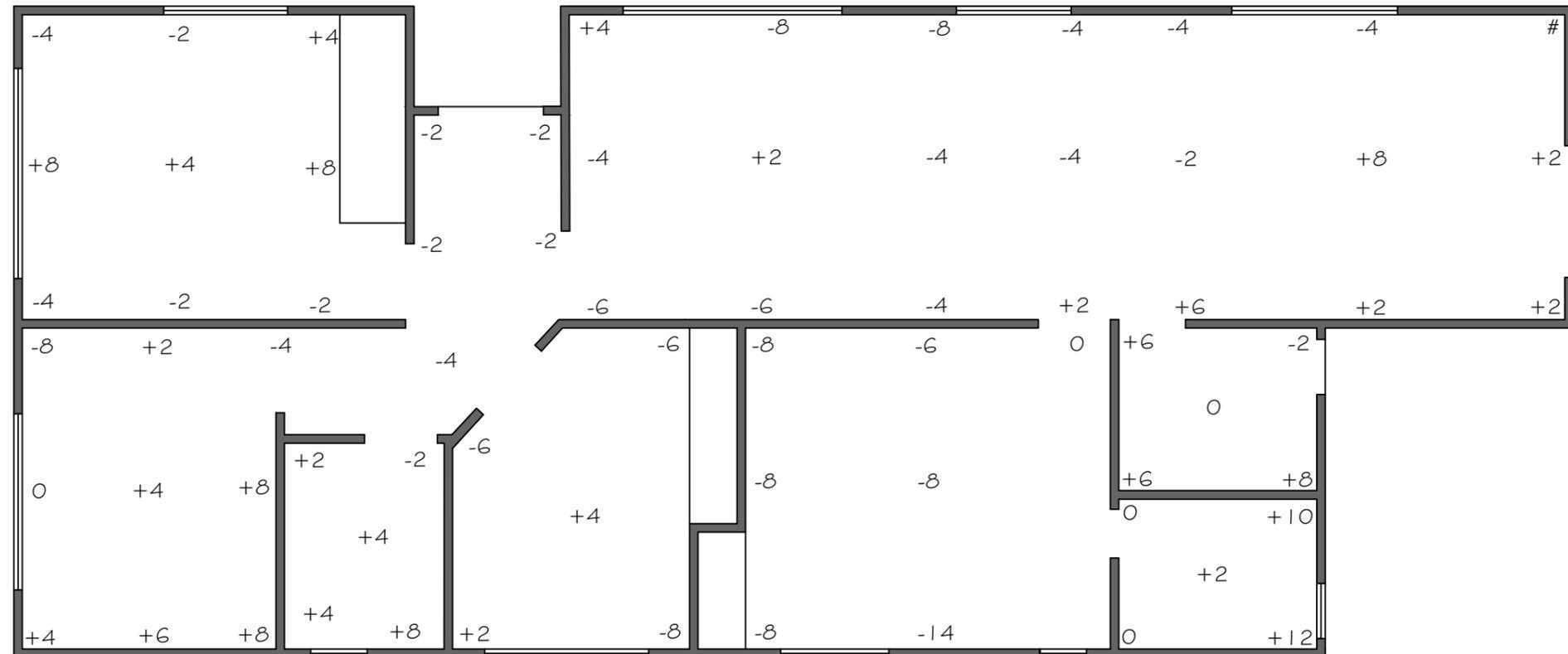
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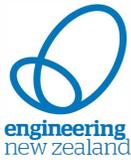
DATE : 16/01/2024

CHECKED BY : NR

NOTES

- MEASUREMENTS LOCATION ARE APPROXIMATE AND INDICATIVE ONLY
- FLOOR PLAN LAYOUT IS INDICATIVE ONLY AND NOT TO SCALE.
- INSTRUMENT USED FOR MEASUREMENT HAS A RATED ACCURACY OF +/- 3.0MM (ZIP LEVEL PRO 2000). OTHER SOURCES OF VARIATION TO THE MEASUREMENTS CAN INCLUDE CONSTRUCTION TOLERANCES, CARPET, WEAR, AND ATMOSPHERIC TEMPERATURE CHANGES.
- ALL MEASUREMENTS HAVE BEEN ADJUSTED TO THE FLOOR COVERING TYPE AT THE DATUM.
- REFERENCE POINT ZERO MILLIMETER DENOTED AS "#".
- FLOOR LEVELS DIFFERENCES BETWEEN HIGHEST AND LOWEST POINT ARE AS FOLLOWS:
 -26 mm OVER THE DWELLING FLOOR
- THE FLOOR SLOPE EXCEEDED 1/200 TOLERANCE DENOTED AS " ↗ " (INDICATIVE ONLY).





New Zealand
Institute of Architects
Incorporated



Building Code Clause(s) B1, MBIE

PRODUCER STATEMENT – PS4 – CONSTRUCTION REVIEW

(Guidance on use of Producer Statements (formerly page 2) is available at www.engineeringnz.org)

ISSUED BY: Limestone Engineers Limited
(Construction Review Firm)

TO: Garnet Developments Ltd
(Owner/Developer)

TO BE SUPPLIED TO: Christchurch City Council
(Building Consent Authority)

IN RESPECT OF: Repairs to existing dwelling and alteration - foundation re-leveling and earthquake repairs
(Description of Building Work)

AT: 63 Aylesford Street, Mairehau
(Address)

Town/City: Christchurch LOT 6 DP 8664 SO
(Address)

We Limestone Engineers Limited have been engaged by Garnet Developments
(Construction Review Firm)

To provide CM1 CM2 CM3 CM4 CM5 (Engineering Categories) or observation as per agreement with
owner/developer Garnet Developments Ltd

or other services
(Extent of Engagement)

in respect of clause(s) B1, MBIE of the Building Code for the building work described in
documents relating to Building Consent No. BCN/2023/8381 and those relating to

Building Consent Amendment(s) Nos. issued during the
course of the works. We have sighted these Building Consents and the conditions of attached to them.

Authorised instructions/variation(s) No. (copies attached)
or by the attached Schedule have been issued during the course of the works.

On the basis of this review these review(s) and information supplied by the contractor during the course of the works
and on behalf of the firm undertaking this Construction Review, I believe on reasonable grounds that
 All or Part only of the building works have been completed in accordance with the relevant requirements of the

Building Consent and Building Consent Amendments identified above, with respect to Clause(s) B1, MBIE
of the Building Code. I also believe on reasonable grounds that the persons who have undertaken this construction review have
the necessary competency to do so.

I, Sanathanan Amirthalingam am: CPEng 1023988 # Reg Arch #
(Name of Construction Review Professional)

I am a member of: Engineering New Zealand NZIA and hold the following qualifications BSc(Civil), MSc, CMEngNZ, CPEng(NZ)
The Construction Review Firm issuing this statement holds a current policy of Professional Indemnity Insurance no less than
\$200,000*.

The Construction Review Firm is a member of ACENZ:

SIGNED BY Sanathanan Amirthalingam (Signature) 
(Name of Construction Review Professional)

ON BEHALF OF Limestone Engineers Limited Date 02/02/2023
(Construction Review Firm)

Note: This statement shall only be relied upon by the Building Consent Authority named above. Liability under this statement accrues to the
Design Firm only. The total maximum amount of damages payable arising from this statement and all other statements provided to the Building
Consent Authority in relation to this building work, whether in contract, tort or otherwise (including negligence), is limited to the sum of \$200,000*.

This form is to accompany **Forms 6 or 8 of the Building (Form) Regulations 2004** for the issue of a Code Compliance
Certificate.

THIS FORM AND ITS CONDITIONS ARE COPYRIGHT TO ACENZ, ENGINEERING NEW ZEALAND AND NZIA

Consenting & Compliance Group

Producer statement construction (PS3)

All sections of this PS3 must be completed

Tick applicable Contractor for:

- | | | | |
|---|---|---|------------------------------------|
| <input checked="" type="checkbox"/> Building | <input type="checkbox"/> Emergency Lighting | <input type="checkbox"/> Cladding | <input type="checkbox"/> Escalator |
| <input type="checkbox"/> Waterproof Membranes | <input type="checkbox"/> Drainlayer | <input type="checkbox"/> Fire Alarm | <input type="checkbox"/> Lift |
| <input type="checkbox"/> Mechanical (HVAC) | <input type="checkbox"/> Solar Heating | <input type="checkbox"/> Other (specify): _____ | |

Author name:

JOSEPH SEGURITAN / VINCENT FUENTES
JOSEPH SEGURITAN BUILDERS LIMITED

Site address:

63 AYLESFORD ROAD

Description of building work:

RE-LEVELLING

Owners Details:

GARNETS DEVELOPMENT LIMITED

Scope of work covered by statement:

RE-LEVELLING AS PER ENGINEER PLAN

System/Product used (if applicable):

I (constructor): VINCENT FUENTES / TRIPLE V RENOVATION LTD have been engaged by GARNETS DEVELOPMENT LIMITED (applicant, designer, main contractor etc) part all to construct.

As specified in the attached particulars of Building Consent Number: _____ and its attached conditions I am satisfied on reasonable grounds that the building work specified above has been completed to the extent required by that Building Consent and complies with the NZ Building Code.

- NZBC clauses: [select as applicable]
- | | | | | | | | | | | | |
|--|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| <input checked="" type="checkbox"/> B1 | <input type="checkbox"/> B2 | <input type="checkbox"/> C1 | <input type="checkbox"/> C2 | <input type="checkbox"/> C3 | <input type="checkbox"/> C4 | <input type="checkbox"/> C5 | <input type="checkbox"/> C6 | <input type="checkbox"/> D1 | <input type="checkbox"/> D2 | <input type="checkbox"/> E1 | <input type="checkbox"/> E2 |
| <input type="checkbox"/> E3 | <input type="checkbox"/> F1 | <input type="checkbox"/> F2 | <input type="checkbox"/> F3 | <input type="checkbox"/> F4 | <input type="checkbox"/> F5 | <input type="checkbox"/> F6 | <input type="checkbox"/> F7 | <input type="checkbox"/> F8 | <input type="checkbox"/> G1 | <input type="checkbox"/> G2 | <input type="checkbox"/> G3 |
| <input type="checkbox"/> G4 | <input type="checkbox"/> G5 | <input type="checkbox"/> G6 | <input type="checkbox"/> G7 | <input type="checkbox"/> G8 | <input type="checkbox"/> G9 | <input type="checkbox"/> G10 | <input type="checkbox"/> G11 | <input type="checkbox"/> G12 | <input type="checkbox"/> G13 | <input type="checkbox"/> G14 | <input type="checkbox"/> G15 |
| <input type="checkbox"/> H1 | | | | | | | | | | | |

I understand that this Producer Statement, if accepted, may be relied on by the Council for the purpose of establishing compliance with the Building Consent.

Registration No: Or N/A

Qualifications/Experience:

LICENSE BUILDING PRACTITIONER - BP-139896

Address: Postcode:

44 MARI OW ROAD ARANUI

022 632 0955

Mobile: Email: vinceguitar023@yahoo.com

Signature:  Date: 2/2/24



ELECTRICAL CERTIFICATE OF COMPLIANCE & ELECTRICAL SAFETY CERTIFICATE

REFERENCE/CERTIFICATE ID No.: CB Aylesford St. Mairehau CHCH

This form has been designed to be used by licensed electrical workers to certify that installations or part installations under Part 1 or Part 2 of AS/NZS 3000 are safe to be connected to the specified system of electrical supply.

Location Details:

63 Aylesford street, Mairehau, Christchurch 8013

Contact Details:
(Name and address)

Garnet Developments limited, 022 033 2141

Name of Electrical worker:

JOSHA JOHN

Registration/Practising licence number:

EE 265807

Phone & email:

022 326 8614 / 021 239 1133 info@H2-power.co.nz

Name and registration number of person(s) supervised:

—

Certificate of Compliance

Type of work:

Addition Alteration New work

The prescribed electrical work is:

Low risk General High-risk (Specify):

upgrade lights, sockets, Bathroom, kitchen, Heat pumps,

Means of compliance:

Part 1 of AS/NZS 3000 Part 2 of AS/NZS 3000

Additional Standards or electrical code of practice were required: No Yes (specify):

Date or range of dates that prescribed electrical work undertaken: 20-12-20 to 23-01-2024

Contains fittings that are safe to connect to a power supply? Yes No

Specify type of supply system: 230V Single phase

The installation has an earthing system that is correctly rated (where applicable) Yes No

Parts of the installation to which this certificate relates that are safe to connect to a power supply?

All Parts (specify):

The work relies on manufacturers instructions:

Yes No

If yes - identify the instruction manual including name, date and version. Also attach a copy of manufacturer's instructions to this certificate. (Or provide reference to readily accessible electronic format, eg Internet link.)

Identify:
Link:

The work has been done in accordance with a certified design: Yes No

If yes - identify the certified design including name, date and version. Also attach a copy of the certified design to this certificate. (Or provide reference to readily accessible electronic format, eg Internet link.)

Identify:
Link:

The work relies on a Supplier Declaration of Conformity (SDoC): Yes No

If yes - identify the SDoC including name, date and version OR ESSS registration. Also attach a copy of the SDoC to this certificate. (Or provide reference to readily accessible electronic format, eg Internet link.)

Identify:
Link:

Raddliffe Electrical - Hornby, Downlight, Switches, Fan, ect.

The installation has been satisfactorily tested in accordance with the Electricity (Safety) Regulations 2010 No Yes

Description of Work:

Rewiring old wiring lights, sockets, upgrade lights and power socket into pdL, install new Daikin split H, wall heat pump one 9 kW living, and one m 3-2 kw, master bed. As is switchboard fuses box, mains cable Rm Earth state, main earth cable located below meter.

Test Results (provide values)

Polarity (independent earth):	<input checked="" type="checkbox"/>	
Insulation resistance:	<input checked="" type="checkbox"/>	Ohms
Earth Continuity:	<u>0.16</u>	Ohms
Bonding:	<input checked="" type="checkbox"/>	Ohms
Fault loop impedance:	<u>0.32</u>	Ohms
Other (specify):	—	

By signing this document I certify that the completed prescribed electrical work to which this Certificate of Compliance applies has been done lawfully and safely, and the information in the certificate is correct.

Certifier's signature:

[Signature]

Date:

05/02/24

Electrical Safety Certificate

By signing this document I certify that the installation, or part of the installation, to which this Electrical Safety Certificate applies is connected to a power supply and is safe to use.

Certifier's name:

JOSHA JOHN

Registration/Practising licence number:

EE 265807

Certifier's signature:

[Signature]

Certificate Issue Date:

05/02/24

Connection Date:

05/02/24

CUSTOMER COPY - THIS IS AN IMPORTANT DOCUMENT AND SHOULD BE RETAINED FOR A MINIMUM OF 7 YEARS

AFFIDAVIT / AFFIRMATION

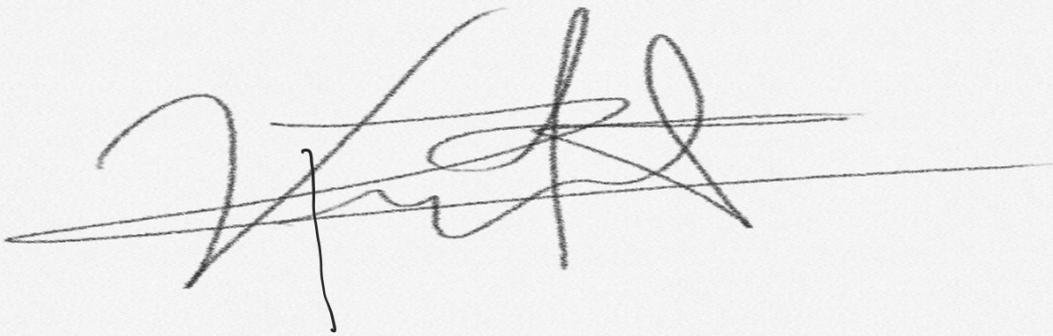
I, Joseph Seguritan/Vincent Fufntes

Joseph Seguritan Builders Limited, 44 Marlow Road, Aranui

Builder

(Full name of deponent, address, and occupation)

, swear/solemnly and sincerely affirm and say as follows:



Sworn/Affirmed at Christchurch this...07 day of ...February...2024...

.....
(Signature of deponent)

EXISTING AND PROPOSED FLOOR LAYOUT (NTS)

PROJECT : STRUCTURAL REPAIR ASSESSMENT

ADDRESS : 63 AYLESFORD STREET, MAIREHAU, CHRISTCHURCH

JOB NO : 23.388

DRAWN BY : HL

DATE : 26/11/2023

CHECKED BY : AEN

GENERAL NOTES:

- 1) THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE AS-BUILT DRAWINGS. ANY DISCREPANCY SHALL BE REFERRED TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
- 2) CONTRACTOR SHALL VERIFY ALL DIMENSIONS REQUIRED FOR SET-OUT AND CONSTRUCTION. THESE DRAWINGS SHALL NOT BE SCALED.
- 3) ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH THE CURRENT RELEVANT NZS STANDARDS AND BUILDING CODE.
- 4) ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
- 5) ALL PROPRIETARY PRODUCTS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND INSTRUCTIONS.

CONCRETE

- 1) MATERIALS AND WORKMANSHIP TO COMPLY WITH NZS 3109.
- 2) CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 20MPA.
- 3) MINIMUM CONCRETE COVER TO REINFORCEMENT (FINISHES NOT INCLUDED):
TO DRY INTERIOR WITH DPM: 30MM
TO EXTERIOR WITH DPM: 40MM
TO EXTERIOR AGAINST EARTH: 75MM

TIMBER

- 1) ALL TIMBER SHALL BE STRESS GRADE SG8 U.N.O.
- 2) PROVIDE WASHERS BETWEEN ALL BOLTS AND TIMBER.
- 3) A DAMP PROOF COURSE SHALL BE PLACED BETWEEN ALL TIMBER IN CONTACT WITH CONCRETE/MASONRY.

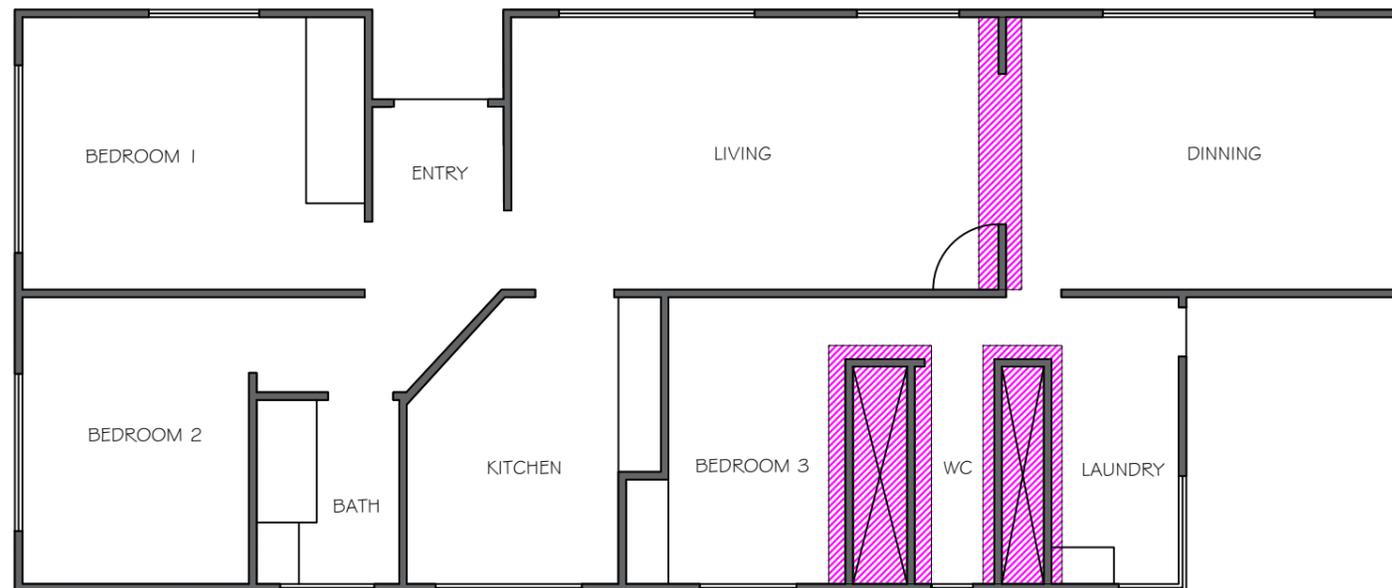
BRACING

- 1) BRACING WALL PANEL LABEL SCHEME:
ELEMENT NO. / TYPE / LENGTH (M)
- 2) REFER TO GIB MANUFACTURER'S SPECIFICATION FOR INSTALLATION DETAILS OF BRACING WALL PANELS.
- 3) PROVIDE STANDARD GIB BRACING PANELS ALONG CEILING AS PER GIB MANUFACTURER'S SPECIFICATION.

LEGEND:

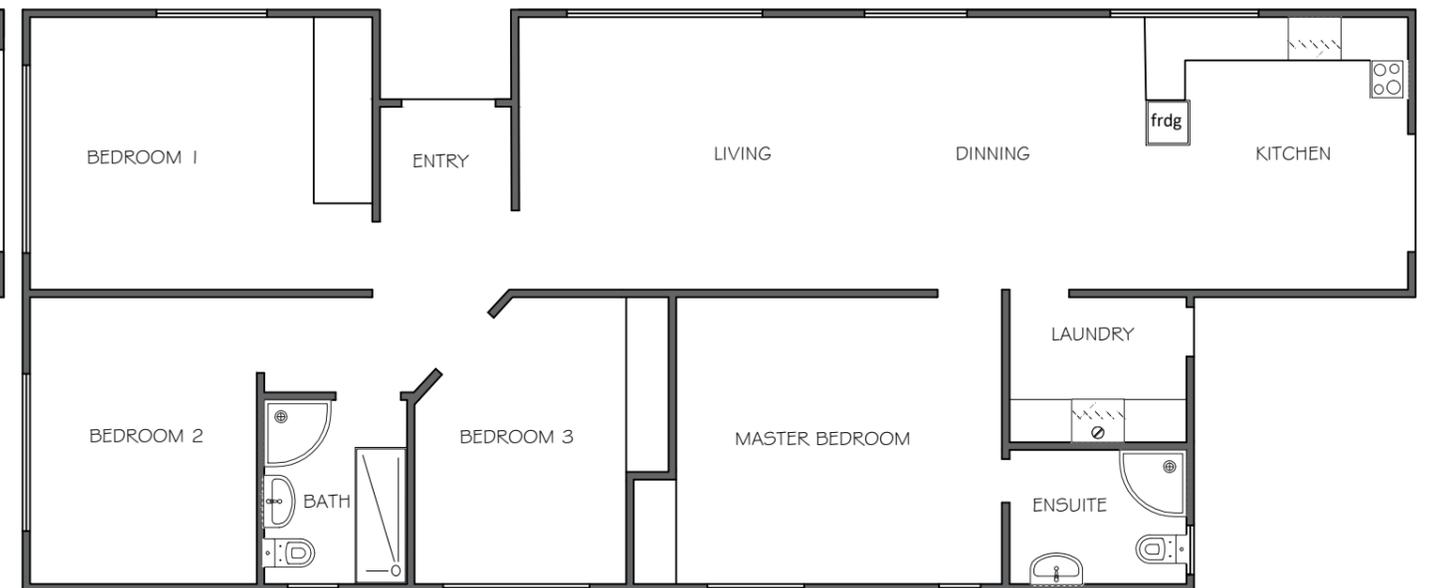
 EXISTING WALL TO REMOVED

 NEW BEAMS AT CEILING LEVEL



EXISTING FLOOR LAYOUT

CONTRACTOR SHALL VERIFY ALL DIMENSIONS REQUIRED FOR SET-OUT AND CONSTRUCTION.



PROPOSED FLOOR LAYOUT

BEAM COLUMN LAYOUT (NTS)

PROJECT : STRUCTURAL REPAIR ASSESSMENT

ADDRESS : 63 AYLESFORD STREET, MAIREHAU, CHRISTCHURCH

JOB NO : 23.388

DRAWN BY : HL

DATE : 26/11/2023

CHECKED BY : AEN

PAGE :

SO2

LEGEND:

 EXISTING WALL TO REMOVED

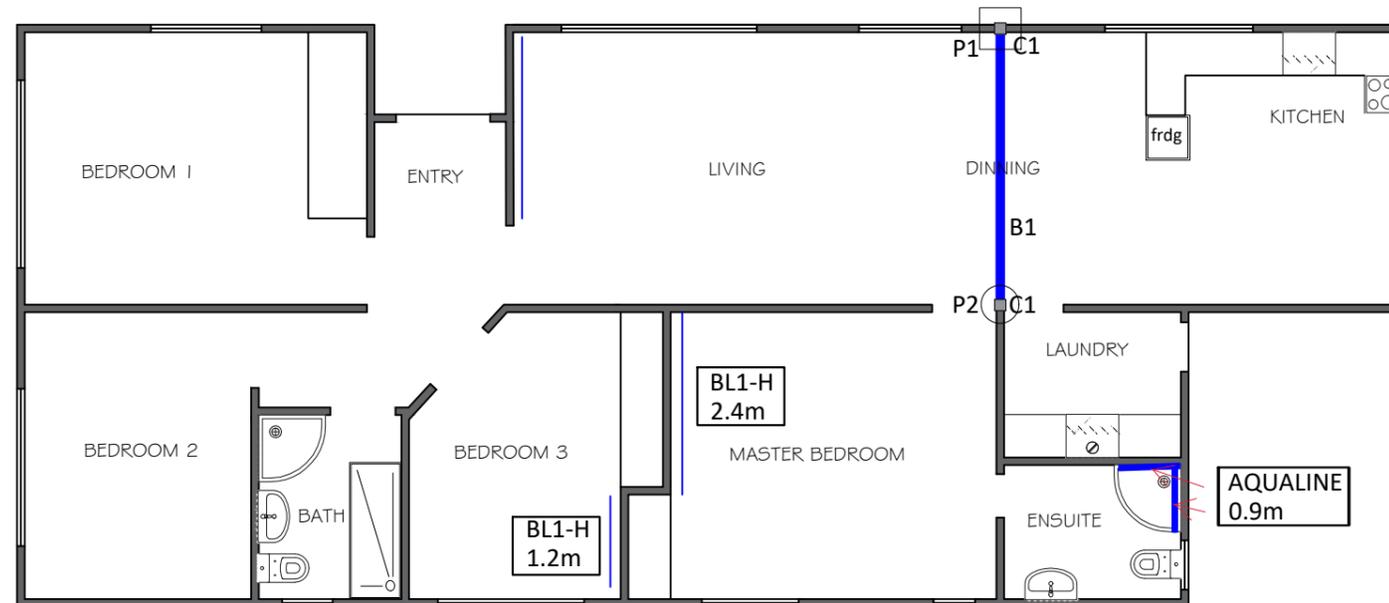
 NEW BEAMS AT CEILING LEVEL

P1 CONCRETE PAD UNDER PERIMETER FOUNDATION

P2 PILE TO BE INSTALLED UNDER FLOOR JOIST

ALL TIMBER ROOF FRAMING FIXINGS TO BE IN ACCORDANCE WITH NZS3604:2011. 90X45 SG8 TIMBER DIAGONAL STRUT, TOP AND BOTTOM FIXED WITH 3/90 X 3.15 NAILS, 2/ 65 X 3.15 AT OTHER CASES.

UNLESS OTHERWISE SHOWN ON THE DRAWINGS, ALL DIAGONAL STRUT TO BE FIXED IN ACCORDANCE WITH NZS3604:2011 TABLE 10.1. REFER ALSO TO FIGURE 10.23.



BEAM AND COLUMN LAYOUT

MEMBER SCHEDULE			
MARK	DESCRIPTION	MAX. SPAN	NOTES
B1	2/290x45	3.7m	
C1	2/90x45 SG-8 POST		

CONTRACTOR SHALL VERIFY ALL DIMENSIONS REQUIRED FOR SET-OUT AND CONSTRUCTION.

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- 3) MINIMUM CONCRETE COVER TO REINFORCEMENT (FINISHES NOT INCLUDED):
TO DRY INTERIOR WITH DPM: 30MM
TO EXTERIOR WITH DPM: 40MM
TO EXTERIOR AGAINST EARTH: 75MM

BRACING

- 1) BRACING WALL PANEL LABEL SCHEME:
ELEMENT NO. / TYPE / LENGTH (M)

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- 3) PROVIDE STANDARD GIB BRACING PANELS ALONG CEILING AS PER GIB MANUFACTURER'S SPECIFICATION.

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BEAM ELEVATION (NTS)

PROJECT : STRUCTURAL REPAIR ASSESSMENT

ADDRESS : 63 AYLESFORD STREET, MAIREHAU, CHRISTCHURCH

JOB NO : 23.388

DRAWN BY : HL

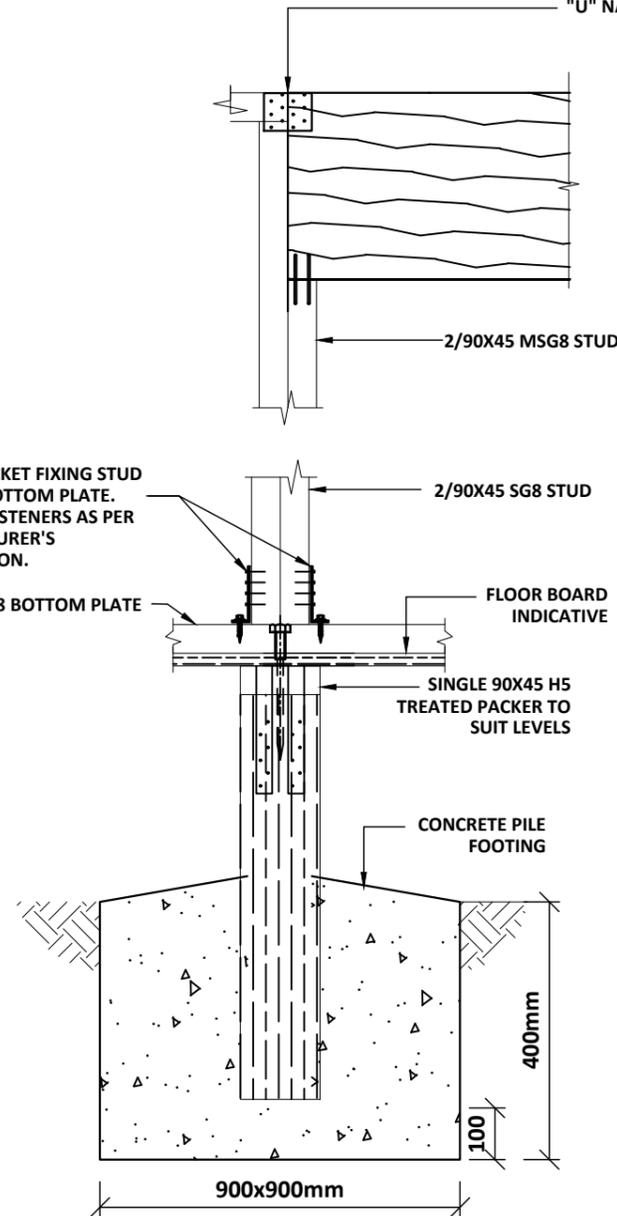
DATE : 26/11/2023

CHECKED BY : AEN

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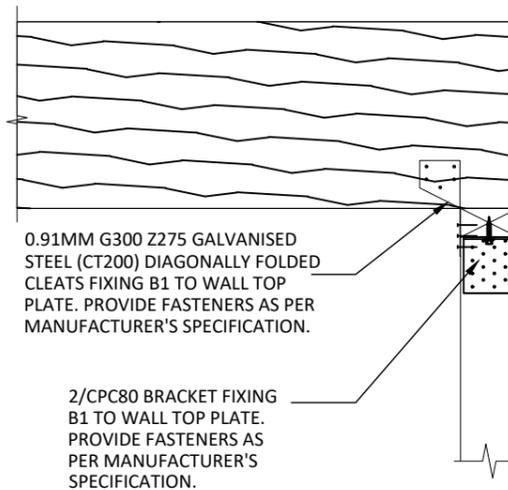
SO3

2/290X45 BEAM FIXED ONTO DOUBLE STUDS
USING 78X126X1 PRYDA NAIL-ON PLATE (ALL NAIL
HOLES FILLED WITH 30X3.15 NAILS) AND 2/PRYDA
"U" NAILS EACH SIDE.

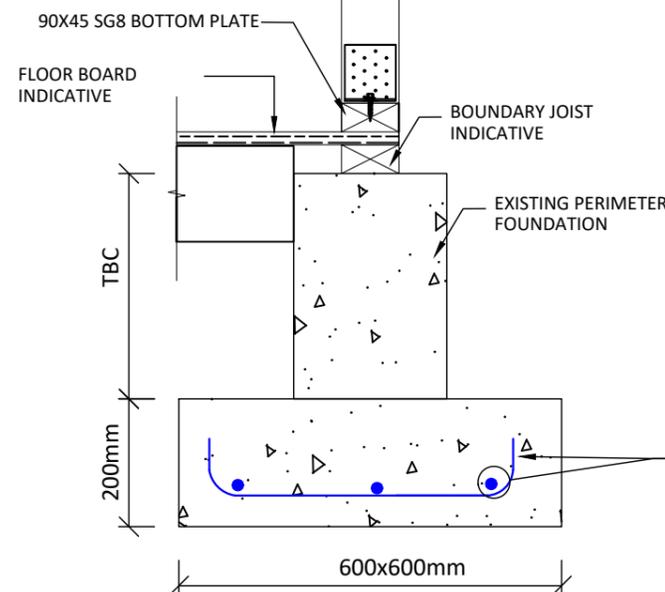


TYPICAL BEAM (B1) & STUD WALL ELEVATION AND PAD DETAIL

1:10



2/CPC80 BRACKET FIXING
B1 TO WALL TOP PLATE.
PROVIDE FASTENERS AS
PER MANUFACTURER'S
SPECIFICATION.

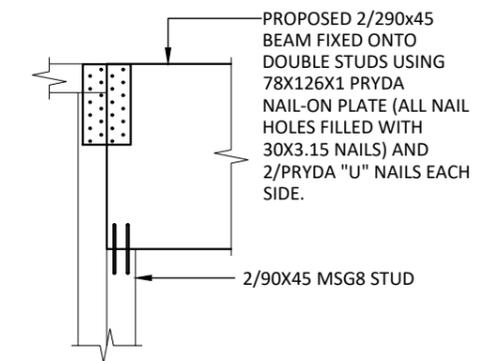


3HD12 "U" BARS EACH
WAY.
PROVIDE 75 COVER TO
EXTERNAL BARS FROM
EACH FACE OF PAD.

C1-STRENGTHEN EXISTING
90X45 SG-8 POST WITH
ADDITIONAL 90X45 SG-8
STUD, FIXED TOGETHER
USING 90X3.15 NAILS AT 250
CRS. BOTH SIDES (TYPICAL)

CPC80 BRACKET FIXING STUD
TO WALL BOTTOM PLATE.
PROVIDE FASTENERS AS PER
MANUFACTURER'S
SPECIFICATION.

DOUBLE STUD (C1) CONNECTION DETAILS



**TYPICAL BEAM 1 / DOUBLE STUD
CONNECTION DETAIL**