

Form 7

Code Compliance Certificate **BC170237**

Section 95, Building Act 2004

The building

Street address of building: 42 Watkins Drive RANGIORA

Legal description of land where building is located: LOT 77 DP 497145 0.075500 Ha

Valuation number: 2165015136

Building name:

Location of building within site/block number:

Level/unit number: 1

Current, lawfully established, use: Housing - Detached dwellings

Year first constructed: 2018

The owner

Name of owner: Mike Greer Homes North Canterbury Limited

Contact person: Sonya Ann Dacombe

Mailing address: PO Box 421 Rangiora 7440

Street address/registered office:

Phone number: Landline: 039755674 Mobile: 021758767

Email address: nc.compliance@mikegreerhomes.co.nz

First point of contact for communications with the council/building consent authority: Mike Greer Homes North Canterbury Limited

Building work

Building consent number: BC170237

Consent description: DWELLING WITH ATTACHED GARAGE 42 WATKINS DRIVE RANGIORA LOT 77 DP 497145

Issued by: Waimakariri District Council

Code compliance

The building consent authority named below is satisfied, on reasonable grounds, that —

(a) the building work complies with the building consent



Sarah Smith
Building Consent Administrator

On behalf of Waimakariri District Council
Date: 31 August 2018

INSPECTION ISSUES

INSPECTION ISSUES NOTED DURING PROCESSING:

ALTERNATIVE SOLUTION/S:

AMENDMENTS (AFTER CONSENT ISSUE):

DATE:

ENGINEER TO INSPECT:

FOUNDATION EXCAVATION
FOUNDATION / SLAB & Post Footings Pre Pour

SURVEYOR REQUIRED (PEGGING / FFL / RECESSION PLANE):

FIRE ENGINEER TO INSPECT:

ITEMS FOR COUNCIL TO INSPECT (SUCH AS EFFLUENT/POOL FENCING):

CONSTRUCTION REVIEWS REQUIRED TO SUPPORT PRODUCER STATEMENT DESIGN AND INSPECTION:

Pipework test, ELECTRICAL CBAT, ENGINEERS PS4, WET AREA mfg/2
Pre-pour PS3 PS3

File Stripping Check Sheet

BC 170237

- ☒ All Correspondence
- ☒ Audit Check Sheets
- ☒ CCC – Signed
- ☒ Working File Cover
- ☒ As Built Plans
- ☒ Drainage Plans (both onsite & scaled Drawings)
- ☒ Specifications if any changes (see Working File Cover)
- ☒ All White Inspection Notices*
- ☒ All site photos
- ☒ All Processing Check sheets & Correspondence*
- ☒ All Amendments*
- ☒ Completed file stripping check sheet attached
- ☒ All relevant information has been included - If in doubt – INCLUDE IT

Signed



4 - 8 - 18

*N.B those items marked with an * are now electronic. Depending on the age of the consent these may already be in TRIM and not hardcopy*

14 February 2018

Mike Greer Homes North Canterbury Limited
PO Box 421
Rangiora 7440

RE: Lapse of Building Consent
BC170237
DWELLING WITH ATTACHED GARAGE 42 WATKINS DRIVE RANGIORA LOT
77 DP 497145
4 April 2017

Dear Mike Greer Homes North Canterbury Limited

The building consent BC170237 outlined above is due to lapse on 04/04/2018. After that date the building consent will be considered invalid.

Should you wish to do so, the Council may agree to a time extension on this consent. If the work has started or is imminent, please contact me prior to 26 February so that we can consider a time extension.

If I don't hear from you prior to this date, your consent will lapse in accordance with the Building Act 2004 and any unused fees will be refunded.

If you have any queries or concerns please don't hesitate to contact me.

Yours sincerely,



Sarah Smith
Building Consent Administrator

Ph: 03 311 8900 x 8744
Mob: 027 453 8142
Email: sarah.smith@wmk.govt.nz

1) Section 52(2) Building Act 2004

Job: 18-419N

Client: Mike Greer Homes NC
Phone:Site: N2113
42 Watkins Drive
Highgate
Rangiora

RECEIVED 10/05/2018

Description: N2113
Building Consent No.:
MITek 20/20 Engineering 4.7.184.0

MITek New Zealand Limited

Phone:

Printed: 13:15:46 27 Apr 2018

MITEK FABRICATOR DESIGN STATEMENT

This statement is issued by MITek accredited fabricator **VIP Frames & Trusses**, being licensed to use the MITek 20/20® software, to the client listed above and may be used by the Building Consent Authority to assist in determining compliance with the New Zealand Building Code.

MITek 20/20® TRUSS DESIGN DATA

The MITek 20/20® computer design for this job is based on the following design parameters entered into the program. The Fabricator shall ensure that these job details are current and relevant to the project for the design of the MITek® trusses.

Job Details

Importance Level : 2

Design Working Life : 50 years

Roof Truss

Timber Group: ~MSGx45 H1.2

Roof

Material: Galv Iron .5mm
Dead Load: 0.210 kPa
Restraints: 900 mm centres
Live Load: Q_{ur} = 0.250 kPa
Q_c = 1.100 kN

Pitch: 28.000 deg

Ceiling

Material: Rondo screwed to BC
Dead Load: 0.200 kPa
Restraints: 600 mm centres
Live Load: Q_c = 1.400 kN

Nominal Overhang: 600 mm

Wind

Area: High (44.0 m/s)
Pressure Coeff: C_{pe} = varies; C_{pi} = -0.30, 0.20

Snow

Location: Christchurch (N4) at 100 m
Open Ground Load: 0.900 kPa
Basic Roof Load: 0.403 kPa

The minimum timber treatment for these MITek® trusses shall be in accordance with B2/AS1 Table 1A and the relevant sections of NZS 3602:2003. The timber for these MITek® trusses shall be graded to the requirements of NZS 3603:1993. Proprietary fixings and timber connectors shall be selected in accordance with NZS3604:2011 Section 4 - Durability.

MITek® Truss List

Legend: * = detail only, ? = input only, Fxx = failed design, Ø = non certified, Unmarked trusses = designed successfully, LB = lateral bracing required
GB = gable brace required

Truss	Qty	Span (mm)	Pitch (deg)	Spacing (mm)	Truss	Qty	Span (mm)	Pitch (deg)	Spacing (mm)	Truss	Qty	Span (mm)	Pitch (deg)	Spacing (mm)
*FR01	1	3380	28.000	900	J23	1	2492	28.000	900	S9	3	5270	28.000	803
*FR02	1	5395	28.000	900	J24	1	2492	28.000	900	S10	1	5270	28.000	803
GE1	1	2180	28.000	900	J25	1	1592	28.000	900	S11	1	4870	28.000	803
GE2	1	4195	28.000	900	J26	1	1592	28.000	900	S12	2	4870	28.000	803
*H1	1	2098	20.605	900	J27	1	2332	28.000	900	S13	1	2180	28.000	900
*H2	2	2368	20.605	900	J28	1	2332	28.000	900	S14	1	4195	28.000	797
*H3	2	6140	20.605	900	J29	1	1432	28.000	900	S15	3	4195	28.000	797
*H4	2	5447	20.605	900	J30	1	1432	28.000	900	S16	1	4195	28.000	797
*H5	1	5624	20.605	900	J31	1	2332	28.000	900	S17	1	4890	28.000	615
*H6	1	1822	20.605	900	J32	1	1432	28.000	900	S18	1	2770	28.000	615
*H7	1	2366	20.605	900	J33	1	1432	28.000	900	S19	1	4710	28.000	900
*H8	2	4125	20.605	900	*OR1	8	1305	0.000	523	S20	3	4710	28.000	802
J1	1	2857	28.000	900	*OR2	10	1202	0.000	684	S21	4	4710	28.000	802
J2	1	2857	28.000	900	*R1	1	1670	28.000	900	T1	1	5270	28.000	900
J3	1	2857	28.000	900	*R2	1	913	28.000	900	T2	1	7560	28.000	900
J4	1	2857	28.000	900	*R3	6	913	28.000	900	T3	1	4890	28.000	900
J5	1	1957	28.000	900	*R4	1	1670	28.000	900	T4	1	4710	28.000	900
J6	1	1957	28.000	900	*R5	6	913	28.000	900	*T5	1D	2302	0.000	900
J7	1	2857	28.000	900	*R6	1	1180	28.000	900	V1	1	1078	28.000	900
J8	1	1957	28.000	900	*R7	1	1180	28.000	900	V2	1	1755	28.000	900
J9	1	1957	28.000	900	*R8	1	1305	28.000	900	V3	1	2433	28.000	900
J10	1	3267	28.000	900	*R9	1	772	-28.000	900	V4	1	1345	28.000	900
J11	1	3267	28.000	900	*R14	1	1145	28.000	900	V5	1	2245	28.000	900
J12	1	2367	28.000	900	*R15	1	1145	28.000	900	V6	1	890	28.000	900
J13	1	2367	28.000	900	*R16	1	913	28.000	900	V7	1	762	28.000	900
J14	1	1467	28.000	900	*R17	1	771	-28.000	900	V8	1	1573	28.000	900
J15	1	1467	28.000	900	S1	2	5270	28.000	900	V9	1	2188	28.000	900
J16	1	3267	28.000	900	S2	1	6580	28.000	900	V10	1	1638	28.000	900
J17	1	2367	28.000	900	S3	1	6580	28.000	892	V11	1	1023	28.000	900
J18	1	2367	28.000	900	S4	2	6580	28.000	892	*V12	1	722	28.000	900
J19	1	1467	28.000	900	S5	1	6580	28.000	892	V13	1	1175	28.000	900
J20	1	1467	28.000	900	S6	3	5270	28.000	678	V14	1	2075	28.000	900
J21	1	2492	28.000	900	S7	1	4890	28.000	900	V15	1	1100	28.000	900
J22	1	2492	28.000	900	S8	1	4710	28.000	900					

Total quantity : 145

The computer design input has been carried out by:

Signed: 

Date: ...Friday, 27 April 2018....

Name of Detailer: Lloyd Harwood

Qualifications and Title: Detailer

On behalf of: VIP Frames & Trusses



Correspondence from : **AUCKLAND**
40 Neales Road, East Tamaki 2013
PO Box 58-014, Botany 2163
Phone: 09 274 7109
Fax: 09 274 7100

CHRISTCHURCH
14 Pilkington Way, Wigram 8042
PO Box 8387, Riccarton 8440
Phone: 03 348 8691
Fax: 03 348 0314

www.mitek.nz.co.nz

MiTek 20/20 Engineering 4.7.184.0

Printed: 13:15:46 27 Apr 2018

PRODUCER STATEMENT for MiTek 20/20® TRUSS DESIGN - Version 4.7

ISSUED BY: **MiTek New Zealand Limited**

TO: **VIP Frames & Trusses**

IN RESPECT OF: **MiTek® Truss Designs**

This producer statement covers the MiTek 20/20® truss design and the structural performance of the GANG-NAIL® connector plate for the job reference **18-419N** and may be used by a Building Consent Authority to assist in determining compliance with the New Zealand Building Code.

The MiTek 20/20® truss design program has been developed by MiTek New Zealand Limited for the design of MiTek® timber roof, floor and attic trusses in New Zealand. The truss designs computed by MiTek 20/20® are prepared using sound and widely accepted engineering principles, and in accordance with compliance documents of the New Zealand Building Code and Verification Method B1/VM1; and internationally accepted standard ANSI/TPI 1 - 2002 as an alternative solution, to satisfy the requirements of Clauses B1 and B2 of the New Zealand Building Code.

On behalf of MiTek New Zealand Limited, and subject to:

- i) All proprietary products meeting their performance specification requirements
- ii) The provision of adequate roof bracing and overall building stability
- iii) Correct selection and placement of GANG-NAIL connector plates
- iv) Correct input of Truss Design Data as shown in the Fabricator Design Statement for this job
- v) The design being undertaken by the accredited fabricator under the terms of the software licence
- vi) Timber is graded to the requirements of NZS 3603:1993
- vii) Minimum timber treatment for these MiTek® trusses shall be in accordance with B2/AS1 Table 1A and the relevant sections of NZS 3602:2003

I believe on reasonable grounds that the trusses, if constructed in accordance with the MiTek 20/20® truss design and shop drawings, will comply with the relevant provisions of the New Zealand Building Code.

MiTek New Zealand Limited holds a current policy of Professional Indemnity Insurance no less than \$500,000.

On behalf of MiTek New Zealand Limited,

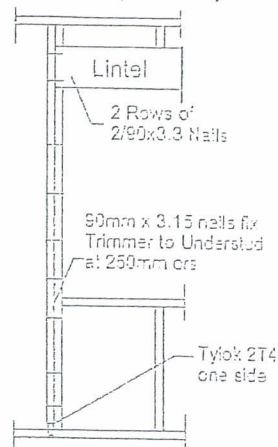
Date: Friday, 27 April 2018

In Ling Ng, BE (Hons), CPEng, IntPE, MIPENZ (ID: 146585)
TECHNICAL SERVICES MANAGER, MiTek New Zealand Limited

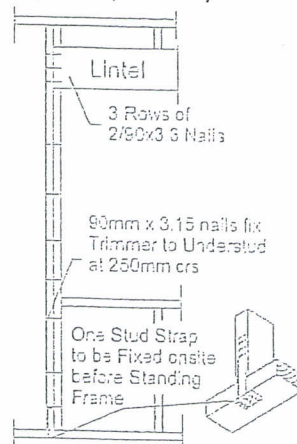
AS BUILT DESIGN
BCN170237NOTE: Image Quality is due to
condition of Original

Lintel Fixings

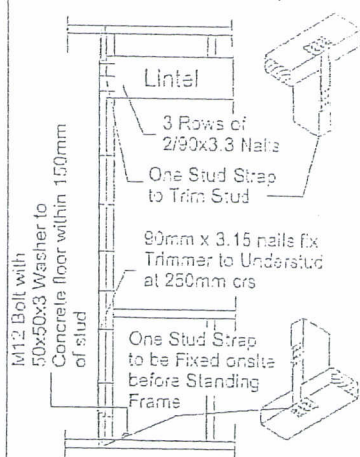
Type E (1.4kN)



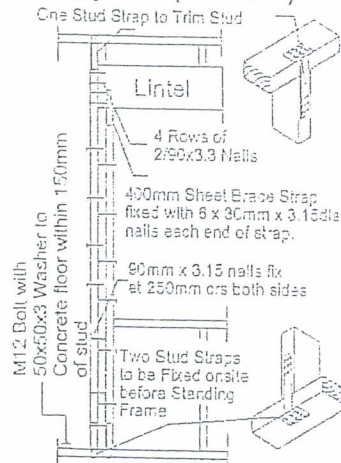
Type F (4.0kN)



Type G (7.5kN)



Type H (13.5kN)

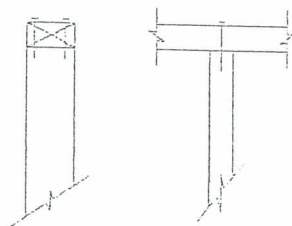


Note. Stud numbers indicative only. Refer Table 6.5 NZS 3604:2011
For fixing of Jack Studs to lintel and top plate refer to "Stud to Top Plate Fixing Schedule"

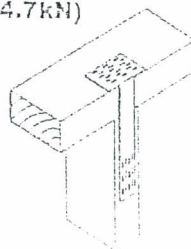
Top Plate Fixings

Fixing Type A (0.7kN)

2/90x3.33 Plain Steel Wirenails
Driven Vertically Into Stud



Fixing Type B (4.7kN)



GANG NAIL Stud Strap
Design Capacity 6.1 kN
AS1720.1-1997

Truss Fixing Layout

VALLEY TRUSS = 2/90x3.15 SKEW NAILS +
2 WIRE DOGS UNLESS STATED OTHERWISE
MULTI-PLY NAILING (TOP CHORD = 1 row
@ 180 ctrs, BOTTOM CHORD = 1 row @
280 ctrs, WEBS = 1 row @ 140 ctrs)

ASBUILT TRUSS BC170237

RECEIVED 15 APR 2018

VIP
&
TRUSSES

200 Maces Road
PO Box 35-193 Christchurch
Ph (03) 389 8200

JOB No **18-419N**

Client: Mike Greer Homes NC
Job Name: N2113
Address: 42 Watkins Drive
Highgate

Pitch: 28.000
Roof Material: Galv Iron .5mm
Soffit Overhang: 600mm
Wind Area: High
Snow Load: 0.403

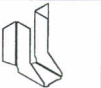
Trusses And Rafters At 900 Centres
Unless Stated Otherwise

DRAWN BY Nick Buckley

DATE 13 Apr, 2018 PAGE 1 of 1

FIXINGS

A=47x90 JH
B=47x120 JH
D=47x190 JH
E=95x165 JH



Joist Hanger

C=2xCT200's
M=Multigrips
N=Nail On Plate
L=Pair CPC 40
P=Pair CPC 80

CT 200



Multi Grips



Nail on plate

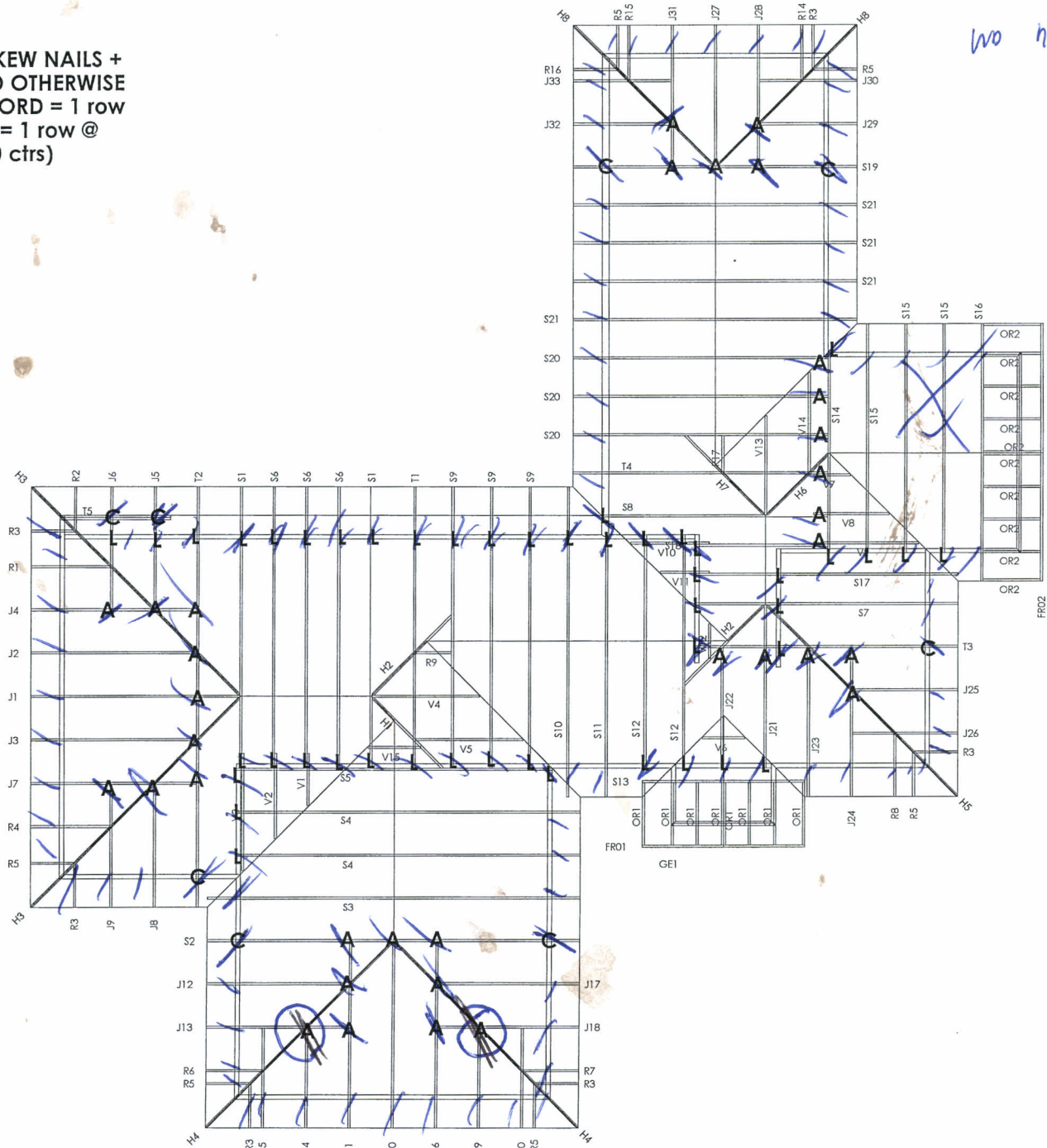


CPC

NOTE

Please contact VIP Frames and Trusses Ltd
for any queries regarding this layout or if any
on site remedial work is required.

No modifications to Roof Trusses or Wall Frames
are to be undertaken without first obtaining
written authority from VIP Frames and Trusses Ltd.



no nip RCB

AS BUILT DESIGN
BCN170237

Truss Dimension Layout

ASBUILT TRUSS BC170057

RECEIVED 11/11/18

VIP
FRAMES
&
TRUSSES

200 Maces Road
PO Box 35-193 Christchurch
Ph (03) 389 8200

JOB No **18-419N**

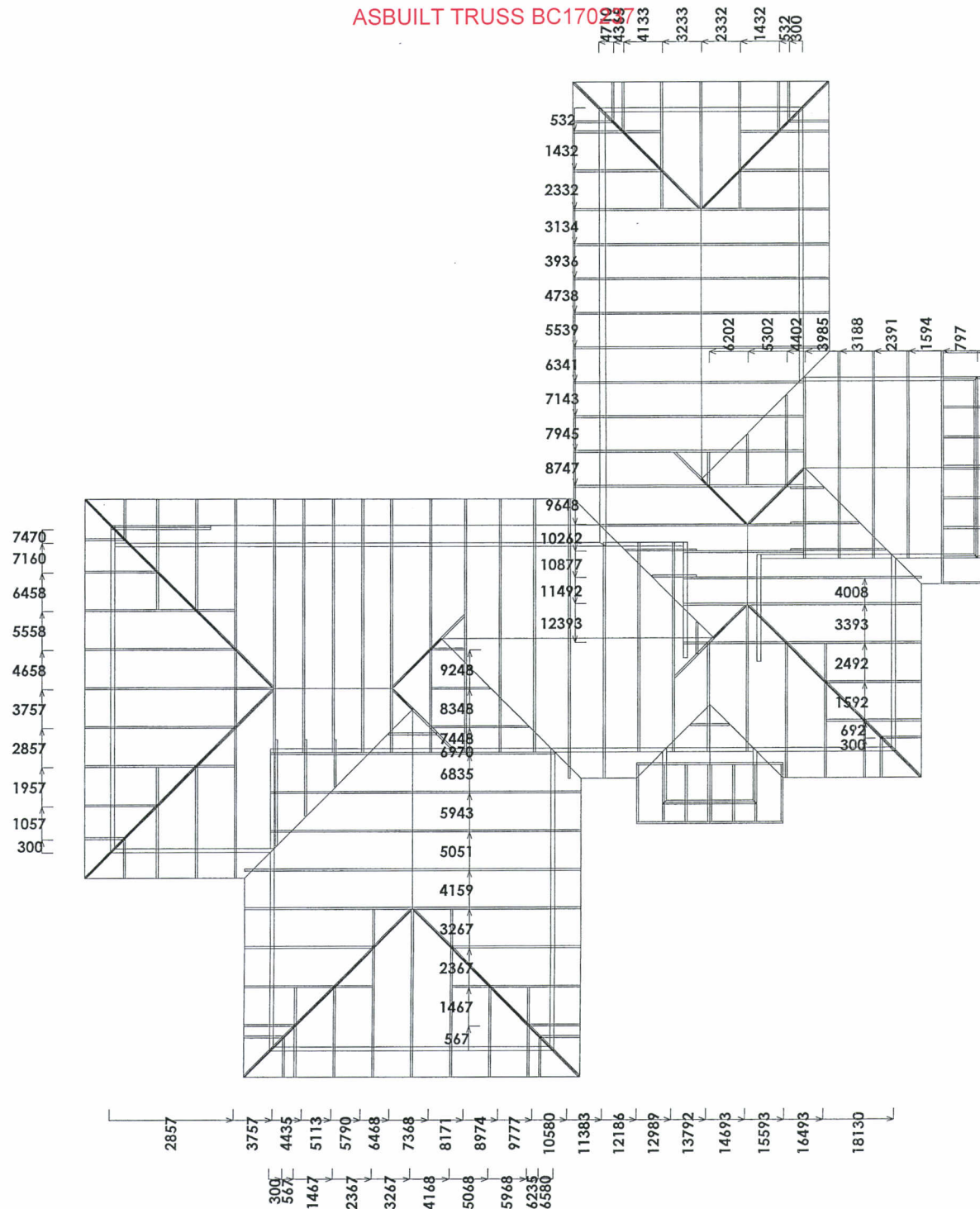
Client: Mike Greer Homes NC
Job Name: N2113
Address: 42 Watkins Drive
Highgate

Pitch: 28.000
Roof Material: Galv Iron .5mm
Soffit Overhang: 600mm
Wind Area: High
Snow Load: 0.403

Trusses And Rafters At 900 Centres
Unless Stated Otherwise

DRAWN BY Nick Buckley

DATE 13 Apr,2018 PAGE 1 of

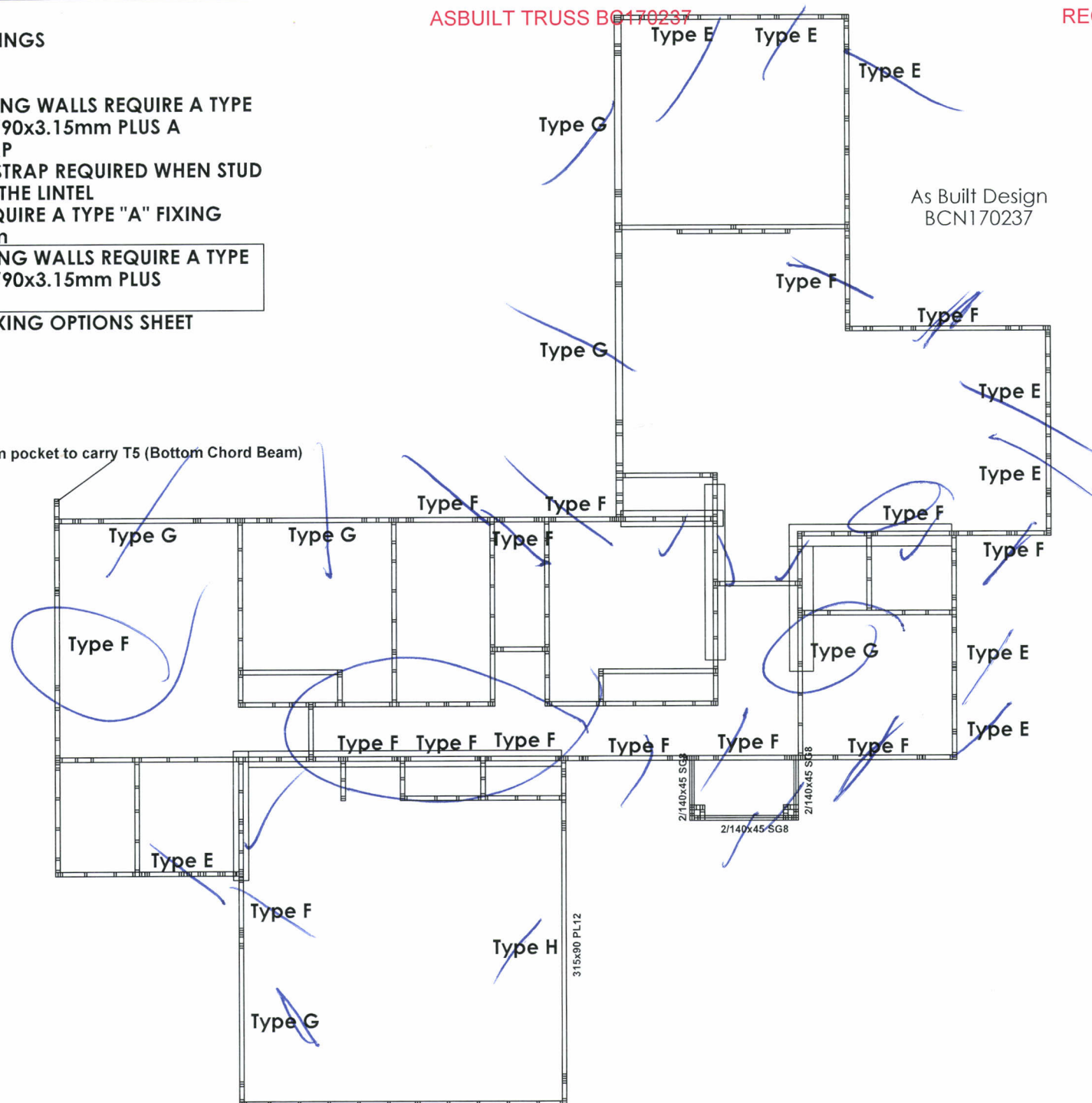


STUD TO TOP PLATE FIXINGS

EXTERNAL LOAD BEARING WALLS REQUIRE A TYPE "B" FIXING (4.7kN) = 2/90x3.15mm PLUS A GANG NAIL STUD STRAP
200mm SHEET BRACE STRAP REQUIRED WHEN STUD STRAP DOESN'T FIX TO THE LINTEL
GABLE END WALLS REQUIRE A TYPE "A" FIXING (0.7kN) = 2/90x3.15mm

INTERNAL LOAD BEARING WALLS REQUIRE A TYPE "B" FIXING (4.7kN) = 2/90x3.15mm PLUS 2/CPC40 ONLY
REFER TO THE LINTEL FIXING OPTIONS SHEET FOR FIXING DETAILS

Beam pocket to carry T5 (Bottom Chord Beam)



VIP FRAMES & TRUSSES

200 Maces Road
PO Box 35-193 Christchurch
Ph (03) 389 8200

JOB No **18-419N**

Client: Mike Greer Homes NC
Job Name: N2113
Address: 42 Watkins Drive
Highgate

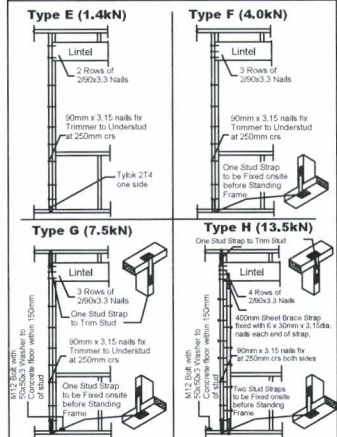
Pitch: 28.000
Roof Material: Galv Iron .5mm
Soffit Overhang: 600mm
Wind Area: High
Snow Load: 0.403

Trusses And Rafters At 900 Centres
Unless Stated Otherwise

DRAWN BY Nick Buckley

DATE 13 Apr, 2018 PAGE 1 of

Lintel Fixings

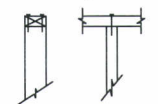


Note: Stud numbers indicative only. Refer Table B.5 NZS 3604:2011
For fixing of Jack Studs to lintel and top plate refer to "Stud to Top Plate Fixing Schedule"

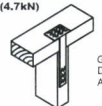
Top Plate Fixings

Fixing Type A (0.7kN)

2/90x3.33 Plain Steel Wirenails
Driven Vertically Into Stud



Fixing Type B (4.7kN)



GANG NAIL Stud Strap
Design Capacity 6.1 kN
AS1720.1-1997

Form 6

Application for code compliance certificate

Section 92, Building Act 2004

The building consent

Building consent number: BC170237

Issued by: Waimakariri District Council

Valuation number: 2165015136

*The owner

Name of owner: Mike Greer Homes North Canterbury Limited

*Contact person: Sonya Ann Dacombe

Mailing address: PO Box 421 Rangiora 7440

Street address/registered office:

Phone number: Landline: 039755674

Mobile: 021758767

Daytime: 033130319

After hours: 039755674

Facsimile number: 033130321

Email address: nc.compliance@mikegreerhomes.co.nz

Website:

The following evidence of ownership is attached to this application: RCNotReq

Application

All building work to be carried out under the above building consent was completed on:

The personnel who carried out the building work are as follows:

The following specified systems are contained on the compliance schedule for the building and, in the opinion of the personnel who installed them, are capable of performing to the performance standards set out in the building consent:

I request that you issue a code compliance certificate for this work under section 95 of the Building Act 2004.

The code compliance certificate should be sent to: PO Box 421 Rangiora 7440



Signature of the owner

Leah Kennedy

Name of person signing

Date: 30/08/18



NEW ZEALAND INSTITUTE OF
ARCHITECTS
INCORPORATED



Building Code Clause(s) **B1**

PRODUCER STATEMENT – PS4 – CONSTRUCTION REVIEW

(Guidance notes on the use of this form are printed on the reverse side)

ISSUED BY: **CONSTRUCTURE LIMITED**
(Construction Review Firm)

TO: **C/O MIKE GREER HOMES NORTH CANTERBURY**
(Owner/Developer)

TO BE SUPPLIED TO: **WAIMAKARIRI DISTRICT COUNCIL**
(Building Consent Authority)

IN RESPECT OF: **NEW DWELLING**
(Description of Building Work)

AT: **LOT 77, 42 WATKINS DRIVE, HIGHGATE, RANGIORA**
(Address)

LOT 77 DP 497145 SO

CONSTRUCTURE LIMITED has been engaged by **OWNER**
(Construction Review Firm)

to provide ☐ CM1 ☐ CM2 ☒ CM3 ☐ CM4 ☐ CM5 (Engineering Categories) or ☐ OL1 ☐ OL2 ☐ OL3 ☐ OL4 (Architectural Categories)
observation ☐ or other **STRUCTURAL ENGINEERING – Foundation bearing, waffle foundation slab and entry post footings only.** services
(Extent of Engagement)

in respect of clause(s) **B1 (STRUCTURE)** of the Building Code for the building work described in documents relating to Building Consent No. **BC170237** and those relating to Building Consent Amendment(s) Nos. issued during the course of the works. We have sighted the Building Consents and the conditions of attached to them.

Authorised instructions/variation(s) No. **7833 01 & 02** copies attached

or by the attached Schedule ☐ have been issued during the course of the works.

On the basis of ☐ this ☒ these review(s) and information supplied by the contractor during the course of the works, I believe on reasonable grounds that ☐ All ☒ Part only of the building works have been completed in accordance with the relevant requirements of the Building Consents and Building Consent Amendments identified above, with respect of Clause(s) **B1** of the Building Regulations.

I, **CORY J BEDFORD** am: ☒ CPEng **238134** #
(Name of Design Professional)

I am a Member of: ☒ IPENZ ☐ NZIA and hold the following qualifications: **BEng (HONS) MIPENZ CPEng IntPE**

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 ☒ YES ☐ NO

SIGNED BY **C.J. BEDFORD** ON BEHALF OF **CONSTRUCTURE LIMITED**

Date **29/08/2018** (signature)

Note: This statement shall only be relied upon by the Building Consent Authority named above. Liability under this statement accrues to the Construction Review 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 (Forms) Regulations 2004** for the issue of a Code Compliance Certificate.

GUIDANCE ON USE OF PRODUCER STATEMENTS

This producer statement has been prepared by a combined task committee consisting of members of the New Zealand Institute of Architects, Institution of Professional Engineers New Zealand, Association of Consulting Engineers New Zealand and the Building Officials Institute of New Zealand.

Four producer statements are available and brief details on the purpose of each are as follows:

- Design:** Intended for use by the person responsible for the design in circumstances where the Territorial Authority will rely on the producer statement to issue a Building Consent.
- Design Review:** Intended for use by a suitably qualified independent design professional where the Territorial Authority does not undertake an internal review and relies on the independent design professional's review to issue the Building Consent.
- Construction:** Intended for the use by the contractor of the building works where the Territorial Authority requires a producer statement at the completion of construction.
- Construction Review:** Intended for use by the person required by the Building Consent to undertake construction monitoring of the building works in circumstances where the Territorial Authority will rely on the producer statement to issue a Code Compliance Certificate.

The producer statements system is intended to provide Territorial Authorities with reasonable grounds for the issuing of a Building Consent or Code Compliance Certificate without having to duplicate design or construction checking by others.

The following criteria are recommended to Territorial Authorities with respect to the use of the producer statements.

Definition of Suitably Qualified Design Professional

A suitably qualified design professional should have recognised qualifications and experience for the work undertaken and should be either:

- (i) an active member of the Association of Consulting Engineers New Zealand (ACENZ) or;
- (ii) a member of the Institution of Professional Engineers New Zealand (IPENZ) having a current policy of Professional Indemnity Insurance for a sum not less than \$200,000 or;
- (iii) a member of the New Zealand Institute of Architects (NZIA) having a current policy of Professional Indemnity Insurance for a sum of not less than \$200,000.

Design Build Contracts

If the design professional is engaged by the contractor, the territorial authority should satisfy itself that it is appropriate for the territorial authority to rely upon a producer statement from the design professional.

Consulting Services during Construction Phase

There are several levels of service which a design professional may provide during the construction phase of a project. The territorial authority is encouraged to require that the service to be provided by the design professional is appropriate for the project concerned.

Requirement to provide Producer Statement

Territorial Authorities should ensure that the applicant is aware of any circumstances in which there may be a requirement for producer statements for the construction phase of building work at the time the building consent is issued as no design professional should be expected to provide a producer statement unless such a requirement forms part of the design professional's engagement.

Attached Particulars

Attached particulars referred to in this producer statement refer to supplementary information appended to the producer statement.



constructure
structural engineering

SITE INSTRUCTION

Contract Lot 27
42 Watkins Drive
Highgate

Date 06.04.2018 Noted
File: 7833

PROGRESS

Boring close waffle foundation slab
No one on site.

INSTRUCTIONS & COMMENT

7⁰⁰ Scatpenetrometer tests.
results > 100 kpa throughout

ok to proceed
John Frepaul.

COPIESTO: Veronica / Duane / site box.

- A No Variation
- B Contract Variation



constructure
structural engineering

SITE INSTRUCTION

Contract Lot 77 Watkins Drive, Rangiora

Date 01/05/18

No: 02

File: 7833

PROGRESS Pre-pour: Slab + Column footings.

Builder on site.

INSTRUCTIONS & COMMENT

Beam layout + mesh as per plan.

* Ensure mesh is central with 50mm edge cover

* Place D10 'L' starters to garage rebar

* Ensure 40mm to underside + edge of pipes/ducts

* Pump water from column footings

* D10 lap to be min. 650mm

* Provide photos prior to pour: cieran@constructure.co.nz

Cieran Hickey

COPIES TO: Site box

A No Variation

B Contract Variation

055431



Company Details

D & B Drainage and Excavation

2 Thorne Place Rangiora 7400

dandbdrainage@gmail.com

Michael Boulton 0276305726

Richard Tapp 0274249918

Producer Statement

Building Consent Number: 170237

Issued By: Richard Tapp, Drainage Reg #24836

To: Mike Greer homes

To be supplied to: Waimakariri District Council

At: 42 Watkins Drive.

Lot Number: 77 Highgate.

We have been engaged by the owner/developer referred to above to provide drainage and construction in respect of the requirements of G13 Drainage and E1 Surface Water of the building code for part only of the proposed work.

This is to confirm that this is done to clause G13 Foul Water and E1 Surface Water under the building code and is in conjunction with the specifications on the consented plans for the property stated above. We have attached working drawings and specifications of the above job. I believe that on reasonable grounds that all work as specified in the attached particulars of the building work under the building consent has been completed to the extent required by that building consent.

Signed: M. Boulton

Date: 8-8-18

Date of installation: 3-5-18

Producer Statement

Drainlaying of Sewer & Stormwater

PS3 Construction

Issued by: D & B Drainage
(the Contractor)

Registration No: 24836

Contractors' qualification and experience: (Tick appropriate box)

To: **Waimakariri District Council**

In respect of the following:

Storm water and all soak pits installed in accordance with E1, G13 or AS/NZ 3500 as shown on the approved plans or as per the attached as built drainage plan.

Installed at: lot 77 Highgate. 42 Watkins Drive
Rangiora.

Building Consent No: 170237

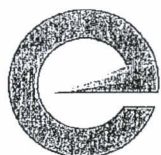
As a licenced Drainlayer, currently holding an annual practicing licence, certify that I, or personnel under my control have carried out the installation of the above system and I believe on reasonable grounds that the installation complies with the New Zealand Building Code.

The Contractor acknowledges that it is responsible to Waimakariri District Council for the information contained in this Producer Statement. The Contractor agrees to indemnify Waimakariri District Council against all liability suffered or incurred by the Council as a consequence of the information contained in this Producer Statement being found to be misleading or incorrect in whole or in part.

Signed: McBaxter

Date: 8-8-18

NOTE: Image Quality is due to condition of Original



Electrical Workers Registration Board

SAFETY | COMPETENCY | COMPLIANCE

Electrical Certificate of Compliance and Electrical Safety Certificate

Reference/Certificate ID No: 997



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 AND CONTACT

Location Details 42 Watkins Drive
Contact Name Mike Greer North Canterbury

Contact Address Mike Greer North Canterbury
Postcode

Name of Electrical worker: Luther Poumale
Organisation/ company: John Larson Electrical

Registration/Practising licence number: E262042

Phone: 0272296747

Email: lenny@larsonelectrical.co.nz

Name of person(s) supervised:

CoC

Type of work: ☐ Additions ☐ Alterations ☒ New work
The prescribed electrical work is: ☐ Low risk ☐ General ☒ High risk (specify):
Reference Standards: ☐ Part 1 of AS/NZS 3000 ☒ Part 2 of AS/NZS 3000
☐ Additional Standards:

Description of work: (including date/s of work and type of supply system)

Wired as per John Larson Electrical plan, x42 lighting circuits, x30 Socket circuits, 13m 16mm neutral screen single core from main switchboard to meterbox, 13m 6mm Earth joined to bare earth at meterbox *mains to boundry from meterbox by others

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 in that the installation, or part of the installation:

Select those that apply:

- ☐ Has been installed in accordance with the specified certified design¹
- ☒ Has an earthing system that is correctly rated (where applicable)
- ☒ Contains fittings that are safe to connect to a power supply
- ☐ Relies on a supplier Declaration of Conformity¹
- ☒ Has been satisfactorily tested in accordance with the Electricity (Safety) Regulations 2010
- ☒ Is safe to connect

Electronic/Other reference:

Certifier's signature:

Date: 2 1 / 0 8 / 2 0 1 8

¹ Attach or reference. If it is impractical to attach a copy of a particular manufacturer's instructions, or of any certified design or supplier declaration of conformity, provide a reference to where the documents can be found, in a readily accessible format, by electronic means.

ESC

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: Luther Poumale

Registration/Practising licence number: E262042

Certifier's signature:

Certificate Issue Date:

2 1 / 0 8 / 2 0 1 8

Connection Date:

2 3 / 0 8 / 2 0 1 8

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

This certificate also confirms that the electrical work complies with the building code for the purposes of Section 19(1)(e) of the Building Act 2004.



WAIMAKARIRI
DISTRICT COUNCIL

Private Bag 1005, Rangiora 7440
Ph 03 311 8900, 03 327 6834 Fax 03 313 4432
www.waimakariri.govt.nz

PRODUCER STATEMENT PIPEWORK TESTING

BC No. 170237

Issued by (Plumber):

Chris Davies

At (address):

42 Watkins Drive, (Lot 77)

For (Owner):

MGHNC - Spec

Highgate, Rangiora.

In respect of the testing of water pipe work prior to concealment.

I hereby state that I have personally tested the water pipe work installed in the building authorised under this Building Consent by the method indicated hereunder.

- ☒ By pressurising the pipe work to 1500 kPa for a period of not less than 15 minutes for the hot and cold water supply and checking to see there are no leaks. (NZBC G12/AS1 7.5.1 (a), (b).)
- ☐ By pressurising the uPVC pipe work to 1.5 times the maximum working pressure for a period of not less than 15 minutes and checking that there are no leaks. (NZBC G12/AS1 7.5.2, NZS 7643).

Max working pressure was:

- ☐ By pressurising the pipe work to 1500 kPa for a period of not less than 5 minutes and checking to see there are no leaks. (NZBC G12 VM1, AS3500:Part 1.2 1998)

And believe on reasonable grounds that the pipe work has passed that test.

- ☒ All work complies with the NZBC

I also understand that Waimakariri District Council in accepting this producer statement will be relying on it to issue the Code Compliance Certificate at the completion of the building work.

SIGNATURE OF LICENSED CERTIFYING PLUMBER:

Signature:

Registration Number:

18932

Company Name:

PHS Plumbing & Heating Services Ltd

Date: 31/7/18



LICENSED BUILDING PRACTITIONERS

**Form 6A Memorandum from Licensed Building Practitioner:
Record of building work
Section 88, Building Act 2004**

THE BUILDING

Street address: N2113-DBR Lot 77 Highgate

Suburb:

Town / City: Rangiora

Postcode:

THE PROJECT

Building consent number: 170237

THE OWNER(S)

Name(s): Mike Greer North Canterbury

Mailing Address: N2113-DBR Lot 77 Highgate

Suburb:

PO Box / Private Bag:

Town / City: Rangiora

Postcode:

Phone Number: 0278397439

Email:

Work that is restricted building work	Description	Carried out/Supervised
---------------------------------------	-------------	------------------------

PRIMARY STRUCTURE

No record added

EXTERNAL MOISTURE MANAGEMENT SYSTEM

Wall cladding or wall cladding system	Brick Veneer Cladding laid as per local building code specifications	Carried out and supervised
---------------------------------------	--	----------------------------

ISSUED BY

Name: Neil Blakemore

LBP number: BP104498

Class(es) licensed in: Bricklaying and Blocklaying

Plumbers, gasfitters and drainlayers registration number (if applicable):

Mailing Address: 51 Swamp Road

Street Address: 51 Swamp Rd, RD2, Rangiora, Rangiora, 7472

Suburb: Rd 2

Town/City: Rangiora

PO Box/Private bag:

Postcode: 7472

Phone number: 0274629191

Mobile: 0274629191

After hours:

Fax:

Email: blakemorebricklaying@yahoo.co.nz

Website:

Register link: <https://lbp.ewr.govt.nz/PublicRegister/View.aspx?lbpid=BP104498>

DECLARATION

I, Neil Blakemore LBP carried out and supervised the restricted building work recorded on this form.

Declaration made on 11/06/2018

Signature: 



MEMORANDUM FROM LICENSED BUILDING PRACTITIONER
RECORD OF BUILDING WORK

Section 88, Building Act 2004

Please fill in the form as fully and correctly as possible.

If there is insufficient room on the form for requested details, please continue on another sheet and attach the additional sheet(s) to this form.

The Building	
Address: Lot 77, 42 Watkins Drive	
Suburb: Highgate	
Town/City: Ranglora	Postcode: 7400

The Project
Building Consent Number: BC 170237

The Owner	
Name: Mike Greer Homes North Canterbury	
Mailing Address: Shop 1, 29 Huntingdon Drive	
Suburb:	PO Box/ Private Bag: 421,
Town/City: Ranglora	Postcode: 7400
Phone Number: 03 3130319	Email Address:

The Building	
Address: Lot 77, 42 Watkins Drive,	
Suburb: Highgate	
Town/City: Rangiora	Postcode: 7400

Record of Work that is Restricted Building Work			
Primary Structure			
Work that is Restricted Building Work		Description of Restricted Building Work	Carried Out / Supervised
Foundations & Subfloor Framing	☐		☐ Carried Out ☐ Supervised
Walls	☐		☐ Carried Out ☐ Supervised
Roof	☒		☒ Carried Out ☒ Supervised
Columns and Beams	☐		☐ Carried Out ☐ Supervised
Bracing	☐		☐ Carried Out ☐ Supervised
Other	☐		☐ Carried Out ☐ Supervised
Tick whether you carried out the restricted building work or supervised someone else carrying out the restricted			

External Moisture Management Systems			
Work that is Restricted Building Work		Description of Restricted Building Work	Carried Out / Supervised
Damp proofing	☐		☐ Carried Out ☐ Supervised
Roof Cladding or Roof Cladding System	☒		☒ Carried Out ☒ Supervised
Ventilation System (e.g. subfloor or cavity)	☐		☐ Carried Out ☐ Supervised
Wall Cladding or Wall Cladding system	☐		☐ Carried Out ☐ Supervised
Waterproofing	☐		☐ Carried Out ☐ Supervised
Other	☐		☐ Carried Out ☐ Supervised
Tick whether you carried out the restricted building work or supervised someone else carrying out the restricted building			

ISSUED BY	
Name and contact details of the licensed building practitioner who is licensed to carry out or supervise restricted building work:	
Name: <u>Mark Jones</u>	LBP number: <u>BP104336</u>
Class(es) licensed in: <u>Profiled Metal Roof and Wall Cladding</u>	
Plumbers, Gasfitters and Drainlayers registration number (if applicable):	
Mailing address (if different from below):	
Street address/Registered office: <u>382 Douglas Rd</u>	
Suburb:	Town/City: <u>Amberley RD2</u>
PO Box/Private Bag	Postcode: <u>7482</u>
Phone number:	Mobile: <u>021 904 115</u>
After hours:	Fax:
Email address:	Website:

DECLARATION	
I <u>Mark Jones</u> carried out or supervised the restricted building work recorded on this form.	
Signature:	<u>[Signature]</u>
Date:	<u>13th August 2018</u>

Memorandum from licensed building practitioner: Record of building work

Section 88, Building Act 2004

Please fill in the form as fully and correctly as possible.

If there is insufficient room on the form for requested details, please continue on another sheet and attach the additional sheet(s) to this form.

THE BUILDING	
Street address: Lot 77 Highgate, 42 Watkins Drive	
Suburb: Highgate	
Town/City: Rangiora	Postcode: 7400

THE PROJECT
Building consent number: BC 170237

THE OWNER(S)	
Name(s): Mike Greer Homes North Canterbury	
Mailing address: Shop 1, 29 Huntingdon Drive	
Suburb:	PO Box/Private Bag:
Town/City: Rangiora	Postcode: 7400
Phone number: 03 313 0319	Email address:

RECORD OF WORK BY A LICENSED BUILDING PRACTITIONER FOR RESTRICTED BUILDING WORK

PRIMARY STRUCTURE

Work that is restricted building work	Description of restricted building work	Carried out or supervised
Tick ☒	If necessary, describe the restricted building work.	Tick ☒ whether you carried out the restricted building work or supervised someone else carrying out the restricted building work.
Foundations and subfloor framing ☒	<i>F.B. 1st Floor</i>	☐ Carried out ☒ Supervised
Walls ☒	<i>Wall Framing</i>	☐ Carried out ☒ Supervised
Roof ☒	<i>Roof Framing</i>	☐ Carried out ☒ Supervised
Columns and beams ☐		☐ Carried out ☐ Supervised
Bracing ☒	<i>Hold downs only. Lining by others</i>	☐ Carried out ☒ Supervised
Other ☐		☐ Carried out ☐ Supervised

EXTERNAL MOISTURE MANAGEMENT SYSTEMS		
Work that is restricted building work	Description of restricted building work	Carried out or supervised
Tick ☒	If necessary, describe the restricted building work.	Tick ☒ whether you carried out the restricted building work or supervised someone else carrying out the restricted building work.
Damp proofing ☒	<i>DPM under raft floor</i>	☐ Carried out ☒ Supervised
Roof cladding or roof cladding system ☐		☐ Carried out ☐ Supervised
Ventilation system (for example, subfloor or cavity) ☐		☐ Carried out ☐ Supervised
Wall cladding or wall cladding system ☒	<i>Linear cladding only</i>	☐ Carried out ☒ Supervised
Waterproofing ☐		☐ Carried out ☐ Supervised
Other ☐		☐ Carried out ☐ Supervised

18-01-2018	
Name and contact details of the licensed building practitioner who is licensed to carry out or supervise restricted building work.	
Name: Craig Bailey	LBP number: 104473
Class(es) licensed in:	
Plumbers, Gasfitters and Drainlayers registration number (if applicable):	
Mailing address (if different from below):	
Street address/Registered office: Shop 1, 29 Huntingdon Drive	
Suburb:	Town/City: Rangiora
PO Box/Private Bag	Postcode: 7400
Phone number: 03 313 0319	Mobile:
After hours:	Fax:
Email address:	Website:

DECLARATION

I Craig Bailey carried out or supervised the restricted building work recorded on this form.

Signature: Craig Bailey

Date: 27/8/18

Producer Statement Construction PS3

Name: Shaun Armstrong- Flawless Tiling Ltd

Tick applicable Contractor for:

- | | | |
|---|---|--|
| ☐ Building | ☐ Emergency Lighting | ☐ Cladding |
| ☐ Waterproof Membranes | ☐ Drainlayer | ☐ Fire Alarm |
| ☐ Mechanical (HVAC) | ☐ Solar Heating | ☐ Lift / Escalator (delete one) |
| ☐ Other (Specify): | | |

Issued by: Shaun Armstrong-Flawless tiling Ltd..... to Waimakariri district Council.

SECTION 1: OWNER

Owner :Mike Greer Homes North Canterbury ltd

Project address: lot 77 highgate, Rangiora

Description of Building Work : Wet area tanking

Scope of work covered by statement:

Tanking of: Tiled shower and bath cradle

System / Product used (if applicable): Mapei wps Aqua Defence 2 cotes ,bandage in corners

I (Constructor): Shaun Armstrong have been engaged by

Mike Greer Homes North Canterbury Ltd..... (building consent applicant) to construct:

As specified in the attached particulars of Building Consent Number 170237 and its attached conditions and 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 Building Consent.

Specific reference to the Building Code:

What clauses of the Building Code are covered by the Producer Statement?

(Circle applicable clauses)

B1	B2	C1	C2	C3	C4	C5	C6	D1	D2
E1	E2	(E3)	F1	F2	F3	F4	F5	F6	F7
F8	G1	G2	G3	G4	G5	G6	G7	G8	G9
G10	G11	G12	G13	G14	G15	H1			

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

SECTION 2: CONSTRUCTOR'S DETAILS

Name: Shaun Armstrong..... Registration Number: 663..... or N/A ☐

Qualifications / Experience: Approved Mapei Applicator.....

Address: 6a Arosa pl Parklands

Phone Number: HOME: WORK: MOBILE: 0279354194

Fax: Email: Flawless.tiling@yahoo.com

Signature: S Armstrong Date: 23/8/2018

NB: All sections of this PS3 must be completed.



WAIMAKARIRI DISTRICT COUNCIL

Private Bag 1005, Rangiora 7440
Ph 03 311 8900, 03 327 6834 Fax 03 313 4432
waimakariri.govt.nz

FILE SIGN OFF FOR ISSUE OF A CCC

BC Number:

170237

Final by:

Robert.

Auditor:

Mike

Date audited:

30-08-2018

Project description:

New Dwelling with Att Garage

AUDIT ITEMS

Tick as appropriate:

P 24/08/18 rec 30/08/18

	Y	N	N/A	Jobs on HOLD, outstanding items & notes
Form 6 signed & dated	☒	☐	☐	Required
Final landscaping photos	☒	☐	☐	
Heating installation sheet	☐	☐	☒	
Drainage plan	☒	☐	☐	
Drainlayer's Reg No: 24836	☒	☐	☐	
Drainlayer's Eff. PS3	☒	☐	☐	
WDC Effluent approval & fenced	☐	☐	☒	
Gas certificate	☐	☐	☒	
Electrical certificate	☒	☐	☐	
Exterior cladding PS3	☐	☐	☐	
Plumber's Reg No: 18932	☒	☐	☐	
Plumber's pressure test PS3	☒	☐	☐	
Tanking PS3	☒	☐	☐	
Cladding type/s as per plans	☒	☐	☐	
Well water test	☐	☐	☒	
Engineer's site notes	☒	☐	☐	
Engineer's PS4	☒	☐	☐	
Membrane roof pitch	☐	☐	☒	
Membrane installer's PS3	☐	☐	☒	
Solar PS3	☐	☐	☒	
Consent fees owing	☐	☐	☒	check
LBP Record of Work Memorandum:				
Foundation	☒	☐	☐	
Carpentry	☒	☐	☐	
Cladding - Brick	☒	☐	☐	
- Linea	☒	☐	☐	
- Plaster	☐	☐	☒	
Roofing	☒	☐	☐	

Additional information received and/or notes:

COMMERCIAL

Tick as appropriate:

	Y	N	N/A	Jobs on HOLD, outstanding items & notes
Access & facilities	☐	☐	☒	
Alarm PS4	☐	☐	☐	
FPIS certificate	☐	☐	☐	
HVAC PS4	☐	☐	☐	
Compliance Schedule application	☐	☐	☐	
Surveyor's certificate	☐	☐	☒	

- **Read File – PIM Conditions.** Check above with site notes and working file
- **Check all site notices, rearrange file with notes in date sequence**
- **Site File to be arranged in:**
 - RH Side – Inspection notes in date order, stapled twice along top
 - LH Side – Drainage plan, PS4's, Energy Certificates etc
 - Put all remaining documentation in date sequence, including plans and specs, bind and place in working file
- **Follow up all failed inspection items thoroughly, sign and date decision and briefly describe outcome.**

Use space on back of sheet to write up any back ground notes ie: where a follow through of a site inspection requirement is not 100% clear from another reinspection but has been conveyed in other inspections. Also note any discussion with field officer/other staff to show how acceptance was achieved.

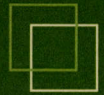
Tick as appropriate:

	Y	N
Inspection notes correctly completed and signed off	☒	☐
Outstanding amendments/items	☐	☒
OK for CCC	☒	☐

Signature:



NOTE: Image Quality is due to
condition of Original



constructure
structural engineering

SITE INSTRUCTION

BC 170237

Contract Lot 77 Watkins Drive Rangiora

Date 01/05/18

No: 02

File: T833

PROGRESS

Pre-pour: Slab + Column footings

Builder on site.

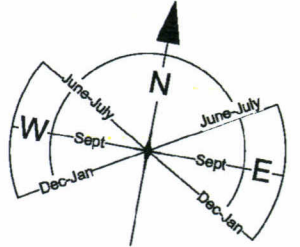
INSTRUCTIONS & COMMENT

Beam layout + mesh as per plan.

- * Ensure mesh is central with 50mm edge cover
- * Place D10 'L' starters to garage rebates
- * Ensure 40mm to underside + edge of pipes/ducts
- * Pump water from column footings
- * D10 lap to be min. 650mm
- * Provide photos prior to pour: cieran@constructure.co.nz
Cieran Hickey

COPIES TO: Site box

- A No Variation
- B Contract Variation



SITE NOTES

Site Area: 755m²
Floor Area: 215.71m² (Over Foundation)
205.51m² (Over Frame)
Site Coverage: 28.57% (38% allowable)

Territorial Authority: Waimakariri District Council
Planning Zone: Residential 2
Site Coverage permitted: 38
Maximum Building Height: 8m

Wind Zone: High
Earthquake Zone: 2
Snow zone: 0.9kPa
Corrosion Zone: C

Set backs required:
- street: 2m
- internal boundaries: Recession planes

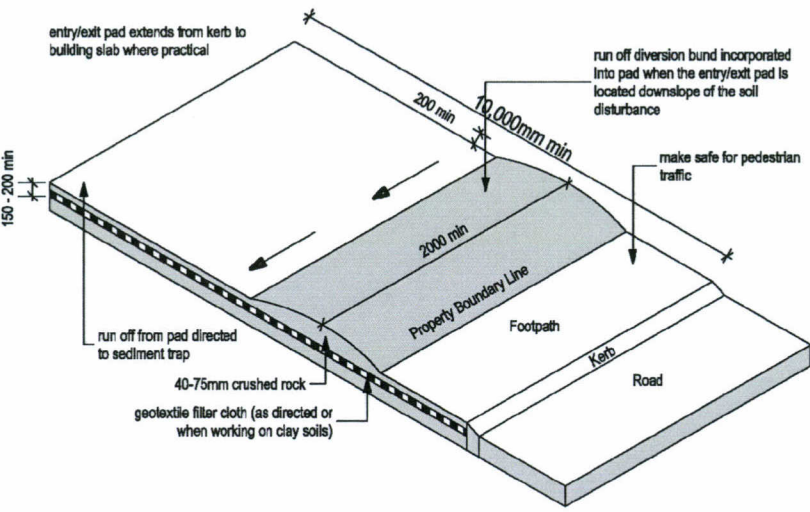
dp = Indicates 75x50mm colorsteel downpipes (55m² per dp)
ht + Indicates hose tap location (confirm with client)
gr Indicates gully trap location

Landscaping: This is indicative only purely for presentation purposes.
Landscaping to be confirmed by the client.
All Fencing to comply with the relevant Covenants.

General: Concept subject to TA rules and regulations.
Concept may be subject to subdivision developer's approval.
All dimensions to be confirmed on site.
Boundary Dimensions and bearings subject to confirmation
Site Levels subject to confirmation

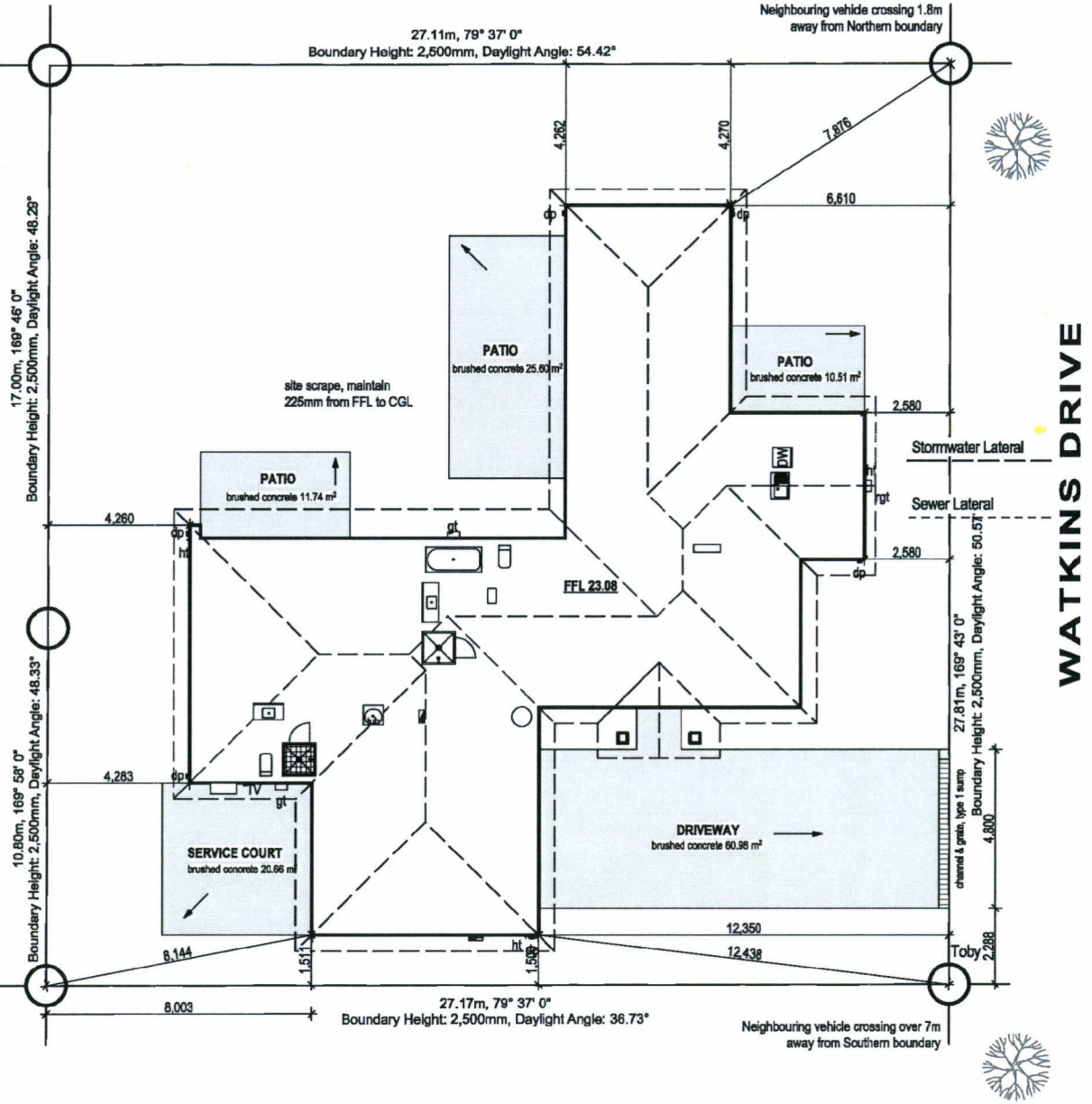
FOUNDATION TYPE: Equivalent to TC1

Specific engineered design - Waffle slab, as per Geotechnical Investigation by Lewis & Barrow Ltd, File #20398 dated 7 May 2015. Foundations to 400mm BGL minimum.



D-01 Stabilised entry pad Detail 1:10

WAIMAKARIRI DISTRICT COUNCIL
Plans and specifications APPROVED in accordance
with the Building Act 2004, clause 49 and the Building
Regulations 1992, Clause 3
BC170237 4/04/2017 lachlant



Z:\A projects\16184D - N2113 Lot 77 Highgate Estate\3 - Working drawings\16184D Lot 77 Highgate - WD.dgn 20/03/2017 Lana

 © Mike Greer Homes North Canterbury Ltd PHONE: (03) 313 0319 FAX: (03) 313 0321 ADDRESS: Shop 1, 29 Huntingdon Drive, Rangiora 7440 WEB: www.mikegreerhomes.co.nz	JOB TITLE: Mike Greer Homes North Canterbury	DRAWING TITLE: SITE PLAN	LEGAL DESCRIPTION: Lot 77, DP 497145, 42 Watkins Drive, Highgate Estate, Rangiora	NOTES: - Subject to council approval - All measurements to be confirmed on site by the contractor prior to the commencement of work © 2010 Mike Greer Homes Limited. All rights reserved. No part of this work covered by copyright may be reproduced or copied in any form or by any means without the written permission of Mike Greer Homes Limited	DATE OF ISSUE: 17/11/2016 AMENDMENT DATE: 2/03/2017	DESIGNER: JM VERSION: V1	SCALE: 1:200, 1:10 JOB # 16184D, N2113	SHEET: A03 OF: 35
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170237

Sarah Smith

From: Sonya Dacombe <Sonya.Dacombe@mikegreerhomes.co.nz>
Sent: Thursday, 22 February 2018 9:18 AM
To: Sarah Smith
Subject: BC170237 - 42 Watkins Drive Lot 77 DP 497145

Good Morning Sarah

We are just about to start work on this building consent.
We should have the first inspection done by the 4\4\18

Cheers

Sonya Hill
Administration Manager

Mike Greer Homes North Canterbury Limited
1/29 Huntingdon Drive Rangiora
PO Box 421 Rangiora 7400
p 03 313 0319, ddi 03 975 5674
m 021 662 517 f 03 313 0321

www.mikegreerhomes.co.nz



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BRACING COMPLIANCE NOTES

Bracing as per NZS3604: 2011, NZBC B1 & B2

B1/AS1

New bracing elements must have been tested and evaluated in accordance with the 2010 version of BRANZ test & evaluation procedure P21.

B2/AS1

Care is required with internal braced wall anchors to ensure there is sufficient slab thickness to meet anchor embedment, hole depth and cover requirements specified in the technical literature.

BRACING NOTES

Bracing Plan is to be read in conjunction with USG BORAL calculations and USG BORAL Plasterboard Bracing Manual June 2015.

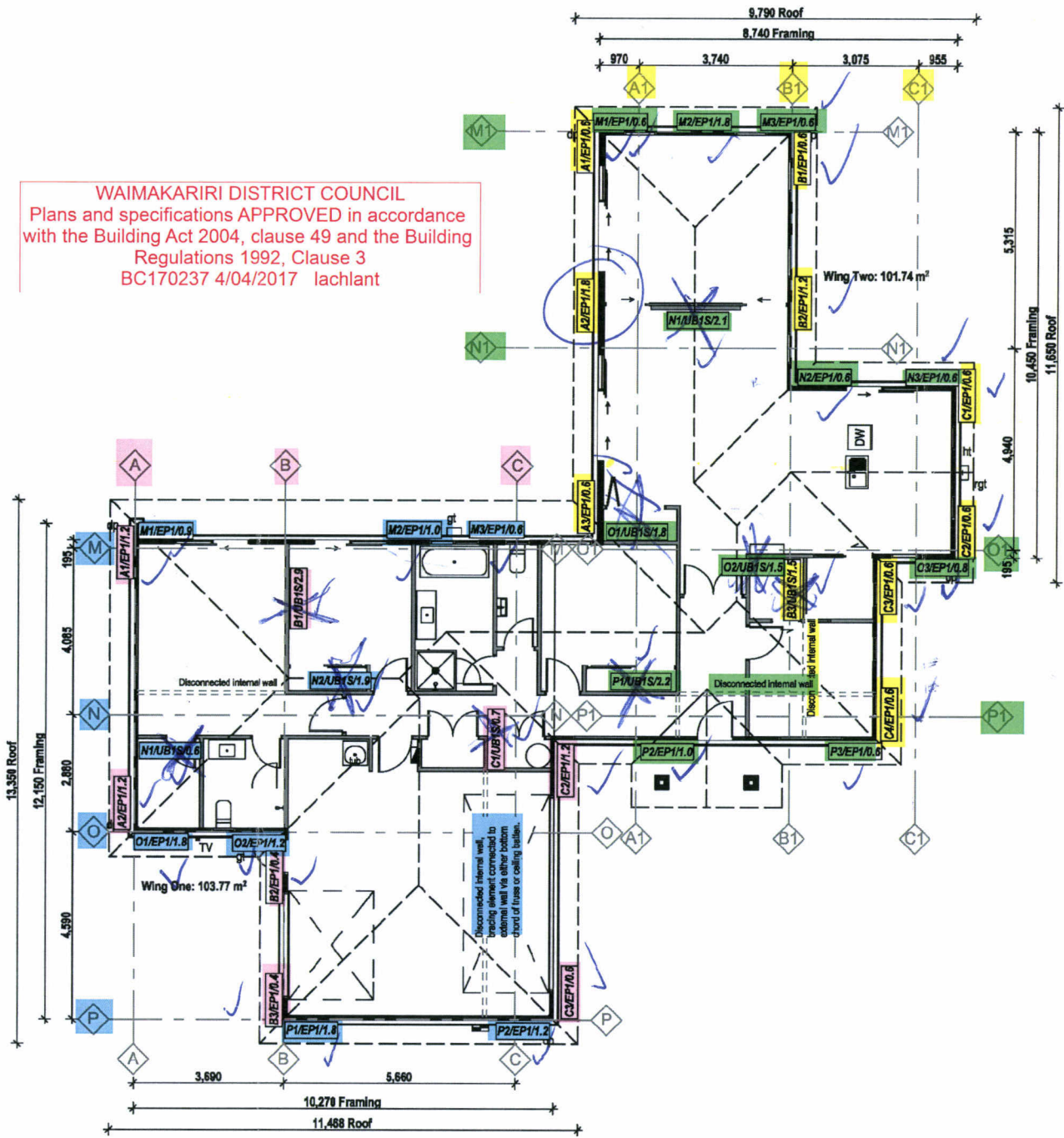
number of stories	Single
foundation type	Slab
roof height above eaves (m)	2.5
maximum roof length (m)	23.01
maximum roof width (m)	21.09
roof pitch (degrees)	28
room in roof space	No
roof cladding weight	Light
floor live load	2kPa

average exterior wall cladding weight	Heavy
building length (m)	21.81
building width (m)	20.04
gross building plan area (m ²)	215.71
interior wall height (m)	2.4
exterior wall height (m)	2.4

wind speed	High
earthquake zone	2

Bracing lines must be spaced no more than:
6m for standard construction with any USB BORAL plasterboard ceiling

WAIMAKARIRI DISTRICT COUNCIL
Plans and specifications APPROVED in accordance
with the Building Act 2004, clause 49 and the Building
Regulations 1992, Clause 3
BC170237 4/04/2017 lachlant



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JOB TITLE:
**Mike Greer Homes
North Canterbury**

DRAWING TITLE:
BRACING PLAN

LEGAL DESCRIPTION:
Lot 77, DP 497145,
42 Watkins Drive,
Highgate Estate,
Rangiora

NOTES:
- Subject to council approval
- All measurements to be confirmed on site by
the contractor prior to the commencement of work
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DATE OF ISSUE:
17/11/2016
AMENDMENT DATE:
3/04/2017

DESIGNER:
JM
VERSION:
V1
SCALE:
1:150
JOB #
16184D,
N2113

SHEET:
A20a
OF: 35

