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CODE COMPLIANCE CERTIFICATE

Section 95 Building Act 2004

Consent No: 160529



The Building			
Street address of building:	25 Mahia Lane, Waikanae	Building name:	
Current, Lawfully established, use:	Residential dwelling	Location of building within site/block number:	Centre of site
Level/unit number:		Intended life of the building if 50 years or less:	
Legal description of land where building is located:	LOT 24 DP 476550 CT 658768	Year first constructed:	2016
The Owner			
Name of owner:	Thomson Adam Robert & Thomson Daphne Kata	Street address /registered office:	
Contact person:	Adam Thomson	Phone numbers:	
Mailing address:	25 Mahia Lane Waikanae 5036	Landline:	
Email address:	adam.thomson@hotmail.co.nz	Mobile:	027 427 9820
Website:		Daytime:	
		After hours:	
		Facsimile number:	
First point of contact for communications with the Kapiti Coast District Council:			
Full Name: Bill Francis Mailing Address: PO Box 65, Paraparaumu Phones:: 296 1248			
Building Work			
Building Consent No:	160529	Issued by:	Kapiti Coast District Council
Project Description:	New single level brick & tile dwelling.		

Code Compliance

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

- (a) the building work complies with the building consent.

Russell Brook – Team Leader – Site Inspections

On behalf of **Kapiti Coast District Council**

Date: 22 November 2016



Statement of Compliance with the NZ Building Code

Consent No: 160529

ISSUED BY: **Kapiti Coast District Council**

PROJECT

Site Address: 25 Mahia Lane, Waikanae
Legal Description: LOT 24 DP 476550 CT 658768
Work Description: New single level brick & tile dwelling.
Building Category: R1

OWNER

Name(s): A R Thomson Family Trust
Address: 4 Taranui Way, Paraparaumu Beach

- [P] Application for CCC received and accepted
- [P] Confirm all required inspections completed and documented in GoGet
- [NA] If inspection(s) have been missed, have they been compensated for?
- [NA] If supervision was required for any inspection - did it occur?
- [P] Work in accordance with approved consent and approved amendments
- [NA] Have any notices to fix been uplifted?
- [P] Supporting documentation required in building consent addenda received
- [P] Quality assurance documentation
- [P] Restricted building work
- [NA] Additional information required and received
- [NA] Compliance schedule issued
- [NA] Earthquake prone building
- [NA] Swimming Pool details updated
- [P] Approve to issue Code Compliance Certificate if all fees paid
- [NA] Approve to issue Certificate for Public Use if all fees paid
- [NA] Approve to issue Certificate of Acceptance if all fees paid
- [NA] Supervision review

NOTES:

Inspections Prepaid:

Inspections Done:

LICENSED BUILDING PRACTITIONERS:

Carpentry 1 BP103940
Bricklaying and Blocklaying 1 BP109132
Roofing 1 BP121430

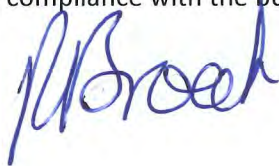
PTO

On review of the documentation and inspection notes it can be considered on reasonable grounds that all work has been completed in compliance with the building consent.

Signed:

Name: Russell Brook

Position: Building Officer

A handwritten signature in blue ink, appearing to read 'R Brook', is positioned over the printed name and position.

Date: 22 November 2016

Independent Electrical Inspectors Ltd.

3 Celtic Way, Paraparaumu.

☑ Andrew Stellingwerf -12866 ph:027 280 4588

COMBINED COC / ROI / ESC

Customer Name: THOMPSON Reference: N287920 and

Location of Installation: 25 MAHIA LN INV-1471
WATUKANDE

Certificate of compliance: for revenue metering installed on this site in accordance with E.I.P.C code.

☐ Vircom EMS testhouse ☒ Indeserve testhouse ☐ Other _____

Record of Inspection: Description of work inspected: NEW HOUSE NEW MTRNS
MON + MTRN DATA

Certificate of compliance supplied

Reference: 1047 Issued by: M DUNN Reg Number: E246282 Dated: 2-11-16

Reference: _____ Issued by: _____ Reg Number: _____ Dated: _____

HAZARD IDENTIFICATIONS AND CONTROLS.

ELECTRA CONTROL ROOM PH: 06 367 9755 IN EMERGENCY PHONE: 111 NETWORK ACCESS PH: 0800 800 109

MINIMUM P.P.E. REQUIRED: HARD HAT, ARCPROOF OVERALLS, WORK BOOTS, GLOVES, SAFETY GLASSES.

FIRE EXTINGUISHER, FIRST AID KIT, AND WATER BOTTLE LOCATED REAR OF VEHICLE.

Client:	<u>2 CONNED.</u>		Electra acknowledgement #	<u>2331402</u>	
Job Type:	<u>NIC</u>		Time on:	<u>0850</u>	
Asset #:	<u>105184A</u>		Time off:	<u>600 9:38</u>	
HAZARD	POTENTIAL HARM	ACTIONS PROPOSED	COMMENTS	WORK CARRIED OUT	
Electricity	Shock, burns	<u>MINIMISE</u>	<u>CHECK GLOVES + PPE</u>	Inspect & Liven	☒
Heights	Gravity			1 PH tie in	☒
Falls, trips & slips	Injury			3 PH tie in	
Outdoor/Weather	Cold/Heat/Rain			Disco/Reco	
Traffic	Hit by			Fuse	
Public Access	Danger to public	<u>MINIMISE</u>	<u>SIGN AT WORK AREA</u>		
CONSIDER ALSO: SITE SECURITY, OTHER SERVICES, ENVIROMENTAL ISSUES, HEAVY LIFTING, ELEVATED WORKING, ETC					
TESTING AND COMMISSIONING					
TESTING & INSPECTIONS CARRIED OUT IN ACCORDANCE WITH THE ELECTRICITY SAFETY REGULATIONS AS/NZS 3000 / AS/NZS 3019					
Voltage:	R: <u>240</u> v	W: v	B: v	Comments:	
Earth Loop impedance:	R: <u>29</u> Ω	R Ω	B: Ω		
PSSC:	R: <u>0.83</u> ka	W: ka	B: ka		
Insulation Resistance:	<u>>500</u> MΩ	Earth Lead Resistance:	<u>0-27</u> Ω	Bonding:	<u>0-00</u> Ω
Polarity ☒	Visual Check ☒	R.C.D Test	ms	ma	

NOTES

This work complies with the NZ building code, is connected to a power supply and has not adversely affected any other part of this installation. I certify that the installation or part thereof, to which this certificate applies, complies with the current electrical regulations and is safe to use.

SIGNATURE: [Signature]
Reviewed 08/12/2015

DATE: 2-11-16





ELECTRICAL CERTIFICATE OF COMPLIANCE & ELECTRICAL SAFETY CERTIFICATE (RETAIN FOR 7 YEARS)

REFERENCE/CERTIFICATE ID No.:

1047 - INV-1471

Customer name:

A B A Thomson

Location of installation:

25 Mahia Ln Waikanae

Name of Electrical worker:

Michael Dunn

Registration/Practising licence number:

E246282

Company details:

2 Connect Electrical Limited / 04 974 0573 / info@2connect.co.nz

Name of person(s) supervised:

Jordan Cosgrove

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:

☐ Type of Supply system:

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

Mains - main Switchboard (MEN) Main Earth.
Pre-wired and fitted Switch gear and lighting
fixtures as per attached plan.
not shown. Heat pump.

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
- ☐ Relies on a manufacturer's instructions¹
- ☒ Has been satisfactorily tested in accordance with the Electricity (Safety) Regulations 2010
- ☒ Is safe to connect

Electronic/Other reference:

Certifier's signature:

M. Dunn

Date:

2.11.16

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

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:

Michael Dunn

Registration/Practising licence number:

E246282

Certifier's signature:

M. Dunn

Certificate Issue Date:

2.11.16

Connection Date:

2.11.16

Certified Design / Suppliers Declaration of conformity

All materials supplied by Stewarts Electrical Ltd + Electroquip + Lighting +

GoGet Inspection Audit Report

Consent No: **160529**
Applicant: **Bill Francis**
Site Address: **25 Mahia Lane, Waikanae**
Work Type: **New single level brick & tile dwelling.**

Inspection Type: **Final Inspection**
Inspection Outcome: **Pass**
Inspected By: **Alan Tinney**
Inspection Date: **14 November 2016 1:54 p.m.**
Duration: **30 minutes**

Inspection Element	Status
Exterior	Pass
Inspection notes	Pass
Drawings	Pass
Additional information/plan	Pass
Sub-floor ventilation	N/A
Roof fixings	Pass
Spouting and down-pipes	Pass
Deck structure	N/A
Flashings - roof	Pass
Penetrations - flashings	N/A
Barriers	N/A
Gully dishes	Pass
Stormwater and site drainage	Pass
Handrails	N/A
Wastes to gully	Pass
Fixings - durability	Pass
Steps/stairs	N/A
Terminal vents/AAVs	Pass
Cladding painted/sealed	Pass
Flashings - windows/doors	Pass
Cladding ground clearance	Pass
Road crossing complete	Pass
Final check complete	Pass
Interior	Pass
Inspection notes	Pass
Drawings	Pass
Additional information/plan	Pass
Service areas-floors/walls	Pass
Stair design	N/A
Handrails	N/A
Balustrades	N/A
Lightings	Pass
Laundrying	N/A
Cooking facilities	N/A
Smoke detectors	Pass
Food storage/preparation	Pass

Ventilation	Pass
Insulation and clearance	Pass
HWC flues	Pass
HWC restraint	Pass
Tempering valve	Pass
Glazing - human impact	Pass
Hot water temp	Pass
48	
Solid fuel heater	N/A
Water supply tank	Pass
Trap seals and AAVS	Pass
Cistern flushing	Pass
WC pan connection	Pass
Septic tank	N/A
Window labels	Pass
Road crossing complete	N/A
Final check complete	Pass
Intertenancy/commercial	N/A
Other	N/A

Support Documentation

Application for CCC	Accepted
Electrical safety certificate	Accepted
As-built drainage plan	Accepted
Drainage (Form 126) for stormwater installation	Required ✓
Drainage (Form 127) for private sewer installation	Required ✓
Plumbing (Form 125) for pressure test and installation piped services	Required ✓
Record of Work	Accepted
Solar water heating technical specifications	Received
Water tank warranty	Accepted



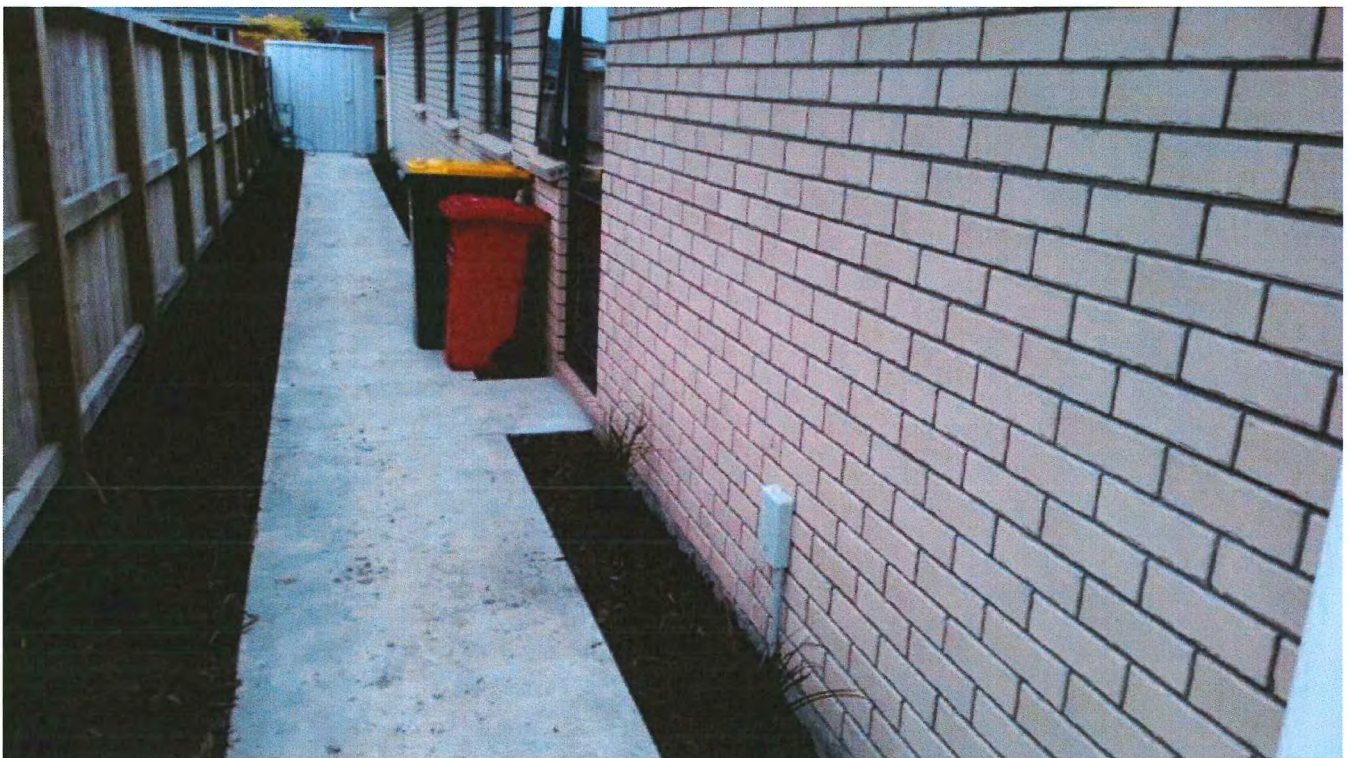
Taken at 1:34 PM on Monday 14/11/2016



Taken at 1:34 PM on Monday 14/11/2016



Taken at 1:34 PM on Monday 14/11/2016



Taken at 1:36 PM on Monday 14/11/2016



Taken at 1:37 PM on Monday 14/11/2016



Taken at 1:37 PM on Monday 14/11/2016



Taken at 1:38 PM on Monday 14/11/2016

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Consent No: **160529**

Applicant: **Bill Francis**

Site Address: **25 Mahia Lane, Waikanae**

Work Type: **New single level brick & tile dwelling.**

Inspection Type: **Drainage**

Inspection Outcome: **Pass**

Inspected By: **Gareth McCullagh**

Inspection Date: **12 October 2016 8:37 a.m.**

Duration: **30 minutes**

Inspection Element	Status
General	Pass
Pipe diameter all pvc 100mm for sewer 90mm for stormwater	Pass
Bedding material bedded in pea metal chip	Pass
Gully trap in place and charged	Pass
Connections/angles inspection points in place	Pass
Branch length	Pass
Direction/fall good fall to lateral	Pass
Holding water	Pass
Terminal vent completed	Pass
Registration number 13448	Pass
Other stormwater to tank	Pass

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Consent No: **160529**

Applicant: **Bill Francis**

Site Address: **25 Mahia Lane, Waikanae**

Work Type: **New single level brick & tile dwelling.**

Inspection Type: **Postline Building**

Inspection Outcome: **Pass**

Inspected By: **Craig Watson**

Inspection Date: **7 October 2016 11:33 a.m.**

Duration: **30 minutes**

Inspection Element

Status

General

Pass

Sighted previous inspection notes

Pass

Conforms with approved drawings

Pass

Confirm additional information/amended plan

N/A

Sheet bracing

Pass

GS1 bracing complete

Sheet fixings

Pass

Fire/acoustic separation

N/A

Other

N/A

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Consent No: **160529**
 Applicant: **Bill Francis**
 Site Address: **25 Mahia Lane, Waikanae**
 Work Type: **New single level brick & tile dwelling.**

Inspection Type: **Preline Building**
 Inspection Outcome: **Pass**
 Inspected By: **Gareth McCullagh**
 Inspection Date: **5 October 2016 10:23 a.m.**
 Duration: **30 minutes**

Inspection Element	Status
General	Pass
Sighted previous inspection notes	Pass
Conforms with approved drawings	Pass
Confirm additional information/amended plan	N/A
Max moisture content 17-21 %	Pass
Ventilation to rooms	Pass
Timber treatment sg8	Pass
Lintel/beam size and fixing	Pass
Insulation 2-6 walls and 5.2 ceilings	Pass
Top plate connection	Pass
Ceiling batten spacing timber and double nailed	Pass
Stud spacing	Pass
Bracing connections	Pass
Air seals all completed	Pass
Bottom plate fixings internal bottom plates fixed	Pass
Weathertightness	Pass
Cladding selection	Pass
Roof material	Pass
Sheets fixed to manufacturer's specification	N/A
Roofing fixing	Pass
Fixings	Pass
Sheet layout	N/A
Ridge/hip flashings in place	Pass
Roof/wall junctions flashed	N/A
Control joints where appropriate	N/A
Penetrations correctly flashed	Pass
Fixings appropriate for bracing elements	N/A
Flashings in place	Pass
Clearance provided for fascia and spouting	Pass
Ground clearances achieved	Pass
Clearance off deck surface	N/A
Flashings/wraps in place, parapets/barriers	N/A

Glazing - human impact	Pass
Truss/rafter fixings	Pass
Other	Pass
still finishing off some brick at high level	

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Consent No: **160529**

Applicant: **Bill Francis**

Site Address: **25 Mahia Lane, Waikanae**

Work Type: **New single level brick & tile dwelling.**

Inspection Type: **Brick Veneer**

Inspection Outcome: **Pass**

Inspected By: **Craig Watson**

Inspection Date: **30 September 2016 10:20 a.m.**

Duration: **30 minutes**

Inspection Element	Status
General	Pass
Min/max cavity achieved	Pass
Brick tie fixings	Pass
Washouts	Pass
Weep holes	Pass
Mortar strength	N/A
Mortar bedding	N/A
Flashings	Pass
Brick tie durability	Pass
Galv	
Building wrap	Pass
Watergate	
Under window vents	N/A
Rebate	Pass
Veneer overhang	Pass
Brick tie spacing	Pass
Head lintels	N/A
Control joints	N/A
Other	N/A

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Consent No: **160529**
Applicant: **Bill Francis**
Site Address: **25 Mahia Lane, Waikanae**
Work Type: **New single level brick & tile dwelling.**

Inspection Type: **Preline Plumbing**
Inspection Outcome: **Fail**
Inspected By: **Craig Watson**
Inspection Date: **13 September 2016 9:06 a.m.**
Duration: **30 minutes**

Inspection Element	Status
General	Fail
Sighted previous inspection notes	Pass
Conforms with approved drawings	Pass
Confirm additional information/amended plan	N/A
Plumber	Pass
Sam Henderson 19251	
Soil pipe size and test	N/A
Pipes fixed/supported	Pass
20mm main feed hot and cold to cylinder 15mm to fixtures all clipped and supported	
System used	Pass
AS3500	
dux segura and fittings with green non potable water to toilets and outside taps	
TRP line	Pass
Inbuilt S/W pipes tested	N/A
Vents terminated	Fail
Still to be fitted	
Pressure test	Pass
1500kpa and holding	
Waste pipe size and test	Pass
40mm vanity wastes	
Floor wastes	N/A
Shut off valves	Pass
in garage	
Fire wraps and collars	N/A



Taken at 8:57 AM on Tuesday 13/09/2016



Taken at 9:06 AM on Tuesday 13/09/2016

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Consent No: **160529**

Applicant: **Bill Francis**

Site Address: **25 Mahia Lane, Waikanae**

Work Type: **New single level brick & tile dwelling.**

Inspection Type: **Pre Clad**

Inspection Outcome: **Fail**

Inspected By: **Craig Watson**

Inspection Date: **13 September 2016 9:15 a.m.**

Duration: **30 minutes**

Inspection Element	Status
General	Fail
Inspection notes	Pass
Drawings	Pass
Additional information/plan	N/A
Building wrap type	Pass
Watergate	
Flexible seling tape	Fail
still to be fitted at bottom of door frames.	
Deck membrane fixed in accordance with specification	N/A
Head flashings	N/A
Not yet fitted.	
Sill flashings	N/A
Back flashings	N/A
Saddle flashings	N/A
Internal/external corner flashings	N/A
Jamb flashings	N/A
Capillary clearances	N/A
Flashing penetrations	Pass
Ground/deck cladding clearance	Pass
Other	N/A



Taken at 9:13 AM on Tuesday 13/09/2016



Taken at 9:14 AM on Tuesday 13/09/2016

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Consent No: **160529**

Applicant: **Bill Francis**

Site Address: **25 Mahia Lane, Waikanae**

Work Type: **New single level brick & tile dwelling.**

Inspection Type: **Pre Wrap**

Inspection Outcome: **Pass**

Inspected By: **Andrew Hawea**

Inspection Date: **30 August 2016 3:22 p.m.**

Duration: **45 minutes**

Inspection Element

General

Status

Pass

Inspection notes

Pass

Drawings

Pass

Additional information/plan

N/A

Cladding type identified

Pass

Framing moisture meets cladding requirements

Pass

Stud spacing appropriate for cladding

Pass

all 600 centres

Exterior sheet bracing and angle brace fixing

Pass

all sheet bracing (ply) placed and fixed

Bottom plate connections

Pass

Building wrap type

N/A

Bracing requirements

Pass

all externals placed

Purlin fixing

N/A

Decking substrate

N/A

Other

N/A

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Consent No: **160529**

Applicant: **Bill Francis**

Site Address: **25 Mahia Lane, Waikanae**

Work Type: **New single level brick & tile dwelling.**

Inspection Type: **Pre-Slab Building**

Inspection Outcome: **Pass**

Inspected By: **Andrew Hawea**

Inspection Date: **22 August 2016 2:34 p.m.**

Duration: **30 minutes**

Inspection Element	Status
General	Pass
Sited as consent.	
Engineers details required	Pass
OK to pour once Hamish Wells approves	
Rebate for brick veneer	Pass
in place	
Ground clearance	Pass
Concrete cover	Pass
to cut steel to achieve clearance	
Driveway S/W control	N/A
Sand blinding	Pass
Slab thickenings	Pass
placed	
Vapour barrier	Pass
Bottom plate fixings	N/A
Steel reinforcing	Pass
all placed as consent	
Bar chairs	Pass
to be placed	
DPC penetrations taped	N/A
Minimum floor level	Pass
Other	N/A

Support Documentation

Construction review PS4 statement for structural engineering and site notes	Required
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Consent No: **160529**

Applicant: **Bill Francis**

Site Address: **25 Mahia Lane, Waikanae**

Work Type: **New single level brick & tile dwelling.**

Inspection Type: **Pre-Slab Plumbing**

Inspection Outcome: **Pass**

Inspected By: **Gareth McCullagh**

Inspection Date: **18 August 2016 11:09 a.m.**

Duration: **30 minutes**

Inspection Element	Status
General	Pass
Secondary flow path	N/A
Pipe material all pvc primed and glued	Pass
Pipe protection as per ribraft design	Pass
TRP line 20 mm copper in place	Pass
Plumbing layout in for all fixtures main 100 mm through slab 40mm kitchen	Pass
Pipes supported	Pass
Wastes and drains	Pass
Water/air water and holding	Pass
Leak check	Pass
Other	N/A

Entered in Magiq
Saved in edocs
Angie 15/08/16

ADVICE OF LICENSED BUILDING PRACTITIONER(S)

Owner must notify names of licensed building practitioners before restricted building work commences

Building Act 2004, section 87

Send or deliver this form to: Kāpiti Coast District Council,
175 Rimu Road, Paraparaumu 5032
Private Bag 60601, Paraparaumu 5254
For enquiries, phone 04 296 4700

Kāpiti Coast District Council
at Paraparaumu
11 AUG 2016
By Ly Time 9.51

Council use only:
Application #
Property ID

THE BUILDING (project location)

Building name (if applicable)

Building street address 25 Mahia Lane, Waikanae

THE PROJECT

Building consent number 160529

THE OWNER (must be completed and all details must be the owner's)

Owner's name (for individuals, state the preferred form of title, e.g. Mr, Mrs, Ms, Miss, Dr. For companies, trusts and other organisations provide a contact person's name)

Adam & Daphne Thomson

Address 4 Taranui Way, Paraparaumu (Please email Daphne info/forms/docs).

Date 11/08/16 Landline Mobile Adam 027 427 9820
Daph 027 421 8666

After hours Fax Email adam.thomson@hotmail.co.nz
daph.twindle@hotmail.co.nz

LICENSED BUILDING PRACTITIONERS ENGAGED TO CARRY OUT/SUPERVISE RESTRICTED BUILDING WORK

Particular work to be carried out or supervised	Name	Licensing class	Licensed building practitioner number (or registration number if treated as being licensed under section 291 of Act)
<u>Electrician</u>	<u>Mike Dunn</u>	<u>E</u>	<u>E246282</u>
<u>Plumber & Drainlayer</u>	<u>Steve Henderson</u>		<u>04479</u>
<u>Builder</u>	<u>Pete Thomson</u>		<u>103940</u>

LICENSED BUILDING PRACTITIONERS ENGAGED TO CARRY OUT/SUPERVISE RESTRICTED BUILDING WORK (cont.)

Particular work to be carried out or supervised	Name	Licensing class	Licensed building practitioner number (or registration number if treated as being licensed under section 291 of Act)
Roofer	Garry Phelps		121430
Bricklayer	Don Watson		109132
Aluminium Joinery	Omega		
Painter	David Kid		
Kitchen Cabinetry	Kitchen Creators		
Concrete Placer	Grant Bevan		

COUNCIL USE ONLY

LBP(s) checked	Y	All OK	Y	N
Comments				
Date issued				



THE BUILDING		
Street address: 25 MAHIA PLACE		
Suburb: WAIKANAHE		
Town/City: KAPITI COAST		Postcode:
THE PROJECT		
Building consent number: 160 529		
THE OWNER(S)		
Name(s): ADAM THOMSON		
Mailing address: 25 MAHIA PLACE		
Suburb: WAIKANAHE		PO Box/Private Bag:
Town/City: KAPITI COAST		Postcode:
Phone number: 027 427 9820		Email address:
RECORD OF WORK THAT IS RESTRICTED BUILDING WORK		
PRIMARY STRUCTURE		
Work that is restricted building work Tick	Description of restricted building work If necessary, describe the restricted building work	Carried out or supervised Tick ☒ whether you carried out the RBW or supervised someone else.
Foundations and subfloor framing	☒ RIBRAFT FOUNDATION & FLOOR AS PER ENGINEER DRAWING AND PLANS & SPECIES PROVIDED	☒ Carried out ☐ Supervised
Walls	☒ PRE ASSEMBLED FRAMES ERECTED & FIXED DOWN AS PER PLANS & SPECIES PROVIDED	☒ Carried out ☐ Supervised
Roof	☒ PRE ASSEMBLED TRUSSES ERECTED & FIXED DOWN AS PER PLAN SUPPLIED	☒ Carried out ☐ Supervised
Columns and beams	☒ POST & BEAM FIXED AS PER PLAN PROVIDED	☒ Carried out ☐ Supervised
Bracing	☒ BOTTOM PLATE TIE DOWNS & CONNECTIONS AS PER PLAN SUPPLIED & PLY FIXING & GIB FIXINGS AS APPLIED.	☐ Carried out ☐ Supervised
Other	☐	☐ Carried out ☐ Supervised

RECORD OF WORK THAT IS RESTRICTED BUILDING WORK

EXTERNAL MOISTURE MANAGEMENT SYSTEMS

Damp proofing ☒	BUILDING WRAP AND WINDOW TAPE + BRICK CAVITY AS PER PLAN SUPPLIED	☒ 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 ☒	ALL INTERIOR WALL CLADDING + BRACING + AQUALINE AS PER Plan SUPPLIED	☒ Carried out ☐ Supervised
Waterproofing ☐		☐ Carried out ☐ Supervised
Other ☐		☐ Carried out ☐ Supervised

ISSUED BY

Name and contact details of the licensed building practitioner who is licensed to carry out or supervise restricted building work.

Name: PETER THOMSON

LBP number: 103949

Class(es) licensed in: CARPENTRY

Plumbers, Gasfitters and Drainlayers registration number (if applicable):

Mailing address (if different from below): 98 MATAPIA RD RAUATI

Street address/Registered office:

Suburb: RAUMATI BEACH

Town/City: KAPITI COAST

PO Box/Private Bag:

Postcode: 5032

Phone number:

Mobile: 0274484314

After hours:

Fax:

Email address:

Website:

DECLARATION

Peter Thomson carried out or supervised the restricted building work recorded on this form.

Date: 6-11-16

NZ BRICK & BLOCKLAYERS ASSOCIATION



Memorandum from licensed building practitioner:
Record of building work
Section 88, Building Act 2004 Form 6A



JOB No.

INVOICE No. **17475**

The Building

Street address of building:

**25 Mahia Lane
Wai Kanae**

The project

Building consent number:

16 05 29

The owner

Name:

A. Thompson

Address:

**25 Mahia Lane
Wai Kanae**

Telephone:

Email:

Record of work that is restricted building work

Description

Carried out/ supervised

Work that is restricted building work

Primary structure

Foundations and subfloor framing ()

Brick Veneer

☒ Carried out () Supervised

Walls ()

() Carried out () Supervised

Columns and beams ()

() Carried out () Supervised

Other ()

() Carried out () Supervised

External moisture management systems

Damp proofing & Penetrations ()

() Carried out () Supervised

Wall cladding or wall system ()

() Carried out () Supervised

Other ()

() Carried out () Supervised

Issued by

Name:

Don Watson

Class(es) licensed in

B1 + B2

LBP number:

109132

Mailing address:

Street address or registered office:

Telephone: Landline:

Mobile: **0274 548 377**

Daytime:

After hours:

Email:

Facsimile:

Declaration

(name of practitioner)

I **Don Watson**

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

Signature:

Don Watson

Date:

26/9/16

NZ BRICK & BLOCKLAYERS ASSOCIATION



Memorandum from licensed building practitioner:

Record of building work

Section 88, Building Act 2004 Form 6A



JOB No.

INVOICE No. **17475**

The Building

Street address of building: **25 Mahia Lane**
Waikanae

The project

Building consent number: **16 05 29**

The owner

Name: **A. Thompson** Address: **25 Mahia Lane**
Telephone: **Waikanae**
Email:

Record of work that is restricted building work

Work that is restricted building work	Description	Carried out/ supervised
Primary structure		
Foundations and subfloor framing ()	Brick Veneer	() Carried out () Supervised
Walls ()		() Carried out () Supervised
Columns and beams ()		() Carried out () Supervised
Other ()		() Carried out () Supervised

External moisture management systems

Damp proofing & Penetrations ()		() Carried out () Supervised
Wall cladding or wall system ()		() Carried out () Supervised
Other ()		() Carried out () Supervised

Issued by

Name: **Don Watson**
LBP number: **109132** Class(es) licensed in **B1 & B2**
Mailing address:
Street address or registered office:
Telephone: Landline: Mobile: **0274 548 377**
Daytime: After hours:
Facsimile: Email:

Declaration

I **Don Watson** (name of practitioner)

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

Signature: **[Signature]** Date: **26/9/16**

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: 25 Mahia Lane	
Suburb: Waikanae	
Town/City: Kapiti Coast	Postcode: 5042

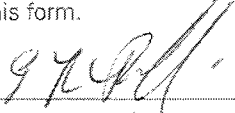
ONE PROJECT
Building consent number:

THE OWNERS	
Name(s): A & D Thomson	
Mailing address: As Above	
Suburb:	PO Box/Private Bag:
Town/City:	Postcode:
Phone number:	Email address: adam.thomson@hotmail.com

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 ☒	215 Building Paper	☐ Carried out ☒ Supervised
Roof cladding or roof cladding system ☒	Gerard Tiles Carona Shake	☐ Carried out ☒ Supervised
Ventilation system (for example, subfloor or cavity) ☐		☐ Carried out ☐ Supervised
Wall cladding or wall cladding system ☐		☐ Carried out ☐ Supervised
Waterproofing ☐		☐ Carried out ☐ Supervised
Other ☐		☐ Carried out ☐ Supervised

RECORD OF WORK THAT IS 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 ☐		☐ Carried out ☐ Supervised
Walls ☐		☐ Carried out ☒ Supervised
Roof ☒	Charcoal Carona Shake Gerard Tiles	☐ Carried out ☒ Supervised
Columns and beams ☐		☐ Carried out ☐ Supervised
Bracing ☐		☐ Carried out ☐ Supervised
Other ☐		☐ Carried out ☐ Supervised

ISSUED BY	
Name and contact details of the licensed building practitioner who is licensed to carry out or supervise restricted building work.	
Name: Garry Phelps	LBP number: 121430
Class(es) licensed in:	
R2 - R3 - R4 - R5	
Plumbers, Gasfitters and Drainlayers registration number (if applicable):	
Mailing address (if different from below):	
Street address/Registered office: 50 Marine Parade	
Suburb: Paraparaumu Beach	Town/City: Kapiti Coast
PO Box/Private Bag	Postcode: 5032
Phone number:	Mobile: 0272480429
After hours:	Fax:
Email address: phelps@paradise.net.nz	Website:

DECLARATION	
Garry Phelps carried out or supervised the restricted building work recorded on this form.	
Signature:	
Date:	26-9-2016

Memorandum from licensed building practitioner: Certificate of design work
Section 45 and Section 30C, 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: 25 Mahia Lane

Suburb:

Town/City

Wairarapa

Postcode:

THE OWNER

Name(s):

Adam Thomson

Mailing address:

use email

Suburb:

PO Box/Private Bag:

Town/City:

Postcode:

Phone number:

027 427 9820

Email address:

adam.thomson @

BASIS FOR PROVIDING THIS MEMORANDUM

hotmail.co.uk

I am providing this memorandum in my role as the: Please tick the option that applies (✓)	
☐	sole designer of all of the RBW design outlined in this memorandum – I carried out all of the RBW design myself – no other person will be providing any additional memoranda for the project
☐	lead designer who carried out some of the RBW design myself but also supervised other designers – this memorandum covers their RBW design work as well as mine, and no other person will be providing any additional memoranda for the project
☐	lead designer for all but specific elements of RBW – this memorandum only covers the RBW design work that I carried out or supervised and the other designers will provide their own memoranda relating to their specific RBW design
☒	specialist designer who carried out specific elements of RBW design work as outlined in this memorandum – other designers will be providing a memorandum covering the remaining RBW design work

IDENTIFICATION OF DESIGN WORK THAT IS RESTRICTED BUILDING WORK (RBW)

I, Hamish Tennant Wells carried out / supervised the following design work that is restricted building work

PRIMARY STRUCTURE: B1

Design work that is restricted building work	Description	Carried out/ supervised	Reference to plans and specifications
Tick (✓) if included Cross (X) if excluded	[If appropriate, provide details of the restricted building work]	[Specify whether you carried out this design work or supervised someone else carrying]	[If appropriate, specify references]

		out this design work]	
Primary structure			
All RBW Design work relating to B1	☒	☒ Carried out ☐ Supervised	
Foundations and 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	

EXTERNAL MOISTURE MANAGEMENT SYSTEMS: E2

All RBW design work relating to E2	☐	☐ Carried out ☐ Supervised	
Damp proofing	☐	☐ 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	☐	☐ Carried out ☐ Supervised	
Waterproofing	☐	☐ Carried out ☐ Supervised	
Other	☐	☐ Carried out ☐ Supervised	

FIRE SAFETY SYSTEMS: C1 - C6

Emergency warning systems, evacuation and fire service operation systems, suppression or control systems, or	☐	☐ Carried out ☐ Supervised	
--	--------------------------	---	--

other			
-------	--	--	--

Note: The design of fire safety systems is only restricted building work when it involves small-to-medium apartment buildings as defined by the Building (Definition of Restricted Building Work) Order 2011.

Note: continue on another page if necessary.

WAIVERS AND MODIFICATIONS

Waivers or modifications of the building code are required () Yes ☒ No

If Yes, provide details of the waivers or modifications below:

Clause	Waiver/modification required
<i>[List relevant clause numbers of building code]</i>	<i>[Specify nature of waiver or modification of building code]</i>

Note: continue on another page if necessary.

ISSUED BY

Name: Hamish Tennent Wells		LBP or Registration number: 186323	
The practitioner is a: () Design LBP () Registered architect		(✓) Chartered professional engineer	
Design Entity or Company (optional): Hamish Wells Civil Engineer			
Mailing address (if different from below): P O Box 188 Otaki 5512			
Street address / Registered office: 202 Otaki Gorge Road Otaki 5582			
Suburb: NA		Town/City: Otaki	
PO Box/Private Bag: 188		Postcode: 5512	
Phone number: 0274 459 757		Mobile: 0274 459 757	
After Hours: 0274 549 757		Fax: none	
Email address: engenr@xtra.co.nz		Website: none	

DECLARATION

I Hamish Tennent Wells *[name of practitioner]*, LBP,

state that I have applied the skill and care reasonably required of a competent design professional in carrying out or supervising the Restricted Building Work (RBW) described in this form, and that based on this, I also state that the RBW:

- Complies with the building code; or
- Complies with the building code subject to any waiver or modification of the building code recorded on this form.

Signature:

H. T. Wells

Date:

1.7.2016

Building Code Clause(s) B1 & 2

PRODUCER STATEMENT – PS1 – DESIGN

(Guidance notes on the use of this form are printed on page 2)

ISSUED BY: Hamish Wells Consulting Civil Engineer

TO: Adam Thomson (Design Firm)

TO: KCDC (Owner/Developer)

TO BE SUPPLIED TO: Non STD Draft of b value for same (Building Consent Authority)

IN RESPECT OF: 25 Mahia Lane (Description of Building Work)

AT: Waikanae (Address)

LOT 1

DP 1

SO 1

We have been engaged by the owner/developer referred to above to provide design & supervision services in respect of the requirements of

Clause(s) B1 & 2 (Extent of Engagement) of the Building Code for All ☐ or Part only ☐ (as specified in the attachment to this statement), of the proposed building work.

The design carried out by us has been prepared in accordance with:

- ☒ Compliance Documents issued by the Ministry of Business, Innovation & Employment VM1 (verification method / acceptable solution) or
☐ Alternative solution as per the attached schedule.

The proposed building work covered by this producer statement is described on the drawings titled Thomson

25 Mahia Lane and numbered 1 - 5

together with the specification, and other documents set out in the schedule attached to this statement.

On behalf of the Design Firm, and subject to:

- (i) Site verification of the following design assumptions 300mm Soils
(ii) All proprietary products meeting their performance specification requirements;

I believe on reasonable grounds that a) the building, if constructed in accordance with the drawings, specifications, and other documents provided or listed in the attached schedule, will comply with the relevant provisions of the Building Code and that b), the persons who have undertaken the design have the necessary competency to do so. I also recommend the following level of construction monitoring/observation:

☐ CM1 ☐ CM2 ☒ CM3 ☐ CM4 ☐ CM5 (Engineering Categories) or ☐ as per agreement with owner/developer (Architectural)

I, Hamish Tennent Wells am: (Name of Design Professional)

☒ CPEng 186323 #

☐ Reg Arch #

I am a Member of: ☒ IPENZ ☐ NZIA and hold the following qualifications: NZCE Civil REA
The Design Firm Issuing this statement holds a current policy of Professional Indemnity Insurance no less than \$200,000*.

The Design Firm is a member of ACENZ: ☐

SIGNED BY Hamish Wells ON BEHALF OF Hamish Wells (Design Firm)

Date 1.7.2016 (signature) Adam Thomson

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 Form 2 of the Building (Forms) Regulations 2004 for the application of a Building Consent.

THIS FORM AND ITS CONDITIONS ARE COPYRIGHT TO ACENZ, IPENZ AND NZIA

Hamish Wells

Civil Engineer
NIDENZ EPPing 186323

202 Otaki George Road, Otaki
P O Box 188, Otaki 5542
Hamish Wells - 0274 459 757
James Wincott - 0274 549 009
Steve Bright - 022 037 6315
Email: Engem@xtra.co.nz

FOUNDATION CALCULATION SPREADSHEET

Client Thomson
Site 25 Mahia Lane
Designer HW
Date 1/07/2016

ROOF

Roof type	Steel Galvanized 0.8mm	0.10	Kpa
Roof Tributary width (Max)	5.00	5.00	m
Roof pitch (Deg)	23.00	23.00	Deg
Roof area	117.00	117.00	
Effective roofing length		5.43	m
Adjusted roof weight		0.54	KN/m run
Roof supporting structure allowance		0.15	
Roof weight line load		1.29	KN/m run
Roof weight total		12.71	KN

UNDER ROOF CEILING

Ceiling Type	Gypsum Plaster, 13mm	0.13	
Ceiling supporting structure Y / N	No	0.00	Timber
Ceiling Tributary width (m)	5.00	5.00	
1st floor ceiling weight		0.65	KN/m run
1st floor ceiling weight total		15.21	KN

1ST FLOOR WALLS

Wall type	None	0.00	
Cladding Type	None	0.00	
Stories Height (m)		0.00	
Total wall length		0.00	
1st floor wall weight per m run on wall		0.00	KN/m run
1st floor wall weight total		0.00	KN

1ST FLOOR

Floor structure type	None	0.00	
Covering one	None	0.00	
Covering two	None	0.00	
Ceiling underside type	None	0.00	
Tributary width		0.00	
First floor area		0.00	
length across		0.00	
Length along		0.00	
1st Floor weight per m run		0.00	KN/m run
1st Floor weight total		0.00	KN

GROUND FLOOR WALLS

Wall type	Timber Stud	0.05	
Cladding Type	Brick 70mm	1.33	
Stories Height (m)	2.70	2.70	
Total external wall length	55.00	55.00	
Ground floor wall weight		3.73	KN/m run
Ground floor wall weight total		204.93	KN

FOUNDATION

Foundation type	Ribraft (85mm)		
Width (m)	0.30	Edge Wt	2.20
Depth (m) (total)	0.31	Slab Wt	3.19
Slab Thickness (m)	0.085		
Building Total Length along	13.0		
Total width across	10.0		
Foundation total slab area	117.0		
Foundation Perimeter length	55.0		
Ground beam length	10.0		
Foundation weight edge (inc 1m of slab)		3.62	KN/m run
Foundation weight Total		509.38	KN

IMPOSED LOADS

Imposed load roof	0.25	Kpa
Imposed load first floor	0.00	Kpa
Imposed load Ground floor	2.00	Kpa

OUTPUT

Foundation	Total un-factored dead load on edge foundation beam	9.29	KN/m run
Edge Load	Total un-factored Imposed loads on edge foundation beam	7.90	KN/m run

Total	Total un-factored dead load	742.2	KN
Building Weight	Total Un-factored imposed load	263.3	KN

Wind	Wind zone	High	108.8	KN
Snow	Snow Load allow	0.00 Kpa	0.0	KN

NOTES

--

Hamish Wells

Civil Engineer
MIPENZ CPEng 186323

202 Otaki Gorge Road, Otaki
P O Box 188, Otaki 5542

Hamish Wells - 0274 459 757
James Winieti - 0274 549 009
Steve Bright - 022 037 6315

Email: Engenr@xtra.co.nz

BUILDING INPUTS

Client **Thomson**
Site **25 Mahia Lane**

Date **1/07/2016**
Designer **HW**

UNITS LOADS FROM NZS1170.1:2002

<u>ROOF</u>	Roof type	Kpa
0	None	0.00
1	Steel Galvanized 0.8mm	0.10
2	Concrete tiles	0.53
3	Other	10.00

<u>UNDER ROOF</u> <u>CEILING</u>	Ceiling Types	Kpa
0	None	0.00
1	Fibrous Plaster 10mm	0.09
2	Gypsum Plaster, 13mm	0.13
3	Lime Plaster, 13mm	0.24
4	Other	10.00

<u>WALLS</u>	Wall and Cladding Types	
0	None	0.00
1	Timber Stud	0.05
2	Brick 70mm	1.33
3	20 Series Block	1.82
4	15 Series Block	1.51
5	10 Series Block	1.20
6	Ply (10mm)	0.12
7	Weather Board	0.15
8	Integra	0.45
9	Other	10.00

<u>1ST FLOOR</u>	Floor Types and Coverings	
0	None	0.00
1	Timber	0.12
2	Interspan	
4	Ply / wood / T and G, (20mm)	0.92
5	Carpet	0.10
6	Other	10.00

Timber joist weight calculator

width	45 mm
Depth	190 mm
Spacing	400 mm
	540.00 KG/M^3
	11.54 KG/M^2
	0.11 Kpa

Foundation

	Edge Beam		Slab	Edge weight	Slab Weight
	Width	Depth	Thickness	KN/M run	KN/M^2
0 None	0.00	0	0	0	0
1 Maxraft (100mm)	0.450	0.225	0.100	2.430	2.400
1 Maxraft (120mm)	0.450	0.225	0.120	2.430	2.880
1 Max-Rib-Raft (100mm slab)	0.450	0.270	0.100	2.916	2.400
2 Ribraft (85mm)	0.300	0.305	0.085	2.196	3.186
2 Ribraft (110mm)	0.300	0.330	0.110	2.376	3.786
3 Slab 85mm	0.300	0.450	0.085	3.240	2.040
4 Slab 100mm	0.300	0.450	0.100	3.240	2.400
5 Slab 125mm	0.300	0.450	0.125	3.240	3.000

Hamish Wells

Civil Engineer

MIPENZ CPEng 186525

202 Otaki Gorge Road, Otaki
P O Box 188, Otaki 5542

Hamish Wells - 0274 459 757
James Wineti - 0274 549 009
Steve Bright - 022 037 6315

Email: Engear@extra.co.nz

SLAB CALCULATIONS

Client Thomson
Site 25 Mahia Lane

Date 1/07/2016
Designer HW

Minimum Concrete strength determination WRT NZS 3101 Cl 3.4 and 3.10

Site with in 500m of coast?

No
No

Concrete exposed to freeze thawing?

Minimum Concrete covers above DPM

In non aggressive soils

Exposed to wetting (exterior)

Min Concrete

20	MPa
25	mm
40	mm
50	mm

Slab Calcs

Input data

Slab width bw 1 M
over all depth d 0.085 M
depth to centriod of tension reo t 0.0425 M
Mesh Type SE62
Concrete strength f'c 20 MPa

As 146.1 MM²
500 MPa

Checks

Minimum area of steel 110.5 MM²

PASS

Moment capacity 2.65 KN/m

9.3.9.3.3

Max concrete shear capacity

Max capacity 0.2f'c 4.000 MPa
vc = lesser of 0.2 Sqrt f'c 0.894 MPa
or (0.07+10 Pw) Sqrt f'c 0.390 MPa
where Pw = as/bd

Garage point load shear check

NO GARAGE

Point load KN 13 NZS1170.1 Table 3.1 item F
Bearing area 0.2 by 0.2 Shear area
Applied punching shear

0.14
9.49E-02 PASS
94.96 Kpa

Bearing pressure under point load

EDGE BEAM CALCULATIONS

Input data

beam width bw 0.3 M
over all depth d 0.305 M
depth to centriod of tension reo t 0.255 M
Bottom reinforcement 2-HD12
Concrete strength f'c 25 MPa
Minimum area of steel 118.95 MM²
Moment capacity 25.03 KN/m

Ribraft (85mm)

226 MM²
500 MPa

Checks

PASS

9.3.9.3.3

Max concrete shear capacity

Max capacity 0.2f'c 5.000 MPa
vc = lesser of 0.2 Sqrt f'c 1.000 MPa
or (0.07+10 Pw) Sqrt f'c 0.498 MPa
where Pw = as/bd

Applied load

Load from previous sheets factored

Shear stress = V*/ ϕ bd 0.34 N/mm²
Applied bearing pressure 76.67 Kpa
Max spanning capacity of foundation 2.95 M

PASS

Hamish Wells

Civil Engineer

MBPENZ CPENG 186323

202 Otaki Gorge Road, Otaki
P O Box 188, Otaki 5542

Hamish Wells - 0274 459 757
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Email: Engenr@xtra.co.nz

SLAB CALCULATIONS

Client Thomson
Site 25 Mahia Lane

Date 1/07/2016
Designer JDW

Minimum Concrete strength determination WRT NZS 3101 Cl 3.4 and 3.10

Site with in 500m of coast?

No
No

Concrete exposed to freeze thawing?

Minimum Concrete covers above DPM

In non aggressive soils

Exposed to wetting (exterior)

Min Concrete

20	Mpa
25	mm
40	mm
50	mm

RIB BEAM CALCULATIONS

Input data	beam width	bw	0.1	M	
	over all depth	d	0.305	M	
	depth to centroid of tension reo	t	0.255	M	
	Bottom reinforcement		1-HD12		
Checks	Concrete strength	f _c	25	MPa	
	Minimum area of steel		39.65	MM ²	PASS
	Moment capacity		12.29	KN/m	
	9.3.9.3.3	Max concrete shear capacity			
	Max capacity	0.2f _c	5.000	MPa	
	vc = lesser of	0.2 Sqrt f _c	1.000	MPa	
	or	(0.07+10 Pw) SqRt f _c	0.572	MPa	
	where Pw = as/bd				

Applied load	Point load	13.00	KN	
	Shear stress = V*/ ϕ bd	0.57	N/mm ²	PASS
	Max spanning capacity of foundation	2.75	M	

--

Hamish Wells Civil Engineer Building Bracing Calculator

V1/2016

Name	Thomson
Street and Number	25 Mahia Lane
Lot and DP Number	DP 492346
City/Town/District	
Designer	HW
Company Name	Hamish Wells Civil Engineer
Date	1/07/2016

Building Location		
Wind Zone	High	Earthquake Zone
Select by Building Consent Authority Map		3
or Preference	High	Soil Type
Wind Region	Preference selected	C(shallow)
Lee Zone	Preference selected	
Ground Roughness	Preference selected	Annual exceedance probability
Site Exposure	Preference selected	1/500 (NZS3604:2011 default)
Topographic Class	Preference selected	

Demand W (BU)		lower	Walls upper
along	slab	491	
across	slab	595	

Demand along / across E (BU)		
	Walls	
	lower	upper
slab	654	

Page 1 of 1

Hamish Wells

Civil Engineer
MIPENZ CPENG 186323

202 Otaki Gorge Road, Otaki
P O Box 188, Otaki 5542

Hamish Wells - 0274 459 757
James Winett - 0274 549 009
Steve Bright - 022 037 6315

Email: Engen@xtra.co.nz

Foundation Calculation

Client Thomson
Site 25 Mahia Lane

Date 1/07/2016
Designer HW

Horizontal Loads

Of structure onto slab from bracing sheets (Ex. GIB)

Max Wind Demand 491 Bus 24.6 KN
Max Seismic Demand 0 Bus 0.0 KN

From NZS 1170

Peak ground acceleration a_h = ZRC

Location Waikanae
Z = 0.4
 R_{SLS} = 0.25
 R_{ULS} = 1

Z Ref Table 3.3 NZS 1170:5

R Ref Table 3.3 NZS1170:0

D Ref Table 3.3 NZS 1170:5

Soil type D&E (deep, very soft)
Annual Probability 1 in 500

C = 1.12
R mod: 1

Ground acceleration for slab

a_h = 0.112 SLS

a_h = 0.448 ULS

Sliding Demand Seismic

Foundation Weight, F_w = 509.4 KN
Building weight, B_w = 232.9 KN
Imposed load, IL = 263.3 KN

Sliding resistance

Wind = $(1.2G + \psi_c Q)\mu_s$

where, ψ_c = 0.4

Seismic = $(G + \psi_c Q)\mu_s$

where, μ_s = 0.4

ex McManus paper 6.03.01 max 0.5

Where G = 742.2 from previous calculation
Q = 263.3 from previous calculation

SLS

Horizontal design load Wind =

17.19 KN

Horizontal sliding design load seismic =

57.1 KN

=> Design sliding resistance wind =

398.4

>

17.2 KN

PASS

=> Design sliding resistance Seismic =

339.0

>

57.1 KN

PASS

ULS

Horizontal design load Wind =

24.6 KN

Horizontal sliding design load seismic =

228.2 KN

=> Design sliding resistance wind =

398.4

>

24.6 KN

PASS

=> Design sliding resistance Seismic =

339.0

>

228.2 KN

PASS

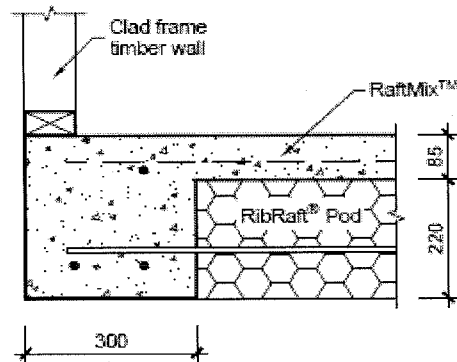
NOTES

--

R value for RibRaft

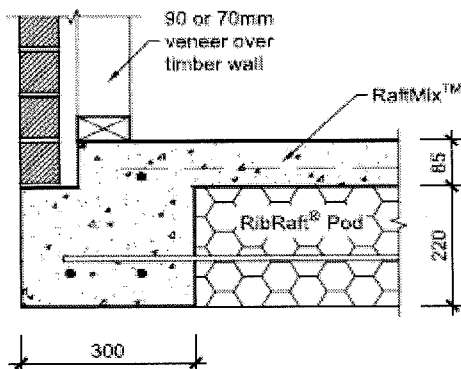
slab area 117.00
perimeter 54.80
a/p 2.14

R=> 2.0



	Floor Area To Perimeter Ratio m ² /m									
	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.50	4.00
R-value m ² °C/W	1.48	1.52	1.64	1.75	1.86	1.97	2.07	2.17	2.38	2.57

Figure 8 RibRaft R-Values for 90mm thick walls on the floor edge.



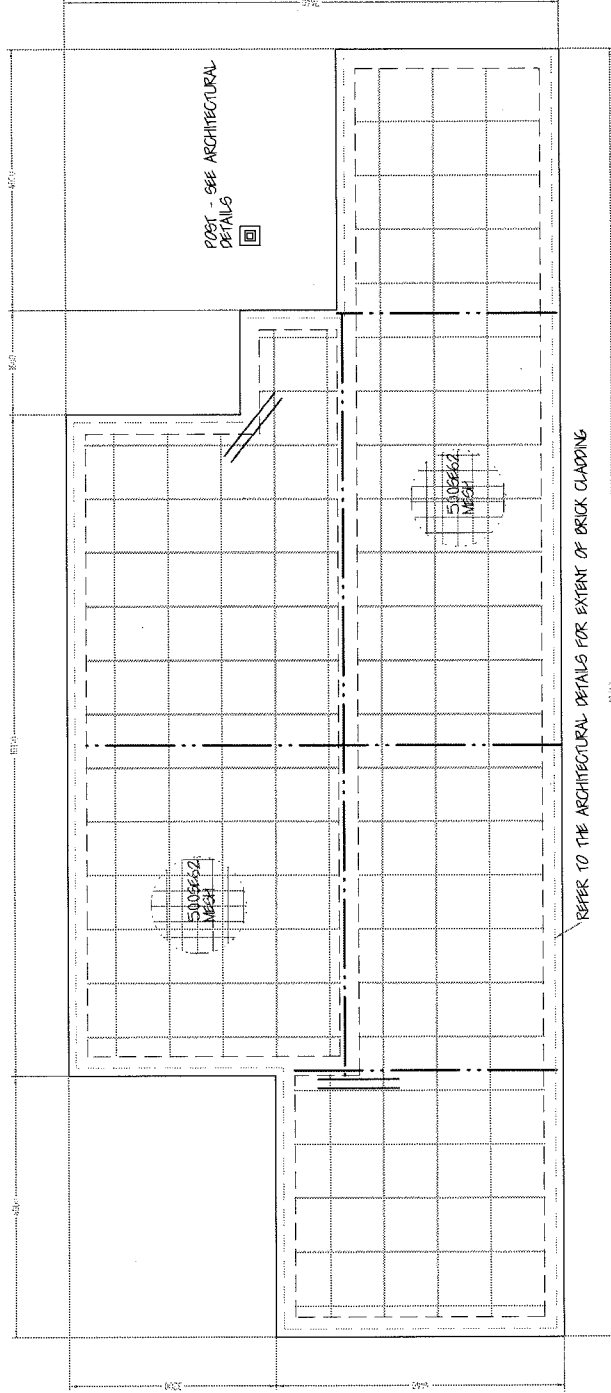
	Floor Area To Perimeter Ratio m ² /m									
	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.50	4.00
R-value m ² °C/W	1.54	1.67	1.80	1.93	2.05	2.17	2.28	2.40	2.62	2.84

Figure 9 RibRaft R-Values for 70-90mm thick veneer, cavity, and 90mm walls.

HAMISH WELLS
 CONSULTING CIVIL ENGINEER
 202 OTAKI ROAD
 5562 NZ
 0274 459 757
 engineer@hwa.co.nz
 MIPENZ CRENS # 166325

THOMSON 25 MAHIA LANE
 WAIKANA E - RIBRAFT

REV	DATE	DESCRIPTION
0	26/06/2015	+ CORRECTION
JOB		
DFT		
DRAWN BY		
CHK'D BY		
DRAWING SCALE		
1:75		
SHEET TITLE		
RIBRAFT		
SHEET 1 OF 5		

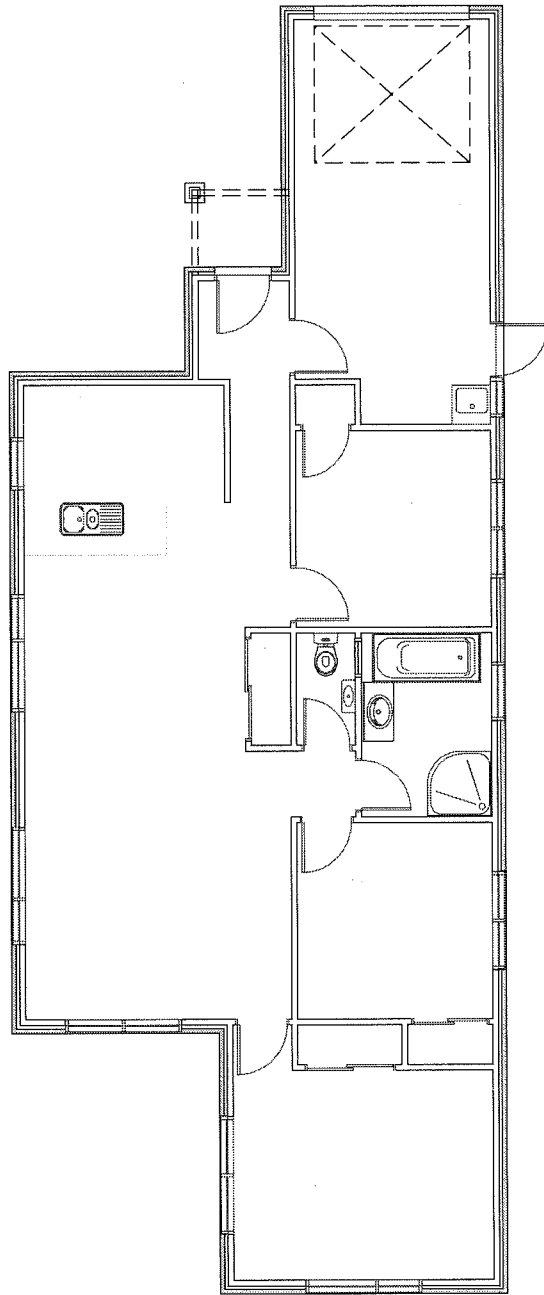


RIB RAFT FOUNDATION PLAN

- 1) ALL DIMENSIONS MUST BE CHECKED AGAINST THE ARCHITECTURAL PLANS
- 2) ANY DISCREPANCY IS TO BE REPORTED TO THE ENGINEER AND THE ARCHITECT IMMEDIATELY AND NO FURTHER WORK CARRIED OUT UNTIL THE ISSUE IS RESOLVED
- 3) ALL WORK IS TO COMPLY WITH THE FIFTH RIBRAFT TECHNICAL MANUAL JANUARY 2012 AND THESE DRAWINGS

--- SANDFILL
 2 X HD12 X 1200 LONG
 2 X HD12 900 LEGS

ARCHITECTURAL FLOOR LAYOUT SHOWING EXTENT OF BRICK VENEER



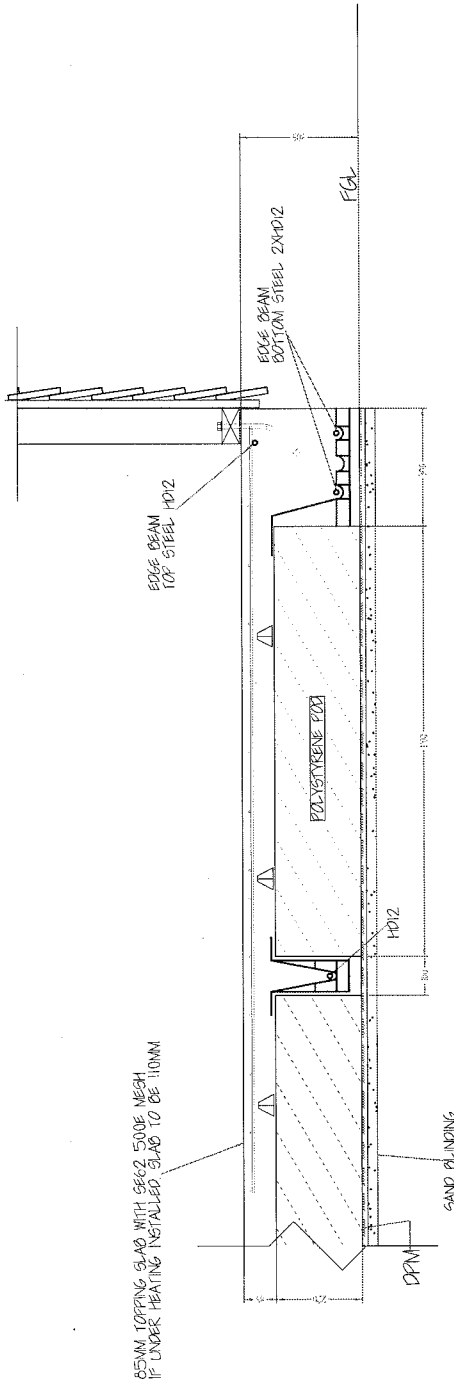
REV	DATE	DESCRIPTION
0	24/06/2016	+ CORRECT
APP		
DWG		
DRAWN BY: HW		
CHK'D BY: HW		
DRAWING SCALE: 1:75		
SHEET TITLE: ARCHITECTS		
SHEET 1A OF 5		

THOMSON 25 MAHIA LANE
WAIKANA E - RIBRA FT

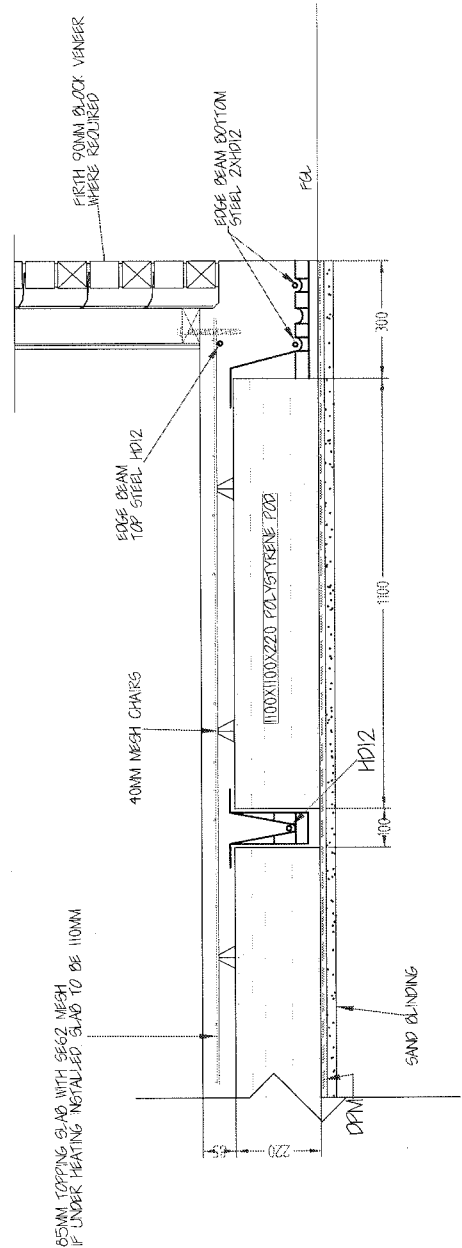
HAMISH WELLS

202 OTAKI 60864
18/03/2012 OTAKI
15/02/12
0274 459 757
CONSULTING CIVIL ENGINEER
MIRRENZ CRENS * 166323
engineer@ktr.co.nz

DWG			HW	1
REV	DATE	DESCRIPTION	DRWN BY	
0	26/06/2016	1 COMMENT	CAD BY	HW
			DRAWING SCALE	
			1:12.5	
			SHEET TITLE	
			SECTIONS	
			SHEET 2 OF 5	



LIGHT CLADDING DETAIL - WHERE APPLICABLE

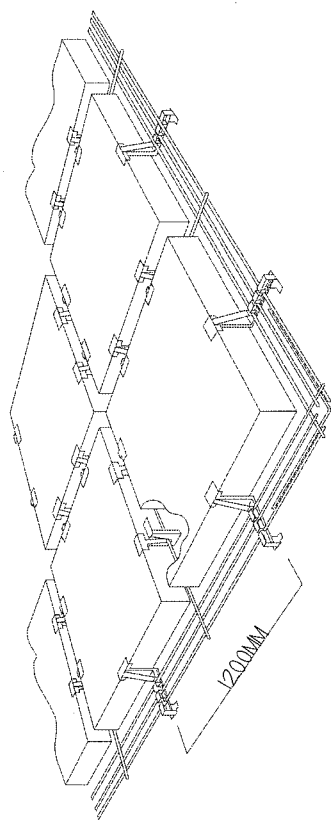
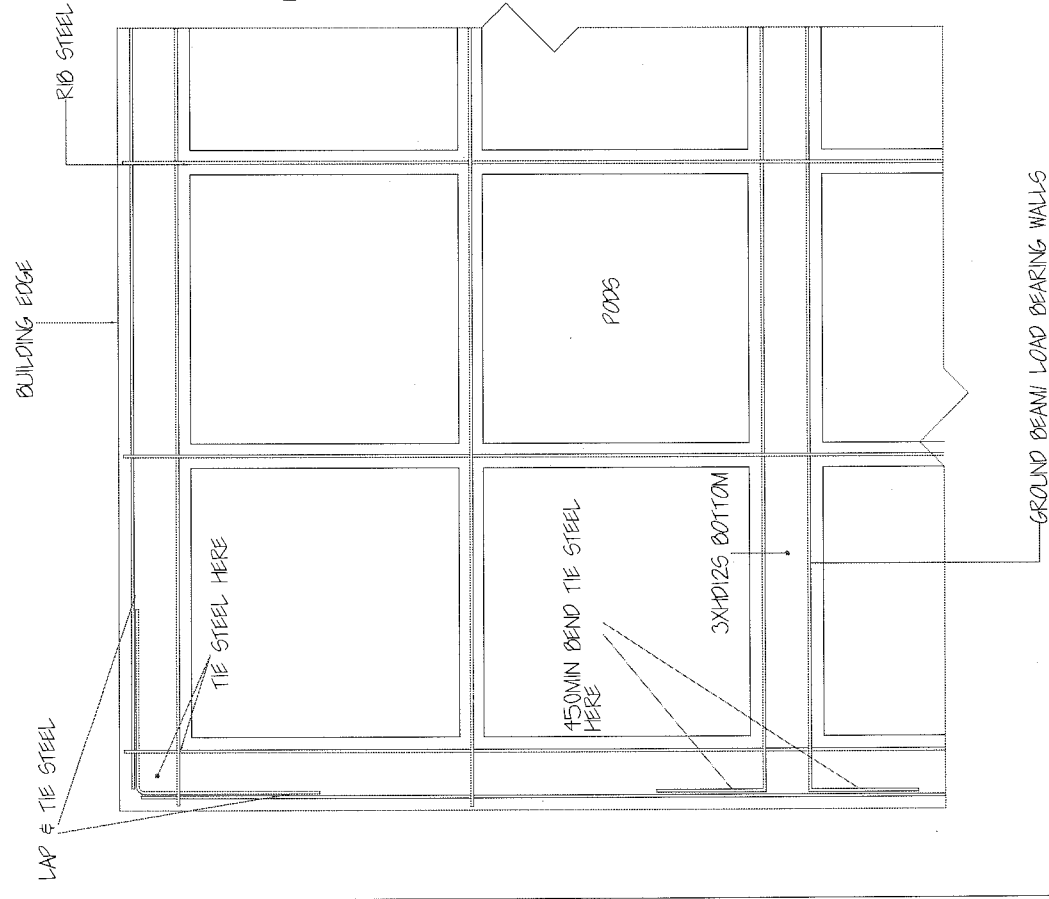
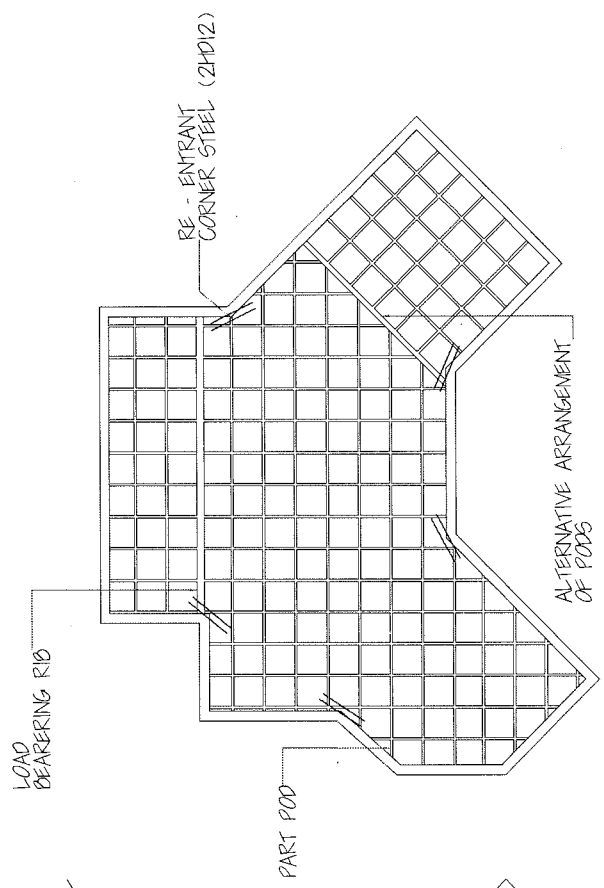


HEAVY CLADDING DETAIL

THOMSON 25 MAHIA LANE
 WAIKANA E - RIBRAFT
 HAMISH WELLS
 CONSULTING CIVIL ENGINEER
 202 OFAKI 60206
 8040 002 OFAKI
 5562 NZ
 0274 459 757
 MPENZ CRENS # 166323
 engineer@ktra.co.nz

THOMSON 25 MAHIA LANE
 WAIKANA E - RIBRAFT
 HAMISH WELLS
 CONSULTING CIVIL ENGINEER
 202 OFAKI 60206
 8040 002 OFAKI
 5562 NZ
 0274 459 757
 MPENZ CRENS # 166323
 engineer@ktra.co.nz

REV	DATE	DESCRIPTION
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GENERIC RIB RAFT DETAILS

PRODUCER STATEMENT STORMWATER DRAINS



Construction Review

Send or deliver this form to: Kapiti Coast District Council,
175 Rimu Road, Paraparaumu 5032
Private Bag 60601, Paraparaumu 5254
For enquiries, phone 04 296 4700 (Toll Free: 0800 486 486)

TO BE COMPLETED BY THE INSTALLER

Issued by: Richard Campbell

Registration number: 13448

In respect of: Stormwater Drains installed in accordance with E1 AS1 as shown on the approved plans or as per the attached amended plan

Installed at: 25 Mahia Lane
Wairakei

Building Consent No: BC 160522

As a certified drainlayer, currently holding an annual practicing license, 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.

Name: Richard Campbell

Signature: [Signature]

Address: P.O. Box 392

Date: 5/10/16

Phone: Paraparaumu

Fax: _____

Mobil: 0274 480044

Email: richard@impr.co.nz

Note: Fully dimensioned as built drain plan to be supplied. (scale 1:100)

Kāpiti Coast District Council Office Use Only

Producer Statement author authenticated and current registration verified. Verification and Registration checked through public register on www.pgdb.co.nz.

Date:

Name:

Signature:

PRODUCER STATEMENT
PIPED SERVICES AND PLUMBING STACKS



Construction Review

Send or deliver this form to: Kāpiti Coast District Council,
175 Rimu Road, Paraparaumu 5032
Private Bag 60601, Paraparaumu 5254
For enquiries, phone 04 296 4700 (Toll Free: 0800 486 486)

TO BE COMPLETED BY THE INSTALLER

Issued by: Stephen Henderson

Registration number: 04479

In respect of Piped Services installed in accordance with G12/AS1 as shown on the approved plans or as per the attached amended plan and Sanitary Plumbing Stacks installed in accordance with G13/AS1 or AS/NZS 3500.2.2

Installed at: 25 Mahia Lane, Waikanae.

Building Consent No: 160529

As a certified plumber, currently holding an annual practicing license, 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. Both hot and cold systems have been pressure tested for a period of 15 minutes at a pressure of 1500 kPa.

Name Steve Henderson Signature [Signature]

Address _____ Date Nov 2016

Phone _____ Fax _____

Mobile 0274485658 Email diane@hendersonplumbing.co.nz

Kāpiti Coast District Council Office Use Only

Producer Statement author authenticated and current registration verified. Verification and Registration checked through public register on www.pgdb.co.nz.

Date

Name

Signature:



**PRODUCER STATEMENT
- SUPPLY -**

Issued By: Larsens Concrete & Drainage
To: Henderson Plumbing
In Respect of: ELE5000Flat – 25000 L Tank for Burial

Larsens Concrete & Drainage Ltd were engaged to supply the above item design as per our standard information and AS /NZS Water Tank Standards at

25 Mahia Lane, Waikanae

The articles have been built and installed in accordance with the above standards and as described in our technical descriptions and drawings as issued by Larsens Concrete & Drainage and Septech Australia Pty Ltd.

I believe on reasonable grounds that subject to;

- (i) all proprietary products meeting the performance specification requirements that these items are constructed and installed in accordance with the New Zealand Standards as listed above.

Signed

A handwritten signature in black ink, appearing to be 'J. J. J.', is written over a dotted line.

Dated: 12/08/2016

Note: This producer statement covers only these sections of the work specifically referred to in the details above.

Some items of installation are required to be performed by others and we are not qualified to inspect these or these have not yet been performed.

- Electrical Connection
- House Plumbing Connection

437 Heads Road
WANGANUI
Phone: (06) 344 5911 Fax: (06) 344 8189

PRODUCER STATEMENT PRIVATE SEWER DRAINS



Construction Review

Send or deliver this form to: Kapiti Coast District Council,
175 Rimu Road, Paraparaumu 5032
Private Bag 60601, Paraparaumu 5254
For enquiries, phone 04 296 4700 (Toll Free: 0800 486 486)

TO BE COMPLETED BY THE INSTALLER

Issued by:

Richard Campbell

Registration number:

13448

In respect of: Private Sewer Drains installed in accordance with G13 AS2 or AS/NZS 3500 .2.2 as shown on the approved plans or as per the attached amended plan

Installed at:

25 Mahia Lane
Waikanae

Building Consent No:

BC 160522

As a certified drainlayer, currently holding an annual practicing license, 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.

Name:

Richard Campbell

Signature:

Address:

P.O. Box 392

Date:

5/14/16

Phone:

Paraparaumu

Fax:

—

Mobile:

0274 480041

Email:

richard@fmpd.co.nz

Note: Fully dimensioned as built drain plan to be supplied.(scale 1:100)

Drains may be laid and backfilled without inspection provided that the drain is left under test with a min of 1.0 m head and the inspection at the lateral left exposed.

Kāpiti Coast District Council Office Use Only

Producer Statement author authenticated and current registration verified. Verification and Registration checked through public register on www.pgdb.co.nz.

Date:

Name:

Signature:

--- = Stormwater
 --- = Sewer
 --- = Power + telecom trench
 = Water

BC 160522

DRAINAGE PLAN NOTES:

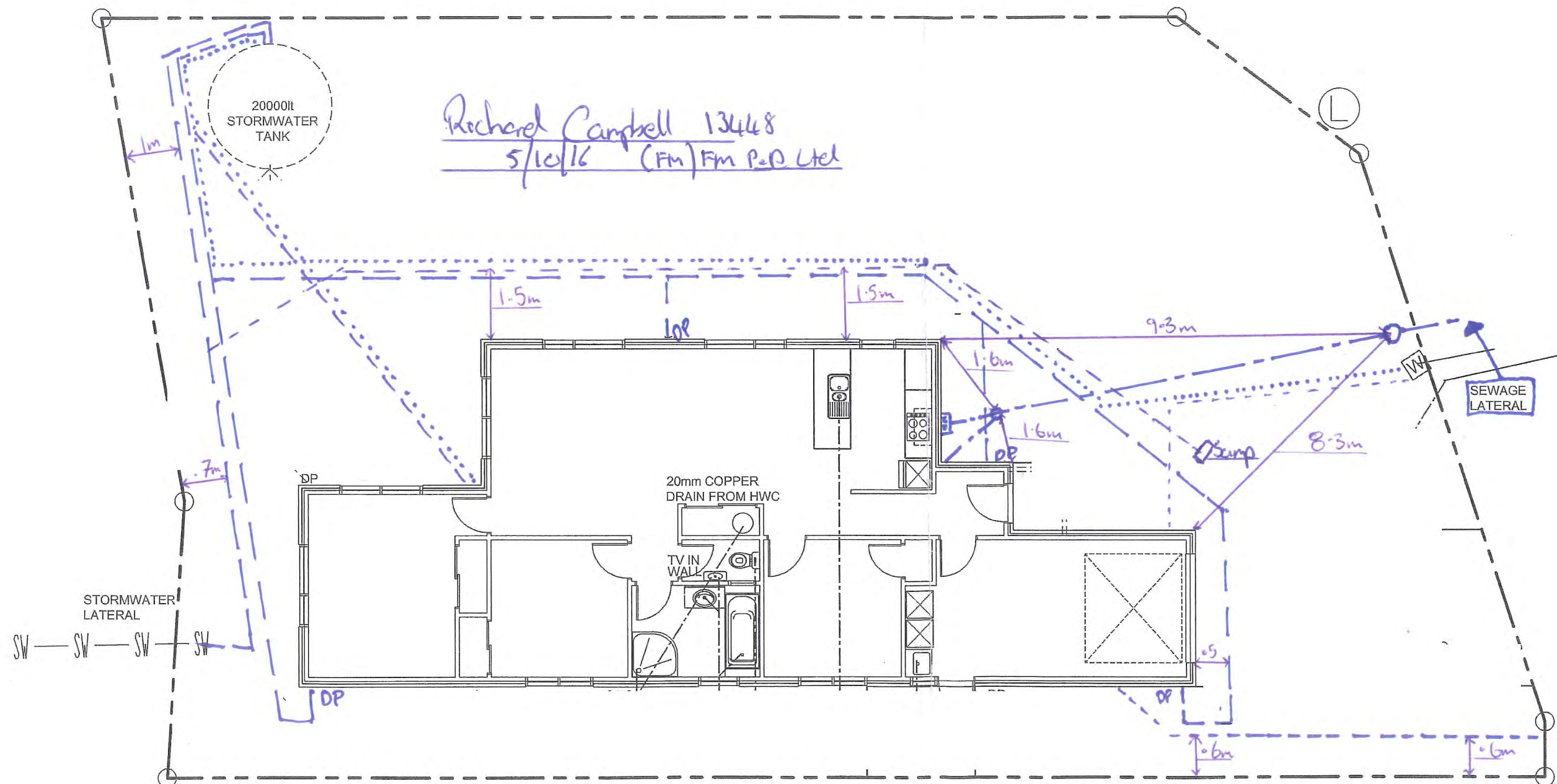
- All Plumbing and Drainage to be in accordance with AS/NZS 3500.2 for ground floor systems and for single stack systems
- Plumber/drainlayer to fill out producer statement and return to council with an as built drainage plan
- Check PIM information for service connections
- pipes to be inspected before covering with sand
- A tempering valve is required to be installed on the hot water service
- No pipes at any point exceed 10m in length from dn 100 vented drain

PIPE GRADIENTS

- Minimum grades for drains and discharge pipes
 65Ø & less = 1 in 40
 80Ø & 100Ø = 1 in 60

HOT & COLD WATER

- All hot & cold water pipes in house to be run in Iplex K2 pex plumbing system
- 20mm for Main, to bath and to HWC
- 15mm to all other branches
- 15mm to exterior taps



Richard Campbell 13448
 5/10/16 (FM) FM P.O. Ltd

Revisions:
 JUNE 2016 rev A

RECEIVED
 07 JUL 2016
 BY: Ange

00 03

Project:
 PROPOSED
 DWELLING

LOT 24,
 25 MAHIA LANE,
 WAIKANAHE

Client:
 AR THOMSOM
 FAMILY TRUST

Drawing Title:
 DRAINAGE PLAN

Designer:
 COASTAL
 ARCHITECTURE LTD.
 11 Kodex Place
 Paraparaumu
 New Zealand
 Tel: 04 296 1248
 e-mail: billfrancis@paradise.net.nz

Design: Bill Francis
 Drawn: bf
 Scale: as shown

Job: 1
 Page of: 2
 Rev: A



All work shall be in accordance with the NZBC. If in doubt ASK
 The Contractor must verify all dimensions on the job before commencing any work or shop drawings. Figured dimensions are to be used, scaled dimensions must be verified.
 This drawing and concept are copyright of Coastal Architecture Ltd. The recipient of this document is prohibited from disclosing its content for any purpose without the prior written consent of Coastal Architecture Ltd

For an attenuated storm water disposal system to work 7,000lt of volume of the tank will need to be above ground to allow gravity to drain the tank 24/7 through the small bore pipe that will be installed

DRAINAGE PLAN

SCALE 1:100

——— = Stormwater
 ——— = Sewer
 - - - - - = power + telecom trench
 = Water

BC 160522

DRAINAGE PLAN NOTES:

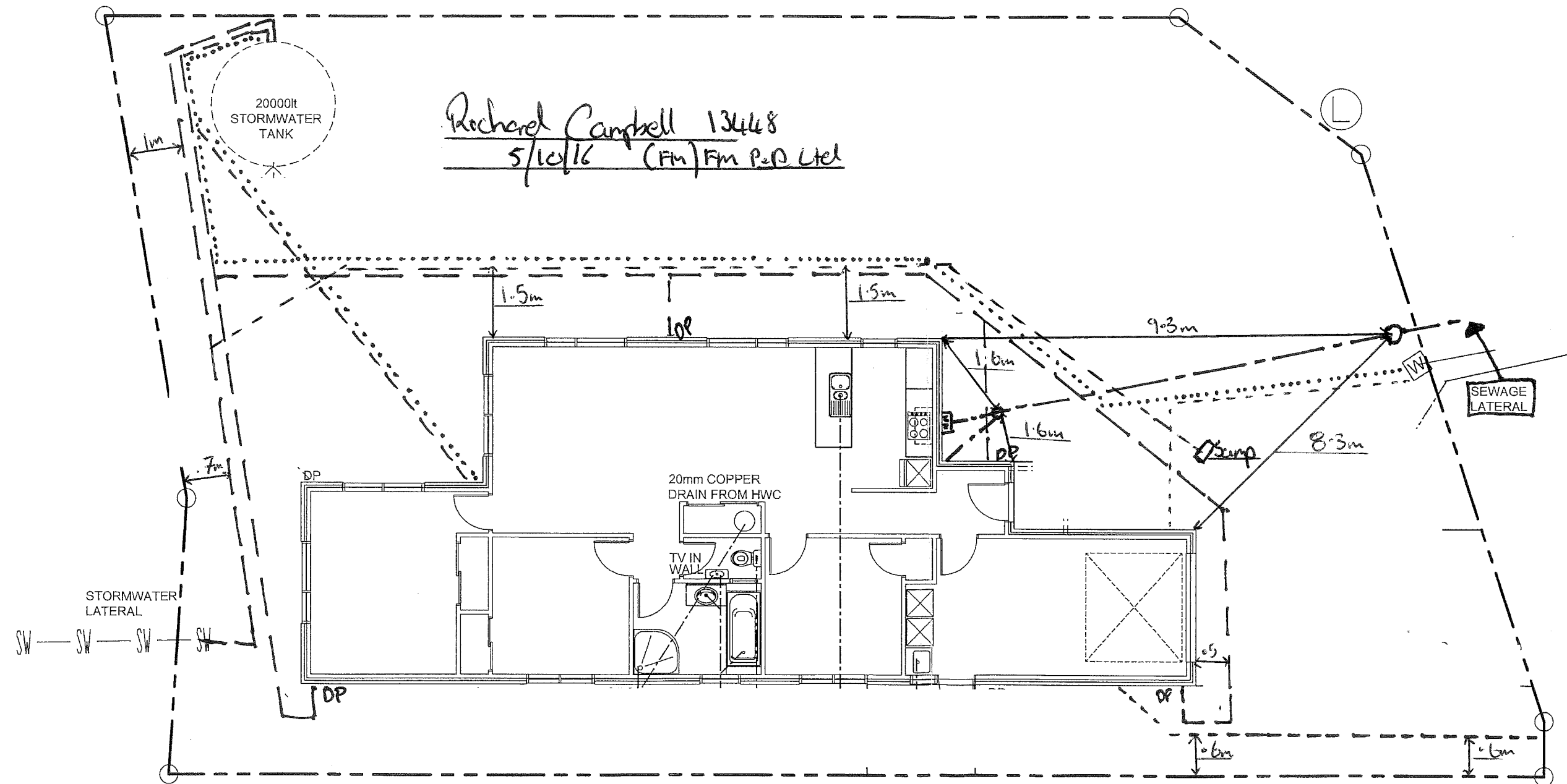
- All Plumbing and Drainage to be in accordance with AS/NZS 3500.2 for ground floor systems and for single stack systems
- Plumber/drainlayer to fill out producer statement and return to council with an as built drainage plan
- Check PIM information for service connections
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- A tempering valve is required to be installed on the hot water service
- No pipes at any point exceed 10m in length from dn 100 vented drain

PIPE GRADIENTS

- Minimum grades for drains and discharge pipes
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- 15mm to exterior taps



For an attenuated storm water disposal system to work 7,000lt of volume of the tank will need to be above ground to allow gavity to drain the tank 24/7 through the small bore pipe that will be installed

DRAINAGE PLAN

SCALE 1:100

Revisions:
JUNE 2016

rev A

RECEIVED
 07 JUL 2016
 BY: Aage

00 03

Project:
PROPOSED DWELLING

LOT 24,
 25 MAHIA LANE,
 WAIKANAE

Client:
 AR THOMSOM
 FAMILY TRUST

Drawing Title:
DRAINAGE PLAN

Designer:
COASTAL
 ARCHITECTURE LTD.
 11 Kodex Place
 Paraparaumu
 New Zealand
 Tel: 04 296 1248
 e-mail: billfrancis@paradise.net.nz

Design: Bill Francis
 Drawn: bf
 Scale: as shown

Job: 1
 Page of: 2
 Rev: A



All work shall be in accordance with the NZBC. If in doubt ASK The Contractor must verify all dimensions on the job before commencing any work or shop drawings. Figured dimensions are to be used, scaled dimensions must be verified. This drawing and concept are copyright of Coastal Architecture Ltd. The recipient of this document is prohibited from disclosing its content for any purpose without the prior written consent of Coastal Architecture Ltd

INSTALL CHECKLIST

WHILST ON ROOF

PV ARRAY

Mounted flat on roof	☒	PV Array tilt..... 25 °	
Building integrated	☐	PV array orientation..... 31 east °	
Mounted on tilted array frame	☐		
PV Array is securely fixed and installed in accordance with the manufacturers recommendations	☒	No dissimilar metals are in contact with the array frames or supports	☒
Roof penetrations are suitably sealed and weatherproofed	☒	PV wiring losses are less than 1% at the maximum current output of the array	☒
Where PV array comprises multiple strings - string protection has been provided AS/NZS 5033	☐	Wiring is protected from UV and mechanical damage	☒
Weatherproof isolator (where required by local electricity distributor) is mounted immediately adjacent to the PV array	☐		

TESTING & COMMISSIONING CHECKLIST

PV ARRAY- d.c.

NOTE: where there is only 1 string and no array junction box, then the following tests will be conducted between the string and the PV array isolator at the inverter.

Isolate PV string and array wiring CHECK that there is no voltage on input OR output sides of any array junction box (where installed)	☐	WARNING: IF POLARITY OF ONE STRING IS REVERSED, THIS CAN CAUSE A FIRE IN THE ARRAY JUNCTION BOX
CHECK - Polarity of PV string & array wiring		RECORD PV string open circuit Voltage
String 1	☒	String 1 ²⁷⁴ V
String 2	☐	String 2V
String 3	☐	String 3V
.....	☐	
Array +ve	☐	
Array -ve	☐	
Polarity of wiring between array junction box and PV array isolator	☐	

RECORD

Short circuit Currents (where required)	String 1..... ^{9.46} A	With the PV array isolator OFF CHECK continuity between PV array isolator and inverter
	String 2A	Array +ve ☒
	String 3A	Array -ve ☒
	String 4A	CHECK polarity between the PV array isolator and inverter ☐
	ArrayA	RECORD Open circuit voltage at input side of the PV array isolator ²⁶³ V
Irradiance at time of recording the currentV / m2		WARNING: If polarity is reversed at the inverter damage may occur which is generally not covered under warranty

INVERTER - a.c.

Ensure that the a.c. normal supply is isolated and the main switch Solar supply is OFF

CHECK polarity at the Inverter and the main switch Solar supply	☒	CHECK polarity at the output of main switch Solar supply from the kWh meter	☐
RECORD the Voltage at the output of the solar AC main switch	 ²⁴⁰ V	Initial reading of kWh meter	

Inverter test certificates - send copy to Powersmart HQ ☐

Accredited Installer Name..... Solarzone contracting Ltd

Signed..... Date..... 2.11.16

Licensed Electrician Name..... Mike Saunders

Signed..... Date..... 2.12.16

INSTALL CHECKLIST

WHILST ON GROUND

INVERTER

Double pole DC isolator [or DC circuit breaker] is mounted close to input of the inverter (rating.....A)	☐	If d.c. isolator is of the polarised type then it is correctly connected to ensure operation under full load	☒
Isolator is mounted on output of the inverter (can be part of inverter)	☒	Lockable AC circuit breaker mounted within the switchboard to act as the main switch for the PV / inverter system. (ratingA)	☒
Inverter is inside building or in weatherproof enclosure with adequate space and ventilation	☒	LV DC CABLING is clearly identified - LV DC or similar at least every 3 metres	☒

SIGNAGE (white or red)

WARNING Dual Supply Isolate Both Normal and Solar Supplies before working on this	is permanently fixed on the switchboard.	☒	Normal Supply MAIN SWITCH	is permanently fixed at the main switch	☒
WARNING DUAL SUPPLY ISOLATE SOLAR SUPPLY AT DISTRIBUTION BOARD DB???	If the solar system is connected to a distribution board then the following sign is located on main switchboard and all intermediate distribution boards	☒	Solar Supply MAIN SWITCH	is permanently fixed at the main solar switch	☒

Where the inverter is not adjacent to the main switchboard, location information is provided ☒

WARNING AND ADVISORY SIGNS AS/NZS 5033 & Appendix G

SOLAR DC	is permanently fixed on array junction boxes (Black on White).	☒	Normal Supply MAIN SWITCH	Fire Emergency information is permanently fixed on the main switchboard (White on Red)	☒
Shutdown procedure is permanently fixed at inverter and/or on main switchboard		☒	Any other signage as required by the local Electricity Distributor		☒

230-240 VOLT (LV) INSTALLATION

All low voltage wiring has been installed by a licensed electrical tradesperson	☒	All wiring has been tested and approved by a qualified electrical tradesperson	☒
---	-------------------------------------	--	-------------------------------------

This checklist is based on the Powersmarts Design and Installation Guidelines. The Guidelines demonstrate the latest industry "best practice" and are to be read in conjunction with the relevant NZ/Australian Standards.

AUTHORISATION : I, verify that the following system has been installed to the standard indicated by these guidelines and complies with all applicable Australian/NZ Standards

Name of the person for whom the system was installed

Location of system

signed Date : / /

Attach a separate sheet detailing any departures

TESTING & COMMISSIONING CHECKLIST

START UP OF SYSTEM

Refer to system manual for the inverter and follow start-up procedure. This generally involves turning on the PV DC main switch followed by the Solar AC main switch but the procedures as recommended by the inverter manufacturer must be followed.

System connects to grid [after 60 seconds]	☒	Voltage at d.c. input of inverter	V
When the AC main switch is turned ON - follow the inverter start-up procedure -	☒	Voltage at a.c. output of inverter	V
Voltage is within operating limits of inverter	☒	Output power of the inverter (where available)	W
Input power of the inverter (where available)	W	Turn AC main switch OFF	☒
Output power as expected	☒	System immediately disconnects from grid	☒

PV OPERATING CURRENT

- Where there's only one string in the array record the operating current after Start-Up of System.
 - If more than one string - turn off the inverter, the a.c. main switch and d.c. main switch. Isolate all strings.
 - With one string connected at a time turn system back on and record the operating current of that string.
- Repeat 2 and 3 above until all string currents have been recorded.
- NOTE: Unless you have a solar irradiance meter then any string current tests should be performed on a bright sunny day with no cloud. This is to avoid varied readings due to cloud cover.

RECORD - operating currents :	String 1A	String 4A
	String 2A	
	String 3A	ArrayA

Accredited Installer Name Solarzone contracting Ltd
Signed..... Date 2.11.16

Licensed Electrician Name Mike Saunders
Signed..... Date 2.11.16



**ELECTRICAL CERTIFICATE OF COMPLIANCE
&
ELECTRICAL SAFETY CERTIFICATE**



PowerSmart
SOLAR ELECTRICITY
a greater choice

Reference/Certificate ID no/Sales Order: SO 1692

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 and AS/NZS 5033:2012 are safe to be connected to the 230/400 volt multiple earth neutral (MEN) system of electrical supply. All electrical work is done in accordance to Electrical (Safety) Regulations 2010 reprinted 1 February 2014.

1. Customer's Name:

A & R Thomson

2. Location Details:

House No: 25

Road: Mahia Ln

Suburb: Waikanae

City: Wellington

New Zealand - 5036

3. Contact details:

a. Name of Electrical worker:

Mike Saunders

b. Reg. /Practicing licence no:

E265037

c. Organisation/Company:

Solarzone contracting Ltd

d. Phone:

0429730602

e. Email:

solarzone@clear.net.nz

f. Name of the person(s)
supervised:

Mike Pierce, Sam Mcleary

Certificate of Compliance (CoC)

4. The prescribed electrical work is:

- a. ☐ Low risk
b. ☒ General
c. ☒ High-risk (Specify) – Photovoltaic – Others (Specify)

5. Reference Standards:

- d. ☐ Part 1 of AS/NZS 3000
e. ☒ Part 2 of AS/NZS 3000
f. ☒ AS/NZS 5033:2014
g. ☒ AS/NZS 4509.1
h. ☒ AS 4777.1
i. ☐ Others (Specify below)

6. Description of work:

Date	Type of supply system
2.11.2016	Single phase supply. 2 kw String PV system

7. Declaration of CoC:

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.

- j. ☒ Has been installed in accordance with the specified certified design¹
k. ☒ Has an earthing system that is correctly rated (where applicable)
l. ☒ Contains fittings that are safe to connect to a power supply
m. ☒ Relies on a supplier Declaration of Conformity¹
n. ☒ Relies on a manufacturer's instructions¹
o. ☒ Has been satisfactorily tested in accordance with the Electricity (Safety) Regulations 2010
p. ☒ Is safe to connect



**ELECTRICAL CERTIFICATE OF COMPLIANCE
&
ELECTRICAL SAFETY CERTIFICATE**



PowerSmart
SOLAR ELECTRICITY
a greater choice

q. ☒ Test Results:

Test Results	
Polarity (Independent earth):	P to re 236v, N to re 0v, E to re 0v
Insulation resistance:	> 20mohms
Earth Continuity:	0.02 ohms
Bonding:	0.13 ohms
Fault Loop impedance	0.10 ohms Z
Other (specify):	

r. Electronic/Other reference:

Certifier's Signature	Date
	02.11.2016

¹Attached or referenced in Appendix. 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.

Electrical Safety Certificate (ESC)

8. ☒ 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.

9. Certifier's name:

Mike Saunders

10. Reg. /Practicing licence number:

E265037

Certifier's signature	Date
	02.11.2016

11. Connection date:

02.11.2016

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.



**RECORD OF INSPECTION (ROI)
OF HIGH-RISK PRESCRIBED ELECTRICAL WORK
PURSUANT TO THE ELECTRICITY (SAFETY) REGULATIONS 2010**

Reference/Record ID Number:

Stones 69920

Issuer (Inspector) details:

Name of Inspector:

Peter Rigalsford

Registration #

I 2226

Email address:

peter@secl.co.nz

Telephone:

04 296 1727

Location of installation:

House No: 25

Road: Mahia Ln

Suburb: Waikanae

City: Wellington

New Zealand - 5036

Location details:

Location type:

- a. ☒ Domestic
b. ☐ Non-Domestic Accommodation
c. ☐ Industrial
d. ☐ Commercial

- e. ☐ Educational
f. ☐ Healthcare
g. ☐ Miscellaneous (other)

Certifying Electrical Work and Certificate of Compliance (CoC) details:

Name of Electrical worker(s):

Mike Saunders (Solarzone Contracting)

Registration #:

E265037

CoC Details:

SO 1692

CoC(s) attached:

Test results attached and also check list

Certifying Electrical Work and CoC details:

What was inspected:

Sunny Boy SMA PV system-single phase 2.5kW Inverter
PV panels mounted on roof
Labels in place and correct

Specify the regulation(s) and companion standard(s), or identify the certified design, followed when carrying out the inspection:

AS/NZS 5033:2014, AS/NZS4777:1:2016 & 2:2015, AS/NZS4509:1:2009 & 2: 2010
AS/NZS 3000:2007 Part 2 incl Amdts 1 & 2
Electricity Safety Regulations 2010, reprinted 2016, reg 6A,2.(iv) Photo-voltaic system

What are the results of the inspection:

Installation passed inspection, test results attached

High Risk Category:

- a. ☐ Not to AS/NZS 3000 Part 2 - 6A(2)(a)(i)
b. ☒ Photovoltaic system - 6A(2)(a)(iv)
c. ☐ Electrical medical area - 6A(2)(a)(vi)
d. ☐ High voltage installation - 6A(2)(a)(ii)
e. ☐ Hazardous area - 6A(2)(a)(v)
- f. ☐ Mains work - 6A(2)(b)
g. ☐ Mains parallel generation - 6A(2)(a)(iii)
h. ☐ Animal stunning or meat conditioning - 6A(2)(c)
i. ☐ Other - please describe:

Declaration

I hereby confirm that the work described above has been done in accordance with the regulations, and the installation on which the work has been done is, and will be, when enlivened, electrically safe.

Signature

Date

2/11/16



**ELECTRICAL CERTIFICATE OF COMPLIANCE
&
ELECTRICAL SAFETY CERTIFICATE**



PowerSmart
SOLAR ELECTRICITY
a greater choice

APPENDIX

Type	Quantity	Reference
a. PV Layout(s)		(Attached)
b. Wiring Diagram(s)		(Attached)
c. Datasheets	1 (combined)	http://powersmartsolar.co.nz/vdb/document/192
d. Supplier's Declaration of Conformity (SDoC)	1 (combined)	http://powersmartsolar.co.nz/vdb/document/192
e. Quality Assurance Standards	1 (combined)	http://powersmartsolar.co.nz/vdb/document/92
f. Others (Specify)		

PowerSmart
SOLAR ELECTRICITY



**RECORD OF INSPECTION (ROI)
OF HIGH-RISK PRESCRIBED ELECTRICAL WORK
PURSUANT TO THE ELECTRICITY (SAFETY) REGULATIONS 2010**

Reference/Record ID Number:

Stones 69920

Issuer (Inspector) details:

Name of Inspector:

Peter Rigalsford

Registration #

I 2226

Email address:

peter@secl.co.nz

Telephone:

04 296 1727

Location of installation:

House No: 25

Road: Mahia Ln

Suburb: Waikanae

City: Wellington

New Zealand - 5036

Location details:

Location type:

- | | |
|--|---|
| a. ☒ Domestic | e. ☐ Educational |
| b. ☐ Non-Domestic Accommodation | f. ☐ Healthcare |
| c. ☐ Industrial | g. ☐ Miscellaneous (other) |
| d. ☐ Commercial | |

Certifying Electrical Work and Certificate of Compliance (CoC) details:

Name of Electrical worker(s):

Mike Saunders (Solarzone Contracting)

Registration #:

E265037

CoC Details:

SO 1692

CoC(s) attached:

Test results attached and also check list

Certifying Electrical Work and CoC details:

What was inspected:

Sunny Boy SMA PV system-single phase 2.5kW Inverter

PV panels mounted on roof

Labels in place and correct

Specify the regulation(s) and companion standard(s), or identify the certified design, followed when carrying out the inspection:

AS/NZS 5033:2014, AS/NZS4777:1:2016 & 2:2015, AS/NZS4509:1:2009 & 2: 2010

AS/NZS 3000:2007 Part 2 incl Amdts 1 & 2

Electricity Safety Regulations 2010, reprinted 2016, reg 6A.2.(iv) Photo-voltaic system

What are the results of the inspection:

Installation passed inspection, test results attached

High Risk Category:

- | | |
|---|---|
| a. ☐ Not to AS/NZS 3000 Part 2 - 6A(2)(a)(i) | f. ☐ Mains work - 6A(2)(b) |
| b. ☒ Photovoltaic system - 6A(2)(a)(iv) | g. ☐ Mains parallel generation - 6A(2)(a)(iii) |
| c. ☐ Electrical medical area - 6A(2)(a)(vi) | h. ☐ Animal stunning or meat conditioning - 6A(2)(c) |
| d. ☐ High voltage installation - 6A(2)(a)(ii) | i. ☐ Other - please describe: |
| e. ☐ Hazardous area - 6A(2)(a)(v) | |

Declaration

I hereby confirm that the work described above has been done in accordance with the regulations; and the installation on which the work has been done is, and will be, when enlivened, electrically safe.

Signature	Date
	2/11/16

GREATER POWER
GREATER LIFE.



POWERSMART
OWNER'S MANUAL

INVERTER SERIAL NUMBERS:

On side of inverter

SOLAR MODULE SERIAL NUMBERS:

167M6K6014005127
167M6K6014005125
167M6K6014005074
167M6K6014005131
167M6K6014005136
167M6K6014005134
167M6K6014005132

PowerSmart

PO Box 5078, Mount Maunganui,
New Zealand, 3150

E: info@powersmartsolar.com

W: www.powersmartsolar.com

Toll Free 0800 00 22 69

Head Office - Tauranga +(64) 7 2811158



PowerSmart
SOLAR ELECTRICITY

a greater choice

SYSTEM TROUBLESHOOTING.

In the event of a system fault, follow the troubleshooting tips below. Contact us if these tips do not resolve the problem. A service technician familiar with high voltage and PV arrays may be required.

Troubleshooting should be performed during sunshine hours.

The inverter is the heart of the system and its display is the first place to look to resolve system faults.

INVERTER FAULT INDICATED

1. Check the inverter display for a fault code.

WHAT TO DO: Follow instructions in the inverter manual for the relevant fault code to resolve fault. In the case of an earth fault, shut down the system as described in the shutdown procedure and contact PowerSmart.

NO AC OUTPUT/ LOW AC OUTPUT

1. Check that all AC Solar Supply Main Switches are CLOSED (ON).
2. Check that all PV Array DC Isolators are ON.

WHAT TO DO: If any are OPEN, shut down the system completely and re-start it by following the system shut-down & start-up procedure on p9. Power must be interrupted for at least 5 minutes to allow for a complete shut-down of the inverter.

INVERTER WILL NOT START

1. Check that all AC Solar Supply Main Switches are CLOSED (ON).
2. Check that all PV Array DC Isolators are ON.

WHAT TO DO: If any are OPEN, shut down the system completely and re-start it by following the system shut-down & start-up procedures on p9. Power must be interrupted for at least 5 minutes to allow for a complete shut-down of the inverter.

LOW SYSTEM DC POWER

1. Look for any shading.

WHAT TO DO: Remove any sources of obstruction if required.

2. Check PV Modules for heavy dirt, dust or debris.

WHAT TO DO: Clean modules if required.

3. Look for damaged or broken glass, and damaged wiring between modules and DC switches.

WHAT TO DO: If damage has occurred please contact Powersmart.



PV Array
DC Isolator
Switch



AC Solar
Supply Main
Switch

WARRANTY AND SERVICE INFORMATION.

POWERSMART WARRANTY STATEMENT.

Valid at or after 01 January 2009

PowerSmart NZ Ltd. ("PowerSmart") warrants to the original purchaser ("Purchaser") of a system(s) that it manufactures and installs ("Product") at the original installation site that the Product shall be free from defects in material, workmanship, and design for a period of five (5) years, from the earlier of 1) the date the installation of the Product is completed, or 2) 30 days after the purchase of the Product by the original Purchaser. The Warranty does not apply to any modifications made to the system or additions after installation and commissioning.

All installations in corrosive atmospheric conditions not reasonably found or consented in normal residential and commercial applications are excluded. This Warranty does not cover damage to

the Product that occurs during its shipment, storage, or installation.

This Warranty shall be VOID if installation of the Product is not performed in accordance with PowerSmart's written installation instructions and design specifications therein, or if the Product has been modified, repaired, or reworked in a manner not previously authorized by PowerSmart, IN WRITING, or if the Product is installed in an environment for which it was not designed. PowerSmart shall not be liable for consequential, contingent or incidental damages arising out of the use of the Product by Purchaser under any circumstances. If within the specified Warranty period the Product shall be reasonably proven to be defective, then PowerSmart shall repair or replace the defective Product, or any part thereof, in

PowerSmart's sole discretion. Such repair or replacement shall completely satisfy and discharge all of PowerSmart's liability with respect to this limited Warranty. Under no circumstances shall PowerSmart be liable for special, indirect or consequential damages arising out of or related to use by Purchaser of the Product. Manufacturers of related items, including but not limited to PV modules and roofing materials, may provide written warranties of their own.

PowerSmart's limited Warranty covers only its Product, and not any related items.

ROOF MOUNTING WARRANTY STATEMENT.

Valid at or after 1 December 2012

PowerSmart NZ Ltd. ("PowerSmart") warrants to the original purchaser ("Purchaser") of the product(s) that it manufactures ("Product") at the original installation site that the Product shall be free from defects in material and workmanship (the "Warranty") for a period of ten (10) years, from the earlier of 1) the date the installation of the Product is completed, or 2) 30 days after the purchase of the Product by the original Purchaser (the "Warranty Period"), subject to the following conditions:

- The Warranty does not apply to any foreign residue deposited on the finish.
- All installations in corrosive atmospheric conditions not reasonably found or consented in normal residential and commercial applications are excluded.
- The Warranty does not cover damage to the Product that occurs during its shipment, storage, or installation.

This Warranty shall be VOID if:

- installation of the Product is not performed in accordance with PowerSmart's written installation instructions and design specifications therein; or
- the Product has not been maintained in accordance with PowerSmart's instructions and/or labeling on the Product; or
- the Product has been modified, repaired, or reworked in a manner not previously authorized by PowerSmart, IN WRITING; or
- the Product is installed in an environment for which it was not designed.

If within the specified Warranty Period the Product shall be reasonably proven to be defective (which shall exclude fair wear and tear), then PowerSmart shall repair or replace the defective Product, or any part thereof, in PowerSmart's sole discretion.

Such repair or replacement shall completely satisfy and discharge all of PowerSmart's liability with respect to this limited Warranty. Save as expressly provided in the conditions of sale for the Product, under no circumstances shall PowerSmart (or its employees, servants or agents, contractors or successor purchasers) be liable for any direct, special, indirect or consequential damages arising out of or related to use by Purchaser of the Product.

Manufacturers of related items, including but not limited to PV modules and roofing materials, may provide written warranties of their own to the Purchaser. The Warranty covers only Product manufactured by PowerSmart, and not any related items.

The Warranty does not replace PowerSmart's obligations under the Consumer Guarantees Act 1993.

PowerSmart has no obligation to replace the Product if you change your mind.





SOLAR PANELS/ PHOTOVOLTAIC ARRAY

Solar panels are made up of interconnected photovoltaic cells. The solar panels installed are linked together to make up an array. The panels capture sunlight to create electricity.

Optimal performance is obtained with direct sunlight, however the modules still generate electricity on cloudy days; less light equals less power. Shading of any part of the PV array caused by trees or other obstructions such as dust or bird droppings has a significant impact on performance and should be avoided.

INVERTER

The inverter converts the electricity generated by the PV array for use in your building. It also manages the flow of electricity between your building and the grid. It does this automatically and does not need to be manipulated in any way.

In the event of a main grid power outage, the inverter will shut down. This feature protects utility

linesmen from harm when they believe the grid to be de-energized and is required by Australian and New Zealand standards. The inverter will start up once the utility grid returns to normal operating parameters. Unless special components are added the grid connected solar power system does not provide backup power in the event of a utility outage.

MOUNTING

The system is mounted using PowerSmart's proprietary solar mounting system which is designed to withstand harsh wind and marine conditions.

SAFETY

The system has been designed for safe, reliable operation. People maintaining or repairing the system must adhere to standard industry practice and appropriate safety guidelines. Only properly trained personnel should perform maintenance or repair outside of the scope of the next section of this manual.

NOTE:

The system does not need to be shut down to perform annual maintenance.

WARNING:

DO NOT clean solar modules if there are cracks or broken glass.

DO NOT touch damaged wiring.

DO NOT clean solar modules with cool water during hot sunny days.

OWNER MAINTENANCE.

It is recommended that you perform simple maintenance on the solar panels once a year, or after such events as dust storms, increased amounts of pollen in the air or if you have noticed a decrease in the performance of the system. Frequent rainfall is usually sufficient to keep the module surface clean.

Inspect PV modules for dirt, dust and bird droppings. A fine layer of dust does not significantly affect system performance. Clean modules if more than a fine layer of dust is present. Only clean modules when cool, in the morning or evening. Use a soft brush and water to avoid scratching the module. Report any damage to PowerSmart.

START-UP & SHUT-DOWN PROCEDURE.

START-UP PROCEDURE

If inverter supplies switchboard:

1. Turn on the solar PV Array DC Isolator.
2. Turn on the inverter AC Solar Supply Main Switch.
3. Turn on the AC Solar Supply Main Switch in switchboard.

If inverter supplies meter box:

1. Turn on the solar PV Array DC Isolator.
2. Turn on the inverter AC Solar Supply Main Switch.
3. Turn on the AC Solar Supply Main Switch in Meter box.

NOTE:

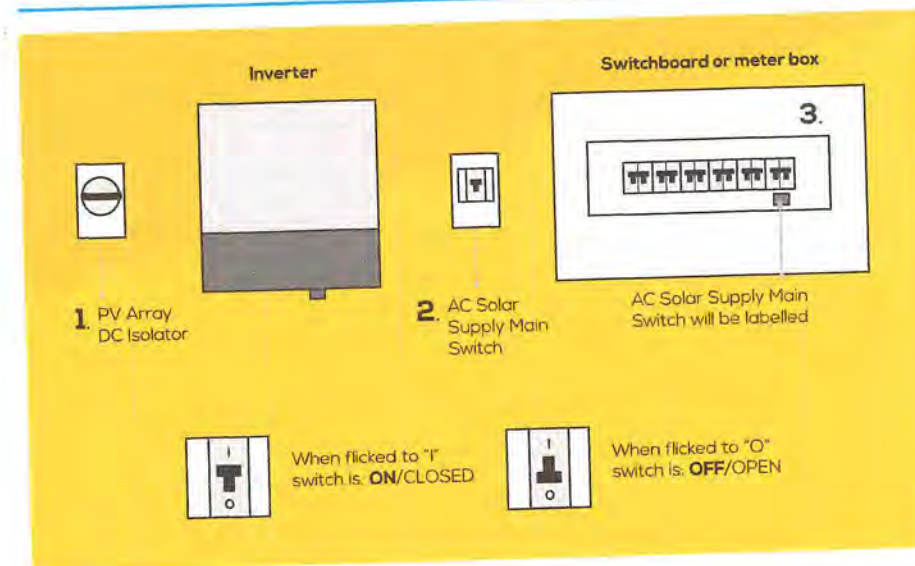
Power must be interrupted for at least 5 minutes to allow for a complete shut-down of the inverter.

WARNING:

Do not open plug and socket connectors or PV string isolators under load.

SHUT-DOWN PROCEDURE

1. Turn off the inverter AC Solar Supply Main Switch.
2. Turn off the solar PV Array DC Isolator.



HOW IT WORKS.

GRID CONNECTED SYSTEM

Your grid connected solar power system produces electricity for use in your building and export to the grid. The system includes: photovoltaic (PV) modules, inverter(s), roof mounting hardware, electrical disconnects and optional communication and monitoring software.

2. CONVERTED TO ELECTRICITY FOR USE IN YOUR HOME

GREATER MONITORING
Your inverter controls the flow of electricity between your solar panels and your home, putting the power back in your hands.

3. DISTRIBUTED TO YOUR HOME OR THE GRID

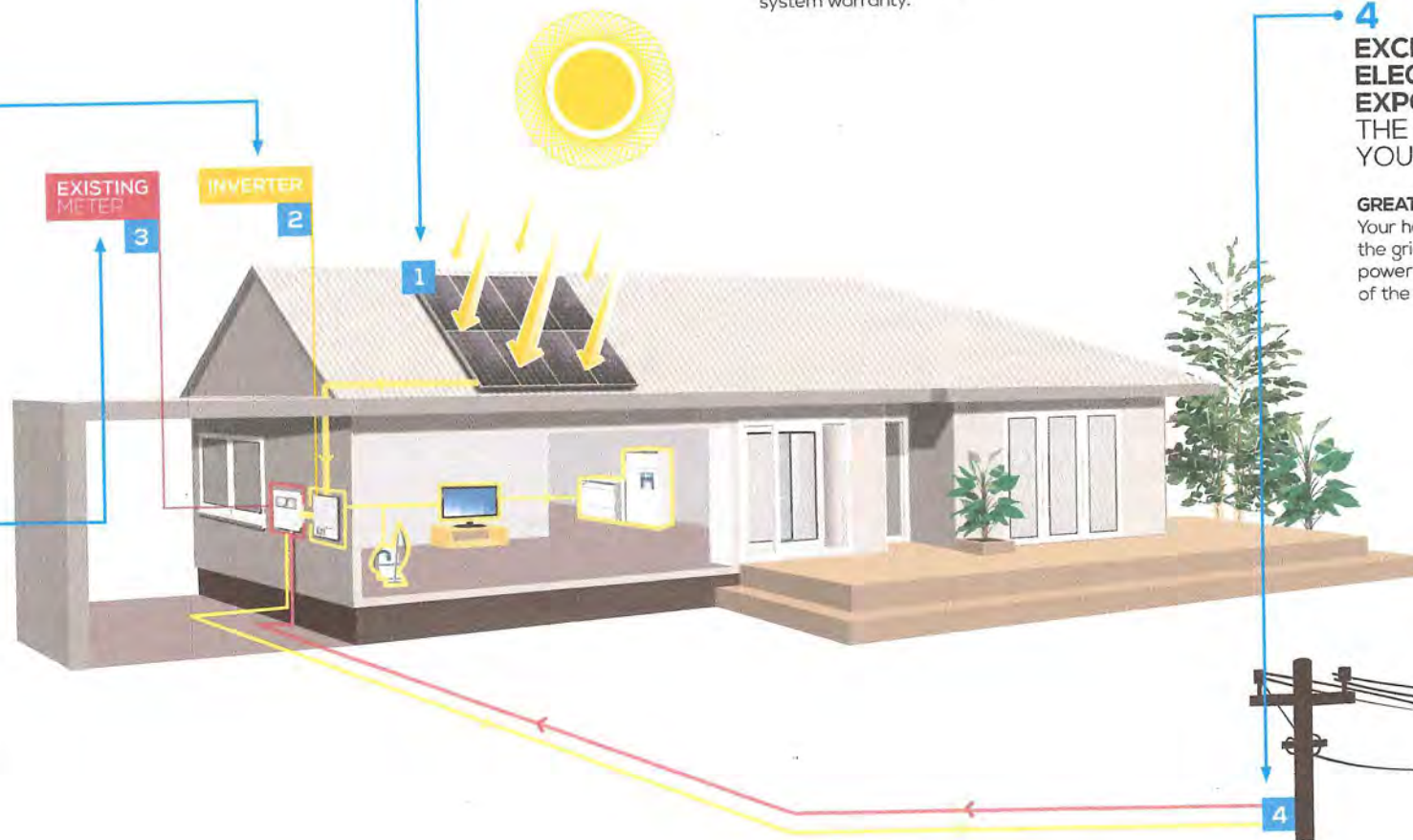
GREATER RETURN
Your meter keeps track of how much electricity is exported to and imported from the grid, so you can see how much you are saving.

1. CAPTURED BY POWERSMART SOLAR PANELS

GREATER WARRANTY
Our systems are built to withstand cyclone force winds and include our personal 5 year complete system warranty.

4. EXCESS ELECTRICITY EXPORTED TO THE GRID CREDITS YOUR BILL

GREATER FREEDOM
Your home is connected to the grid so there is always power available any time of the day or night.





A GREATER CHOICE FOR YOUR HOME.

Congratulations, you are now the proud owner of a PowerSmart solar electricity system.

An investment in solar electricity pays for itself, and is built to last for over 25 years – so you can relax in the knowledge that you've made a greater choice for your home.

Inside this pack you will find everything you need to know about how your system works and all of your customer information.

GREATER POWER. GREATER FREEDOM.

There is no greater way to generate electricity than the sun. In fact, the energy from just one minute of sunshine could power the world for a whole year.

On top of that, solar electricity is friendly to the environment. And that's pretty great too.

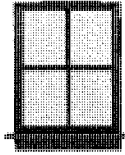
But with electricity prices continuing to rise, one of the truly great benefits of the sun is the power it puts in your hands. Reduce or even eliminate your power bill. Add value to your property, and watch as your solar electricity system pays for itself.



CONTENTS.

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Omega Aluminium Kapiti Ltd



151 Matai Rd
Raumati
P.O.Box 166
Paraparaumu

10 Year Manufacture Warranty

We undertake to rectify any faulty workmanship that may become evident and affect the performance as specified in accordance with NZS 4211 specification for performance of windows, for a period of 10 years from date of installation.
All hardware and surface finish is covered by their manufactures warranties.
All double glazing is covered by a 10 year supplier warranty.
Hardware items covered by their respective manufacturers
Excluded is replaceable wearable components such as door rollers.
Maintenance and cleaning to be carried as per attached files

We also state that the aluminium joinery & conservatory Roofs supplied will meet or exceed the 15 year performance requirements of
B2 Durability (2004) – 1.2.1 b, 1.2.1 e, 1.3.1 & 2.1.
E2 External moisture (2008) – Table 20
All glass supplied complies with
NZS 4223 glazing in buildings, Parts 1, 2 and 3
AS/NZS 1170 Occupancy
Where engineers details have been required, we state that the joinery supplied has been manufactured to the engineers specifications.

Retro Double glazing warranty excludes any existing window components, but includes any new glazing, hardware and aluminium extrusions fitted to complete the job.

Dated : 30/09/2016
Owners name : A R Thomson Trust
Builders name: Peter Thomson
Site address: 25 Mahia lane, Waikanae

Signed - Colin Harwood

Residential Roof Warranty New Zealand



Address Warranted **25 Mahia Lane Waikanae Waikanae**

Gerard Certified Roofer **Horowhenua Kapiti Roofing**

Name of Purchaser **A Thomson**

Product Description **Gerard Corona Shake Tex Charcoal 300**

Warranty Date **02.09.2016**

Warranty **132800**

Purchase Order **Thomson**

Our obligations under these warranties are subject to the **CONDITIONS** and **EXCLUSIONS** overleaf and apply only if the roof has been fitted by a Gerard Certified Roofer in accordance with the Gerard Roofs Installation Guide.

Standard residential environments:

Low/medium corrosion areas – more than 750m from breaking surf

WEATHERPROOF



If the roof fitted at the above address has been correctly installed and does not continue to satisfy the external moisture requirements of the New Zealand Building Code (in force at the Date of Warranty) for a period of 50 years from the Date of Warranty, we will at our option, repair or replace the roof or the affected part of it.

SURFACE COATING



If, as a direct result of a manufacturing defect, the surface coating of any tile or trim comprised in the roof fitted at the above address deteriorates during the period (from the Date of Warranty) of 20 years for Textured Coated products or 15 years for Satin Finish products, to the extent that, in our reasonable opinion, the appearance of the roof is substantially affected, then we will at our option replace the affected products, apply our surface coating to the affected tile or provide other reasonable compensation to the Purchaser.



During an initial period following the Date of Warranty, we will bear the full cost of fulfilling the warranties (including material and labour costs in removing and replacing or repairing defective tiles or trim and any inspection, freight or waste disposal costs). During the subsequent period, those costs will be shared between us and the purchaser (or subsequent homeowner) as shown below.

	Initial period Full cost of repair or replacement	Subsequent period Pro-rata share
Weatherproof warranty	First 25 years	Years 26 - 50, as per Schedule A
Surface Coating warranty: Textured Coated Tile	First 10 years	Years 11 - 20, as per Schedule B
Surface Coating warranty: Satin Finish Tile	First 5 years	Years 5 - 15, as per Schedule C

Severely corrosive environments:

Exposed marine areas – less than 750m from breaking surf

WEATHERPROOF



If the roof fitted at the above address has been correctly installed and does not continue to satisfy the external moisture requirements of the New Zealand Building Code (in force at the Date of Warranty) for a period of 25 years for Textured Tiles or 15 years for Satin Finish Tiles, from the Date of Warranty, we will at our option, repair or replace the roof or the affected part of it.



SURFACE COATING



If, as a direct result of a manufacturing defect, the surface coating of any tile or trim comprised in the roof fitted at the above address deteriorates during the period (from the Date of Warranty) of 10 years for Textured Coated products or 5 years for Satin Finish products, to the extent that, in our reasonable opinion, the appearance of the roof is substantially affected, then we will at our option replace the affected products, apply our surface coating to the affected tile or provide other reasonable compensation to the Purchaser.



YOU MUST FOLLOW THE RECOMMENDATIONS IN GERARD ROOFS' MAINTENANCE GUIDELINES FOR THIS WARRANTY TO REMAIN VALID.
THE MAINTENANCE GUIDELINES ARE AVAILABLE ON REQUEST FROM GERARD ROOFS.

Residential Roof Warranty New Zealand



Warranty Conditions & Exclusions

- The warranties apply only if the Purchaser has made full payment for the supply and fitting of the roof.
- As colour variations may exist in tiles and trims manufactured at different times, we reserve the right to repair or replace a tile or trim in the closest available colour in our range at the time of repair or replacement.
- The performance of a roof or individual tiles may be affected by the following. The warranties do not apply (and we are not liable) if:
 - the roof/tiles/trims are not maintained strictly in accordance with the Gerard Roofs Maintenance Guidelines issued by us from time to time (which include, amongst other things, repainting satin tiles after 15 years (5 years in severe marine environments) or if certain signs of deterioration are exhibited);
 - the tiles and other roofing materials are not stored, handled and installed strictly in accordance with the Gerard Roofs Installation Guide issued by us from time to time;
 - any work is done to the roof other than temporary emergency work or work carried out under our supervision, or subject to our prior inspection and prior written approval;
 - the product manufacturers' recommendations relating to the use of roof cleaning products are not strictly followed;
 - the performance of the roof /tiles/trim has been affected by:
 - faulty roofing design or faulty installation such as, but not limited to, incorrect specification of the product, the inappropriate use of dissimilar metals or substitution with materials not supplied by us;
 - faulty design or workmanship in the creation of penetrations in the roof (e.g. aerials, skylights, vents, pipework);
 - damage caused by anyone walking, or other unusual traffic, on the roof;
 - hailstones; moisture retaining substances; droppings from wildlife; pollutants; corrosive agents; fumes; dust; pollen; or organic growth;
 - defects in the structure on which the roof has been fitted;
 - any unusual natural phenomena or act of god including, without limitation, earthquakes, fires, floods, lightning, heavy hail, the build up of snow or other natural substances or winds stronger than those which the roof ought reasonably to have been designed and built to withstand, given the building's location, site conditions, design and any other relevant factors.
 - the roof/tiles/trims are not installed in accordance with the requirements of the New Zealand Building Code.
- The warranties do not cover (and we are not liable for):
 - installation of the roof (this is the installer's responsibility);
 - the performance of Gerard Vision Tiles, skylights or vents;
 - rust (red or white) on, or run off from rust on, roof fasteners;
 - 'halos' of rust (red or white) on the surface of tile or trims surrounding fasteners;
 - normal wear and tear; natural weathering, variable darkening, gradual fading or chalking of tiles or trims;
 - variations in the colour or texture of Textured Coated products arising from natural variations or the presence of other minerals in the crushed rock used in the chip with which the tiles are made.
- To the fullest extent permitted by law, we will not be liable for any consequential, indirect or special damage or loss of any kind whatsoever, including (without limitation) damage to other property or building elements, loss of profits or anticipated savings, or any such losses arising due to any delay by us in complying with our obligations under the warranties.
- Each of the limitations in paragraphs 3, 4 and 5 (and any part of each of those limitations) is a separate limitation applying even though one or more of the other limitations may be held not to apply in the circumstances.
- All warranties, liabilities and obligations, other than those specified in this warranty, are excluded to the fullest extent permitted by law.
- Any replacement or remedial work carried out under a warranty does not extend the term of any warranty.

Other things you should know

- To claim under the warranties and as a condition of our liability under the warranties:
 - the Purchaser must deliver written notice of the claim to the email or business address below and complete the warranty claim form which we will provide by return email or post to the address you specify in the notice;
 - any claim must be made within 3 months of the date the Purchaser became aware (or ought to have been aware) of the matter giving rise to the claim.
- Any expense incurred in claiming under the warranties is to be borne solely by the Purchaser.
- Subject to paragraph 1, this warranty extends to subsequent owners of the property.
- The benefits given by the warranties are in addition to other rights and remedies available to the Purchaser under any law which relates to the roof/tiles/trims, except to the extent excluded by this warranty.
- Any failure, delay or indulgence by us will not operate as a waiver. A waiver by us of any condition of these warranties is not a waiver of any other condition. No waiver is effective unless it is in writing.

SCHEDULE A: Weatherproof Warranty

Year	Company Contribution %	Purchaser/Owner Contribution %
1-25	100	Nil
26	50	50
27	48	52
28	46	54
29	44	56
30	42	58
31	40	60
32	38	62
33	36	64
34	34	66
35	32	68
36	30	70
37	28	72
38	26	74
39	24	76
40	22	78
41	20	80
42	18	82
43	16	84
44	14	86
45	12	88
46	10	90
47	8	92
48	6	94
49	4	96
50	2	98
51+	Nil	100

SCHEDULE B: Textured Coating

SCHEDULE C: Satin Finish Coating

Year	Company Contribution %	Purchaser/Owner Contribution %	Company Contribution %	Purchaser/Owner Contribution %
1-5	100	Nil	100	Nil
6	100	Nil	67	33
7	100	Nil	60	40
8	100	Nil	54	46
9	100	Nil	47	53
10	100	Nil	40	60
11	50	50	34	66
12	45	55	27	73
13	40	60	20	80
14	35	65	14	86
15	30	70	7	93
16	25	75	Nil	100
17	20	80	Nil	100
18	15	85	Nil	100
19	10	90	Nil	100
20	5	95	Nil	100
21+	Nil	100	Nil	100

The warranties are given by AHI Roofing Limited trading as Gerard Roofs (referred to here as we or us).

90-104 Felton Matthew Ave
PO Box 18071
Glen Innes, Auckland.

Telephone 0800 244 737
E-mail info@gerardroofs.co.nz

YOU MUST FOLLOW THE RECOMMENDATIONS IN GERARD ROOFS' MAINTENANCE GUIDELINES FOR THIS WARRANTY TO REMAIN VALID.
THE MAINTENANCE GUIDELINES ARE AVAILABLE ON REQUEST FROM GERARD ROOFS.

Bill Francis
PO Box 65
Paraparaumu

10 August 2016

Dear Building Consent Applicant / Building Owner

Approval of Building Consent: 160529

Location: 25 Mahia Lane, Waikanae
Legal Description: LOT 24 DP 476550 CT 658768
Description: New single level brick & tile dwelling.

I am pleased to inform you that the above building consent application has been approved. The building consent documents have been issued and are enclosed.

Before starting any work please read ALL the building consent documents carefully and in full so that you as the owner understand the conditions under which the consent has been issued.

As the owner you are also responsible for the following:

- ensuring that building work starts within 12 months of the approval of the building consent and that work progresses at a reasonable pace.
- ensuring that all required inspections are completed and that a Code Compliance Certificate is obtained once the work has been completed – please be aware that before a Code Compliance Certificate is issued, the building work must comply with the Building Act 2004 and the Building Code as at the date of Consent.
- that no work with noisy equipment is to be carried out before 7.30 a.m. or after 6 p.m. Monday to Saturday. During the week there may be workers on site from 6.30 a.m. quietly preparing for work. Work with noisy equipment is not permitted on Sundays and public holidays.
- ensuring that no damage occurs to public property, for example footpaths or retaining structures. Should damage occur you will be required to pay for any repairs.
- ensuring that if you wish to make any changes to the approved building consent, then an amendment to the building consent will need to be lodged with us.

If you have any questions regarding your building consent or your responsibilities, please contact Kāpiti Coast District Council on (04) 296 4700.

Building Consent
160529
Section 51, Building Act 2004

The building

Street address of building: 25 Mahia Lane, Waikanae
Legal description of land where building is located: LOT 24 DP 476550 CT 658768
Valuation number: 1494195021
Building name:
Location of building within site/ block number: Centre of site
Level/unit number:

The owner

Name of owner: A R Thomson Family Trust
Contact person: Adam Thomson
Mailing address: 4 Taranui Way, Paraparaumu Beach
Street address/registered office:
Email address: adam.thomson@hotmail.co.nz
Website:
Phone numbers:
Landline: *Mobile:* 027 427 9820
After hours: *Fax number:*
First point of contact for communications with the council/building consent authority:
Full Name: Bill Francis
Mailing Address: PO Box 65, Paraparaumu
Phones:: 296 1248

Building work

The following building work is authorised by this building consent:
New single level brick & tile dwelling.

Residential Dwelling

This building consent is issued under section 51 of the Building Act 2004. This building consent does not relieve the owner of the building (or proposed building) of any duty or responsibility under any other Act relating to or affecting the building (or proposed building). This building consent also does not permit the construction, alteration, demolition, or removal of the building (or proposed building) if that construction, alteration, demolition, or removal would be in breach of any other Act.

Build conditions

Compliance schedule

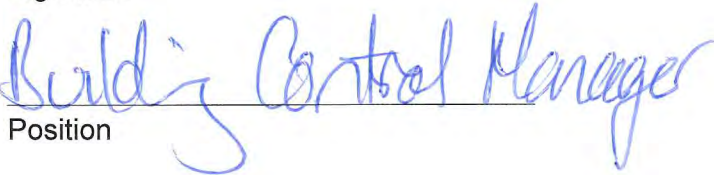
A compliance schedule is not required for the building.

Attachments

Copies of the following documents are attached to this building consent:

- Building Consent Addendum
- List of required inspections
- Plans and specifications


Signature


Position

On behalf of: KAPITI COAST DISTRICT COUNCIL

Date: 9/08/16

Addenda to Application

Application

Bill Francis PO Box 65 Paraparaumu	No.	160529
--	-----	--------

Project

Description	New (& prebuilt) House, Unit, Bach, Crib, Town House etc. Being Stage 1 of an intended 1 Stage New single level brick & tile dwelling.
Intended Life	Indefinite, but not less than 50 years
Intended Use	Residential Dwelling
Estimated Value	\$180,000
Location	25 Mahia Lane, Waikanae
Legal Description	LOT 24 DP 476550 CT 658768
Valuation No.	1494195021

Designer: Coastal Architecture Ltd 11 Kodex Place, Paraparaumu : 296
1248

General Requirements

- a) The Building Inspector is to be given 24 hours' notice before carrying out the following inspections:
1. Site
 2. Foundations
 3. Pre-slab - Plumbing
 4. Pre-slab - Building
 5. Drainage
 6. Pre Wrap
 7. Pre Clad
 8. Weathertightness
 9. Preline - Building
 10. Preline - Plumbing
 11. Postline
 12. Brick Veneer
 13. Final Inspection
- b) To arrange for any of the above required inspections by Building Control Team, please contact the Call Centre on (04) 296 4700 between the hours of 8am and 5pm.

1. LAPSE AND CANCELLATION OF BUILDING CONSENT. A building consent shall lapse and be of no effect if the building work concerned has not been commenced within 12 calendar months after the date of issue. Or within such further period as the territorial authority allows.
2. The inspection of all specific design components of the building is the responsibility of the Design Engineer who is also required to supply a written report to Council.
3. Note and comply with endorsements on approved plans.
4. Names and registration numbers of plumber and drainlayer are required before work commences.
5. Concealed soil and TV pipes and gas flues are only permitted built into ducts or minimum 150mm framed walls or with the Phillips top plate connecting bracket.
6. Both hot and cold water pipes are to be tested to 1500 KPA pressure.
7. Owner/builder is to ensure that the proposed foundation height will allow a satisfactory drainage connection to the sewer main.
8. Minimum heights of finished concrete slab-on-ground floors above adjoining finished ground level to comply with the current NZS3604.
9. Contractor to leave site clear of all demolition materials and in a tidy state.
10. Exterior cladding system to be previously completed and inspected by Council's Inspector prior to any subsequent prelining inspection/approval being granted for the fixing of internal linings.
11. This project contains elements specifically designed by an engineer. The Owner/Builder is required to ensure the Engineer inspects the work and provides KCDC with written evidence of the inspections.
12. All work to be in accordance with Sec 221 Consent Notice under RM130101.
13. All work to be in accordance with RM160138.

I have read the foregoing addenda to application, and the Owner/Builder/Authorised Person hereby agrees to comply with them.

**OWNER/BUILDER/
AUTHORISED PERSON**

Date:

GoGet Inspection Audit Report

Consent No: **160529**

Applicant: **Bill Francis**

Site Address: **25 Mahia Lane, Waikanae**

Work Type: **New single level brick & tile dwelling.**

Inspection Type: **Pre-site Inspection**

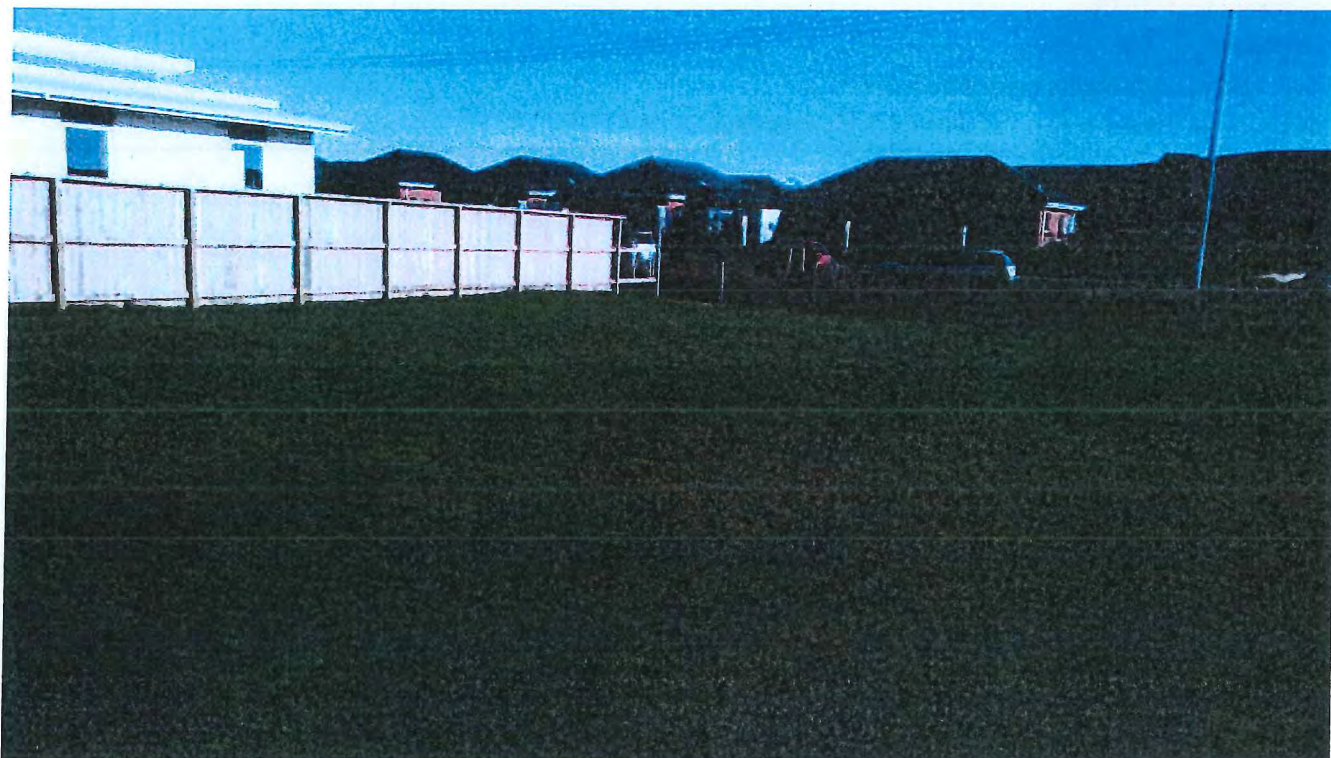
Inspection Outcome: **Pass**

Inspected By: **Alan Tinney**

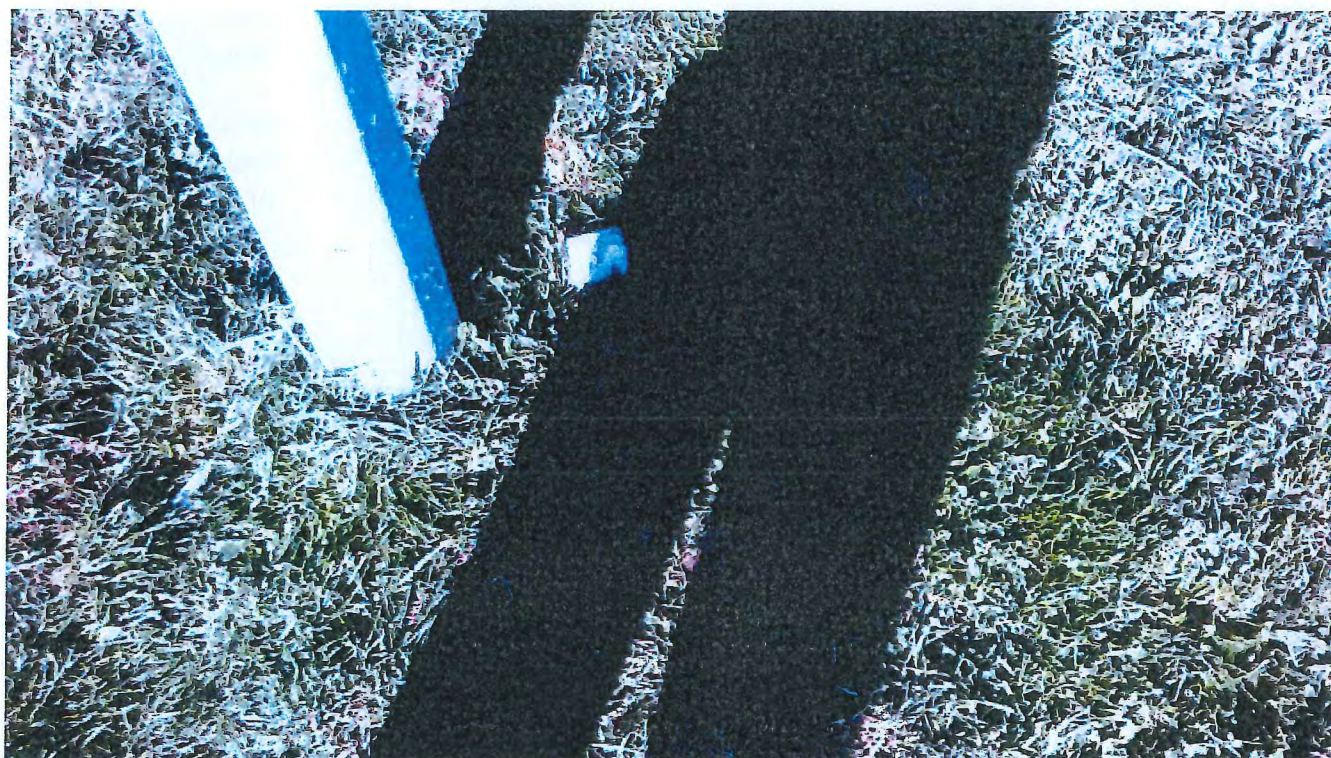
Inspection Date: **11 July 2016 11:14 a.m.**

Duration: **15 minutes**

Inspection Element	Status
General	Pass
Contours match application	Pass
Datum point identified	Pass
Boundaries identified	Pass
Ground conditions checked	Pass
engineer	
Footpath checked	N/A
Kerb and channel checked	Pass
Grass berm checked	Pass
Existence damage	N/A
Vehicle crossing installed	N/A
Dogs	N/A
Further investigation	N/A
Conforms with approved drawings	N/A
Resource consent	N/A
Producer statement	Pass
PS1	
Driveway checked	N/A
Position of boundaries and datum height checked	Pass
Surveyor	Pass
H WELLS	
Engineer supervision required	Pass



Taken at 11:14 AM on Monday 11/07/2016



Taken at 11:14 AM on Monday 11/07/2016



Taken at 11:15 AM on Monday 11/07/2016

BUILDING CONSENT DOCUMENTATION FILED

Building Consent Number: 160529.

Street Address: 25 Mahia Lane, Waikanae

Tick indicates documents (s) included in this Building Consent



Building Consent Documentation



Application Workflow Coversheet



Application for a Building Consent Form



Application for a Building Consent Checksheet



Proof of ownership



Costing Schedule



Building plans and specifications



Production Checklist



GoGet Processing Summary



Scope of Inspection Sheet and Inspection Checksheets



1-33, 45-50, 143-153

Building consent and memorandum

Inspection reports

Application for CCC

Site Plan

PIM

Certificate of Design Work

Copy of electrical certificate



Copy of gas certificate

An "as-built" drainage plan



Plumbing (Form 125) for pressure test and installation piped services



Drainage (Form 126) for stormwater installation



Drainage (Form 127) for private sewer installation



A Construction Review (PS4) statement for structural engineering



A Construction Review (PS4) statement for fire engineering

A Construction Review (PS4) statement for geo-technical engineering

Roof cladding warranty

Solar water heating technical specifications

Wall cladding/texture coating installation applicator warranty

A copy of the lift certificate

A certificate from the fire alarm installer

A certificate from the sprinkler certifier

A copy of wet-area membrane installers warranty

A copy of deck membrane manufacturer's installers warranty/guarantee

FPIS (verifier) Fire Systems Certification	
Specified Systems – Make - Model - Location	
A copy of windows	
A copy of water tank warranty	
A copy of septic tank warranty	
Record of work	
Owner Builder Statutory Declaration	
Extension of Completion Time for Building Consent letter	
Lapsed Building Consent letter	
Compliance Schedule	
Compliance Schedule Statement	
Building Consent Amendment Documentation Filed	
Peer review documents	
Fire design documents	
Installers Checksheet – Freestanding or Inbuilt Fire (Form 129)	
Requests for further information and other correspondence	
Amendments	
Supplementary information	
Notices to Fix	
Code of Compliance Certificate	
Refuse to Issue Code Compliance Certificate letter	
Photos:	

This form comprises part of the Building Consent documentation and indicates the contents of the Building Consent File.

BUILDING CONSENT PRODUCTION CHECKLIST



Proposal: <i>New Dwelling.</i>		BC: <i>160529.</i>
Address: <i>25 Mahia Lane, Waikanae</i>	Category:	
Officer:	Residential: ☒	Commercial: ☐
	Date:	

Key	
N/A ☐	Not Applicable to this application. (The deletion of whole sections as N/A is permitted. For alternatives comment below each section).
No ☐	Plans, specifications & documentation not complying with the Building Code &/or Bld Act (The reason specified alongside each prompt)
Yes ☐	Plans, specifications & documentation complying with Category Bld Code &/or Bld Act (The reason specified alongside each prompt)

Site Plan (NZS 3604 Sec 3.4, 4, 5 Code c/B1, B2, E1, E2, F1 & F2 Sect. 72, 75 BA04)			
N/A	No	Yes	Comments
☒	☐	☐	Wind zone <i>High</i> V/ High Specific <i>(GIS)</i> Site specific (3604)
☒	☐	☐	Flooding / ponding hazards (GIS)
☒	☐	☐	Slippage / fault line hazards (GIS)
☒	☐	☐	Erosion, river & coastal hazards (GIS)
☐	☐	☒	Subsidence / soft soil hazards (Site inspection notes) <i>(engineer)</i>
☒	☐	☐	Corrosion zone Zone D or <i>Zone C</i>
☒	☐	☐	Soil contamination (F1 GIS)
☐	☐	☒	Distances to boundaries / siting (District plan) <i>CRM 160138</i>
☐	☐	☒	Floor levels / contours (E2/AS1 & NZS 3604 E1) <i>(FFL 19.80 contours 19.5-20)</i>
☒	☐	☐	Two or More Allotments (Sec 75 – 83 Bld Act)
☐	☐	☒	Noise / sound insulation (airport & highway) <i>(within SH1 noise corridor)</i>
☐	☒	☒	CT/221 notice reviewed
☒	☐	☐	Outstanding Building Consents, No CCC
			BC:
			BC:
Additional comments:			

Ambiguity / Contradictions			
N/A	No	Yes	Comments
☒	☐	☐	Manufacturers Specs
☒	☐	☐	Engineer compared with Designer/Arch
☒	☐	☐	Any Other contradictions
Additional comments:			

Commercial Fire report (C/MM1, C/As1, C/AS2, C/A34, C/AS4, C/AS5, C/AS6, C/AS7, F6, F7, F8)			
N/A	No	Yes	Comments
☒	☐	☐	Referral to NZFS Fire Engineering unit
Additional Comments:			

Notes

P+D Pack ✓

Rate forms

221 attached to B.C ✓

* no form 164

sump shown running into storage tank

Detail of how attenuated tank will work.

General stamp prompts:

Wind Zone
Corrosion
Cladding and Roofing
Electrical
Compliance Schedule
Boundary setting out
Engineers design and addendum
Slip resistance

Set Status
Complete checklist
Addendum and note re fire report
Section 72 / ponding
Set inspections
Glazing
Sec 72
Hazard Assessment

List further information requested, info received, records / reference of communication etc.
via Phone / Email / letter / counter / fax

List further information requested, info received, records / reference of communication etc.
via Phone / Email / letter / counter / fax

[illegible]

Change of Use – Sec 114: (Record decisions and basis for decisions – confirm whether sec 115 applies)						
Date:						
Alteration to Existing Building - Sec 112 (Record decisions and basis for decisions – confirm whether sec 118 applies and if so, has it been complied with?). List conditions / communications / actions:						
Date:						
Hazards – Sec 71-74: (Record decisions and basis for decisions – see under "site plan above already done")		<table border="1"> <tr> <td colspan="2">Letter Sent</td> </tr> <tr> <td>Yes ☐</td> <td>No ☐</td> </tr> </table>	Letter Sent		Yes ☐	No ☐
Letter Sent						
Yes ☐	No ☐					
Date:						
Compliance Schedule – Sec 100 - 107: (Record if new / amended compliance schedule required, and attach copy of replica compliance schedule. Ensure that note is recorded on building consent that new / amended compliance schedule will be issued).						
Date:						

Declaration of Owner-builder		
N/A	Yes	Comments
☐	☐	Declaration of Owner-builder
☐	☐	Design
☐	☐	Building

Owner-builder register – Edocs: 406692

Inspections		
No of inspections estimated on application	No of inspections estimated at processing	Additional fees actioned if required

CODE COMPLIANCE CERTIFICATE REVIEW CHECKSHEET

*Criteria: All building work except for minor works or major projects.
Refer QAS: B14, B15, B16*



Address of Project:	
Date:	BC No:

		N/A	Yes	No
Application for Code Compliance Certificate (Form 278) completed?			☐	☐
Confirm all required inspections and been completed and passed			☐	☐
If inspections have been missed, what supporting information and method of verification has been provided to compensate for missed inspections?				

For consents issued after change to inspection fees on 1 July 2015

Inspections estimated at time consent issued (number)				
Inspections undertaken (number)				
Number of extra inspections to be invoiced and paid before CCC issued				
☐ Invoice actioned Date:				
		N/A	Yes	No
Work in accordance with approved consent and approved amendments			☐	☐
If no, has NTF been issued?		☐	☐	☐
Have items of non-compliance been resolved and NTF uplifted?		☐	☐	☐

Note: If work is not in accordance with consent, (and approved amendments) or NTF matters have not been resolved, suspend application for Code Compliance Certificate.

Supporting documentation required in Building Consent addenda. Form completed during BC Approval process
Tick indicates yes, N/A indicates considered – but not applicable

	Req'd	Supplied	Accept
Copy of electrical certificate			
Copy of gas certificate			
An "as-built" drainage plan			
Plumbing (Form 125) for pressure test and installation piped services			
Drainage (Form 126) for stormwater installation			
Drainage (Form 127) for private sewer installation			
A Construction Review (PS4) statement for structural engineering			
A Construction Review (PS4) statement for fire engineering			
A Construction Review (PS4) statement for geo-technical engineering			
Roof cladding warranty			
Solar water heating technical specifications			
Wall cladding/texture coating installation applicator warranty			
A copy of the lift certificate			
A certificate from the fire alarm installer			
A certificate from the sprinkler certifier			
A copy of wet-area membrane installers warranty			
A copy of deck membrane manufacturer's installers warranty/guarantee			
FPIS (verifier) Fire Systems Certification			
Specified Systems – Make - Model - Location			
A copy of windows			
A copy of water tank warranty			
A copy of septic tank warranty			
Record of work			
Owner Builder Statutory Declaration			
Building Consent Amendment Documentation Filed			

If specified supporting documentation has not been provided, what alternative information or verification method has been provided to compensate? *(Describe)*

Compliance Schedule	Yes	No
Is a new or amended compliance schedule required?	☐	☒
If "Yes" Has it been issued? (Refer note below)	☐	☐
If the new/revised compliance schedule has not been issued, what action has been taken to ensure it will be issued? (Outline)		

Note: If the draft/ revised compliance schedule has not been issued, the Code Compliance Certificate cannot be issued. Suspend issuing CCC until this matter is addressed.

Building Consent Requirements	Yes	No
Are there any items specified in the Building Consent or PIM that have not been completed?	☐	☐
(If yes, outline below)		
Are there any development impact fees to be paid outstanding? (if Yes, CCC cannot be issued)	☐	☐
Are there any other outstanding fees? (if Yes, CCC cannot be issued)	☐	☐

Decision
Issue Code Compliance Certificate? ☐ or Refuse Code Compliance Certificate? ☐
Give reasons for decision:
☐ On review of the inspection notes and supporting documentation it can be considered on reasonable grounds that all work has been completed in compliance with the Building Consent. OR ☐ Other

Building officer:	Co- reviewer:
Signature:	Signature:
Date:	Date:
Name:	Name:
Copies	Yes No
File: Compliance Schedule, Compliance Schedule Statement, and CCC placed on file.	☐ ☐
Applicant: Copies of Compliance Schedule, Compliance Schedule Statement sent out with the CCC	☐ ☐
Inspection Pack: Add copies of Compliance Schedule, Compliance Schedule Statement and CCC	☐ ☐

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VEHICLE CROSSING INSPECTION FORM

Building Consent: 160529.

Date: _____

To: Building Inspectors

Owner: _____

Address: _____

Can you please inspect the above Vehicle Crossing, footpath and berm and return the completed form to me signed.

Thank you

Inspected by:	
Date Inspected:	
Approved:	☐ YES ☐ NO

COMMENTS:

Department	✓ For Referral	Comments	Approving Officer / Date
Site Inspection	✓	Refer to Form 241 for completion of Site Inspection & sign off this form when completed.	
Resource Consents (refer PIM Sheet)	✓		
Plumbing and Drainage	✓	Stu see me before sending ✓ the RFI letter Thanks Simon	5/8/2016 Simon
Building	✓		09/08/2016
Fire Design			
Compliance Schedule			
Environmental Health			
Other.....			
Attachments: ☐ PIM ☐ DIF ☐ CS ☐ Sec 37/ Building work related to this consent may not yet commence because you need to obtain resource consent/s under the Resource Management Act 1991 or the proposal must be amended to comply with the requirements of the District Plan. Other: ☐ ☐	NOTES:		

APPLICATION WORKFLOW COVERSHEET (Blue Folder)



Building Consent No.	160529
Building Project	25 Mahia Lane, Waikanae.
Location (Site Address)	New Dwelling.
Building Category	Circle appropriate category 0 R1 R2 R3 C1 C2 C3

Received:

RECEIVED
07 JUL 2016
BY: Ange.

Note: A signature confirms that the application contains sufficient information to enable compliance with the building code to be assessed.

	Name and signature	Date
# Note: Checked, date stamped and initialled by TO/BCO. Select and circle appropriate category above & identify allocation to appropriate technical groups and if required to go to "site inspection" BC1	Ange	7/7/16.
Payment taken and receipted (details entered inside this cover sheet) by CSO BC1		
Data entered and invoiced by CSO BC1	Angie	7/07/16.
Pages numbered by CSO BC1	Ange	7/7/16
BC Application and documentation scanned, checked & status update by CSO BC1	Angie	7/07/16
BC Application signed over to BC BC1	Angie	7/07/16
Application reviewed by Technical Officers who sign off at back of this form BC2 & BC5	Simon	08-08-16 5/8/2016
Once Technical review complete, passed to CS for Plan Production and Invoicing BC3	Simon	09/08/16
CSO checks data entry input, including required inspections BC3		
BC, plans and other appropriate paperwork produced by CSO BC3		
BC, Approved plans and appropriate paperwork sent to applicant or agent with receipt by CSO BC3	Jo Croft	10/8/16
Inspection envelope prepared by CSO with endorsed plans and other appropriate paperwork and filed to cabinet. BC3		

CONSENT DATA INPUT REQUIREMENTS

✓	Required Inspections	✓	Required Inspections	✓	Required Inspections	✓	Required Inspections
✓	Foundation/Piles	✓	Drainage	✓	Pre-lining (Plumbing)	✓	Final (Dwelling)
	Block	✓	Pre-Wrap	✓	Wet Areas – Membrane		Final (Commercial)
✓	Pre-Slab (Plumbing)	✓	Pre-Clad	✓	Post Lining		Chimney (Inbuilt Fire)
✓	Pre-Slab (Building)	✓	Weathertightness	✓	Brick Veneer		
✓	Sub-Floor	✓	Pre-lining (Building)		Retaining Wall		

Office use	✓	Office use	✓
32	✓	23A	
2	✓	25	✓
3		30	
4		31	
6		33	
9	✓	34	
10	✓	38	
11	✓	39	
12	✓	40	
13		43	
15	✓	44	✓
21	✓		
23			

Act Ref	✓	Standard Consent Conditions	Comment
37		Resource Consent has not yet been obtained	
72 - 73		Land subject to natural hazard	
75-80		Construction on two or more allotments	

Non-Standard Addenda

Yes/No ☒ Compliance Schedule

Yes/No

Office - please see additional consent data comments on next page

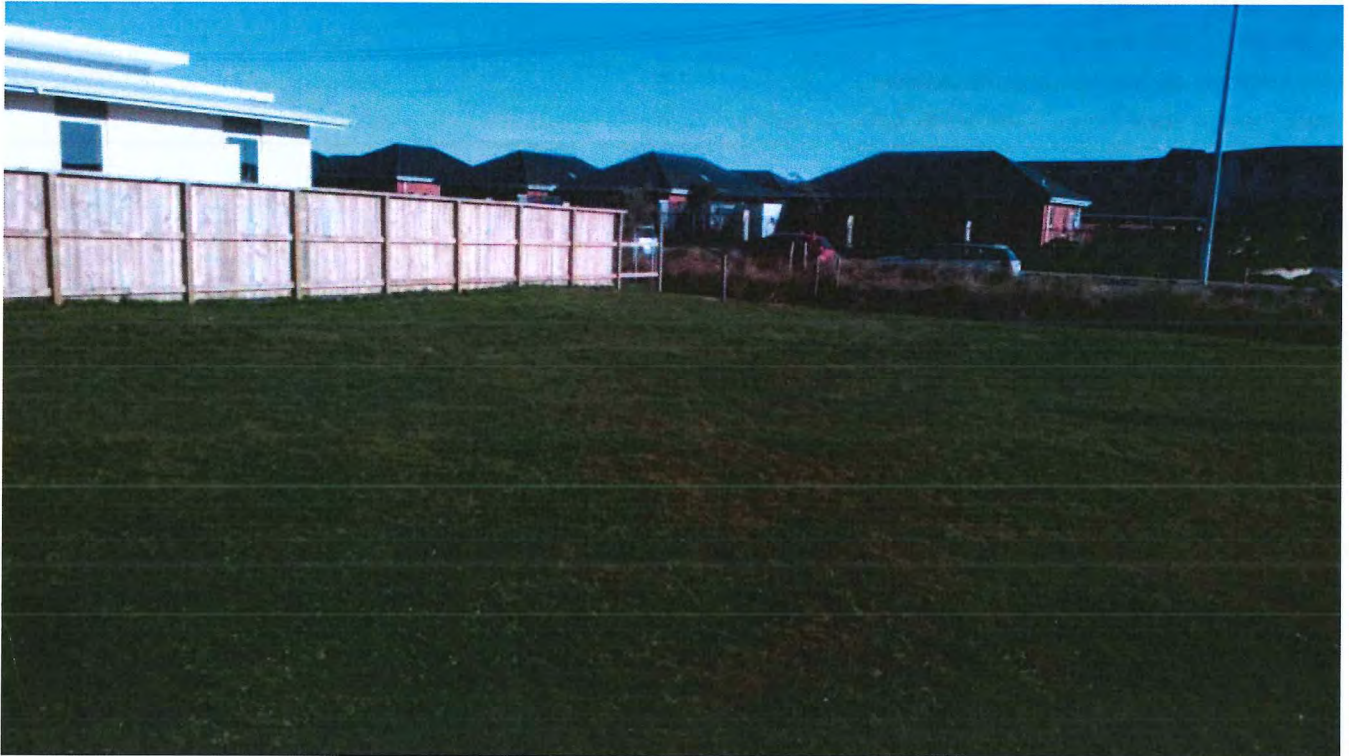
✓	Attach Receipt	
✓	This project contains elements specifically designed by an engineer. The Owner/Builder is required to ensure the Engineer inspects the work and provides KCDC with written evidence of the inspections. The attached fire report constitutes an essential part of this Building Consent and must be read and fully implemented on site - refer to the fire report for full details that are not necessarily indicated on the architectural drawings. It is the responsibility of the owner and contractor to ensure the full fire precautions, systems and construction are incorporated in the building. Ground bearing must be reconfirmed on site following excavation but prior to placing of concrete and reinforcing. Soft ground may be encountered requiring engineer specific design. Other:	OGST 51-860-608 Received with thanks by 7/01 KAPITI COAST DISTRICT COUNCIL 7-07-16 11:30 Receipt no. 540600 *COPY* *COPY* *COPY* DR BC160529 (AR FAMILY TRUST) 4,716.80- (AR Family Trust)::4 Taranui Way, Parap CQ EFT (AR Family Trust) 4,716.80
Office Use Only: Fees		
Building Consent Fee	\$ 1591.00	
Inspection Fee	\$ 1641.00	
Sewer Connection	\$	Application Fee 4716.80 \$4716.80
Water Connection	\$	Invoice No: 17812 Date: 7/07/16
Building Research Levy	\$ 180.00	Receipt No: 540600 Date: 7/7/16
Vehicle Crossing Damage Deposit	\$ 544.00	Fees Paid By: AR Family Trust
Certificate of Title Charge	\$	Building Consent Number: 160529
MBIE Building Levy	\$ 361.80	Date Issued: 7/07/16
Compliance Schedule	\$	AUTHORISATION FOR REFUND OF DEPOSITS
Code Compliance Certificate	\$ 73.00	Deposit Held \$
Accreditation Levy	\$ 180.00	Cost to Repair Damage Caused During Construction \$
Photocopying - District plan check	\$ 146.00	Total Balance to be Refunded \$
SUBTOTAL	\$	Authority Number:
Less Fee Paid	\$	Authorised: Date:
Total	\$ 4716.80	Deposit Held \$

GoGet Inspection Audit Report

Consent No: **160529**
Applicant: **Bill Francis**
Site Address: **25 Mahia Lane, Waikanae**
Work Type: **New single level brick & tile dwelling.**

Inspection Type: **Pre-site Inspection**
Inspection Outcome: **Pass**
Inspected By: **Alan Tinney**
Inspection Date: **11 July 2016 11:14 a.m.**
Duration: **15 minutes**

Inspection Element	Status
General	Pass
Contours match application	Pass
Datum point identified	Pass
Boundaries identified	Pass
Ground conditions checked	Pass
engineer	
Footpath checked	N/A
Kerb and channel checked	Pass
Grass berm checked	Pass
Existence damage	N/A
Vehicle crossing installed	N/A
Dogs	N/A
Further investigation	N/A
Conforms with approved drawings	N/A
Resource consent	N/A
Producer statement	Pass
PS1	
Driveway checked	N/A
Position of boundaries and datum height checked	Pass
Surveyor	Pass
H WELLS	
Engineer supervision required	Pass



Taken at 11:14 AM on Monday 11/07/2016



Taken at 11:14 AM on Monday 11/07/2016



Taken at 11:15 AM on Monday 11/07/2016

5 August 2016

Bill Francis
PO Box 65
Paraparaumu

Dear Building Consent Applicant/Building Owner

Request for Further Information – Building Consent: 160529

Site Address: 25 Mahia Lane, Waikanae
Legal Description: LOT 24 DP 476550 CT 658768
Project Description: New single level brick & tile dwelling.

Following checking of your Building Consent it is apparent that further information is required.

Information needed:

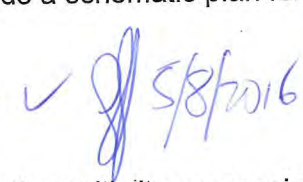
BUILDING

1. Doorsill details are required.

PLUMBING AND DRAINAGE

1. Please show the method of mechanical ventilation to the internal toilet.
2. Please provide elevation plan showing the storm water connection height in relation to the attenuation outfall pipe, please also show the overflow pipe as well connecting into this drain. ✓

A portion of the tank may need to be above ground to achieve what is required. A detail of what is required is attached. ✓

3. Please show the sump drain connecting directly into the tank overflow drain. ✓
4. Are the solar panels for solar water heating if so please provide a schematic plan for the pipe-work ✓
5. Please fill in sign and return form 164 and return them to me ✓ 

We have suspended your application and will not proceed any further with its processing until the above information is received. Please send it to us by 19 August 2016. If we do not receive it by this date, we may not be able to issue your Building Consent.

If you have any questions regarding plumbing and drainage or you would like to discuss this matter, please contact Simon Copp on (04) 296 4700 or simon.copp@kapiticoast.govt.nz referencing Building Consent No 160529.

If you have any questions regarding building or you would like to discuss this matter, please contact me on (04) 296 4700 or stuart.nepia@kapiticoast.govt.nz referencing Building Consent No 160529.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Stuart Nepia', with a stylized, cursive script.

Stuart Nepia
Building Officer

WATER DEMAND MANAGEMENT DECLARATION OF COMPLIANCE



In 2009 Council required all new homes built in urban areas to provide an alternative source of water for flushing toilets and outdoor irrigation. This form is to be submitted with all applications for a Project Information Memorandum/Building Consent for new or relocated dwellings on land zoned residential.

Address of Project	
Number of Dwellings	
Building Consent Number	(Office Use Only)

1. Water Demand Management Solution:

All dwellings subject to this development (new or relocated) will use one of the following water demand management solutions in accordance with the District Plan (please tick one box):

☐	Rainwater storage tanks with a total volume of not less than 10,000 litres, for each house in the development.
☐	Rainwater storage tanks with a total volume of not less than 4,000 litres, for each house in the development, and a complying greywater diversion device.
☐	The application is made with an alternative solution (note that a discretionary resource consent will be required).
☐	The application is made without provision for water demand management (note that a notified resource consent will be required).

2. For All Applications where Water Demand Management Will be Provided:

Volume of rainwater storage tanks:

I confirm all the following:

☐	That the rain water tank volume complies with selected water demand management option and have provided a certificate from the manufacturer demonstrating the tank volume.
☐	That there will be no direct connection from the reticulated water supply to any outside taps.
☐	That there will be a direct connection from the rainwater storage tanks to all internal toilet cisterns and any external taps.
☐	That there will be no direct connection from the reticulated water supply to any toilet cistern.
☐	I understand that the toby or manifold may have to be replaced with a dual feed manifold at my expense. <i>A dual feed manifold has one supply for the house a separate restricted supply to connect to the rainwater tank.</i>
☐	I have completed Kāpiti Coast District Council Form 159: "Water Supply Connection / Alteration Application Form". <i>An applicant is required to submit this form to Kāpiti Coast District Council Water and Wastewater Team if a new water connection or alteration of existing connection is required.</i>

4. Signatures	
Name:	
Signed:	
Date:	

3. For Applications Where a Greywater Diversion Device is to be Installed:	
Size of Disposal Field: (Note that this needs to be marked on the site plan or the plumbing and drainage plan submitted to Council).	
I confirm all the following:	
☐ That greywater will be collected from all laundry and bathroom drains (excluding toilets) and channelled to a greywater diversion device for use in outdoor irrigation.	
☐ The greywater worksheet is attached and confirms that greywater diversion is suitable on the lot.	
☐ That the device will be installed by an approved installer and that a certificate demonstrating this will be available to Council on request after installation.	

GREYWATER IRRIGATION CALCULATION SHEET

This sheet will help determine whether there is sufficient area available to reuse greywater for irrigation. Remember that greywater should be diverted to sewer and only used for garden irrigation when needed.

Greywater irrigation will not be suitable for your proposed dwelling, if it is in an area where:

- soils are too slow draining,
- are too steep,
- have high water tables less than a meter below the surface, or is within 20m of a drain, wetland, pond, river or other water body

If greywater is unsuitable, you will need to install a minimum of 10,000 litre of rainwater storage.

The following will help establish if your site is suitable for greywater irrigation.

Greywater Diversion Device:

Model:	
Irrigation method	

1. Is the area being irrigated at least 20m away from a waterbody?	Yes / No
--	----------

2. Area available for irrigation.	m ²														
Calculate the area you have available for outdoor irrigation allowing for set back distances below: <table border="1"> <thead> <tr> <th>Set Back Features</th> <th>Setback Distance (metres)</th> </tr> </thead> <tbody> <tr> <td>Property boundaries, pedestrian paths, and driveways.</td> <td>0.5</td> </tr> <tr> <td>Footings of buildings.</td> <td>1.5</td> </tr> <tr> <td>Retaining wall footing.</td> <td>1.0</td> </tr> <tr> <td>In ground swimming pool surrounds.</td> <td>1.0</td> </tr> <tr> <td>In ground potable water tank.</td> <td>6.0</td> </tr> <tr> <td>Bores intended for human consumption</td> <td>50.0</td> </tr> </tbody> </table>		Set Back Features	Setback Distance (metres)	Property boundaries, pedestrian paths, and driveways.	0.5	Footings of buildings.	1.5	Retaining wall footing.	1.0	In ground swimming pool surrounds.	1.0	In ground potable water tank.	6.0	Bores intended for human consumption	50.0
Set Back Features	Setback Distance (metres)														
Property boundaries, pedestrian paths, and driveways.	0.5														
Footings of buildings.	1.5														
Retaining wall footing.	1.0														
In ground swimming pool surrounds.	1.0														
In ground potable water tank.	6.0														
Bores intended for human consumption	50.0														

3. Greywater Volume

Calculate how much water your home could generate. As the number of people will vary over the life of the house, use the following calculation to estimate greywater volume.

40 Litre	+	60 Litres	=	100 Litres	x		x	7 Days	=	Litres
Laundry Usage		Bathroom usage		Total Daily usage		Occupancy (depends on number of bedrooms see table below)		Days per week		The amount of grey water produced each week

Bedroom numbers in home	Occupancy for design purposes and calculation
1	2
2	4
3	6
4	8
5	10
6	12

Litres produced each week	÷	Soil irrigation rate*	=	area needed for irrigation
litres/week		mm/day		m ²

Match the soil on your site to the soil irrigation rates below.

Soil Category	Soil Texture	Irrigation rate * for greywater	Indicative drainage class
1	Gravel and sands – structure-less	35 mm/week	Rapid draining
2	Coarse to medium sand	35 mm/week	Free draining
3	Medium-fine and loamy sand (dune sands)	35 mm/week	Good drainage
4	Sandy loam, loam and silt loam	20 mm/week	Moderately well drained
5	Sandy clay loam, clay loams, silt clay loam, peaty loam	20 mm/week	Moderate to slow drainage
6	Sandy clay, non-swelling clay and silty clay, peat	15 mm/week	Slowly draining
7	Swelling clay, grey clay, hardpan	15 mm/day	Poorly or non-drained

4. Does area available = area needed?	Yes / No
If the area available is greater than the area needed, the proposed application area is sufficient to cope with the volume of greywater that is likely to be generated and approval may be granted if all other conditions are met. Enter the area available on the compliance sheet and mark out on the <u>site plan</u> or <u>plumbing and drainage plan</u> the area to be irrigated with greywater.	

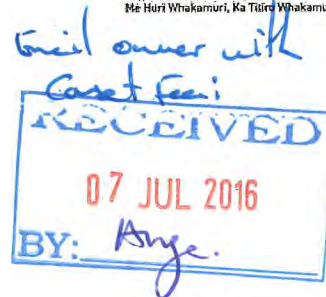
5. There isn't enough area for greywater irrigation If the area available is less than the area needed, the proposed application area is insufficient to cope with the volume of greywater that is likely to be generated. If you want greywater irrigation but the area available does not appear to be sufficient, you can: • select a system that limits greywater to be suitable to your site conditions • apply for an alternative solution that will only use greywater from the bathroom or laundry • use a suitably qualified person to design a greywater system suited to your site (please attach their report with the compliance sheet)
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- Bill to email New Site Plan & Certificate of Title

CHECKSHEET: SINGLE RESIDENTIAL DWELLING AND ACCESSORY BUILDING

including single stand-alone dwellings, dwelling additions and/or alterations, re-piling, garages, decks, gazebos, sheds, retaining walls etc.

Kapiti Coast District Council,
175 Rimu Road, Paraparaumu 5032
Private Bag 60601, Paraparaumu 5254
For enquiries, phone 04 296 4700



00 25

Address of Project: 25 MAHIA LANE, WAIKANAHE

This checksheet shows you the information that has to be supplied with your building consent application. Please attach **2 copies** of the following information (unless otherwise specified) with your completed Building Consent Application Form.

Please tick relevant box in the Customer Use column as you attach the information. If the box is not relevant to your application, write NA across the box. Please check each section carefully and complete those sections that are relevant to your project.

Once you have attached all the required information, please check for completeness as an incomplete application or lack of any supporting information will mean that your application cannot be accepted for processing.

An Application Form is attached to this checksheet — Please include this checksheet with your application

Customer Use	1	GENERAL	For Office Use Only
		Complete this section for all applications	
☒	a	Building Consent Application Form (1 copy) Completed and signed by the owner or by an agent on behalf of the owner	☒
☐	b	Proof of Ownership (1 copy) <i>Certificate of Title Sale & Purchase</i> One recent copy of <u>current</u> certificates/s of title (i.e. not older than 3 months) or where applicable one copy of purchase agreement (if recently purchased) or one copy of relevant portions of current lease.	☒
☒	c	Locality Plan (1:500) showing: Physical location of the subject building in relation to streets or landmarks, north point, name of building and lot and DP number.	☒
☒	d	Restricted Building Work Does the application involved restricted building work? ☐ Yes ☐ No If Yes, provide certificate(s) of design work and advise Council of your Licensed Building Practitioner(s) as per the Advise of Licensed Building Practitioners Guidance sheet.	☒
☐	e	Inspections and Monitoring Details of proposed inspection regime including monitoring by council officers and other professionals e.g. architects, engineers, surveyors and certification to be supplied on completion.	☒
☒	f	Site Plan (1:100) showing: Dimensions of all boundaries, north point, <u>finished floor levels</u> , ground contours (extended to boundaries) and/or levels, site area, street name and number, lot and DP number, outline of building, distance to boundaries and the position of swimming or spa pools. Include on the site plan the designated wind zone of the site (e.g. specific design, very high, high, medium or low).	☒

For office use only Received on the grounds that all information appears to have been provided to enable assessment for compliance in accordance with the Building Act 2004 and the NZ Building Code: *well said*

Name:

Shant Nayan

Signature:

Shant Nayan

☐	g	Application Fee Applications will not be accepted without payment of the appropriate fees. Fees payable are set out in the published fee schedule of the council that has jurisdiction over the project site.	☒
2 CHANGE OF USE Complete for all existing buildings where the proposal involves forming a household unit where one did not exist before. Example: the conversion of a garage or shed into a residential unit			
☐	a	Assessment of the Building for Compliance with the Building Code Section 115(a) of the Building Act 2004 requires that the building, in its new use, complies fully with all clauses of the Building Code.	☐
☐	b	Reasonably Practicable The above assessment must relate to all building code clauses. If the proposal is for the project to meet anything less than full compliance with any clauses, your application must clearly state your reasoning, with supporting documentation, and show how you will meet the highest level of compliance that can be considered reasonably practicable.	☐
3 FOUNDATIONS / FLOOR Complete for all new buildings, for existing buildings where the footprint of the building will change or where an additional storey is being added			
☒	a	Foundation Plan (1:100 / 1:50) showing: • Dimensions of all new foundations • Sub-floor, including bracing • Footing details • If a concrete slab, show basic details including reinforcing and contractions joints • Piles and footing • If the addition is an upper storey show details on upgrading existing foundations, joints, piles etc • Indicate ventilation to sub floor spaces	☒
☐	b	Subfloor Bracing Provide subfloor bracing plan and calculations for all piled structures. Where the structure is specifically engineered, this should be included with the structural calculations. Subfloor bracing plan and calculations are required where an additional storey is to be added	☐
4 CONSTRUCTION Complete for all new structures or alterations to existing structures.			
☐	a	Existing Floor Plan (1:100 / 1:50) showing: (For additions and alterations only) • All levels • All designated spaces • All removals • Sanitary fixtures • Smoke detectors	☐
☒	b	Proposed Floor Plans (1:100 / 1:50) showing: • Room dimensions • Location of partitions • All designated spaces • All floors (new or altered) • Location of sanitary fixtures • Stairs, barriers, handrails, floor joists and beams • Floor joist layout for each level with timber floors • Smoke detectors • Note where wall will form part of the swimming pool fence	☒

☒	c	Pre-nail Truss and Frames - Specific design wall framing requires clarification - Truss layout must be supported by design certification and design of fixing details, including consideration of load paths to ground - Lintels carrying point loads, such as from girder trusses, require specific engineering design	☒
☒	d	Wall Bracing Plan (1:100 / 1:50) showing: - Bracing details and calculations for wall bracing (also required for existing lower storeys where an additional storey is being added) - Sub-floor bracing for decks projecting more than 2m from the house - Location, type and number of bracing elements to indicate compliance with NZS 3604:2011 (include calculations) - If the bracing was specifically designed by a structural engineer, provide calculations (required for specific design wind zones and lateral distribution of upper floor loads where lower storey bracing is provided in walls beyond the upper storey footprint)	☒
☒	e	Sections and Details (1:50 / 1:20 / 1:10) showing: - Foundation details involving reinforcing and connections - Stairs, handrails, decks and decking - Insulation systems and materials to floors, walls and roof - Barriers providing safety from falling. Specific engineering design required where detail does not comply with NZBC B1/AS2 - Framing sizes, beams, lintels - Roof cladding, eaves, fascias, gutters - Flashings to openings - Fire rated systems on all walls – closer than 1 metre to boundary - Stud heights of rooms and total height from lowest ground floor level to top of ridge - Window and door installation details - Retaining wall details e.g. type, height of retained ground, relationship to boundary, waterproof membrane and proposed drainage	☒
☐	f	Fire Report For domestic dwellings of 4 storeys or more, or buildings providing more than one household unit	☒
5 EXTERNAL Complete for new buildings or existing buildings with alternations to the external shell			
☒	a	Elevations (1:100 / 1:50) showing: Accurate lines from boundary to boundary on each elevation, relevant District Plan daylight control lines, the maximum height on each elevation, location of door and window openings, fixed and opening sashes, sill heights, <u>floor levels</u> in relation to ground levels, exterior cladding nominated to all elevations, down pipes and spouting, ventilators to sub-floor area (suspended floors only)	☒
☒	b	Risk Assessment <i>(Risk matrix in E2/AS1 may be used for buildings within scope)</i> Consider exposure, design and detailing to support appropriate selection of cladding	☒
☒	c	Cladding Details (1:50 / 1:20 / 1:10) Provide details around all penetrations, joinery and other junctions at a level appropriate to the level of risk e.g. roof/wall, balcony/wall, junction of different types of cladding, back flashing details for cavity systems	☒
☐	d	Production Certification Supply copies of product certificates relied on as compliance documents	☒
☐	e	Alternative Solutions If the proposal uses products or systems that are not covered in the Acceptable Solutions of clause E2 of the building code provide supporting current information including test results (fully signed reports), case studies, expert opinion (including evidence of experience/qualification, basis for forming opinion and statement of independence) etc to demonstrate compliance.	☒