Kellee Morunga

MONIT

From: Bruce Flood

Sent: Monday, 7 April 2008 9:02 a.m.

To: Kellee Morunga

Cc: Patrick Schofield; Dave Currie; Tyrone Hansford

Subject: Watson Lot 1. DP. 370981 Arawhata Rd. Kaingaroa. Kaitaia.

Hi Kellee.
As agreed at the Mediation at Kaitaia Friday 4 April 2008 the Council is to assist in the agreement between the Watson's and Robert Neave to repair their roof and check and repair any damage internally. The Council's input will be to waive fees for the Building Consent required to cover repair work that may be required and inspection costs called for by the Registered Master Builder who will be employed by Mr Neave. Only the Master Builder who will be identified on the on the BC application will be permitted to call for the inspections. As this will be an urgent repair job, inspections can be carried out before the BC is issued but must be recorded as per normal.

Bruce

Far North District Council

FACSIMILE

Private Bag 752, Memorial Ave
Kaikohe 0440, New Zealand
Freephone: 0800 920 029
Phone: (09) 405 2750
Fax: (09) 401 2137
Email: ask.us@fndc.govt.nz
Website: www.fndc.govt.nz

Company: FNDC

Attention: Robert Manual

From: Bruce FLOOD

Department: Building Direct Fax No: (09) 401 5363

Date: 6.3.08

Page(s) including cover page: 5

Subject: Watson Appointments - Booking Diary.

NOTE: If this fax, and its attachments, are illegible or you do not receive the same number of pages as stated above, please telephone the writer immediately on 0800 920029

12 Tuesday Bruce on Leave / Roger Here

Week 37 : 256-110

4011800

- 9:00am B.C 993228 Mr Neil Stevens = 4010572 or 41 Hihi Rd - Pre-line - just off reserve down Row
- 10.30 Pipeline Pumaway Pomaray Tatapo Okaihau Hallett 4083322 Just over Bridge from Wells Rd. Next on Rt.
- 11-30 20010097 Masters. Footings Ahipara. Reg Frost.
- 2pm: B.C = 991583 Arawhata Rd - Kaingaroa App: Brenda Tatnell = 4067762 - Jim Tatnell Pre-line:
- X 2.30 BC 20010229 Footings Watson Arawhata Kaingaroa Ph: 406048
- 4:00PM BC20010164 Church St Whangarei Footings. Bryce White. 025 999208.

Week 37 : 257-109

Wednesday 13

~~9.30 BC~~

- 9.30 Spare job. Hauhora, opp. Service St. ABA 20001568, Prepper? Preline? Lloyd Matthews N. pb

~~11.00~~

2pm =

- 2. pm 61 Tokerau Beach Rd. Simon Ulrich - Pre lining - ABA 20001681 - 408002 KPH N
- 2.30 Iw Ross Framing Simon Kaikohe BC992464 025 763655

~~10.00am BC20010197 Wesley Pole framing Donzaro KPH~~ 408118

November 1999: M 1 8 15 22 29; T 2 9 16 23 30; W 3 10 17 24; T 4 11 18 25; F 5 12 19 26; S 6 13 20 27; S 7 14 21 28

December 1999: M 6 13 20 27; T 7 14 21 28; W 1 8 15 22 29; T 2 9 16 23 30; F 3 10 17 24 31; S 4 11 18 25; S 5 12 19 26

January 2000: M 31 3 10 17 24; T 4 11 18 25; W 5 12 19 26; T 6 13 20 27; F 7 14 21 28; S 1 8 15 22 29; S 2 9 16 23 30

February 2000: M 7 14 21 28; T 1 8 15 22 29; W 2 9 16 23; T 3 10 17 24; F 4 11 18 25; S 5 12 19 26; S 6 13 20 27

March 2000: M 6 13 20 27; T 7 14 21 28; W 1 8 15 22 29; T 2 9 16 23 30; F 3 10 17 24 31; S 4 11 18 25; S 5 12 19 26

April 2000: M 3 10 17 24; T 4 11 18 25; W 5 12 19 26; T [redacted]; F [redacted]; S 1 [redacted] 29; S 2 9 16 23 30

May 2000: M 1 8 15 22 29; T 2 9 16 23 30; W 3 10 17 24 31; T 4 11 18 25; F 5 12 19 26; S 6 13 20 27; S 7 14 21 28

June 2000: M 5 12 19 26; T 6 13 20 27; W 7 14 21 28; T 1 8 15 22 29; F 2 9 16 23 30; S 3 10 17 24; S 4 11 18 25

July 2000: M 31 3 10 17 24; T 4 11 18 25; W 5 12 19 26; T 6 13 20 27; F 7 14 21 28; S 1 8 15 22 29; S 2 9 16 23 30

August 2000: M 7 14 21 28; T 1 8 15 22 29; W 2 9 16 23; T [redacted]; F 4 11 18 25; S 5 12 19 26; S 6 13 20 27

September 2000: M 4 11 18 25; T 5 12 19 26; W 6 13 20 27; T 7 14 21 28; F 1 8 15 22 29; S 2 9 16 23 30; S 3 10 17 24

October 2000: M 30 2 9 16 23; T 31 3 10 17 24; W 4 11 18 25; T 5 12 19 26; F 6 13 20 27; S 1 8 15 22 29

November 2000: M 6 13 20 27; T 7 14 21 28; W 1 8 15 22 29; T 2 9 16 23 30; F 3 10 17 24; S 4 11 18 25; S 5 12 19 26

December 2000: M 4 11 18 25; T 5 12 19 26; W 6 13 20 27; T 7 14 21 28; F 1 8 15 22 29; S 2 9 16 23 30; S 3 10 17 24 31

January 2001: M 1 8 15 22 29; T 2 9 16 23 30; W 3 10 17 24 31; T 4 11 18 25; F 5 12 19 26; S 6 13 20 27; S 7 14 21 28

February 2001: M 5 12 19 26; T 6 13 20 27; W 7 14 21 28; T 1 8 15 22; F 2 9 16 23; S 3 10 17 24; S 4 11 18 25

24 Sunday

Week 38 : 268-98

NO ROWER

Week 39 : 269-97

Monday 25

South Canterbury Anniversary

9.00 K. WEBSTER 8 PINEWEY AVE KIA BC993267 PAEWA (2WD) 408313 ~~408774~~

9.30 QUANTUM FLOORING 4 NORTH RD KAIAIA 025 803172 025 243-2319

10.30 FWAL BC20001354 8 REMUTA HILL RD QUIN 021 2527197

~~11.30 DENTIST~~

X 4pm S. WATSON REMUTAKA AGRICULTURAL RD. BC20010329 025 970457

November 1999
M 1 8 15 22 29
T 2 9 16 23 30
W 3 10 17 24
T 4 11 18 25
F 5 12 19 26
S 6 13 20 27
S 7 14 21 28

December 1999
M 6 13 20 27
T 7 14 21 28
W 1 8 15 22 29
T 2 9 16 23 30
F 3 10 17 24 31
S 4 11 18 25
S 5 12 19 26

January 2000
M 31 3 10 17 24
T 4 11 18 25
W 5 12 19 26
T 6 13 20 27
F 7 14 21 28
S 1 8 15 22 29
S 2 9 16 23 30

February 2000
M 7 14 21 28
T 1 8 15 22 29
W 2 9 16 23
T 3 10 17 24
F 4 11 18 25
S 5 12 19 26
S 6 13 20 27

March 2000
M 6 13 20 27
T 7 14 21 28
W 1 8 15 22 29
T 2 9 16 23 30
F 3 10 17 24 31
S 4 11 18 25
S 5 12 19 26

April 2000
M 3 10 17 24
T 4 11 18 25
W 5 12 19
T 6 13 20
F 7 14 21
S 1 8 15 22 29
S 2 9 16 23 30

May 2000
M 1 8 15 22 29
T 2 9 16 23 30
W 3 10 17 24 31
T 4 11 18 25
F 5 12 19 26
S 6 13 20 27
S 7 14 21 28

June 2000
M 5 12 19 26
T 6 13 20 27
W 7 14 21 28
T 1 8 15 22 29
F 2 9 16 23 30
S 3 10 17 24
S 4 11 18 25

July 2000
M 31 3 10 17 24
T 4 11 18 25
W 5 12 19 26
T 6 13 20 27
F 7 14 21 28
S 1 8 15 22 29
S 2 9 16 23 30

August 2000
M 7 14 21 28
T 1 8 15 22 29
W 2 9 16 23 30
T 3 10 17 24 31
F 4 11 18 25
S 5 12 19 26
S 6 13 20 27

September 2000
4 11 18 25
5 12 19 26
6 13 20 27
7 14 21 28
F 1 8 15 22 29
S 2 9 16 23 30
S 3 10 17 24

October 2000
M 30 2 9 16 23
T 31 3 10 17 24
W 4 11 18 25
T 5 12 19 26
F 6 13 20 27
S 7 14 21 28
S 1 8 15 22 29

November 2000
M 6 13 20 27
T 7 14 21 28
W 1 8 15 22 29
T 2 9 16 23 30
F 3 10 17 24
S 4 11 18 25
S 5 12 19 26

December 2000
M 4 11 18 25
T 5 12 19 26
W 6 13 20 27
T 7 14 21 28
F 1 8 15 22 29
S 2 9 16 23 30
S 3 10 17 24 31

January 2001
M 1 8 15 22 29
T 2 9 16 23 30
W 3 10 17 24 31
T 4 11 18 25
F 5 12 19 26
S 6 13 20 27
S 7 14 21 28

February 2001
M 5 12 19 26
T 6 13 20 27
W 7 14 21 28
T 1 8 15 22
F 2 9 16 23
S 3 10 17 24
S 4 11 18 25

13 Monday Bruce only

Week 46 : 318-48

- 8·30 B.C: 20010084: Pre-line + Pre-Plumb -
Tasmen Heights Rd: Allan Harding - 4092001
Allsopp

- 9.00 BC 20010082 Barwa Hobbywood 75 Tasmans Rd Ameria 021 2915407

- 10·30 BC 20010213 Samwise Brown Northern Beach Rd Forrest 4082247

- 11-11.15 BC 20001774 DEMOLISH PAINES TAIPA 38 ADAMSONS RD. PRELINE
CLIVE BLACKMAN 4060562

- 2pm PRELINE BC 20010320 CONNELLS RD KAEO P. Hall 021 [illegible] 4091233

3pm: B.C. 2001028: Pre-line - Taatoa Rd - Paropara
Williams + Johnson 021-2939157 = Ross Pollington

- 4.30 BC 20010420 Kia Ora Farmhouse Pukepoto Rd Kia 4082394

Week 46 : 319-47

Tuesday 14

Bruce only to ~~Lunch Time~~ 4

8·30: Mr A.R. Whittaker = 4068822
Re: Info about App B.C.

- 9.30 BC 20010334 Kaimanawa Subs 15 Taipa Heights Taipa 021 2116566

10 CC BC 20010443 Subdivision Kaimanawa Rd Mangonui (2 x 1-20) (Sms received & confirmed) 021 0245765

- 10.30 BC 20010361 Pre-finish - Richardson - St Johns Rd, Coopers Beach 4082233

- 11 CC BC 20010429 Footing - Whitmore - Dudley Cres, Cable Bay - Eclair Hol

1pm Lunch

- 2.00pm PC 20010474 Coopers Beach "Le Haven" Lot 1 DP
Greg Muller 4060466

2.30 (Continued) Kaimanawa Subs 15 Taipa Heights Taipa 021 2116567

X 3pm Prelim BC 20010229 Aberdeen Rd Kaimaumau (Chris)

- 4pm BC 20010419 2 Unit Cluster Kia Peneti Beach

17 Friday
Canterbury Anniversary

Week 46 : 322-44

B 9:00 ABA 20001402 Cliff 4081992, 4094192 Calluna, Panorama Lane, Ahipara - Prelining.
extra ? Job Ahipara (Monday) $1015.0020.
R 9.00 ov B 10.00. Mervin Job. Inland Rd 20010522

XS 10:30 Stan Watson 408 7564 ABA 20010229 Arawhata Rd, Kaingaroa
- Relining Insp.

B 11:30. Reed Pukaroa Rd. from dotcom Imp Rd 025 278850
South Rd, Panmure - BC 20010580

Bruce 13:30 ABA 20010466 - PRELINE GARAGE - 12 NORTH ST - MR WAYNE WHEELER - 408 2055
1:30 BC 20010475 Brownell Swanson Crossing Rd Mangonui 4051022

2:30 BC 20010308 J+D Keane GIB Bracing 110 Virtue Cres - Tokerau Beach.
Steve Schick 025 2998695 - On site.

3 pm

CPU

November 1999

M	T	W	T	F	S	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

December 1999

M	T	W	T	F	S	S
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

January 2000

M	T	W	T	F	S	S
31					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

February 2000

M	T	W	T	F	S	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29					

March 2000

M	T	W	T	F	S	S
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

April 2000

M	T	W	T	F	S	S
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

May 2000

M	T	W	T	F	S	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

June 2000

M	T	W	T	F	S	S
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

Week 46 : 323-43

Saturday 18

July 2000

M	T	W	T	F	S	S
31					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

August 2000

M	T	W	T	F	S	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

September 2000

M	T	W	T	F	S	S
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

October 2000

M	T	W	T	F	S	S
30	31					1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

November 2000

M	T	W	T	F	S	S
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

December 2000

M	T	W	T	F	S	S
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

January 2001

M	T	W	T	F	S	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

February 2001

M	T	W	T	F	S	S
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28				

Bruce Flood

From: Patrick Schofield
Sent: Wednesday, 5 March 2008 8:36 a.m.
To: Bruce Flood; Robert Manuel
Subject: FW: 51 Arawhata Road, Kaingaroa, RD3, Kaitaia

Subject: 51 Arawhata Road, Kaingaroa, RD3, Kaitaia

To Whom It May Concern:

I Patrick Schofield, General Manager Development Consents give authorisation for Bruce Flood to provide evidence on behalf of the Far North District Council in the matter of the Watson dwelling at 51 Arawhata Road, Kaingaroa, RD3, Kaitaia

Yours sincerely

Patrick Schofield

GM Development & Consents Dept
Far North District Council

REQUEST FOR SERVICE (RFS) PROFILE

- RFS Master
- RFS Extra data
- RFS Events
- RFS Fees
- RFS Monitoring
- RFS Notes
- RFS Messages
- RFS Letters

NO CCC issued only two inspection call for foundations & drainage. & then a Pre-line not final or Roofing inspection ever done

SUMMARY

Group	RFS number	Received	Status	Status Changed	Started	Current as at	Days t Curren
ABA	20010229	18/08/00	CURRENT		07/09/00	18/08/00	28/09/06

RFS STAGES

Stage no 1 Initial Assessment & Issue BC

Stage	Description	Seq	Start	Completed	Due date
1	Initial Assessment & Issue BC	1	18 Aug 2000	07 Sep 2000	31 Aug 2000

Action				Est	Act
109	Support prepare file	109		0	0
112	Building Officer check	112		0	0
121	RC Planner check	121		0	0
141	Support - PIM Issued	141	06 Sep 2000	0	0
145	Support-Issue Building Consent	145	07 Sep 2000	0	0

Stage no 2 Inspections

Stage	Description	Seq	Start	Completed	Due date
2	Inspections	2	08 Sep 2000		08 Sep 2000

Action — Est Act

There are no Actions for this Stage

RFS MASTER RECORD

RFS ABA Application Building Act 20010229
RFS status CURRENT Status last changed on 07 Sep 2000
Request details NEW DWELLING
RFS type COM Combined PIM/BC
Date/Time received 18 Aug 2000, 11:53 Start date 18 Aug 2000
Contact type APP Application

COPY
9/28/2006

LINKS: Properties
Main property 3301703 ARAWHATA RD, SOUTHERN AUPOURI 500
Rate account 2401703 VNZ number 00013 65114
Rates legal desc LOT 3 DP 187780
Location description ARAWHATA ROAD KAINGAROA WHITE L'BOX 1ST ON LEFT

LINKS: People
143340 STANLEY ROY WATSON
This persons role Applicant
Default mail Address ARAWHATA ROAD, R D 3, KAITAIA 0500
Phone numbers Bus phone Home phone 09 4087564

Debtor 143340 WATSON, STANLEY ROY

LINKS: Parcels

LINKS: Other RFSs

LINKS: Analysis grps
There is no Analysis data

Handling officer HAH HEATHER HOLGATE
Authorising officer BEF BRUCE FLOOD
Department ES Environmental Services
Function BLD Building

SUSPENSIONS
Stage number 1 Initial Assessment & Issue BC
Status
Reason LETTER SENT TO A PEDERSEN
Lifted hah 11:32:00 06/09/2000 Stage 1
Suspension started 01 Sep 2000
Suspension ended 05 Sep 2000

Stage number 1 Initial Assessment & Issue BC
Status
Reason PENDING FEES
Lifted hah 12:56:40 07/09/2000 Stage 1
Suspension started 06 Sep 2000
Suspension ended 07 Sep 2000

RFS EXTRA INFORMATION

Internal reference
Contact details ANTONY PEDERSEN
Phone 09 4060048
Facsimile
Position
Construction started
Consent type 1 NEW CONSTRUCTION
Nature 1 NEW BUILDING
Intended uses 101 House, Dwelling
Project value 60000
Intended life INDEFINITE
Building 1409 NEW DWELLING
Floor area 1060 Dwelling units 1 Storeys 2
Proposed work NEW DWELLING
ABA start date 18 Aug 2000

```
      Days to status  Current      {28/09/2006}   1536 days
  PIM:       Granted 06 Sep 2000    Work days to Grant      11
              Issued 06 Sep 2000    Work days to Issue      11
   BC:       Granted 07 Sep 2000    Work days to Grant      12
              Issued 07 Sep 2000    Work days to Issue      12
  CCC:       Granted                Work days to Grant
              Issued                Work days to Issue
```

RFS EVENTS

```
            Event id 7
          Event code 209 Foundations Inspection
   Date event created
             Officer
              Status C    Completed
               Stage   0 "  0" is an Invalid code
              Action
        Planned date 12 Sep 2000    Planned officer RJH ROGER HARSANT
2 ANCHOR PILES CHANGED TO BRACE PILES OK TO POUR

            Event id 6
          Event code
   Date event created
             Officer
              Status
               Stage
              Action
        Planned date                Planned officer
unsuspended - 2000/09/07 - 12:56
PENDING FEES
Lifted hah        12:56:40 07/09/2000 Stage   1

            Event id 8
          Event code 241 Drainage Inspection
   Date event created
             Officer
              Status C    Completed
               Stage   0 "  0" is an Invalid code
              Action
        Planned date 25 Sep 2000    Planned officer BEF BRUCE FLOOD
DRAINLAYER B MITCHELL

            Event id 5
          Event code
   Date event created
             Officer
              Status
               Stage   1 Initial Assessment & Issue BC
              Action
        Planned date                Planned officer
Completed Stage for RFS
Performed by HAH  on 07/ 9/2000

            Event id 1
          Event code
   Date event created
             Officer
              Status
               Stage   3 Issue Code of Compliance Cert
              Action
        Planned date                Planned officer
```

Stage Not Required

Event id 4
Event code
Date event created
Officer
Status
Stage
Action
Planned date Planned officer
suspended - 2000/09/06 - 11:32
PENDING FEES

Event id 3
Event code
Date event created
Officer
Status
Stage
Action
Planned date Planned officer
unsuspended - 2000/09/05 - 11:31
LETTER SENT TO A PEDERSEN
Lifted hah 11:32:00 06/09/2000 Stage 1

Event id 2
Event code
Date event created
Officer
Status
Stage
Action
Planned date Planned officer
suspended - 2000/09/01 - 09:32
LETTER SENT TO A PEDERSEN

RFS FEES

Stg	Fee code	Description	Standard Amount	Invoiced to date
1	B00	Building Consent Processing Fe		175.00
1	B01	Project Information Memorandum		150.00
1	B02	BRANZ Levy	0.00	60.00
1	B03	DBH Levy	0.00	39.00
1	B21	Standard Building Inspection F	84.00	630.00
				1054.00

Click here to do an Accounts Receivable enquiry 143340 WATSON, STANLEY ROY

RFS MONITORING

There are no Monitor records for this RFS

RFS NOTES

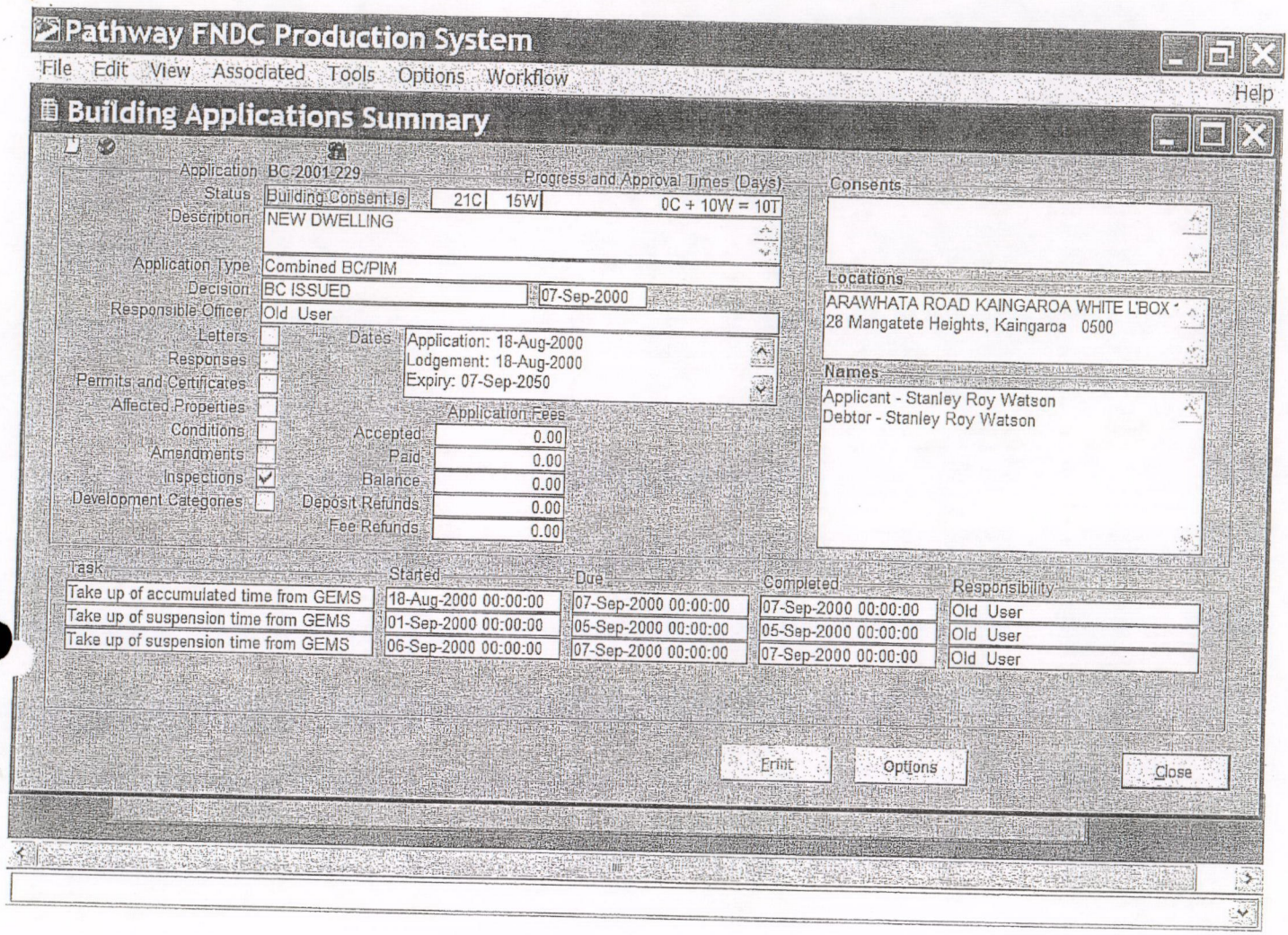
There are no Notes on file for this RFS

RFS MESSAGES

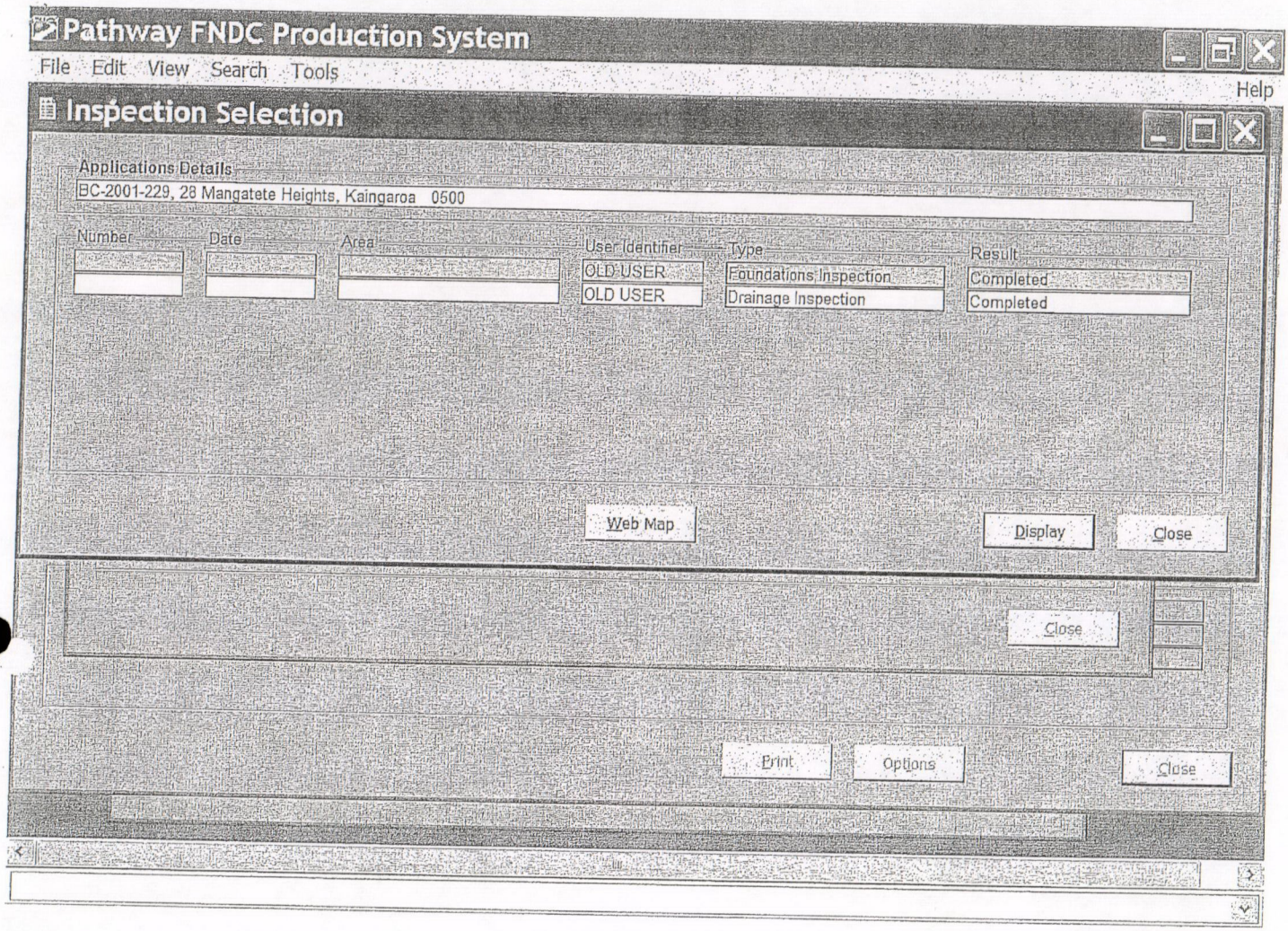
There are no Messages for this RFS

RFS LETTERS SENT

There are no Letters for this RFS



Form: LAPG6900
Entity: LAPSTAT
Field: DESCR
Date/Time: 28-Sep-2006 16:25:23
Release: 02.20.000 (0009) With Fixes
Customer: FARN
User: PSCHOFIELD
Stage: prod
[redacted]form: WXP



Form: LINS1100
Entity: LINROLE
Field: FMTNUMB
Date/Time: 28-Sep-2006 16:24:58
Release: 02.20.000 (0009) With Fixes
Customer: FARN
User: PSCHOFIELD
Stage: prod
[redacted]form: WXP

Bruce Flood

To: Kellee Morunga

Subject: FW: The Watson house - upcoming mediation Patrick's reply

Kellee,
Can you please book out these days for me just in case I will be required to attend which is very likely.
Thanks,
Bruce.

From: Patrick Schofield
Sent: Friday, 7 March 2008 8:53 a.m.
To: Robert Manuel
Cc: Bruce Flood
Subject: RE: The Watson house - upcoming mediation Patrick's reply

HI Robert
CC: Nicole, & Bruce

I don't know much about this case.

Bruce: if you have any information please send it to Robert ASAP. (as per his email).

Bruce I take it you were the inspector?

Nicole: can you please arrange for Bruce & me to meet to discuss the case. In Kaitaia so I can view the file would be great.

Nicole: Please block out these dates in my calendar for me to attend the hearing

Thanks Patrick

General Manager
Development & Consents Dept
Far North District Council
Private Bag 752, Kaikohe
Northland
Ph 09 405 2750
0274 316 500

From: Robert Manuel
Sent: Tuesday, March 04, 2008 5:28 PM
To: Patrick Schofield; Bruce Flood
Subject: The Watson house - upcoming mediation

Patrick and Bruce,

Good morning. I have heard from Heaney & Co again in relation to the Watson house. They had hoped to get Council removed from the case on the grounds that we didn't inspect the roof because the owner/builder never applied for a CCC and the roof would only have been inspected during a final inspection which never happened because it wasn't requested (how's that for a long sentence!).

However Heaney & Co have now advised me that Council hasn't been excluded from the case and the matter is going to go to mediation although the above point is a strong point in Council's favour that can be made at that time. They told me that the mediation will be in Kaitaia on April 2nd or 4th. They are now preparing for the mediation. Nigel Stone is the Heaney & Co solicitor dealing with this. (Nigel also told me that if mediation fails, adjudication is scheduled for May 15th or 16th in Auckland.)

Patrick: Nigel asked who normally attends mediations on Council's behalf and I said that you have attended in the past. He is hoping you will attend this one. By the way, the Watsons' claim has jumped up to approx $57,000.

Bruce: Nigel said you will be needed there too. Also, he enquired about your notes. (When he asked about the dates that appeared in your affidavit, I said that Kellee had told me this afternoon that you were able to get those dates from your diaries or whatever they're called.) Nigel said that was fine, but we are legally obliged to fully disclose all relevant information that we hold to the other parties. Consequently he has requested copies of any diary notes you have relating to that property. Please provide them to me somehow and I will forward them to Heaney & Co. I hope you can do that quickly as Nigel said we have already gone past the deadline for disclosure.

Thanks,

Robert.

Q. If the applicant (building owner) Mr Watson though the council signed the house off why did they ask for a final CCC inspection

Q If the building owner noticed the leaks in 2002 & noticed the builder why did they not contact the council until 2002?

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* Roof Pitch Plans 7 degrees - slop 5 degrees under the code can be 4 & 3% for trapezoidia roofing under the 2004 building code E2 page 20

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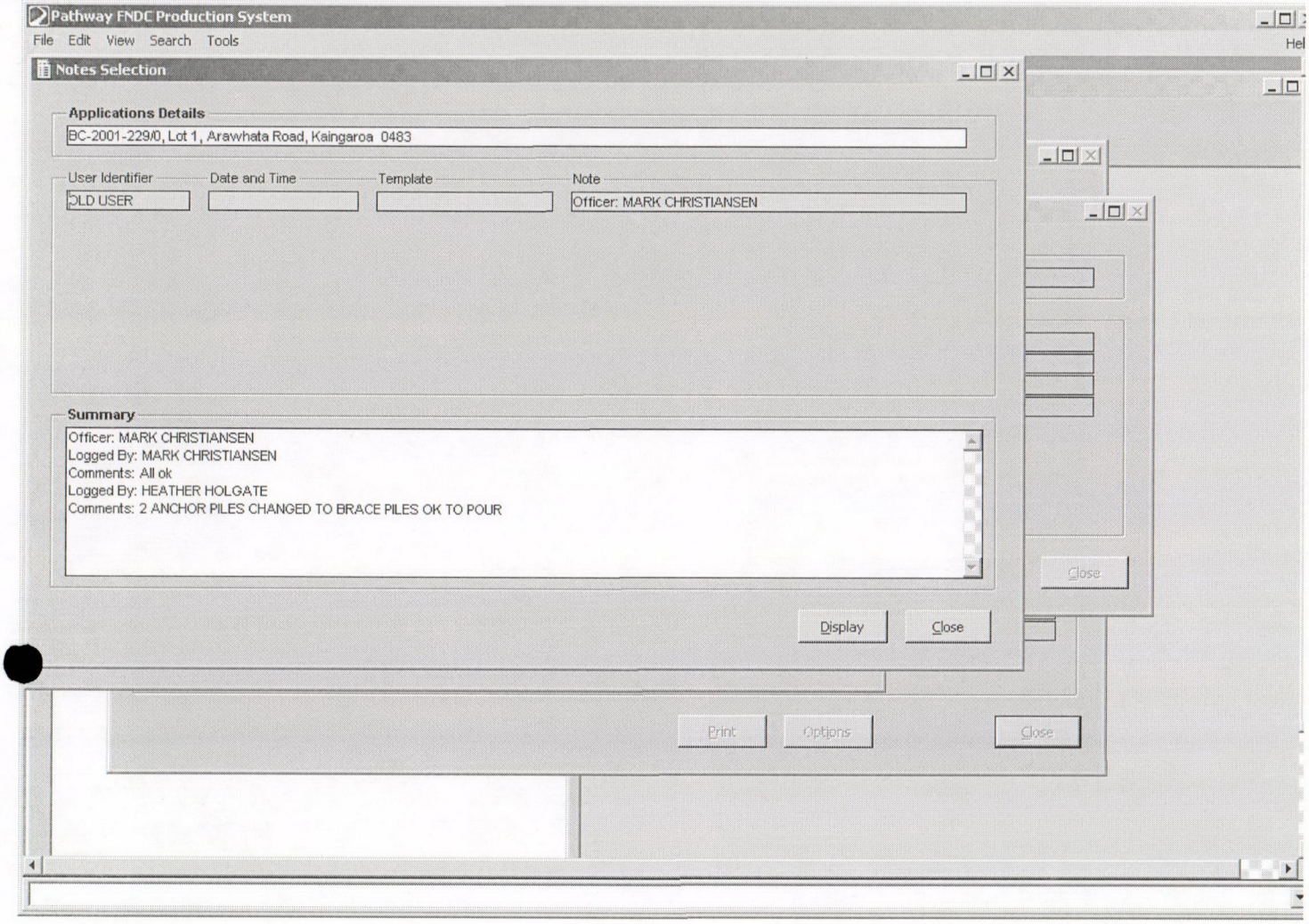
* Mr Watson applied & sent a Letter stating it unfair council would not issue a final code of compliance, when they had lodged a WHRS claim in 2006? WHRS report was issued 05/07/05

* Timber can move 1 to 2%

NOTE= QUOTE VERY HIGH

Q WHR Assessor has quoted $5 to $10k to carry out repairs needed.
The claim is for $57,288.50.
(Whats in the Roofing Quote from Far North Roofing to bring the total to that figure).
Is the entire house going to be reroofed with concrete tiles, with new rafters & purlins? or somelike that?

NEED to have a copy of the quote



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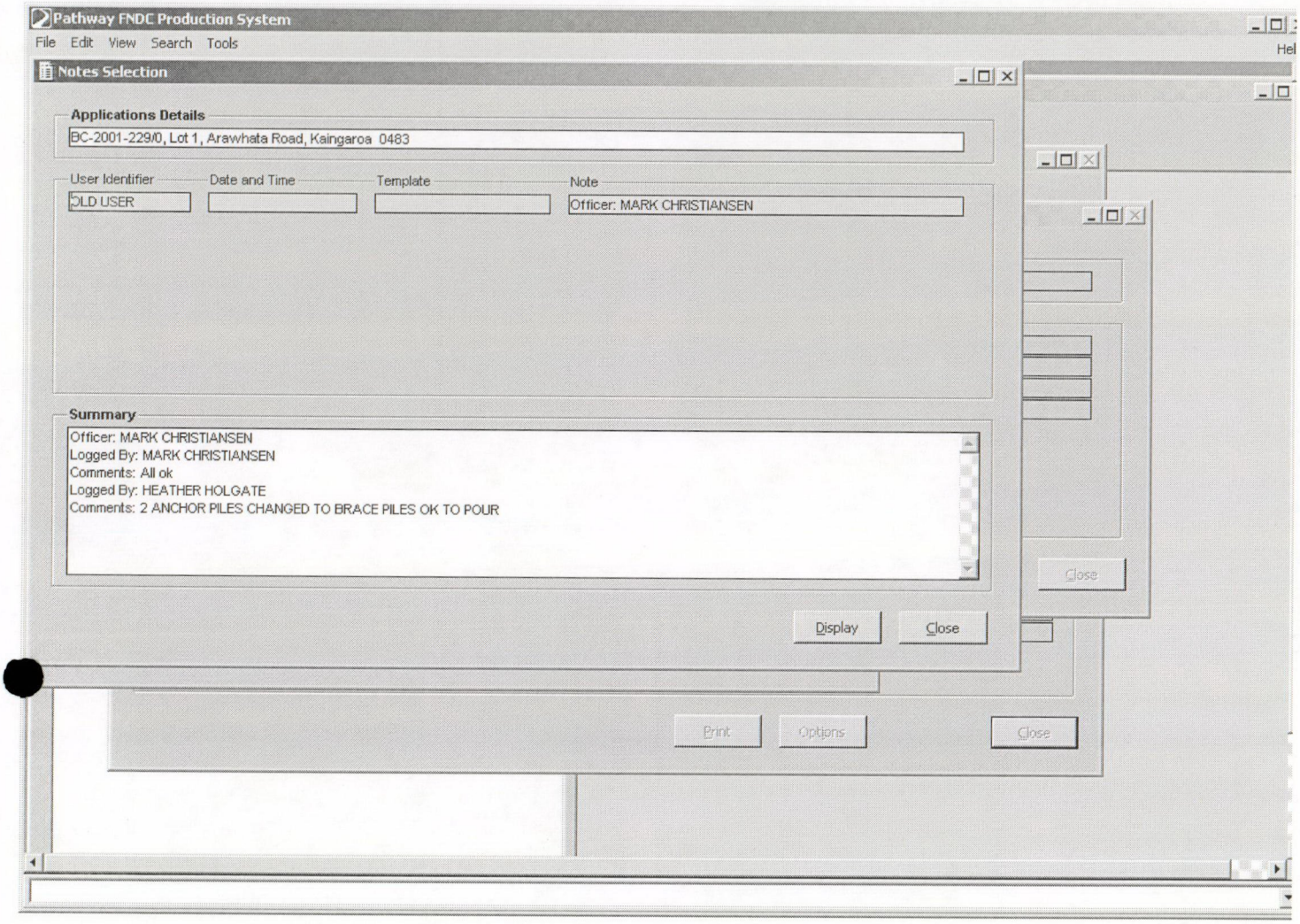

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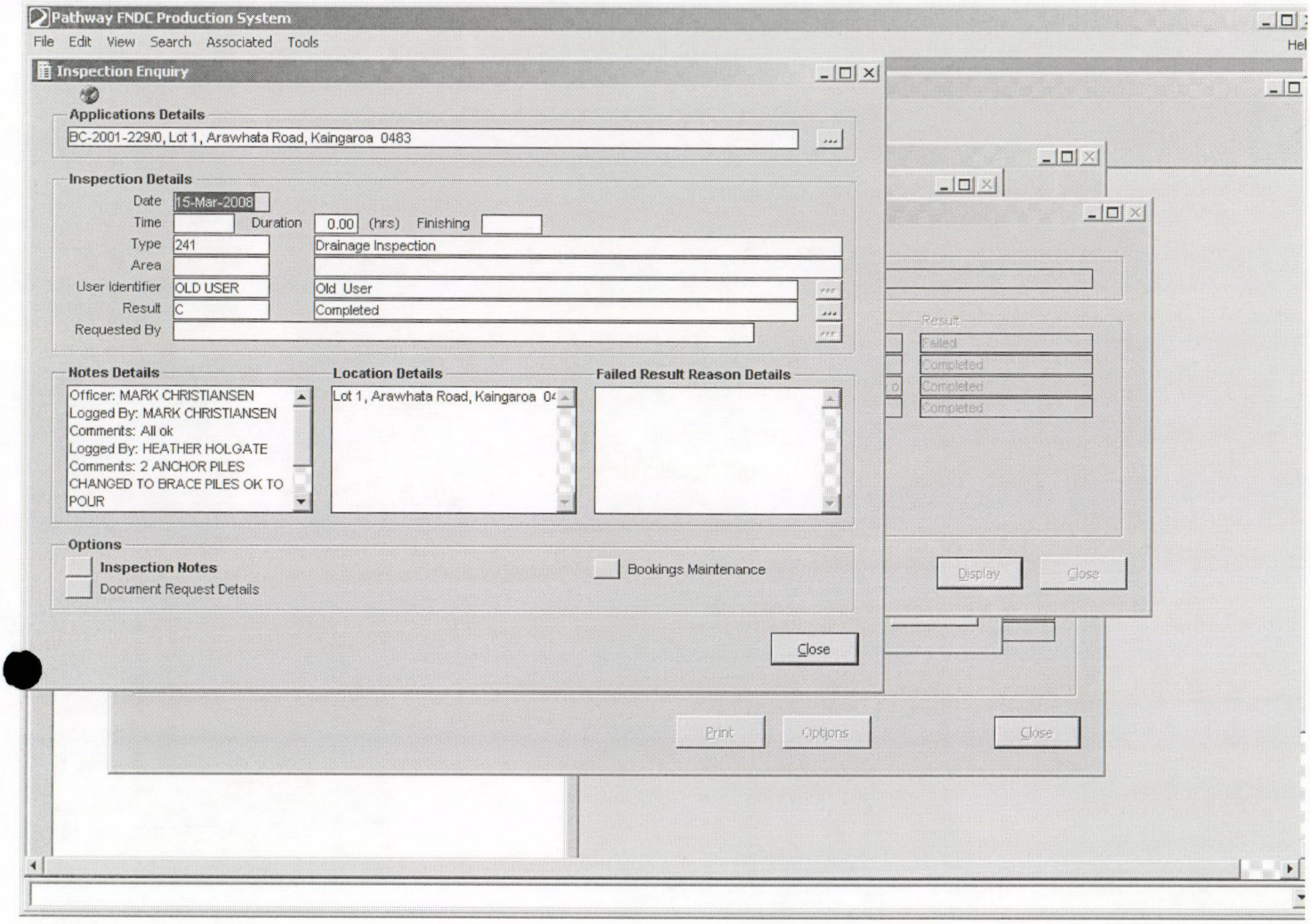

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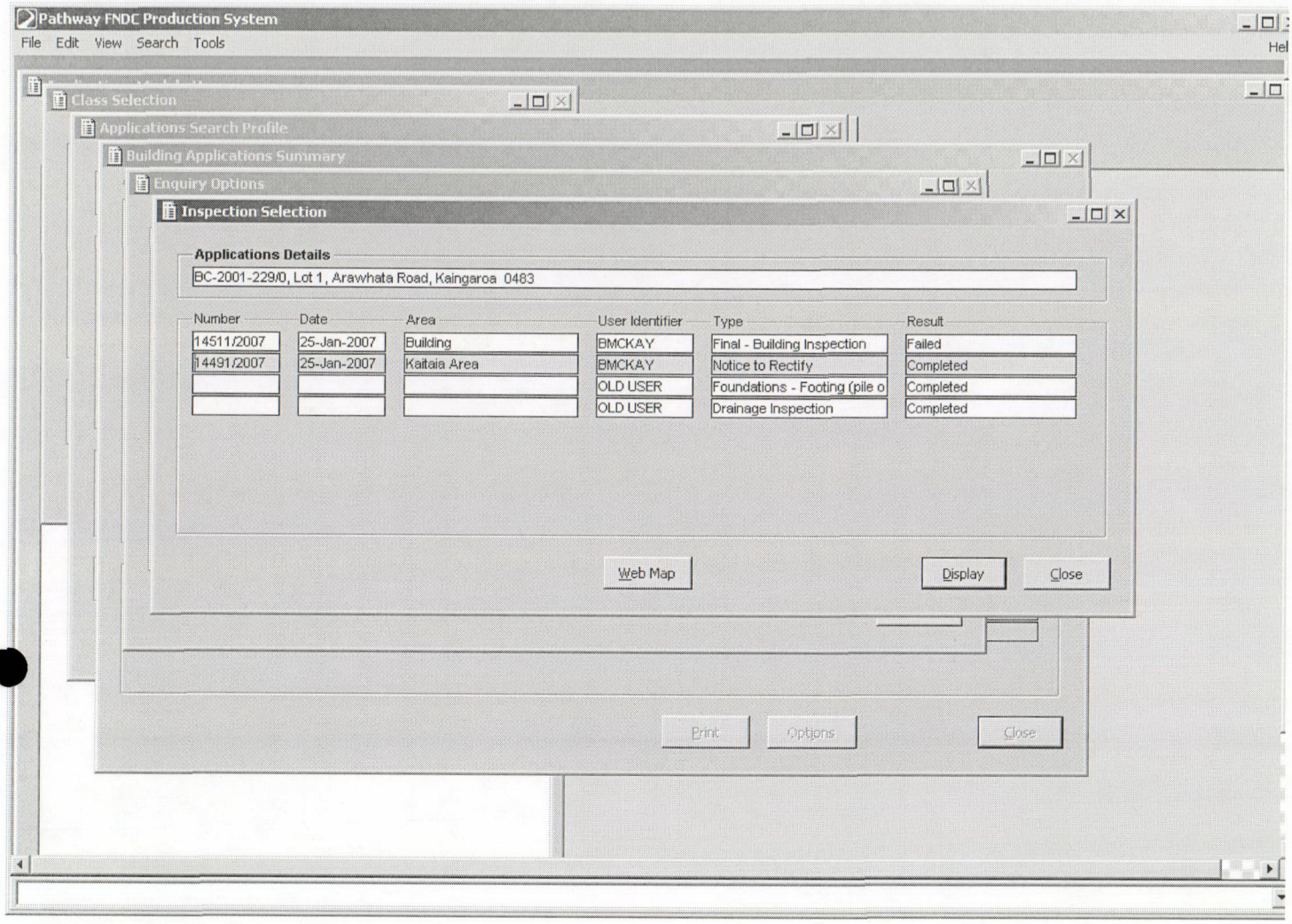

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User: PSCHOFIELD
Stage: prod
[redacted]form: WN1

The Far North District Council
Private Bag 752
Memorial Ave
Kaikohe 400

Rece...
2 5 OCT 2007
Reg mio - 41

Stanley & Caroline Watson
51 Crawhata Rd
Kaingaroa R.D.3
Kaitaia 0483

22nd October 2007

Dear Bryan,

Thankyou for your letter informing us of what the Council believes is required to obtain our Code of Compliance.

We believe it is unfair that we should have to comply with the Building Act 2004 since our house was built in 2001 & should therefore comply with the regulations applicable to this time.

We would also like to question some of the points that have been raised;

Point 3 - Stairs not consistent:

Originally the stairs were consistent but had to be modified by the builders because there was not enough space allowed in the plans between the second bedroom door and the beginning of the stairs. I believe a stair had to be taken out to allow for a reasonable amount of space and to comply with regulations. To this end the four bottom stairs are slightly higher than the remaining eight. The remaining eight stairs are all of the same measurement so are the bottom four and the slight change in height occurs on the corner

where the stairs change direction. This is not terribly noticeable and in the six years we have lived here, it has never caused a problem to ourselves or anybody else.

Point 4 - Handrail required on lower stairs:

On the lower stairs the wall has been cut at about handrail height to follow the stairs and for this reason we believe that a handrail here is unnecessary & would also be too low to be of much use.

Point 5 - Base boards required around house:

There are base boards around the front and side of the house facing the road but not around the back (South) & West side both of which are not generally viewed except by ourselves. Surely this is just cosmetic?

Point 7 - Joist hangers on verandah rafters & stringer connection

Please could you explain what these are & the purpose of them? We didn't realise the verandah was missing anything.

Point 10:- As-built drainage plan required

The Council already has a copy of the drainage plan which was approved on 6/9/2000. This is apparently one of the two things that the Council did come to have a look at.

Point 11:- Provide access to gully under deck

The gully is just underneath the edge of the deck & accessibility is not a problem should it become blocked.

In conclusion we would like to say that we had faith in the builder Robert Neave to build our house to a reasonable standard & were under the impression that the Council had in fact been here several times to supervise the building of our house.

We are at present awaiting new quotes from a roofer & builder to allow for the further damage that may have occurred so that we can re-apply to the Withes under the new system. Perhaps any building work that needs doing can be done in conjunction with the roof repairs when this occurs?

Yours sincerely

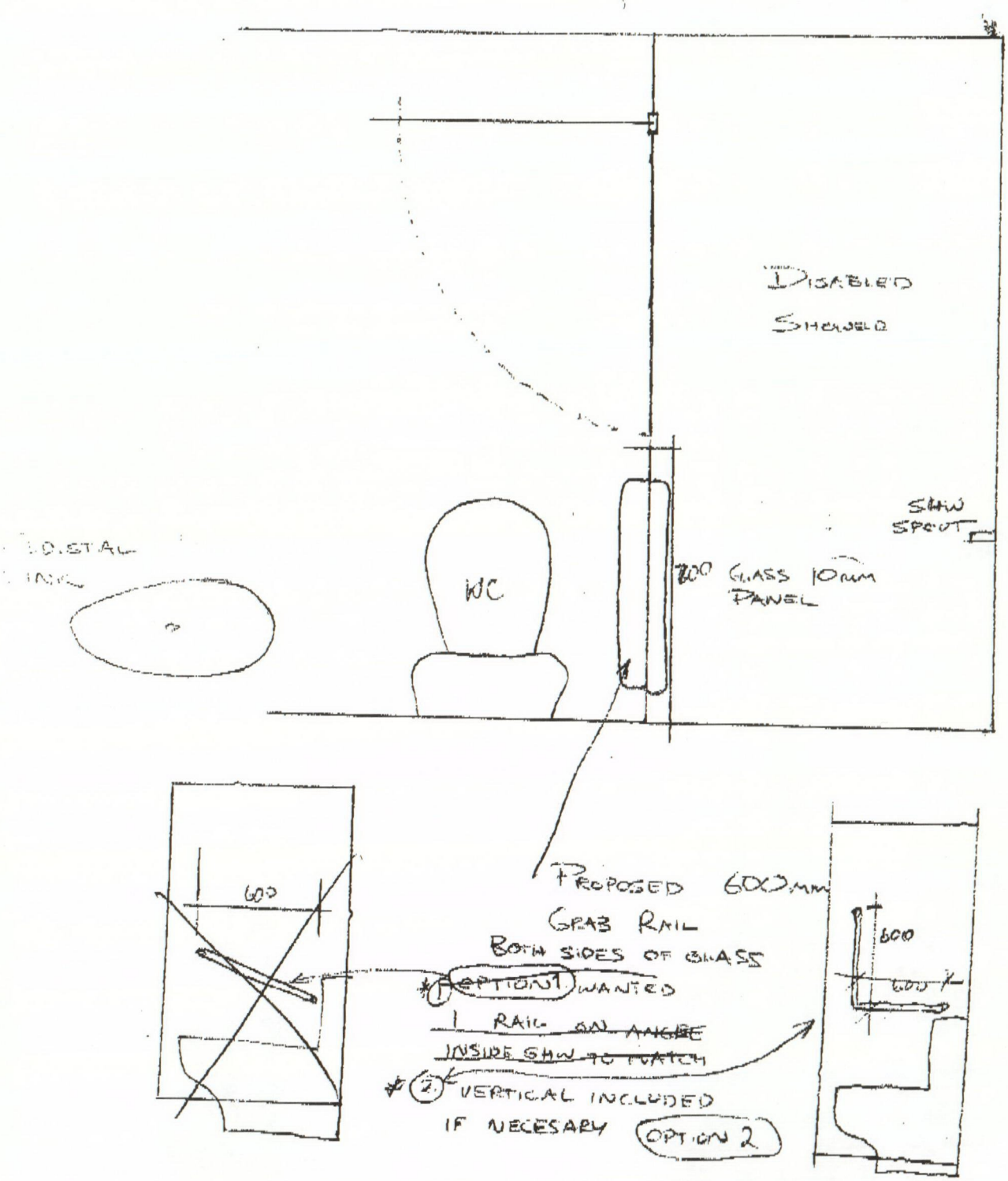
Stanley & Caroline Watson

DESIGN FAX NO. :011 649 403 7430 Sep. 04 2007 11:52AM P1

ATTN: BRYAN MELLOR. FAX 401 0987 4/9/07

RE : DISABLED GRAB RAIL REQUIREMENT VARIATION.

CONTACT : MURRAY WATSON 021 628 620



HEANEY & CO
LEAKY BUILDING INFORMATION

Date Reviewed: 31.03.08

Date of last LBIS: 13.12.07

Council: Far North District Council

Claimant: Watson (Stanley Roy and Caroline Wynne)

Original Owner: Yes

Address: Arawhata Road, R D 3, Kaingaroa, Kaitaia

Date of Consent: 07.09.00

Date of CCC: not issued

Date of Purchase: 23.06.05 2001

Telephone: (09) 408 7564

Forum: WHRS

Ref : TRI 2007-100-69

Claim Date: 13.06.05

Number of Claims: 1

Client Ref: TBA

Fund Year: 8

Council Ref: TBA

Number of Units: 1

HCO Ref: RIS50F01

HCO Instructed: 29.6.06

Solicitor: Nigel Stone

Partner /Associate: David Heaney/Frana Divich

NEXT STEP:

Mediation on 4 April 2008.

Obtain Tristyle Homes Limited's documentation as soon as possible. This is late and it has been communicated to the tribunal that this is required urgently.

SPECIFIC INSTRUCTIONS REQUIRED:

We seek your instructions to attend the mediation, together with an officer from the Far North District Council. We also seek your authority to settle the claim up to a level of $20,000.

Type:	Amount:	Loss Reserve:	Cost Reserve:	Excess:
Estimated repairs	$57,289	$20,000	$20,000	$50,000 Including costs
Total:	$57,289			

THEORY OF CASE:

It is our view that the council has very limited exposure to the claim that has been made.

The reason for this is that the defects all occur in the roof of the dwelling. We have spoken to Robert Manuel of the Far North District Council who has been in contact with the council inspector who inspected the house. Apparently the Far North District Council do inspect the roof as part of the final inspection. In this case neither the home owners nor the builder requested the council to undertake a final inspection so there has never been any inspection by the council of the roof.

Both the designer and builder are exposed. The builder at the time of constructing the dwelling appears to have been inexperienced. The roof contains workmanship issues.

The assessor believes that the designer did not provide adequate detail on how the roof should be constructed.

The designer has not been cooperating and may not attend the mediation. If it does not attend we should still attempt to settle the claim by contributing the council's irrecoverable costs.

STATUS OF CLAIM:

This claim will mediate on 4 April 2008. In the event that the claim does not settle at mediation, there will be an adjudication hearing on 15 May 2008.

If the mediation is unsuccessful the claimants are to file witness statements by 17 April 2008, full responses are required by 24 April 2008 and brief written replies should be lodged by each party by 1 May 2008.

Liability of the council

As stated above the council has very little, exposure The only exposure it may have is that it did not follow up on the consent that was issued in 2000 and there is authority that says the council can be liable in those types of situations.

Liability of the builder

Robert Neave has completed work on the roof which the assessor describes as being "contrary to good practice". The issues identified by the assessor of: roof pitch too shallow, incorrect apron flashings where roof pitch changes, inadequate side lap where sheets join, inadequate verge flashings, are defects for which the builder will be liable.

The builder jointly owns a home with another (possibly his partner). It is mortgaged. The house has been owned since 1991 so probably has a lot of equity in it.

Designer - Tristyle Homes Limited

The designer is exposed. According to the paragraph 6.1 of the assessors report "the plans do not give any details for the flashings at the change of pitch or verges nor sheet lap requirements."

We do not know whether the designer had a person on site during construction. In assessing this we would be assisted by the designers documents which have, despite our efforts to obtain them, not been forth coming.

An accountant, Mr Wootton on behalf of "Tristyle Homes Limited" has written to the tribunal seeking removal. We expect that to be unsuccessful. However, in the course of putting forward the argument of behalf of "Tristyle Homes Limited" Mr Wootton has asserted that "Tristyle Homes Limited" has all but been stripped of its assets which are now under the control of "Tristyle International Limited". It appears the entity responsible for the design was "Tristyle Homes Limited" . Both companies however, have a director in common, Mr Gregory Chartreis. Present position is to see what relevant documentation "Tristyle Homes Limited" can provide and make an assessment as to whether "Tristyle International Limited" or Mr Gregory Chartreis could or should be joined as further respondents either before the mediation or after it should it be unsuccessful.

Tristyle Homes Ltd owns no property in New Zealand.

Quantum

The quantum sought by the claimants is based on a quote from Far North Roofing totally $57,288.50.

This amount is substantially higher than the cost of repairs on the basis of the assessors report. In that report the cost was estimated to be between $5,000 to $10,000.

REASONS FOR RESERVE:

We have reserved this claim at $20,000 because it reflects the irrecoverable costs of taking this matter to adjudication. This reserve will need to be reviewed should the claim not settle at mediation. The cost reserve is set on the basis that this matter will settle at mediation. If it does not settle at mediation the cost reserve will need to be reviewed.

Assessor: David Lovell

Stucco	Modified Plaster	EIFS	Texture Coating
Panel Products	Other		

Description Of Defects:	Council Problem:	Other Parties:
Lack of roof flashings.	Unlikely	Designer/builder
Lack of verges.	Unlikely	Designer/builder
Improper sheet lap.	Unlikely	Designer/builder
Incorrect apron flashing where roof pitch changes.	Unlikely	Designer, builder

Parties:	Party's Name:	Comment:	Contact Details (Solicitor / Expert):
Claimants	S R and C W Watson	Self represented. Agreed to mediate.	Phone: (09) 408 7564, Mobile: (021) 0238 4488, Email: stanccaro@xtra.co.nz
First Respondent - builder	Robert Neave	Agreed to mediate.	Wells Road, RD2, Kaitaia, Ph: (09) 408 4390, Mobile: 025 238 4284
Second Respondent	Far North District Council		HCO - NLS/FPD
Third Respondent - designer	Tristyle Homes Limited		95 Montgomerie Road, Mangaere, Auckland, c/- John Wootton, Phone: (09) 585 2471, Email: johnwootton@clear.net.nz

Mediation:	✓	**JSC:**	✗	**Hearing/Adjudication:**	✗
Mediator:	Carol Powell	**Judge:**		**Judge /Adj:**	M Carter
Date	4.4.08	**Date**	N/A	**Date:**	N/A

Client Contact Name: John Golder

Telephone: DDI 04 495 8225 **Facsimile:** Fax:04 495 8177 **Email:** john.golder@jltgroup.co.nz

WHRS Case Manager:

Telephone: **Facsimile** **Email**

WHT Case Manager: Carolyn Mudford

Telephone: DDI 356 5660 **Facsimile** (09) 356 5664 **Email** Carolyn.Mudford@justice.govt.nz

Council Contact Name: Robert Manuel

Telephone: 09 401 5236 **Facsimile:** 09 401 5363 **Email:** robert.manuel@fndc.govt.nz

Expert: N/A

Telephone: **Facsimile:** **Email:**

Cost Reserve: $20,000.00 **Date Reviewed:** 31.03.08

Legal Fees:

Expert Fees:

Full Settlement Amount: N/A

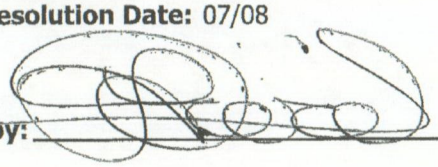
Contributing party:	Amount:	Comment:
Net to Client:		
Amount Paid:	$0.00	
Costs:	$0.00	
Less Excess:	$0.00	
Net Total:	N/A	

Status: Active with HCO

Settlement Date: N/A

Expected Resolution Date: 07/08

Prior HCO Refs:

Approved by: 

Date: 3.3.08

File Note
Property File Number
Legal Description

10 January 2008
Val No 000 13 65 114
Lot 1 DP 370981

The Department of Building and Housing has provided the following information regarding a claim relating to this property:

Weathertight Homes Resolution Service Claim Number: 03597
WHT Ref: 69 – DBH Ref: TRI 2007-100-69

Claimant Name: Stanley R Watson & Caroline W Watson
Property Address: Arawhata Road, RD 3, Kaingaroa, Kaitaia

That: An application for Adjudication with Weathertight Homes Tribunal (WHT) has been lodged

This information has been provided to the council by the chief executive of the Department of Building and Housing, or the chair of the Weathertight Homes Tribunal, in accordance with section 124(1) of the Weathertight Homes Resolution Services Act 2006, or in response to an Official Information Act request by the council. The council is not in a position to verify the correctness of the information and cannot accept any responsibility for its accuracy.

For further information or clarification on this weathertightness notification, you should contact the Department of Building and Housing (www.dbh.govt.nz/whrs-index or 0800 324 477) or the Weathertight Homes Tribunal (www.justice.govt.nz/wht or 0800 777 757).

Department of Building and Housing
Te Tari Kaupapa Whare

Weathertight Homes Resolution Service

Weathertight Homes Resolution Service
PO Box 5011, Wellington, New Zealand
Tel +64 4 494 0260
Fax 0800 116 189
www.dbh.govt.nz

25 September 2006

Building Support Team
Far North District Council
Private Bag 752
Kaikohe

Dear Far North District Council

Weathertight Homes Resolution Service – Claim Number 03597
Claimant Name: Stanley Roy Watson & Caroline Wynne Watson
Property Address: Arawhata Road, RD 3, Kaingaroa, Kaitaia

Your Authority has been listed as having an interest or involvement in a leaky building that is the subject of a claim.

The homeowner wishes to resolve their claim by mediation and as your Authority has been associated with the building works that give rise to the claim they have asked that the WHRS approach you to see if you will agree to take part in mediation.

The WHRS was set up by the Government to help resolve disputes over properties that leak and where that leaking is causing damage. The purpose of the WHRS is to provide independent assessment and dispute resolution procedures, both mediation and adjudication. Homeowners are entitled to make application to use the WHRS services for claims relating to their properties.

The Weathertight Homes Resolution Services Act 2002 ("the Act") requires that the affected homes be assessed by a WHRS assessor, who provides a report to the WHRS on the:

- causes of any leaks found
- nature and extent of any damage caused by the leaks
- work needed to repair the damage and make the property watertight
- estimated cost of that work
- persons who should be parties to the claim.

Once that report is received and the claim is found to be eligible under the Act, the homeowner can ask the WHRS to arrange mediation or adjudication with the aim of resolving the claim.

Mediation is a process entered into by the homeowner and the other parties identified as being associated with the building works that have given rise to the homeowner's claim.

Received:
26 SEP 2006
Dept
MQ 545 Reg

It is voluntary and you do not have to agree to participate in mediation. However if the homeowner wishes they can refer the matter to the WHRS adjudication process, through which an enforceable decision is made by the adjudicator regardless of whether other parties participate or not.

Adjudication is a more formal process in which the adjudicator may make a legally binding and enforceable decision in relation to the claim.

The homeowner can choose to proceed to mediation even if only some, but not all, parties agree to participate in that process. Similarly, the homeowner can choose to proceed to adjudication with those other parties who choose not to participate in the mediation or with whom the homeowner was unable to reach an agreement at mediation.

Except with the consent of the relevant party or parties, everyone involved in the mediation must keep confidential any statement, admission, or document made for the purposes of the mediation.

The WHRS is aware that Territorial Authorities have legislative obligations that require them to keep certain information about properties in a publicly accessible form. With this in mind, we have obtained a global undertaking from those Territorial Authorities that are members of New Zealand Mutual Liability RiskPool, signed on their behalf by their legal adviser Heaney & Co, Auckland.

By this means each Territorial Authority named in the schedule attached to the global undertaking agrees to keep confidential the contents of any documents or other information concerning claims under the Act that are disclosed to the Authority, except as required by law.

As part of the agreed undertaking, your Authority has authorised the WHRS to forward such documents and information directly to Heaney & Co on your behalf.

As your authority is a member of New Zealand Mutual Liability RiskPool, we followed the agreed procedure. We sent a notice to Heaney & Co requesting that they agree to participate in mediation on your behalf. A copy of the assessor's report relating to the claim and any other relevant documentation associated with the claim accompanied the notice.

Contact with Heaney & Co has shown that they no longer have the information and assessor report that WHRS sent to them and suggested that perhaps because of the low quantum of the claim this was forwarded onto the council. Further to a phone call this morning to your office, it appears that you have no information of this claim and I am now resending this to you for your consideration.

Enclosed is the referral form. If you agree on behalf of your client to participate in mediation please sign it and return it to us within 10 working days of the date of this letter. Also **enclosed** is a copy of the WHRS assessor's report on the homeowner's property.

Once we have received the signed form from you, we will make arrangements for the pre-mediation meeting.

If you have any queries please contact me on 0800 324 477.

Yours sincerely

Marissa Hansson for Diane Cave
Case Manager's Assistant
Weathertight Homes Resolution Service

Department of Building and Housing
Te Tari Kaupapa Whare

Weathertight Homes Resolution Service

REFERRAL OF CLAIM TO MEDIATION
(Agreement by Other Parties)

(Approved Form, Section 14, Weathertight Homes Resolution Service Act 2002)

Claim number: 03597

Name(s) of claimant(s) (the homeowner/s):

Stanley Roy Watson & Caroline Wynne Watson

Address of property subject of the claim:

Arawhata Road, RD 3, Kaingaroa, Kaitaia

Name of Other Party:

Far North District Council

To the National Manager
Weathertight Homes Resolution Service (WHRS)
PO Box 5011, Wellington

Agreement by an 'other party' to participate in mediation

I/We agree to attend WHRS mediation in respect of the homeowner's claim in this matter.

Signed by .....

Date.....

Please print:

Name.....

Organisation .....

Position.....

Office Use:

Date received: _____ Entered: on file ☐ in database ☐

Department of Building and Housing
Te Tari Kaupapa Whare

Weathertight Homes Resolution Service

ASSESSOR'S REPORT

CLAIM NUMBER 03597

WEATHERTIGHT HOMES RESOLUTION SERVICE
ASSESSOR'S REPORT

This is an independent report prepared for the Weathertight Homes Resolution Service (WHRS) by an Assessor contracted by the Chief Executive of the Department of Building and Housing to provide specific information on dwellinghouses that are the subject of claims under the Weathertight Homes Resolution Services Act 2002.[i]

On completion, this report is to be provided to the WHRS Assessor Coordinator who requested the report on behalf of the Chief Executive of the Department of Building and Housing. Drafts or copies of the report are not to be provided to any other person except as directed by the Assessor Coordinator.

Claim Number	03597
Property Address	51 Arawhata Road Kaingaroa, RD3 Kaitaia Far North
Owner's name(s)	Stanley Roy Watson Caroline Wynne Watson

Date application was received by the WHRS	13th June 2005

Report prepared by	David Lovell (Refer Appendix for qualifications)
Date of completion of report	11th October 2005
Assessor job number (if applicable)	

Site visit(s)

Date	Weather conditions on the day	Persons present	Relationship to claimant
22 /8/05	Fine & dry	Mr & Mrs Watson	Claimants
/ /			
/ /			

Assistance engaged by Assessor

On-site assistance:

Name	Role	Signed confidentiality undertaking

Other off-site assistance engaged by Assessor: (e.g. labs)

Construction History	
Period of construction/alteration	11/2000 – 03/2001
Date Building Consent applied for	06/09/2000
Date Building Consent issued	07/09/2000
Date of final inspection by certifier	None recorded
Date Code Compliance Certificate applied for	None recorded
Date Code Compliance Certificate issued	None recorded
Date dwellinghouse first inhabited	03/2001
Other relevant documentation/information held by the owner/TA	

CONTENTS

1 Description of the building

1.1 Description

1.2 Weathertightness risk factors

2 Claimants comments

3 People and organizations associated with the construction/ alteration

4 Off site investigation

4.1 Information obtained by Territorial Authority Records

4.2 Information obtained from other sources

4.3 Compliance issues relating to weathertightness.

5 Site Investigation

5.1 Equipment used

5.2 Investigation methodology

5.2.1 Visual inspection

5.2.2 Moisture readings – non invasive

5.2.3 Moisture readings – invasive

5.2.4 Destructive testing

5.3 investigation observations

5.3.1 Visual inspection

5.3.2 Moisture readings – non invasive

5.3.3 Moisture readings – invasive

5.3.4 Destructive testing

5.4 Compliance issues relating to weathertightness

6 Conclusions

6.1 Cause

6.2 Damage

6.3 Repairs

6.4 Cost

6.5 Parties

7 Does the claim meet the criteria?

Appendix

A. Assessors Qualifications

B. Council file

C. Photograph list

D. Acceptable Solution E2/AS1 including Flashing detail

E. BRANZ Bulletin – Roofs on Exposed Sites Jan 2001

F. Moisture Content and damage table

1. DESCRIPTION OF THE BUILDING

1.1. Description

The property comprises a two-storey settler style house built with plywood board and batten cladding elevations under a pitched and profiled metal covered roof with aluminium framed windows, timber floors and pile foundations and plasterboard internal linings.
The dwelling is situated in a rural environment on a 1.6 ha block mainly of a level contour around the building with the front of the property facing north.

1.2. Weathertightness Risk Factors

The property is situated in a 'very high wind zone' with a shallow pitched profiled metal roof that incorporates a change in angle of roof plane where the shallow roof over the main bedroom area meets the more steeply sloping main roof and ridge area. The winds in the area can come from the north and driving and wind blown rain can create high risk leaking situations.

The following timber moisture decay factors based on % moisture content of timber indicate potential risk levels:

* Below 20% - No likely decay
* 20%-24% - Cause for suspicion
* 20% - 28% - Active decay will survive but may not initiate
* 28%-35% - Decay will initiate
* Above 35% - Decay almost certain

Schedule 1 of the Building Code applicable at the time of construction demands the following functional requirements:

"**B2.2** *Building* materials, components and *Construction* methods shall be sufficiently durable to ensure that the *building*, without reconstruction or major renovation, satisfies the other functional requirements of this code throughout the life of the *Building*".

"**E2.2** *Buildings* shall be constructed to provide *adequate* resistance to penetration by, and the accumulation of, moisture from the outside".

"Requirement E2.2 shall not apply to *buildings* in which moisture from outside would result in effects which are no more harmful than those likely to arise indoors during normal use".

According to the Good Profiled Metal Roofing Practise produced by BRANZ dated 2000, BRANZ recommends that roofing underlay/flexible sarking be:
run horizontally where possible as this is considered to be "best practise";
That the underlay be lapped 100mm for horizontal application and 150mm for vertical application;
Covered with roofing at the end of each day's work.

The maximum roof pitch should be designed to suit the roof area and rainfall intensities for the given location. Where feasible, increasing the roof pitch by 1º for each 10 metres increase in roof length over 10m will aid drainage.

Purlin spacings should be reduced:
Within the eaves and ridge roof zones, to 50% of those that apply to the body of the roof;
On roofs with a pitch of 5º or less where some foot traffic will occur.

When using exposed fixings on profiled metal roof sheets all sheets are recommended to be screw fixed through the crest of the profile. The number of fixings will determine the resistance of the roofing material to uplift from wind or suction pressures acting on the roof and will depend upon pitch of the roof, the edges, exposure to high wind zones and location on a ridge or escarpment.

BRANZ recommends that flashings be screw fixed with the fixing being driven through the roofing into the purlin. Consideration should be given to using load-spreading washers:
Where purlin spaces are more than 2/3rds of the maximum recommended for the profile and situation;
Where wind speeds are over 44 metres per second;
In cyclonic zones; in roof edge zones;
Where fixing holes are oversized or slotted to accommodate thermal movement (together with a Butyl, Teflon or similar sliding washer);
Along the edges of a sprung curve roof, particularly where the curve is close to the maximum permitted bend.

Where using rivets or stitch screws is unavoidable they are to be installed at no more than 150-200mm depending upon wind zones, typically every third crest for corrugated profiles.

In terms of thermal movement a specific design approach to accommodate thermal movement is adopted when sheet lengths exceed:

12 metres for dark coloured steel; 1
8 metres for light coloured steel;
8 metres for dark coloured aluminium;
12 metres for light coloured aluminium.

Roofs should discharge into gutter of sufficient size and design to meet the expected discharge rates from the roof and gutters should be installed with a fall of 1:300 to ensure efficient water drainage to the outlet point.

When profiled metal sheets are joined by lapping general rules for side laps include arranging the exposed edge of the joint to face away from the strongest wind direction, the avoidance of over-tightening fixings which can reduce the effectiveness of the anti-capillary gap at the side lap, following a correct laying sequence and stitch laps where recommended by the manufacturer's installation instructions. BRANZ recommends that end laps be avoided where sheets must be end joined a stepped detail is used.

Penetrations through a profiled metal roof create a potential source of weakness into the effectiveness of the waterproofing. When penetrations are unavoidable details must prevent water from ponding around the area and must not be obstructed from discharging away from the penetration.

Where parapets are present these should be over-flashed to prevent water entering through a parapet and getting behind the defences provided by the roofing.

Flashings should be used to waterproof and trim or finish edges such as hips, ridges and junctions and along the long edge of the flashing should be folded to provide stiffen or rigidity to the flashing. BRANZ recommends that all flashings are limited in length to 3 metres for dark colours and 4 metres for light colours to avoid deformation from thermal movement. Flashings should have a minimum thickness of 0.55mm for steel and 0.9mm for aluminium and have a maximum width of 300mm unless strengthening ribs are incorporated. Flashing widths must be suitable for the expected wind forces so that sufficient coverage is provided to prevent the entry of wind borne rain. As wind speed increases so should flashing cover. Flashings to the gable verge or barge should be at least one rib and edge turned up or to crests and between 135mm to 285mm for wind speeds between 32 metres per second and 45+ metres per second.

A number of manufacturers recommend decreasing flashing cover as the roof pitch increases because of the increased wind forces acting on the roof. BRANZ recommends that all flashing fixings be imbedded into a structural member.

The Acceptable Solution E2/AS1 included as Appendix D states under comment 1.3.2 "serious roof leaks can result from thermal movement in roof claddings. Particular attention should be applied to installing appropriate fixings, flashings and laps to avoid such problems".

2. CLAIMANT'S COMMENTS

The dwelling was built for the claimants in 2001 and they moved in shortly after the works had been completed. A local builder built the house following plans modifying an existing kitset house design to move the first floor bathroom to the rear of the building from the front.
The claimants believed that the Far North District Council carried out regular inspections of the property and 'signed the building off'.
The first signs of leaking occurred in April 2002 when water was found on the walls of the main first floor bedroom and the ceilings in the living area below. The claimants contacted the builder who made several visits and attempts to prevent the leaking.

The claimants have attempted to stop the leaking by silicone sealing a number of the areas of the roof with some degree of success.
Following my original inspection the claimants have monitored the situation for some 6 weeks and whilst the temporary repairs have stopped most of the problems leaking has occurred under more severe weather conditions.

3. PEOPLE AND ORGANISATIONS ASSOCIATED WITH THE CONSTRUCTION / ALTERATION

This is a historical record of all those who were associated with the construction or alteration.

Person or Organisation	Name	Details of role/association	Source	
			TA	Claimant
Developer				
Designer	Tristyle Homes	Architect/ designer	Y	Y
Engineer				
Builder	Robert Neave	Main builder	Y	Y
Materials manufacturer				
Building certifier	Far North District Council	Certifier	Y	
Territorial Authority	Far North District Council	Certifier	Y	
Site supervisor	Robert Neave	Builder		
Plumber	Vernon's Plumbing	Plumber	Y	
Cladding fixer	Robert Neave	Builder		Y
Roofer	Robert Neave	Builder		Y
Window installer	Robert Neave	Builder		Y
Project manager	Robert Neave	Builder		Y
Other		Builder		

4. OFF-SITE INVESTIGATION

4.1. Information obtained from Territorial Authority records

A complete set of records including Building Consent and PIM was personally obtained from the TA directly and is attached as Appendix B below.
The records show that whilst Building Consent was issued no interim inspections have been recorded by the TA or by a Certifier. The TA confirmed that no Code Compliance Certificate has been issued.

4.2. Information obtained from other sources

The Good Profiled Metal Roofing Practise produced by BRANZ and the BRANZ bulletin Roofs on Exposed Sites have been used as reference. The New Zealand Building Code 1991 in particular the Acceptable Solution E2/AS1 has also been referred to and details are included as Appendix D.

5. SITE INVESTIGATION – Methodology and Observations

5.1. Equipment used:

Protimeter SM moisture meter combined capacitance and resistance meter, camera, ladder and small hand tools including a protractor to measure surface angles including the roof.
The moisture meter has been tested and calibrated and is due to be re- tested in January 2006.

5.2. Investigative methodology and observations

5.2.1. Visual inspection
A visual inspection of both the interior and exterior of the house was carried out some of which from a ladder. The plans provided by the TA were inspected and compared to the building on site.

5.2.2. Moisture readings – non-invasive
Non-invasive moisture test readings were taken with the Protimeter both internally and externally to claddings, internal linings and exposed timbers within the garage in the areas of external cracking of the plaster.

5.2.3. Moisture readings – invasive
A hole was cut in the internal linings of the linen cupboard of the main bedroom to correspond with the leaking in the stairwell and probes were used into the exposed timbers in the front wall of the main bedroom.

5.2.4. Destructive testing
None carried out.

5.3. Investigation observations

5.3.1. Visual inspection
The shallow pitched roof was inspected from a ladder from the adjoining roof. The pitch was measured at 5 degrees despite the plans showing 7 degrees. The detail where the steep part of the roof meets the shallow part is a high-risk detail.
The top part of the shallow pitched roof is higher than the lower point of the roof behind. This has therefore created an internal gutter that has not been properly formed. The details shown in Appendix D, figure 1(b) should have been used. These are the Acceptable Solutions for a change of direction and relevant to both the side of the dormer and above it where it meets the main roof. The detail is similar to that described in the earlier BRANZ Good Practice Guide. Where the roof changes direction around the dormer, (Photo 7) which is not an uncommon situation, a flashing should have been used that fits under the upper slope and over the lower slope with a movement gap between the two roofs to allow for any movement between the two roofs. These details have not been reproduced on site.

The roofing sheets needs to be lapped according to the Good Practice Guide described above under 1.2. The gutter spreader discharges to the sides of the walls –Photo 5. Ideally the ends should be blocked and holes created on the down side to direct the flow of water away from the walls and therefore reduce the risk of leaking.
The verge flashing to the east where leaking has occurred should cover at least two crests of the roof covering although in this case covers only 1 – Photo 6.
The eastern side of the dormer incorporates verge flashings shown as Photo 8 and below this area the sidewall of the dormer meets the main roof. Internal

leaking had occurred in this area although following sealant repairs from the owner this problem has reduced. The sealant at the base of the wall whilst preventing water entry may stop any water that has entered elsewhere from exiting the area.
Internally the coving in a number of rooms has come away from the wall/ ceiling junction – Photos 11,12 &13. Paint is peeling on the underside of the dormer in the main bedroom Photo14, although when tested with the moisture meter, Photo 15 recorded relatively low levels.

5.3.2. Moisture readings – non-invasive
Moisture readings recorded throughout the dwelling were all relatively low. As a check holes were drilled in a number of areas- see below.

5.3.3. Moisture readings – invasive
The timbers in bedroom 2 is where the highest moisture levels of 12% were recorded in the house which is still at the bottom end of the range described in 1.2 above. The moisture readings obtained in the linen cupboard were approximately 9% to both the timber stud and the adjoining plasterboard. A similar reading was obtained in the timbers behind the down pipe spreader in the main bedroom. On the sloping ceiling in this area where the paint was pealing a reading of 10.7% was recorded – see photos 13 & 14.

5.3.4. Destructive testing
None carried out.

5.4. Compliance issues related to weathertightness

- Roof pitch too shallow
- Incorrect apron flashing where roof pitch changes
- Inadequate side lap where sheets join
- Inadequate verge flashing

6. CONCLUSIONS

In my view, as required by Clause 10(1)(b) of the Act this investigation has shown:

6.1. Cause

The cause of the water entering the dwellinghouse is/was as follows:
The roof, whist incorporating a change of pitch, is not particularly unusual design. The plans do not give any details for the flashings at the change of pitch, or verges nor sheet lap requirements. However the details are reasonably standard and in this case the finished work is contrary to good practice. The combination of the details described above have, in my opinion, led to the leaking.
The temporary sealant repairs carried out by the claimants are unlikely to be a long-term solution to the problem although have, in the meantime, stopped much of the leaking.

6.2. Damage

The nature and extent of any damage caused by the water entering the dwelling house is as follows: Minimal paint pealing to the plasterboard lining in the main

bedroom. Parts of the coving has come away from the wall/ ceiling junction although the cause of this is unclear and may not be as a result of any leaking. Failure to complete the repairs may lead to more serious problems in the future.

6.3. Repairs

The work needed to make the dwelling house watertight and repair the damage is as follows:

The roof coverings need to come off and re-laid in accordance with the details described above. The roof pitch should be increased to at least 7 degrees in line with the original plans. The sheets should be laid with a minimum side lap of two crests. The roof at the junction of the two pitched areas should incorporate the apron flashing described above and the verge flashing replaced with one that covers at least two crests of the roof.

6.4. Cost

The estimated cost of that work is/was as follows:
$5000 -$10,000 depending upon how much of the existing materials can be salvaged.
Note: This is a costing based on inspection at this time. It is advisable to obtain more than one quote before doing repairs.

6.5. Parties

The persons who should be parties to the claim are as follows:
Designer – Inadequate detail.
Builder – Poorly built
Certifier – Suspect supervision

7. DOES THE CLAIM MEET THE CRITERIA?

In my opinion the claim in respect of the dwellinghouse that is the subject of this report meets the criteria set out in section 7(2) of the Weathertight Homes Resolution Services Act 2002.

.....
David Lovell MRICS MNZIBS ANZIV MNZPI

WHRS Assessor

Date: 11/10/2005

ENDNOTE:

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[i] The Weathertight Homes Resolution Services Act 2002 states:

Section 10 Assessor's Report

1) An assessor's report is a report setting out –
   a) Whether or not, in the assessor's opinion, the claim to which the report relates meets the criteria set out in section 7(2); and
   b) If the report states that the claim meets those criteria, the assessor's view as to –
      i) the cause of the water entering the dwellinghouse; and
      ii) the nature and extent of any damage caused by the water entering the dwellinghouse; and
      iii) the work needed to make the dwellinghouse watertight and repair that damage; and
      iv) the estimated cost of that work; and
      v) the persons who should be parties to the claim.
2) When the assessor's report is completed, the chief executive must –
   a) give a copy of it to the claimant; and
   b) refer it to an evaluation panel convened under section 11.

3) The claimant may, within 10 working days after receiving the copy of the assessor's report, make a submission on the report to the evaluation panel to which the report has been referred.

Section 7 Criteria for eligibility of claims for mediation and adjudication services

2) To be an eligible claim, a claim must, in the opinion of an evaluation panel, formed on the basis of an assessor's report, meet the following criteria:
   a) The dwellinghouse to which the claim relates must –
      i) have been built; or
      ii) have been subject to alterations that give rise to the claim –
      within the period of 10 years immediately preceding the date that an application is made to the chief executive under section 9 (1); and
   b) the dwellinghouse is a leaky building; and
   c) damage to the dwellinghouse has resulted from the dwellinghouse being a leaky building.

Section 5 Interpretation

In this Act, unless the context otherwise requires, –

leaky building means a dwellinghouse into which water has penetrated as a result of any aspect of the design, construction, or alteration of the dwellinghouse, or materials used in its construction or alteration.

Assessors Qualifications & Experience

***David Lovell** MRICS, MNZIBS, ANZIV, MNZPI*

Qualifications and Memberships

Member of New Zealand Institute of Building Surveyors - NZIBS
Registered Building Surveyor
Certified Weathertightness Inspector
Member of the Royal Institution of Chartered Surveyors – RICS
New Zealand Registered Valuer – ANZIV MNZPI

Experience

Experienced in carrying out building Surveys and Inspections since1993 in the UK and New Zealand.

FAR NORTH DISTRICT COUNCIL
Private Bag 752, Memorial Ave, KAIKOHE
Freephone: 0800 920 029, Ph: (09) 405 2750, Fax: (09) 401 2137

Issued by: Far North District Council

BUILDING CONSENT NUMBER: ABA 20010229

SECTION 31, BUILDING ACT 1991

DETAILS OF APPLICANT(S)

Name(s) WATSON, STANLEY ROY

Address ARAWHATA ROAD
R D 3
KAITAIA 0500

Contact Person: ANTONY PEDERSEN Telephone: 09 4060048

SITE LOCATION

Address: ARAWHATA ROAD, R 013

Legal Description: LOT 3 DP 187780

Valuation No: 00013 65114 Location ID:

PROJECT DESCRIPTION

Intended Use(s) NEW DWELLING

Estimated Value (including GST) $ 60000

Floor Area 106.0

PROPOSED WORK	INTENDED LIFE
NEW DWELLING	Indefinite, but not less than 50 years

This building consent is a consent under the Building Act 1991, to undertake building work in accordance with the attached plans and specifications, to comply with the provisions of the Building Code. It does not affect any duty or responsibility under any other Act, or permit any breach of any other Act.

This building consent is issued subject to endorsements shown on the approved plans and may be subject to any conditions as attached. ☐

SIGNED BY, OR ON BEHALF OF COUNCIL

Date:07/09/2000

FAR NORTH DISTRICT COUNCIL
Private Bag 752, Memorial Ave, KAIKOHE
Freephone: 0800 920 029, Ph: (09) 405 2750, Fax: (09) 401 2137

STANDARD CONDITIONS
BUILDING CONSENT NO: ABA 20010229
SECTION 31, BUILDING ACT 1991

This building consent is issued subject to the conditions specified below and contained in the Building Consent headed "Special Conditions" applicable to Building Consent Application No. ABA 20010229

1. This building consent is a consent under the Building Act 1991 to undertake building work in accordance with the attached plans and specifications so as to comply with the provisions of the building code. It does not affect any duty or responsibility under any other Act nor permit any breach of any other Act.

2. The applicant is fully responsible for any damage done to any systems such as Telecom cables, power lines, water mains, sewer and stormwater pipes, footpaths, roads or any other utility or service.

3. No deviation or alteration from the original approved plans and specifications is permissible without a further consent being obtained from Council.

   It is also an offence to convert the building to any other use than that stated in this consent.

   These and other offences are contained in Section 80 of the Building Act 1991, in association with all relevant penalties.

4. This consent expires and becomes void if:

   a) The work it authorises is not commenced within six (6) months after the date of issue of the consent or within such additional time as Council, in its absolute discretion, may allow.

   b) Reasonable progress on the building work has not been made within twelve (12) months after work has commenced or within such additional time as Council in its absolute discretion, may allow.

   Written applications for extensions of time must be submitted to Council.

   Council may further cancel building consent as specified in Section 41(2), (3) and (4) of the Building Act 1991.

5. Inspections of the building work are to be carried out at the stages of construction as endorsed on the approved plans with the notice time being given as specified in those endorsements.

6. This Building Consent is issued in accordance with Project Information Memorandum No:

PROJECT INFORMATION MEMORANDUM NO. ABA 20010229
SECTION 31, BUILDING ACT 1991

DETAILS OF APPLICANT(S)

Name(s)	WATSON, STANLEY ROY
Address	ARAWHATA ROAD R D 3 KAITAIA 0500
Contact Person:	ANTONY PEDERSEN
Telephone:	09 4060048

SITE LOCATION

Address:	ARAWHATA ROAD, R 013
Legal Description:	LOT 3 DP 187780
Valuation No:	00013 65114

PROJECT DESCRIPTION

Intended Use(s): NEW DWELLING

Estimated Value (including GST): $ 60000

Floor Area: 106.0

PROPOSED WORK:	NEW DWELLING
INTENDED LIFE:	Indefinite, but not less than 50 years

This Project Information Memorandum is....
(Cross where applicable)

- [x] Confirmation that the proposed work may be undertaken, subject to the provisions of the Building Act 1991, and requirements of the building consent.
  - [ ] Not yet applied for
  - [x] No. 20010229 ~~attached~~ PENDING FEES
- [ ] Notification that the proposed work may not be undertaken because a necessary Authorisation has been refused
- [ ] See Attached Conditions

FOR COUNCIL USE

Date Received: _____ Application Fee: _____ Receipt No: _____

PROJECT INFORMATION MEMORANDUM NO. ABA 20010229
SECTION 31, BUILDING ACT 1991

THIS PROJECT INFORMATION MEMORANDUM INCLUDES:

(Cross each applicable box, attach relevant documents and send a copy to any relevant network utility operators and organisations having the power to classify land and buildings)

- [✓] Information identifying special features of the land concerned
  ZONED GENERAL RURAL
- [ ] Information about the land or buildings concerned notified to Council by any statutory Organisation having the power to classify land and buildings
- [ ] Details of relevant utility systems
- [ ] Details of authorisations which have been granted
- [ ] Details of authorisations which have not been refused
- [ ] Notification of any other authorisation which must be obtained before the proposed building work may be undertaken

SIGNED FOR AND ON BEHALF OF COUNCIL

Name: _____

Position: _____

Date: 06/09/2000

FAR NORTH DISTRICT COUNCIL
RECEIVED
15 SEP 2000
HAH

FAR NORTH DISTRICT COUNCIL

NOTIFICATION OF LICENSED TRADESMEN

(To be completed and returned to Council a minimum of 2 days prior to any work commencing.)

Building Consent No: ABA 20010229 **Applicant: WATSON, STANLEY ROY**

BUILDER

Name: Robert Neave
Contact: Wells Road
Address: RD2 Kaitaia
Telephone: 094084390
0252384284

PROJECT AND LOCATION

Description of Work: NEW DWELLING
Street Address: LOT 3 DP 187780
Area: 106.0
Valuation No:00013 65114

In compliance with the Plumbers, Drainlayers and Gasfitters Act 1976 and the Energy Sector Reform Act 1992, the following tradesman / men has / have been hired to carry out the work described in the above referenced Building Consent:

PLUMBER

Name: Vernon's Plumbing
Address: 99 Cable Bay Block Road.
Telephone: 406 1131
Signature
Licence No: 13490
Date: 8-9-00

DRAINLAYER

Name: Brian Mitchel
Address: Raimaru Bay. Hi Hi
Telephone: 406 1155.
Signature
Licence No: 11378
Date: 8-9-00

ELECTRICIAN

Name: Tentatively advised ALL FAZE Electrical + Security
Address: PARAPARA ROAD. TAIPA.
Telephone: 406 0026
Signature
Licence No: E3152
Date: 12/9/00

GASFITTER

Name: To be advised if needed
Address:
Telephone:
Signature
Licence No:
Date:

Gib® Wall Bracing Calculation Sheet A — single storey — V1.2A

Job Details

Name	Stan Watson
Street and Number	Arawhata Road
Lot and DP Number	Lot 3 DP187780
City/Town/District	Kaingaroa/Far North
Designer and date	Tristyle Industries 20-Jul-00

Building Specification

Location of Storey	single	
Floor Loading	2 kPa	
Foundation Type	subfloor	
Building Height to Apex (m)	7	
Roof Height above Eaves (m)	3	
Stud Height (m)	2.4	
Cladding Weight (top or single)	light	
Cladding Weight (lower)	light	*not applicable (single storey building)*
Cladding Weight (subfloor)	light	
Roof Weight	light	
Roof Pitch (degrees)	25-45	
Room in Roof Space	yes	
Building Length (m)	9	*Use roof length including eaves*
Building Width (m)	7.2	*Use roof length including eaves*
Gross Building Plan Area (m2)	65	

Building Location

Wind Zone	*Very High*	**Earthquake Zone** C
Region	R2	
Terrain	Inland	
Exposure	Exposed	
Topography	Moderate	

Bracing Units required for Wind

per m	subfloor	walls
W along	184	100 BUs/m
W across	185	100 BUs/m

Totals	subfloor	walls
W along	1325	720 BUs
W across	1665	900 BUs

Bracing Units required for Earthquake

per m2	subfloor	walls
E	7.9	6.6 BUs/m2

Totals	subfloor	walls
E along	514	429 BUs
E across	514	429 BUs

Gib® Wall Bracing Calculation Sheet B

single storey

V1.2A

Across							Wind	Earthq.
Wall or Bracing Line		Bracing Elements provided					8W	9EQ
1	2	3	4	5	6	7		
Line Label	Minimum BUs Req/Ach	Bracing Element No.	Supplier	Bracing Type	Element Length L (m)	Element Height H (m)	BUs Achieved	BUs Achieved
M	enter	1	gib®CHH	PlyGib	2.4	2.4	276	264
		2		none		2.4		
		3		none		2.4		
		4		none		2.4		
line totals		5		none		2.4		
W	276	6		none		2.4		
EQ	264							
N	enter	1	Gib®	Gib2b	2.6	2.4	208	182
		2		none		2.4		
		3		none		2.4		
		4		none		2.4		
line totals		5		none		2.4		
W	208	6		none		2.4		
EQ	182							
O	enter	1	Gib®	Gib2a	1.9	2.4	143	114
		2		none		2.4		
		3		none		2.4		
		4		none		2.4		
line totals		5		none		2.4		
W	143	6		none		2.4		
EQ	114							
P	enter	1	gib®CHH	PlyGib	2.4	2.4	276	264
		2		none		2.4		
		3		none		2.4		
		4		none		2.4		
line totals		5		none		2.4		
W	276	6		none		2.4		
EQ	264							
Q	enter	1		none		2.4		
		2		none		2.4		
		3		none		2.4		
		4		none		2.4		
line totals		5		none		2.4		
W		6		none		2.4		
EQ								

							Wind	Earthq.
Totals Achieved							903	824
							OK	OK
Totals Required (from Sheet A)							900	429

Gib® Wall Bracing Calculation Sheet B — single storey — V1.2A

Along							Wind	Earthq.
Wall or Bracing Line		Bracing Elements provided						
1	2	3	4	5	6	7	8W	9EQ
Line Label	Minimum BUs Req/Ach	Bracing Element No.	Supplier	Bracing Type	Element Length L (m)	Element Height H (m)	BUs Achieved	BUs Achieved
A	enter	1	Gib®CHH	PlyGib	3.6	2.4	414	396
		2	Gib®CHH	PlyGib	3	2.4	345	330
		3		none	0.9	2.4		
line totals		4		none		2.4		
W	759	5		none		2.4		
EQ	726	6		none		2.4		
B	enter	1	Gib®	Gib3	2	2.4	130	120
		2	Gib®	Gib3	1.8	2.4	117	108
		3	Gib®	Gib3	2.9	2.4	189	174
line totals		4		none		2.4		
W	436	5		none		2.4		
EQ	402	6		none		2.4		
C	enter	1	Gib®CHH	PlyGib	0.9	2.4	104	99
		2	Gib®CHH	PlyGib	1.5	2.4	173	165
		3	Gib®CHH	PlyGib	0.9	2.4	104	99
line totals		4		none		2.4		
W	380	5		none		2.4		
EQ	363	6		none		2.4		
D	enter	1		none		2.4		
		2		none		2.4		
		3		none		2.4		
line totals		4		none		2.4		
W		5		none		2.4		
EQ		6		none		2.4		
E	enter	1		none		2.4		
		2		none		2.4		
		3		none		2.4		
line totals		4		none		2.4		
W		5		none		2.4		
EQ		6		none		2.4		

	Wind	Earthq.
Totals Achieved	1574	1491
	OK	OK
Totals Required (from Sheet A)	720	429

Gib® Subfloor Bracing Calculation Sheet B — single storey — V1.2A

Along						Wind	Earthq.
Bracing Line		Bracing Elements provided					
1	2	3	4	5	6	8W	9EQ
Line Label	Minimum BUs Req/Ach	Bracing Element No.	Supplier	Bracing Type	Number or Length L (m)	BUs Achieved	BUs Achieved
a	line totals	1	NZS3604	anchor pile	3	480	360
W	480	2		none			
EQ	360	3		none			
b	line totals	1	NZS3604	anchor pile	3	480	360
W	480	2		none			
EQ	360	3		none			
c	line totals	1	NZS3604	anchor pile	3	480	360
W	480	2		none			
EQ	360	3		none			
d	line totals	1		none			
W		2		none			
EQ		3		none			
e	line totals	1		none			
W		2		none			
EQ		3		none			
f	line totals	1		none			
W		2		none			
EQ		3		none			
g	line totals	1		none			
W		2		none			
EQ		3		none			
h	line totals	1		none			
W		2		none			
EQ		3		none			
I	line totals	1		none			
W		2		none			
EQ		3		none			
j	line totals	1		none			
W		2		none			
EQ		3		none			

	Wind	Earthq.
Totals Achieved	1440	1080
	OK	OK
Totals Required (from Sheet A)	1325	514

Gib® Subfloor Bracing Calculation Sheet B — single storey — V1.2A

Across						Wind	Earthq.
Bracing Line		Bracing Elements provided			6	8W	9EQ
1	2	3	4	5			
Line Label	Minimum BUs Req/Ach	Bracing Element No.	Supplier	Bracing Type	Number or Length L (m)	BUs Achieved	BUs Achieved
m	*line totals*	1	NZS3604	anchor pile	3	480	360
W	480	2		none			
EQ	360	3		none			
n	*line totals*	1	NZS3604	anchor pile	1	160	120
W	160	2		none			
EQ	120	3		none			
o	*line totals*	1	NZS3604	anchor pile	1	160	120
W	160	2		none			
EQ	120	3		none			
p	*line totals*	1	NZS3604	anchor pile	2	320	240
W	320	2		none			
EQ	240	3		none			
q	*line totals*	1	NZS3604	anchor pile	1	160	120
W	160	2		none			
EQ	120	3		none			
r	*line totals*	1	NZS3604	anchor pile	3	480	360
W	480	2		none			
EQ	360	3		none			
s	*line totals*	1		none			
W		2		none			
EQ		3		none			
t	*line totals*	1		none			
W		2		none			
EQ		3		none			
u	*line totals*	1		none			
W		2		none			
EQ		3		none			
v	*line totals*	1		none			
W		2		none			
EQ		3		none			

	Wind	Earthq.
Totals Achieved	1760	1320
	OK	*OK*
Totals Required (from Sheet A)	1665	514

Subfloor Bracing Systems

For details see NZS3604:1999
and appropriate manufacturer's literature

Supplier	System	Min. No. or Length (m)	BUs W/m	BUs EQ/m
	none			
NZS3604	masonry 0.75	1.5	42	42
NZS3604	masonry 1.5	1.5	100	100
NZS3604	masonry 3.0	1.5	200	200
NZS3604	masonry 4.5	1.5	300	300
NZS3604	braced piles	1	160	120
NZS3604	cantilever pile	1	70	30
NZS3604	anchor pile	1	160	120
Custom	Custom			
Custom	Custom			
Custom	Custom			
Custom	Custom			
Custom	Custom			
Custom	Custom			
Custom	Custom			
Custom	Custom			
Custom	Custom			
Custom	Custom			

Gib® Bracing Systems (1999)

For details see Gib® Bracing Systems, 1999 and appropriate manufacturer's literature

Supplier	System	Minimum Length (m)	BUs W/m	BUs EQ/m
	none			
Gib®	Gib1a	1.8	55	50
Gib®	Gib1b	2.4	75	50
Gib®	Gib2a	1.8	75	60
Gib®	Gib2b	2.4	80	70
Gib®	Gib3	1.2	65	60
Gib®	Gib10	1.8	65	60
Gib®	Gib11	1.2	65	65
Gib®	UL1	1.2	70	60
Gib®	UL2	1.2	100	85
Gib®	BR1a	1.8	70	60
Gib®	BR1b	2.4	90	75
Gib®	BR2a	1.8	75	60
Gib®	BR2b	2.4	85	60
Gib®	BR3a	1.8	60	45
Gib®	BR3b	2.4	95	65
Gib®	BR4	0.9	100	85
Gib®	BR5	1.2	115	85
Gib®	BR6	1.2	150	110
Gib®	BR7	0.9	145	145
Gib®	BR8	0.9	120	95
Gib®	BR9	0.6	110	95
gib®CHH	PlyGib	0.9	115	110
Custom	Custom			
Custom	Custom			
Custom	Custom			
Custom	Custom			
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Custom	Custom			
Custom	Custom			
Custom	Custom			
Custom	Custom			
Custom	Custom			
Custom	Custom			

NO PROPERTY FILE

PRIORITY: BC

BUILDING CONSENT NO ABA 20010229
TRACKING SHEET

NAME:	STAN WATSON	**DATE:**	18.8.00
VAL NO:	13-651-14		
LEGAL DESC:	LOT 3 DP 187780		
BUILDING:	NEW DWELLING		
LOCATION	ARAWHATA RD KAINGAROA		

RESOURCE PLANNER

DATE: 21/8/00 **SIGNED:** [signature]

CONDITIONS: COULD BUILDING INSPECTOR PLEASE ENSURE THAT THIS IS FIRST DWELLING ON SITE. — yes B Flood 29.8.00
Only 2 Trailers + Awning

DEVELOPMENT ENGINEER

DATE: **SIGNED:**

CONDITIONS:

PLUMBING AND DRAINGAGE

DATE: 6.9.00 **SIGNED:** B Flood

CONDITIONS: To prevent likelihood of surcharge at times of wet weather.
Effluent disposal system to be installed with fall away from dwelling.

BUILDING INSPECTOR 9 inspections

DATE: 6.9.00 **SIGNED:** B Flood

CONDITIONS:
See ammended for Landing area top of int Stairs

OTHER:

DATE: **SIGNED:**

CONDITIONS:

FAR NORTH
DISTRICT COUNCIL
Private Bag 752, Memorial Ave, KAIKOHE
Freephone: 0800 920 029, Ph: (09) 405 2750, Fax: (09) 401 2137

SEPTEMBER 1 2000

MR STAN WATSON
C/- ANTONY PEDERSEN - 4060048
FAX 09 4060028

FAXED

Dear Sir/Madam,

RE: BUILDING CONSENTS 20010229

Please be advised that further information is required prior to Council being able to process your Building Consent application any further.

The time period for processing is suspended as provided for under Section 34 of the Building Act 1991 and will not be resumed until the information is received.

The information required, is as follows.

BUILDING ASPECT:

1. Effluent disposal system to be installed with fall away from dwelling to prevent likelihood of surcharge at gully trap in wet weather.
2. Minimum length of 900mm for landing between top step and upstairs WC door required, with 400mm minimum spare between doors swing arc. ~~edge~~ of landing
3. Please provide details of Handrails on stairs and complying barriers to prevent people falling more than 1 metre. This would also apply to the finished height above ground level of external decks.
4. Piles more than 600mm above ground level to be braced piles. Please provide 2 copies of plan showing sub floor bracing.
5. Bracing calculations to be provided or Producer Statement from Tristyle Homes covering method of construction to comply with NZBC 1992. - Calculations received

FAR NORTH
DISTRICT COUNCIL
Private Bag 752, Memorial Ave, KAIKOHE
Freephone: 0800 920 029, Ph: (09) 405 2750, Fax: (09) 401 2137

PLANNING ASPECT:

NIL.

Should you have any queries regarding this matter, please do not hesitate to call me on 09 4081400.

Yours Faithfully,

HEATHER HOLGATE

ENVIRONMENTAL SUPPORT OFFICER

The time period for processing is suspended as provided for under Section 54 of the Building Act 1991 and will not be resumed until the information is received.

The information required, is as follows.

BUILDING ASPECT:

1. Effluent disposal system to be installed with fall away from dwelling to prevent likelihood of surcharge at gully trap in wet weather.

2. Minimum length of 900mm for landing between top step and upstairs WC door required, with 400mm minimum between doors swing arc.

3. Please provide details of Handrails on stairs and complying barriers to prevent people falling more than 1 metre. This would also apply to the finished height above ground level of external decks.

4. Piles more than 600mm above ground level to be braced piles. Please provide 2 copies of plan showing sub floor bracing.

5. Bracing calculations to be provided or Producer Statement from Tristyle Homes covering method of construction to comply with NZBC 1992.

01/09/00 11:34 FNDC KAITAIA → 1094060028 NO.068 D

MESSAGE CONFIRMATION

01/09/00 11:35
ID=FNDC KAITAIA

DATE S.R-TIME DISTANT STATION ID MODE PAGES RESULT

01/09 00'27" MANGONUI I.T.M CALLING 02 OK 0000

Photographs for 51 Arawhata Rd, Kaingaroa, Kaitaia

Number	Date	Elevation	Description
1	22/8/05	North	Elevation
2		East	Elevation
3		South	Elevation
4		West	Elevation
5		E	Down pipe spreader and wall around dormer
6		N/E	Verge of dormer roof
7		N	Main to dormer roof-note pitch and junction
8		N/E	Dormer verge
9		N/E	Base of dormer
10		N	Behind spreader
11		E	Internal – bed to ceiling wall junction
12		S	Internal – bed to ceiling wall junction
13		E	Bedroom 2 ceiling wall junction
14		E	Paint pealing on underside of dormer – Bed 1
15		E	Moisture test – 10.7%
16			
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Acceptable Solution E2/AS1

1.0 Roofs

1.0.1 Roofs shall have weatherproof *cladding* with *adequate* pitch and be *constructed* to prevent or control condensation in the roof space.

1.0.2 Membrane *claddings* shall have sealed waterproof joints. *Claddings* of profiled sheet material or tiles shall have joints which are waterproof or are *constructed* to drain any penetrating moisture to the outside.

1.0.3 All roof *claddings*, except those described in Paragraph 1.0.4, shall have an underlay complying with Paragraph 1.4.

1.0.4 Roof *claddings* for which underlays are not required are:

a) Membrane *claddings*, and

b) Concrete or clay interlocking tiles on a roof which:

i) is not a skillion roof, and

ii) is not located in a very high wind zone, as defined in NZS 3604, and

iii) has a pitch of no less than 17°.

1.1 Pitch

1.1.1 The roof pitch shall be no less than the greater of:

a) That given in Table 1, or

b) That recommended by the manufacturer.

1.2 Provisions for snow

1.2.1 Specific design for preventing the ingress of snow melt water is required when:

a) The open ground snow load S_g, as defined in NZS 4203, exceeds 1.0 kPa and the roof angle is less than 70°, or

b) The open ground snow load S_g, as defined in NZS 4203, exceeds 0.4 kPa and the roof is constructed in a way which is likely to cause a build up of snow (internal gutters or parapets are an example).

1.3 Roof claddings

1.3.1 Roof *cladding* material shall comply with the relevant Standard in Table 2.

1.3.2 Roof *cladding* shall be installed in accordance with the relevant Standard in Table 2 or in accordance with the manufacturer's instructions.

COMMENT:

Serious roof leaks can result from thermal movement in roof *claddings*. Particular attention should be applied to installing appropriate fixings, flashings and laps to avoid such problems.

1.3.3 For metal profile *claddings* for which installation instructions are not available, flashings and stopends shall comply with Figure 1.

COMMENT:

It is important to ensure that "proven performance" relates to the appropriate site exposure conditions. Verification method E2/VM1 is a suitable method for determining the adequacy of a roof *cladding* system.

1.3.4 Installation methods shall avoid creating corrosive situations arising from electrolytic action.

COMMENT:

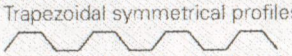
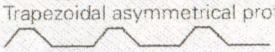
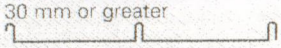
1. Severe corrosion can be caused by having dissimilar materials in contact or from rainwater run-off from one material to another. This can be avoided by the careful selection of materials and the provision of suitable protective finishes, e.g. unpainted galvanised steel is corroded by run-off from pre-painted metal, aluminium, zinc/aluminium, plastics and glass.

2. The "Profiled Metal Roofing Handbook" published for the New Zealand Metal Roofing and Cladding Manufacturers Association Inc, provides sound guidelines on installation methods.

1.3.5 Section 11 of NZS 3604 lists acceptable roofing materials. This Standard however does not give full information on fixings, substrate, and weatherproofing of joints and junctions, which need to be submitted as part of the *building consent* process.

Amend 3
Dec 2000

Table 1: Roof Pitch
Paragraph 1.1.1

Material	Pitch (no less than) (note 1)
Corrugated and low profile metal sheet with profile height less than 20 mm:	
Long run steel or aluminium	8°
End lapped steel or aluminium	10°
Metal decking and trough sections:	
i) Trapezoidal symmetrical profiles with rib heights between 20 mm and 35 mm 	4°
ii) Trapezoidal asymmetrical profiles with rib heights between 20 mm and 35 mm 	3°
iii) Trapezoidal symmetrical and asymmetrical profiles with rib heights between 36 mm and 60 mm	3°
iv) Concealed trough section profiles with rib heights:	
Less than 30 mm	8°
30 mm or greater 	3°
Flat metal sheet fully supported	3°
Metal tile:	
Long run	10°
Lapped	12°
Thin stone slate	20°
Timber shingle	14°
Cellulose-cement:	
Corrugated	7°
Slates	17.5°
Shingles	20°
Shakes	25°
Membrane (e.g. butyl rubber)	1.5°
Bitumen strip slate	17.5°
Concrete tile	12.5°

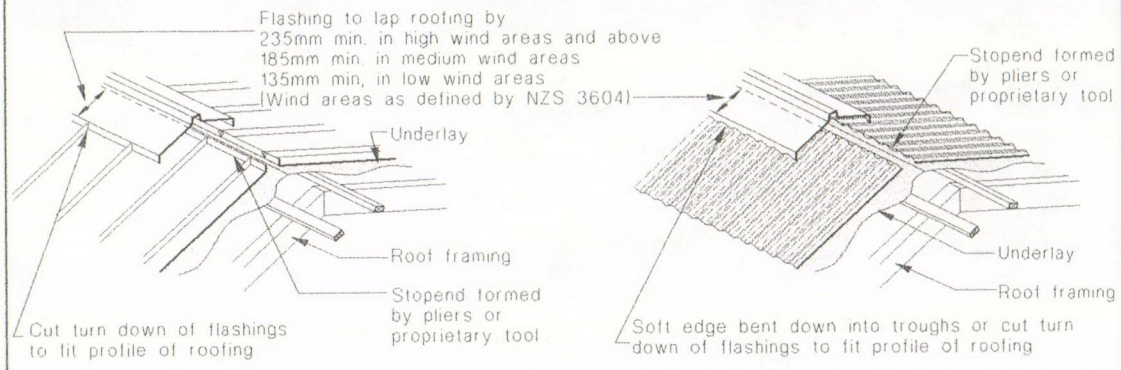
Note:

1. These pitches may need to be increased in snow-prone localities.

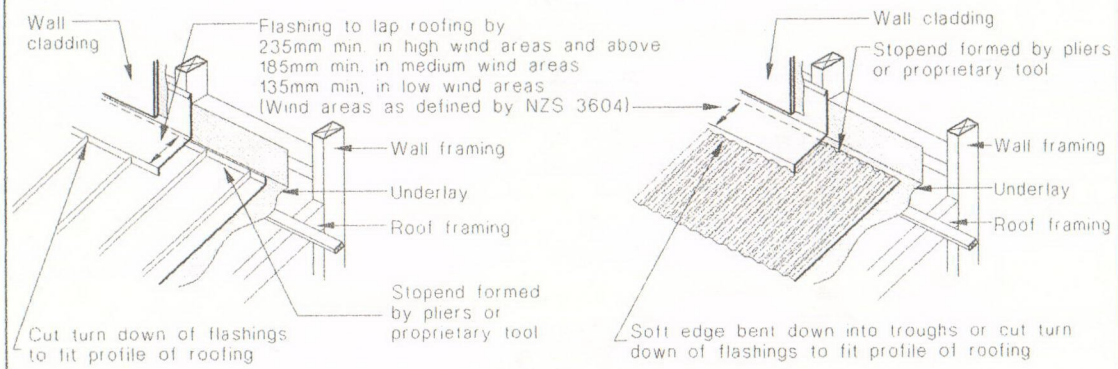
Table 2: Roof Claddings
Paragraph 1.3.1

Material	Relevant Standard
Aluminium	BSCP 143: Part 15
Concrete interlocking tiles	NZS 4206
Copper	BSCP 143: Part 12
Corrugated steel	NZS 3403
Corrugated cellulose-cement	NZS/AS 2908: Part 1
Lead	BS 6915
Mastic asphalt	BS 6925
Pressed metal tiles	NZS 4217: Parts 1 and 2
Zinc	BSCP 143: Part 5
Zinc or aluminium/zinc coated steel	NZS/AS 1397

Figure 1: Flashings and Stopends for Metal Profile Roofing
Paragraph 1.3.3



(a) Ridge



(b) Change of direction

NOTE:
These details are to be used when there are no installation methods given in the relevant Standard in Table 2 or there are no manufacturers instructions (see Paragraph 1.3.2).

1.4 Underlay

1.4.1 Roofing underlay, where required, shall:

a) Be laid either vertically when the roof pitch is not less than 8°, or horizontally, with laps of no less than 150 mm under concrete or clay tiles, and 100 mm under other *claddings*. When laid horizontally upper sheets shall be lapped over lower sheets to ensure water is shed to the outer face of the underlay. Fire retardant underlays shall be lapped no less than 150 mm in all cases.

b) Have a surface absorbency greater than 100 g/m^2 (underlays complying with NZS 2295 meet this requirement),

c) Have a vapour transmission resistance of no more than 7 MN s/g (meganewton seconds per gram) measured using ASTM E96 procedure B or BW, and

d) Be installed in a manner which prevents ponding of water by:

   i) allowing self-supporting underlay to span no more than 1200 mm in one direction, or

   ii) allowing underlay which is not self-supporting to span no more than 300 mm in one direction unless supported by corrosion-resistant material, (polypropylene packing tape,

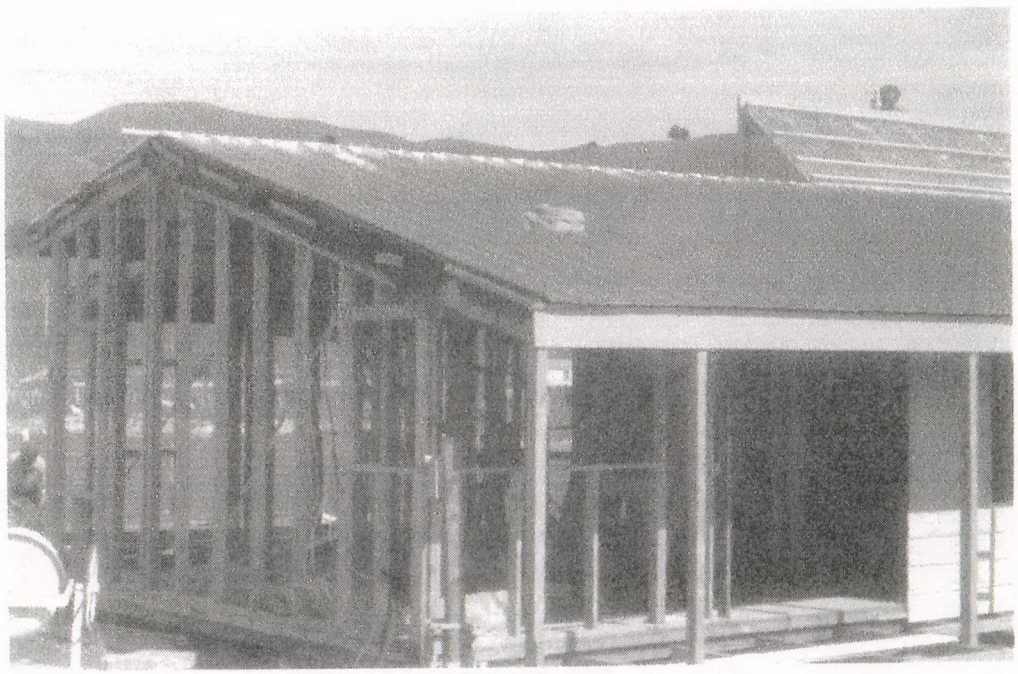
BULLETIN

BRANZ

THE RESOURCE CENTRE FOR BUILDING EXCELLENCE

JANUARY 2001 NUMBER 408

ROOFS ON EXPOSED SITES



- Building on exposed sites places greater demands on the design and installation of the building.
- This bulletin describes suitable practices for constructing and installing roofs on exposed sites.

This bulletin replaces the roofing aspects of Bulletin 326 Cladding Buildings on Exposed Sites.

1.0 INTRODUCTION

1.0.1 Newly developed building sites are often subjected to higher wind forces because development is occurring on land which is more exposed. Exposed sites are those where the building wind zone is classified as high or greater by NZS 3604.

1.0.2 Designing and installing roofing elements for buildings on exposed sites places greater demands on both the designer and the installer to ensure that the completed roof will effectively keep out the water and resist the wind forces acting on the roof.

1.0.3 Designers and contractors need to ensure that the roof cladding proposed is suitable for use in exposed locations – obtain specific details from the manufacturer or an industry technical source.

1.0.4 This bulletin describes suitable practices when designing, constructing and installing roof components (framing, cladding, flashings) on exposed sites.

2.0 WIND LOADS

2.0.1 The biggest factor influencing wind loads is the actual wind speed (remember that wind loads generated are proportional to the wind speed squared). Wind action also tends to exert a fluctuating force on the building as the gusts pass across the site, causing cyclical or fluctuating loading of the structure.

2.0.2 On exposed sites the wind speeds are higher so the loads generated are higher. Standard or traditional practices may not be sufficient to prevent a building from leaking on these sites or for elements to remain securely attached.

2.0.3 Higher wind forces on exposed sites:

- generate greater loads, especially uplift forces, on the roof and therefore on the fixings (framing and roof cladding) and the structure
- create a greater risk of water being blown under flashings, through windward laps in the roofing or back along the underside of the roofing – as wind speeds increase so should the amount of flashing cover or lap provided
- can prevent water from draining effectively from the roof on lower sloped roofs while the wind is blowing – a lull in the wind will allow some drainage
- can deform claddings and allow water to enter.

2.0.4 Other factors that influence the wind load on the roof are:

- roof pitch
- the size of the roof (size determines the extent of the roof edge zone where uplift forces are greatest)
- abrupt changes in roof shape or pitch, which create localised areas of increased loading
- areas which may trap wind, such as large roof overhangs, carports, open garages and verandahs
- turbulence around dormers and chimneys
- spacing of framing such as purlins – as purlin spacings increase the load on each fixing also increases
- the most common direction of stormy wind (not always the prevailing wind).

2.0.5 In addition, on exposed sites:

- adjacent buildings do not provide shelter
- the effect of the wind is difficult to moderate through the use of trees or fences.

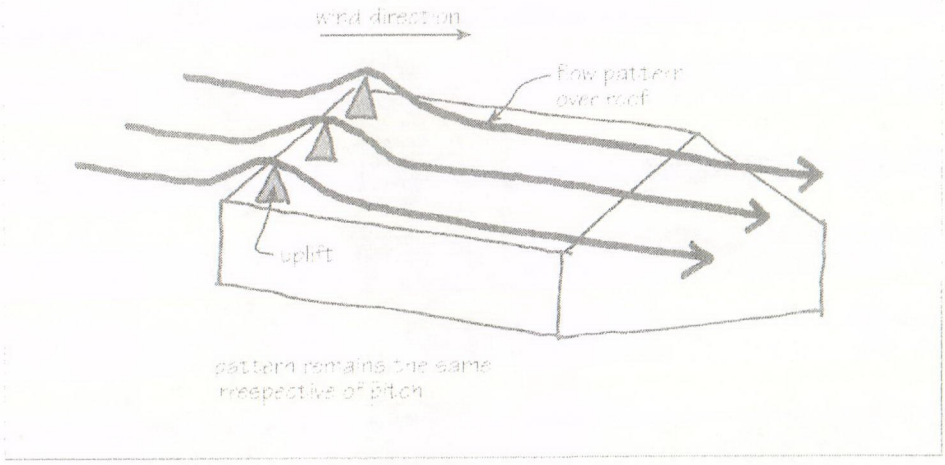


Figure 1. Wind parallel to ridge

3.0 EFFECT OF ROOF DESIGN AND WIND DIRECTION

3.0.1 Roof pitch determines how wind impacts on the roof and the strength of those forces.

3.0.2 Wind parallel with the ridge (Figure 1) creates uplift, with the greatest uplift forces being generated along the leading edge of the roof.

3.0.3 Where winds blow at an angle to the ridge, roofs are subject to uplift or suction on leeward faces, with the amount of suction increasing as the pitch decreases. The loads generated also fluctuate as a gust develops and passes. On the windward face of the roof the wind action varies with pitch:

- when the pitch is less than 17° suction is the key action, with the amount of suction increasing as the roof pitch decreases (Figure 2)
- over 35° it is a downward pressure (Figure 3)
- between 17 and 35° it may be either uplift or downward pressure or both (fluctuating).

3.0.4 Uplift forces generated on the roof are greatest around the perimeter of the roof planes – up to twice the uplift force at the body of the roof (Figure 4). This perimeter edge zone is approximately 20% of the roof dimension, up to about 2 m maximum.

3.0.5 Abrupt changes in roof level (such as in split-level roofs) can also produce local areas of high wind uplift. The roofing at, or around, these areas must be more securely fixed than the general body of the roof.

4.0 FRAMING CONNECTIONS

4.0.1 Critical roof framing connections are:

- purlin to rafter/truss top chord
- rafter/truss bottom chord to top plate
- isolated posts (e.g. verandah posts). Isolated posts must be sufficiently anchored into the ground at their base and to the beam they support at their tops – refer NZS 3604.

4.0.2 It is also important that the connections between the top plate and the lower wall framing are suitable for the wind and load conditions.

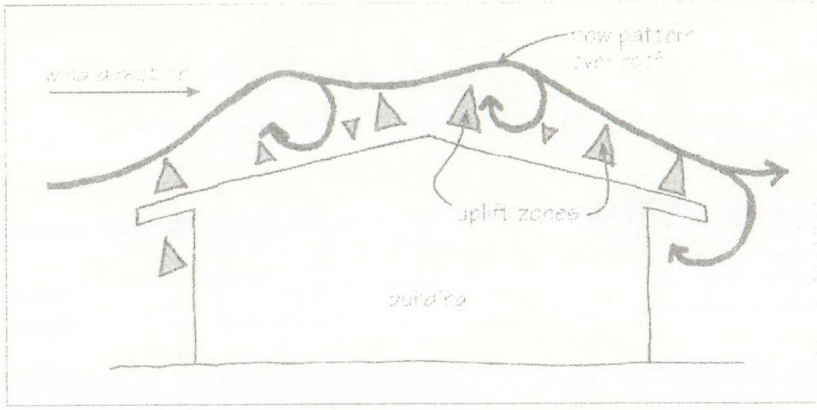


Figure 2. Wind flow over lower roof pitch.

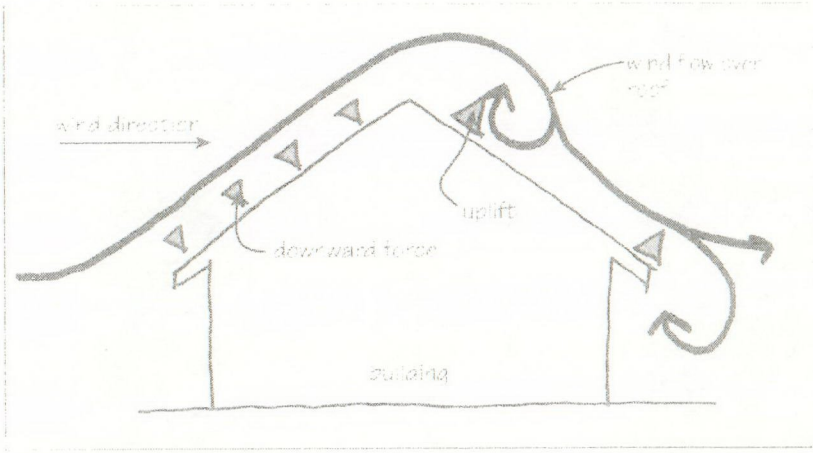


Figure 3. Wind flow over steeper roof pitch.

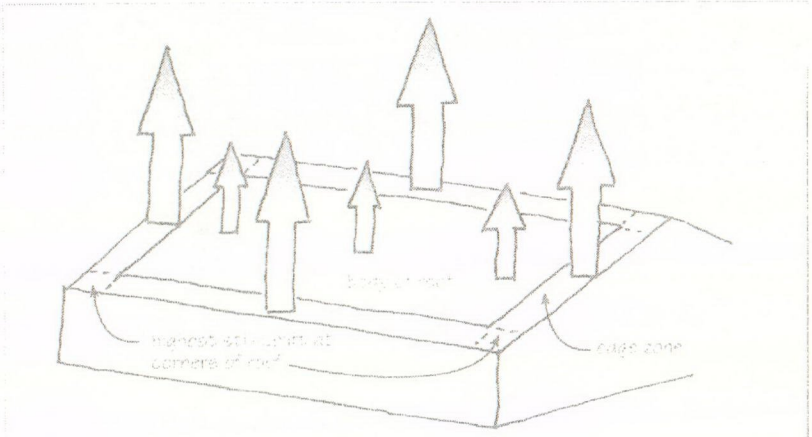


Figure 4. Roof edge zones.

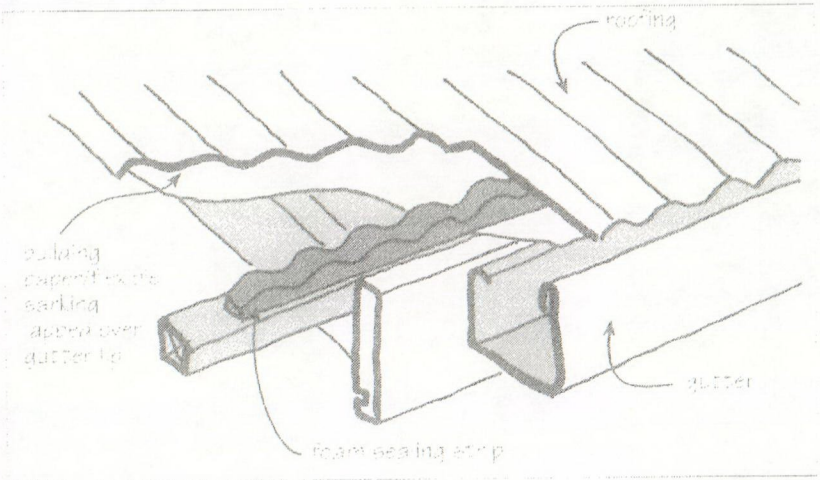


Figure 5. Sealing strip to bottom edge.

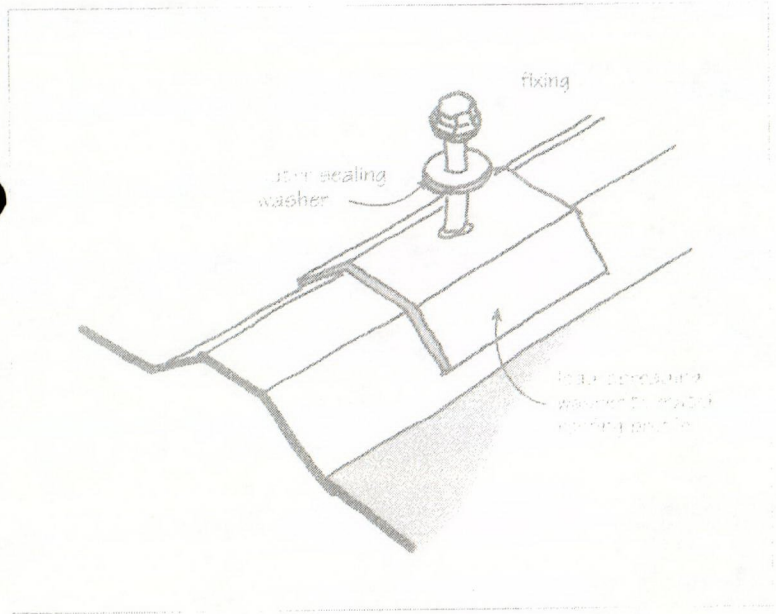


Figure 6. Load-spreading washer.

4.0.3 Specific construction requirements are:

- roof space and roof plane bracing must be calculated correctly and installed in accordance with NZS 3604
- roof framing (underpurlins, struts, etc), for light roofs generally should be tied down as shown in accordance with NZS 3604
- for roofs outside the limits of NZS 3604 use specific engineering design
- reduce purlin spacings within the eaves and ridge roof edge zones to half that over the rest of the roof.

5.0 ROOF CLADDING INSTALLATION

5.0.1 Fixing methods vary with roofing type. Manufacturers' instructions for fixing on exposed sites must be followed. Generally on exposed sites more fixings are required to ensure the roof stays securely in place. Typical factors which influence the installation and fixing of the roofing are listed below for each generic roofing type.

5.1 Profiled Metal Roofing

5.1.1 For metal roofing:

- purlin fixing should be in accordance with NZS 3604
- ensure the manufacturers' minimum pitch guidelines for the roofing profile are followed
- consider sealing the underside of the bottom edge of the sheets where there is a large opening under the crest (corrugated and trapezoidal profiled metal) with a sealing strip formed to the roof profile (Figure 5). However, the use of an airtight sealing strip also has the effect of preventing any condensation, which may accumulate under the roofing, from escaping. It also restricts the beneficial effect of the ventilation that occurs through the gaps
- lap sheets and ridging with the prevailing or strongest wind direction
- have sheets in one length from ridge to eaves (if possible)
- use load-spreading washers at each fixing point to improve the resistance of the fixing to uplift (Figure 6). Load-spreading washers should also be used where the purlin spacings are at the limit for the roofing profile as wider purlin spacings increase the load on each fixing
- screw fix to provide greater holding power and resistance to withdrawal loads than nails fixing (if using nails spiral shank nails are preferable to plain shank because their withdrawal

Table 1. Nail fixing density for metal barge and parapet flashings (1, 2, 3)

Maximum wind speed (m/sec)	No. of fixings per m run
38 to 44 (NZS 3604 high wind)	3
44 to 50 (NZS 3604 very high wind)	4
over 50 (NZS 3604 specific design)	specific design

Notes (1) From the Profiled Metal Roofing Handbook.
Notes (2) For ridge, hip and apron flashings refer to the respective manufacturer's recommendations.
Notes (3) Fixings for flashings must be into a framing member (purlin) below. Pop riveting the flashing to the roofing is not an acceptable practice.

resistance is greater)
- ensure that the fixings are long enough to provide sufficient penetration for the material being fixed to
- fixings for flashings should pass through the flashing and roofing and into the structure below. Suggested fixing centres for exposed sites are given in Table 1
- provide 60 mm roofing overhang into the gutter to provide protection from wind-driven rain.

5.1.2 Other normal installation practices, which assume greater significance if not done properly on exposed sites are:
- stop end the top edge of all roof sheets (Figure 7)

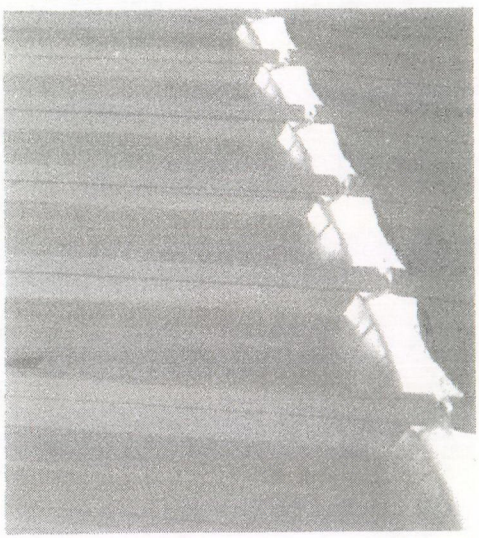


Figure 7. Stop-ended roofing prior to installation of ridge capping.

- form a turn down or drip edge to the pans/troughs of the bottom edges of sheets
- fixings with proven waterproof design
- in long roofing lengths (particularly aluminium and dark coloured steel), allow for thermal movement (usually by over-drilling fixing holes or using a flashed step in the roof) to:
  - prevent roofing from distorting, buckling or damaging the fixings
  - prevent tearing of the roofing at the fixing points
- seal flashing intersections to manufacturer's instructions (neutral cure silicon for coil-coated materials).

5.2 Concrete and Clay Tiles

5.2.1 For concrete and clay tiles:
- install a roofing underlay
- ensure the manufacturer's minimum pitch guidelines for the tile type/profile are followed
- mechanically fix every verge, hip or ridge tile and at least 50% of the tiles in the body of the roof
- fix tile battens in accordance with NZS 3604.

5.3 Metal Tiles

5.3.1 Refer to the manufacturer's instructions for minimum pitch and fixing/flashing requirements for installation on exposed sites.

5.3.2 Fix tile battens in accordance with NZS 3604.

5.4 Asphalt Shingles

5.4.1 Asphalt shingles can usually be installed in high wind zones but use may be limited in very high wind zones.

5.4.2 Installation requirements are:
- seal down ridge and hip caps with adhesive
- ensure the manufacturer's minimum pitch guidelines are followed
- apply additional adhesive under the tab of each shingle
- apply a continuous strip of adhesive on top of all drip edges
- install additional mechanical fixings (generally, increase the number of fixings by 50% or more).

5.5 Timber Shingles

5.5.1 For timber shingles on exposed sites:
- have a minimum of three plys (three layers)
- ensure the manufacturer's minimum pitch guidelines are followed
- under-flash ridges and hips

Table 2. Suggested minimum roof flashing cover for metal roofing based on wind speed

Flashing type	Additional requirements	Minimum flashing cover (mm) for a wind speed (in m/sec) of: 38 to 44 (NZS 3604 high wind)	45 or more (NZS 3604 very high wind)
gable, verge or barge	trapezoidal profiles	at least one crest and edge turn up or two crests (1)	
	vertical rib profiles	at least one rib and edge turn up or two crests (1)	
	corrugated	at least two crests (1)	
ridge or hip	roofing stop ended	235 (2)	285 (3)
apron	roofing stop ended	235 (2)	285 (3)
flashing upstands	behind pitched roofing	250 (3)	250 (3)
	behind wall cladding	150 (3)	150 (3)

Notes (1) But not less than 150 mm.
(2) From NZBC E2/AS1.
(3) BRANZ recommended dimension.

Table 3. Suggested minimum roof flashing cover relative to wind speed and roof pitch for metal roofing

Roof pitch (degrees)	Minimum flashing cover (in mm) for a wind speed of 38m/sec and over
3 maximum	300
3 – 5 maximum	235
5 – 8 maximum	200
8 – 15 (1)	175
over 15	150

Note (1) BRANZ extrapolated figure.

- fix each shingle with two fixings for shingles under 300 mm wide and three fixings for those 300 mm or wider
- ensure the overlap for the shingles is in accordance with the manufacturer's recommendation for the specific wind exposure.

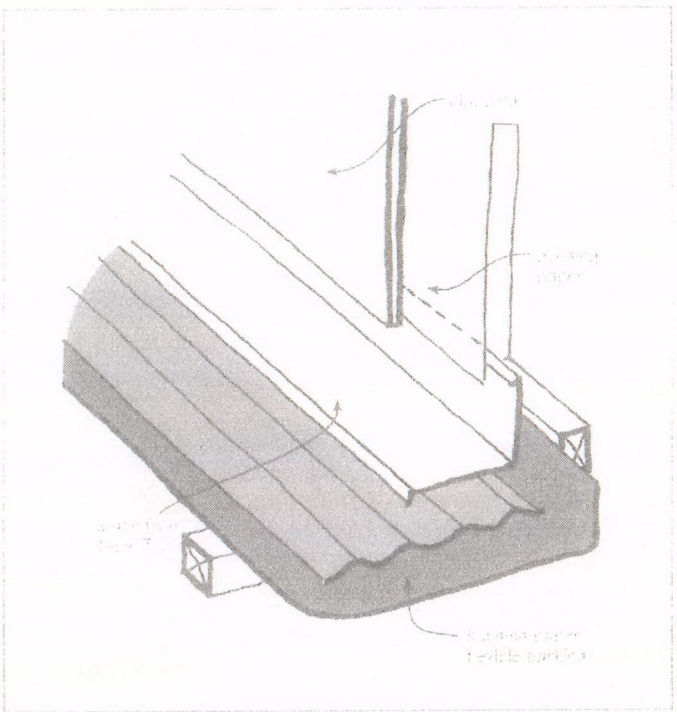


Figure 8. Lap apron flashing over two crests for corrugated profile.

6.0 FLASHING COVER/ WIDTH

6.0.1 Wider flashings are required on roofs on exposed sites so that sufficient cover is provided to prevent the entry of wind-borne rain. Information provided by the industry on cover varies but Tables 2 and 3 give two approaches. Flashings that are not wide enough will allow water to be blown under them and possibly enter the building. Flashings must be fixed to resist uplift.

6.0.2 To provide sufficient resistance to water penetration the edge of the flashing must be formed to fit to the profile of the roofing material.

6.0.3 Where the flashing is parallel with the roofing sheets the detail is relatively simple in that the edge of the flashing is bent down once, past:

- the first rib for trapezoidal and vertical rib profiles
- the second corrugation for corrugated profiles (see Figure 8).

6.0.4 Where the run of the flashing is at

right angles to the roofing profile, the options are:

- use a flashing with a soft edge. Soft edges can be a proprietary product, zinc, soft-grade aluminium or factory-coated lead. Soft edges are most commonly used with corrugated profile roofing. Soft-edge flashings must be accurately and tightly dressed to the roofing profile without causing damage to the soft edge
- use a flashing that has a formed downturn along the edge, which is then notched to suit the roofing profile. Notching is most commonly used with trapezoidal and ribbed profiles where the rib height is greater than 30 mm but can also be used with corrugated profile material. When notching, it is essential that the notches are accurately and neatly cut.

6.0.5 Design and install flashings so that water will drain off them.

7.0 EXTERNAL GUTTERING/ SPOUTING

7.0.1 Select a spouting profile with a front edge that is:

- higher than the back, to restrict the possibility of water being blown back up under the bottom edge of the roofing
- higher than the crest of the roofing profile to provide some protection to the end of the roofing from wind-driven rain.

7.0.2 Spouting should have an adequate fall to the downpipe (1 in 600 fall minimum).

7.0.3 Ensure that the spouting is supported by correctly spaced brackets and that it is connected to the brackets in accordance with the manufacturer's instructions for an exposed site, particularly when internal brackets are being used. If literature does not specifically cover exposed sites, get specific instructions from the manufacturer.

8.0 CODES AND STANDARDS

Standards New Zealand, Wellington
NZS 3604 Timber framed buildings.

9.0 CREDITS

Valuable assistance in preparing this bulletin was given by:
Les Hodges, Otago Polytechnic
Neil Gerrish, Porirua City Council
John McGirr, BRANZ Accredited Adviser, Greymouth
Trevor Ashman, Roofing Association of New Zealand.

Moisture Content and Damage Table – Appendix F

Guide to Moisture Content Percentage:

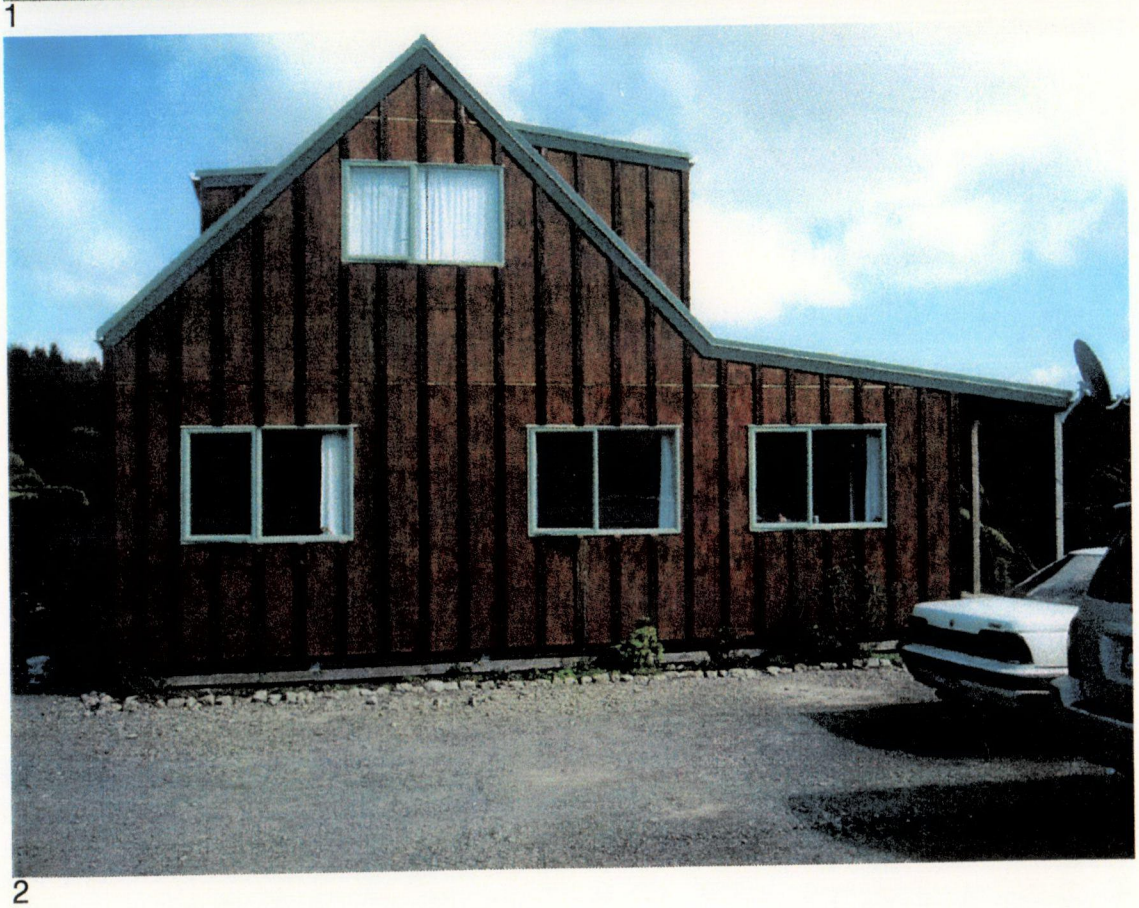
Very Low	0 – 10%
Low	11 – 18%
Medium	19 – 24%
High	25 – 35%
Very High	36% +

Photo	Elevation	Location	Moisture Content %	Damage
1	North	External roof		Roof location
6&7	North	Roof flashing details		Damaged linings below
10&14	North	Internal linings		Damage to linings

Photographs
For
Case Number 3597

August 2005

1



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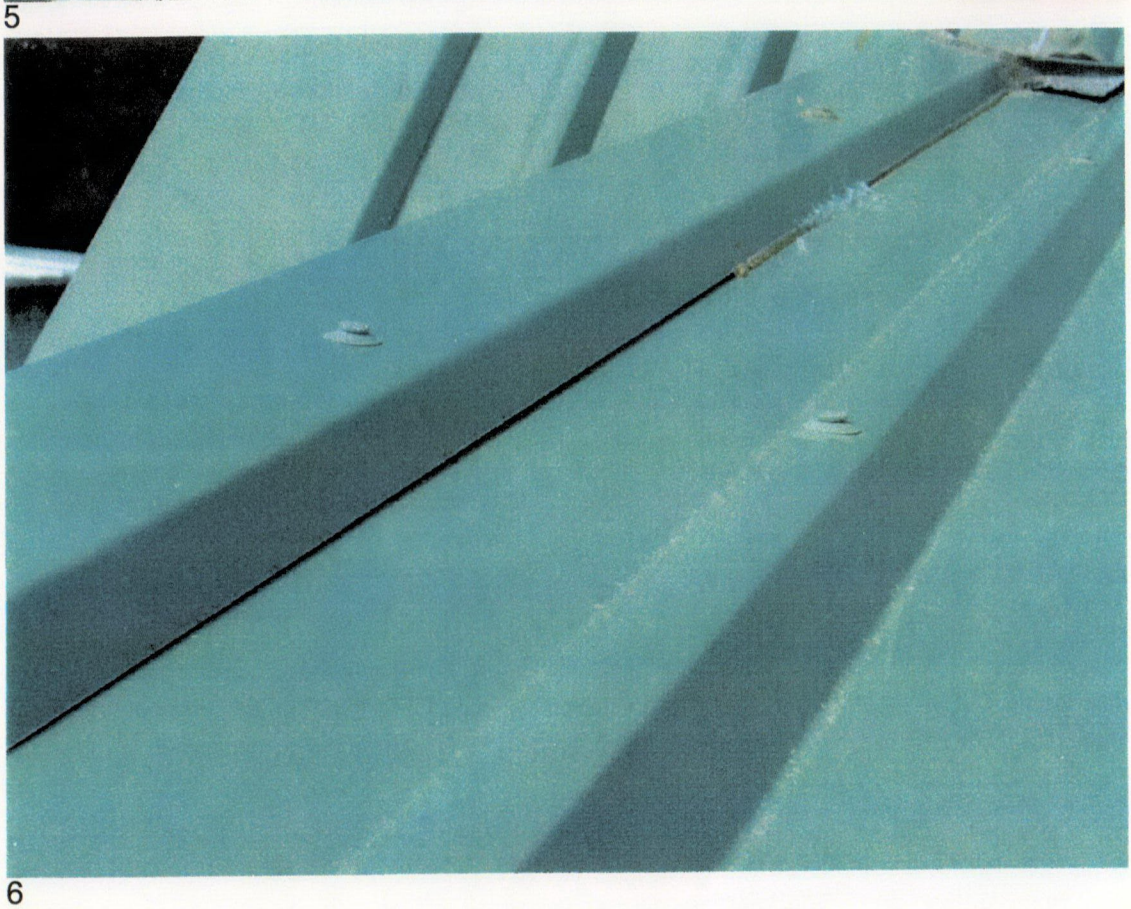

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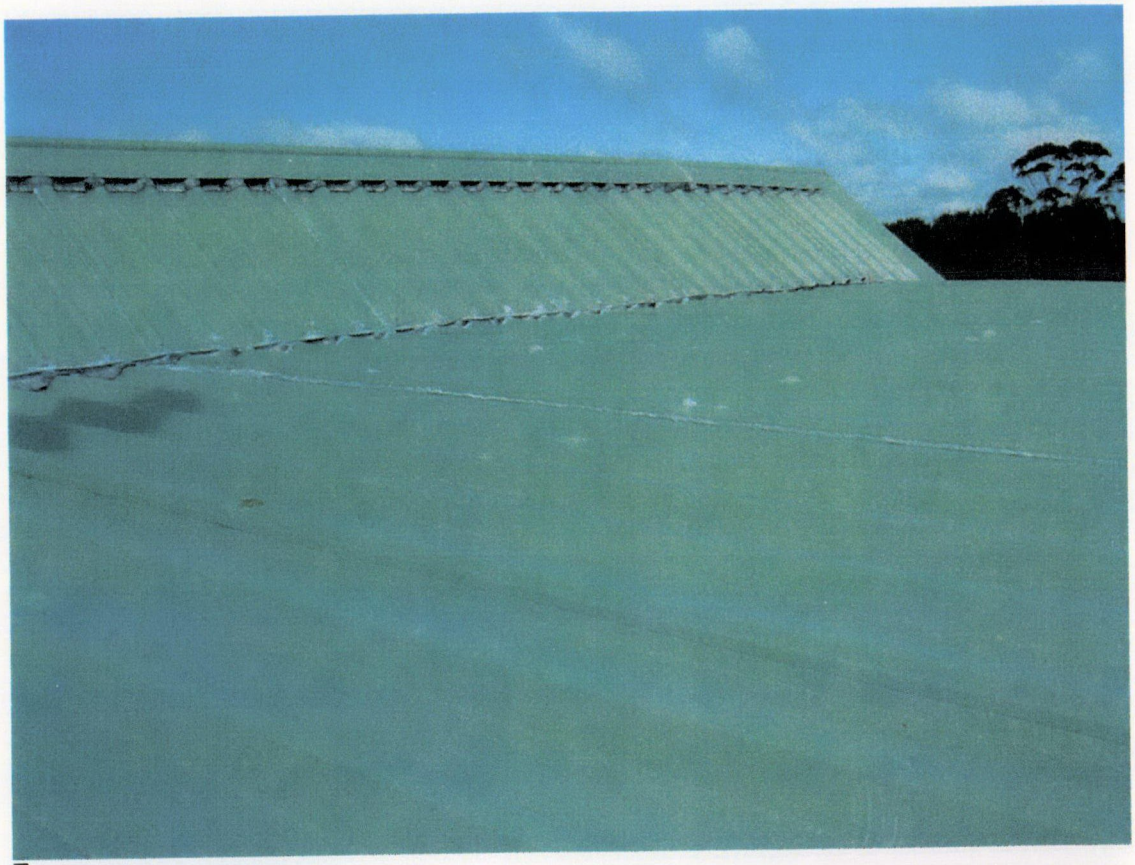

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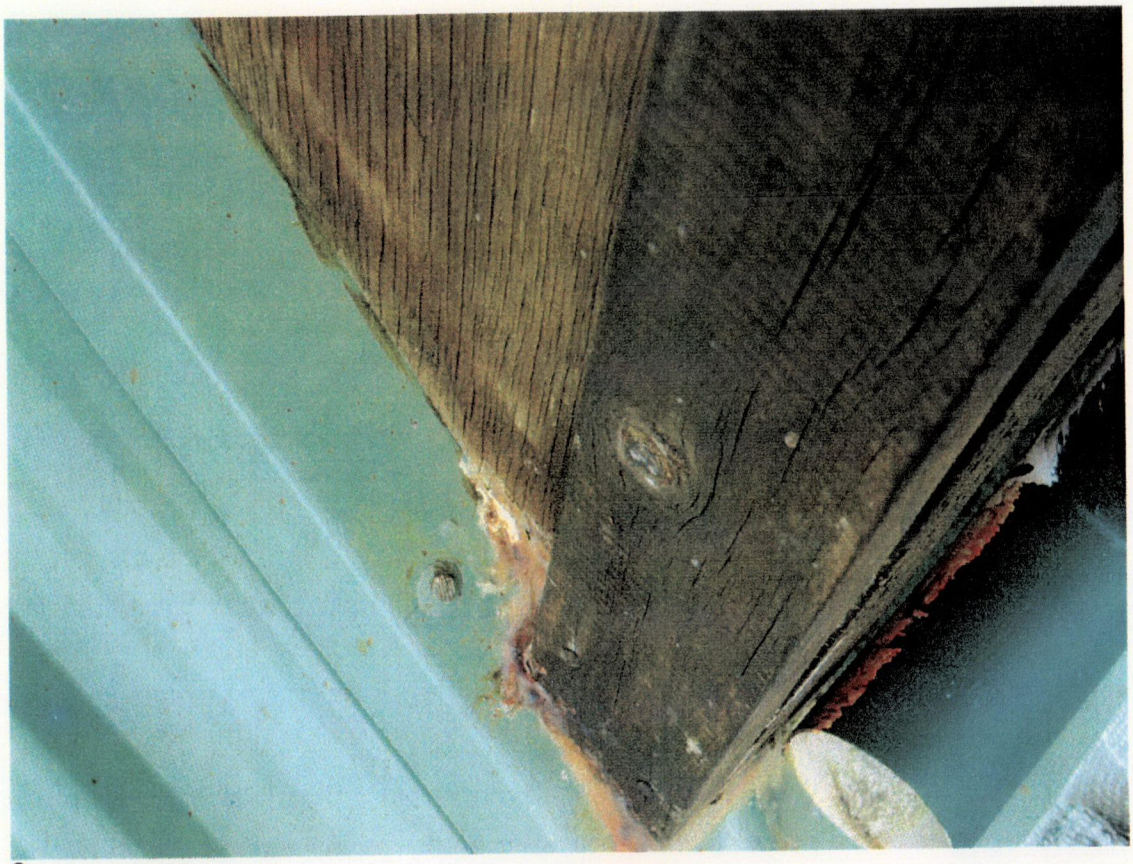

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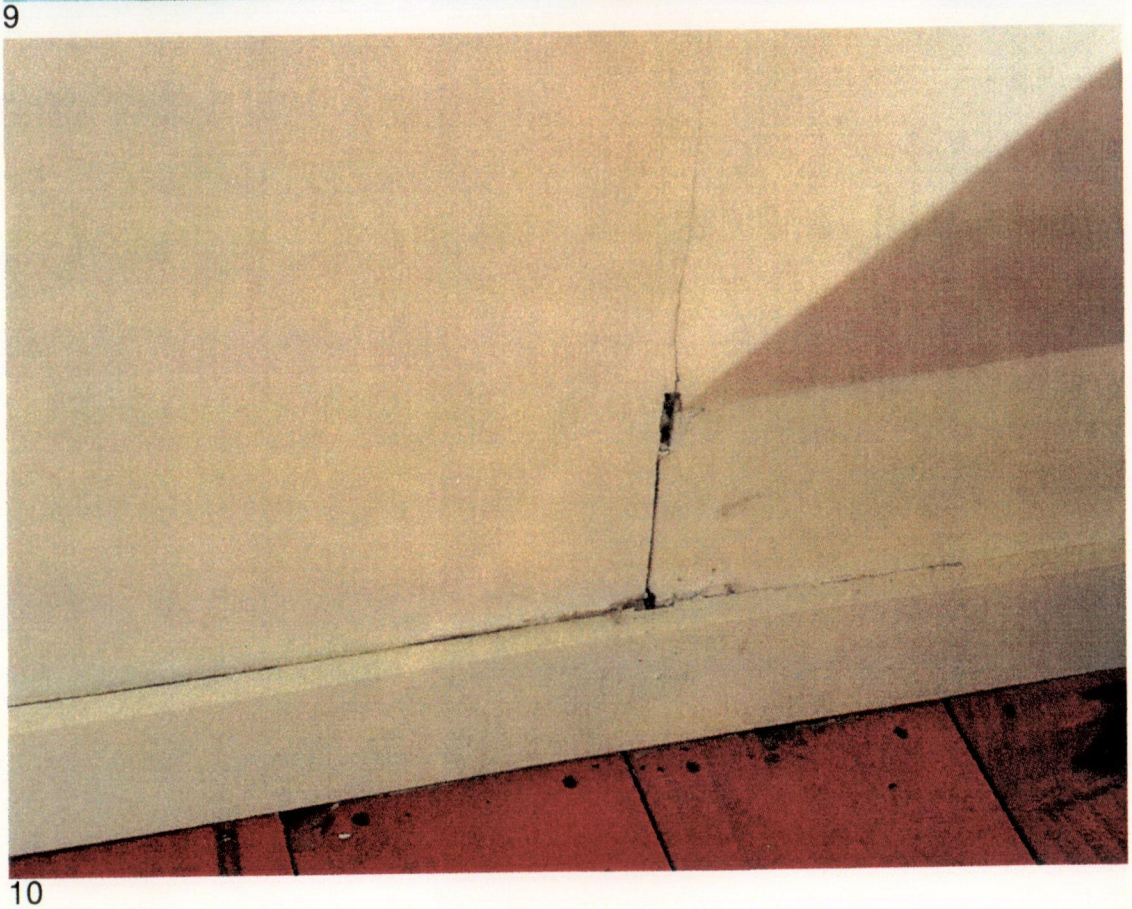

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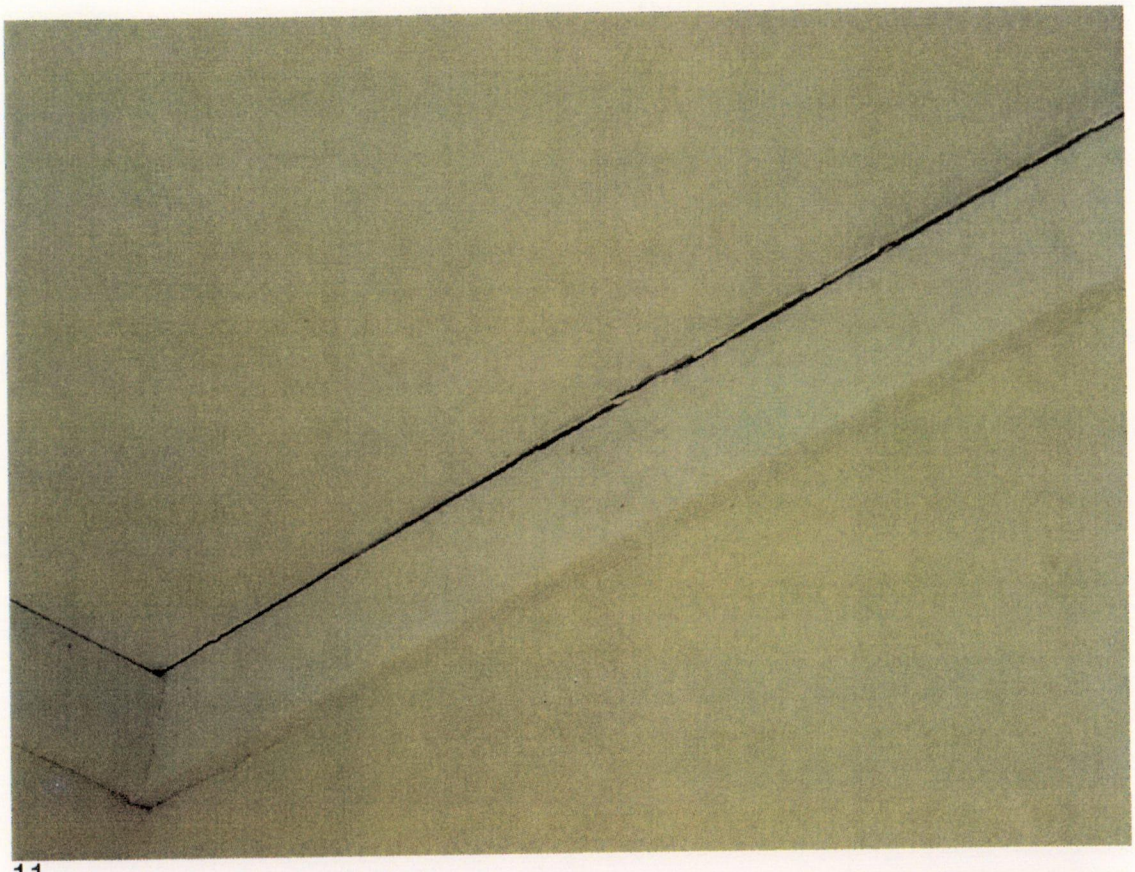

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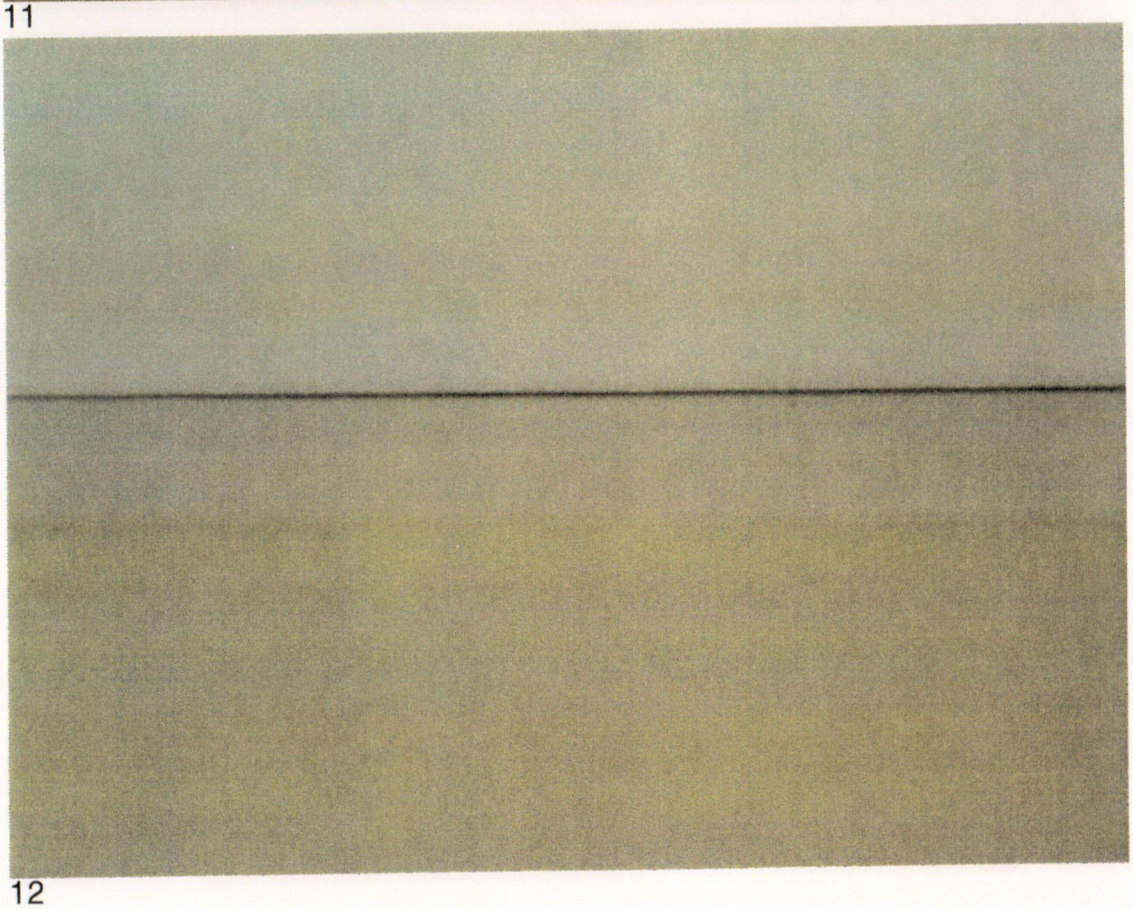

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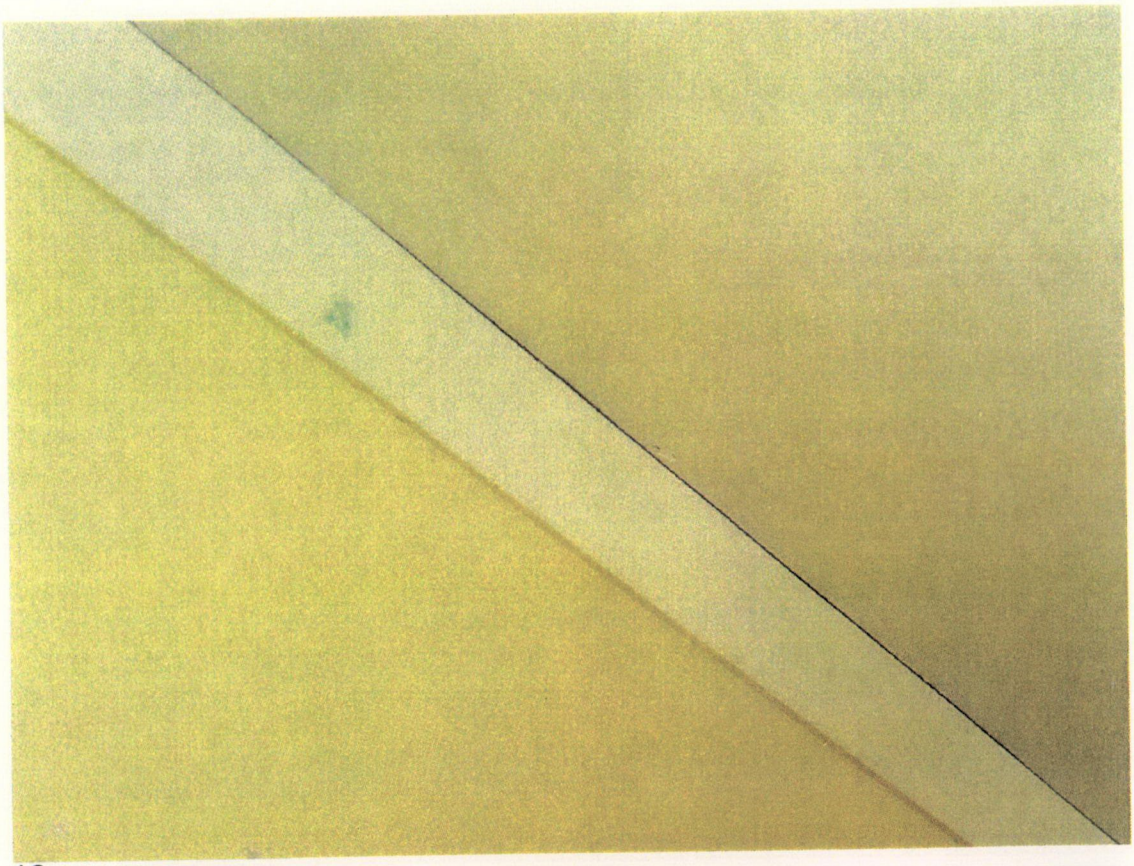

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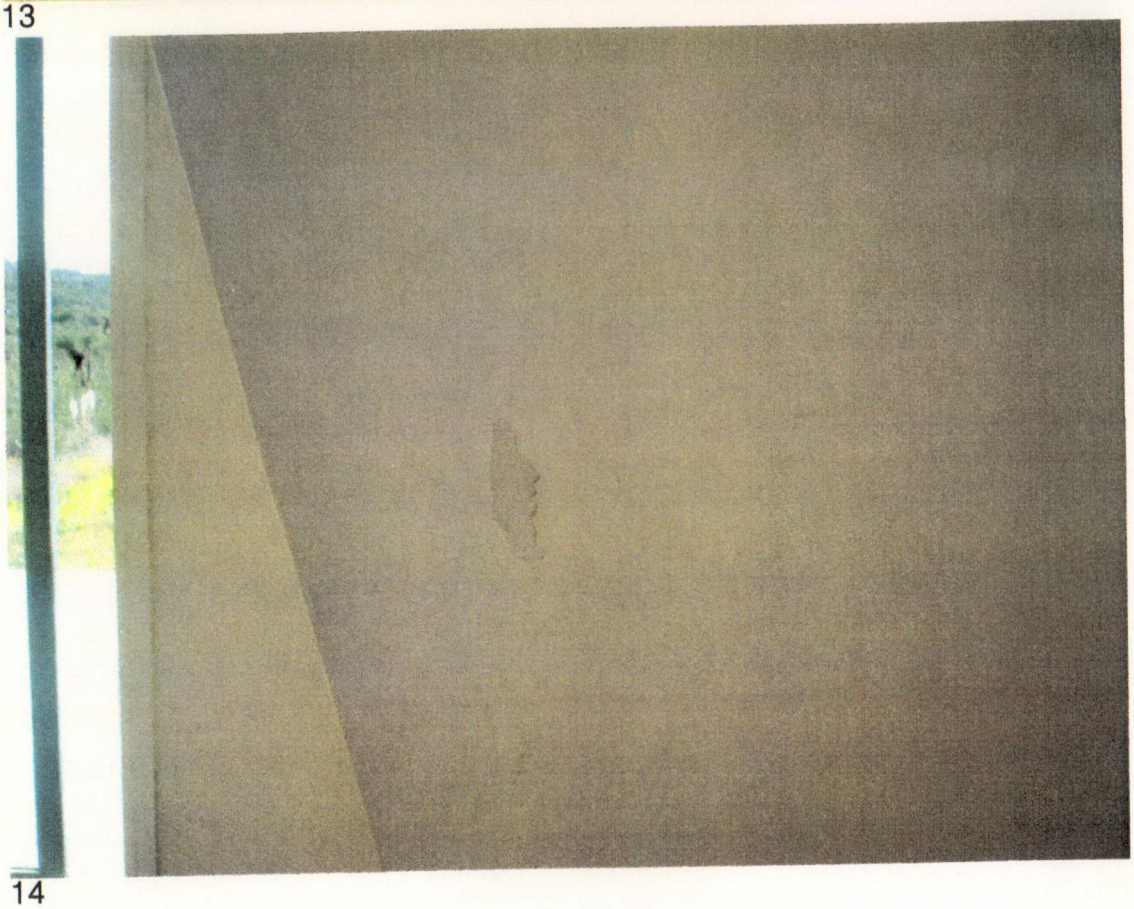

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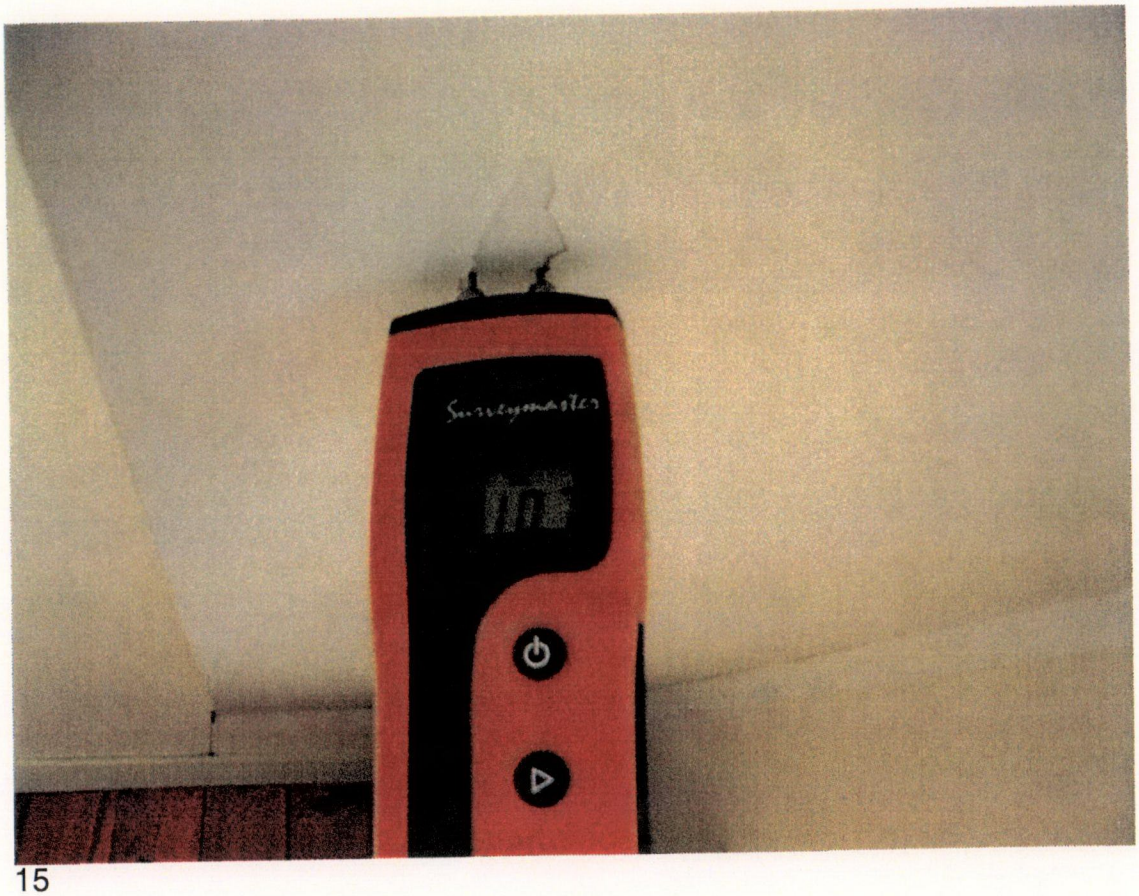

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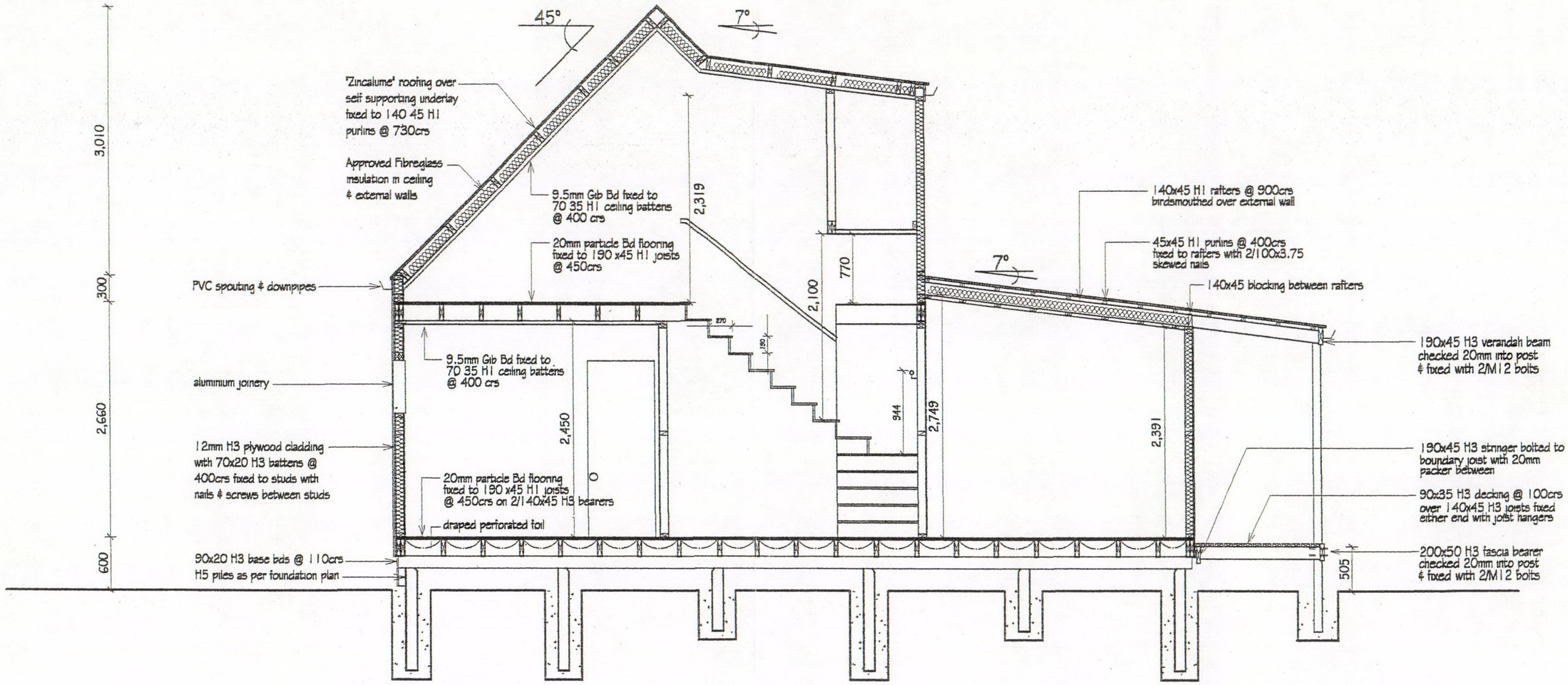


SECTION A-A
LO1

Proposed dwelling for
Stan Watson
KAINGAROA

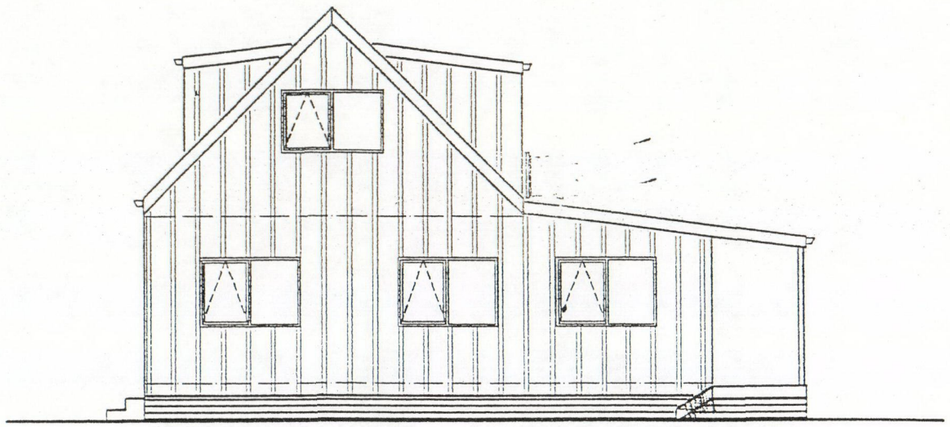
X-SECTION

SCALE 1:50

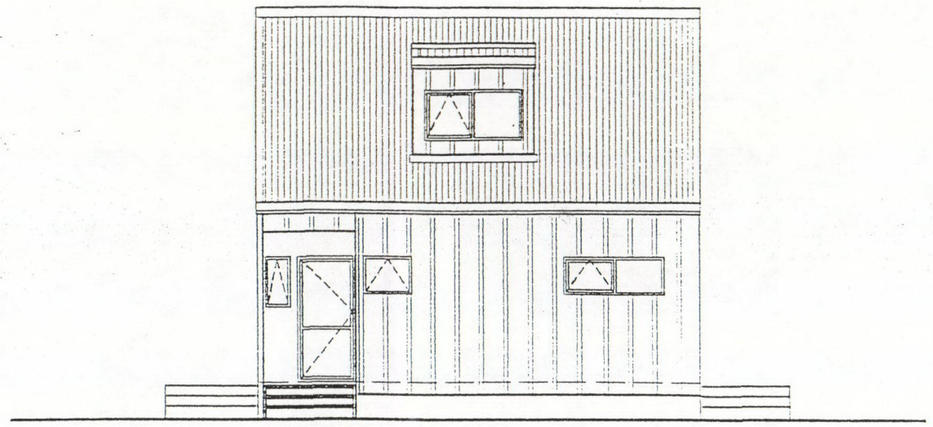
TRISTYLE HOMES
STATE HIGHWAY 10, PO BOX 241, AWANUI
NEW ZEALAND

ISSUE DATE	5/9/00
REVISION No.	FINAL
JOB No.	30 Wats
DRAWN BY	Pauline

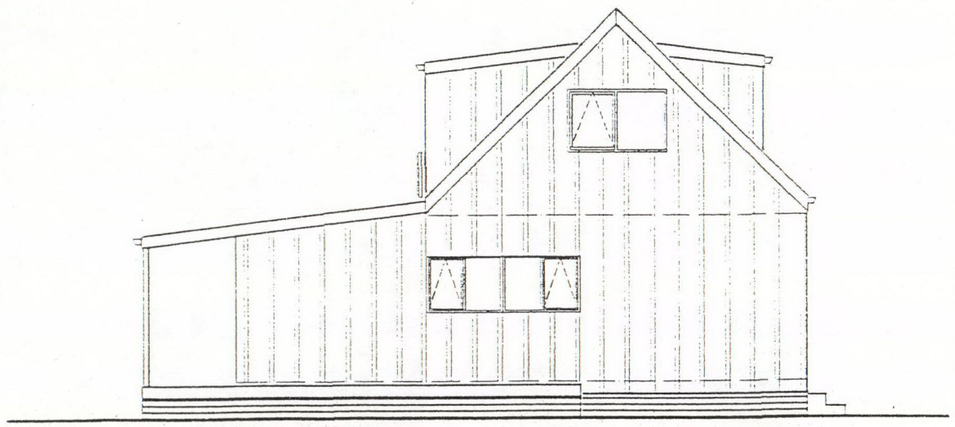
No. L03
OF 10



ELEVATION 'A' EAST



ELEVATION 'B'
SOUTH



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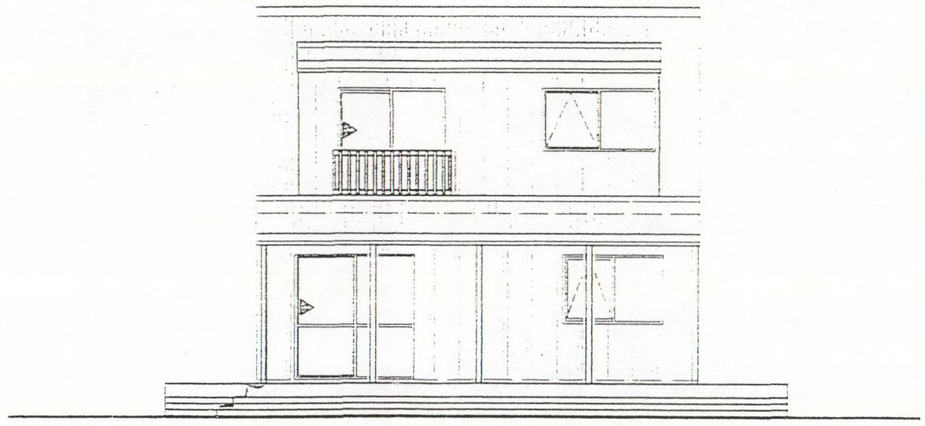


ELEVATION 'D'

Proposed dwelling for
Stan Watson

ELEVATIONS

SCALE
1:100

TRISTYLE HOMES
STATE HIGHWAY 10, PO BOX 241, AWANUI

ISSUE DATE	20/7/00
REVISION No.	FINAL
JOB No.	30 Wats
DRAWN BY	Pauline

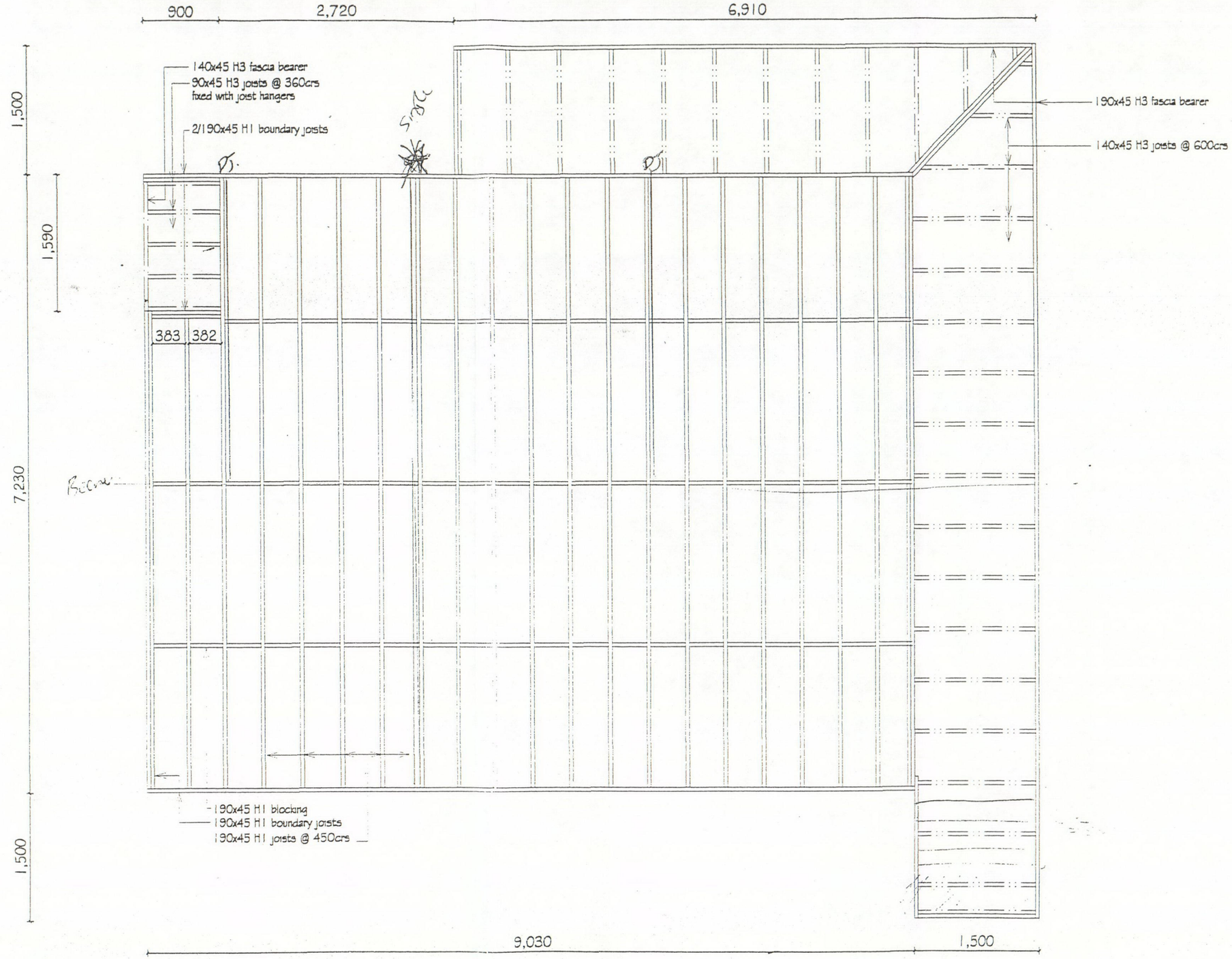
No. L02
OF 10

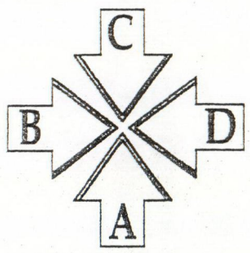
NOTES

1. Contractor to check all dimensions & conditions on site before commencing work

2. Work only to figured dimensions. In the event of a discrepancy, consult the Architect.

3. All construction to be to NZ building code & related documents including Local Authority by-laws & District Schemes





Proposed dwelling for
Stan Watson
KAINGAROA

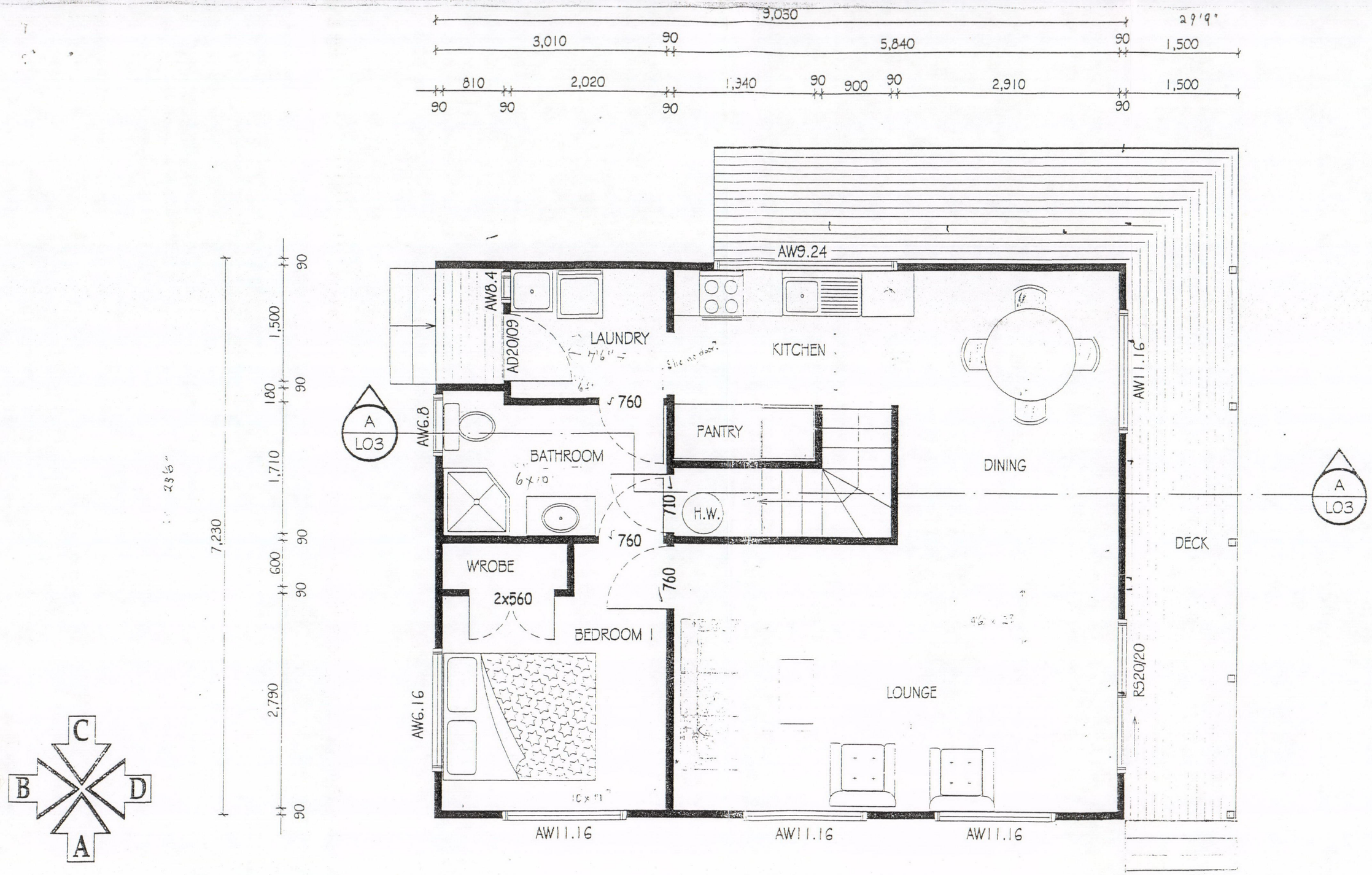
SUBFLOOR PLAN

SCALE 1:50

TRISTYLE HOMES
STATE HIGHWAY 10, PO BOX 241, AWANUI
NEW ZEALAND

ISSUE DATE	21/7/00
REVISION No.	FINAL
JOB No.	30 Wats
DRAWN BY	Pauline

No. L06.1
OF 10



Floor Area 65.3m².

Proposed dwelling for
Stan Watson
KAINGAROA

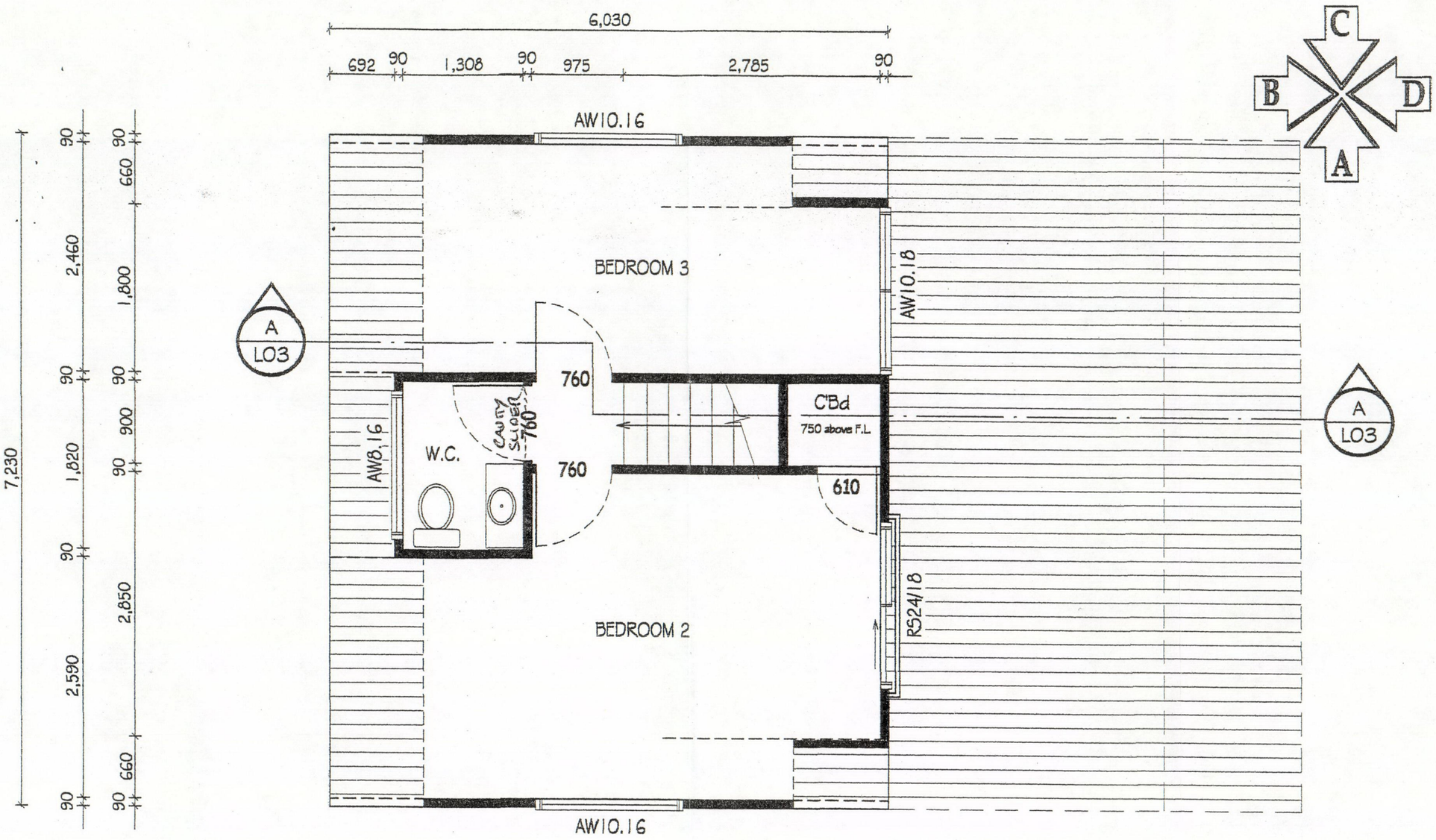
1F FLOOR PLAN

SCALE 1:50

TRISTYLE HOMES
STATE HIGHWAY 10, PO BOX 241, AWANUI
NEW ZEALAND

ISSUE DATE	21/7/00
REVISION No.	FINAL
JOB No.	30 Wats
DRAWN BY	Pauline

No. L01.1
OF 10



Floor Area: 41.2m2

Proposed dwelling for
Stan Watson
KAINGAROA

2F FLOOR PLAN

SCALE 1:50

TRISTYLE HOMES
STATE HIGHWAY 10, PO BOX 241, AWANUI
NEW ZEALAND

ISSUE DATE	5/9/00
REVISION No.	FINAL
JOB No.	30 Wats
DRAWN BY	Pauline

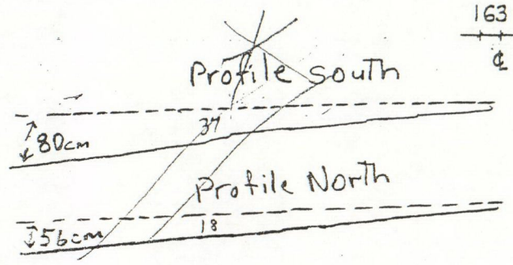
No. L01.2
OF 10

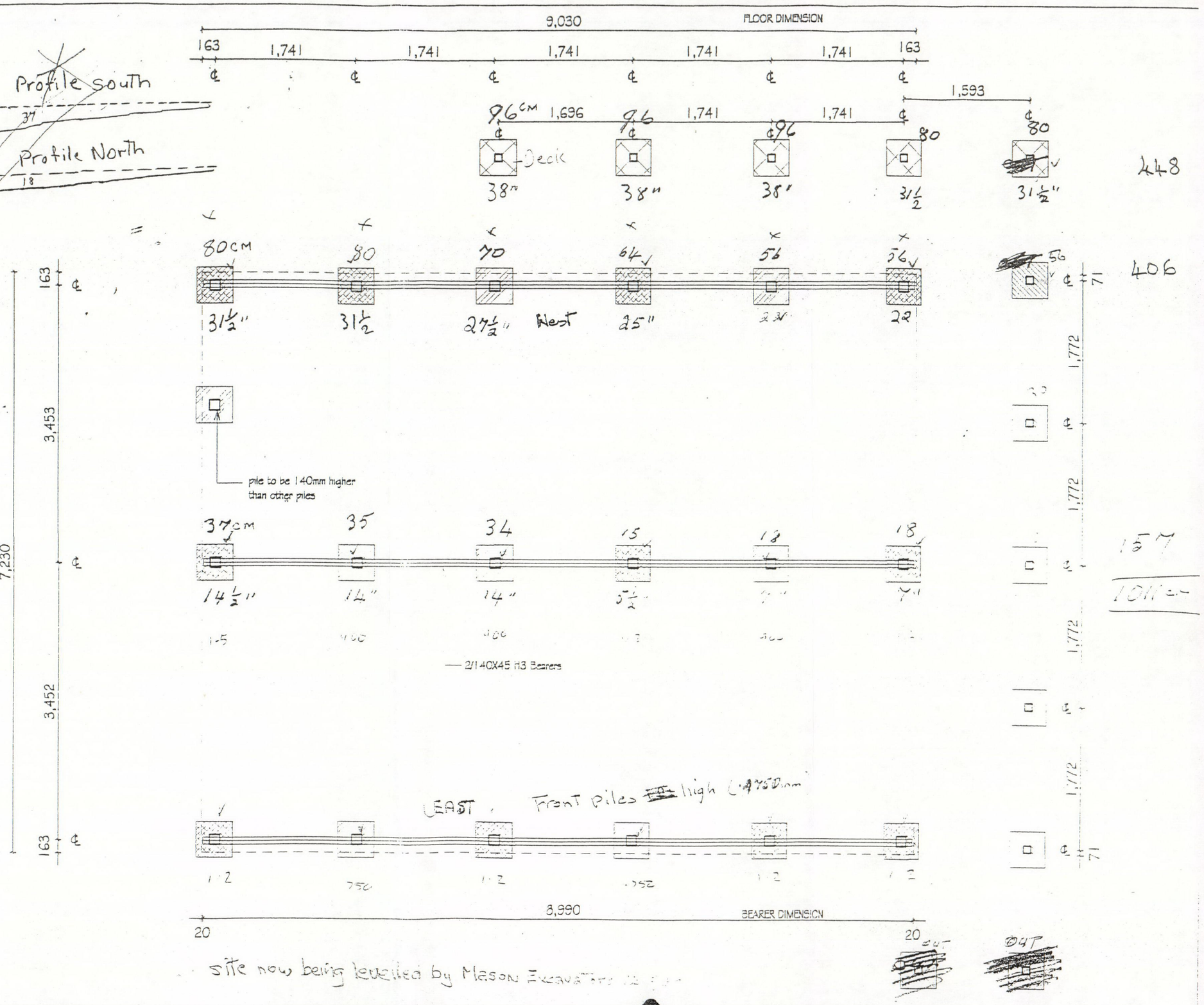
NOTES

1. Contractor to check all dimensions & conditions on site before commencing work
2. Work only to figured dimensions. In the event of a discrepancy, consult the Architect.
3. All construction to be to NZ building code & related documents including Local Authority by-laws & District Schemes

KEY

- ANCHOR PILES - 125x125 H5 timber, 900mm below G.L. with 100mm conc. foot in 450x450 conc. filled hole.
- ORDINARY PILES - 125x125 H5 timber, 450 below G.L. with 100mm conc. foot, in 450x450 conc. filled hole.
- VERANDAH POSTS - 100x100 H5 timber, 450 below G.L. with 100mm conc. foot, in 450x450 conc. filled hole.
- DECK PILES - 100x100 H5 timber 450 below G.L. with 200mm conc. foot, in 450x450 hole
  PILE HEIGHT - 95mm below F.F.L.





448

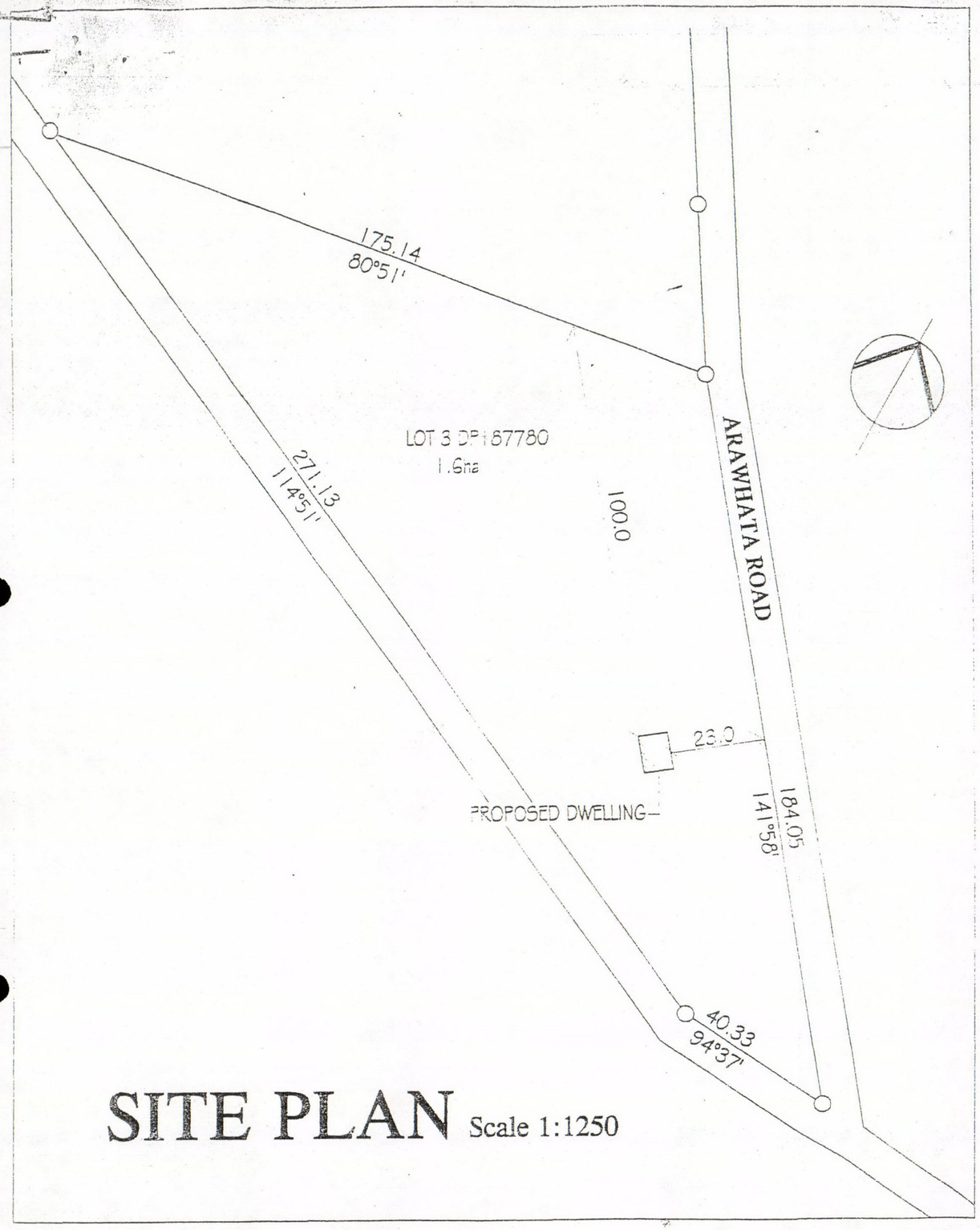
406

157

10mm

Proposed dwelling for **Stan Watson** KAINGAROA	PILE & BEARER PLAN	SCALE 1:50	TRISTYLE HOMES STATE HIGHWAY 10, PO BOX 241, AWANUI NEW ZEALAND

ISSUE DATE	21/7/00	No.	L05
REVISION No.	FINAL		
JOB No.	30 Wats	OF	10
DRAWN BY	Pauline		



SITE PLAN Scale 1:1250

APPROVED PIM/BC 20010229

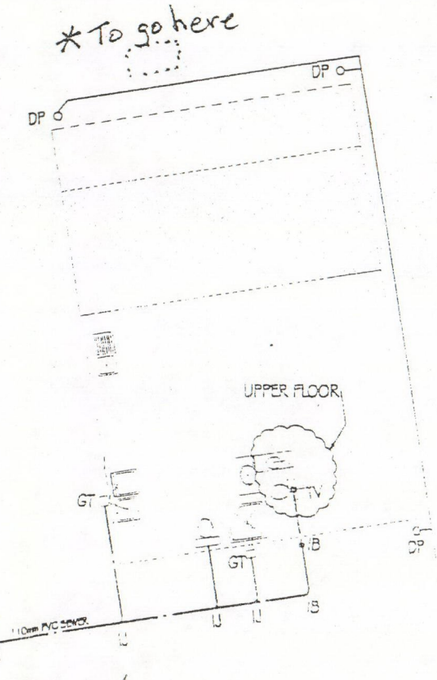
Date 6.9.00

Signed

FARNORTH DISTRICT COUNCIL

Far North District Council
NOTIFIABLE INSPECTIONS

Site Inspection		
Foundation Check Up	✓	
Slab	✓	
Bond Beam	✓	
Sub Floor	✓	
Framing		
Exterior (Rather Straps)		
Pre-line	✓	
Sheet Bracing	✓	
Other (specify)		
Final Inspection	✓	



SEPTIC TANK & FIELD DRAIN
TO LOCAL AUTHORITY SPECIFICATIONS

(9) Inspections

Far North District Council
NOTIFIABLE INSPECTIONS
Plumbing & Drainage

Pre-pour under slab P & D		
Pre-line Plumbing in wall	✓	
Sewer & Stormwater drains prior to back-filling trench	✓	Comb.
Septic Tank effluent disposal Trench	✓	
Other		

20,000 LITRE
WATER TANK

DRAINAGE PLAN Scale 1:200

Proposed dwelling for
Stan Watson
KAINGAROA

SITE PLAN

SCALE
AS SHOWN

TRISTYLE HOMES
STATE HIGHWAY 10, PO BOX 241, AWANUI
NEW ZEALAND

ISSUE DATE	21/7/00
REVISION No.	FINAL
JOB No.	30 Wats
DRAWN BY	Pauline

No. L00
OF 10

NOTES

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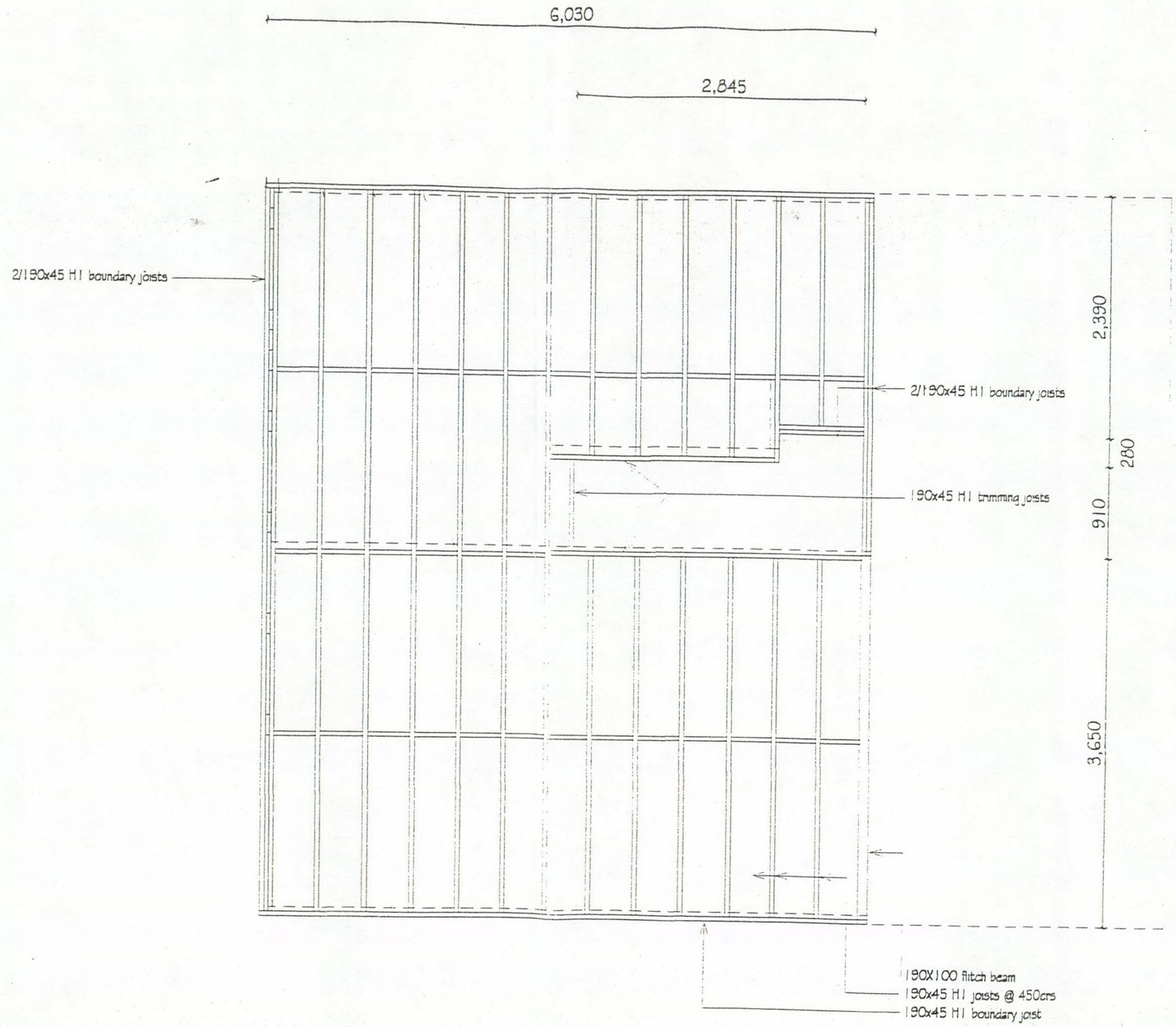

C
B D
A

Proposed dwelling for
Stan Watson
KAINGAROA

2F JOIST LAYOUT

SCALE 1:50

TRISTYLE HOMES
STATE HIGHWAY 10, PO BOX 241, AWANUI
NEW ZEALAND

ISSUE DATE	21/7/00
REVISION No.	FINAL
JOB No.	30 Wats
DRAWN BY	Pauline

No. L06.2
OF 10

NOTES

1. Contractor to check all dimensions & conditions on site before commencing work

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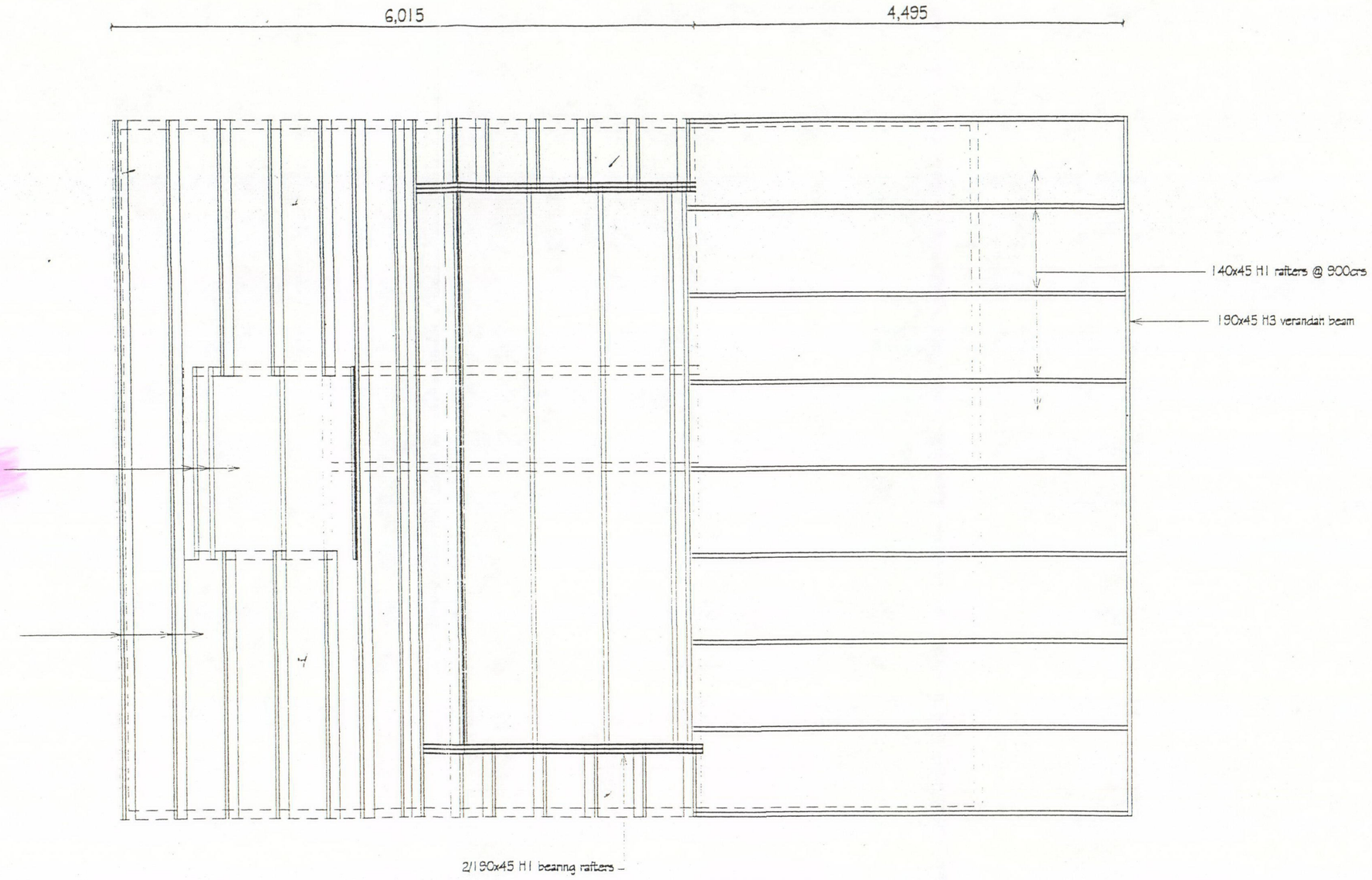


Proposed dwelling for
Stan Watson
KAINGAROA

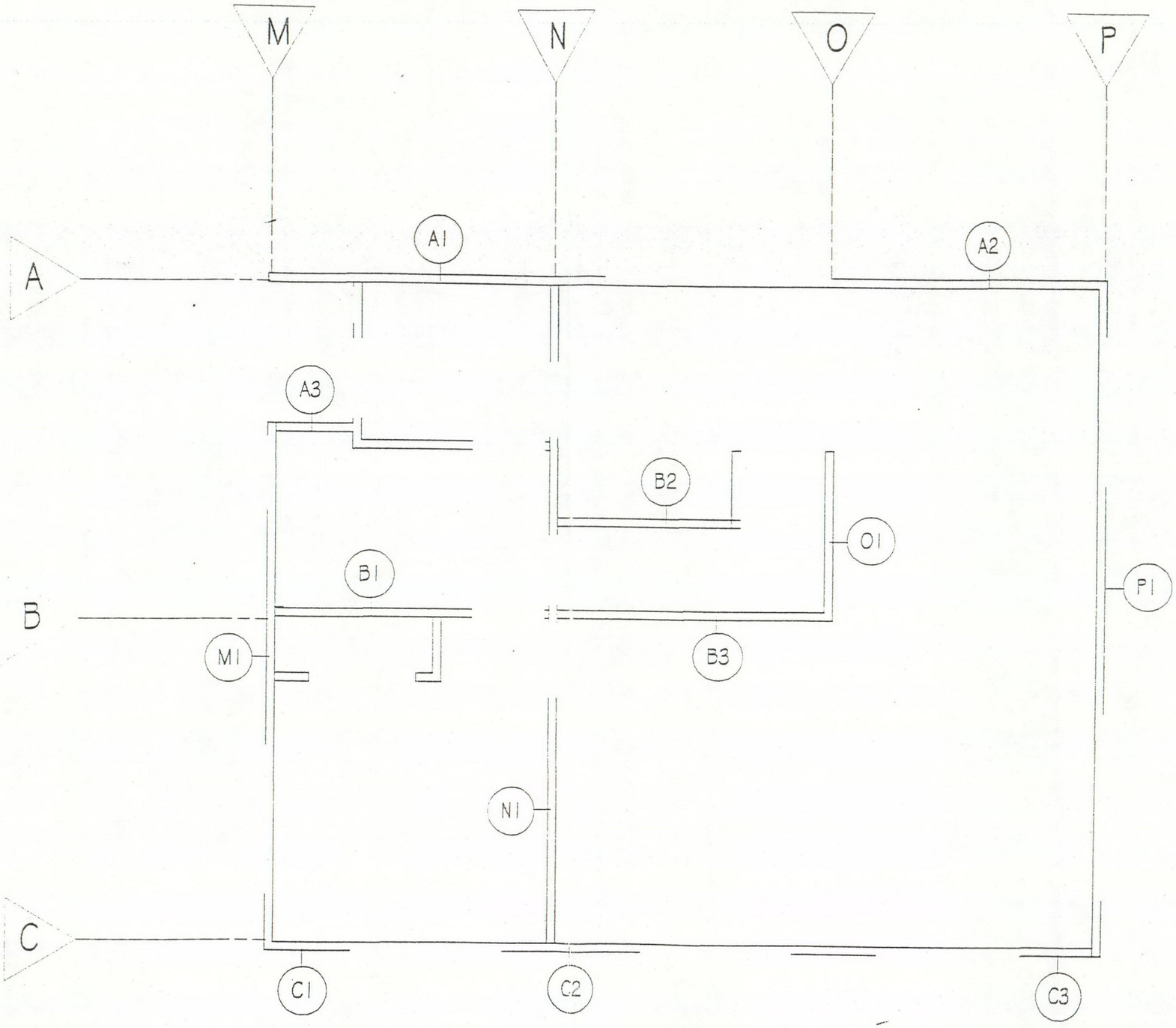
ROOF FRAME PLAN

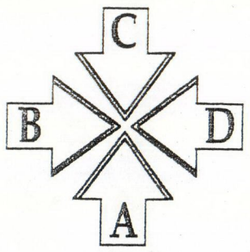
SCALE 1:50

TRISTYLE HOMES
STATE HIGHWAY 10, PO BOX 241, AWANUI
NEW ZEALAND

ISSUE DATE	21/7/00
REVISION No.	FINAL
JOB No.	30 Wats
DRAWN BY	Pauline

No. L07
OF 10





Proposed dwelling for

Stan Watson

KAINGAROA

WALL BRACE PLAN

SCALE 1:50

TRISTYLE HOMES

STATE HIGHWAY 10, PO BOX 241, AWANUI
NEW ZEALAND

ISSUE DATE	21/7/00
REVISION No.	FINAL
JOB No.	30 Wats
DRAWN BY	Pauline

No. L08

OF 10

POOLS (including spa pools)

	Check Yours	Ours
• Three copies of construction details or manufacturers design	☐	☐
• Details of pool filling, backflow prevention and backwash facilities (backwash to go to sewer via a gully trap)	☐	☐
• Three copies of pool fencing details	☐	☐

NOTE: It is now a requirement of the Building Act that a pool fence has a building consent

HEATER

	Check Yours	Ours
• One copy of manufacturers design and fitting instructions	☐	☐
• Details of wetback and name of craftsman plumber doing the job	☐	☐
• Name of appliance installer	☐	☐
• Three copies of all construction details ie floor strengthening or rafter replacement	☐	☐

CONTRACTORS

Builder:	STUART PEDERSEN	Telephone:	4061773.
Address:	130 STATE HIGHWAY 10 COOPERS BEACH.		
Designer:	TRISTYLE HOMES.	Telephone:	406749.
Address:	P.O BOX 241 KAWAKAWA		
Registered Drainlayer:	VERNON PLUMBING	Telephone:	4061733
Address:	99 CABLE BAY BLOCK RD COOPERS BEACH		
Registered Plumber:		Telephone:	
Address:	" "		
Registered Electrician:	KERRY PEDERSEN	Telephone:	4060996
Address:	9 MARION LANE		

Signed by or for and on behalf of the applicant:

Name: ANTONY PEDERSEN

Position (eg owner/builder): MANGONUI ITM SUPPLIER Date: 16.08.00

FOR COUNCIL USE

Date Received: _____ Deposit Fee: _____ Receipt No: _____

Under section 33 of the Building Act 1991 the applicant must be the owner of the land on which building work is contemplated or a person who or which has agreed in writing, whether conditionally or unconditionally, to purchase the land or any leasehold estate or interest in the land, or to take a lease of the land, while the agreement remains in force.

FAR NORTH DISTRICT COUNCIL

RECEIVED 18 AUG 2000 FAR NORTH DISTRICT COUNCIL

APPLICATION FORM BUILDING CONSENT AND PIM

BC Number 2001.0229

APPLICANT

NAME: STAN WATSON
MAILING ADDRESS: ARAWHATA ROAD
TELEPHONE: RD3 KAITAIA 094587564 FAX:

CONTACT PERSON: ANTONY PEDERSEN.
MAILING ADDRESS: P.O.BOX 86 MANGONUI ITM.
TELEPHONE: PH 4060048 FAX: 094060028

PROJECT

☑ New Building	Area 106.5 m²	Property Use (eg res/com/ind): RES.
☐ Relocated Building	Area ..... m²	
☐ Alts and Adds to Building	Area ..... m²	Description of Work: 3 HOUSE BEING BUILT.
☐ Demolition	Area ..... m²	
☐ Plumbing and Drainage Only	Area ..... m²	Intended life:
☐ Other (please specify)	Area ..... m²	☑ Indefinite but not less than 50 years
		☐ Specified as ..... years

ESTIMATED VALUE OF WORK (GST INCL)

Building $ 53.000 Plumbing and Drainage $ 7000 Total Value $ 60.000

PROJECT LOCATION

Street Address: ARAWHATA ROAD / KAHANGATOA / WHITE METTER BOX FIRST ON LEFT.
Legal Description (as shown on Certificate of Title): LOT 3 DP 187760
Area: 1.600Ha m²/ha
Valuation number: 00013-65114.

Requirements to be met for a Building Consent Application. All boxes are to be ticked by the applicant and verified by the technical clerk or building inspector at the time of lodgment. Applications not meeting these requirements may not be accepted.

THIS APPLICATION IS FOR

☐ Building consent only; in accordance with project information memorandum no .....
☑ Both building consent and project information memorandum

CHECK SHEET

APPLICATION

	Check Yours	Check Ours
• One copy of this application form	☑	☐
• One copy of any authorizations required by the Project Information Memorandum (PIM) which relates to this application. (This is if PIM has previously been applied for)	☐	☐

NOTE: Vehicle crossings and footpath damage
Is there a vehicle crossing required? If so please request a standard construction detail from the council officer
Is there footpath damage? If damage has occurred before site works start then notify the council officer (charges may be applicable if damage occurs)

NOTE: All applications for a consent will lapse after 60 days if
- the consent is not uplifted after approval; or
- further information requested is not supplied

SPECIFIC DESIGN (where applicable)

	Check Yours	Check Ours
• Three copies of engineering calculations and drawings and associated producer statements	☑	☐
• Three copies of engineer design effluent disposal system (TP58)	☑	☐
• Three copies of engineer calculations for thermal resistance when specific design is proposed	☑	☐
• Three copies of ground test details and reports	☐	☐

NOTE: Ground that does not have a ground bearing capacity of 100K.p.a. will require to the foundations to be specifically designed.

CONSTRUCTION

	Check Yours	Check Ours
• Three copies of subfloor bracing design and calculations. Detail all pile types and fixings and floor joist layout for each floor	☑	☐
• Three copies of wall bracing element details showing location, type, fixing details and bracing schedule	☑	☐
• Three copies of truss layout (include truss number and truss fixing details) or roof framing and strutting beam layout	☑	☐
• Three copies of all fire and egress details, full specification of fire wall construction, fire doors and windows etc	☑	☐

BUILDING CERTIFIER (where applicable)

	Check Yours	Check Ours
• One copy of plans and specifications and relevant certificates and calculations and producer statements	☑	☐
• One copy of information as to areas certified	☑	☐
• For building consent application supply copy of issued PIM and any relevant authorizations requested as a result of the PIM	☑	☐

SERVICES

	Check Yours	Check Ours
• Three copies of all plumbing and drainage details including acceptable solution to be used	☑	☐
• Three copies of electrical layout	☐	☐
• Three copies of all mechanical services details ie sprinkler systems, lifts, air conditioning systems etc. (A separate check list form for systems necessitating a compliance schedule on *non residential* building only is available from the building office	☐	☐
• Details of backflow prevention (for protection of potable water supply)	☐	☐

NOTE: One copy of as-built drainage plan will be required prior to issue of the Code Compliance Certificate

NOTE: Applications for vehicle crossing, drainage and water connection services should have been made with the application for a Project Information Memorandum

PLANS

	Check Yours	Check Ours
• Three copies of plans, elevations, cross section and details drawn to standard metric scales eg 1:100 and 1:50. Plans to be drawn in ink	☑	☐
• Three copies of relevant producer statement, building industry authority accreditation certificates, determinations or applications for waivers	☑	☐
• Three copies of the site plan, showing dimensions of proposed building from the boundaries of the site, including sewer and stormwater drainage. Plans must also show finished floor levels in relation to finished ground levels and location and uses of all existing buildings on site and any water bodies.	☑	☐
• Three copies of building specifications	☑	☐
• One copy of the Certificate of Title	☑	☐
• For rural sites, three copies of the locality plan	☑	☐

NOTE: Structural plan are not necessary for a PIM only application

48709
13/65114

WEATHERTIGHT SERVICES GROUP
Weathertight Homes Resolution Act 2006 - section 124.
Notifications to territorial authorities for land information memorandum purposes.
Data as at 30 April 2008

NOTES:
1. The first notification, prefix & application accepted should already have been provided to the territorial authority at the time of acceptance.

Territorial Authority	Far North District Council

Count of WHRS_Claim_Number

WHRS_Claim_Number	Dwelling_Address_As_Provided_by_the_Claimant	Claimant_Name	Title_Name	Certificate_of_Title_Identifier	Legal_Description	Prefix	Prefix + Application acceptec	Prefix + Application declined	Prefix + Claim decided eligible by the Chief Executive	Prefix + Claim decided ineligible by the Chief Executive	Prefix + Closed claim-no review	Prefix + Claim decided ineligible following review	Prefix + Claim decided eligible after review	Prefix + Claim terminated under section 52 (wrongly brought multi claim)	Prefix + Claim terminated under section 56 (not pursued claim)	Prefix + Termination under section 55	Prefix + Settlement 02	Prefix + Settlement LVC Neg	Prefix + Settlement LVC Med	Prefix + Settlement Trib Med	Prefix + Closure of claim	Prefix + Closure of claim on reques	Total
03597	Arawhata Road, RD 3, Kaingaroa Kaitaia	Stanley Roy Watson & Caroline Wynne Watson	Stanley Roy Watson, Caroline Wynne Watson	NA117C/702		The Department of Building and Housing has provided the following information under section 124(1) of the WHRS Act 2006 regarding a claim relating to this property:														DBH case number 03597. The claimant has settled the claim with some or all of the parties under section 85 of the WHRS Act 2006. The details of the settlement are confidential. A settlement does not necessarily mean the property has been repaired.			1
05656	234 Wharau Rd, Kerikeri, Northland	Phillip John Tisdall & Lindsay Barbara Tisdall	Phillip John Tisdall, Lindsay Barbara Tisdall	NA137A/188	Lot 2 deposited plan 208840	The Department of Building and Housing has provided the following information under section 124(1) of the WHRS Act 2006 regarding a claim relating to this property:	DBH case number 05656. An application for an assessor's report was accepted on 11/04/2008																1
Grand Total																							2

15858.
221/03102.

HAZCO