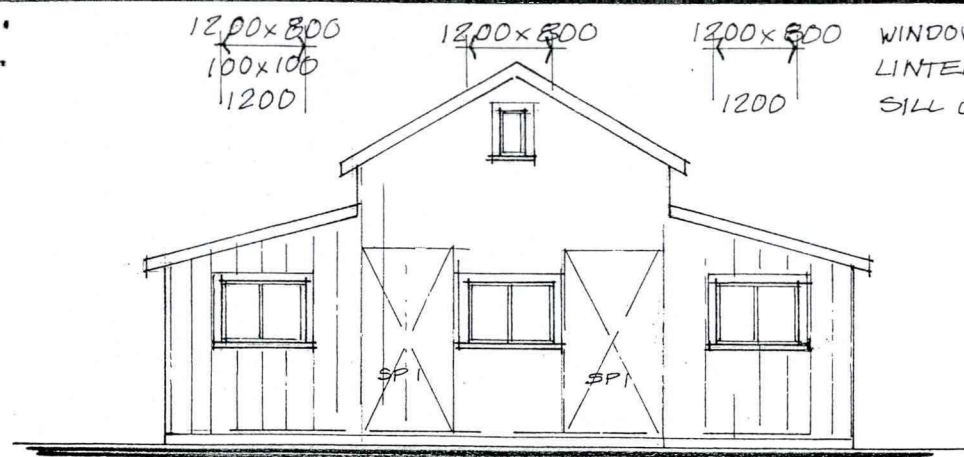
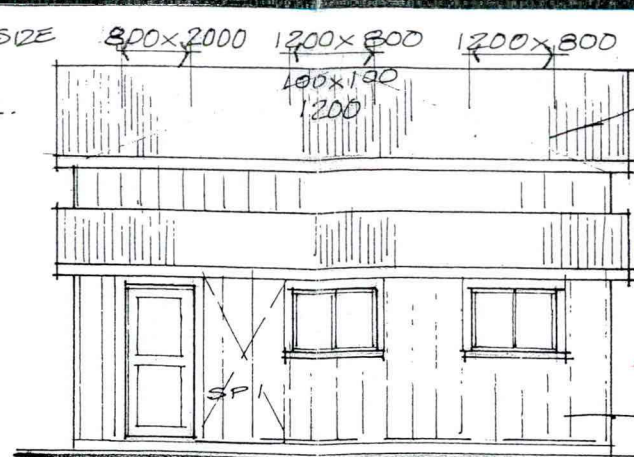
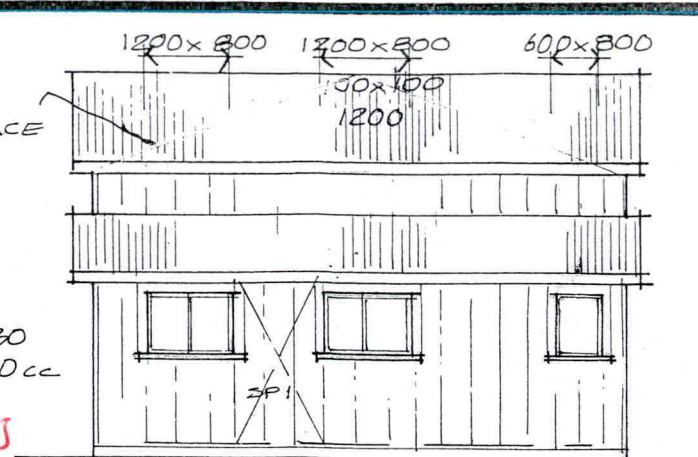




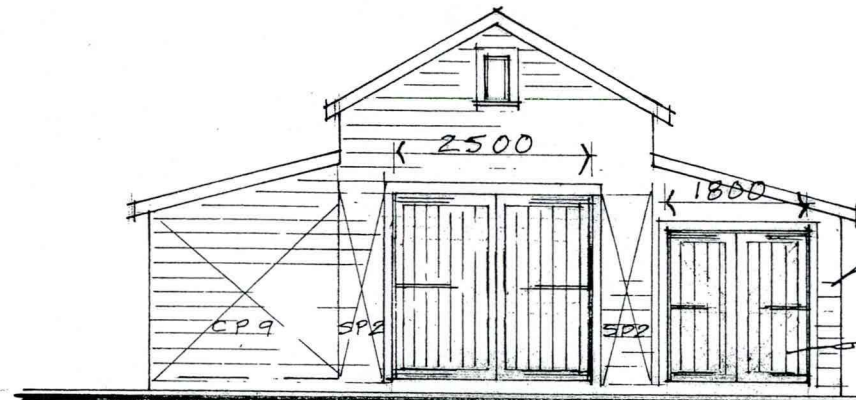
S ELEVATION



E ELEVATION



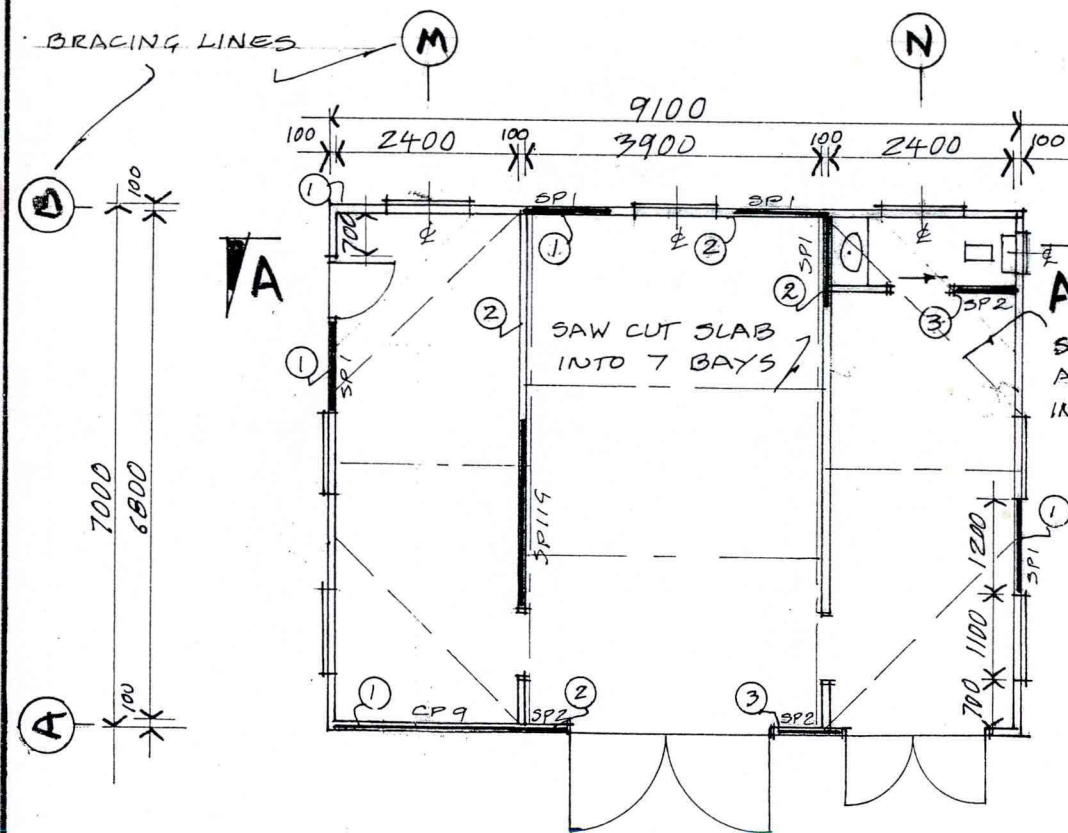
W ELEVATION



N ELEVATION

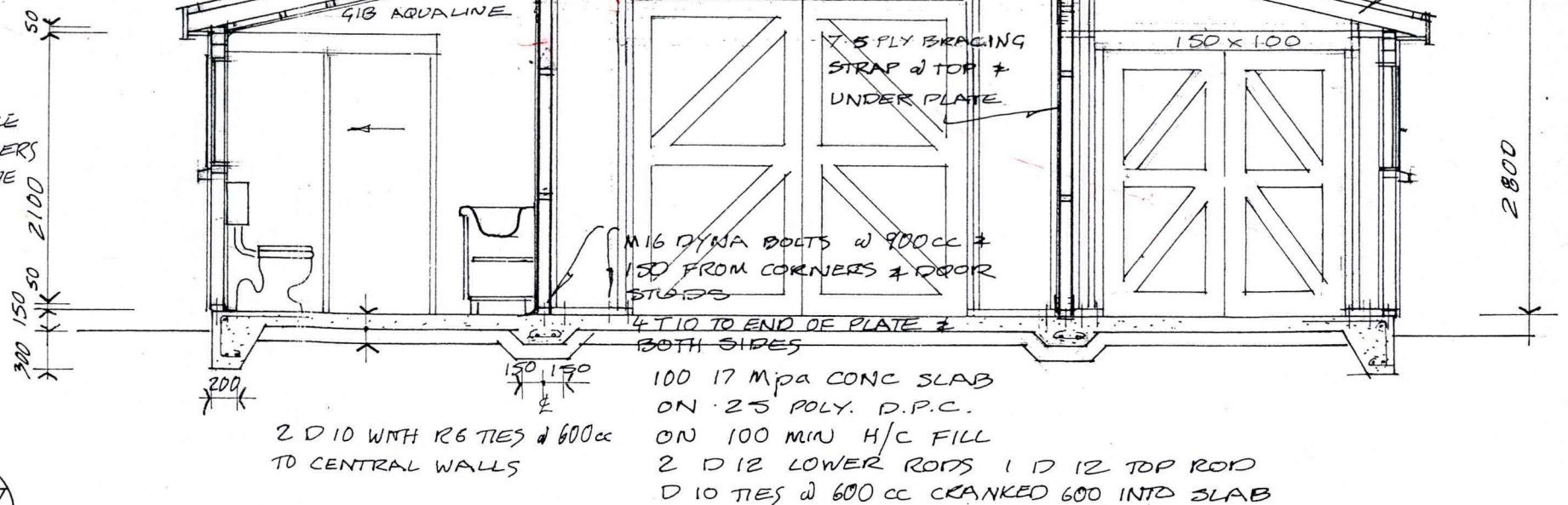
H3 180x25 ROUGH SAWN W/B CLADDING ON B/P ON 100x50 FRAMING @ 600cc TO NORTH ELEVATION
7.5 PLY & 40x25 H3 BATTENS @ ± 400cc TO E.W. & S. ELEVATIONS
TIMBER JOINERY
H3 C GRADE PLY LINING
ALL BRACING SHEETS TO STRAPPED TOP & BOTTOM

ROOF: 30° PITCH
LONGRDN COLOUR ST ON REINFORCED BUILDING FOIL ON 75x50 FURLINS ON FLAT @ 1800cc MAX
2 100x3.75 SKEWED NAILS PLUS Z NAIL FIXING
R11 GANGNAIL TRUSSES @ 1200 cc MAX. 2 100x3.75 SKEWED NAILS PLUS Z NAIL FIXING.



PLAN 1:100

Framing spec is H3.



SECTION A-A 1:50

Waitaki District Council

These plans approved for construction and must be kept on site. Boundary must be defined prior to building commencing.

PROPOSED SHED FOR LOT 4 AWAMOA ROAD WAITAKI.
J.S. PURDON DESIGN · B Arch · 138 Ngarongo Rd · RD 13 · Hawera · Ph: 06-2728128 · Nov 04 · Drg: 369/W1

**SPECIFICATION FOR THE CONSTRUCTION OF A SHED FOR MR AND MRS E.
BADCOCK, AT LOT 4, AWAMOA ROAD, WAITAKI**

This is a contract between the Owner as the contractor and the sub-contractors.

All dimensions must be checked before commencing.

All work to conform to the Building Act 1991 NZS 1900 and amendments
NZS 3109 Concrete Construction and related documents.

Excavate top soil from the building area and place where instructed. Level and consolidate to take min of 100 mm of clean graded hardcore fill. Leave smooth to take .25 poly. d.p.c. membrane.

Excavate for foundations as shown.

Pour slab and foundations with 17 Mpa conc and saw cut into 7 bays within 36 hours of pouring, keep damp for 7 days.

Construct framework as shown with

100 x 50 H3 no 1 dressed pine, wall plates fixed with ~~M16~~ *M12 tra bolts or similar* Dyna bolts at 900cc

H3 dressed lintels as shown fixed with 4T10 nailplates

125 x 50 rafters at 1200 cc max.

75 x 50 purlins at 1000 cc max

~~R11~~ Gangnail trusses at 1200 cc max

*as designed 0.5 kpa snow
high wind.*

Brace where shown 7.5 ply fixed to manuf. spec.

External cladding 7.5 construction ply with 40 x 25 battens at 300 cc

Timber joinery and board and batten doors

Longrun colour steel roofing on h/d roofing foil.

PVC guttering and downpipes to soak holes.

Registered electrician to fix in lighting and
connect to house power system.

Plumber to fix in toilet and basin and drain to gulley trap with 40 diam. PVC pipe.

100 Diam PVC waste pipe with 75 Diam vent pipe, to connect to house sewer system.

All bends to be fitted with inspection eyes.

Job Details

box 1

Name E. Badcock

Street and Number Awamoa Rd.,

Lot and DP Number Lot 4 DP 321410

City/Town/District Waitaki

Location of Storey: _____ single/upper of two/lower of two Floor load: 2kPa/3kPa

Building height to apex 5 m Roof weight light/heavy

Roof height above eaves 1.5 m Cladding weights: _____

Stud height 2.8 m Subfloor light/medium/heavy

Average roof pitch 2 2 1/2 Lower Storey light/medium/heavy

Upper Storey light/medium/heavy

Room in Roof Space Yes / No

Building length BL = 7 m Gross Building

Building width BW = 9.1 m Plan Area, GPA = 63.7 m²

Note: When the average roof pitch is over 25 degrees, use the eaves length and width to determine BL and BW.

Note: For heavy roofs use the roof plan at eaves level to determine GPA.

Wind Zone

box 2

Region: _____ Terrain: _____ Exposure: _____ Topography: _____

R1 0 ☒ Inland 0 _____ Sheltered 0 _____ Gentle 0 ☒

R2 1 _____ Coastal 1 ☒ Exposed 1 ☒ Moderate 1 _____

Extreme 3 _____

Total points _____

Wind Zone: _____ Low (0) _____ Very high (3)

_____ Medium (1) _____ Specific Design (4)

☒ High (2)

Earthquake Zone

box 3

From figure EQ1 select Earthquake Zone: A B C

BUs required Wind

box 4

From Table W1A/W1B

W along = 57 BUs/m

W across = 40 BUs/m

Total wind load,

W ALONG:

W along x BW = 57 x 9.1 BUs 519

W ACROSS

W across x BL = 40 x 7 BUs 280

BUs required Earthquake

box 5

From Table EQ1/EQ2/EQ3/EQ4/EQ5/EQ6

E = 7.1 BUs/m²

Note: For a room in the roof space use E - 3

Total earthquake load,

EQ ALONG and EQ ACROSS

E x GPA BUs = 7.1 x 63.7 = 453 BUs

Along

Wall or Bracing Line		Bracing Elements Provided			Wind		Earthquake	
1	2	3	4	5	6 W	7 W	6 E	7 E
Line Label	Minimum BUs Required	Bracing Element No.	Bracing Type	Length Element (m) L	Rating BU/m	BUs Achieved (BU/m x L) W	Rating BU/m E	BUs Achieved (BU/m x L) E
A	70	1	CP 9	2.4	110	264	95	228
		2	SP 2	.6	$.86 \times 8.5 = 73$	44	69	41
		3	SP 2	.6	$.86 \times 8.5 = 73$	44	69	41
B	70							
C		1	SP 4	1.2	$.86 \times 100 = 86$	103	86	103
		2	SP 1	1.2	" " "	103	86	103
		3	SP 2	.8	85	51	51	41
D								
E								

Totals Achieved		W	609	E	557
From Sheet A Totals Required		W	519	E	453
Wreq/Ereq =					

* If Wreq/Ereq is 1 or less complete E column only
 If Wreq/Ereq is 1.5 or more complete W column only
 Otherwise complete both W and E

Across

Wall or Bracing Line		Bracing Elements Provided			Wind		Earthquake	
1	2	3	4	5	6 W	7 W	6 E	7 E
Line Label	Minimum BUs Required	Bracing Element No.	Bracing Type	Length Element (m) L	Rating BU/m	BUs Achieved (BU/m x L) W	Rating BU/m E	BUs Achieved (BU/m x L) E
M	91	1	SP 1	1.2	100	120	100	120
		2	SP 11 G	2.4	$.86 \times 140 = 120$	288	103	247
N	91	1	SP 1	1.2	100	120	100	120
		2	SP 1	1.2	86	103	86	103
O								
P								
Q								

Totals Achieved		W	631	E	590
From Sheet A Totals Required		W	280	E	453
Wreq/Ereq =					

end stud fixing details

Figure 1

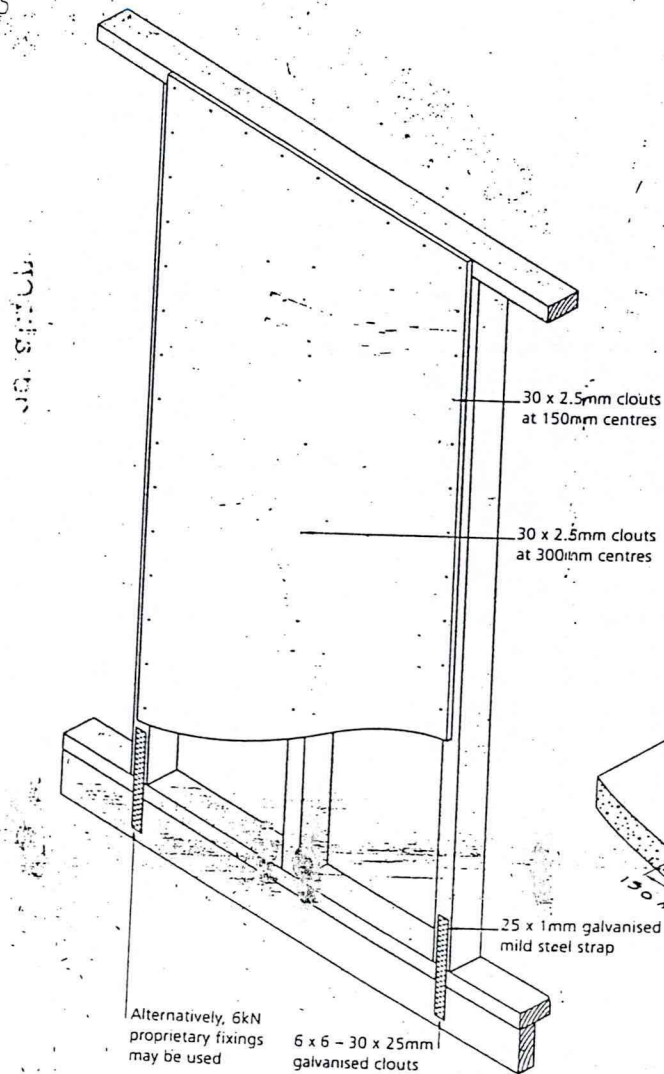
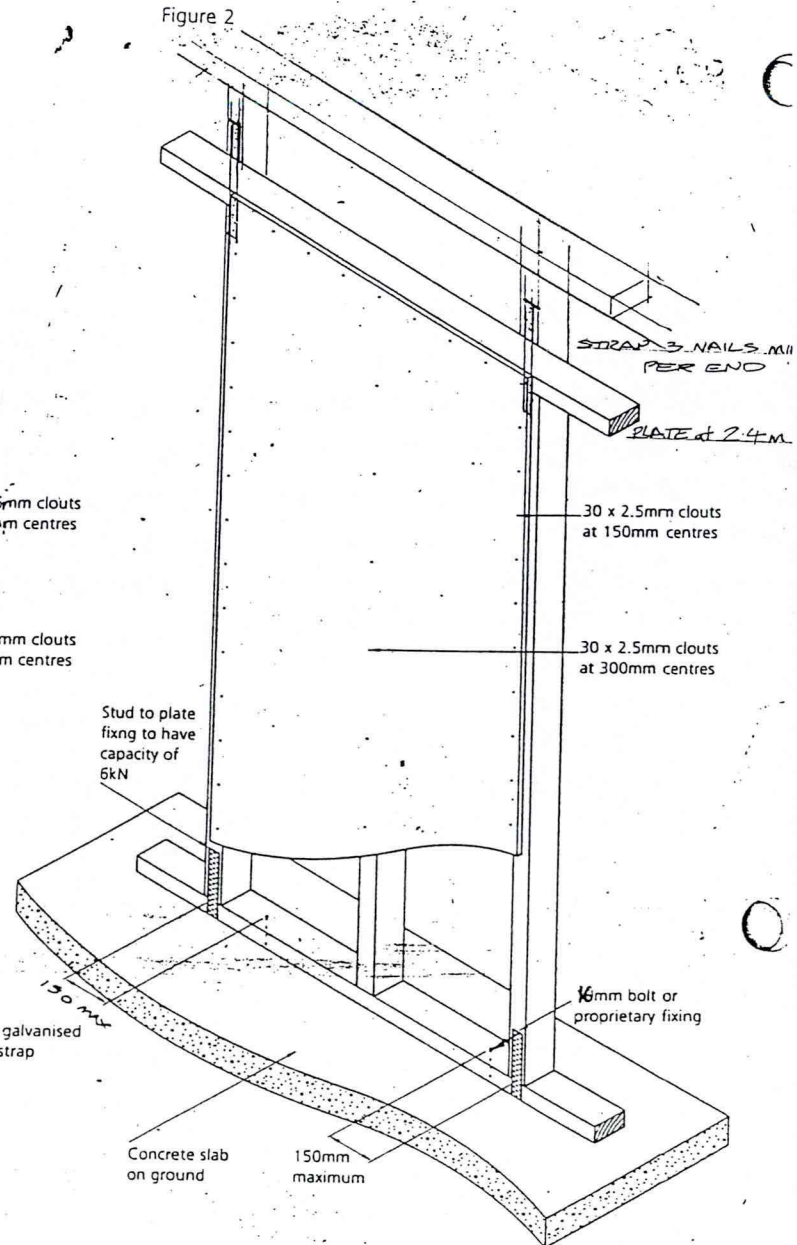
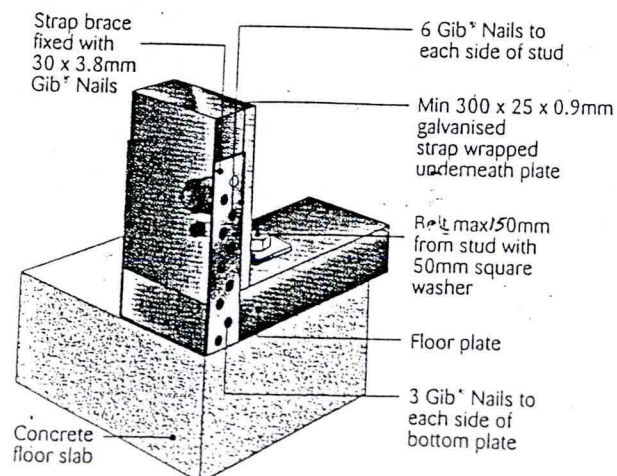
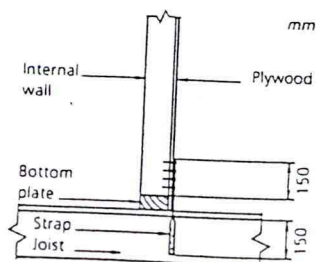


Figure 2



12kN connection

Figure 5



design and construction

Bracing Performance

- If the building is constructed in accordance with NZS 3604: 1990 then the bracing ratings will be as shown as in Table 2. The bracing ratings are based on wall heights of 2.4m. For heights other than 2.4m, the bracing ratings are multiplied by 2.4 and divided by the height of the wall in metres. Walls that measure less than 1.8m in height should be assumed to be 1.8m in height.
- The minimum grade plywood required for bracing applications is 7mm DD. Usually the product is untreated, however treated and / or higher grades can be substituted for the untreated DD grade.

Table 2
HT-Ply Structural
Wall Bracing Systems

Type	Primary bracing element	NZS 3604: 1990 ratings in bracing units per metre of element length	
		Wind	Earthquake
SP2	7mm HT-Ply Structural on one face. Length 0.6 – 0.9m.	85	85
SP2G	7mm HT-Ply Structural on one face with 9.5mm standard Gib® plasterboard on the other. Length 0.6 – 0.9m.	95	95
SP1	7mm HT-Ply Structural on one face. Length 0.9 – 1.8m	100	100
SP1G	7mm HT-Ply Structural on one face with 9.5mm standard Gib® plasterboard on the other. Length 0.9 – 2.4m.	100	100
BR7	7mm HT-Ply Structural on one face with Gib® Braceline on the other. Length 0.9 – 2.4m.	145	145
CP9	7mm HT-Ply Structural on one face. Length 1.8 – 3.6m	110	95
SP1.1G	7mm HT-Ply Structural on one face with standard Gib® on the other. Length 1.8 – 3.6m	140	120

Framing

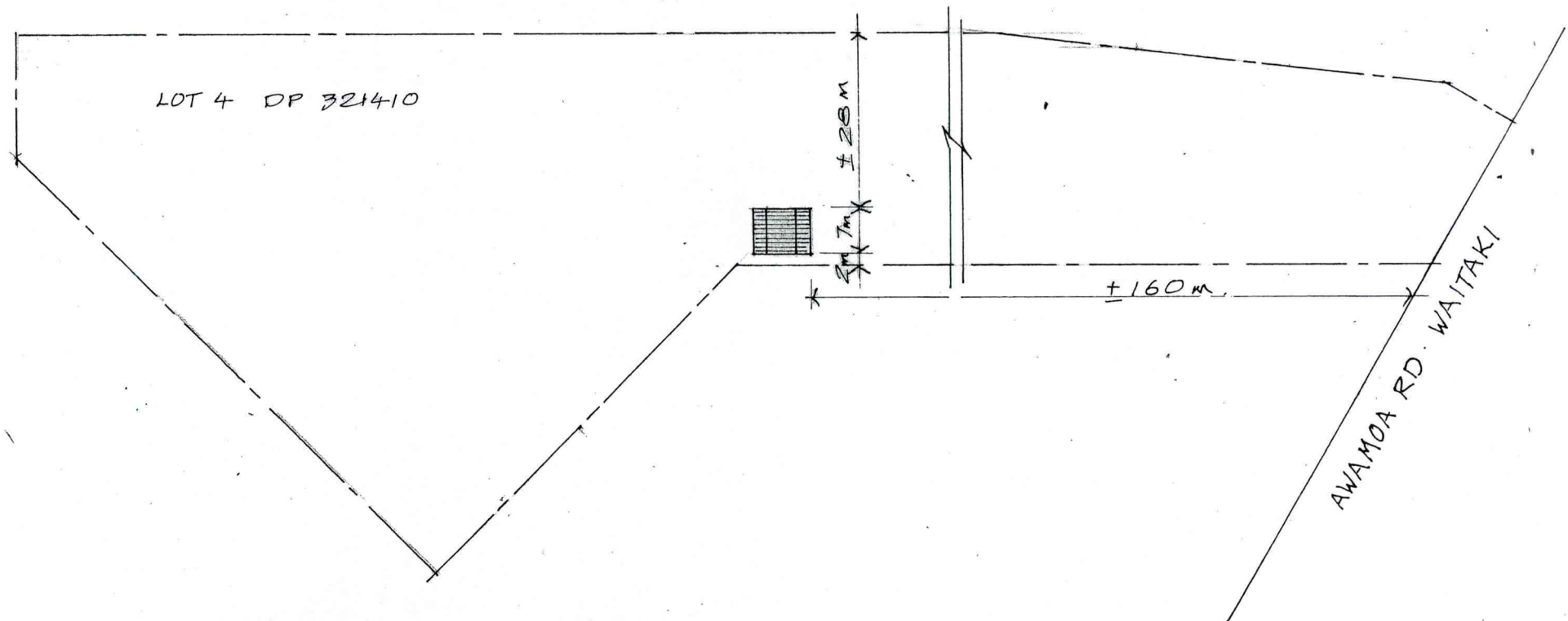
- All sheet edges must be on timber framing.
- Use extra studs near openings.
- Nogging or plates must be used at top and bottom edges of panel.
- Where cladding or lining materials are going to be fixed over the plywood bracing, the timber framing may be rebated to accommodate the plywood.
- The spacings shown in Table 3 are for general use suited specifically to house and office requirements. For higher impact environments, thicker plywood or closer spacings should be used.
- Add 1 to 2mm to stud spacings for square edge sheets. This is to allow for sheet swelling of between 2 and 3mm.

Table 3
Recommended maximum stud spacings
for cladding / lining mm

Plywood thickness mm	Frame spacing when sheets are fixed in residential or office buildings	
	Along framing	Across framing
7	240	480
9	400	600
12	600	900
15	750	1050
17	900	1200
21	1200	1200

Along framing is when sheets are applied vertically to studs.
Across framing is when applied horizontally to studs.

- 45mm wide studs are easier to fix the profiled edges of Plyclad and Plyline to than 35mm.
- Excessively warped timber should be rejected. The extent of warping can be determined by sighting along the length of timber.
- Minor bows in the studs should be placed in the same direction to give a consistent nailing surface.



SITE DIAGRAM 1:1000

PROPOSED SHED FOR LOT 4. AWAMOA RD. WAITAKI.

JS PURDON DESIGN. B Arch. 138 Ngarongo Rd. RD 13. Hawera. Ph: 06.2728128 Nov 04 Drg 369/WZ

LOT 1
DP 16377
1.2847

LOT 2
DP 20379
1.6577

LOT 1
DP 321410
1.1185

LOT 4
DP 321410
1.3130

Badcock

Pt LOT 1
DP 3042
DCDB Document Id: CT 196/1
(0.5868)

LOT 2
DP 321410
1.3115

May

LOT 1
DP 23244
2.3137

LOT 1
DP 24955
0.5318

Pt LOT 2
DP 23244
1.4684

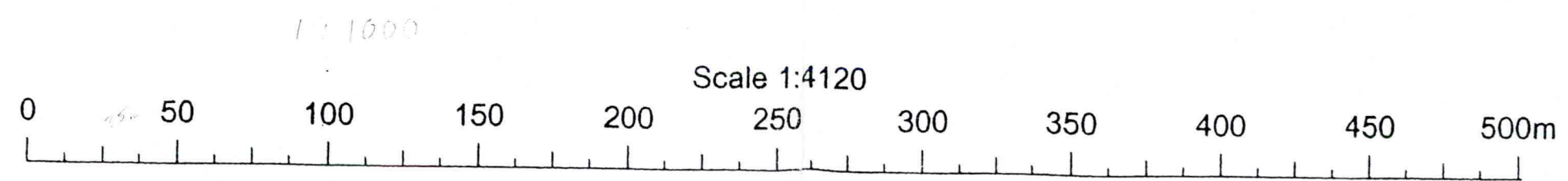
LOT 5
DP 321410
19.6450

LOT 3
DP 321410
8.0625

AWAMOA ROAD

Pt Sec 36 Blk IV
Oamaru SURVEY DISTRICT
(DP 3910, SO 1308)
(4.5249)

Pt Sec 25R Blk IV
Oamaru SURVEY DISTRICT
(DP 3910, SO 1308)



AWAMOA ROAD (WAITAKI DISTRICT)