

PLAN No. 6775

PLUMBING INSPECTORS RECORD

Street Ruachine St
 House No. 15 Val No. 6673/645/00
 Lot No. 3 D.P. 18720
 Permit No. 20103 16-12-88
 Type of Work Plumbing
 Publicity Print New dwg \$41,890

Owner M. Broomhall
 Address _____
 Phone _____
 Plumber/Drainlayer Plumbing Services
 Address Box 6055
Tga Phone 64-139

PRELIMINARY NOTICE	FORMAL NOTICE	FIRST REMINDER	SECOND REMINDER	CONNECTION FEE	PLUMBING FEE	
9/15 IF	14.2.89.	P/L.	no w/param.	waste pipes	on insulation on all	11/15 service as yet.
11/20 IF	2/2/89	Final	(front unit)	ok.		

Progress

Date

INSPECTOR.....

DATE CERTIFIED AS COMPLETE.....

PLAN No. 6775

PLUMBING INSPECTORS RECORD

Street Ruahine St
House No. 15 Val No. 6673/645/00
Lot No. 3 D.P. 18720
Permit No. 20104 16-12-88
Type of Work Drainage
Publicity Print New dwg \$41,890

Owner M. Broomhall
Address
Phone
Plumber/Drainlayer M. Loveridge
Address 101 Sutherland Rd
Tga Phone 66-042

PRELIMINARY
NOTICE

☒ FORMAL
NOTICE

FIRST
REMINDER

SECOND
REMINDER

CONNECTION
FEE

PLUMBING
FEE

~~8/15~~
8/15
23/2/89
New

Progress

Date

INSPECTOR.....

DATE CERTIFIED AS COMPLETE

Inspector: M _____

File No. _____

Receipt No. 244272/37650

Date Permit Issued 16 / 12 / 88

OWNER

Name M. Broomhall

Mailing Address 14 Kiteroa st

Tauranga

BUILDER

Name Hunts Family Homes

Mailing Address P.O. Box 2360

Tauranga

PROPERTY ON WHICH BUILDING IS TO BE ERECTED/DEMOLISHED

SITE

Street No. 15B

Street Name Ruahine street

Town/District Blairini

Riding Tauranga

LEGAL DESCRIPTION

Valuation Roll No. 6673/645/00

Lot 3 D.P. 18720

Section 787m2 Block

Survey District

DESCRIPTION OF PROPOSED WORK AND MAIN PURPOSE OF USE

Erect New Dwelling

FLOOR AREA

DWELLING UNITS

Whole
Sq. Metres

75

Number
ErectedESTIMATED
VALUES
\$

Building	38 540
Plumbing	2 800
Drainage	1 050
G.S.T.	
TOTAL	42 390

NATURE OF PERMIT (TICK BOX)

- ☒ NEW BUILDING
- exclude domestic garages and domestic outbuildings
- ☐ FOUNDATIONS ONLY
- ☐ ALTERED, REPAIRED, EXTENDED, CONVERTED, RESITED
- include installation of heating appliances
- ☐ NEW CONSTRUCTION
OTHER THAN BUILDINGS - include demolitions
- ☐ DOMESTIC GARAGES
AND DOMESTIC OUTBUILDINGS

FEES APPLICABLE

Building Permit	\$	Water Connection	\$
Street Damage Deposit ..	\$		\$
Building Research Levy ..	\$		\$
Plumbing	\$		\$
Drainage	\$		\$
Sewer Connection	\$		\$
Vehicle Crossing Levy ..	\$		\$
M.S. Plumbing	\$		\$
		G.S.T.	
		TOTAL:	

Receipt No. 244272

Date of Payment 15 / 12 / 88

Authorised Officer R Brown

Special Conditions: _____

COMPLY WITH THE
ENDORSEMENTS ON
THE APPROVED PLAN.

Date Inspected

REMARKS (e.g. stage reached with work)

23.1-88

Steps OK

10-2-88

Recline. As per plan OK.

12-6-88

Final insp: all complete; owner confirms insulation

(CONTINUED OVER)

Date Inspected

in ceilings.

COMPLETED (Signature)

MS Montoya

Date

20 / 6 / 79

To the SEWERAGE OVERSEER:

Please connect applicant as set out.

CITY ENGINEER

APPLICATION FOR SEWER SERVICE

B/F 6775
No 14581



Fee Payable Conn. \$119-90 PSR \$ -
Receipt No. 244272
Date of Receipt 16-12-88

Date connected 24/1/89
Foremans Signature [Signature]
A/c opened No.

Erect New Dwelling

To the TAURANGA CITY COUNCIL

(Owner of Land) I, M. Broomhall
hereby apply for a sewer service to be laid on from the City system to the premises (as indicated on the sketch plan below) situated at (suburb) Hairini
House No. 15B Ruahine st Avenue Street Tauranga
which is described as Lot No. 3 Road D.P.S. 18720
(Name of subdivider to be given where subdivision is new)
Valuation No. 6673/645/00

The total area of the property above referred to is 787 Ha/M2
and this connection is to apply to the undermentioned.

Dwelling
1
IWC
M. M. Doveridge is the Licensed Drainlayer who will be employed by me.
Signed [Signature] Person to be charged for services to be supplied or his authorised Agent.

Connection Approved R. Brown for City Engineer
Date of Application 16-12-88

SKETCH PLAN — Within the City

TAURANGA CITY COUNCIL

20103

PERMIT FOR SANITARY PLUMBING OR DRAINAGE WORK

Mr Plumbing Services Ltd Plumber
Address P.O. Box 6055 Drainlayer
Brookfield, Tga.

PLAN No. 6775
RECEIPT No. 244272
APPLICATION No. _____
BUILDING PERMIT No. F065121
RATING AREA No. _____

IS HEREBY AUTHORISED TO CARRY OUT WORK DESCRIBED HEREIN AS SET FORTH IN THE PLANS DEPOSITED WITH ME IN THE PREMISES:—

OWNED BY: M. Broomhall

OCCUPIED BY: _____

AND SITUATED IN HOUSE No.: 15 Rushine st

Street
Road
Avenue

DESCRIBED AS LOT No.: 3 D.P. 18720

SPECIFICATION OF SANITARY PLUMBING TO BE CARRIED OUT:

	W.C.'s	BATHS	SHWRS	BASINS	SINKS	TUBS	WASHING MACHINES	URINALS	OTHER SANITARY FITTINGS	HOSE TAPS	HOT & COLD WATER SERVICES
INSTALL	<u>1</u>	<u>1</u>	<u>—</u>	<u>1</u>	<u>1</u>	<u>1</u>				<u>2</u>	<u>1</u>
RENEW											
SHIFT											

together with all necessary wastes, soil-pipes and vent pipes.

SPECIFICATION OF SANITARY DRAINAGE WORK TO BE CARRIED OUT:

Cross out whichever is not applicable.

- Construct new drain together with septic tank and effluent disposal system.
- Construct new drain and connect to sewer or other approved outfall.
- Construct Stormwater Drains.
- Repair Drain.
- Extend Drain.

The work is to be carried out in strict accordance with the Drainage and Plumbing Regulations 1978 and shall be completed on or before

16-5-89

VALUES

FEE

PLUMBING:-	Contract Price	\$ <u>2800</u>	Labour Value	\$ <u>1100</u>	\$ <u>116</u>
DRAINAGE:-	Contract Price	\$ _____	Labour Value	\$ _____	\$ _____
TOTALS:		\$ <u>2800</u>		\$ <u>1100</u>	\$ <u>116</u>

Dated this _____ day of _____ 19 _____

PLUMBER SIGNATURES: _____
DRAINLAYER

This Copy to be returned to C/D/I

R. Brown 16-5-88
for CITY ENGINEER

NOTICE OF COMPLETION OF WORK

I hereby give notice that I have completed at the above premises the sanitary plumbing (or drainage work) and hereby request that the work be inspected.

Dated _____

Signature M. J. M. Jones

I hereby certify that the work has been examined and found satisfactory.

Dated _____

Inspector [Signature]

TAURANGA CITY COUNCIL

20104

PERMIT FOR SANITARY PLUMBING OR DRAINAGE WORK

Mr Milton Loveridge ~~Plumber~~
Address 101 Sutherland rd Drainlayer
Tauranga

PLAN No. 6775
RECEIPT No. 244272
APPLICATION No.
BUILDING PERMIT No. F065121
RATING AREA No.

IS HEREBY AUTHORISED TO CARRY OUT WORK DESCRIBED HEREIN AS SET FORTH IN THE PLANS DEPOSITED WITH ME IN THE PREMISES:—

OWNED BY: M. Broomhall

OCCUPIED BY:

AND SITUATED IN HOUSE No.: 15B Ruahine st

Street
Road
Avenue

DESCRIBED AS LOT No.: 3 D.P. 18720

SPECIFICATION OF SANITARY PLUMBING TO BE CARRIED OUT:

	W.C.'s	BATHS	SHWRS	BASINS	SINKS	TUBS	WASHING MACHINES	URINALS	OTHER SANITARY FITTINGS	HOSE TAPS	HOT & COLD WATER SERVICES
INSTALL											
RENEW											
SHIFT											

together with all necessary wastes, soil-pipes and vent pipes.

SPECIFICATION OF SANITARY DRAINAGE WORK TO BE CARRIED OUT :

Cross out whichever is not applicable.

- ~~1. Construct new drain together with septic tank and effluent disposal system.~~
2. Construct new drain and connect to sewer or other approved outfall.
3. Construct Stormwater Drains.
- ~~4. Repair Drain.~~
- ~~5. Extend Drain.~~

The work is to be carried out in strict accordance with the Drainage and Plumbing Regulations 1978 and shall be completed on or before

16-5-89

VALUES

FEE

PLUMBING:-	Contract Price	\$	Labour Value	\$	\$
DRAINAGE:	Contract Price	\$ <u>1050</u>	Labour Value	\$ <u>350</u>	\$ <u>76</u>
TOTALS:		\$ <u>1050</u>		\$ <u>350</u>	\$ <u>76</u>

Dated this.....day of19.....

PLUMBER SIGNATURES:.....
DRAINLAYER

R Brown 16-12-88
for CITY ENGINEER

This Copy to be returned to C/D/I

NOTICE OF COMPLETION OF WORK

I hereby give notice that I have completed at the above premises the sanitary plumbing (or drainage work) and hereby request that the work be inspected.

Dated

Signature M. W. Loveridge

I hereby certify that the work has been examined and found satisfactory.

Dated

Inspector

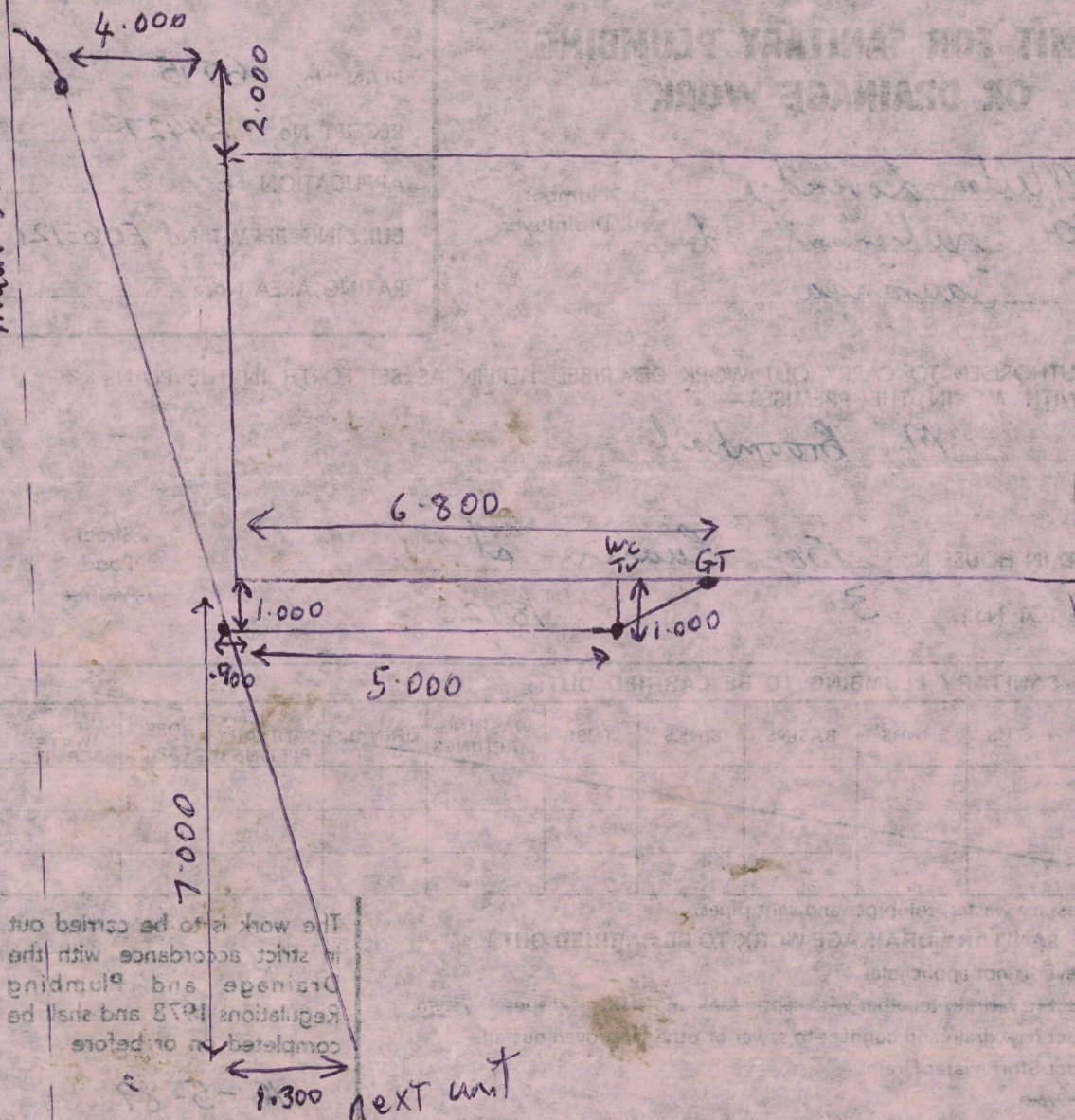
20104

TABRANGA CITY COUNCIL

PERMIT FOR SANITARY PLUMBING

OR DRAINAGE WORK

Main Sewer



Date: 5 / 7 / 78

TAX INVOICE

37650

INSPECTORS OFFICE

TAURANGA CITY COUNCIL

Private Bag, Tauranga
Phone 82-079

G.S.T. Reg. No. 11-073-212

NOTICE OF FEES DUE

A permit is ready for issue to:-

B/F: 6775.

HUNTS FAMILY HOMES.
P.O. Box 2360
Tauranga.for M. BROOMHALL ownerat 15 B Ruahine ST. street addressThe permit is for ERECT DWELLING. DWG. () at ()
Building Activity SuburbPermit Value \$ 42390.00 Section Area _____ m² New Dwelling Only

FEES PAYABLE FOR:

		\$
PERMITS:	Building	incl: \$20 TL check. 101
	Plumbing & Drainage	102
	Building Research Levy	103
	Footpath Levy	104
	Vehicle Crossing	105
	Water Connection	106
	Propn. Water Rate	107
	Sewer Connection	108
	Stormwater Connection	109
	Charge Up Quotes	
REFUSE:	Refuse Bags	121
	Trade Waste	122
HEALTH:	Register Premises & Licence Fees	131
LICENSES:	Dangerous Goods Licence	132
	Fire Safety Cert.	133
MISCELLANEOUS:		

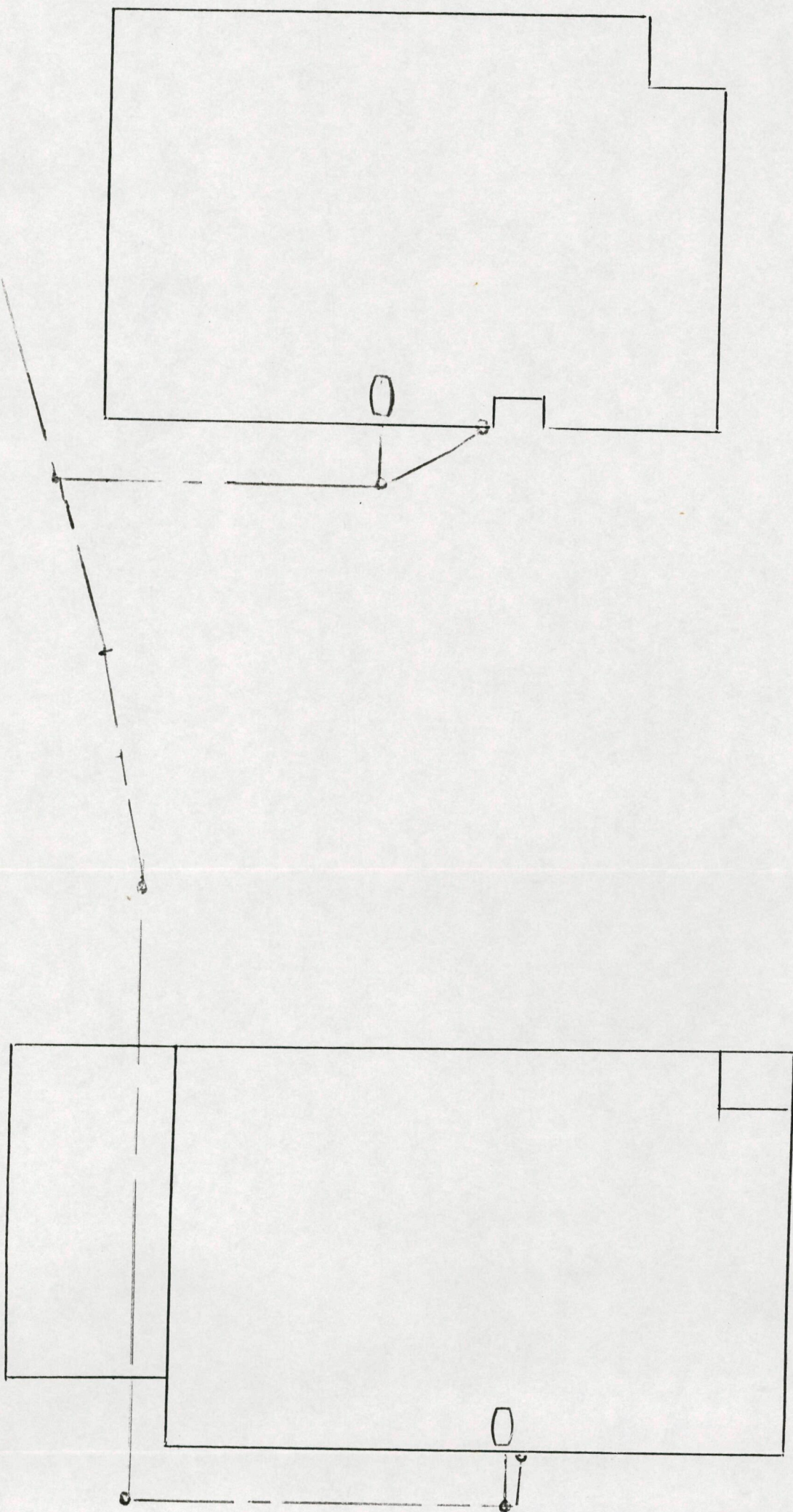
TOTAL FEE \$

912:52.

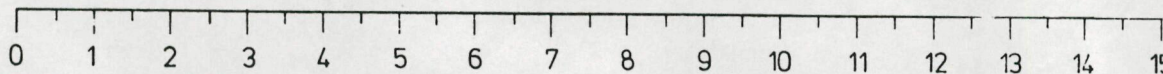
(Inclusive of G.S.T.)

PLEASE PAY ALL FEES TO CASHIER

RECEIPT NUMBER (244272)If you require a permit, refuse bags, etc. **immediately** you must show the receipt to the Inspectors Office Staff. **We prefer to mail permits the next day.**



Note: All dimensions to be in metres



Graphic Scale

Symbols	CITY OF TAURANGA		Scale 1:100
Stormwater: [Show green]	DRAINAGE BLOCK PLAN OF:		Building Plan Number
San Sewer: [Show red]	House No: <u>15</u> Street: <u>RUAHINE</u> Lot No: <u>3</u> D.P.[S.] <u>18720</u>		<u>6775</u>
Water: Valve 	Sewer Inspected: <u>B M</u> Date: <u>23/2/89</u>	Plotted: _____ Date: _____	Sheet No _____

B M.

4/11/89



17.1.89

1148

Engineering design to subfloor for Broomhall, 15 Ruahine St.

Builder : Hunts Homes

House is a 10.81x7.205 m Hibiscus plan that has light cladding on light timber framing with a trussed roof.

Design subfloor bracing system.

Lateral load from house

$$EQ \text{ critical } Cd = .125 \times 1.0 \times 1.7 \times 1.0 = .2125$$

$$S = 1.7$$

(Table 5B, B3A)

$$\text{Area} = 10.8 \times 7.2 = 78.0 \text{ kN}$$

$$Wt = .4 + .2 + .3 + .5 + .15 = 1.55 \text{ kPa}$$

roof+walls+floor+L/3+subfloor

$$E = .2125 \times 78.0 \times 1.55 = 25.7 \text{ kN}$$

Increase this by 1.4 for eccentricity

$$Ee = 36.0 \text{ kN}$$

Summary of findings to this section

- A. Use 6 standard 3604 braces in each direction as on plans.
- B. Use standard NZS 3604 foundations to piles.





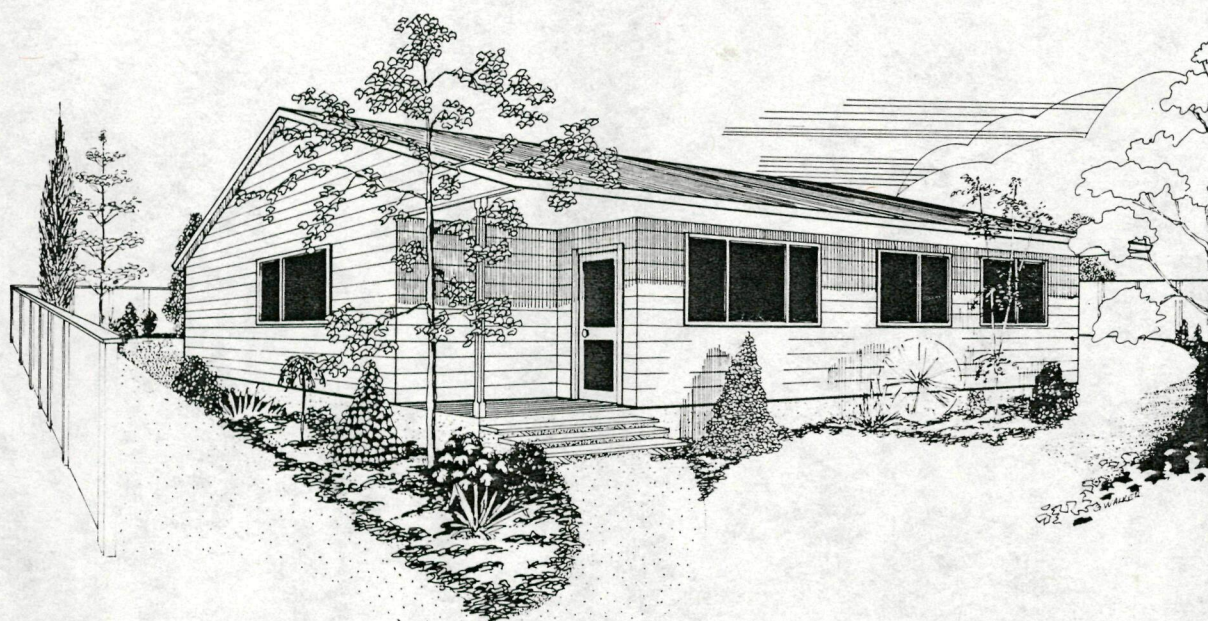
HUNTS

Family Homes



The Hibiscus Cottage

Plans and Specifications

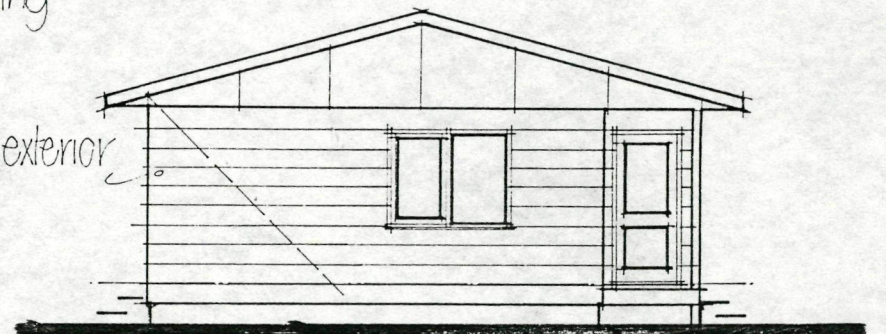
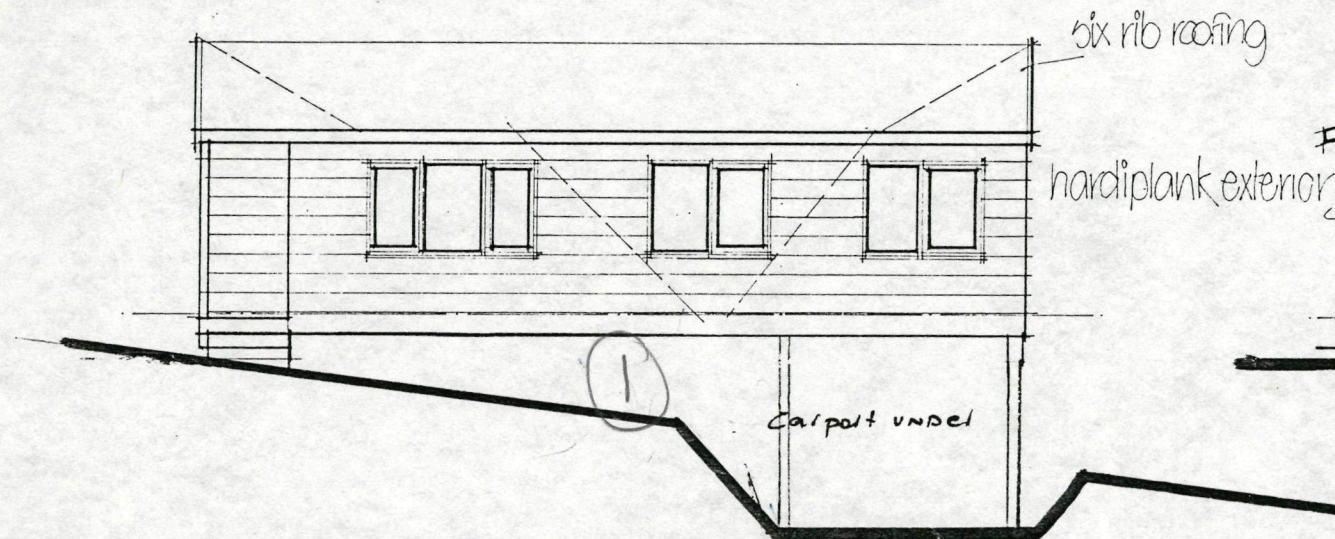
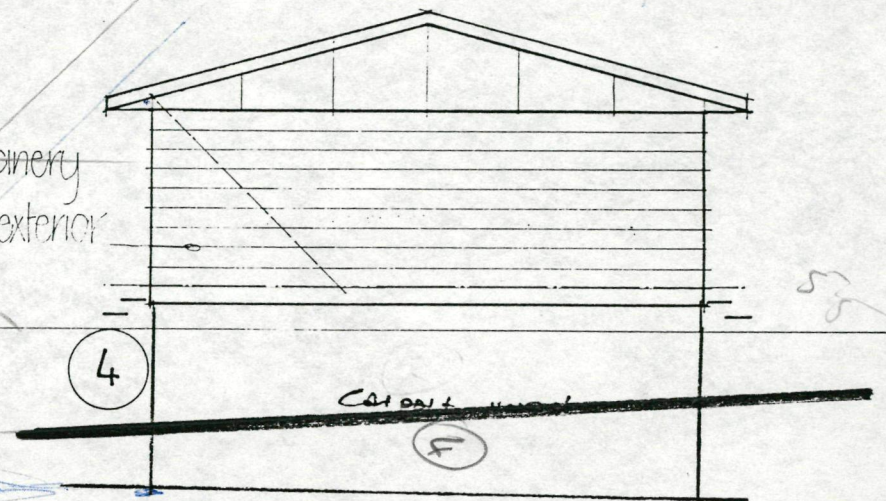
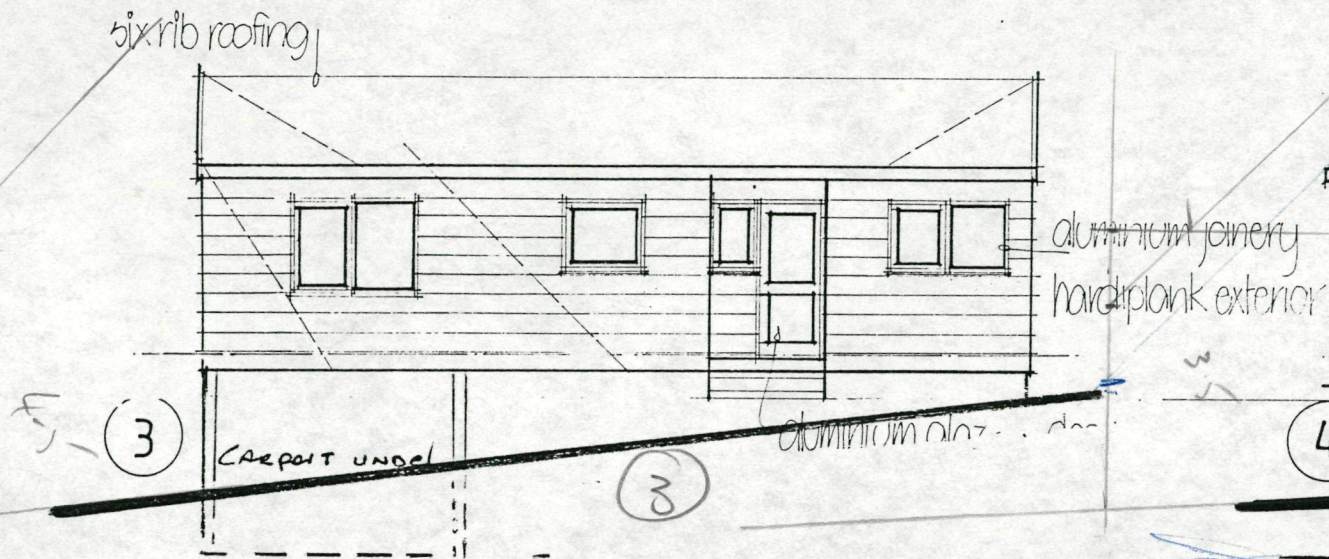


Artists Impression

Foundation Series

VERIFY
SEWER DEPTH
BEFORE
COMMENCEMENT
OF BUILDING.

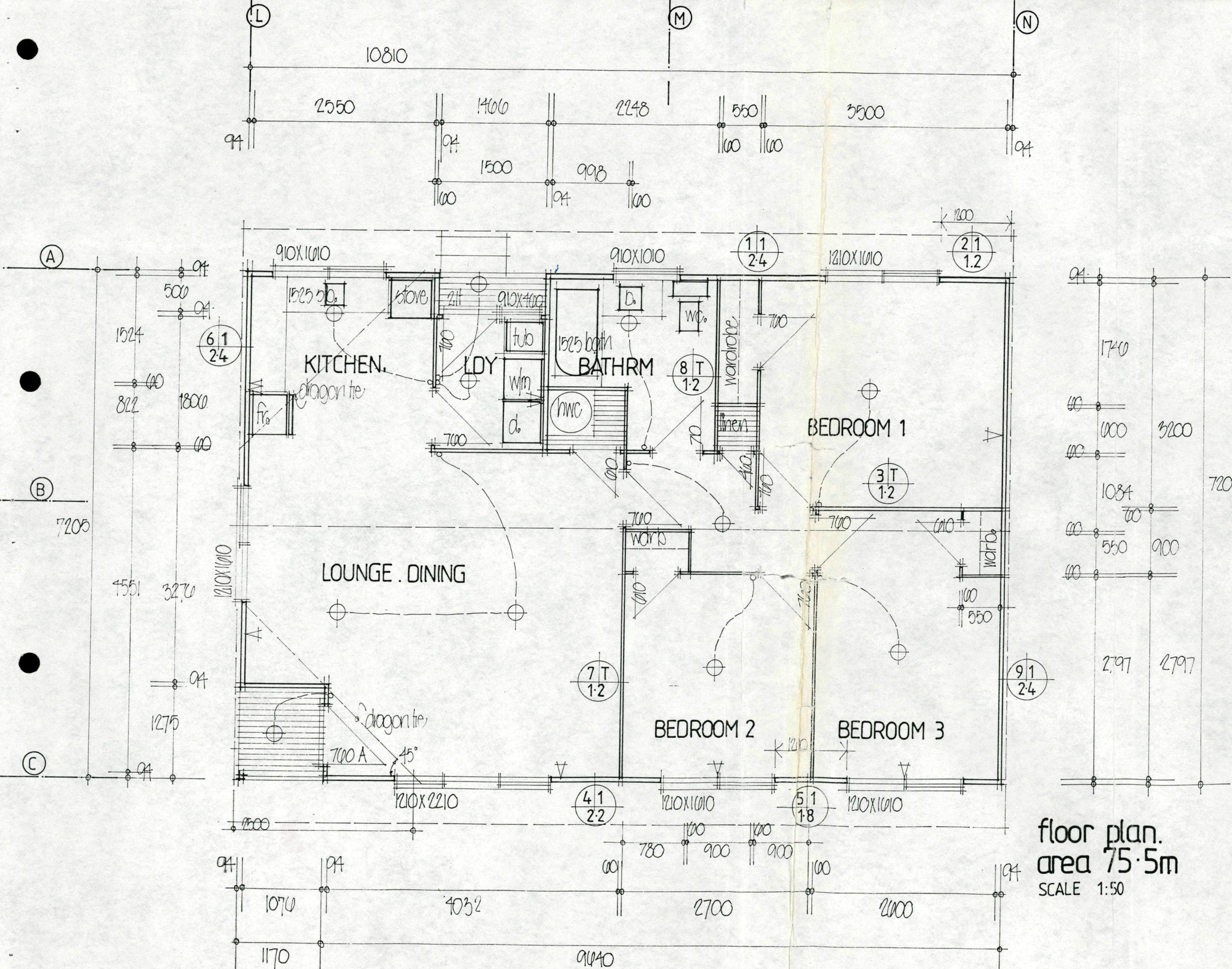
Head Office:
P.O. Box 2360, Tauranga
Telephone (075) 80-079
Facsimile (075) 80-077



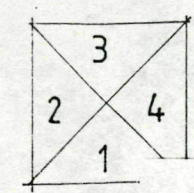
elevation is
hibiscus cottage.



TAURANGA
CITY COUNCIL
APPROVED PERMIT
PLANS

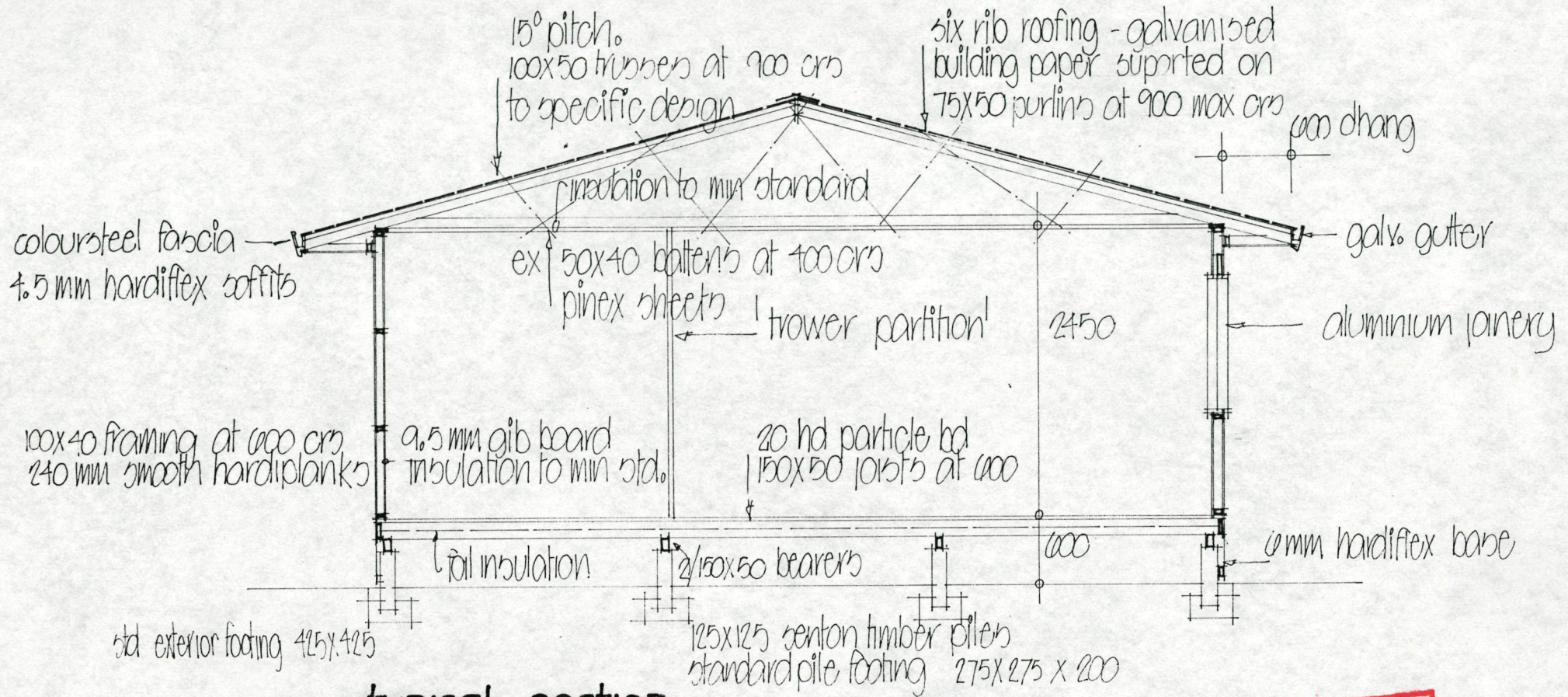


floor plan.
area 75.5m
SCALE 1:50



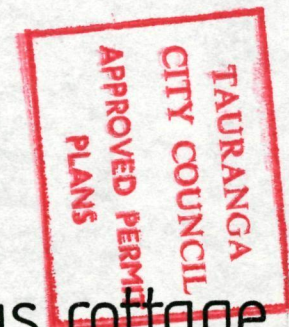
hibiscus cottage.





typical section.

SCALE 1:50



hibiscus cottage.



BRANZ

SHEET A

(CIRCLE whichever is applicable)



NAME: HIBISCUS

ADDRESS:

STOREY: Single or Uppermost /
Lower of two or middle of three
Lower of three

ROOF TYPE: Light / Heavy

ROOF PITCH: 0° - 25° / 26° - 45°

WIND AREA: High / Medium / Low

W = 16 B.U.'s/m 9+

EARTHQUAKE ZONE: A / B / C

E = 2 B.U.'s/m²

ROOF OR BUILDING LENGTH

BL = 10.8 m

ROOF OR BUILDING WIDTH

BW = 7.2 m

GROSS ROOF OR BUILDING PLAN AREA

GPA = 91 m²

EARTHQUAKE: B.U.'s ALONG AND ACROSS

E x GPA = 2 x 91 = 182 B.U.'s

WIND: B.U.'s ALONG

W x BW = 16 x 7.2 = 115 B.U.'s

WIND: B.U.'s ACROSS

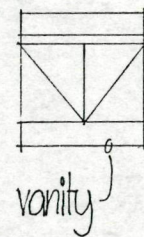
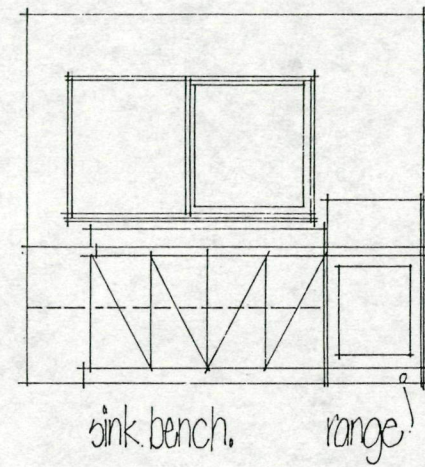
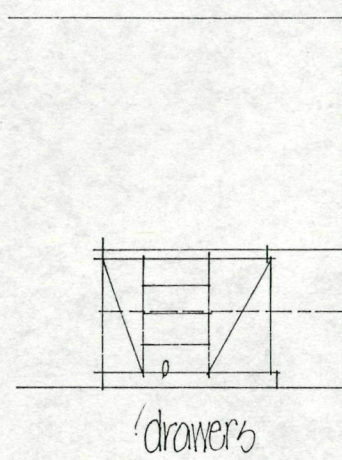
W x BL = 16 x 10.8 = 173 B.U.'s

SKETCH PLAN (external and internal walls) :

SHEET B

1 Total B.U.'s Required	2 Wall Line	3 Minimum B.U.'s Required	4 Label No.	5 Type	6 Rating B.U.'s/m	7 Length (m)	8 B.U.'s Provided
ALONG	A		1	1	42	2.4	100
			2	1	42	1.2	50
		108	Sub-total				150
	B		3	TOWER BRACE		1.2	72
		70	Sub-total				72
	C		4	1	42	2.1	88
			5	1	42	1.8	76
		108	Sub-total				164
D							
		Sub-total					
182	TOTAL	286	TOTAL				386

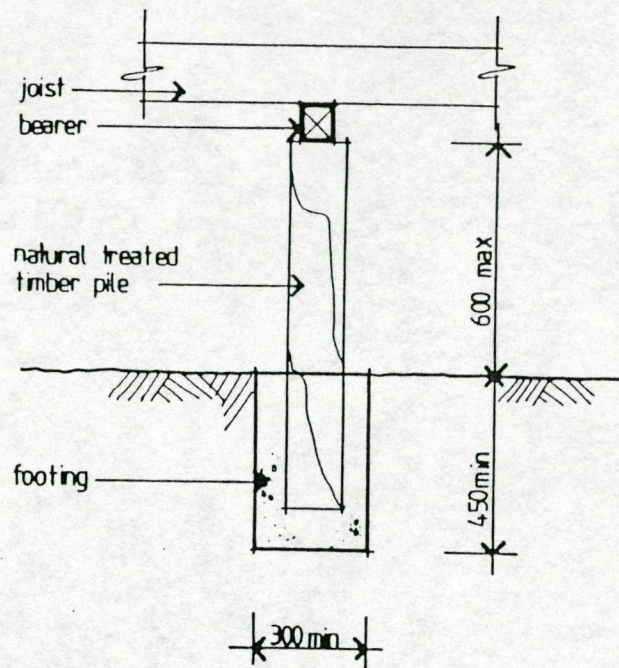
ACROSS	L		6	1	42	2.4	100
		72	Sub-total				100
	M		7	TOWER BRACE		1.2	72
			8	1	1	1.2	72
		70	Sub-total				144
	N		9	1	42	2.4	100
		72	Sub-total				100
O							
		Sub-total					
P							
		Sub-total					
182	TOTAL	214	TOTAL				344



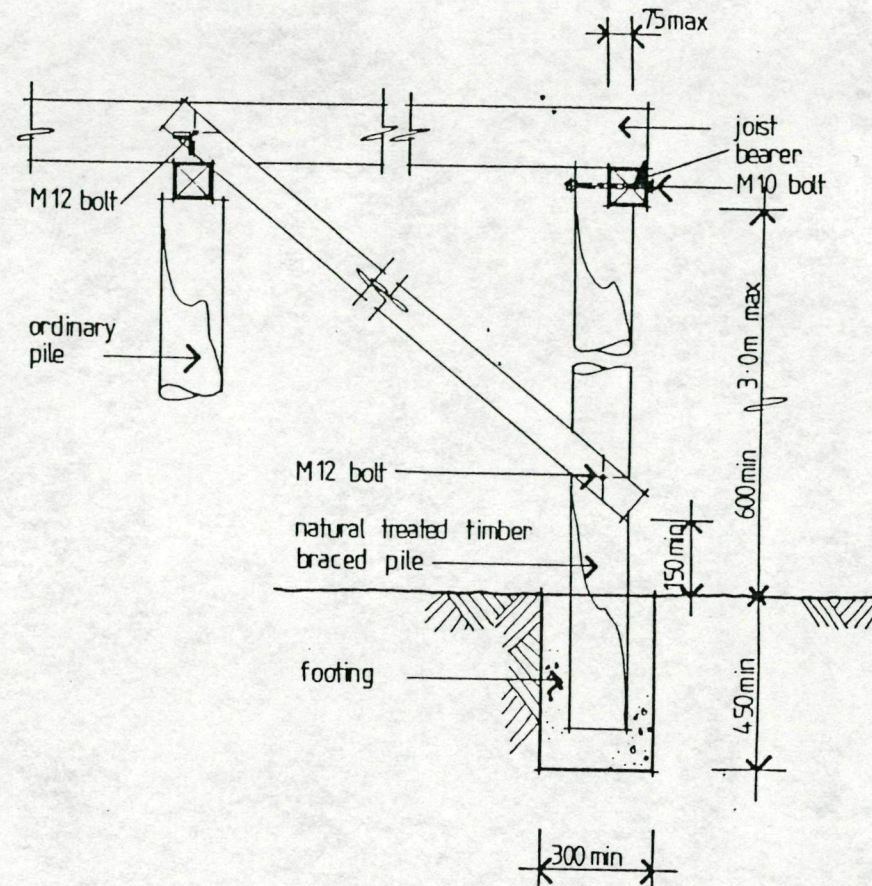
HIBISCUS

JOINERY.





cantilevered piles

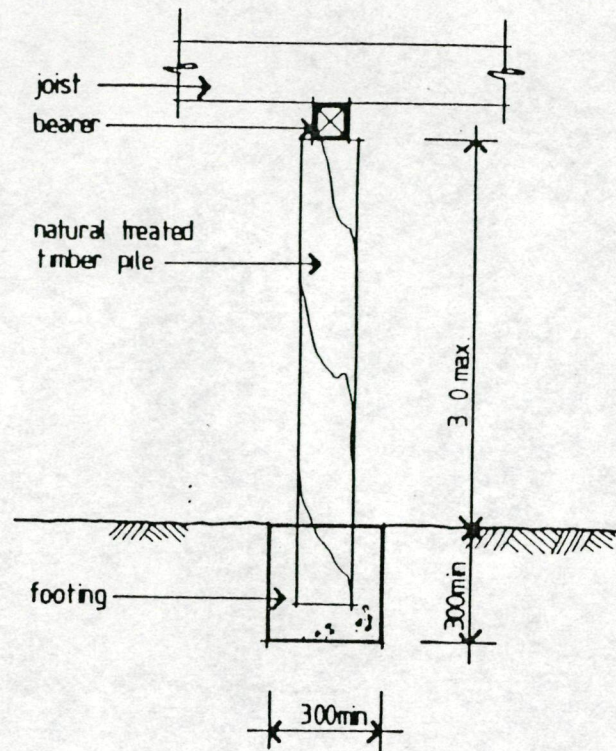


braced piles

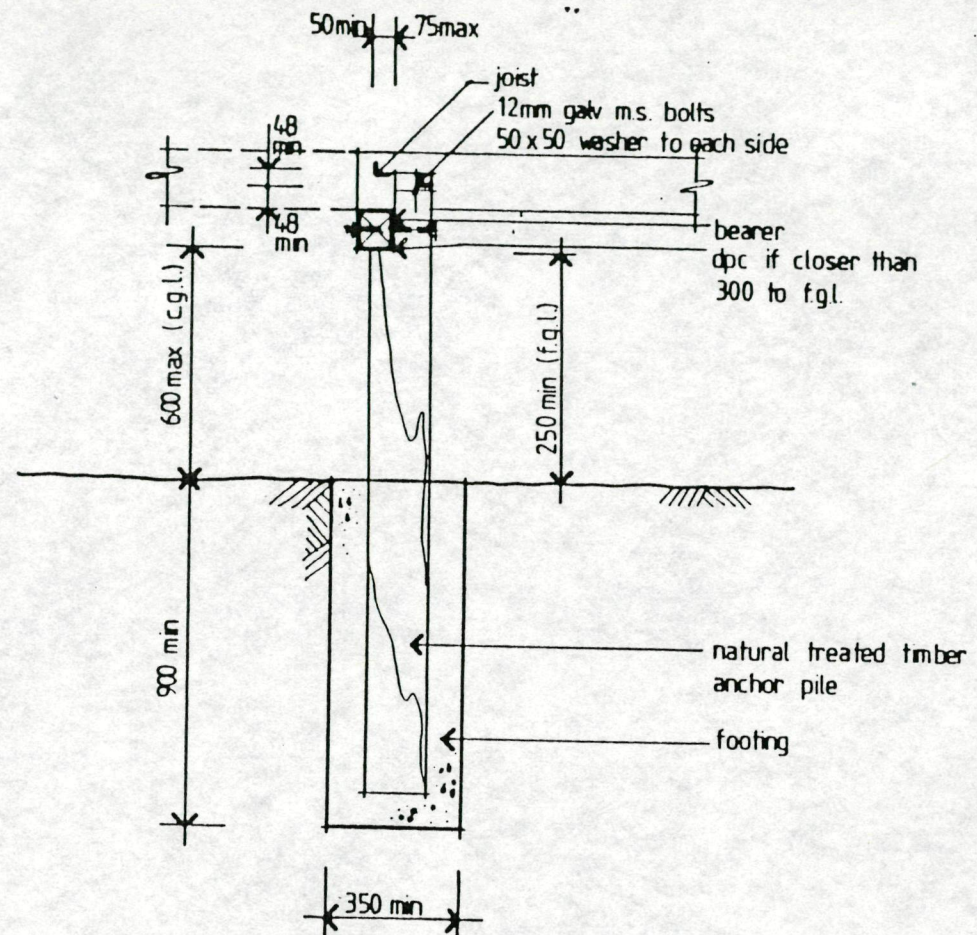
PILE DETAILS scale 1:20

NOTE : all bolts to be galv. m.s. engineering grade
with 50x50 galv. ms. washers each side

to directly support a bearer that directly supports the floor joists, in a complete row, in the line of the bearer; or a complete row of such piles at right angles to the bearer, provided this method won't be used under an external wall.



ordinary piles



anchor piles

PILE DETAILS scale 1:20

NOTE : all bolts to be galv. m.s. engineering grade
with 50 x 50 galv. m.s. washers each side



STANDARD SPECIFICATION FOR FOUNDATION SERIES

Built to New Zealand Standards 3604 - 1984
and to Local Authority requirements.

1: FLOOR:

- Bearers Radiata Pine, boric treated.
- Floor joists gauged Radiata Pine, boric treated.
- Flooring 20mm thick high density particle board.

2: WALLS:

- Interior walls lined with 9.5mm Gibraltar Board.
- Exterior wall framing 100mm x 50mm gauged Radiata Pine, boric treated or Douglas Fir.
- Exterior wall cladding Masada D5 or as specified.

3: ROOF:

- Roof frame Radiata Pine boric treated, or Douglas Fir, gauged, Engineer designed.
- Purlins 75mm x 50mm, or as specified Radiata Pine, boric treated.
- Roofing is roll formed galvanised steel with primed edge laps and ends.
- Fascia Colorsteel.
- Soffit lining 4.5mm Hardiflex.

4: CEILING:

- Battens 150mm x 40mm and 50mm x 40mm gauged Radiata Pine, boric treated.
- Pinex Flameguard sheets, with aluminium or PVC jointers.

5: JOINERY:

- Aluminium joinery silver or powder coat coloured frames glazed in clear glass. Bathroom, WC windows and rear entrance door glazed in obscure glass.
- Interior doors are paintgrade hung in finger-jointed Radiata Pine frames and complete with hardware.

6: INSULATION:

- Perforated aluminium foil underfloor insulation.
- Gib Foil wall insulation.
- Loose fill or similar ceiling insulation.

7: INTERIOR FITTINGS:

- Bathroom vanity unit paint quality, with Formica top and pre-finished doors.
- Laundry cupboard, paintgrade with stainless steel fabricated tub.
- Kitchen units paintgrade with Formica tops, prefinished doors and drawer fronts. Pantry shelves where applicable are pre-finished, straight.
- Bath and Vanity basin are acrylic.
- Shower lined with Formica Aquapanel wallboard or similar with stainless steel tray where fitted.
- White toilet with cistern and seat and toilet roll holder.
- Taps over sink, tub, bath and vanity. Separate washing machine taps. Shower fittings where required.
- Hot water cylinder 180 litre low pressure electric. Wet-back fittings are not included.
- Towel rail and mirror in bathroom.

8. INTERIOR FINISHING:

- Interior of all rooms to be papered using wallpapers selected by the purchaser to a lump sum allowance of \$.....
- Ceilings and other interior timber work to be painted. No allowance has been made to paint the interior of wardrobes, storage/linen cupboards, kitchen and vanity units etc.
- Wardrobe rail, and shelf 300mm wide.
- Linen cupboard, 5 shelves of 75mm x 25mm slats.
- Floors coarse sanded to joints only ready for carpets and vinyls.

9. EXTERIOR FINISHING:

- Exterior wall cladding Masada D5 (pre-finished) with woodwork to be painted. Base cladding unpainted.
- Steps to rear entry Radiata Pine, Tanalith treated.
- Two exterior hose taps, brass.
- Front Decking 3.3m x 1.5m, where applicable, Tanalith treated.

10. ELECTRICAL:

- Upright standard 4-element electric cooker.
- Ceiling mounted bayonet light fittings complete with standard plastic shade and bulb.
- Power points and T.V. aerial fitting as specified in the plans.

ALL PLUMBING, DRAINAGE AND ELECTRICAL SERVICES INCLUDED.

To be read in conjunction with the plans and quotation.

PAUL JONES - Designer
P.O. Box 810 Tauranga Ph 25 553

BROOM HALL

BEAM. FOUNDATION DESIGN

TECHNICAL REC
Nº 2.

① SPAN = 3.3
JOIST SPAN = 2.3
ROOF SPAN = 7.4

LIGHT ROOF
LOW WIND

T 1.1 DL = 1.82

T 1.2 DL = 0.37
2.19

T 2.9
4.41

LL = 1.81
TL 4.0

2.20
5.02

USE 250X100

② SPAN = 3.3
JOIST = 4.65

T 2.9

T 1.2 DL = .71

2.20

LL = 3.53

4.41

USE 250X100.

4.24

5.02

TAURANGA
CITY COUNCIL
APPROVED PERMIT
PLANS

M.C. HORSLEY
REGISTERED ENGINEER
B.E., M.I.P.E.N.Z.

C/O 2781 Sixth Avenue,
TAURANGA.
Ph. 79353 Bus

JOB NO: 257/88

DATE: NOV 88

CLIENT: PAUL SAWES,
WINDOM ROAD
TAURANGA

STRUCTURAL CALCULATIONS

PROJECT FOR/PROJECT ADDRESS: Broomfield
.....
.....
.....

DELIVERED TO P.J. BY M.C.H.

DETAILS/DESCRIPTION:

① LATERAL BRACING TO CARPORT
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

M.C. Horsley

M C Horsley
REGISTERED ENGINEER

NOTE 3 - BEAM DESIGN BY OTHERS

FEE
DRW
CALC HOURS

NATURAL BRACING TO BASEMENT

LIGHT ROOF.

$$\text{FLOOR PLAN AREA} = 10.8 \times 7.2 = 77.8 \text{ m}^2$$

From previous cases, V_{eq} is critical.

● $\text{Area} = 7.2 \times 3.2 / 2 = 11.5 \text{ m}^2$. Contributing to end of house.

∴ $V_{eq} = A \times \text{Wt} \times ECC$

$\text{Wt} = 1.55 \text{ kPa}$ from DC
 $\times 0.25 = 0.39 \text{ kPa}$
(Cd)

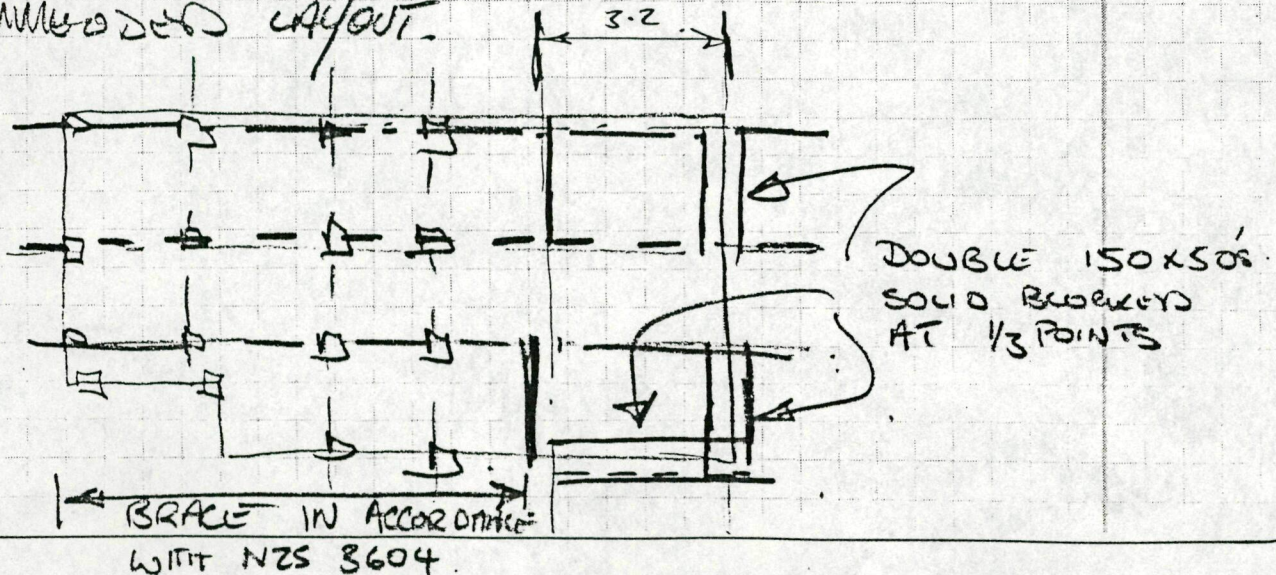
$$V_{eq} = 11.5 \times 0.39 \times 1.4 = 6.28 \text{ kW. in short direction}$$

Refer Std Brace Codes Capacity = 14 kW in plane.

∴ 2 braces are provided more than adequate.

Remaining Sub floor in Accordance with NZS 3604.

RECOMMENDED LAYOUT.



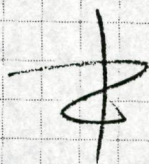
Direction (2)

$$A_e \text{ house as a whole} = 16.2 \times 7.2 = 77.8 \text{ m}^2$$

$$\therefore V_{of} = 77.8 \times (1055) \times \underset{Cd}{.25} \times \underset{\substack{\uparrow \\ E_{cu}}}{1.4} = 42.2 \text{ kW}$$

$$9 \text{ longitudinal braces} = 42.2 / 9 = 4.69 \text{ kW/brace with}$$

capacity $\therefore$ As drawn OK



SOB 102 257/85
NOV 88

GENERAL STRUT DESIGN.

CALCULATION SHEET.

JOB NAME. - GENERAL

PAGE No.

SECTION. DIAGONAL STRUT

BS1

JOB No. —

DESIGNED. M.C.H.

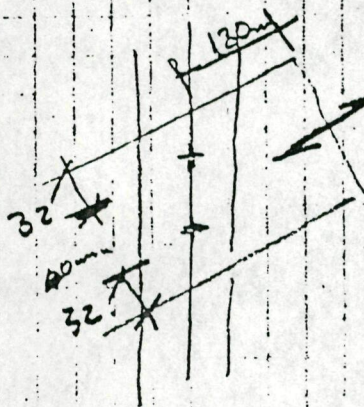
DATE. 87

CHECKED. —

$$F_p = 26 \text{ } \circ \circ F_p = 0.24 \times 1.7 \times 2.6 = 1.06 \text{ MPa}$$

$$\text{STRUT CAPACITY} = 1.06 \text{ MPa} \times 45 \times 150 \times 2 \times 10^{-3} = 14.3 \text{ kN}$$

BOLT GROUP DESIGN



TRY 2m16.

AXIAL LOAD

$$P_B = 5.5 \text{ kN}$$

$$\text{Basic load} = 2 \times 5.5 = 11 \text{ kN/bolt}$$

$$\circ \circ \text{ Bolt Group Capacity} = K \times \text{Basic load}$$

$$K = K_1 = 1.5 \text{ DURATION}$$

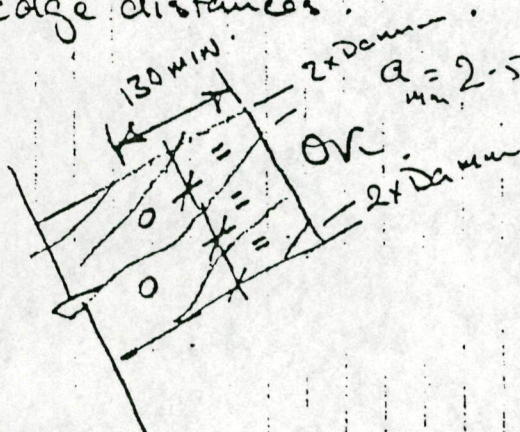
$$\times K_{14} = 0.7 \text{ GREEN}$$

$$K = 1.05$$

$$\circ \circ \text{ Bolt Group} = 1.05 \times 11 \times 2 = 23 \text{ kN} \gg \text{Stab @ 14}$$

Adopt 2m16 (WB with washers)

Edge distances.



$$a = 2.5 \times 16 = 40 \text{ } \circ \circ \text{ OK}$$

JABN 257/83
Nov 88

GENERAL STRUT DESIGN.	JOB NAME. GENERAL		PAGE No.
	SECTION. DIAGONAL STRUT		BS1
	JOB No.	DESIGNED. M.C.H.	
	DATE. 87.	CHECKED.	

CALCULATION SHEET.

STRUT CAPACITY

CONSTRUCTION.

2 No 150x50 Braced @ 1/3 points.
length between Brt groups = 3.1m

Column Design.

Duration Factor
Load Sharing

$$\left. \begin{array}{l} K_1 = 1.50 \\ K_4 = 1.14 \end{array} \right\} K = 1.710$$

SLANDERNESS COEFFICIENT

Composite Column x-x Axis by 33.2 = $S_4 = \frac{K_{12}L}{D} = \frac{3700}{150} = 25.$

y-y Axis. $K_{16} = 3.1$ $S_4 = K_{12}K_{16}L$

$$3.5 \sqrt{I/A}$$

$$\begin{aligned} I &= 2 \left(\frac{4.7^3 \times 15}{12} + 4.7 \times 15 \times 8.6^2 \right) \\ &= 2 \times (130 + 5214) \\ &= 10688 \text{ cm}^4 \quad A = 2 \times 15 \times 4.7 = 141 \text{ cm}^2 \\ r_y &= \sqrt{\frac{I}{A}} = \left(\frac{10688}{141} \right)^{0.5} = 8.7 \text{ cm} \end{aligned}$$

$$S_4 = \frac{1 \times 3700 \times 3.1}{3.5 \times 8.7} = 38$$

$$S_4 = 38 \Rightarrow K_8 = 0.74$$

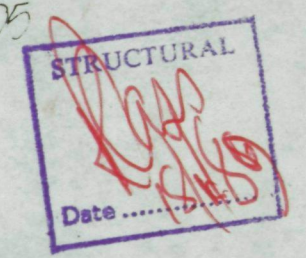
F_p = Interpolating between M.C. = 16 $F_p = 3.0 \text{ MPa}$
M.C. = 25 $F_p = 1.8 \text{ MPa}$
for M.C. 18% $\Rightarrow F_p = 2.6 \text{ MPa}$

The following details comply with my design

- ① Subfloor bracing
- ② Foundations - to 3604

PWM Envt

17.1.89



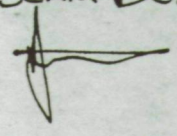
DESIGN ENGINEER :- I confirm that I have inspected details of those elements of the building designed by me & confirm that they correctly portray my design intentions

SIGNED..... DATE 25/1/89

LIMIT OF ELEMENTS DESIGNED BY ENGINEER
1) INTERIOR PARTS
TO C/C/B/S

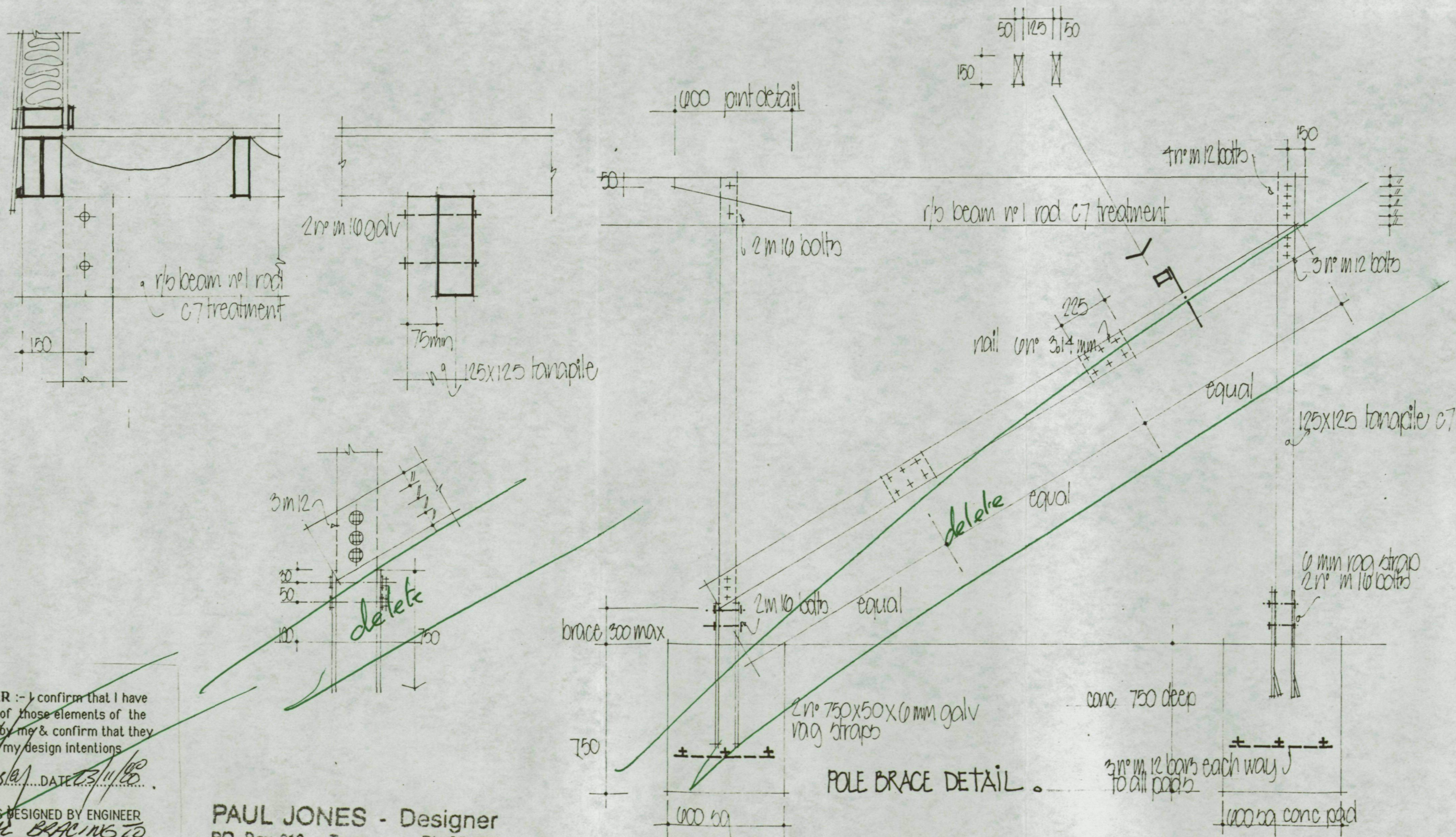
PAUL JONES - Designer
P.O. Box 810 Tauranga Ph 25-553

BEAM DESIGN



FOUNDATION PLAN . BROOMHALL.

- TAURANGA
CITY COUNCIL
APPROVED PERMIT
PLANS



SIGNED [Signature] DATE 23/11/20

LIMIT OF ELEMENTS DESIGNED BY ENGINEER

1) NATURAL BRACING TO
THE COLUMN

PAUL JONES - Designer
P.O. Box 810 Tauranga Ph 25-553

Date: 10/12/88

TAX INVOICE

37693

INSPECTORS OFFICE

TAURANGA CITY COUNCIL

Private Bag, Tauranga
Phone 82-079

G.S.T. Reg. No. 11-073-212

NOTICE OF FEES DUE

A permit is ready for issue to:-

B/F: 6775

8525 HUNTS HOMES
21/12 P.O. Box 2360
Tauranga

for _____ owner

at Building Research Levy for street addressThe permit is for 15 B Ruahine at ST ()

Building Activity

Suburb

not charged on INVOICE 37650.Permit Value \$ M. Broomhall Section Area _____ m² New Dwelling Only

FEES PAYABLE FOR:

\$

PERMITS:	Building	I01	
	Plumbing & Drainage	I02	
	Building Research Levy	I03	<u>47.30</u>
	Footpath Levy	I04	
	Vehicle Crossing	I05	
	Water Connection	I06	
	Propn. Water Rate	I07	

REFUSE:

HEALTH:	Register Premises & Licence Fees	I31	
LICENSES:	Dangerous Goods Licence	I32	
	Fire Safety Cert.	I33	

MISCELLANEOUS: _____

TOTAL FEE \$ 47:30

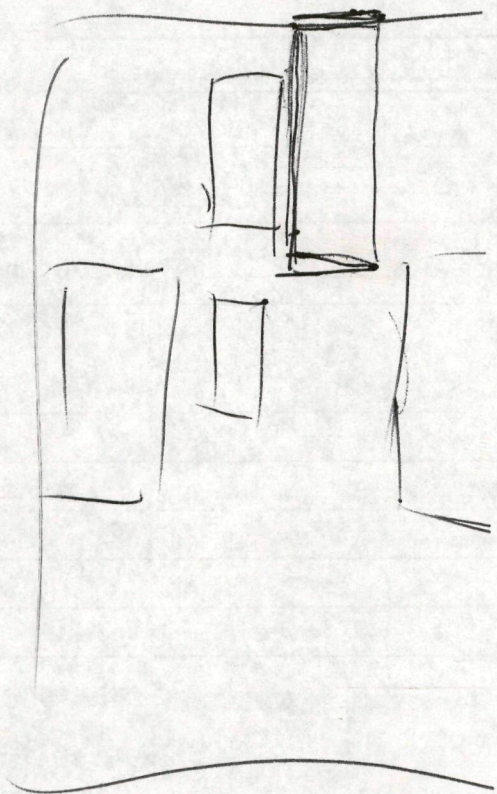
(Inclusive of G.S.T.)

PLEASE PAY ALL FEES TO CASHIER

RECEIPT NUMBER ()

If you require a permit, refuse bags, etc. immediately you must show the receipt to the Inspectors Office Staff. We prefer to mail permits the next day.

PUBLICITY PRINT



T.P.O. <i>[Signature]</i> Date <u>30-11-88</u>	HEALTH Date	BUILDING <i>[Signature]</i> Date <u>9-12-88</u>	D and P <i>[Signature]</i> Date <u>12/12/88</u>	ENGINEER Date	B/F. <u>6775</u> Date <u>29-11-88</u> Structural
--	----------------------	---	---	------------------------	--

CITY OF TAURANGA BUILDING APPLICATION FORM

Streets 1-61 14/12

ATTACH 2 copies of all Plans Scale 1:50 or 1:100. Elevations, Sectional Elevations, Floor Plan, Foundation and Structural Details.

 2 copies of site plan Scale 1:100 only with all existing and proposed buildings clearly defined. Existing sewer drainage must be shown in red, existing stormwater drainage in green and any proposed drainage in pencil. Vehicle crossings (3.5m std width) and position of water toby must be shown on site plan. Owners signature on application form confirms agreement to placings.

 2 copies specifications

I HEREBY APPLY FOR PERMISSION TO:

Erect ☒ Add to ☐ Alter ☐ Install ☐

Repair ☐ Remove ☐ Demolish ☐ New dwelling

AT No. 158 RUAHINE St., Rd., Ave. Describe work

It is an offence to start building work before a permit is issued.

ALL INSPECTIONS REQUIRE AT LEAST 24 HOURS NOTICE SUBSTITUTED PLUMBERS and DRAINLAYERS TRADESMEN MUST COUNTERSIGN.

BUILDER Name: <u>HUNTS FAMILY HOMES</u> Address: <u>P.O. BOX 2360 TAURANGA</u> Phone: <u>80079</u> Signature: <i>[Signature]</i>		OWNER Name: <u>MISS M. BROOMHALL</u> Address: <u>14 KITEROA ST. GREERTON</u> Phone: <u>410315</u> Signature: <i>[Signature]</i>	
Legal Description: Lot No: <u>3</u> DPS No. <u>18720</u> Section Size <u>787</u> m ² Frontage <u>20</u> m Depth <u>35.56</u> m Valuation Roll No. <u>6673/645/00</u> Footpath Deposit Will be refunded following completion of work, on request (see back of form)			

PERMIT ENDORSEMENTS ONLY COMPLY WITH THE ENDORSEMENTS ON THE APPROVED PLAN.	AREAS New Ground floor area <u>75.5</u> m ²		Any question as to the estimated value of the work for the purpose of computing a permit fee may be determined in his discretion by the City Engineer and his determinations shall be final		
	New Outbuilding Area m ²		Values: BUILDING <u>38,540.00</u> DRAINAGE <u>3850.00</u> PLUMBING <u>42390.00</u> TOTAL <u>44890.00</u>		
			DATE	PERMIT No.	FEE
	Building <u>16-12-88 incl:</u> Sanitary Plumbing & Drainage Building Research Levy Footpath deposit Vehicle Crossing Water Connection Proportion Water Rate Sewer Connection Stormwater Connection		<u>20TP check.</u> <u>16-12-88</u> <u>Excluding</u> <u>16-12-88</u> <u>16-12-88</u> <u>1A</u>	<u>B065121</u> <u>20103-04</u> <u>1A08.10645</u> <u>14581</u>	<u>360.00.</u> <u>192.00.</u> <u>230.00</u> <u>10.62</u> <u>119.90.</u>
	RECEIPT <u>244 272</u> DATE <u>15/12/88</u>		TOTAL <u>912.52</u>		

FOR OFFICE USE ONLY

Rec 246536
22/12/88
 INV 37693
20-12-88
 INV: 37650
13.12.88

Mike

18/1/89

Phase note

Basis change

small

W. J. S.

THE APPROVED
ENDORSEMENTS
COMPANY WITH

TOWN PLANNING CHECKLIST
MULTI UNIT DEVELOPMENT

ORDINANCE 434.

6775
ADDRESS 153, QUAHINE ST.
LEGAL DES Lot 3 D.P.S. 18720
RECEIVED (date) 30.11.88

TYPE: No. OF UNITS 1
Predominant or Conditional P

NO. OF BLOCKS 1

1. RESERVE CONTRIBUTION N/A
2. FRONT OR REAR SITE P
3. R.O.W. OR ACCESS STRIP 176.86
4. SUBDIVISION CLEARED FOR BUILDING "A"
5. ZONE "A"
6. SITE AREA 650 m² proposed 31.12. 786 m²
7. DENSITY permitted 1 Unit proposed 1 Unit
8. HEIGHT permitted 8.00m proposed 6.40m with cant
9. YARDS permitted ALL 1.50m proposed 3.50m
- permitted _____ proposed _____
- permitted _____ proposed _____

10. BOUNDARY WALL Distance from bdg _____
- Length permitted _____ proposed _____
- Height permitted _____ proposed _____
- Not to exceed 30% of periphery
- NEIGHBOURS CONSENT _____

11. DAYLIGHTING permitted 2.70m proposed _____

12. PRIVATE OPEN SPACE area required 56 m² proposed _____
- Minimum Dim. 6m proposed _____

13. VISUAL PRIVACY Glazing separation _____
- Screened _____

14. SEPARATION REQUIRED 1.2 Proposed —

15. STEP IN PLAN Required 3m Proposed —

16. STORAGE required 3.0 m² proposed 3.0 m²

17. PARKING required 2 proposed 2

18. ACCESS & MANOEUVRING (3 or more units) O.K.

19. DISPENSATION required _____ passed date _____

COMMENTS: _____

CHECKED [Signature]

DATE 30.11.88

FINAL OK _____

DATE _____



TAURANGA CITY COUNCIL APPLICATION FOR PERMIT FOR SANITARY PLUMBING OR DRAINAGE WORK

To the City Engineer

TAURANGA CITY COUNCIL

Plan No.....

Received.....

Permit No. 20103-04

Receipt No. 244272 Date 16-12-88

PLUMBER: Name: <u>PLUMBING SERVICES (TGA.) LTD.</u> Address: <u>P.O. Box 6055 Brookfield</u> Registration No. <u>3570</u> Phone <u>64139</u>	Name of Person for whom work is to be carried out: OWNER Phone No. Name: <u>MISS M. BROOMHALL</u> Postal Address: <u>14 KITEROA ST 9TH</u>
DRAINLAYER: Name: <u>MILTON LOVERIDGE</u> Address: <u>101 SUTHERLAND RD</u> Registration No. <u>07899</u> Phone <u>66042</u>	LOCATION Lot No. <u>3</u> D.P. <u>18720</u> House No. <u>15B RUAHINE</u> Road Street Avenue

hereby apply for permission to carry out the work described herein and set out in the plans and specifications hereto.

SPECIFICATION OF SANITARY PLUMBING TO BE CARRIED OUT:

	W.C.'s	BATHS	SHWRS	BASINS	SINKS	TUBS	WASHING MACHINES	URINALS	OTHER SANITARY FITTINGS	HOSE TAPS	HOT & COLD WATER SERVICES
INSTALL	1	1	—	1	1	1	—	—	—	2	1
RENEW											
SHIFT											

together with all necessary wastes, soil-pipes and vent pipes.

SPECIFICATION OF SANITARY DRAINAGE WORK TO BE CARRIED OUT:

Cross out whichever is not applicable.

- ~~1. Construct new drain together with septic tank and effluent disposal system.~~
2. Construct new drain and connect to sewer or other approved outfall.
3. Construct Stormwater Drains.
- ~~4. Repair Drain.~~
- ~~5. Extend Drain.~~

VALUES			FEE		
PLUMBING:-	Contract Price	\$ <u>2800.00</u>	Labour Value	\$ <u>1100.00</u> <u>550.00</u>	\$ <u>116.00</u>
DRAINAGE:	Contract Price	\$ <u>1050.00</u>	Labour Value	\$ <u>350.00</u>	\$ <u>76.00</u>
TOTALS:		\$ <u>3850.00</u>		\$ <u>900.00</u> <u>1150</u>	\$ <u>192.00</u>
Dated this <u>28th</u> day of <u>NOVEMBER</u> 19 <u>88</u>			PLUMBER	SIGNATURES: <u>M. W. Brenage</u>	
			DRAINLAYER		

NOTE: Any question as to the estimated value of the work shall be determined in his discretion by the Engineer and his determination shall be final. (D. & P. Regs 1978, Clause 87 (7)).

Completion of work to be notified at least 24 hours before an inspection or test is required.

Drainlayers are advised to invest in plugs, torch and mirrors and to test their own work before calling for an inspection as re-inspections incur additional fees.

VALUES	FEE PAYABLE
Not exceeding \$50	\$3.00
In excess of \$50 but not exceeding \$100	\$6.00
In excess of \$100 but not exceeding \$150	\$9.00
In excess of \$150 but not exceeding \$200	\$12.00
In excess of \$200 but not exceeding \$250	\$15.00
In excess of \$250 but not exceeding \$300	\$18.00
In excess of \$300 but not exceeding \$350	\$21.00
In excess of \$350 but not exceeding \$400	\$24.00
In excess of \$400	\$24.00 Plus
\$4 for every additional \$200 (or part thereof) of labour content of the contract.	
Re-inspections	\$10.00

ISSUE OF PERMIT APPROVED

[Signature]

For City Engineer

Plumbing, Drainage and Water Service Block Plan is to be drawn on the back of this form per the details listed below and in metric dimensions to a scale of 1 : 100

MARK
NORTH
POINT

SEPARATE AND DISTINCT
FROM ALL SITE
AND STRUCTURAL PLANS.

REFERENCES:-
G.T. means Gully Trap
T.V. means Terminal Vent
B.V. means Back Vent
I.P. means Inspection Pipe
I.C. means Inspection Chamber
F.A.I. means Fresh Air Inlet
T.B. means Toby Box

FOR NEW BUILDINGS AND ADDITIONS NOT INVOLVING ALTERATIONS

2 PLUMBING AND DRAINAGE PLANS: SCALE 1:100 SHOWING:

a.	All sanitary fittings	2.5.4
b.	All existing stormwater drains and connections in GREEN	2.5.4
c.	All existing sewers and connections in RED	2.5.3
d.	All proposed sewer and stormwater drains in PENCIL	2.5.3
e.	Surface water disposal/cesspits	2.5.4
f.	The new building or additions outlined in RED	Ord 202.2
g.	All existing buildings (on same site) in NORMAL PRINT	2.5.3
h.	Sufficient detail as to light and ventilation	2.5.3
		Reg. 87 (3)

FOR ALTERATIONS TO EXISTING BUILDINGS.

2 PLUMBING AND DRAINAGE PLANS: SCALE 1:100 SHOWING:

a.	An "existing" plan alongside the "proposed" alteration for easy comparison	2.5.4
b.	All existing and proposed sanitary fittings.	2.5.1
c.	All existing stormwater drains and sewers in GREEN	2.5.1V
d.	All existing foulwater drains and sewers in RED	2.5.3
e.	All proposed drains in PENCIL	2.5.3
f.	Surface water disposal/cesspits.	2.5.3
g.	Sufficient detail as to light and ventilation	Ord 202.2
		Reg. 87 (3)

OFFICE USE ONLY