

Artistic impression only. Please see all working drawings and details inside.

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9/4/22
Harry & Jessica Lo
2 Rapere Street
Rolleston

JL
22
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LEGAL DESCRIPTION

Lot: 663

DP: TBC

Site area: 725 m²

PLANNING

Living zone: Selwyn Living Z
(Falcon's Landing)

Site coverage area (Only): 261.59 m²

Site coverage: 36.08 %

HARD SURFACE WATER

ZONES

Earthquake: Zone 2

Wind: High

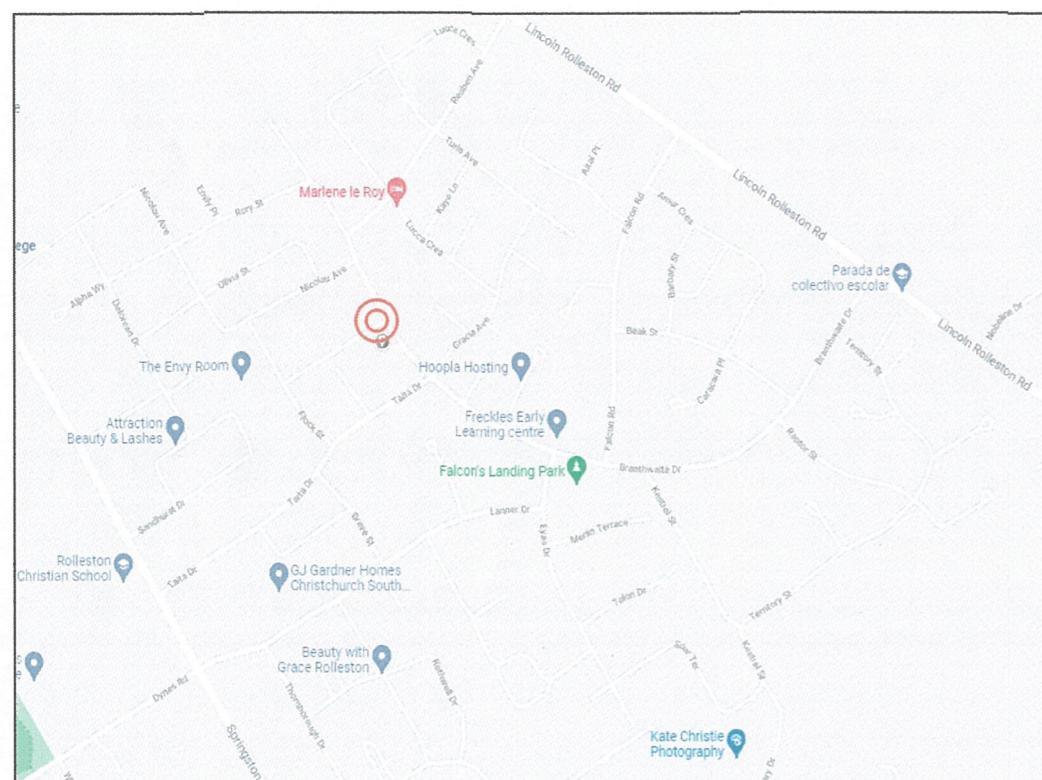
Corrosion: Zone C

Altitude above sea: 45 m (Rolleston)

NOTES

- All dimensions taken to foundation edge unless otherwise stated

- Service location to be confirmed



1 Location Plan NTS

SEDIMENT CONTROL

All adjacent groundcover to be retained in building phase.

Sediment control soaks preventing run off from excavation & gravel washdown where required.

1. To boundaries and street frontage
2. Containing surplus soils & gravel

Downpipes to be connected as soon as roof fitted & drains laid. Temporary arrangements are to be made when exterior claddings are not fitted.

Construction supervisor to oversee sediment control.

LANDSCAPE LEGEND

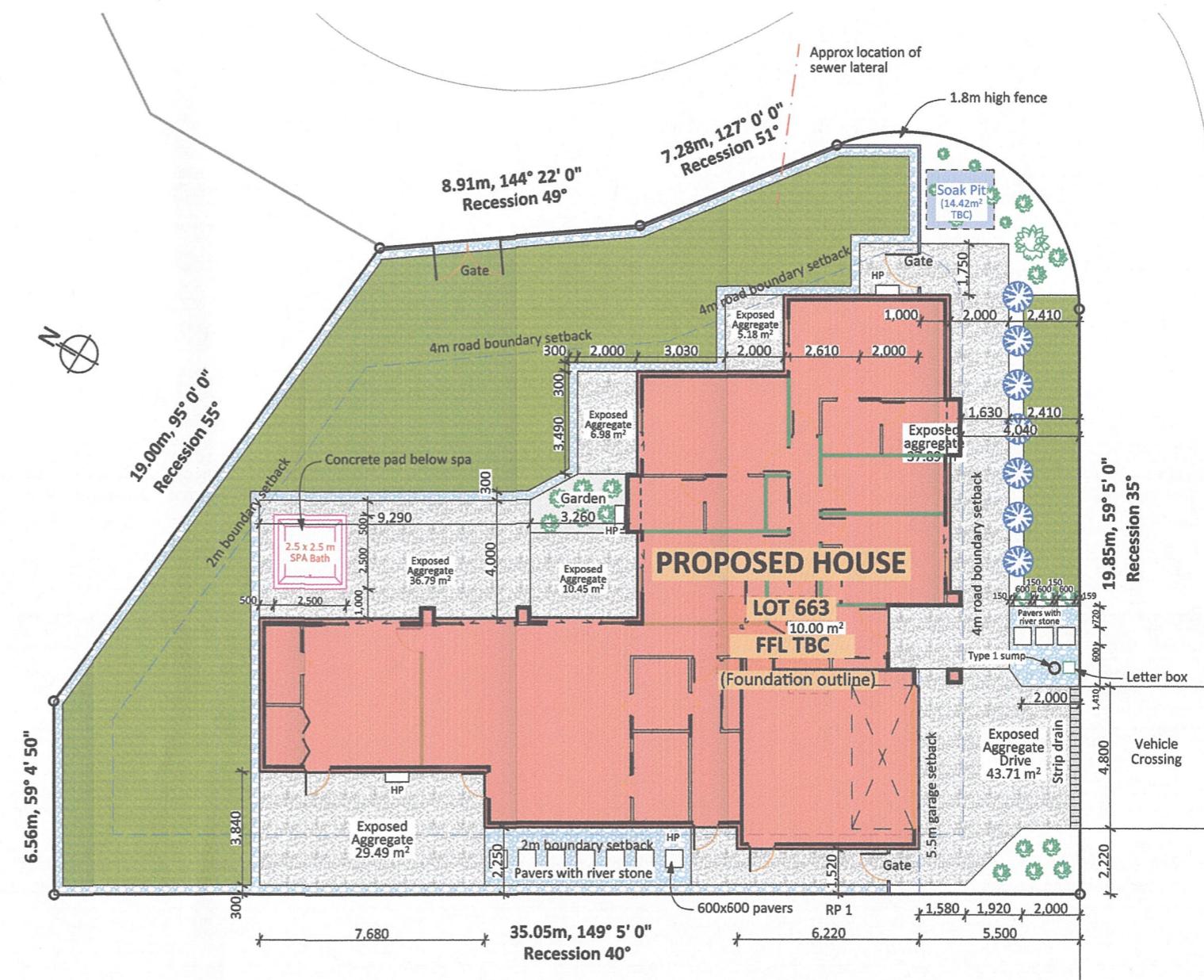
- Fence: 1.8m high - 140x20mm or similar dressed pine paling butt joined with timber capping
- Brick letter box with capping
- Shrubs (lavender, rosemary and/or cranberry)
- Dwarf tree (1 to 1.5m apart - feijoa tree or others)



Brick Letter Box (Example)



Fence (Example)



2 Site Plan 1:200

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TITLE: Site Plan	
SCALE: 1:200	
PAPER SIZE: A3	PROJECT #: #Pln
DRAWN BY: JMK	
FILE NAME: Harry Lo v22 - 5.pln	
PRINTED: 21/03/2022	

01

KEY	
	Gully trap
TV	80mm ø terminal vent
IP	Inspection point
DP	Downpipe
ORG	Overflow relief gully
AAV	Air admittance valve

NOTES (NZBC E1/VM1)

- Soakage hole excavated into free draining shingle.
 - Pour 2x10L buckets of clean water into base of hole to confirm that free draining shingle has been reached.
 - Volume of soak pit (V_{stor})

$$V_{store} = P_c - V_{soak}$$

$$= 10CIA - \text{zero}$$

Where

$$C = 0.9 \text{ (Run-off Coefficients)}$$

$$I = 22.7 \text{ (Rolleston 1.03} \times \text{Christchurch Aero 19.0}$$

$$\times 1.16 \text{ climate change)}$$

$$A = 0.034 \text{ hectares (Roof + Driveway area} = 340\text{m}^2)$$

Laterals

Drainlayer to confirm existing foul drain & stormwater lateral position & depth on site before any work commences, to ensure correct falls can be achieved. Pipes to be min. 100mm Ø

Min. Drains clearance to floor slab

All drains under floor slab to have 50mm min. clearances to underside of floor slab. Drains to be laid straight with even gradient along length of drain

Acceptable solution

NZBC G13 AS1 Sanitary plumbing
NZBC G13 AS2 Drainage

Kitchen gully

Connection to gully by strap boss on gully riser above water trap

Top plate stiffeners

For plumbing systems ducting through wall at BV or vanity/ laundry reinforced by lumberlok stiffner (stud/plate)

Underground drainage

Foul water drain 100mm Ø min. 1:120 fall

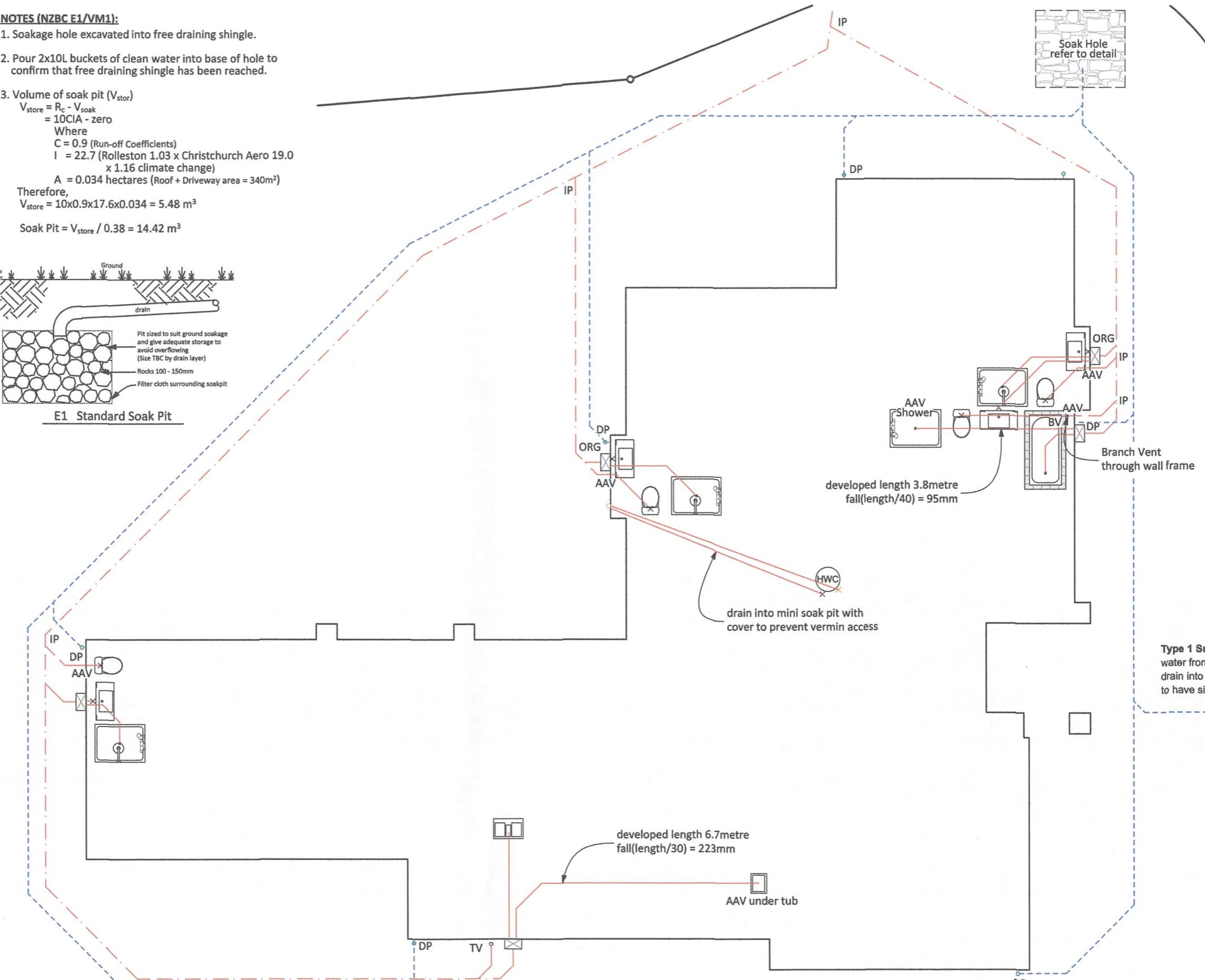
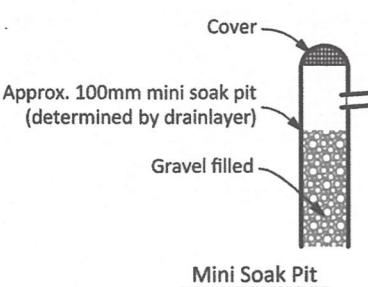
Stormwater drain 100mm Ø min. 1:120 fall

In-slab waste pipes

Vanity, bath, shower	40mm Ø min. 1:40 fall
Laundry	40mm Ø min. 1:30 fall
Kitchen & dishwasher wastes	50mm Ø min. 1:40 fall
WC waste	100mm Ø min. 1:60 fall
HWC drain	22mm Ø min. copper and
HWC Safe Tray	40mm Ø min. uPVC with continuous fall, such as 1:80 fall.

AAV Shower

Mitek lumberlok top plate stiffner to top plate. Centre of the hole to be within 100 - 102mm of adjacent stud. AAV not to extend 1 metre past top plate



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TITLE:		Plumbing & Drainage	
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FOUNDATION TYPE

TC1 NZS 3604:2011 Foundation.
Refer to Geotechnical Report (Constructure
Structural Engineering Job No. 11698 dated
on 22 September 2020)

- Concrete Slab & Foundation strength to be 20Mpa
 - Concrete Slab thickness to be 100mm

SETOUT

Refer to floor plan to ensure foundation dimensions are consistent before setout. If any inconsistencies occur contact Faye Homes Ltd.

LOAD BEARING WALLS & POINT LOAD

Please refer to truss plan in supporting documentation for location of load bearing walls & confirmation of point load locations

INSPECTIONS

- Chartered Professional Geotechnical Engineer confirms subgrade bearing condition and provide PS4

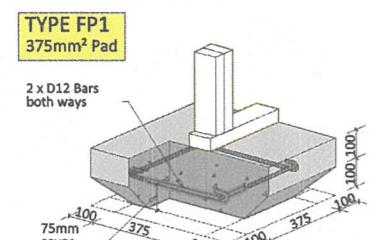
KEY

Saw cut - Shall extend to a quarter of the slab

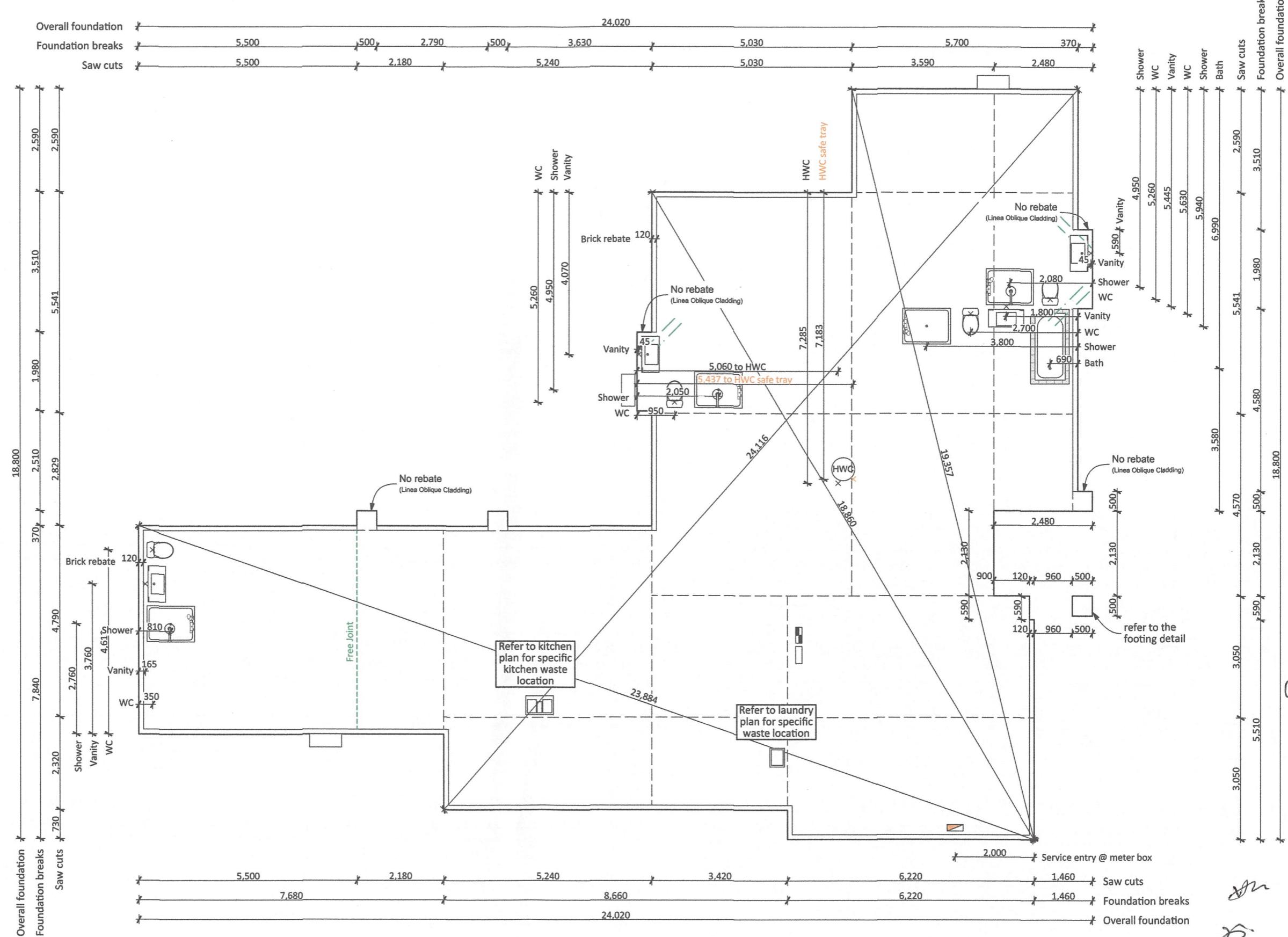
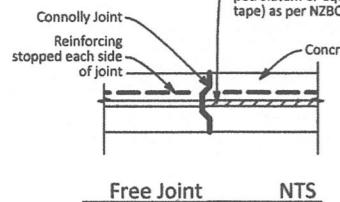
Supplement reinforcing bars
-2/D10 1200mm bars



SLAB THICKENING



R12 dowel bars 600mm long,
300mm each side @ 300mm
crs along the free joint. One
side have a bond breaker
applied.(e.g. wrapping with
petroleum or equivalent
tape) as per NZBC B1/A51



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TITLE:		Foundation Plan
SCALE:	1:100	
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Overall foundation	2,4020
Foundation breaks	
Framing	5,290
Openings	5,380
Internal	5,290
External	5,290
Overall foundation	2,4020
Foundation breaks	
Framing	90 320 90 2,790 90 320 90 3,260 90 400 90 490
Openings	500 320 2,790 500 550 2,700 10 1,315 2,400 1,315 1,530 2,400 1,530 490
Internal	90 320 90 2,790 90 320 90 3,260 90 400 90 2,070 90 2,780 90 1,000 90 2,000 90 2,100 90 400
External	90 320 90 2,790 90 320 90 3,260 90 400 90 2,070 90 2,780 90 1,000 90 2,000 90 2,100 90 400

FRAMING

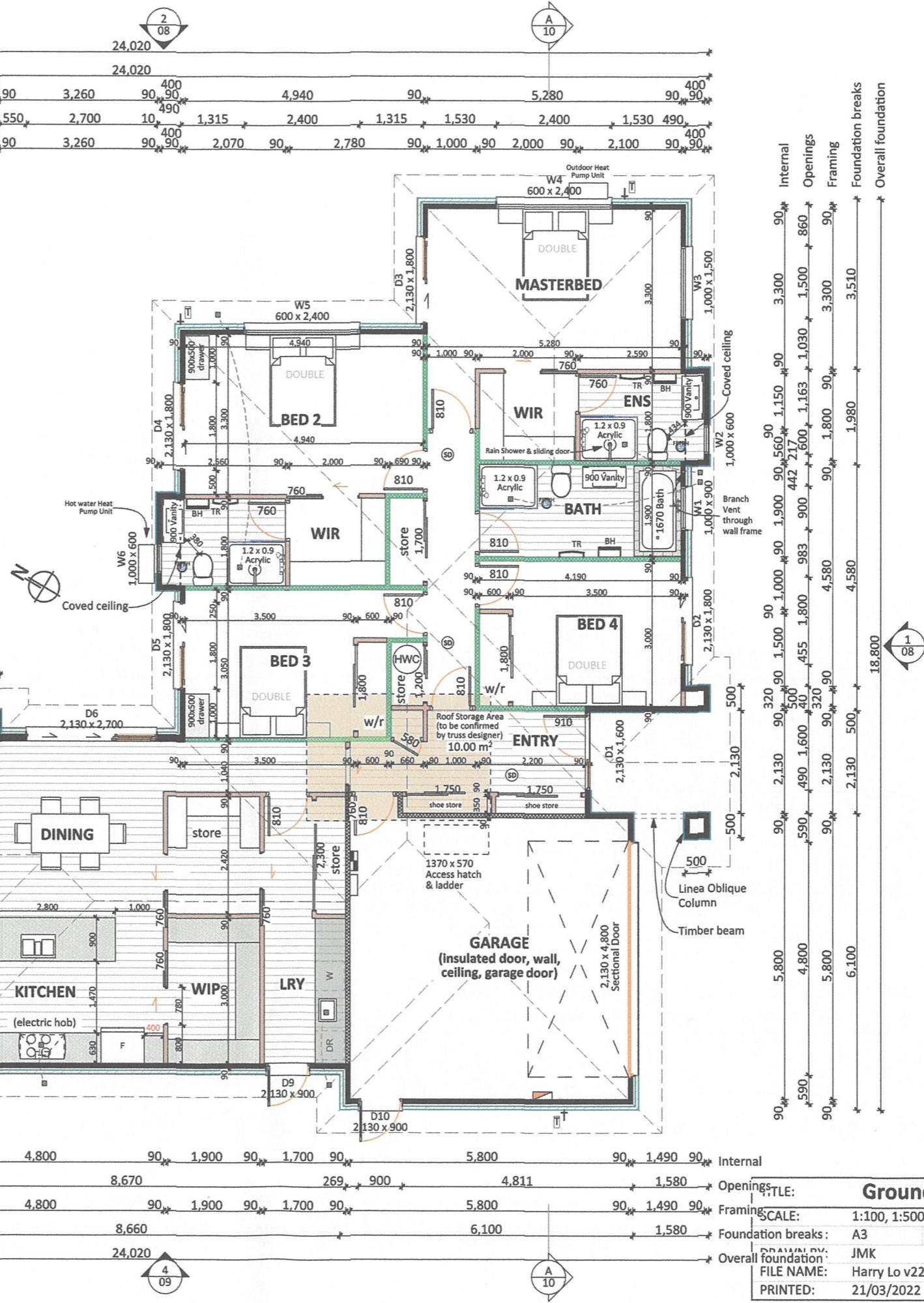
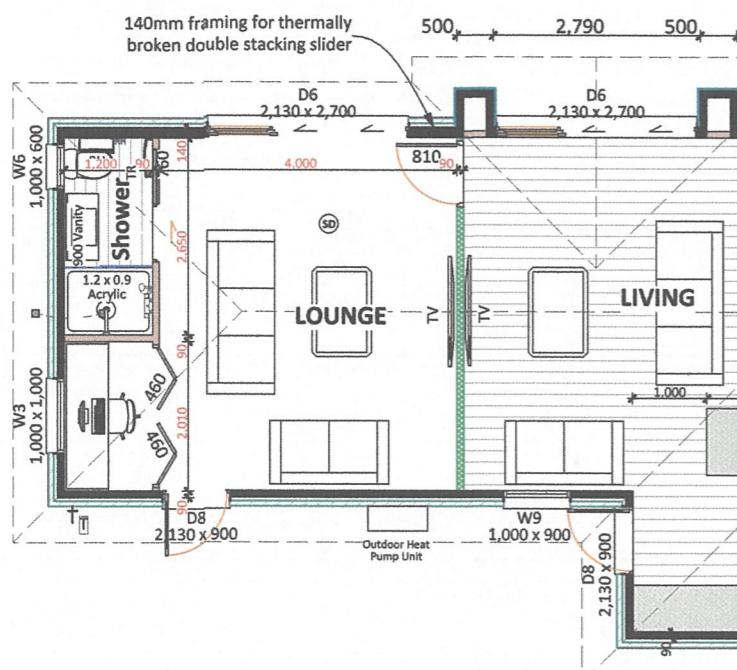
Timber wall framing to comply with NZS 3604:2011
- 2.455m high 90 x 45mm Studs @ 600 centres (External)
- 2.455m high 90 x 45mm Studs @ 600 centres (Internal)
- 2 rows of dwangs @ 800 centres
- 3 rows of dwangs @ 600 centres (Linea Oblique Vertical)
- Lintels as per truss plan
- Double studs under all concentrated point loads
Refer to truss plan for specific location
- Tyvek straps placed horizontally between dwangs @ 300 crs.

ENTRY

Minimum slip resistance to paths, steps & landings to be in accordance with NZBC D1/AS1 - Table 2. Unless otherwise stated H5 timber step(s) to all access points (owner's care), min 150mm below FFL, maximum 190mm high step.

NOTE

- Water connection to fridge
- Thermally broken windows/doors (With double glazed glass without Argon Gas and Low E Glass)
- Multi room heat pump system
- Hot water heat pump



AREAS

Roof:	302.33 m ²
Over cladding/foundation:	256.29 m ²
Perimeter:	91.30 m
Over framing:	245.36 m ²
Inside framing:	237.23 m ²
Covered area:	5.30 m ²
Total area:	261.59 m ²

KEY

Meter box
Switchboard
Data box
Hose tap
Smoke detector (Wired)
Extract fan (Vent to soffit)
Exterior framing
Interior framing
Thermal (or acoustic) break (Insulated to NZBC1)
Sound Insulation/Batt
Brick
Linea Oblique (vertical)
Vinyl planking
Bathroom heater
Toilet Roll Holder
Heated towel rail

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Ground Floor Plan	
SCALE:	1:100, 1:500
Framing:	A3
Foundation breaks:	JMK
Overall foundation:	FILE NAME: Harry Lo v22 - 5.pln
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BRACING NOTES

- All small openings (e.g. power outlets) of 90 x 90mm max. to be placed no closer than 90mm to the edge of braced element.
- Refer to support docs. (Length of GIB EzyBrace elements) for method of calculating element lengths & position of GIB fixings
- Fixing of top plates to external walls to be in accordance with NZS 3604:2011 section 8.7.3.3 & 8.7.3.4. Refer also to BRANZ Build 138 figures 3 & 4.
- Bottom plate cut out should be less than 100mm on bracing element (if required)

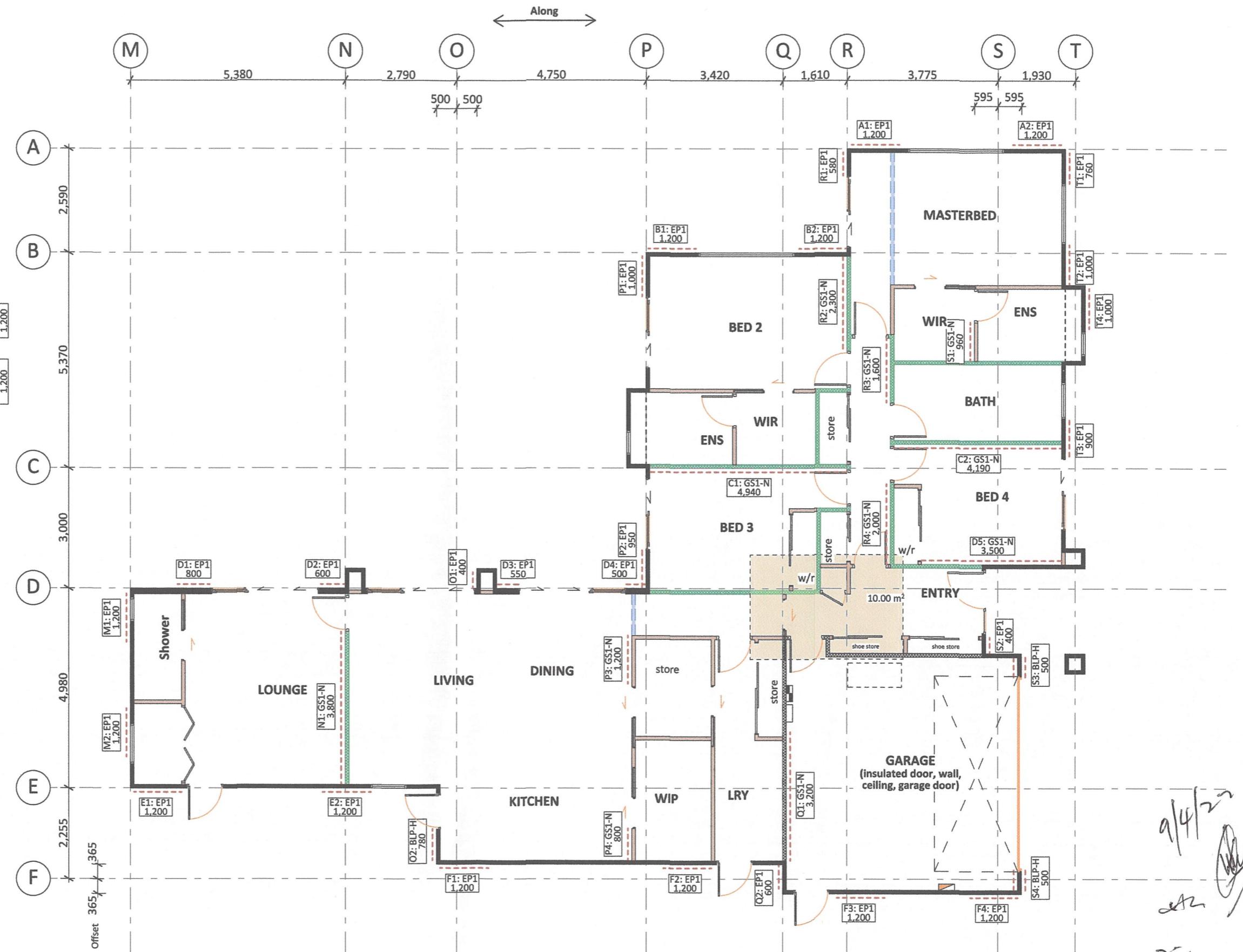
BRACING KEY

GS1-N _ 10/13mm Standard GIB plasterboard to one side only
(Min. length- 0.4m)

BLP-H _ 10/13mm GIB Braceline to one side of the frame plus
7mm min. structural plywood manufactured to AS/NZ
2269.0:2012 to the other side (Min. length - 0.4m)

EP1 _ 7mm Ecoply to one side (Min. length - 0.4m)

Bracing ID
A1: GS1-N 1,200
Bracing type
Length of bracing



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TITLE: Bracing Plan		
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PRESSED METAL TILE ROOFING

Roof plan area: 302.33m²

Roof cladding: Pressed metal tile (Shake tile) with V-trim - 0.39 BMT Zincalume colorsteel

Roof fixings: per 4/50 x 2.8mm galv. pre-painted nails sheet at turndown, and top fixing at eaves with neoprene washers

Eaves: noted 600mm off framing - except where

Bracing: Light roof

ROOF STRUCTURE

See Mitek producer statement for truss details & fixings

BATTENS

50 x 40mm H1.2 battens @ 370 crns.
Fixing type S (2 nails) 90 x 3.15 Ø
Power driven nails or 100mm x 3.75 hand driven nails

ROOF PENETRATIONS

All penetrations to be flashed to E2/AS1 8.3.10

GUTTER

Metteline quad gutter x section 5550mm²

DOWNPipes

Max. Roof area 80mm diameter downpipe = 80m²
@ 25° roof pitch

303m² = Min. 4 Downpipes (Actual 6 downpipes)
72m² Fixings @ 1200 crs.

BRACING KEY

Hip/Valley Rafter



Roof plane bracing

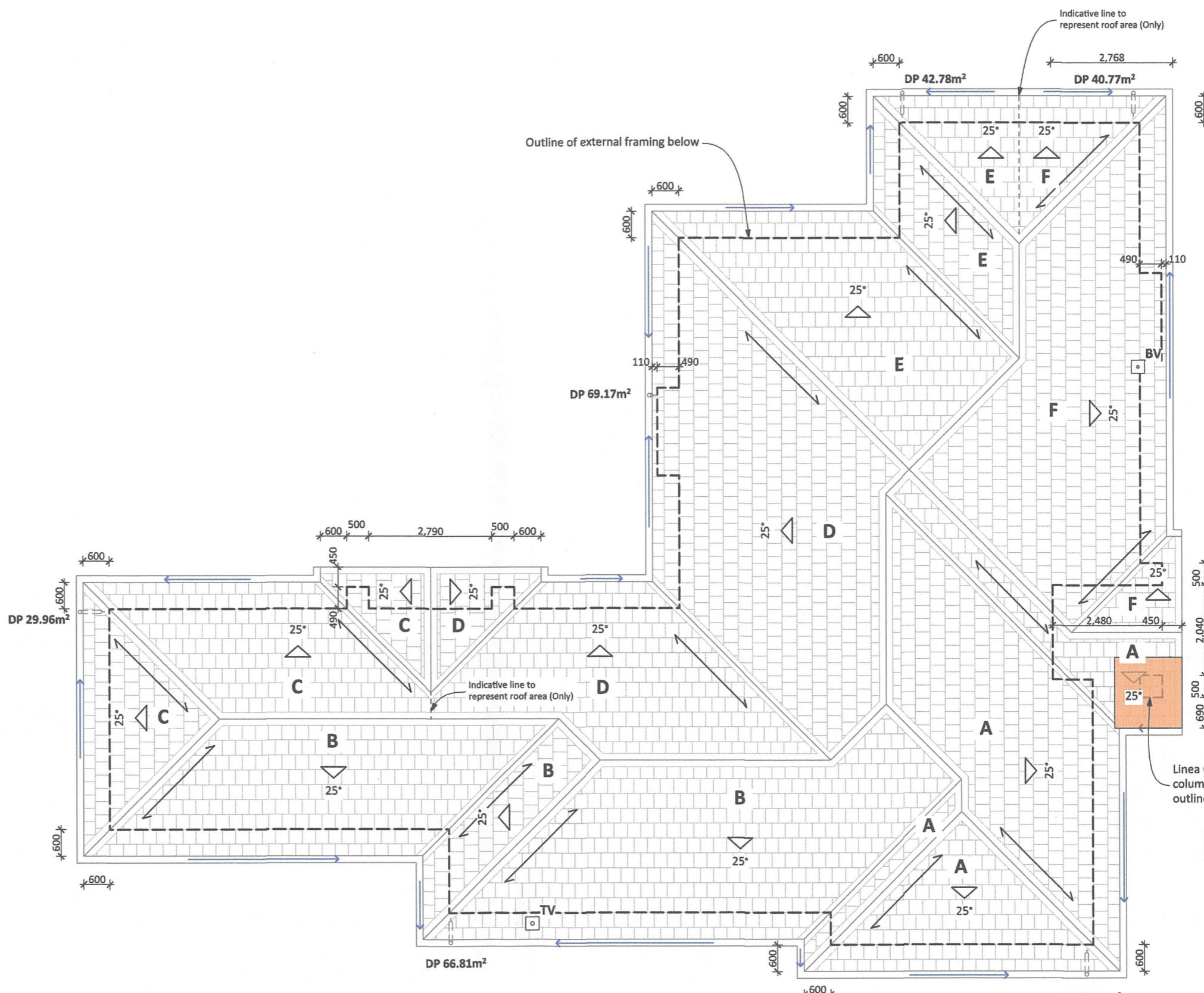


OUTRIGGERS

90 x 45mm outriggers @ max. 1200mm crs. fixed back to first standard truss. (All joints fixed using a min. of 2 / 90 x 3.15 mm nails). 90x45mm flying rafter on edge. 90x45mm blocking on edge over wall framing.

VALLEY GUTTERS

All valley gutters are 250mm wide unless otherwise stated.



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TITLE: Roof Plan	
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LEGEND

Sockets

- △ S Single switch socket
- △ D Double switch socket
- △ safety Double switch bathroom socket
- ▲ ph/inter Telephone/ Internet socket
- ◀ t/v TV socket
- o/s Outdoor switch socket (waterproof)

Mains/ Services/ Switchboard

- Meter Box
- Switchboard
- Data Box

Heating/ Ventilation

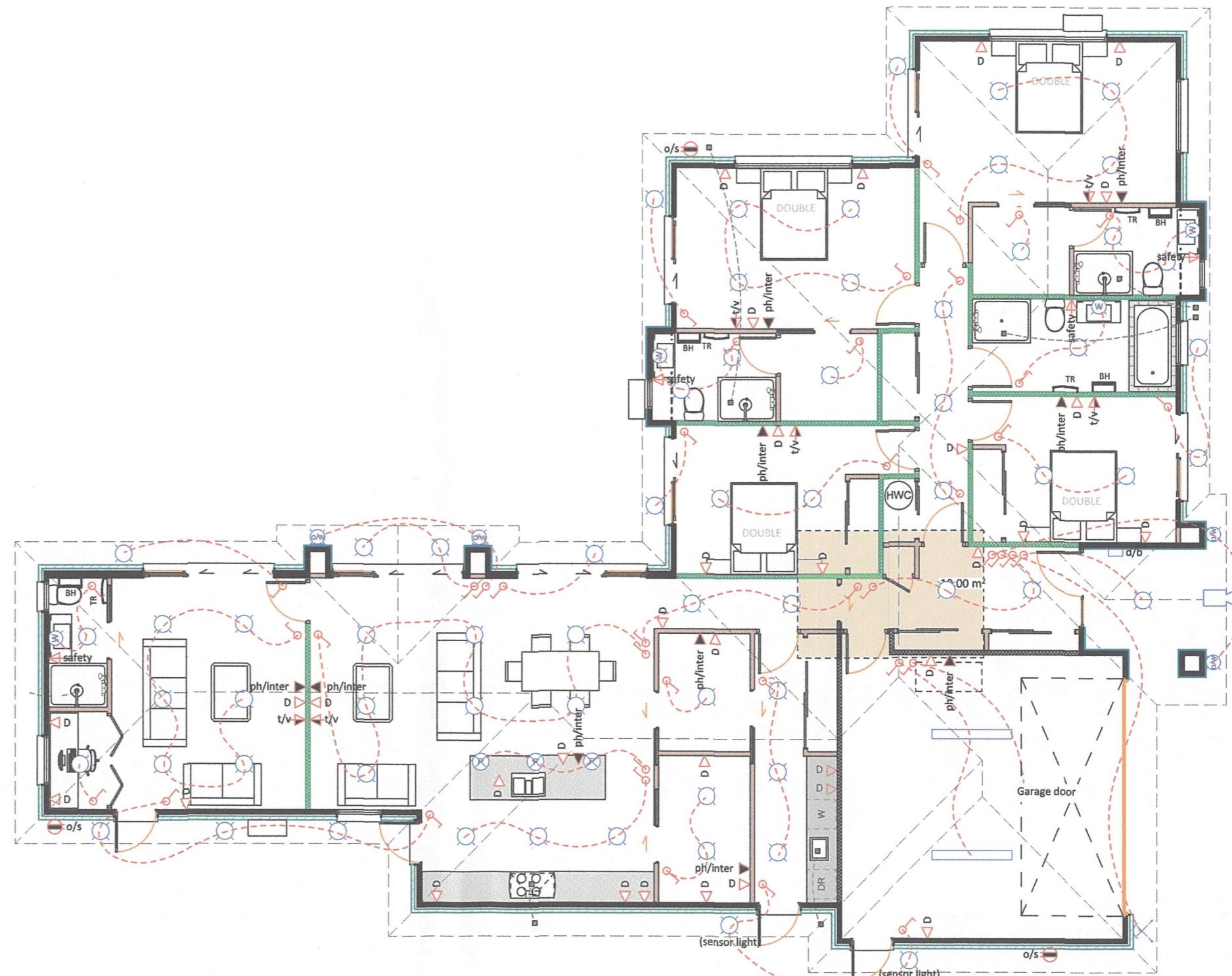
- BH Bathroom Heater
- TR Heated towel rail
- Extract fan

Light Fittings

- LED down lights
- W Vanity lights (Wall mounted)
- DW Outdoor wall light (sensor light)
- Security lights
- Hanging pendant light
- Twin fluorescent light
- d/b Door bell button

NOTE

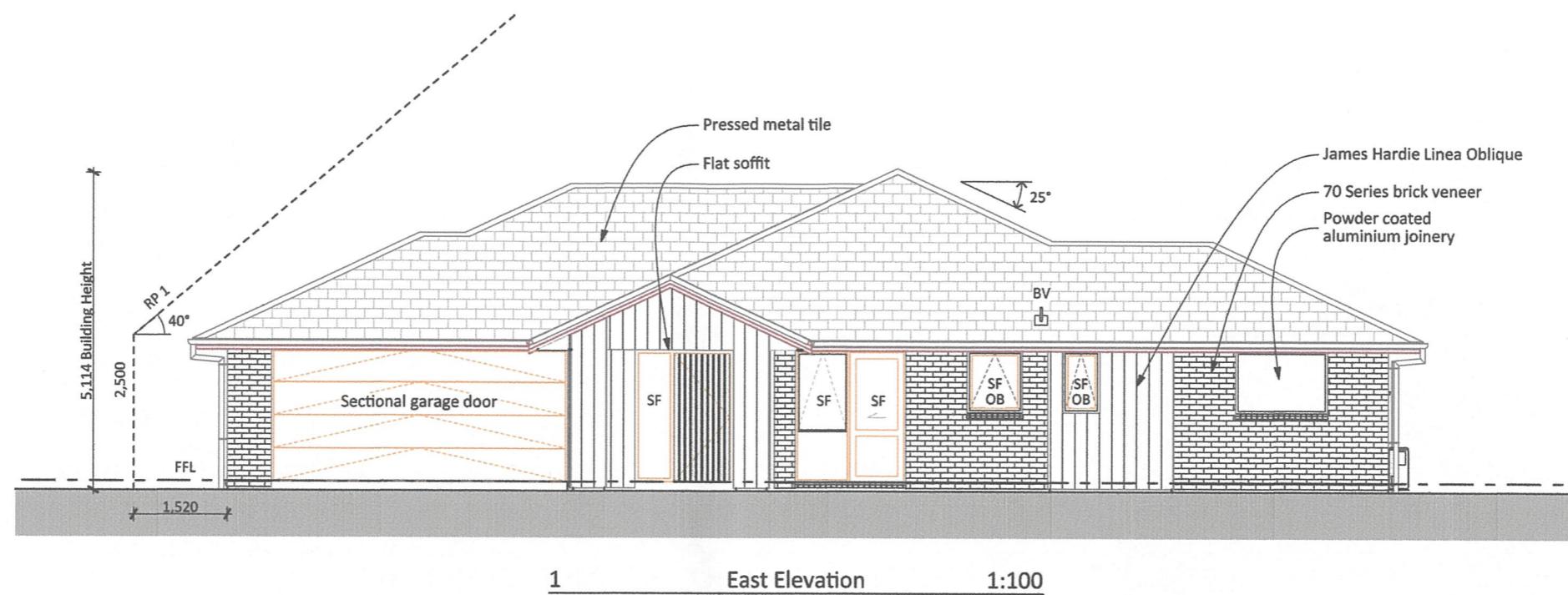
- Single power points to be installed for kitchen appliances includes kitchen connections. ie: microwave, fridge, waste, dishwasher, garage door openers and rangehood.
- Confirm all points, including hob and oven, with kitchen designer prior to placement
- Install single batten holder and switch to attic space in Garage if applicable
- All locations to be confirmed on site by clients with a electrician.



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TITLE: Electrical & Lighting Plan		
SCALE:	1:100	PROJECT #:
PAPER SIZE:	A3	DRAWN BY:
FILE NAME:	Harry Lo v22 - 5.pln	PRINTED:
		21/03/2022

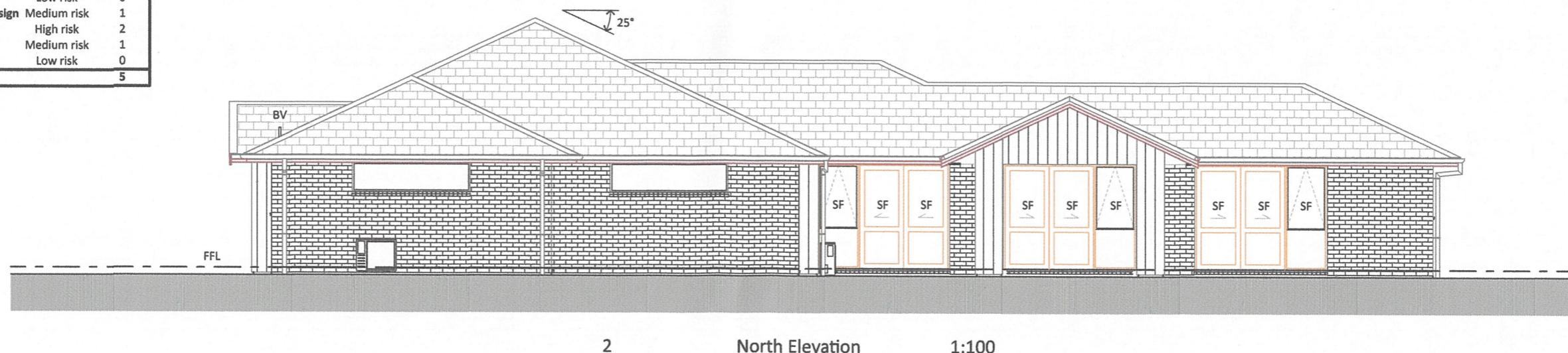
BUILDING ENVELOPE RISK MATRIX		
Elevation		
Risk Factor	Risk Severity	Risk Score
Wind zone (per NZS 3604)	High risk	1
Number of storeys	Low risk	0
Roof/wall intersection design	Medium risk	1
Eaves width	High risk	2
Envelope complexity	Medium risk	1
Deck design	Low risk	0
Total Risk Score:		5



KEY

FFL	Finished floor level
OB	Obscure glass
SF	Safety glass
HP	Heat pump - on metal brackets
TV	Terminal vent

BUILDING ENVELOPE RISK MATRIX		
Elevation		
Risk Factor	Risk Severity	Risk Score
Wind zone (per NZS 3604)	High risk	1
Number of storeys	Low risk	0
Roof/wall intersection design	Medium risk	1
Eaves width	High risk	2
Envelope complexity	Medium risk	1
Deck design	Low risk	0
Total Risk Score:		5



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TITLE: Elevations	
SCALE:	1:100
PAPER SIZE:	A3
DRAWN BY:	JMK
FILE NAME:	Harry Lo v22 - 5.pln
PRINTED:	21/03/2022

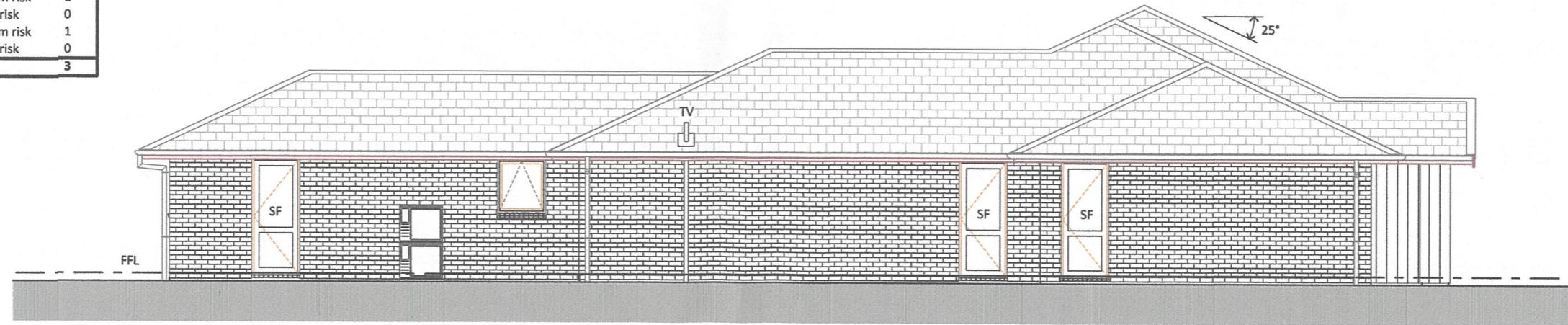
BUILDING ENVELOPE RISK MATRIX		
Elevation		
Risk Factor	Risk Severity	Risk Score
Wind zone (per NZS 3604)	High risk	1
Number of storeys	Low risk	0
Roof/wall intersection design	Medium risk	1
Eaves width	Low risk	0
Envelope complexity	Medium risk	1
Deck design	Low risk	0
Total Risk Score:		3

KEY

FFL	Finished floor level
OB	Obscure glass
SF	Safety glass
HP	Heat pump - on metal brackets
TV	Terminal vent



BUILDING ENVELOPE RISK MATRIX		
Elevation		
Risk Factor	Risk Severity	Risk Score
Wind zone (per NZS 3604)	High risk	1
Number of storeys	Low risk	0
Roof/wall intersection design	Medium risk	1
Eaves width	Low risk	0
Envelope complexity	Medium risk	1
Deck design	Low risk	0
Total Risk Score:		3



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TITLE:	Elevations		
SCALE:	1:100		
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FILE NAME:	Harry Lo v22 - 5.pln		
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