

# Linkwater Memorial Hall

## 1355 Queen Charlotte Drive

### Linkwater

#### General

All construction is to be in accordance with this specification, the technical standards associated with that work, the manufacturer's literature, and generally accepted good trade practices.

Construction of the work shall be carried out by competent, experienced tradesperson.

Excavated material is to be removed from site unless otherwise noted. The contractor is to verify all details and dimensions on site prior to commencing any work.

Do not scale from drawings.

All standards referred to in this specification are assumed to be the most recent issue of the standard including amendments. This should be read in conjunction with structural engineers drawings.

Site datum top of peg 4.70m

Owners responsibility to maintain, good ground clearances & maintenance. 225mm min ground clearance to natural ground or 150mm min to permanent material

#### Concrete

C1. All concrete work shall comply with NZS 3109:2003, CONCRETE CONSTRUCTION.

C2. Concrete production must comply with NZS 4210:2001

C3. Construction of buildings under consideration complying with NZS 3604, NZS 4229, NZS 3104 and NZS 3109:1997

C4. All concrete shall be high grade with a compressive strength of not less than 20 MPa at 28 days.

#### Reinforcement

R1. D12 continuous bars

R.3 R10 stirrups @ 600mm crs

R.4 Bottom bars cover 75mm & edge cover 50mm NZS3604:2011

#### Timber Durability

(Refer to standard NZS 3602:2003)

T1. All timbers to be SG8 kiln dried unless specified

T2. Timber treatment: H3.2 treated (L.O.S.P. treatment is not acceptable, accept plywood).

T3. Timber treatment of ACQ or CuAz preservatives all fixings to be Stainless Steel type 304

T4. Fixing through H3.2 treated timber to be Stainless Steel

T5. Timber cut faces to be treated with Holdfast Metalex wood protector or similar product

#### COLORSTEEL Endura Roofing

Roof to be installed to NZBC E2/AS1:2011

NZ Metal Roof and Wall Cladding Code of Practice

0.55 COLORSTEEL Endura corrugated iron longrun

THERMAKRAFT CoverTec 407 roof underlay or similar

#### Gutters

COLORSTEEL Endura Continuous gutter & pre finished fascia  
80mm Ø PVC downpipes

#### Plumbing

Sewer tie into existing reticulation system

Stormwater new soak pit

#### Soffit Linings

JH 4.5mm Hardie soffit exterior soffit lining to 70 x 35 battens @ 600mm crs - PVC jointers & paint finish.

#### Exterior Cladding

ShadowClad cladding Plywood & batten H3 over 20mm cavity battens H3.1

Ecoply Barrier 7mm Ecoply barrier H3.2

#### Insulation

Walls R2.8 - 90mm thk EARTHWOOL

Ceilings R3.6 - 175mm thk EARTHWOOL

Subfloor R1.80 - 60mm thk EXPOL BLACK

#### Aluminum Flashings

Manufactures to supply all flashings as required in Very High wind zone

Installed in accordance with E2/AS1:2011

#### Glazing

Mirrors & Shower doors

in bathrooms Grade 'A' Safety glass Toughened in accordance with NZS 4223.3:2016

#### Fire Protection

GIB Fire rated walls system (GBUW 120)

One Way protection 120/120/120

2 layers of 19mm Fyrelite GIB boards on inside

#### General Structural Fixings Notes

**Note: All Timbers to be SG8, Unless noted otherwise NZS 3602:2003.**

#### Bottom plate to timber floor

- External walls & internal wall bracing elements  
Hand Driven nails - 2 /100 x 3.75 @ 600mm crs or  
Power Driven nails - 3 /90 x 3.15 @ 600mm crs
- Internal walls (may be nailed to floor decking)  
Hand Driven nails - 1 /100 x 3.75 @ 600mm crs  
Power Driven nails - 1 /90 x 3.15 @ 600mm crs
- Trimmer not exceeding 2.4m long  
Hand Driven nails - 4 /100 x 3.75 end nailed or  
Power driven nails - 6 /90 x 3.15 end nailed

#### Stud to plate

- 4 /75 x 3.15 (skewed) or 2 /100 x 3.75 (end nailed)  
(Refer Table 8.19 - Nailing Schedule in NZS 3604:2011).

#### Top plate

- Type B - 2 /90 x 3.15 end nails + 2 wire dogs ALT 4.7kN  
(Refer to Table 8.18 - Fixing of top plate of wall to supporting members in NZS 3604:2011 for standard nailing).

#### Ribbon board to top plate

- 2/100 x 3.75 @500mm crs (hand driven)  
3/90x3.15 @500mm crs (power driven)  
(Refer to Table 8.19 - Nailing Schedule for hand driven & power driven nails NZS 3604:2011 for standard nailing).

#### Trusses

- Type T - 1 /10g self-drilling screw, 80mm long fixing ALT 2.4kN (Refer Table 10.10 - Fixing Purlins on the flat in NZS 3604:2011)

#### Purlins

- Type T - 1 /10g self-drilling screw, 80mm long fixing ALT 2.4kN  
(Refer Table 10.10 - Fixing Purlins on their flat in NZS 3604:2011)

#### Load Bearing Walls

- 2.45m high, 90 x 45 @ 400mm crs.  
(Refer table 8.2 - Studs in laddering walls - SG8 NZS 3604:2011)

#### None Bearing Walls

- 2.45m high, 90 x 45 @ 400mm crs.  
(Refer table 8.4 - Studs in non-load bearing walls - SG8 NZS 3604:2011)

#### Drawing Index

##### Sheet #

##### Sheet Name

##### Revision / Date

#### DRAWING LIST

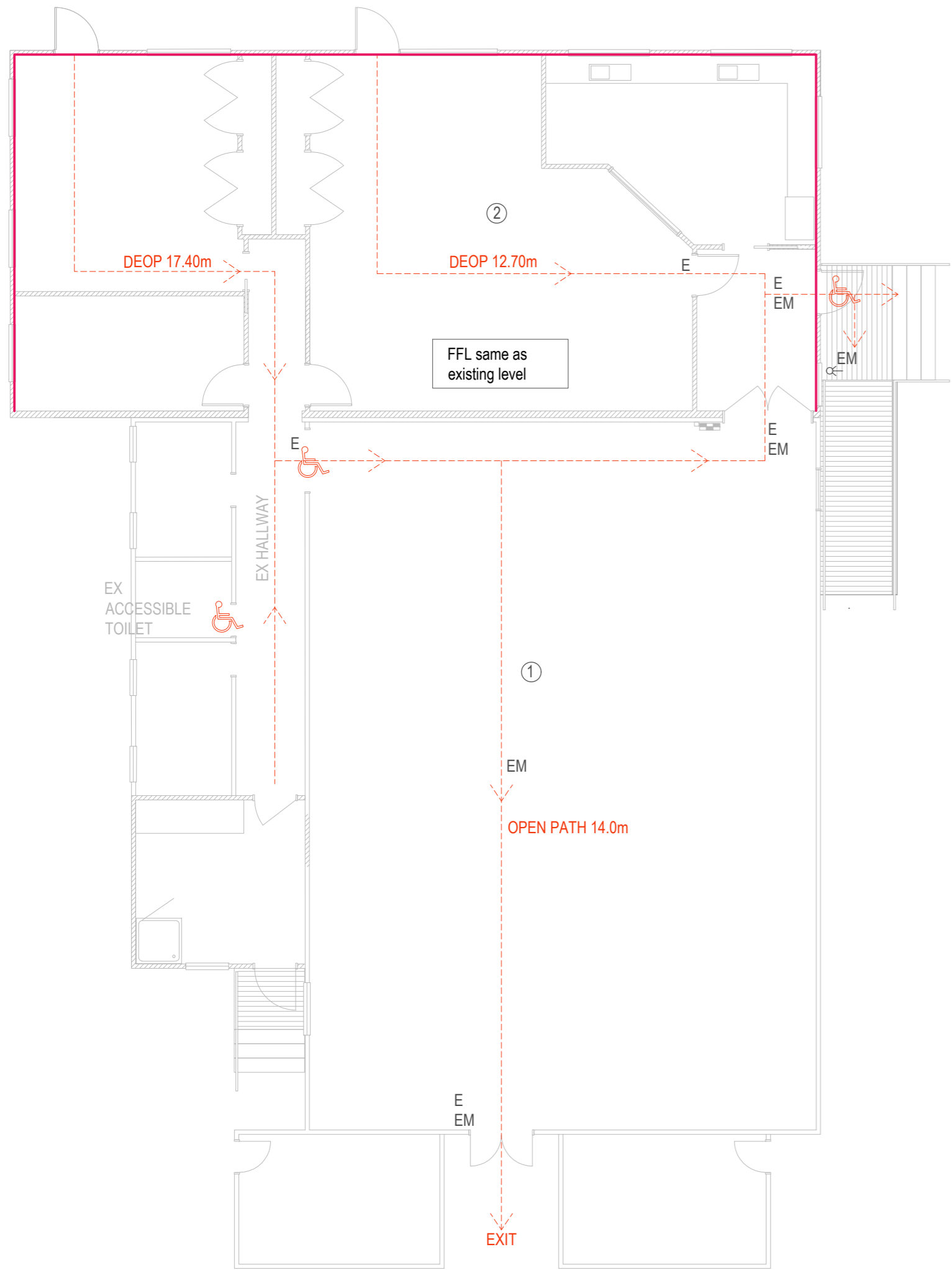
F1.0	Egress Route & Electrical Layout	01	01.04.20
A1.0	Site, Demolition & Drainage Plan	01	01.04.20
A1.1	Foundation & Wall Bracing Plan	01	01.04.20
A2.0	Existing Floor plan & Elevations	01	01.04.20
A2.1	Elevations	01	01.04.20
A3.0	Floor Plan	01	01.04.20
A3.1	Roof Plan & Window Schedule	01	01.04.20
A4.0	Floor Dimensions & Cross Sections	01	01.04.20
A5.0	Details	01	01.04.20
A6.0	Window Schedule	01	01.04.20

Fire & Accessible Report  
Scala Test report

ALL DIMENSIONS TO BE CHECKED ON SITE PRIOR TO ORDERING MATERIALS, BY THE MAIN BUILDING CONTRACTOR

THESE DRAWINGS SHOULD BE READ IN CONJUNCTION WITH THE ENGINEERING SPECIFICATIONS AS NOTED AND WITH SPECIFICATION PROVIDED SEPARATELY

REFER TO ATTACHED MASTERSPEC FOR SPECIFICATIONS



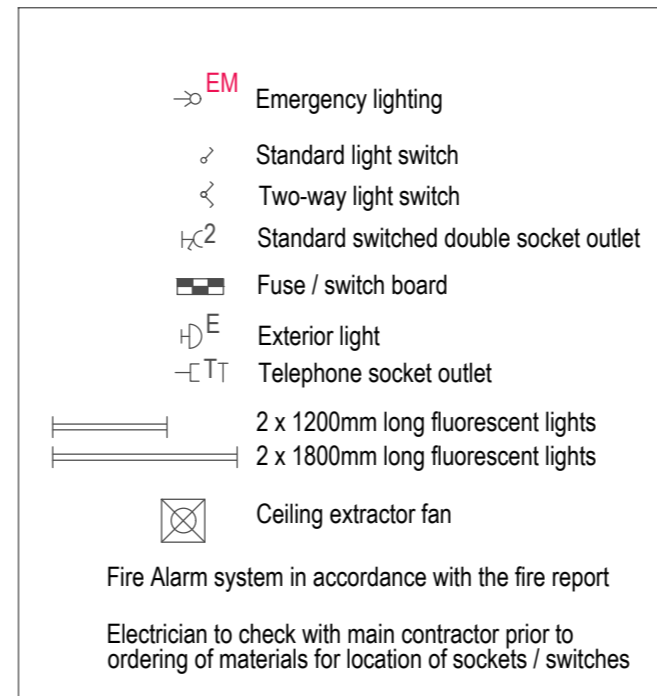
**EGRESS ROUTE**  
SCALE 1:100 (A2)

**NOTES**

- E - Exist Sign
- EM - Accessibility Sign
- Egress Route
- ♿ Existing Accessible toilet
- GIB Fire rated walls system (GBUW 120) Refer to fire report attached
- Site plan showing 2 accessible carparks bays

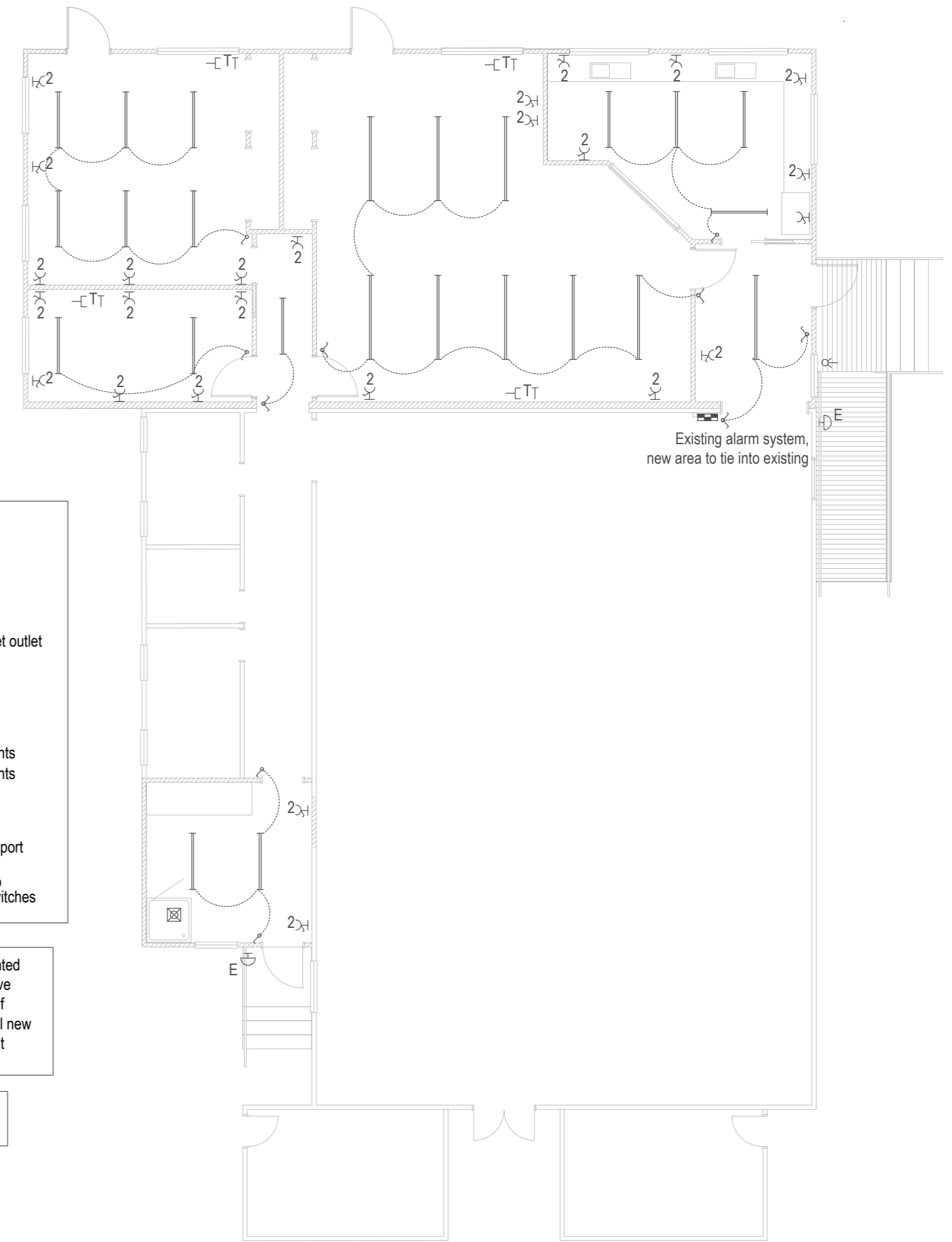
① Floor area 157m<sup>2</sup> Main Hall  
② 50.8m<sup>2</sup> Supper room

**Electrical Layout Legend :**



Electrical power points to be mounted between 500-1200mm height above finished floor level and minimum of 500mm away from corners, and all new light switches are to be mounted at 1000mm above finished floor level

Lighting & Emergency Layout  
Accessibility report attached



**ELECTRICAL LAYOUT**  
SCALE 1:100 (A2)

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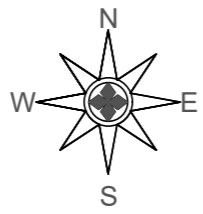
Client: Linkwater Memorial Hall  
1355 Queen Charlotte Drive  
Linkwater

Project: Hall Extension

Egress Route & Electrical Layout

Sheet Number  
**F1.0**  
For Consent

DWG NO REV  
**1286** 01  
Scale at A2



**PROJECT INFORMATION**

Territorial Authority Marlborough District Council

Reference Numbers  
 Resource Consent :  
 Project Information Memorandum :  
 Building Consent :

Legal Description  
 Section 2 SECT 15 Mahakipawa DIST  
 Resource Management Plan : Wairau / Awatere District Plan

**Earthquake Zone** : Zone 3  
**Corrosion Zone** : Zone C  
**Climate Zone** : 3  
**Wind Region** : W  
**Wind Zone** : Very High  
**Snow Loading** : N3  
**Rainfall Intensity** : 50 - 60

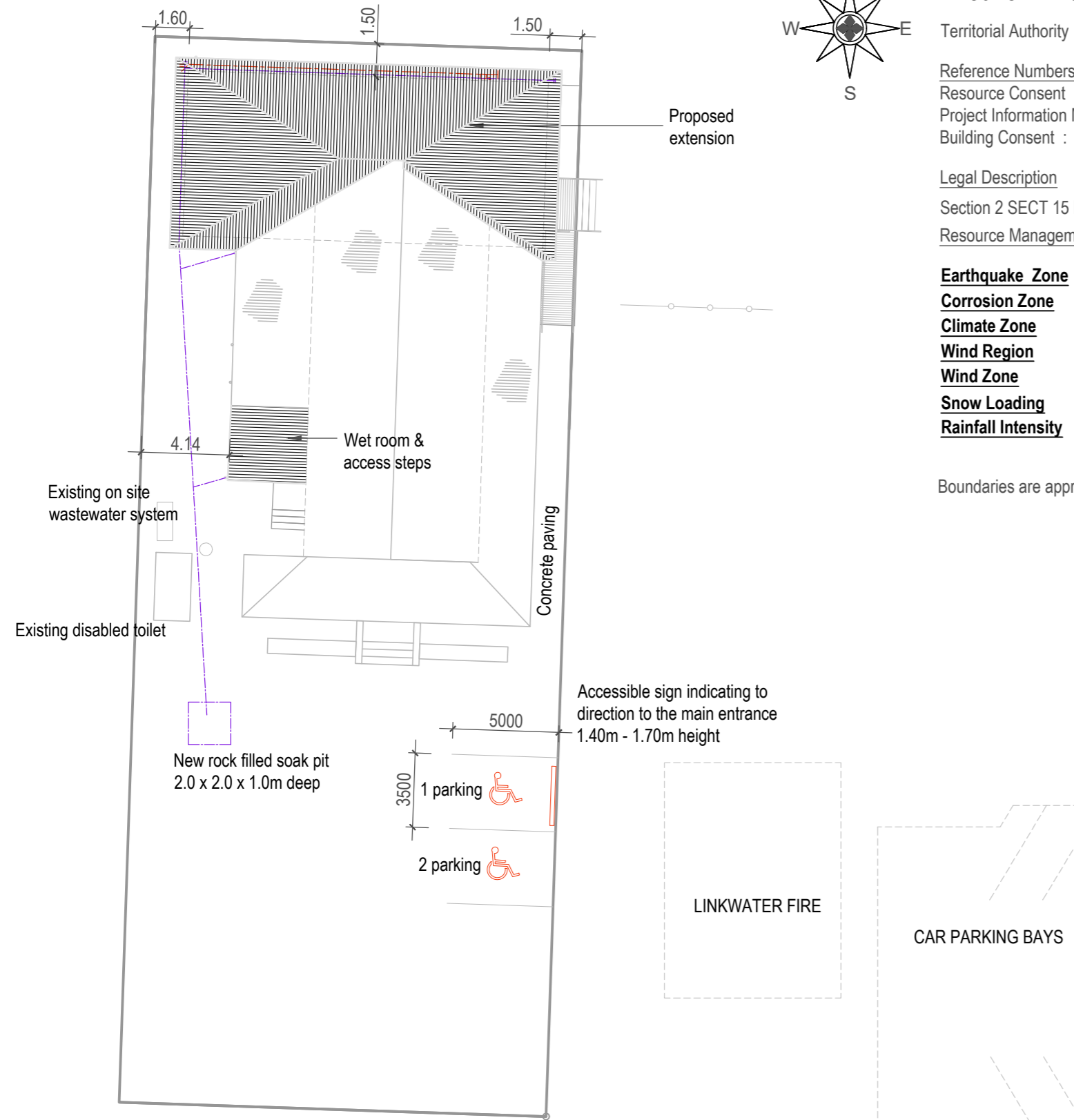
Boundaries are approximate only



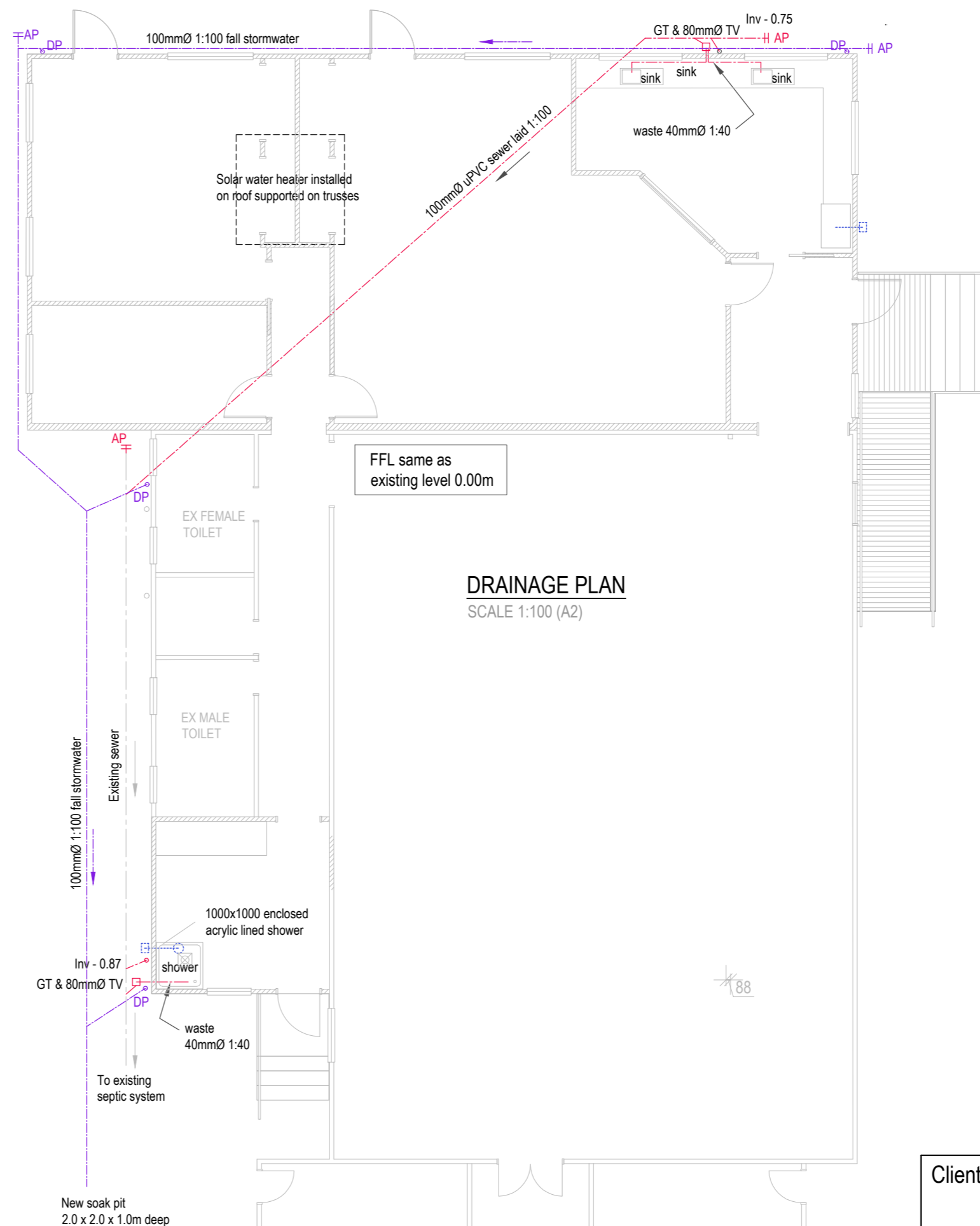
**AERIAL VIEW**  
SCALE N.T.S.



**SITE LOCATION**  
SCALE 25000 (A2)



**SITE PLAN**  
SCALE 1:250 (A2)



**DRAINAGE PLAN**  
SCALE 1:100 (A2)

**LEGEND**

DRAINAGE SCHEDULE Building Code G13 AS1/ NZS			
Waste pipes, Sizes, Falls & Unvented Length			
Fixture	Min Size	Min Fall	Max unvented length
Sink	40mm	1:40	2.5m
Shower	40mm	1:40	2.5m
Stormwater	100mm	1:100	
Sewer	100mm	1:100	
Terminal vent	80mm Ø		
Down pipe	80Ø PVC		

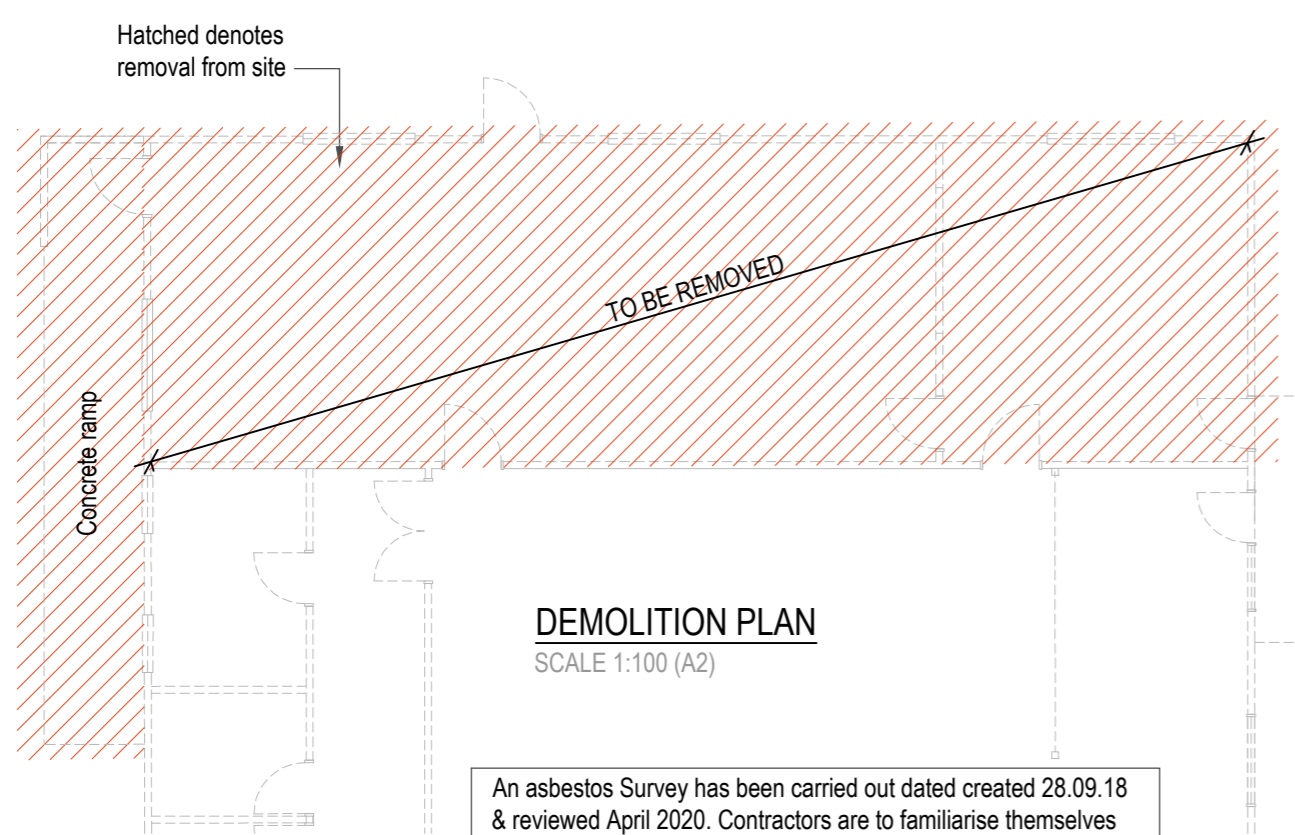
**KEY**

- 100mm Ø uPVC Sewer
- Stormwater tie into existing drainlayer to confirm location
- Light extractor unit ducted thru soffit
- AP Access Panel
- Pipe penetrations in accordance with E2/AS1 paragraph 9.1.9.3

Pipe-runs to kitchen from hotwater In accordance with NZS4305

Nominal pipe size (mm)	10	15	20
Length (m)	25	12	7

Baths, Basins, & Sinks, Joints against Wall Linings in accordance with E3/AS1 paragraph 3.2.2



**DEMOLITION PLAN**  
SCALE 1:100 (A2)

An asbestos Survey has been carried out dated created 28.09.18 & reviewed April 2020. Contractors are to familiarise themselves with this report and take appropriate precautions to protect personnel, occupants and the public from any exposure

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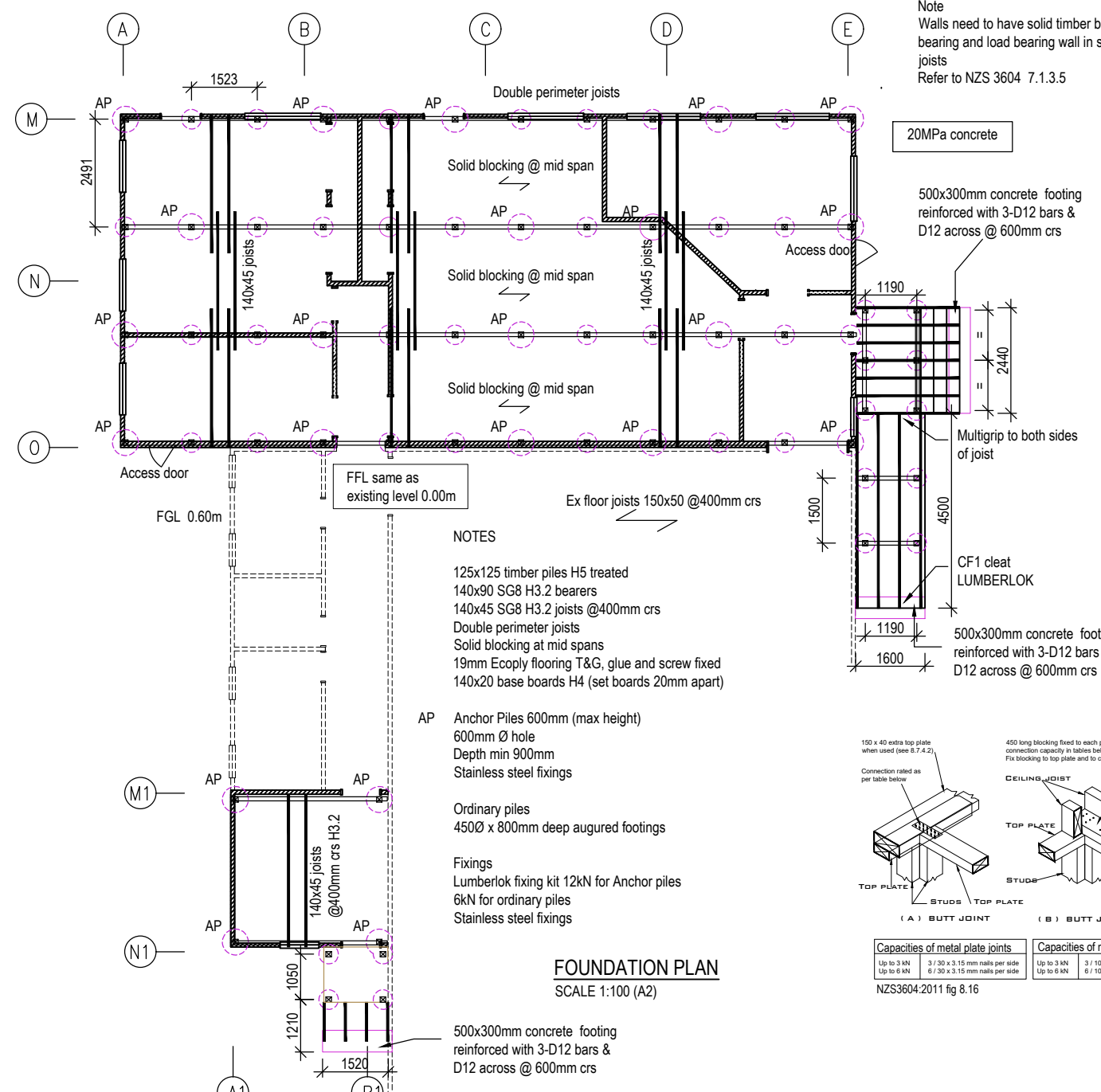
Client: Linkwater Memorial Hall  
 1355 Queen Charlotte Drive  
 Linkwater

Project: Hall Extension  
 Site, Demolition & Drainage Plan

Sheet Number  
**A1.0**  
 For Consent

DWG NO 1286  
 Scale at A2

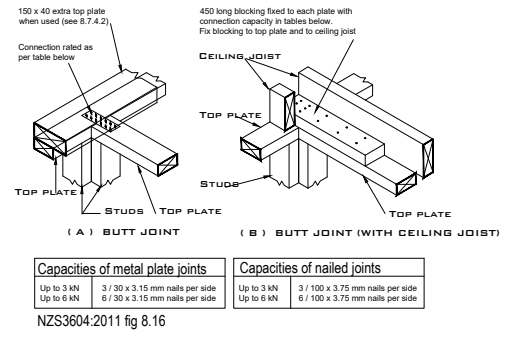
Note  
Walls need to have solid timber blocking under non load bearing and load bearing wall in same direction as the floor joists  
Refer to NZS 3604 7.1.3.5



- NOTES**
- 125x125 timber piles H5 treated
  - 140x90 SG8 H3.2 bearers
  - 140x45 SG8 H3.2 joists @400mm crs
  - Double perimeter joists
  - Solid blocking at mid spans
  - 19mm Ecoply flooring T&G, glue and screw fixed
  - 140x20 base boards H4 (set boards 20mm apart)

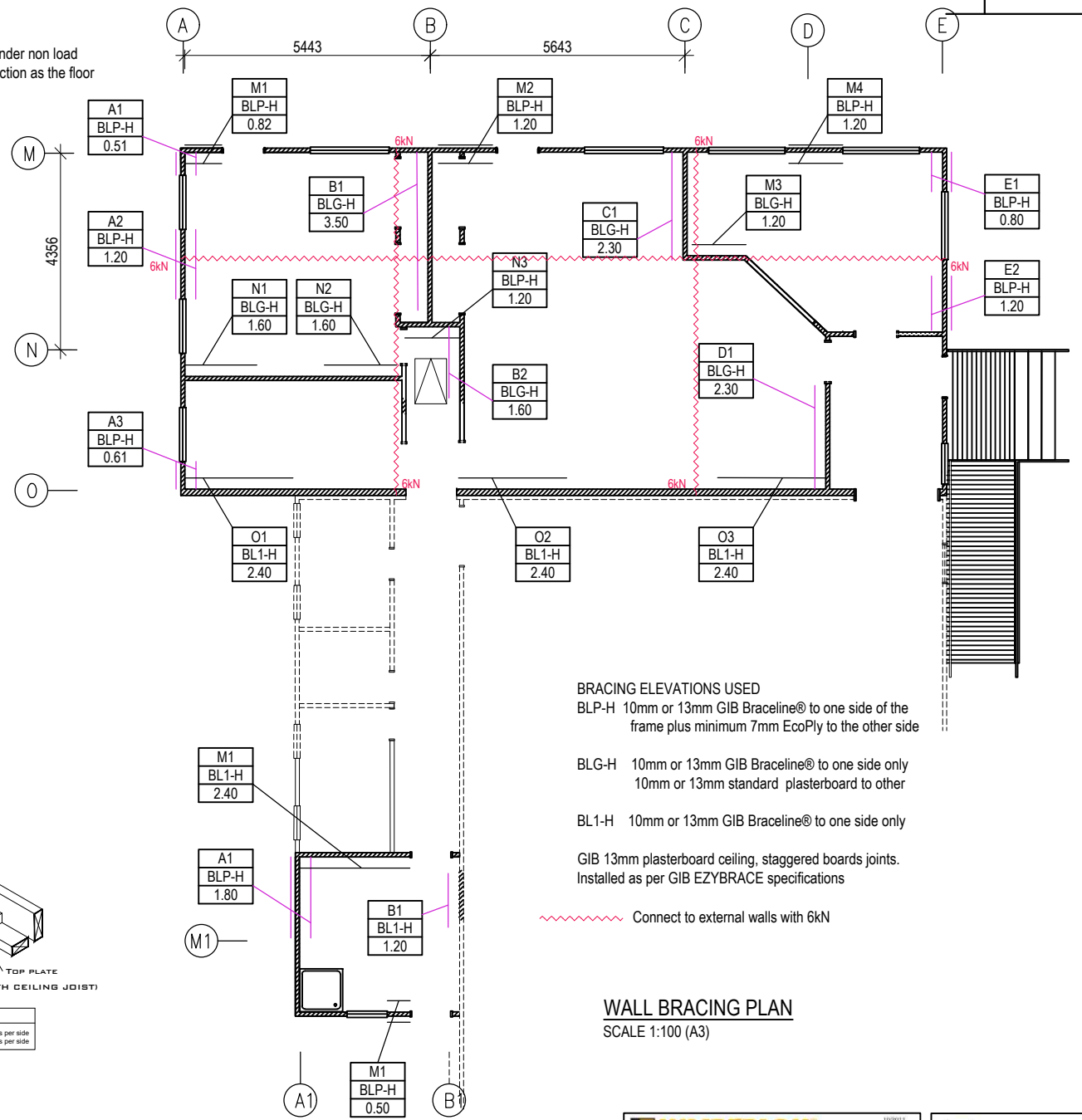
- AP Anchor Piles 600mm (max height)**
- 600mm Ø hole
  - Depth min 900mm
  - Stainless steel fixings
- Ordinary piles**
- 450Ø x 800mm deep augured footings
- Fixings**
- Lumberlok fixing kit 12kN for Anchor piles
  - 6kN for ordinary piles
  - Stainless steel fixings

**FOUNDATION PLAN**  
SCALE 1:100 (A2)



Capacities of metal plate joints		Capacities of nailed joints	
Up to 3 kN	3 / 30 x 3.15 mm nails per side	Up to 3 kN	3 / 100 x 3.75 mm nails per side
Up to 6 kN	6 / 30 x 3.15 mm nails per side	Up to 6 kN	6 / 100 x 3.75 mm nails per side

NZS3604:2011 fig 8.16



- BRACING ELEVATIONS USED**
- BLP-H 10mm or 13mm GIB Braceline® to one side of the frame plus minimum 7mm EcoPly to the other side
  - BLG-H 10mm or 13mm GIB Braceline® to one side only  
10mm or 13mm standard plasterboard to other
  - BL1-H 10mm or 13mm GIB Braceline® to one side only
  - GIB 13mm plasterboard ceiling, staggered boards joints.  
Installed as per GIB EZYBRACE specifications

Connect to external walls with 6kN

**WALL BRACING PLAN**  
SCALE 1:100 (A3)

**Demand Calculation Sheet**

Bracing Units required for Wind		Bracing Units required for Earthquake	
Along	Across	Along & Across	
Single Level	619	1242	1783
Subfloor Level	966	1951	1977

**Single Level Along Resistance Sheet**

Line	Element	Length (m)	Angle (degrees)	Type	Supplier	Wind (kN)	EQ (kN)
A	1	0.51	2.4	BLP-H	OSB	51	151
	2	1.00	2.4	BLP-H	OSB	100	300
	3	1.00	2.4	BLP-H	OSB	100	300

**Single Level Across Resistance Sheet**

Line	Element	Length (m)	Angle (degrees)	Type	Supplier	Wind (kN)	EQ (kN)
M	1	0.52	2.4	BLP-H	OSB	52	152
	2	1.00	2.4	BLP-H	OSB	100	300
	3	1.00	2.4	BLP-H	OSB	100	300

**Subfloor Level Along Resistance Sheet**

Line	Element	Length (m)	Angle (degrees)	Type	Supplier	Wind (kN)	EQ (kN)
A	1	1.00	2.4	BLP-H	OSB	100	300
	2	1.00	2.4	BLP-H	OSB	100	300
	3	1.00	2.4	BLP-H	OSB	100	300

**Subfloor Level Across Resistance Sheet**

Line	Element	Length (m)	Angle (degrees)	Type	Supplier	Wind (kN)	EQ (kN)
M	1	1.00	2.4	BLP-H	OSB	100	300
	2	1.00	2.4	BLP-H	OSB	100	300
	3	1.00	2.4	BLP-H	OSB	100	300

**Demand Calculation Sheet - Wet Room**

Bracing Units required for Wind		Bracing Units required for Earthquake	
Along	Across	Along & Across	
Single Level	341	334	96
Subfloor Level	532	525	107

**Single Level Along Resistance Sheet - Wet Room**

Line	Element	Length (m)	Angle (degrees)	Type	Supplier	Wind (kN)	EQ (kN)
A1	1	1.00	2.4	BLP-H	OSB	100	300
	2	1.00	2.4	BLP-H	OSB	100	300
	3	1.00	2.4	BLP-H	OSB	100	300

**Single Level Across Resistance Sheet - Wet Room**

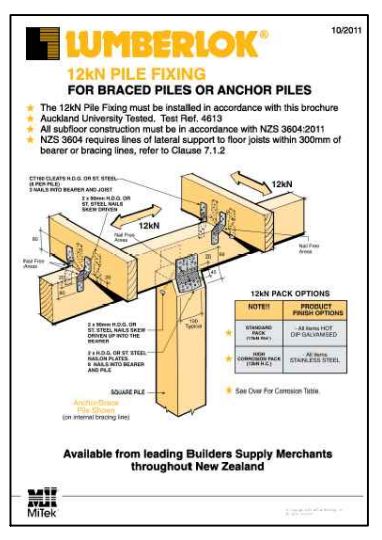
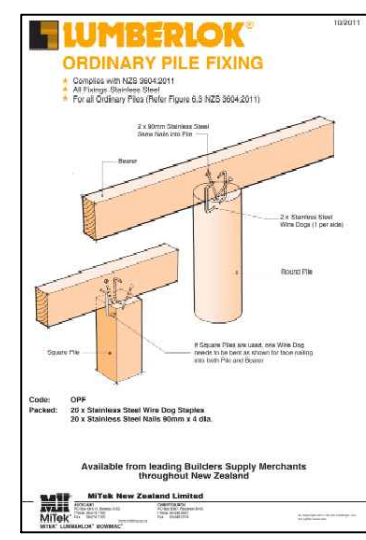
Line	Element	Length (m)	Angle (degrees)	Type	Supplier	Wind (kN)	EQ (kN)
M1	1	1.00	2.4	BLP-H	OSB	100	300
	2	1.00	2.4	BLP-H	OSB	100	300
	3	1.00	2.4	BLP-H	OSB	100	300

**Subfloor Level Along Resistance Sheet - Wet Room**

Line	Element	Length (m)	Angle (degrees)	Type	Supplier	Wind (kN)	EQ (kN)
A1	1	1.00	2.4	BLP-H	OSB	100	300
	2	1.00	2.4	BLP-H	OSB	100	300
	3	1.00	2.4	BLP-H	OSB	100	300

**Subfloor Level Across Resistance Sheet - Wet Room**

Line	Element	Length (m)	Angle (degrees)	Type	Supplier	Wind (kN)	EQ (kN)
M1	1	1.00	2.4	BLP-H	OSB	100	300
	2	1.00	2.4	BLP-H	OSB	100	300
	3	1.00	2.4	BLP-H	OSB	100	300



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**AD NZ**  
ARCHITECTURAL DESIGNERS NZ

**LICENSED BUILDING PRACTITIONER**  
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Client: Linkwater Memorial Hall  
1355 Queen Charlotte Drive  
Linkwater

Project: Hall Extension

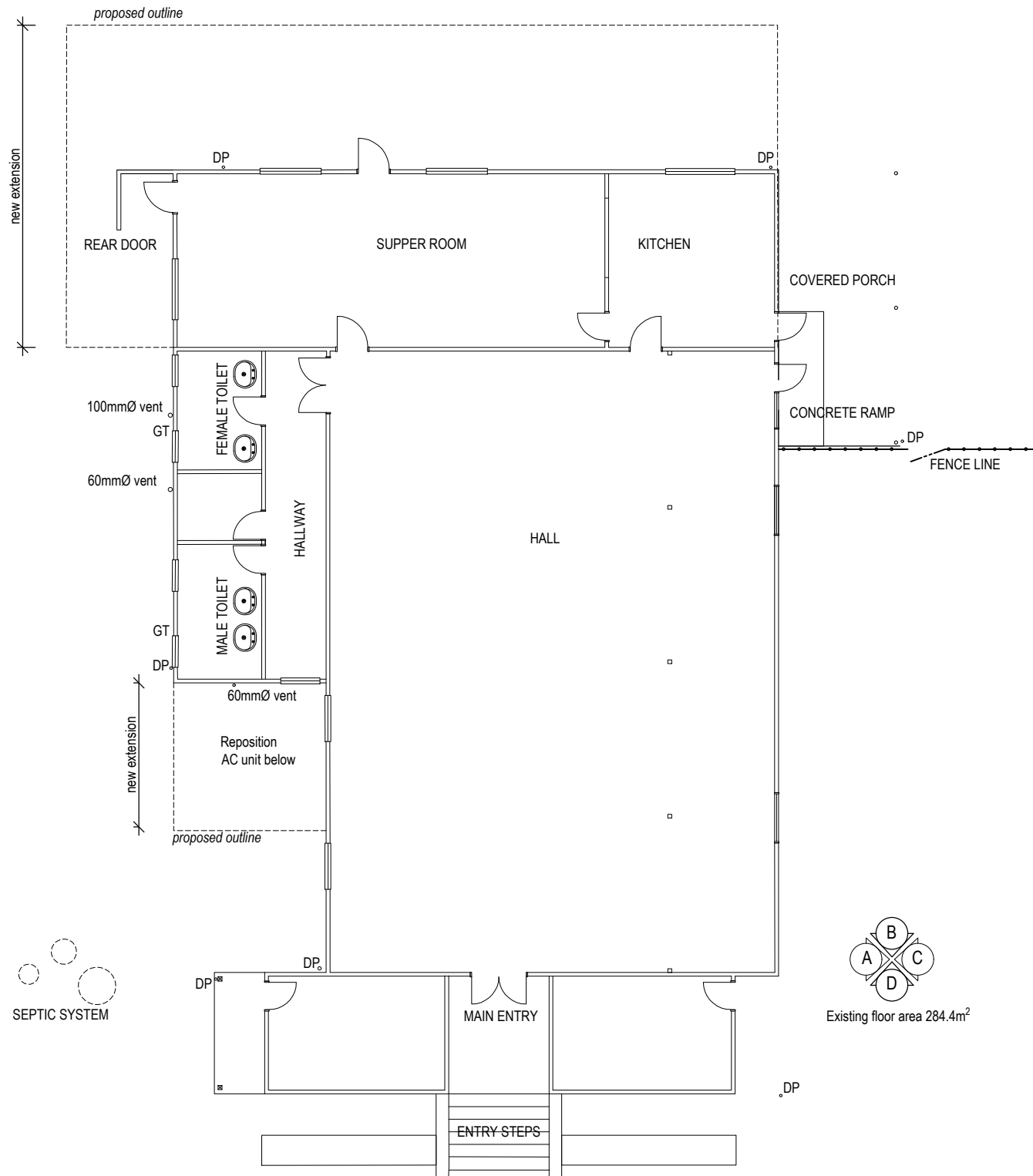
Foundation & Wall Bracing Plan

Sheet Number **A1.1**  
For Consent

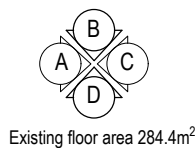
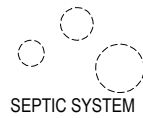
DWG NO **1286**  
Scale at A2

REV **01**

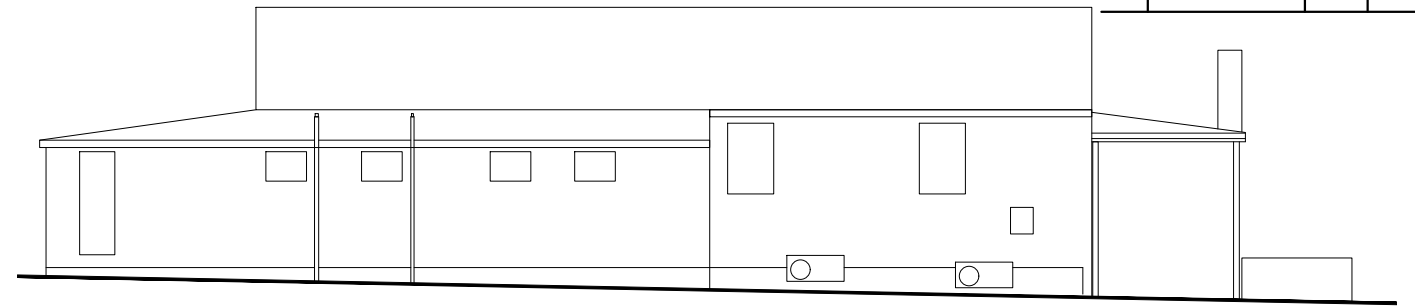
Issue	Change	Issuer	Date
No 1	For Approval	DL	21.04.20



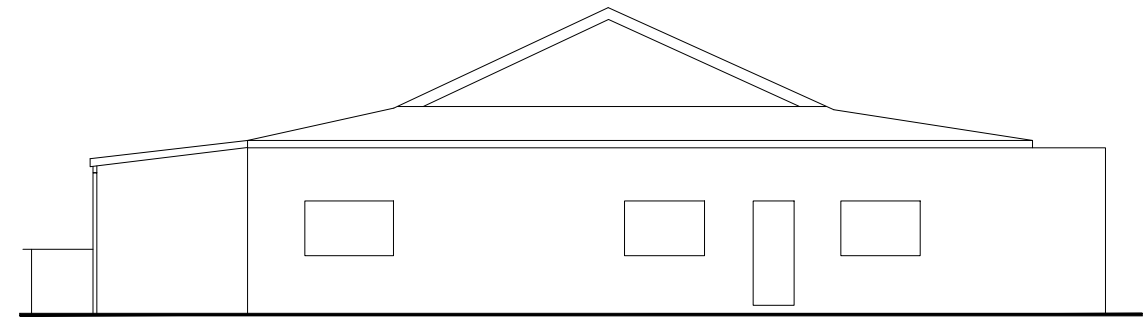
**EXISTING FLOOR PLAN**  
SCALE 1:100 (A2)



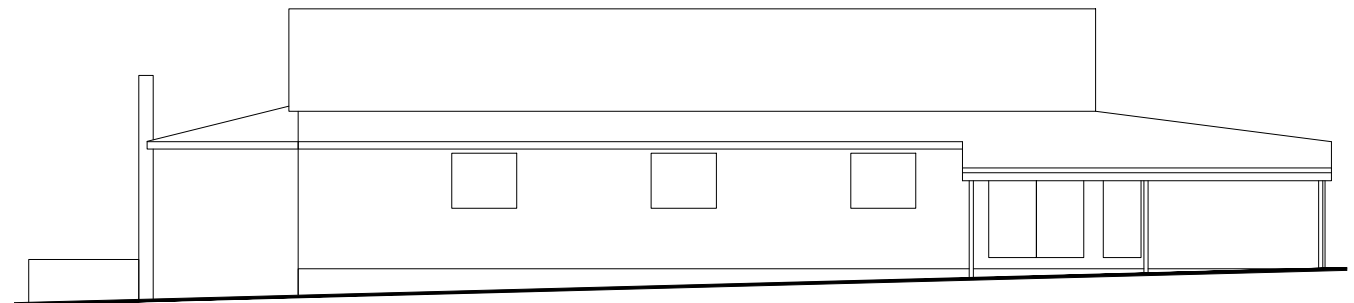
Existing floor area 284.4m<sup>2</sup>



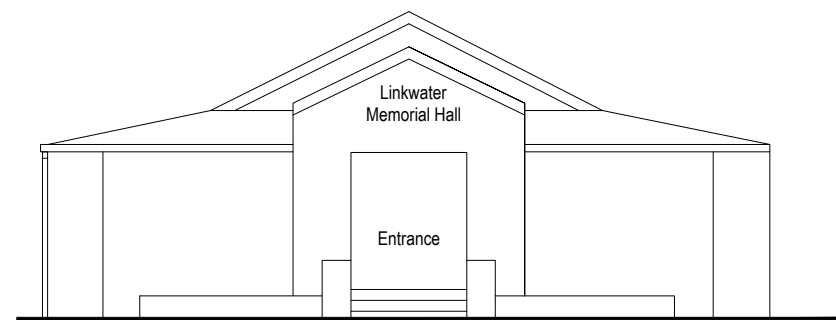
**EXISTING WEST ELEVATION A**  
SCALE 1:100 (A2)



**EXISTING NORTH ELEVATION B**  
SCALE 1:100 (A2)



**EXISTING EAST ELEVATION C**  
SCALE 1:100 (A2)



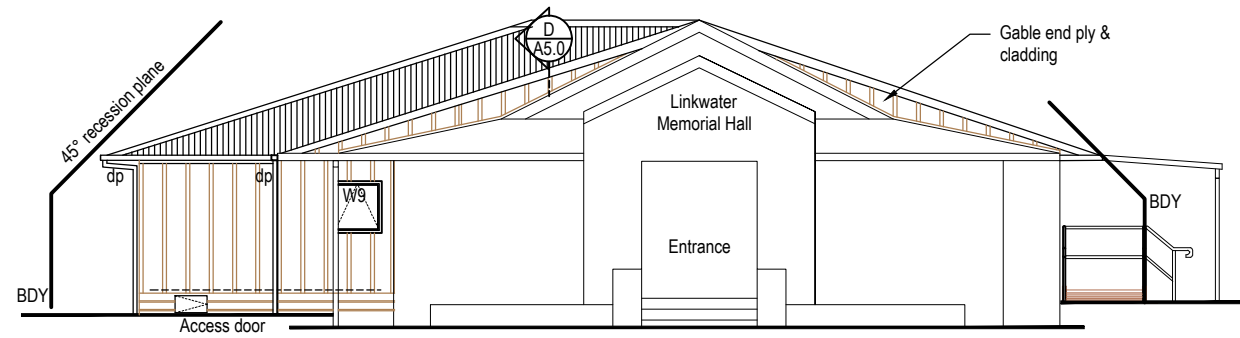
**EXISTING SOUTH ELEVATION D**  
SCALE 1:100 (A2)

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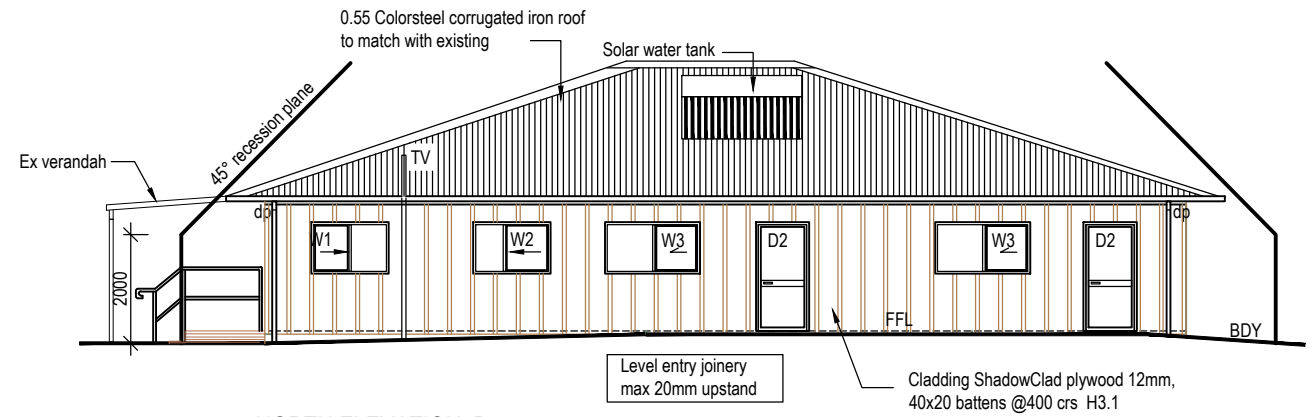
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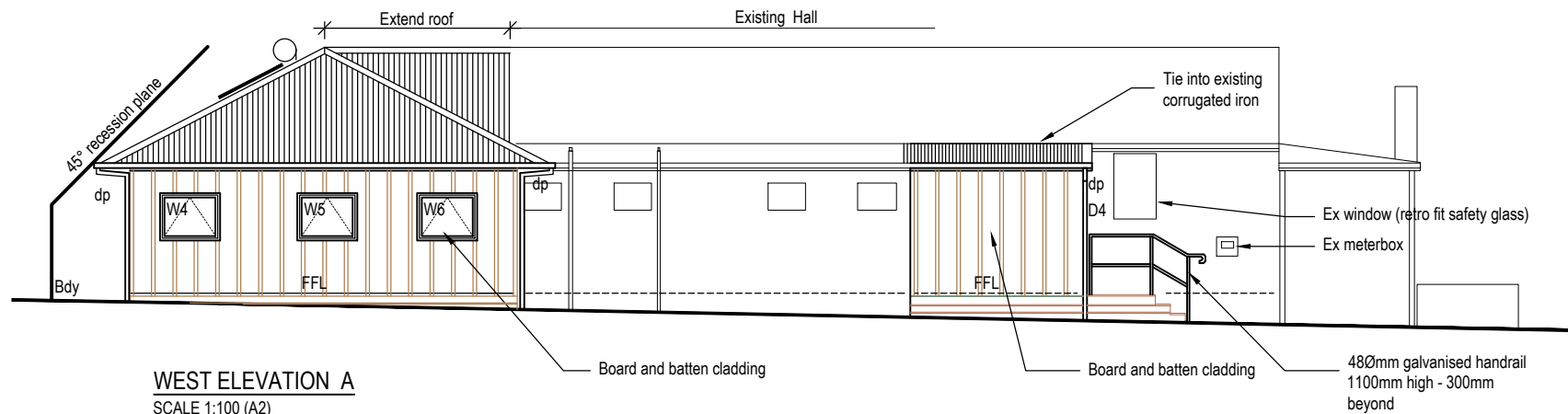
Client: Linkwater Memorial Hall 1355 Queen Charlotte Drive Linkwater	Sheet Number <b>A2.0</b> For Consent
Project: Hall Extension	DWG NO REV 1286 01
Existing Floor plan & Elevations	Scale at A2



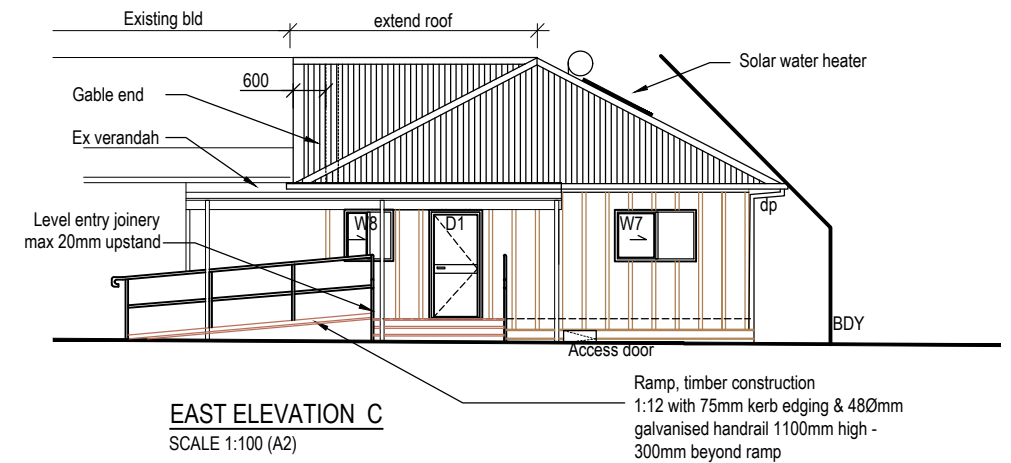
**SOUTH ELEVATION D**  
SCALE 1:100 (A2)



**NORTH ELEVATION B**  
SCALE 1:100 (A2)



**WEST ELEVATION A**  
SCALE 1:100 (A2)



**EAST ELEVATION C**  
SCALE 1:100 (A2)

BUILDING ENVELOPE RISK MATRIX		
A,B, & C elevations		
Risk Factor	Risk Severity	Risk Score
Wind zone (per NZS 3604)	Very High	2
Number of Storey's	Low Risk	0
Roof/ wall intersection design	Low Risk	0
Eave width	High Risk	2
Envelope Complexity	Medium Risk	1
Deck Design	Low Risk	0
<b>Total Risk Score</b>		<b>5</b>

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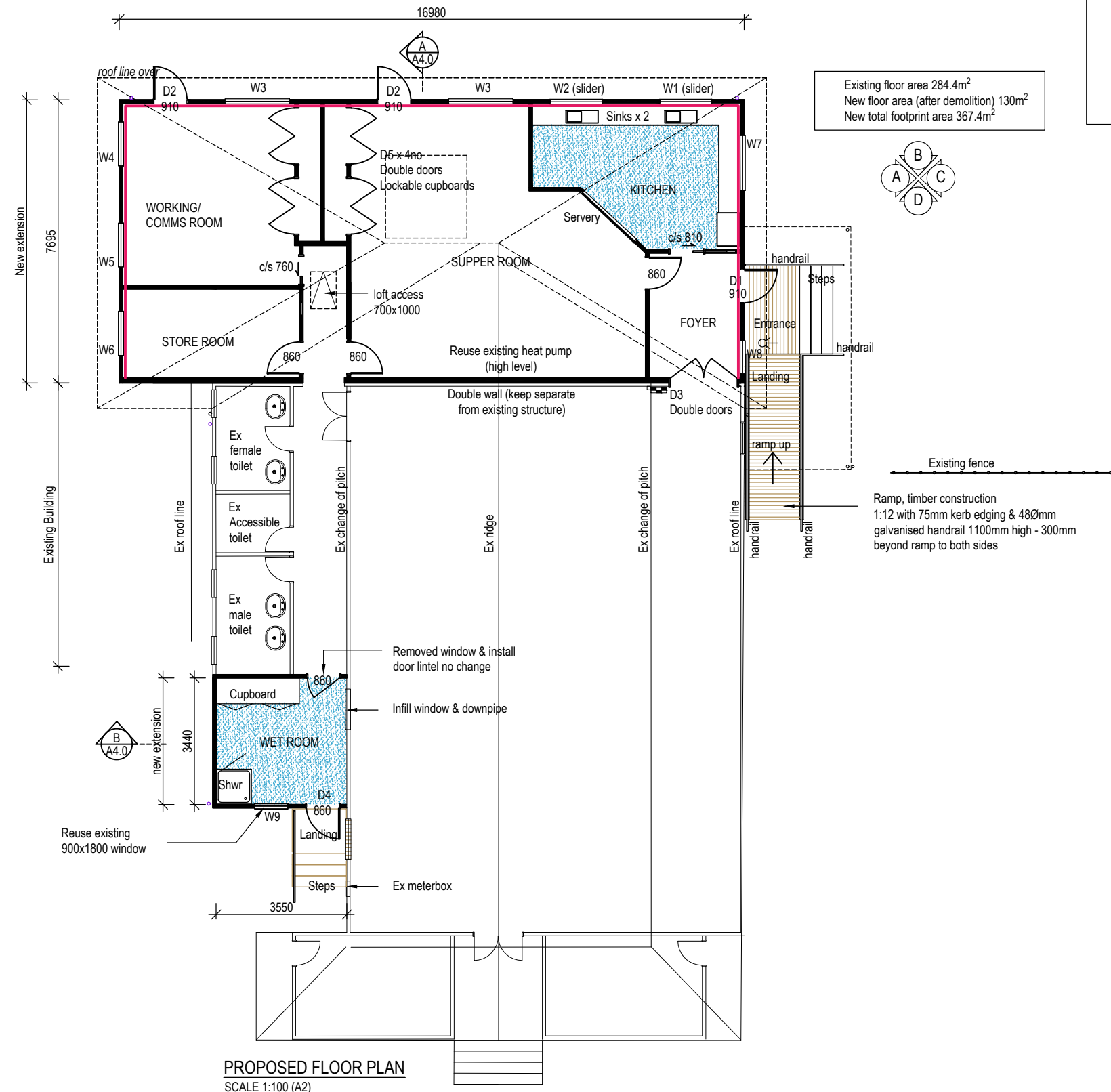
Client: Linkwater Memorial Hall  
1355 Queen Charlotte Drive  
Linkwater

Project: Hall Extension  
Floor plan & Elevations

Sheet Number  
**A2.1**  
For Consent

DWG NO 1286  
REV 01  
Scale at A2

ISSUE CHANGE		© Copyright	
Issue	Change	Issuer	Date
No 1	For Approval	DL	21.04.20



Existing floor area 284.4m<sup>2</sup>  
 New floor area (after demolition) 130m<sup>2</sup>  
 New total footprint area 367.4m<sup>2</sup>

**LEGEND**

- 90x45 SG8 framing @ 400mm crs & dwangs @800mm crs H1.2
- GIB Fire rated walls system (GBUW 120)  
2 layers of 19mm GIB Fyrelite one side

- NOTES**
- DIMENSIONS**  
ALL DIMENSIONS ARE TO FRAMING UNLESS OTHERWISE STATED.
- RECESSED DOWNLIGHTS**  
ALL RECESSED LUMINATED TO BE IC-F RATED LED DOWNLIGHTS.
- LINTELS**  
ALL LINTELS & BEAMS TO BE SG8 OR GREATER FOR PREVENTION OF UPLIFT REFER TO "MITEK LUMBERLOK" LINTEL FIXING SCHEDULE "TYPE" DEFINITIONS.
- WET AREAS WALL LININGS**  
GIB AQUALINE WET WALL LININGS FINISHED WITH SEMI-GLOSS OR GLOSS PAINT. AS PER ACCEPTABLE SOLUTION E3/3.2.1 WALLS.
- TIMBER FRAMING**  
EXTERIOR AND LOAD-BEARING WALLS TO BE FRAMED WITH 90x45mm SG8 STUDS @ 400mm MAX CRS UNLESS OTHERWISE SHOWN. ALL OTHER INTERNAL STUDS TO BE SG8 STUDS @ 600mm MAX CRS. ALL EXTERNAL WALL FRAMING SHALL BE PRESERVATIVE TREATED "H1.2" WITH "H1.2" BOTTOM PLATES.
- UNLESS OTHERWISE STATED ALL OTHER FRAMING TIMBER (INCLUDING FLOOR, ROOF, DECK, ETC.) SHALL HAVE A MINIMUM GRADE SG8.
- ROOFING CLADDING**  
27° ROOF PITCH  
ROOF CLADDING  
0.4mm COLORSTEEL ENDURA  
LONG RUN IRON
- ROOF TRUSSES BY OTHERS**  
TRUSS MANUFACTURE SHALL PROVIDE A PRODUCER STATEMENT PRIOR TO FABRICATION. S  
SITE MEASURE PRIOR TO FABRICATION
- EXTERIOR CLADDING**  
SHADOWCLAD & COVER BATTENS OVER DRAINED CAVITY ON 7mm RIGID AIR BARRIER (ECOPLY)
- SOLAR HOT WATER SYSTEM**  
INSTALLED ON ROOF
- ALUMINIUM JOINERY**  
DOUBLE GLAZED UNITS
- KITCHEN & BATHROOM FLOOR COVERING**  
TARKETT VINYL ANTI-SLIP WITH COVED SKIRTING 100mm

**PROPOSED FLOOR PLAN**  
SCALE 1:100 (A2)

**LIGHTFOOT DESIGN NZ Ltd**

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 www.dlightfootdesigns.com  
 LBP No BP107656



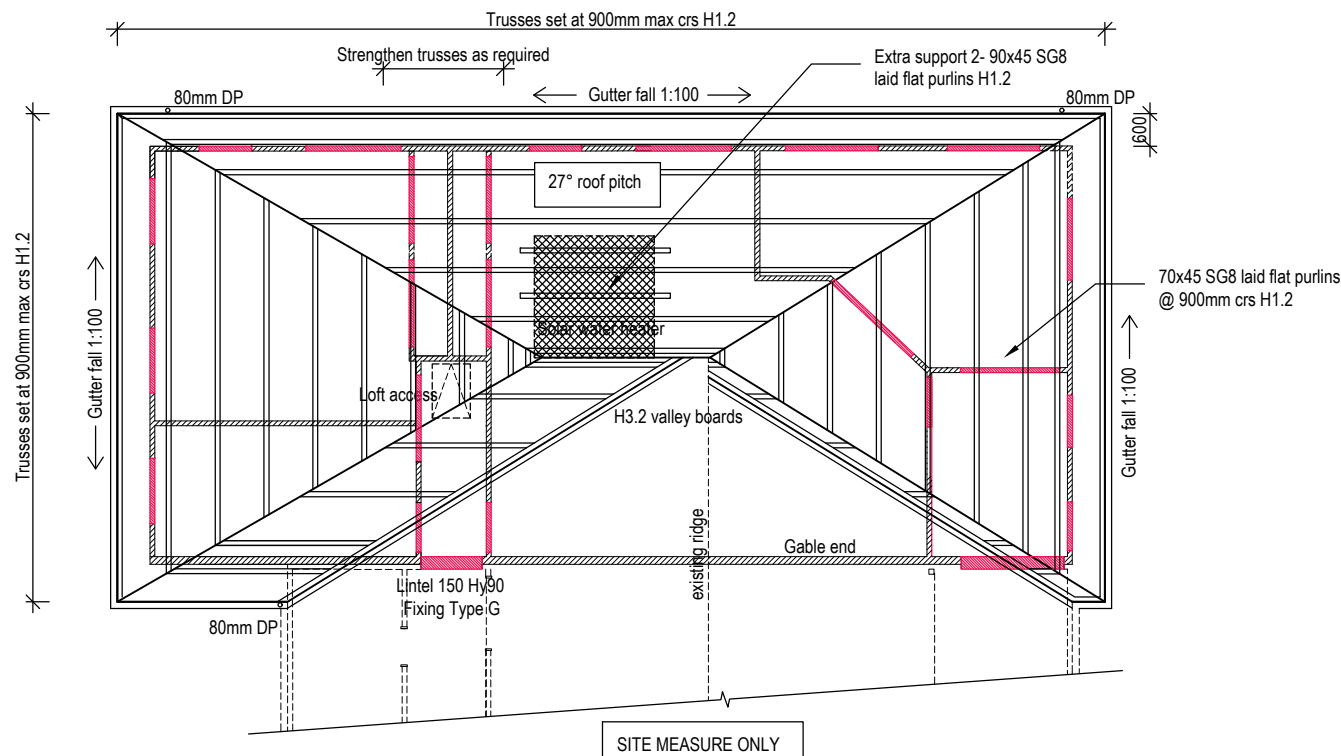
Client: Linkwater Memorial Hall 1355 Queen Charlotte Drive Linkwater	Sheet Number <b>A3.0</b> For Consent
Project: Hall Extension	DWG NO 1286
Floor Plan	REV 01 Scale at A2

Issue	Change	Issuer	Date
No 1	For Approval	DL	21.04.20

**Table 8: Maximum catchment areas for valley gutters**  
Paragraphs 8.1.6.2, 8.4.16.2, 9.7.7.1, 9.9.4.4, 9.9.10.1, Figures 27, 37 and 51

Gutter width	Maximum catchment area	Minimum roof pitch
250 mm	25 m <sup>2</sup>	8°
100 mm to 249 mm	16 m <sup>2</sup>	12.5°

**NOTE: Catchment areas are limited to:**  
(1) Gutters in accordance with Paragraph 8.1.6.2.  
(2) Rainfall intensity with average recurrence interval (ARI) no greater than 200 mm per hour.



0.55 COLORSTEEL longrun corrugated profile metal  
THERMAKRAFT CoverTec 407 roof underlay or similar

**Fixings**  
Truss  
Refer to truss manufactures fixings details

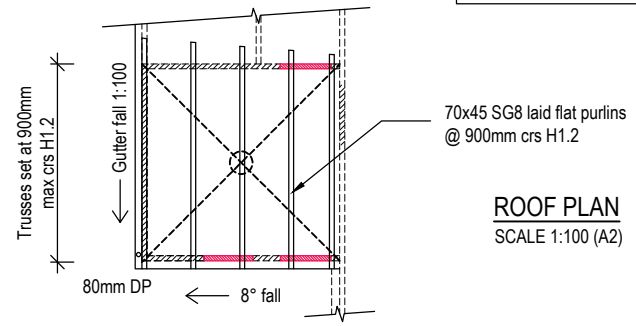
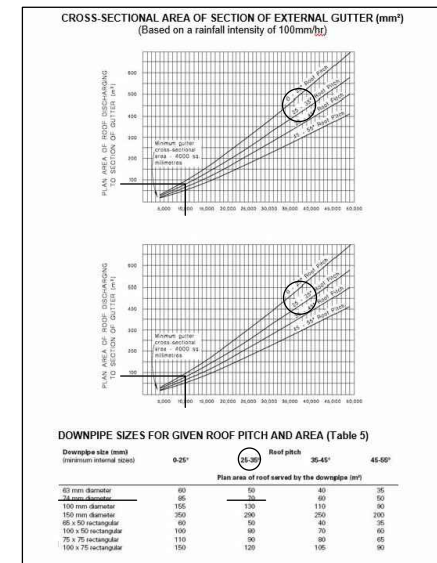
**Purlins**  
Type T - 1/10g self-drilling screw, 80mm long fixing ALT 2.4kN (Refer Table 10.10 - Fixing Purlins on the flat in NZS 3604:2011)

Roof cladding to purlins  
TEKS® self-drilling screws 12-14 x 68

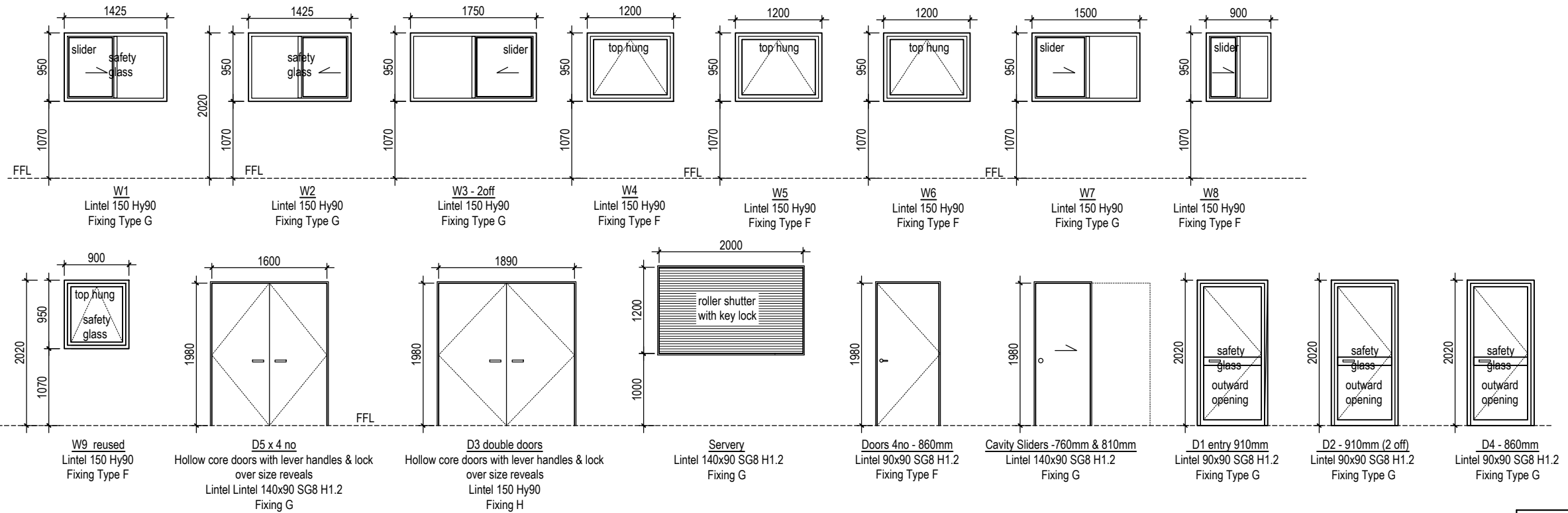
**KEY**  
Indicates lintels locations above garage level

Total roof area 141m<sup>2</sup>  
Wet room roof area 14.2m<sup>2</sup>  
Valley area maximum catchment roof area 25m<sup>2</sup>

REFER TO TRUSS LAYOUT ATTACHED



ROOF PLAN  
SCALE 1:100 (A2)



**NOTE:**  
Site information  
Wind Zone - Very High  
Exposure zone C

**SITE MEASURE ALL WINDOW & DOORS OPENINGS PRIOR TO MANUFACTURING**

New flashing & flashing tape as per E2:2011.  
DANCO TB 830 aluminium foil tape in addition to flashing tape or similar.  
Openings to be confirmed on site  
Window manufacture to allow +10mm rough opening.  
Wall underlay turned into framing reveals & taped at corners.

Powdercoated flashings supplied by fabrication manufacture.

Aluminum Powdercoated colour to be advised

Sill support bar over 600mm width  
Refer to E2/AS1:2011.

All windows / doors double glazed (0.26)  
Grade 'A' Safety glass Toughened in accordance with NZS 4223.3:2016

**IEWS TAKEN FROM OUTSIDE**

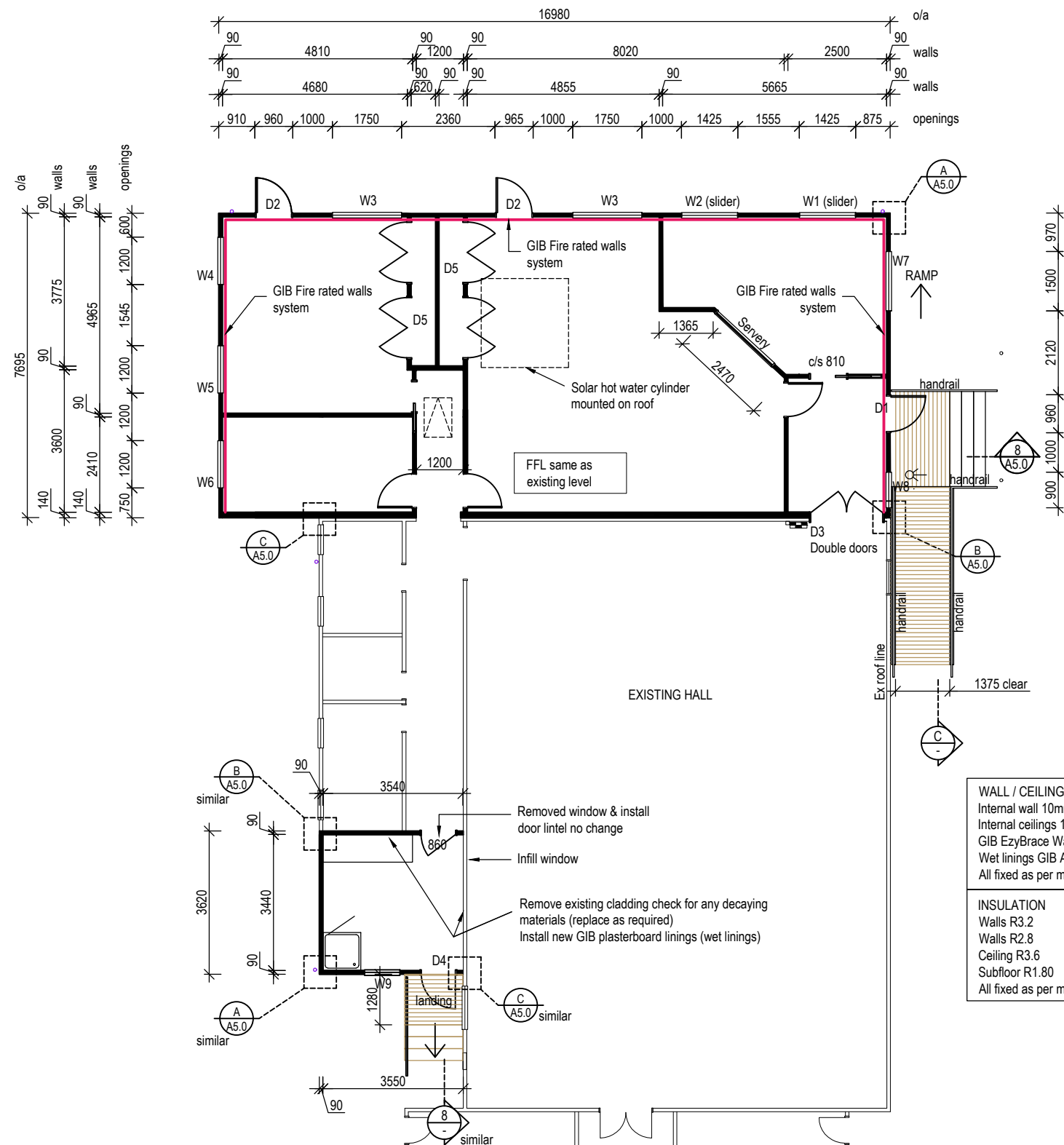
Lintel fixings taken from LUMBERLOK fixing schedule attached



Standard painted softwood reveals grooved for plasterboards

Door Hardware 1 and half pair of hinges  
Handle set & locking as required



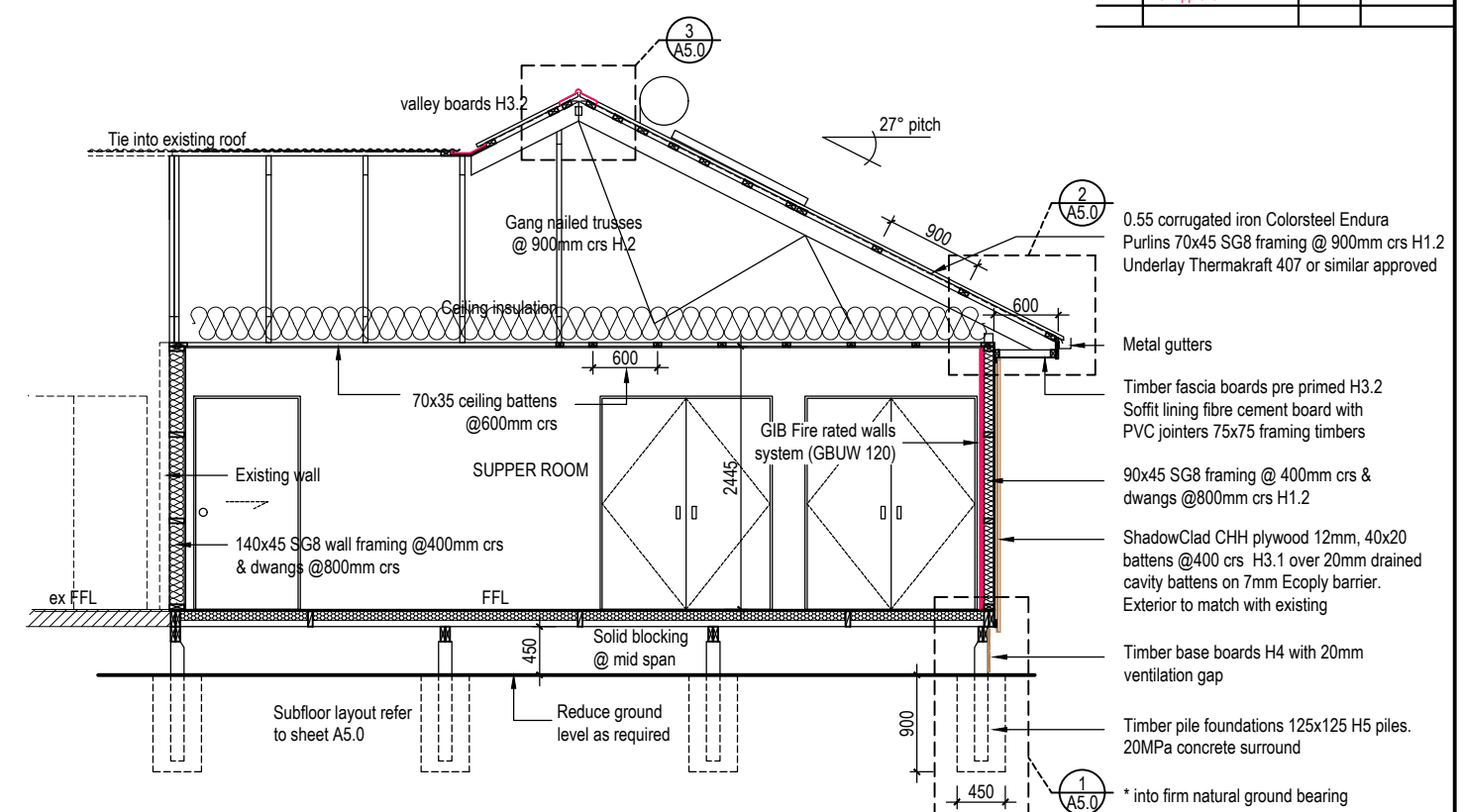


WALL / CEILING LININGS	
Internal wall	10mm GIB plasterboards
Internal ceilings	13mm GIB plasterboards
	GIB EzyBrace Wall Bracing System
	Wet linings GIB Aqualine boards
All fixed as per manufactures specifications	
INSULATION	
Walls R3.2	- 140mm thk EARTHWOOL
Walls R2.8	- 90mm thk EARTHWOOL
Ceiling R3.6	- 175mm thk EARTHWOOL
Subfloor R1.80	- 60mm thk EXPOL Black
All fixed as per manufactures specifications	

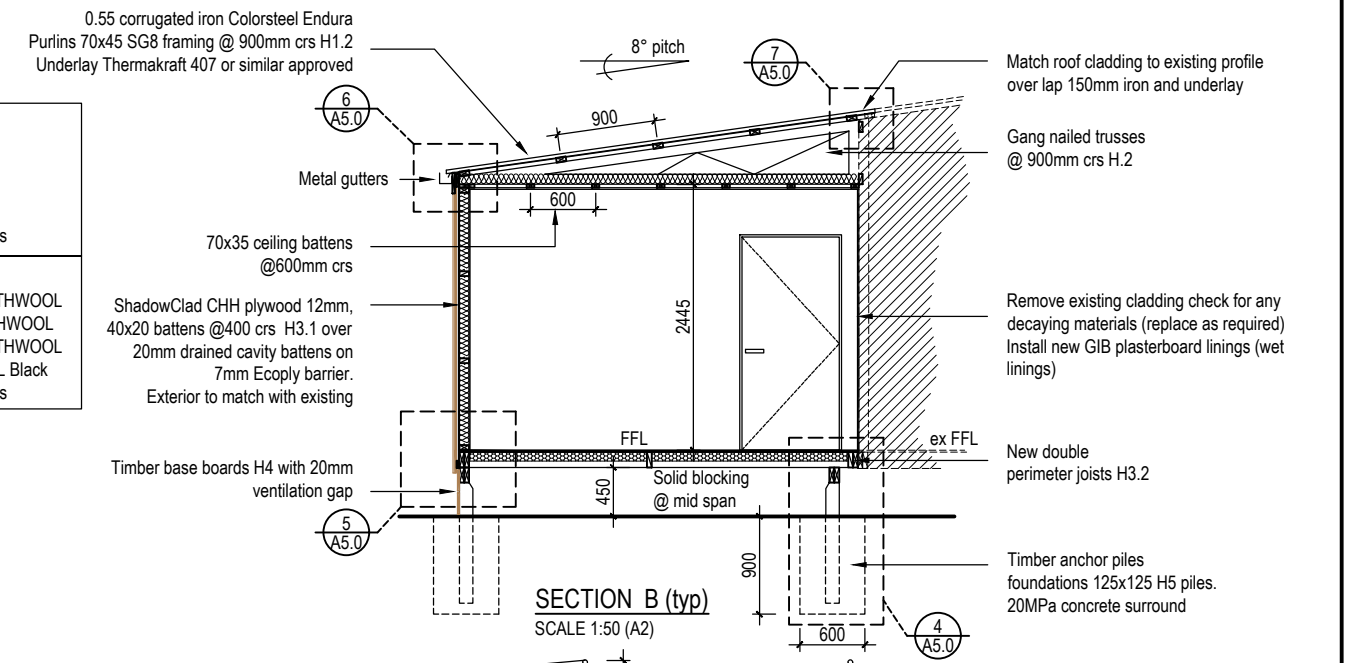
**FLOOR DIMENSIONS**  
SCALE 1:100 (A2)

**LEGEND**

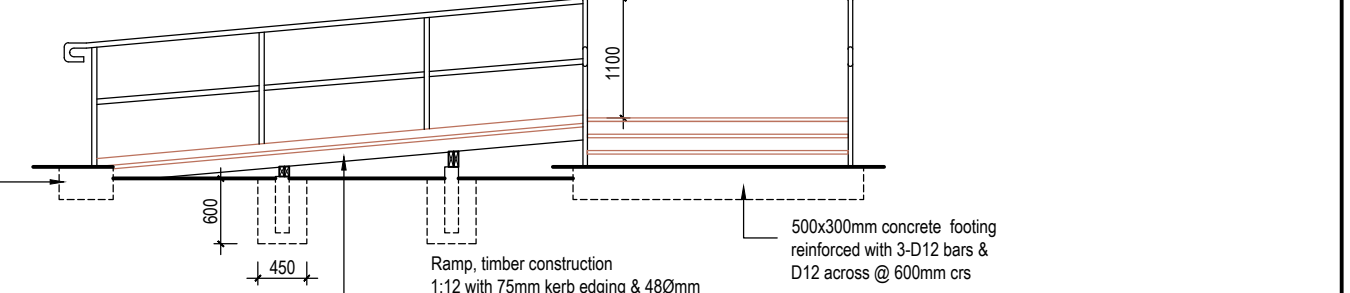
- Fire and accessibility report attached security lighting (auto switch)
- 90x45 SG8 framing @ 400mm crs & dwangs @800mm crs H1.2
- GIB Fire rated walls system (GBUW 120) 2 layers of 19mm GIB Fyrelite one side



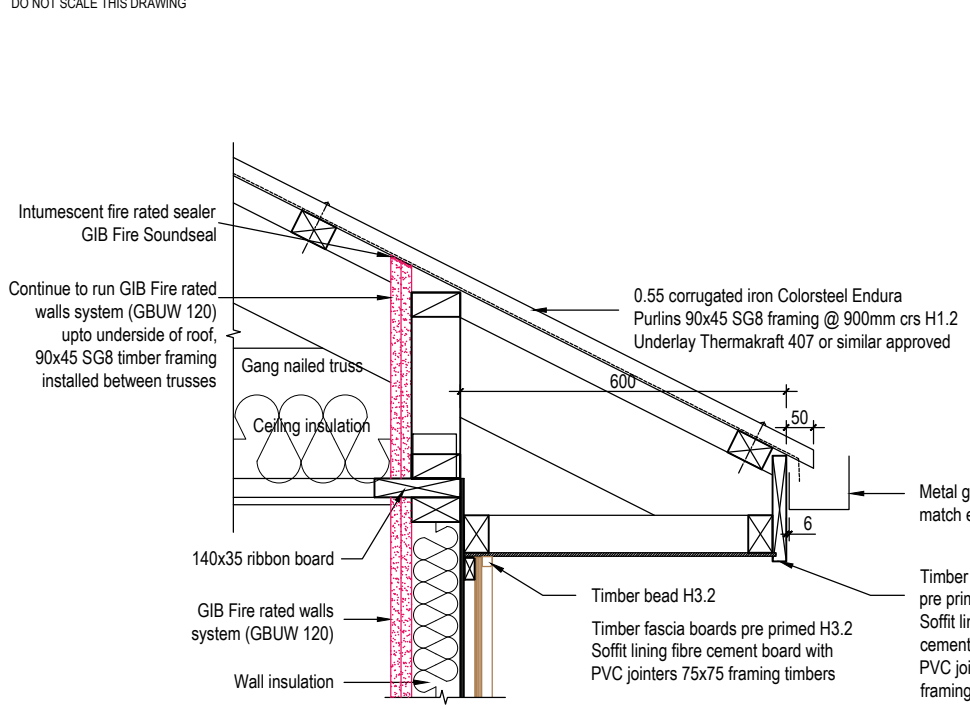
**SECTION A (typ)**  
SCALE 1:50 (A2)



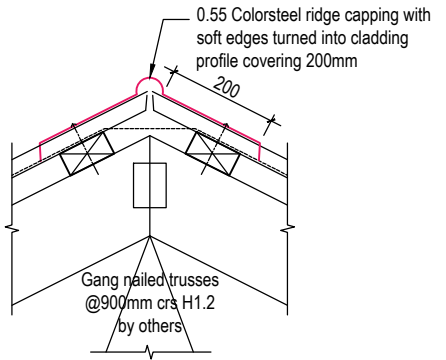
**SECTION B (typ)**  
SCALE 1:50 (A2)



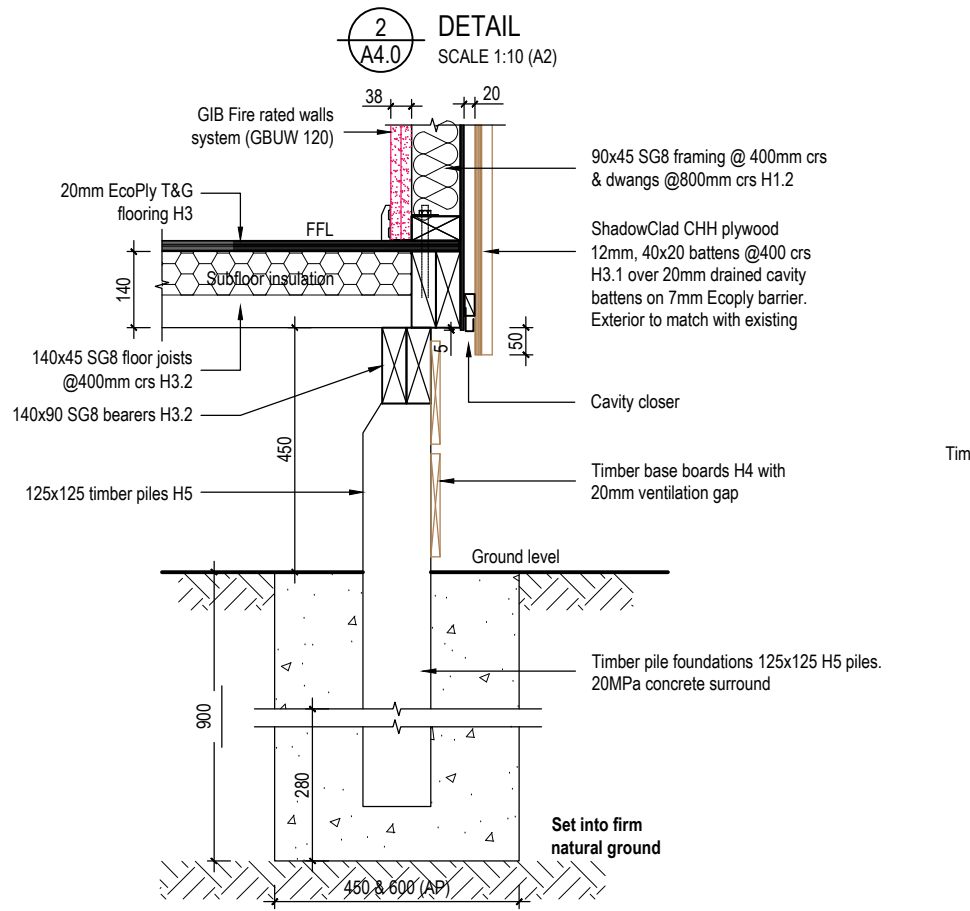
**RAMP & STEPS ELEVATION**  
SCALE 1:50 (A2)



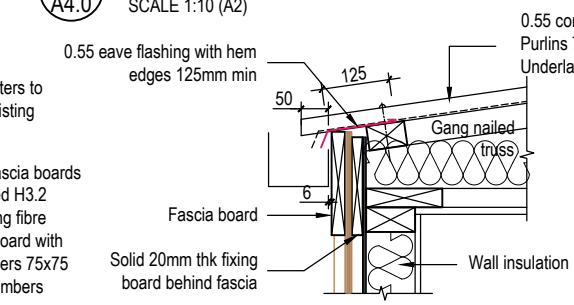
**1** DETAIL  
A4.0 SCALE 1:10 (A2)



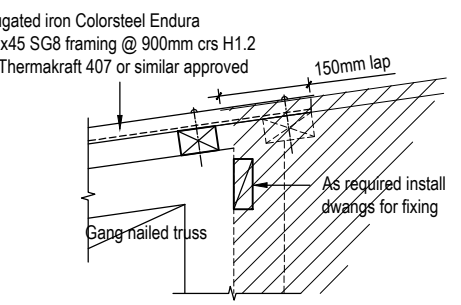
**2** DETAIL  
A4.0 SCALE 1:10 (A2)



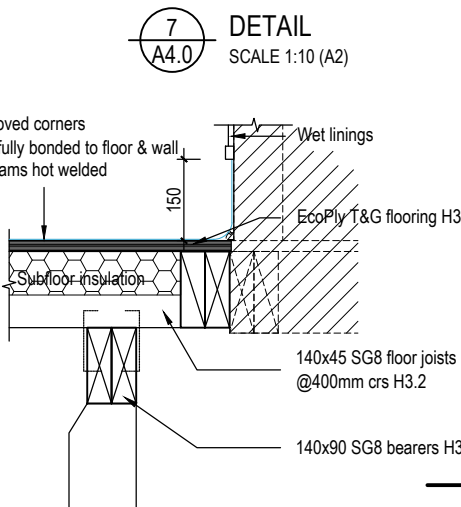
**3** DETAIL  
A4.0 SCALE 1:10 (A2)



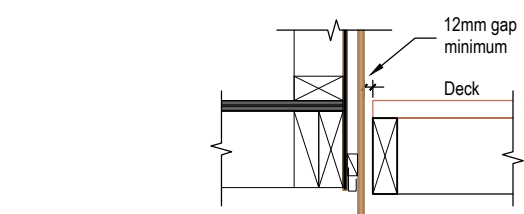
**4** DETAIL  
A4.0 SCALE 1:10 (A2)



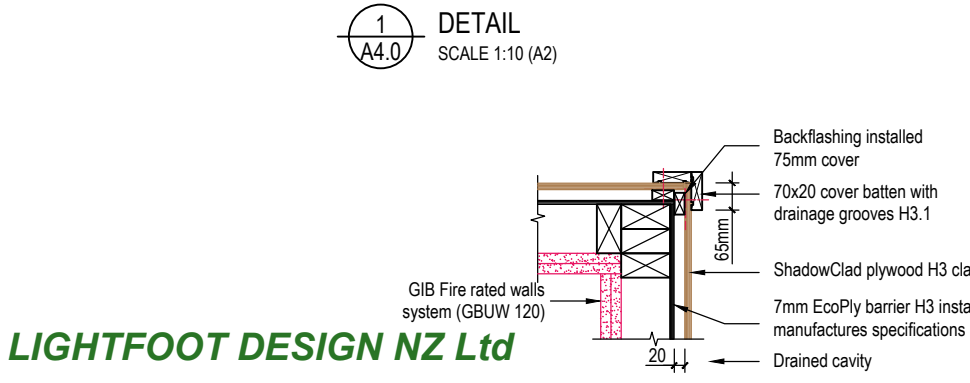
**5** DETAIL  
A4.0 SCALE 1:10 (A2)



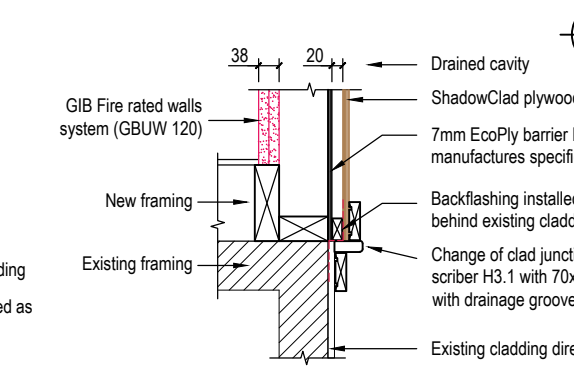
**6** DETAIL  
A4.0 SCALE 1:10 (A2)



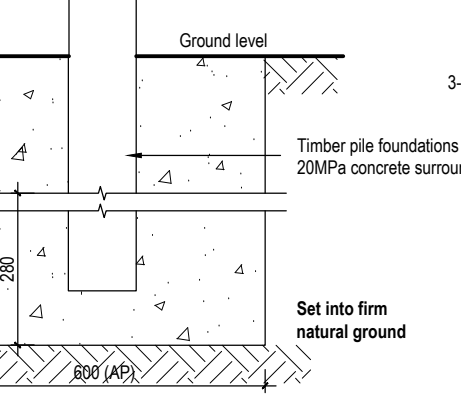
**7** DETAIL  
A4.0 SCALE 1:10 (A2)



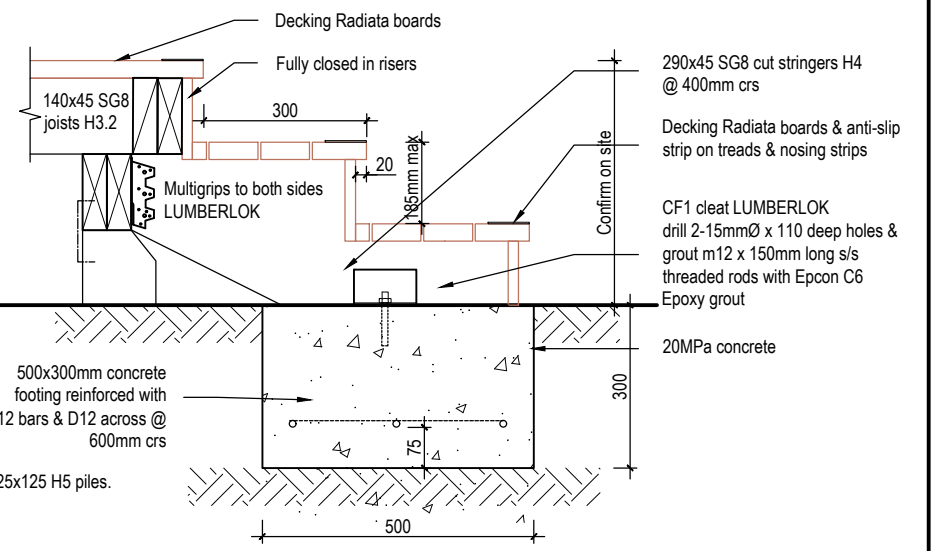
**8** DETAIL  
A4.0 SCALE 1:10 (A2)



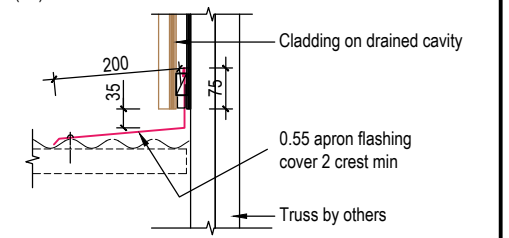
**9** DETAIL  
A4.0 SCALE 1:10 (A2)



**10** DETAIL  
A4.0 SCALE 1:10 (A2)



**11** DETAIL  
A4.0 SCALE 1:10 (A2)



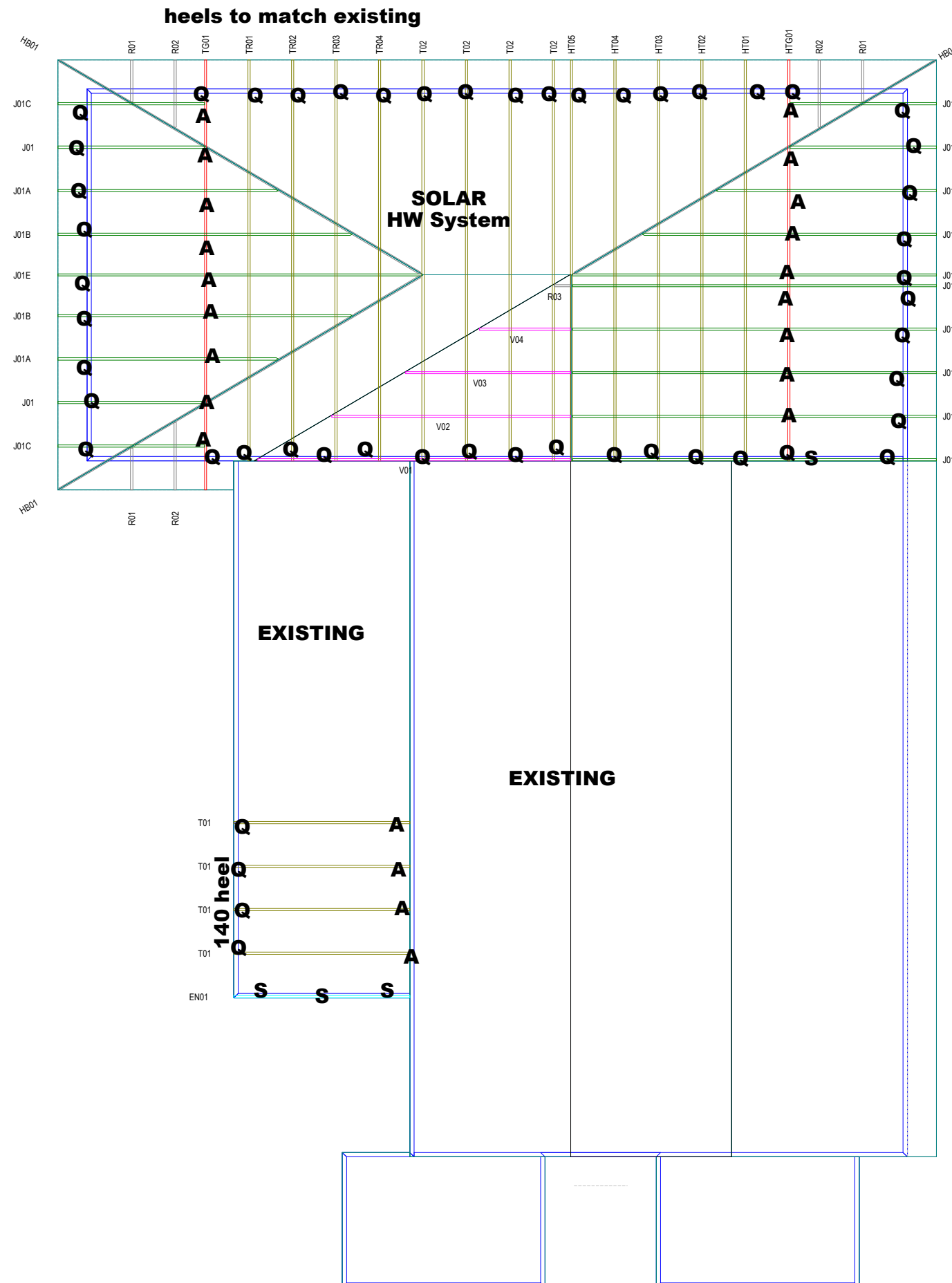
**12** DETAIL (typ)  
A2.1 SCALE 1:10 (A2)

# BUILDABLE CONSENT LAYOUT

For valley/saddle truss fixing unless stated otherwise use a pair of wire dogs at 900mm centres for up to and including a very high wind zone. Or a pair of CT200's at 900mm centres for extra high wind zone. This fixing is to meet the minimum requirements as per NZS3604.



Your Building Partner



CARTERS Carters Manufacturing Nelson (03) 5478174	
<b>JOB No 315695C1</b>	
Client: Lightfoot Design NZ Ltd Job: Linkwater Hall Site: 1355 Queen Charlotte Drive Linkwater	
Pitch: 27.0deg Roof Type: Galv Iron .5mm Overhang: 600mm Wind Area: Very High Roof Snow: 0.400kPa Ceiling Restraint Centres:600mm	
Trusses and rafters at 900mm max centres unless stated otherwise. This layout is to be read in conjunction with the Architectural plans.	
DRAWN Russell Kells	28 Apr,2020
<b>FIXINGS</b>	
<b>A = 47x90 Joist Hanger</b> <b>B = 47x120 Joist Hanger</b> <b>C = CT200 (pair)</b> <b>D = 47x190 Joist Hanger</b> <b>E = 95x165 Joist Hanger</b> <b>F = SH-140 Split Hanger</b> <b>G = SH-180 Split Hanger</b> <b>H = SH-220 Split Hanger</b> <b>J = 2x6kN Strap (12kN Total)</b> <b>K = 6kN Strap</b> <b>L = Multigrip (single)</b> <b>M = Multigrips (pair)</b> <b>N = Nailon Plate (240x110x1)</b> <b>P = 16kN Pack</b> <b>Q = 9kN Pack</b> <b>S = CPC 40 Single Cleat</b> <b>T = CPC 40 Short (pair)</b> <b>U = CPC 80 Single Cleat</b> <b>V = 16kN Uplift</b> <b>W = 24kN Uplift</b> <b>X = 25kN Uplift</b> <b>Y = 35kN Uplift</b> <b>Z = 45kN Uplift</b>	
Unless otherwise indicated, all specified truss fixings are to use L/Lok product nail fasteners (as per the MiTek On-site Guide) when the choice of using screws or nails is optional.	
All truss to frame fixings require 2 additional 2/90x3.15dia skew nails.	
All truss fixings not indicated as above must have 2 wire dogs for cross joints and 2/90x3.15dia nails for butt joints.	
Fixings shown are for fixing trusses to the top plate. Any other point load uplift fixings down through the framing stud to top plate, stud to bottom plate, bottom plate to floor remain the responsibility of the architect / draughtsman.	

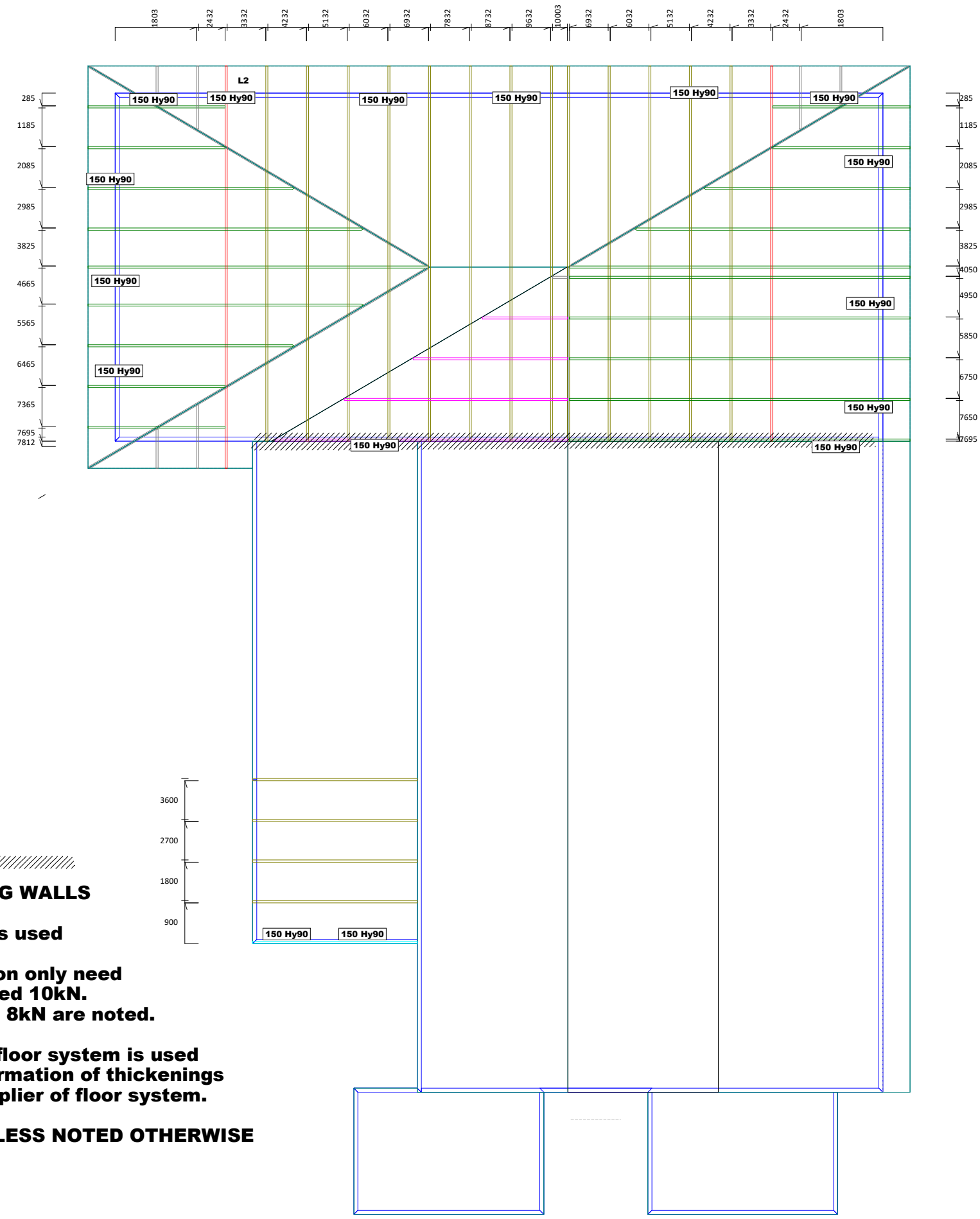
If metal ceiling battens on clips are used, 90x45 SG8 bottom chord restraints are required at 1800mm centres fixed with 2/90x3.15dia nails (skew nails if on edge).  
 All gable trusses are designed to suit cladding manufacturer's framing requirements.  
 If a gable truss requires a windbeam brace, the type of MiTek brace will be noted as such on the layout.

## Truss Layout

# BUILDABLE CONSENT LAYOUT



**Your Building Partner**



CARTERS  
Carters Manufacturing Nelson  
(03) 5478174

**JOB No 315695C1**  
Client: Lightfoot Design NZ Ltd  
Job: Linkwater Hall  
Site: 1355 Queen Charlotte Drive  
Linkwater

Pitch: 27.0deg  
Roof Type: Galv Iron .5mm  
Overhang: 600mm  
Wind Area: Very High  
Roof Snow: 0.400kPa

Trusses and rafters at 900 mm max centres unless stated otherwise. This layout is to be read in conjunction with the Architectural plans.

DRAWN Russell Kells 28 Apr,2020

↓ Dn kN	↑ Up kN	Ultimate Limit State Loads
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Notification of point loaded lintels or point loads on internal walls where the downward load is higher than 8kN (85mm raft type slab) or 10kN (100mm standard slab), or the upward load is greater than 10kN.

Any roof loads as stated on this layout over 16kN up or down are outside the scope of NZS3604, and the architect / draughtsperson is responsible for the design to transfer the loads to the ground.

The lintels have been sized using one of the following:

hy90, hyONE and hySPAN lintels have been sized using the designIT for houses - New Zealand series 6 software.

GANGLAM and FLITCH BEAMS have been sized using the MiTek Beam Program V1.10 June 2011.

Unless otherwise stated the timber grade for all lintels is SG8. Lintels not shown are to be selected as per NZS3604: 2011.

## INTERNAL LOAD BEARING WALLS

Internal loadbearing walls used as part of truss design. Standard slab construction only need thickenings if loads exceed 10kN. All truss loads exceeding 8kN are noted.

Note if Ribraft or similar floor system is used separate engineers confirmation of thickenings to be confirmed from supplier of floor system.

**ALL LINTELS ARE L1 UNLESS NOTED OTHERWISE**

**All internal walls shown hatched on this layout are considered to be loadbearing  
Lintel fixing specification remains the responsibility of the architect / draughtsperson**