ABA20250765
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Hastings District Council
12/09/2025

TW PROPERTY
FLAXMERE HOUSING
72 CAERNARVON DRIVE
BUILDING CONSENT

SEPTEMBER 2025

SITE SPECIFIC DRAWINGS
LOT 7

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A001 REV.0

ARCHITECTURAL DRAWING LEGEND

The information contained on this page outlines Designgroup Stapleton Elliott standard annotations, abbreviations and symbols as used in this documentation set.

ABBREVIATIONS

AP	Access panel
BDL	Building datum level
COS	Check on site
CS	Cleaners Sink
D	Data outlet
DP	Down pipe
ECP	Emergency Call Point
F	Fixed panel / fixed window
FHR	Fire hose reel
FR	Fridge
FRZ	Freezer
FW	Floor waste
GR	Grab rail
GT	Gully Trap
HR	Hand rail
M	Mirror
MW	Microwave
PB	Pin Board
P/C	Powder coat finish
PTD	Paper towel dispenser
RWH	Rain water head
SB	Splash back
SD	Service duct
SIM	Similar Detail
SJ	Seismic joint
SK	Skirting
SM	Shower Mixer
SPD	Soap dispenser
TBA	To be advised by Architect / Client
TBC	To be confirmed
TR	Towel rail
TPH	Toilet paper holder
UB	Under bench
VAN	Vanity
V	Vent
W	Window
WB	White board
WC	Toilet pan
WHB	Wash hand basin
(E)	Existing
(NIC)	Not in contract

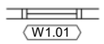
FLOOR PLAN - DRAWING LEGEND

Existing wall

Existing wall demolished

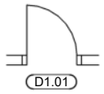
New wall, note wall hatches for new walls vary depending on framing / construction refer to legend on floor plan for specific types

Window demolished



Window in plan with reference


Door to be demolished



Door in plan with reference

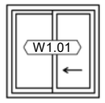
REFLECTED CEILING PLAN DRAWING LEGEND

*4000 Ceiling Level

ELEVATIONS & SECTIONS

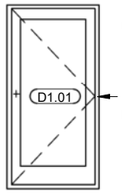
Fixed window in elevation with reference

Awning window in elevation with reference



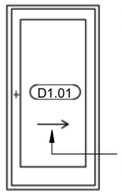
Sliding window in elevation with reference

Casement window in elevation with reference



Door in elevation with reference

Door opening reference points of hinge point

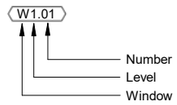


Sliding door in elevation with reference

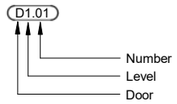
Arrow points to retracted location

REFERENCE ANNOTATIONS

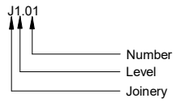
Window Number
Refer window schedule



Door Number
Refer door schedule

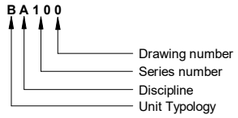


Joinery Number
Refer Joinery Drawings



DRAWING SHEET NUMBERING

DGSE Drawing numbering is as follows:



Discipline:

A	Architecture
C	Civil Infrastructure
E	Electrical
F	Fire
G	Geo-techincal
L	Landscape
M	Mechanical
P	Plumbing
S	Structural
T	Topography / Survey

Drawing Series Numbering:

000 Series	Cover sheet
100 Series	Site
200 Series	Floor Plan
300 Series	Elevations
400 Series	Sections
500 Series	Details
600 Series	Schedule
700 Series	Joinery

SCALE CONVERSIONS

DGSE drawings are designed to be viewed at both A3 and A1. Scales annotated on drawings are at A3 and need to be halved when viewed at A1. Typical scale conversions:

A3 Scale	A1 Printed
1:2	1:1
1:5	1:2.5
1:10	1:5
1:20	1:10
1:50	1:25
1:100	1:50
1:200	1:100
1:500	1:250
1:1000	1:500

GENERAL NOTES

1. Contractor to report any apparent discrepancy to the Client for interpretation prior to the affected work proceeding.
2. These drawings are to be read in conjunction with all other contract documents including specifications.

GENERAL LEGEND


North Point

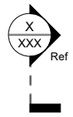
Floor Level indicator

Sheet Revision annotation, X denotes revision number

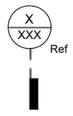
Material annotation, XXX denotes reference to legend on sheet

Interior elevation references, 00 denotes elevations number, XXX denotes drawing sheet on which section is shown

Exterior elevation references, X denotes section number, XXX denotes drawing sheet on which section is shown



Building section references, X denotes section number, XXX denotes drawing sheet on which section is shown



Detail section references, X denotes section number, XXX denotes drawing sheet on which section is shown

DRAWING LEGEND

SITE SPECIFIC DRAWINGS

TW PROPERTY

FLAXMERE HOUSING

72 CAERNARVON DRIVE

BUILDING CONSENT

PROJECT No. **F563.1**

Contractors shall verify all dimensions on site before commencing work. Do not scale from the drawings. If in doubt ask. Copyright of this drawing is vested in Designgroup Stapleton Elliott.

NO.	DESCRIPTION	DATE
0	BC - Type A&B	01.07.25

Site Information

Climate Zone: 2
Earthquake Zone: 3
Exposure Zone: B
Lee Zone: No
Rainfall Range: 50 - 60mm/h
Wind Region: A
Wind Zone: High
Corrosion Zone: B

Legal Description: LOT 2 DP 435766

NZBC Compliance

Compliance with NZBC E2 is by means of NZBC E2 AS1. Refer Risk Matrix provided.

Wellington +64 4 920 0032 wn@dgse.co.nz
Palmerston North +64 6 357 4534 pn@dgse.co.nz
Tauranga +64 7 925 6238 tr@dgse.co.nz
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Auckland +64 9 976 8288 ak@dgse.co.nz

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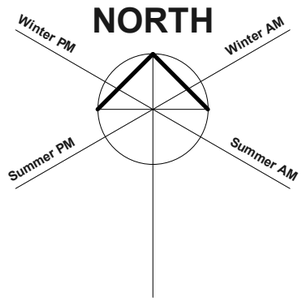
2 **Location Plan.**
SCALE @ A3 -1 : 10000 SCALE @ A1 - DOUBLE SCALE

1 **Lot 7 Typology Plan**
SCALE @ A3 - 1 : 500 | SCALE @ A1 - DOUBLE SCALE



ZONING REQUIREMENTS

Assessed with resource consent

72 CAERNARVON DRIVE: FLAXMERE GENERAL RESIDENTIAL

Building Height
- Maximum height of 10m (up to 11m with a pitched or gable roof)

Height in Relation to Boundary
- 3m up at 45º all side and rear boundaries on southern end
- 3m up 55º all boundaries facing northen end
- Not applicable to front road boundaries

Outdoor Living Court
- 36m² Minimum and can contain a circle 6m in diameter.

Frontage
- 3m setback from road

Side & Rear Setbacks
- 1m setback from road

Building Coverage
- 50% under Medium Density Residential Zone (Decisions Version)

Outdoor Service Court
- 30m² with min 4m dimension (ground floor
- units)
- 8m² with min 1.8m dimension (above
- ground units)
- Directly accessible from main living area.
- Free of driveways, carparks, and vehicle manouvering.

Vehicle Crossing
Minimum widths of accessways
- 1 to 3 dwellinghouses: 3.6 metres
- 4 to 6 dwellinghouses: 4.5 metres
- 7 or more dwellinghouses: 6 metres

- Road frontage < 60m = 1 vehicle crossing
- Road frontage > 60m = 2 vehicle crossing

TYPOLOGY LEGEND

TYPE A - Approx. GFA:
3 Bed
2 Bath
1 Garage

TYPE B - Approx. GFA:
3 Bed
2 Bath
1 Garage
*Colour Variation noted as B.1

TYPE C - Approx. GFA:
2 Bed
1 Bath
1 Garage

TYPE D - Approx. GFA:
2 Bed
1 Bath
1 Garage
*Colour Variation noted as D.1

TYPE E - Approx. GFA:
2 Bed
1 Bath
No Garage
*Colour Variation noted as E.1

NOTE
*Colour Variation indicates same typology but with changes to cladding colour.

A100 REV.3

LOCATION & TYPOLOGY PLANS

SITE SPECIFIC DRAWINGS

TW PROPERTY

FLAXMERE HOUSING

72 CAERNARVON DRIVE

BUILDING CONSENT

PROJECT No. **F563.1**

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NO.	DESCRIPTION	DATE
3	BC - Type E	05.09.25
0	BC - Type A&B	01.07.25
F	Resource Consent 95% Update	14.05.25
D	Resource Consent 95%	09.05.25

Site Information

Climate Zone: 2
Earthquake Zone: 3
Exposure Zone: B
Lee Zone: No
Rainfall Range: 50 - 60mm/h
Wind Region: A
Wind Zone: High
Corrosion Zone: B

Legal Description: LOT 2 DP 435766

NZBC Compliance

Compliance with NZBC E2 is by means of NZBC E2 AS1. Refer Risk Matrix provided.

Wellington	+64 4 920 0032	wn@dgse.co.nz
Palmerston North	+64 6 357 4534	pn@dgse.co.nz
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Napier	+64 6 835 6173	np@dgse.co.nz
Auckland	+64 9 976 8288	ak@dgse.co.nz

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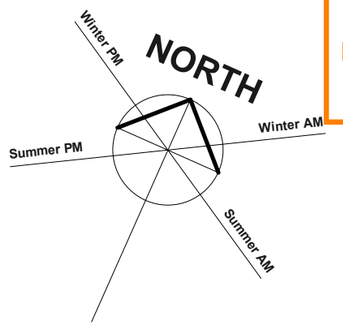
1 Proposed Site Plan - Lot 7

SCALE @ A3 -1 : 300

PROPERTY AREAS

LOT Number	Site Area	GFA (m2)	Coverage	Outdoor Living Space	Landscape Area
JOAL	158 m²	0	0%	0 m²	0%
LOT 1	300 m²	121	37%	35 m²	47%
LOT 2	274 m²	121	41%	36 m²	41%
LOT 3	267 m²	121	42%	37 m²	40%
LOT 4	303 m²	104	32%	47 m²	45%
LOT 5	259 m²	121	43%	40 m²	39%
LOT 6	259 m²	121	43%	37 m²	39%
LOT 7	196 m²	91	43%	43 m²	37%
LOT 8	236 m²	91	36%	42 m²	40%
LOT 9	287 m²	104	34%	44 m²	51%
LOT 10	304 m²	121	37%	32 m²	42%
LOT 11	223 m²	91	38%	29 m²	32%
LOT 12	226 m²	91	37%	29 m²	43%
LOT 13	292 m²	104	33%	31 m²	50%
LOT 14	218 m²	104	44%	26 m²	39%
LOT 15	263 m²	104	37%	25 m²	38%
	4066 m²	1610			



LANDSCAPE LEGEND

- Low Planting
- Medium Planting
- High Planting
- Grass
- Pedestrian Paths - Broom Finish - Pedestrian Loading
- JOAL & Carparks Brom Finish - Vehicular Loading - 5% Black Oxide Concrete
- Patio (Sawcut Concrete)
- Specimen Trees
- Existing Street Trees
- ODL 4m Min — Outdoor Living Area
- CL — Clothesline (Wall Mounted)
- 1200mm Aluminium Picket Fence
- 1500mm Aluminium Picket Fence
- 1800mm Aluminium Fence
- Garden Edging
- Entry Door
- G — Gate (Match to fence)
- RB — Rubbish Bins
- BE — Bin Enclosure (1130mm (H) x 1325mm (W) x 835mm (D))
- SW — Stormwater Tank

VEHICLE TRACKING

Vehicle tracking curves calculated with Autodesk AutoCAD vehicle tracking software to AS/NZS 2890. 1:2004 (off street carparking) with B85 vehicle (realistic min radius) (2004). Car body dimensions 1.87m x 4.9m. Turning radius 6.180m

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A110 REV.3

PROPOSED SITE PLAN

SITE SPECIFIC DRAWINGS

TW PROPERTY

FLAXMERE HOUSING

72 CAERNARVON DRIVE

BUILDING CONSENT

PROJECT No. **F563.1**

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NO.	DESCRIPTION	DATE
3	BC - Type E	05.09.25
2	BC - Type C&D	02.09.25
0	BC - Type A&B	01.07.25
F	Resource Consent 95% Update	14.05.25
E	Resource Consent 95% Update	13.05.25
D	Resource Consent 95%	09.05.25

Site Information

Climate Zone: 2
Earthquake Zone: 3
Exposure Zone: B
Lee Zone: No
Rainfall Range: 50 - 60mm/h
Wind Region: A
Wind Zone: High
Corrosion Zone: B

Legal Description: LOT 2 DP 435766

NZBC Compliance

Compliance with NZBC E2 is by means of NZBC E2 AS1. Refer Risk Matrix provided.

Wellington +64 4 920 0032 wn@dgse.co.nz
Palmerston North +64 6 357 4534 pn@dgse.co.nz
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Napier +64 6 835 6173 np@dgse.co.nz
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1 **SITE PLAN UNIT 7-8**
SCALE @ A3 - 1 : 100 | SCALE @ A1 - DOUBLE SCALE

LANDSCAPE LEGEND

- Low Planting
- Medium Planting
- High Planting
- Grass
- Concrete Path
- JOAL
- Patio (Sawcut Concrete)
- CL — Clothesline (Wall Mounted)
- Specimen Trees
- Existing Street Trees
- 1200mm Picket Fence
- 1500mm Picket Fence
- 1800mm Aluminium Fence
- Garden Edging
- Entry Door
- G — Gate (Match to fence)
- RB — Rubbish Bins
- BE — Bin Enclosure (1130mm x 1345mm x 835mm)
- SW — Stormwater Tank
- LB — Letterbox (Fence-mounted)
- AC — AC Unit
- Concrete deepened edge

A125 REV.3

SITE PLAN - UNIT 7-8

SITE SPECIFIC DRAWINGS

TW PROPERTY
FLAXMERE HOUSING
72 CAERNARVON DRIVE

BUILDING CONSENT

PROJECT No. **F563.1**

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NO.	DESCRIPTION	DATE
3	BC - Type E	05.09.25
F	Resource Consent 95% Update	14.05.25
E	Resource Consent 95% Update	13.05.25
D	Resource Consent 95%	09.05.25
C	For Client Review Draft 95% Set	02.05.25
A	For Client Review	15.04.25

Site Information

Climate Zone: 2
Earthquake Zone: 3
Exposure Zone: B
Lee Zone: No
Rainfall Range: 50 - 60mm/h
Wind Region: A
Wind Zone: High
Corrosion Zone: B

Legal Description: LOT 2 DP 435766

NZBC Compliance

Compliance with NZBC E2 is by means of NZBC E2 AS1. Refer Risk Matrix provided.

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Palmerston North +64 6 357 4534 pn@dgse.co.nz
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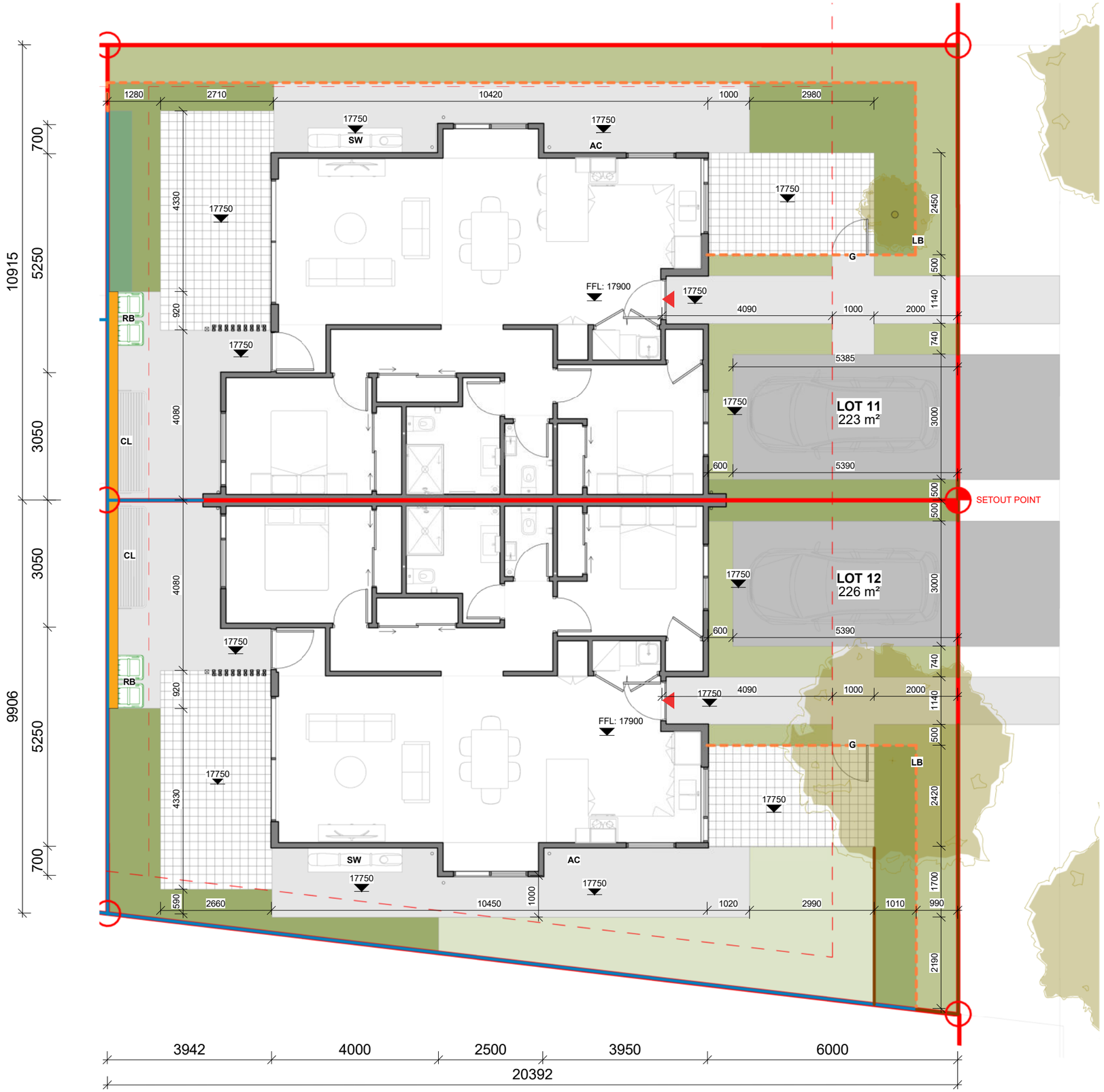

1 **SITE PLAN UNIT 11-12**

SCALE @ A3 - 1 : 100 | SCALE @ A1 - DOUBLE SCALE

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LANDSCAPE LEGEND

- Low Planting
- Medium Planting
- High Planting
- Grass
- Concrete Path
- JOAL
- Patio (Sawcut Concrete)
- CL — Clothesline (Wall Mounted)
- Specimen Trees
- Existing Street Trees
- 1200mm Picket Fence
- 1500mm Picket Fence
- 1800mm Aluminium Fence
- Garden Edging
- Entry Door
- G — Gate (Match to fence)
- RB — Rubbish Bins
- BE — Bin Enclosure (1130mm x 1345mm x 835mm)
- SW — Stormwater Tank
- LB — Letterbox (Fence-mounted)
- AC — AC Unit
- Concrete deepened edge

A128 REV.3

SITE PLAN - UNIT 11-12

SITE SPECIFIC DRAWINGS

TW PROPERTY

FLAXMERE HOUSING

72 CAERNARVON DRIVE

BUILDING CONSENT

PROJECT No. **F563.1**

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NO.	DESCRIPTION	DATE
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F	Resource Consent 95% Update	14.05.25
E	Resource Consent 95% Update	13.05.25
D	Resource Consent 95%	09.05.25
C	For Client Review Draft 95% Set	02.05.25
A	For Client Review	15.04.25

Site Information

Climate Zone: 2
Earthquake Zone: 3
Exposure Zone: B
Lee Zone: No
Rainfall Range: 50 - 60mm/h
Wind Region: A
Wind Zone: High
Corrosion Zone: B

NORTH

Legal Description: LOT 2 DP 435766

NZBC Compliance

Compliance with NZBC E2 is by means of NZBC E2 AS1. Refer Risk Matrix provided.

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12/09/2025

Landscape - Masterplan

SCALE @ A3 -1 : 300

LANDSCAPE LEGEND

- Low Planting
- Medium Planting
- High Planting
- Grass
- Pedestrian Paths - Broom Finish - Pedestrian Loading
- JOAL & Carparks Brom Finish - Vehicular Loading - 5% Black Oxide Concrete
- Patio (Sawcut Concrete)
- Specimen Trees
- Existing Street Trees
- ODL 4m Min — Outdoor Living Area
- CL — Clothesline (Wall Mounted)
- 1200mm Aluminium Picket Fence
- 1500mm Aluminium Picket Fence
- 1800mm Aluminium Fence
- Garden Edging
- Entry Door
- G — Gate (Match to fence)
- RB — Rubbish Bins
- BE — Bin Enclosure (1130mm (H) x 1325mm (W) x 835mm (D))
- SW — Stormwater Tank

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Palmerston North	+64 6 357 4534	pn@dgse.co.nz
Wellington	+64 4 920 0032	wn@dgse.co.nz
Queenstown	+64 3 568 8411	qt@dgse.co.nz

TW PROPERTY

FLAXMERE HOUSING

72 CAERNARVON DRIVE

BUILDING CONSENT

Contractors shall verify all dimensions on site before commencing work. Do not scale from the drawings.
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LANDSCAPE MASTERPLAN

NO.	DESCRIPTION	DATE
0	BC - Type A&B	01.07.25
F	Resource Consent 95% Update	14.05.25

Site Information

Rainfall Intensity: 60 mm/h

Climate Zone: 2

Corrosion Zone: B

Legal Description: LOT 2 DP 435766

Wind Zone: High

L100 REV.0

PROJECT No. **F563.1**

PLOT DATE. **5/09/2025 8:50:50 am**

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12/09/2025

Landscape - Hardstand

SCALE @ A3 -1 : 300

LANDSCAPE LEGEND

- JOAL & Carparks Brom Finish - Vehicular Loading - 5% Black Oxide Concrete
- Pedestrian Paths - Broom Finish - Pedestrian Loading (Expansion joints as required)
- Patio - Broom Finish (Sawcut Concrete @1m crs)

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Tauranga	+64 7 925 6238	tr@dgse.co.nz
Napier	+64 6 835 6173	np@dgse.co.nz
Palmerston North	+64 6 357 4534	pn@dgse.co.nz
Wellington	+64 4 920 0032	wn@dgse.co.nz
Queenstown	+64 3 568 8411	qt@dgse.co.nz

TW PROPERTY

FLAXMERE HOUSING

72 CAERNARVON DRIVE

BUILDING CONSENT

Contractors shall verify all dimensions on site before commencing work. Do not scale from the drawings.
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HARDSTAND PLAN

NO.	DESCRIPTION	DATE
0	BC - Type A&B	01.07.25
F	Resource Consent 95% Update	14.05.25

Site Information

Rainfall Intensity: 60 mm/h

Climate Zone: 2

Corrosion Zone: B

Legal Description: LOT 2 DP 435766

Wind Zone: High

L101 REV.0

PROJECT No. **F563.1**

PLOT DATE. **5/09/2025 8:52:05 am**

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Landscape - Overall Fencing

SCALE @ A3 -1 : 300

LANDSCAPE LEGEND

- G — Gate (Match to fence)
- F1 - 1200mm Aluminium Picket Fence
- F2 - 1500mm Aluminium Picket Fence
- F3 - 1800mm Aluminium Fence
- Garden Edging
- Timber Retaining (Refer to civil documentation for heights)

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TW PROPERTY

FLAXMERE HOUSING

72 CAERNARVON DRIVE

BUILDING CONSENT

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FENCING PLAN

NO.	DESCRIPTION	DATE
0	BC - Type A&B	01.07.25
F	Resource Consent 95% Update	14.05.25

Site Information

Rainfall Intensity: 60 mm/h

Climate Zone: 2

Corrosion Zone: B

Legal Description: LOT 2 DP 435766

Wind Zone: High

L102 REV.0

PROJECT No. **F563.1**

PLOT DATE. **5/09/2025 8:54:56 am**

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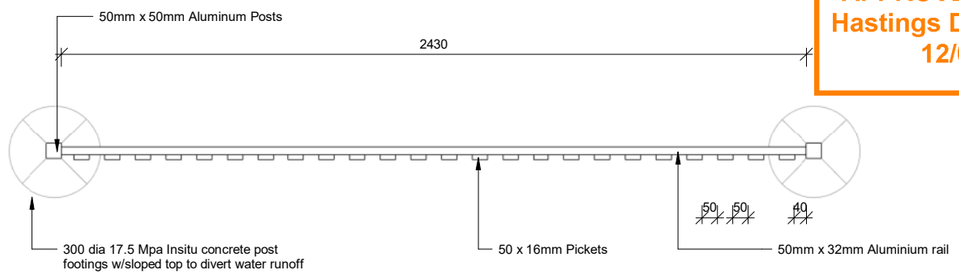
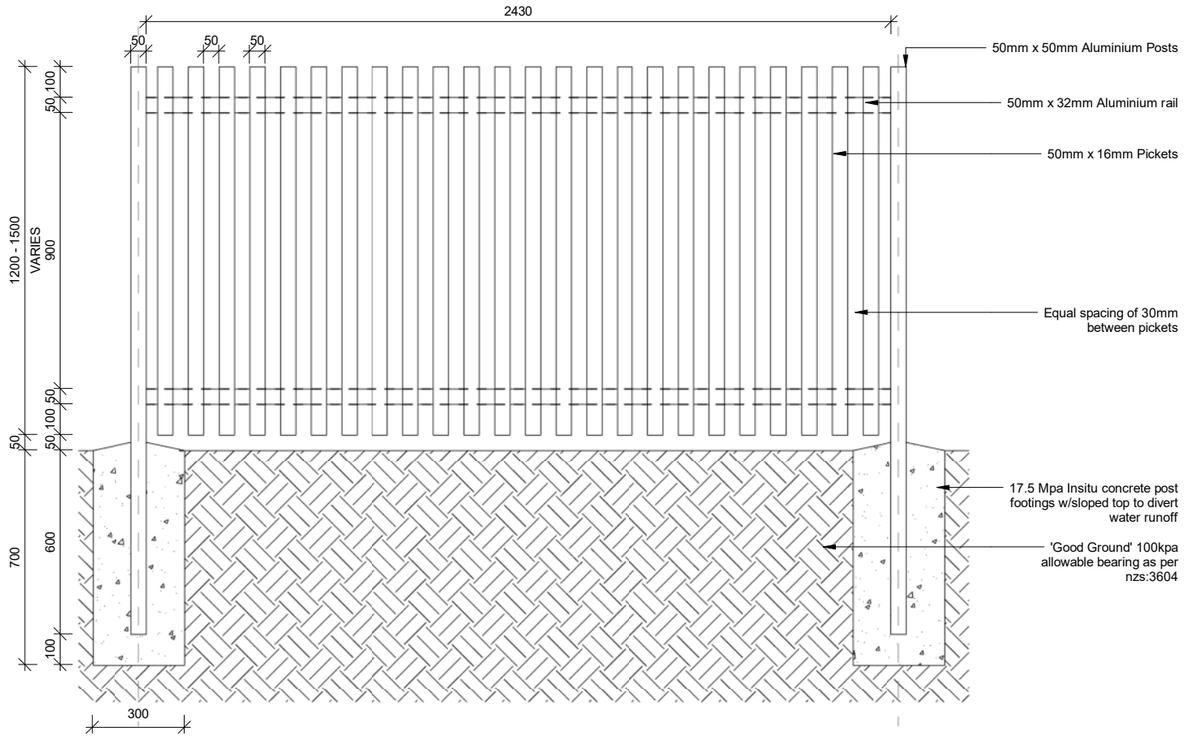


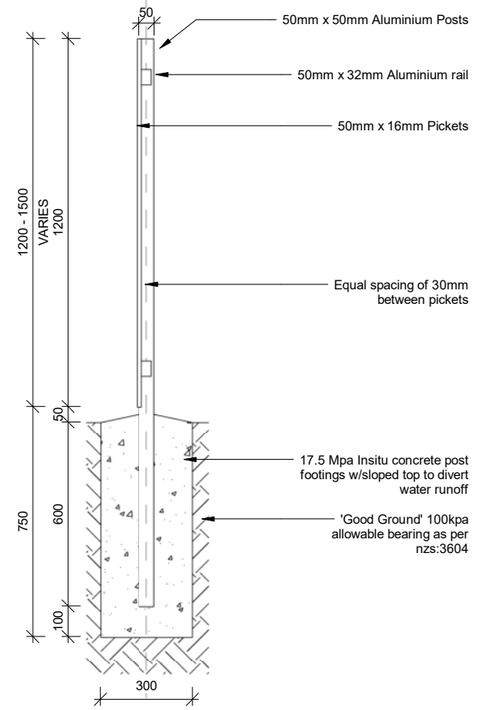
F1/2 - 1200 - 1500mm Picket Fencing - Plan

SCALE @ A3 - 1 : 20



F1/2 - 1200 - 1500mm Picket Fencing - Elevation

SCALE @ A3 - 1 : 20 | SCALE @ A1 - DOUBLE SCALE



F1/2 - 1200 - 1500mm Picket Fencing - Profile

SCALE @ A3 - 1 : 20

NOTE FENCE TYPES PROPRIETARY - PLEASE REFER TO MANUFACTURERS INSTILLATION GUIDE

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TYPICAL FENCE DETAILS - F1/2

NO.	DESCRIPTION	DATE
0	BC - Type A&B	01.07.25
F	Resource Consent 95% Update	14.05.25

Site Information

Rainfall Intensity: 60 mm/h

Climate Zone: 2

Corrosion Zone: B

Legal Description: LOT 2 DP 435766

Wind Zone: High

L200 REV.0

PROJECT No. **F563.1**

PLOT DATE. **5/09/2025 8:54:57 am**

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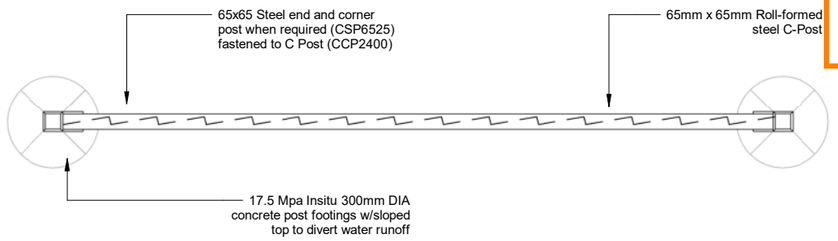
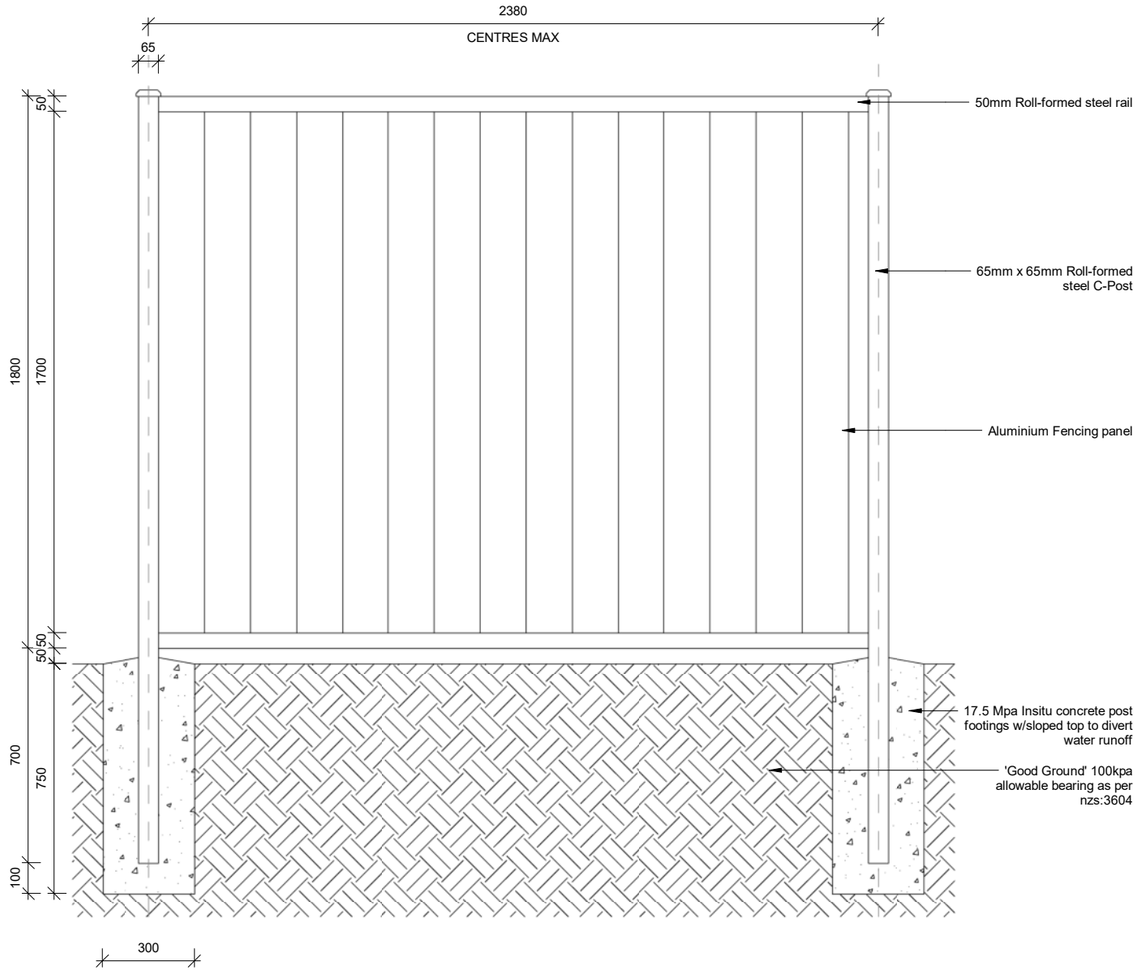


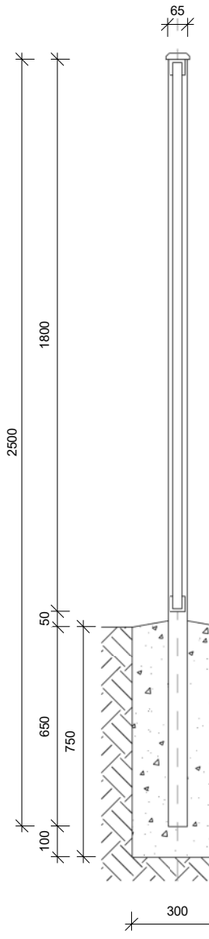
F3 - 1800mm Boundary Fencing - Plan

SCALE @ A3 - 1 : 20



F3 - 1800mm Boundary Fencing - Elevation

SCALE @ A3 - 1 : 20 | SCALE @ A1 - DOUBLE SCALE



F3 - 1800mm Boundary Fencing - Profile

SCALE @ A3 - 1 : 20

NOTE FENCE TYPES PROPRIETARY - PLEASE REFER TO MANUFACTURERS INSTILLATION GUIDE

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TYPICAL FENCE DETAILS - F3

NO.	DESCRIPTION	DATE
0	BC - Type A&B	01.07.25
F	Resource Consent 95% Update	14.05.25

Site Information

Rainfall Intensity: 60 mm/h

Climate Zone: 2

Corrosion Zone: B

Legal Description: LOT 2 DP 435766

Wind Zone: High

L201 REV.0

PROJECT No. **F563.1**

PLOT DATE. **5/09/2025 8:54:59 am**

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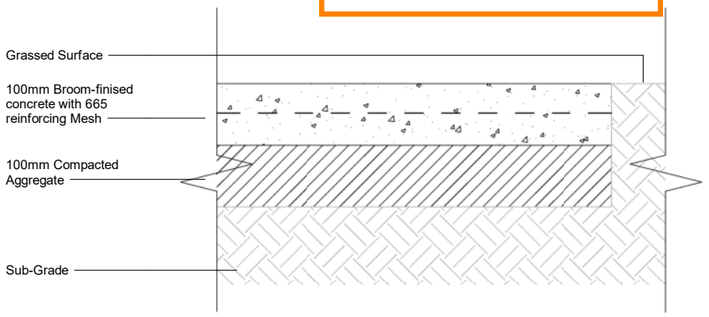
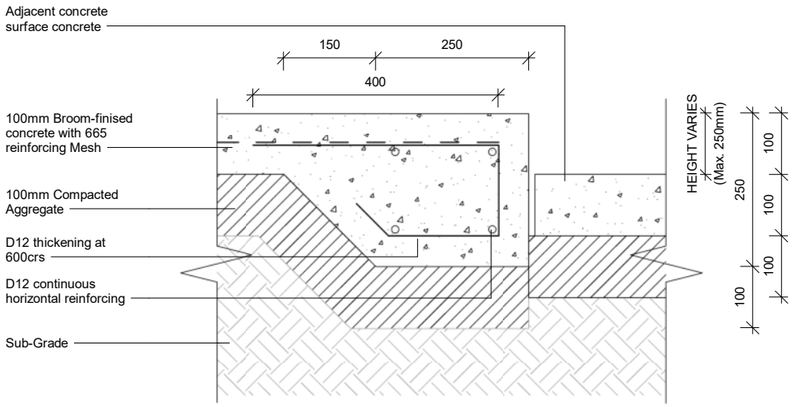
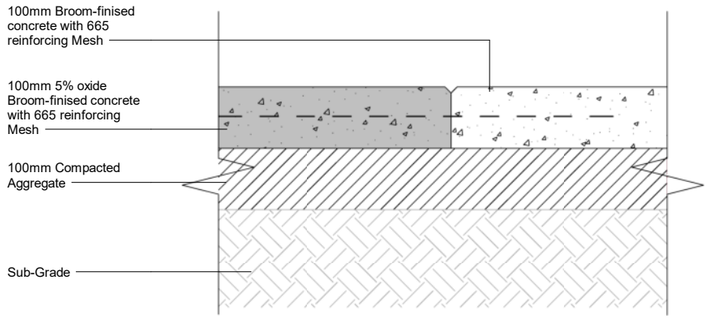


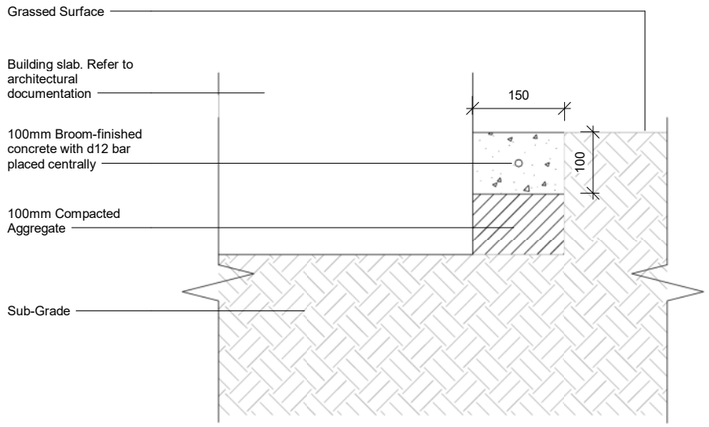
Concrete to Grass - Typical Detail
SCALE @ A3 - 1 : 10



Concrete Level Change - Typical Detail
SCALE @ A3 - 1 : 10



Concrete Transition - Typical Detail
SCALE @ A3 - 1 : 10



Mowing Strip - Typical Detail
SCALE @ A3 - 1 : 10

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FLAXMERE HOUSING

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TYPICAL DETAILS - HARDSCAPE

NO.	DESCRIPTION	DATE
0	BC - Type A&B	01.07.25
F	Resource Consent 95% Update	14.05.25

Site Information

Rainfall Intensity: 60 mm/h
Climate Zone: 2
Corrosion Zone: B

Legal Description: LOT 2 DP 435766
Wind Zone: High

L210 REV.0

PROJECT No. **F563.1**

PLOT DATE. **5/09/2025 8:55:00 am**

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12/09/2025

PLANT SCHEDULE - Specimen Trees

ID	Latin Name	Common Name	Spacing	PB Size	Quantity
Specimen trees					
PT0.1	Pittosporum tenuifolium	Black Matipo	0		7
CB0.1	Callistemon 'Kings Park'	Bottlebrush	0		3
SM0.1	Sophora microphylla	Kōwhai	0		9
CL0.1	Citrus limon	Lemon Tree	0		15
					34
					34

PLANTING STRATEGY

SCALE @ A3 -1 : 300

- Lawn
- Low Planting
- Medium Planting
- High Planting
- Specimen Trees

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PLANTING PLAN

NO.	DESCRIPTION	DATE
0	BC - Type A&B	01.07.25

L300 REV.0

PROJECT No. **F563.1**

PLOT DATE. **5/09/2025 8:56:58 am**

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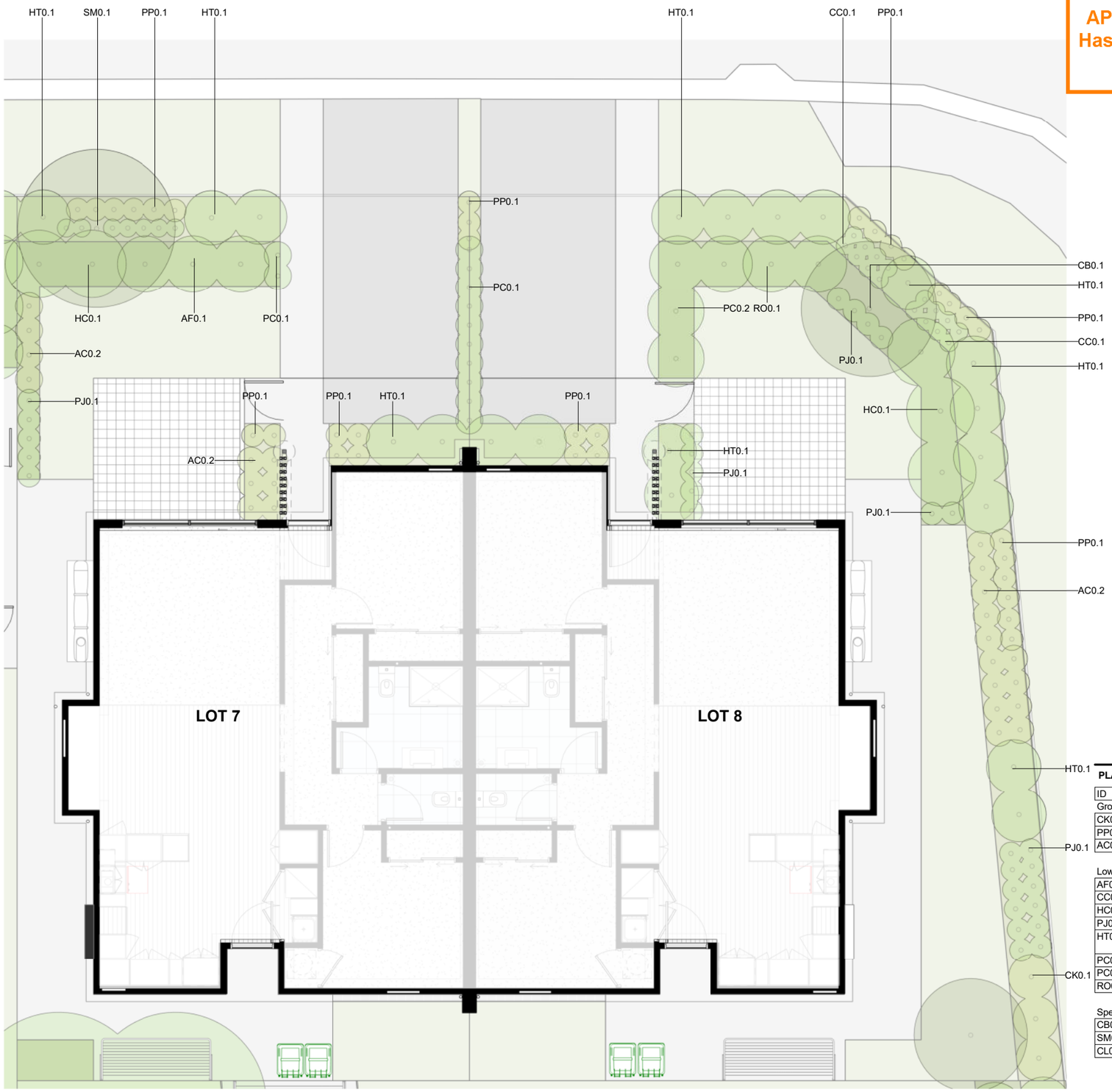
12/09/2025



PLANT SCHEDULE 7-8

ID	Latin Name	Common Name	Spacing	PB Size	Quantity
Ground Covers					
CK0.1	Coprosma kirkii	Creeping Coprosma	0		3
PP0.1	Primula prostrata	Alpine Primrose	0		33
AC0.2	Arthropodium cirratum	Rengarenga Lily	0		23
					59
Low-Medium Planting					
AF0.1	Astelia fragrans	Hangehange	0		3
CC0.1	Chionochloa flavicans	Mini Toe Toe	0		23
HC0.1	Hebe cupressoides	Cypress Hebe	0		5
PJ0.1	Phormium 'Jack Sprat'	Dwarf Flax	0		29
HT0.1	Hebe topiaria Topiaried Hebe	Topiaried Hebe	0		20
PC0.2	Phormium cookianum	Mountain Flax	0		4
PC0.1	Poa cita	Silver Tussock	0		12
RO0.1	Rosmarinus officinalis	Rosemary	0		2
					98
Specimen trees					
CB0.1	Callistemon 'Kings Park'	Bottlebrush	0		1
SM0.1	Sophora microphylla	Kōwhai	0		1
CL0.1	Citrus limon	Lemon Tree	0		1
					3
					160

PLANTING PLAN UNIT 7-8

SCALE @ A3 - 1 : 100

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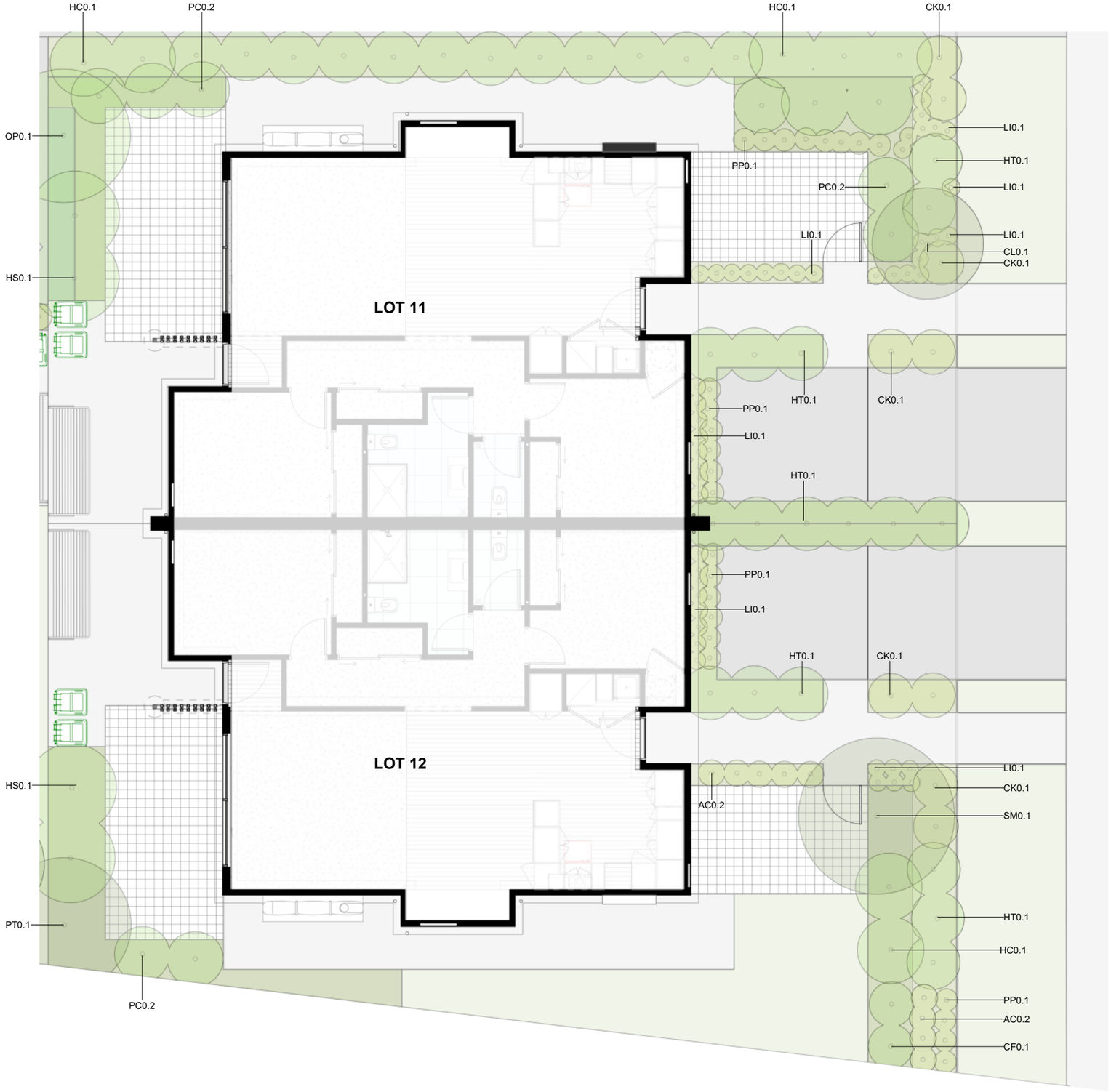
PLANTING PLAN UNIT 7-8

NO.	DESCRIPTION	DATE
3	BC - Type E	05.09.25

L306 REV.3

PROJECT No. **F563.1**

PLOT DATE. **5/09/2025 8:57:03 am**



PLANT SCHEDULE 11 - 12

ID	Latin Name	Common Name	Spacing	PB Size	Quantity
Ground Covers					
CK0.1	Coprosma kirkii	Creeping Coprosma	0		9
LI0.1	Libertia ixiodes	Mikoikoi	0		47
PP0.1	Primula prostrata	Alpine Primrose	0		24
AC0.2	Arthropodium cirratum	Rengarenga Lily	0		9
					89
Low-Medium Planting					
AF0.1	Astelia fragrans	Hangehange	0		1
HC0.1	Hebe cupressoides	Cypress Hebe	0		9
HT0.1	Hebe topiaria Topiaried Hebe	Topiaried Hebe	0		29
OP0.1	Olearia paniculata	Golden Akeake	0		1
HS0.1	Hebe stricta	North Island Koromiko	0		4
CF0.1	Chionochloa flavicans	Mini Toe Toe	0		2
PC0.2	Phormium cookianum	Mountain Flax	0		7
					53
Specimen trees					
PT0.1	Pittosporum tenuifolium	Black Matipo	0		1
SM0.1	Sophora microphylla	Kōwhai	0		1
CL0.1	Citrus limon	Lemon Tree	0		1
					3
					145

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PLANTING PLAN UNIT 11-12

SCALE @ A3 - 1 : 100

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FLAXMERE HOUSING

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BUILDING CONSENT

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PLANTING PLAN UNIT 11-12

NO.	DESCRIPTION	DATE
3	BC - Type E	05.09.25

L310 REV.3

PROJECT No. **F563.1**

PLOT DATE. **5/09/2025 8:57:22 am**

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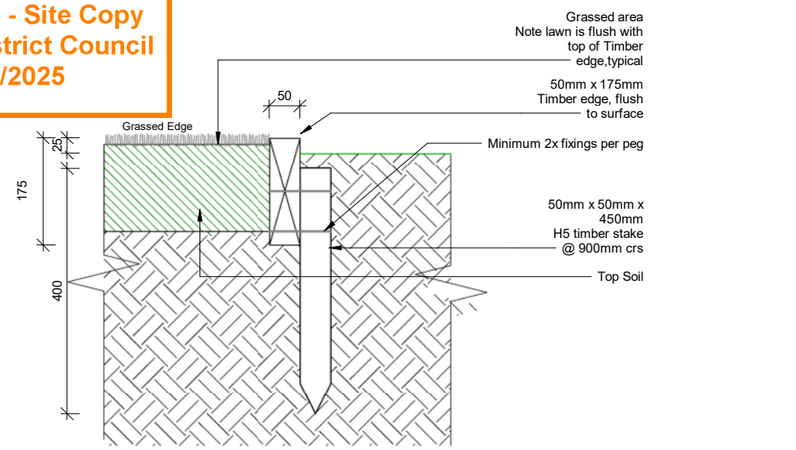
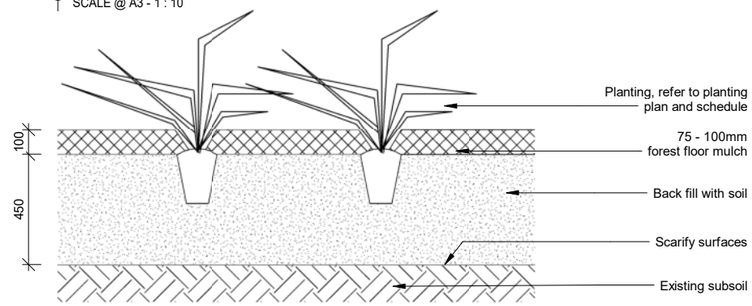
12/09/2025

PLANT SCHEDULE

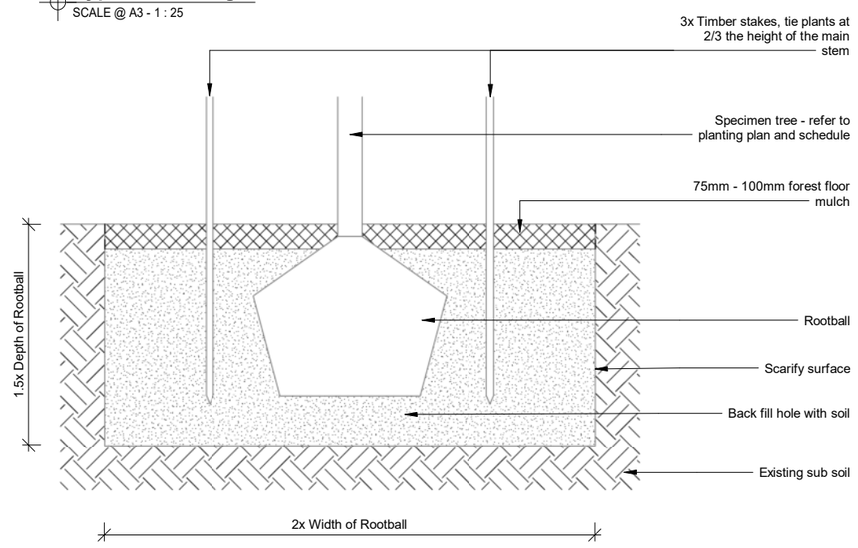
ID	Latin Name	Common Name	Spacing	PB Size	Quantity
Ground Covers					
CK0.1	Coprosma kirkii	Creeping Coprosma	0		32
LI0.1	Libertia ixiodes	Mikoikoi	0		146
PP0.1	Primula prostrata	Alpine Primrose	0		154
AC0.2	Arthropodium cirratum	Rengarenga Lily	0		87
					419
Low-Medium Planting					
AF0.1	Astelia fragrans	Hangehange	0		42
CC0.1	Chionochloa flavicans	Mini Toe Toe	0		23
HC0.1	Hebe cupressoides	Cypress Hebe	0		43
PJ0.1	Phormium 'Jack Sprat'	Dwarf Flax	0		87
HT0.1	Hebe topiaria Topiaried Hebe	Topiaried Hebe	0		117
GL0.1	Griselinia littoralis	Broadleaf	0		2
OP0.1	Olearia paniculata	Golden Akeake	0		1
HS0.1	Hebe stricta	North Island Koromiko	0		4
CF0.1	Chionochloa flavicans	Mini Toe Toe	0		16
PC0.2	Phormium cookianum	Mountain Flax	0		23
PC0.1	Poa cita	Silver Tussock	0		40
RO0.1	Rosmarinus officinalis	Rosemary	0		30
					428
Specimen trees					
PT0.1	Pittosporum tenuifolium	Black Matipo	0		7
CB0.1	Callistemon 'Kings Park'	Bottlebrush	0		3
SM0.1	Sophora microphylla	Kōwhai	0		9
CL0.1	Citrus limon	Lemon Tree	0		15
					34
					881



Timber Edging
SCALE @ A3 - 1 : 10



Typical Planting
SCALE @ A3 - 1 : 25



Typical Tree Detail
SCALE @ A3 - 1 : 25

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FLAXMERE HOUSING

72 CAERNARVON DRIVE

BUILDING CONSENT

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PLANTING SCHEDULE & TYPICAL DETAILS

NO.	DESCRIPTION	DATE
0	BC - Type A&B	01.07.25
F	Resource Consent 95% Update	14.05.25

Site Information

Rainfall Intensity: 60 mm/h

Climate Zone: 2

Corrosion Zone: B

Legal Description: LOT 2 DP 435766

Wind Zone: High

L350 REV.0

PROJECT No. **F563.1**

PLOT DATE. **5/09/2025 8:57:25 am**

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LOW PLANTING








Coprosma kirkii
Creeping Coprosma / Mikimiki

Hebe topiaria
Topiaried Hebe / Koromiko

Carex comans 'Bronze'
Bronze Sedge / Makura

Poa cita
Silver Tussock / Wī

Libertia ixiodes
New Zealand Iris / Mikoikoi

Primula prostrata
Alpine Primrose

Arthropodium cirratum
Rengarenga Lily / Rengarenga

Phormium 'Jack Sprat'
Dwarf Flax / Whararikī

MEDIUM PLANTING





Chionochloa flavicans
Miniature Toe Toe / Pākura

Phormium cookianum
Mountain Flax / Whararikī

Hebe cupressoides
Cypress Hebe / Koromiko

Rosmarinus officinalis
Rosemary / Rosemary

Astelia fragrans
Hangehange

HIGH PLANTING




Pittosporum tenuifolium
Black Matipo / Kōhūhū

Hebe stricta
North Island Koromiko / Koromiko

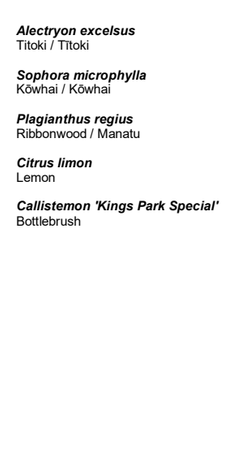
Olearia paniculata
Golden Akeake / Ākeke

Griselinia littoralis
Broadleaf / Kapuka

SPECIMEN TREES







Alectryon excelsus
Titoki / Tītoki

Sophora microphylla
Kōwhai / Kōwhai

Plagianthus regius
Ribbonwood / Manatu

Citrus limon
Lemon

Callistemon 'Kings Park Special'
Bottlebrush

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BUILDING CONSENT

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PLANT PALETTE

NO.	DESCRIPTION	DATE
0	BC - Type A&B	01.07.25

Site Information

Rainfall Intensity: 60 mm/h
Climate Zone: 2
Corrosion Zone: B

Legal Description: LOT 2 DP 435766
Wind Zone: High

L900

REV.**0**

PROJECT No. **F563.1**

PLOT DATE. **5/09/2025 8:57:27 am**

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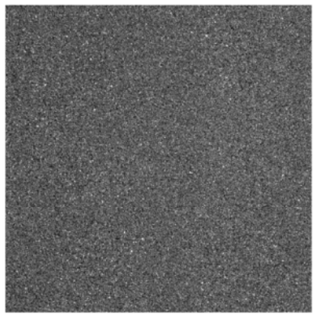
HARDSCAPE



Broom finished Concrete
Pedestrian Paths

Broom finished 5% Black Oxide
JOAL Surface
Carparks

Broom finished Concrete w/ decorative sawcuts @ 1m spacings
ODL Patios

FENCING

Intertenancy Fencing
Boundaryline - ColourPanel Classic Black 1800mm or similar approved

Boundary Fencing
Boundaryline - PicketPanel Atlas Black 1200mm - 1500mm or similar approved

Bin Screening Enclosure
Easygate (Or similar approved) - 1130mm x 1325mm x 835mm

SERVICES

Fold-Down Clotheslines
Austral Slenderline 20 or similar approved.
Fold-down clothesline mounted on proprietary stand, top mounted to hardstand surface. Install as per manufactuer directions

Letterboxes
Sandleford Black Bault or similar approved.
Face fixed to low fence at JOAL front, directly accessible from path. Stainless steel adhesive numbers applied to face

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TW PROPERTY

FLAXMERE HOUSING

72 CAERNARVON DRIVE

BUILDING CONSENT

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If in doubt ask. Copyright of this drawing is vested in Designgroup Stapleton Elliott.

MATERIALS PALETTE

NO.	DESCRIPTION	DATE
0	BC - Type A&B	01.07.25

L901 REV.0

PROJECT No. **F563.1**

PLOT DATE. **5/09/2025 8:57:28 am**

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TW PROPERTY
FLAXMERE HOUSING
LOT 7 - 72 CAERNARVON DRIVE
BUILDING CONSENT
SEPTEMBER 2025

EA000	3	COVER PAGE
EA200	3	FLOOR PLAN
EA210	3	FOUNDATION PLAN
EA220	3	WALL FRAMING PLAN
EA230	3	BRACING PLAN
EA280	3	ROOF PLAN
EA300	3	ELEVATIONS
EA400	3	SECTION
EA401	3	SECTION
EA600	3	WINDOW SCHEDULE
EA650	3	DOOR SCHEDULE
EA660	3	H1 CALCULATIONS
EA661	3	H1 REFERENCES
EA700	3	KITCHEN JOINERY
EA701	3	BATHROOM
EA702	3	WC & LAUNDRY
EE200	3	LIGHTING & ELECTRICAL PLAN
EP200	3	PLUMBING & DRAINAGE PLAN

TYPE E
UNIT 7&8, 11&12 - ORIENTATION AS PER SITE PLAN

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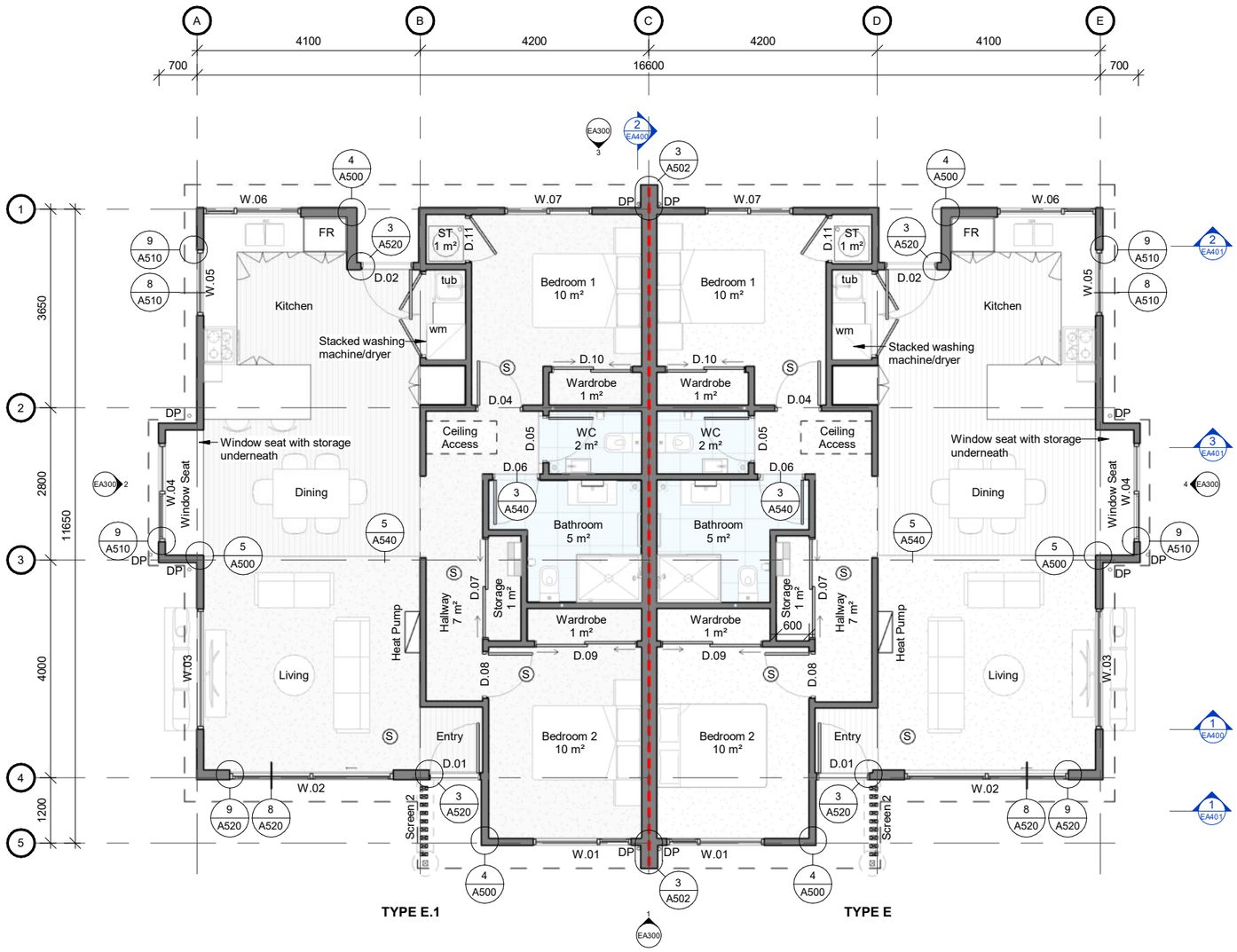

1 EA300 **Proposed Floor Plan**
SCALE @ A3 - 1 : 100 | SCALE @ A1 - DOUBLE SCALE

EA200 REV.3

FLOOR PLAN

TYPE E

TW PROPERTY

FLAXMERE HOUSING

LOT 7 - 72 CAERNARVON DRIVE

BUILDING CONSENT

PROJECT No. **F563**

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WALL BRACING
Refer to Bracing plan.

CLADDING
Refer to wall framing plan & elevations.

INTERNAL WALL LININGS
Internal non-wet areas to be lined with 10mm GIB Standard Plasterboard unless otherwise noted.

Internal wet-area & garage walls to be lined with 13mm GIB Aqualine Plasterboard unless otherwise noted. Level 4 finish throughout to receive paint finish.

Where applicable all Plasterboard components must be compatible with any fire rating requirements.

Lever type door handles to all doors fitted at 1000mm above FFL (unless internal access garage door). Garage door where provided for internal access is to be fitted with a door closer and the door handle located at 1500mm above FFL.

All selected door hardware should be easily operable by people with limited or reduced hand function and should avoid any small or round mechanisms.

Interior lockable hardware consider a locking mechanism that can be opened from outside in an emergency.

Insulate all external walls. Refer to H1 Report. Where applicable internal walls & ceilings adjoining garages to be insulated.

CEILINGS
Internal non-wet area ceilings to be lined with 13mm GIB Standard Plasterboard unless otherwise noted.

Internal wet-area ceilings to be lined with 13mm GIB Aqualine Plasterboard unless otherwise noted. Fixed over GIB Rondo Metal Batten Systems, Refer to manufacturers requirements.

(S) Ceiling mounted interconnected Type 1 domestic smoke alarms with test and hush buttons to comply with NZBC Section F7 Cl 3.2

(ME) Mechanical Ventilation - refer Mechanical Documentation

Ceiling Access Hatch. Sellwood P30 access hatch with drop down ladder. 600x1300mm opening.

FLOOR FINISHES LEGEND

Skirting to be finger-jointed pine, 60x10mm bevelled profile to all interior walls. Paint colour - refer to selections.

Selected Carpet

Selected vinyl plank flooring

Selected wet area vinyl flooring

NO.	DESCRIPTION	DATE
3	Type E - BC	05.09.25
D	For Consultants	25.08.25
C	Requested Updates	16.07.25
B	Requested Updates	10.07.25

Site Information

Climate Zone: 2
Earthquake Zone: 3
Exposure Zone: B
Lee Zone: No
Rainfall Range: 50 - 60mm/h
Wind Region: A
Wind Zone: High
Corrosion Zone: B

Legal Description: LOT 2 DP 435766
Total Site Area: 4065m2

NZBC Compliance

Compliance with NZBC E2 is by means of NZBC E2 AS1. Refer Risk Matrix provided.

Compliance with H1/AS1. Refer to calculations within drawing set.

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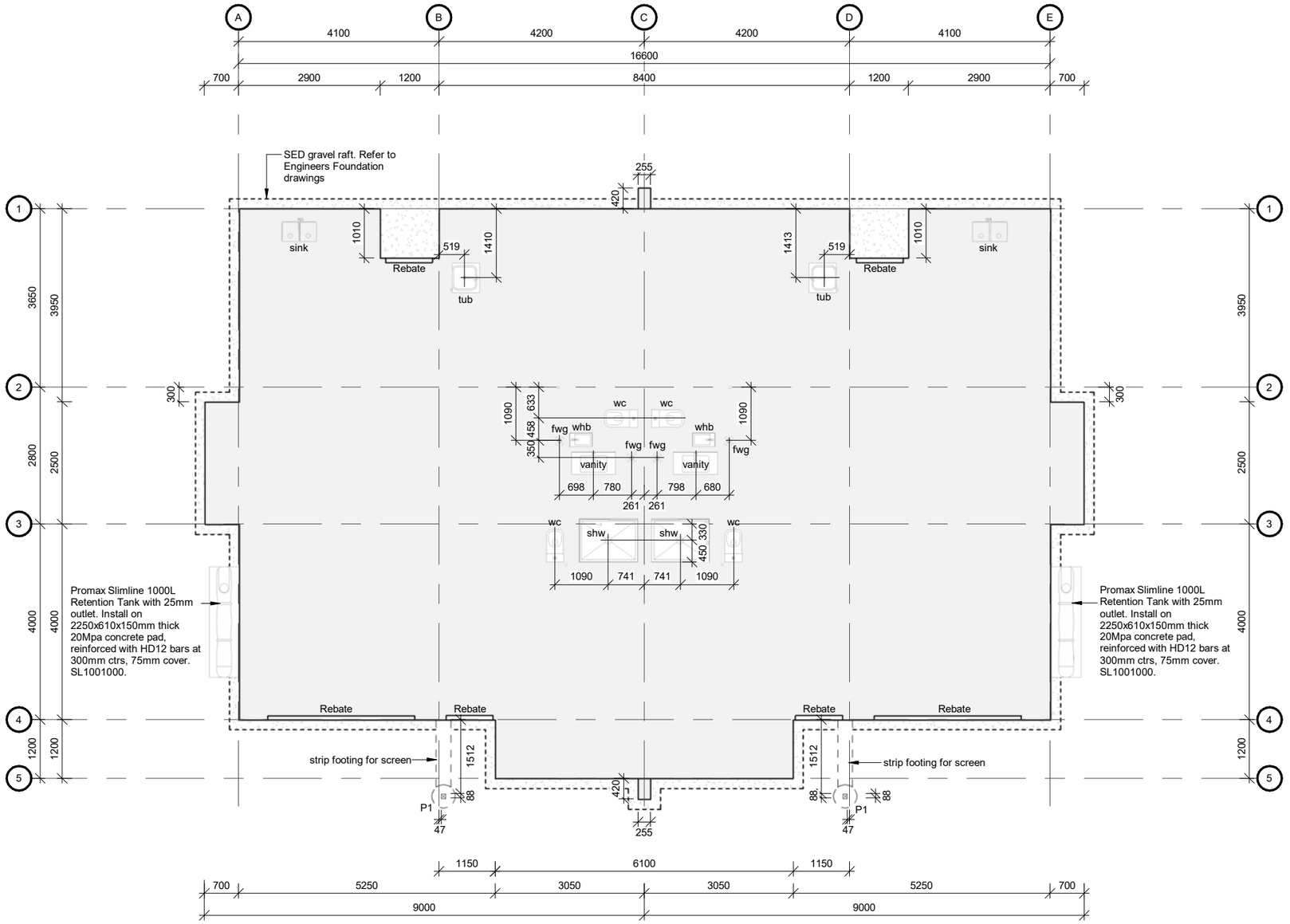

POST SCHEDULE	
Mark	**Description**
P1	Prolam Post 88x88 Visual PL12 H5 (PLP12H5-100)

1 EA300 **FOUNDATION PLAN**
SCALE @ A3 - 1 : 100 | SCALE @ A1 - DOUBLE SCALE

EA210 REV.3

FOUNDATION PLAN

TYPE E

TW PROPERTY

FLAXMERE HOUSING

LOT 7 - 72 CAERNARVON DRIVE

FOUNDATIONS BY STRUCTURAL ENGINEER

Refer to structural engineer's PS1 drawings for further detail, preparation, materials and installation requirements.

Refer to H1 report for insulation

- Inspect and confirm that the soil conditions are as anticipated by the Geotechnical Investigation and report to conform to the requirements of the structural engineer's PS1 drawings.
- Refer to Geotech Report for all ground preparation detail requirements.
- Confirm all rebates / dimensions against the Architectural Floor Framing Plans prior to commencing works.
- Do not scale from these drawings. It is the responsibility of the Contractors & Sub-Contractors to confirm all dimensions on site prior to construction.

FLOOR FRAMING LEGEND

Concrete Slab:
Refer to structural engineer

Openings Rebate:
30mm deep, 90mm wide. Refer to wall framing plan for rough opening lengths.

Dim
Dim
Floor Penetrations: (where applicable) dimensioned to centrepoint.
Refer to services drawings for types and sizes.

P1
Posts:
Encase timber post into concrete footing. Refer to structural engineer's PS1 drawings for post footing details.

BUILDING CONSENT

PROJECT No. **F563**

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NO.	DESCRIPTION	DATE
3	Type E - BC	05.09.25
D	For Consultants	25.08.25
C	Requested Updates	16.07.25
B	Requested Updates	10.07.25

Site Information

Climate Zone: 2
Earthquake Zone: 3
Exposure Zone: B
Lee Zone: No
Rainfall Range: 50 - 60mm/h
Wind Region: A
Wind Zone: High
Corrosion Zone: B

Legal Description: LOT 2 DP 435766
Total Site Area: 4065m2

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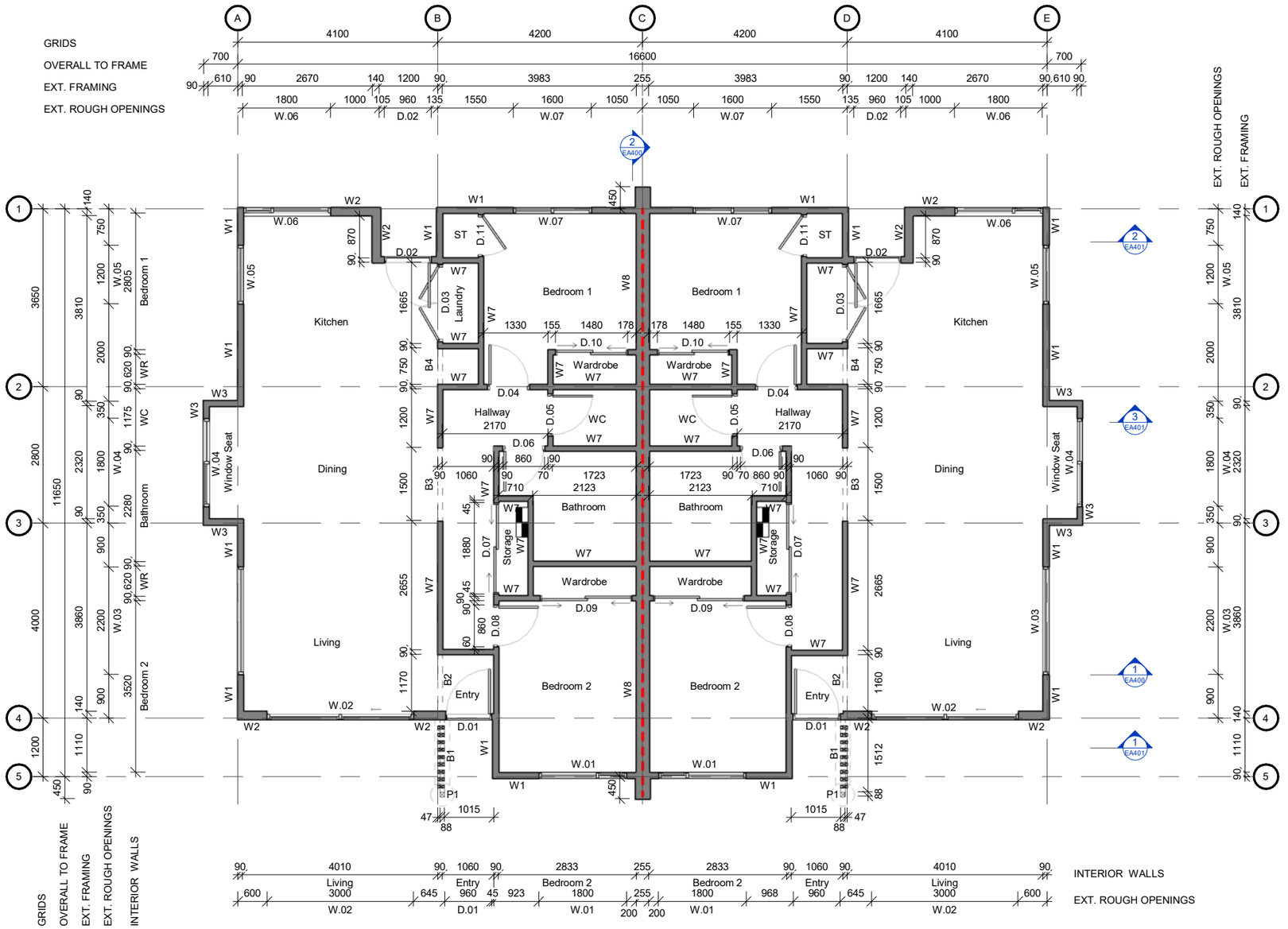

POST SCHEDULE

Mark	Description
P1	Prolam Post 88x88 Visual PL12 H5 (PLP12H5-100)

LINTEL SCHEDULE

Mark	R.O.	Load.D	Lintel	Fixing
D.07	1880	Trimmer	2/90x45mm SG8	N/A
D.08	860	Trimmer	90x45mm SG8	N/A
D.09	1880	Trimmer	2/90x45mm SG8	N/A
D.10	1480	Trimmer	2/90x45mm SG8	N/A
D.11	860	Trimmer	90x45mm SG8	N/A
W.01	1800	2035	2/140x45mm SG8	Mitek F
W.02	3000	2005	2/290x45mm SG8	Mitek G
W.03	2200	2005	2/190x45mm SG8	Mitek G
W.04	1800	2355	2/140x45mm SG8	Mitek F
W.05	1200	2005	2/90x45mm SG8	Mitek F
W.06	1800	1335	2/140x45mm SG8	Mitek F
W.07	1600	1990	2/140x45mm SG8	Mitek F

LINTEL SCHEDULE

Mark	R.O.	Load.D	Lintel	Fixing
B1	2000	600	PL12H3-150100	Prolam
B2	1160	4040	2/140x90mm SG8	Mitek F
B3	1500	4040	2/140x90mm SG8	Mitek G
B4	750	4040	2/90x45mm SG8	Mitek F
D.01	1060	1990	2/90x45mm SG8	Mitek F
D.02	1060	2005	2/90x45mm SG8	Mitek F
D.03	<varies>	4040	2/140x45mm SG8	Mitek F
D.04	860	Trimmer	90x45mm SG8	N/A
D.05	860	Trimmer	90x45mm SG8	N/A
D.06	860	Trimmer	90x45mm SG8	N/A

1 EA300 **WALL FRAMING PLAN**
SCALE @ A3 - 1 : 100 | SCALE @ A1 - DOUBLE SCALE

EA220 REV.3

WALL FRAMING PLAN

TYPE E

TW PROPERTY

FLAXMERE HOUSING

LOT 7 - 72 CAERNARVON DRIVE

BUILDING CONSENT

PROJECT No. **F563**

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WALL FRAMING NOTES

Read in conjunction with GA plans and specification. Wall framing shown only for clarity. Refer to bracing plan & calculations.

LINTEL FIXINGS

Lintel fixings to comply with Lumberlok Lintel Fixing Schedule, Alternative to table 8.14 & Figure 8.12 of NZS 3604:2011. Refer to Mitek on site guide included in product information.

TOP PLATE STIFFENER

Use LumberLok top plate stiffener detail where penetrations are made through the top plate. Alternative Solution to Fig. 8.20 of NZS3604:2011. Stiffener material: 1.55mm G300 Galvanised Steel

WALL TYPE LEGEND.

EXTERIOR WALLS

W1
JH Oblique W/B staggered (2.4m) — STRUCTURE: 90x45mm H1.2 treated SG8 timber framing. Studs at 600ctrs max. Nogs at 600ctrs max.
AIR BARRIER: Masons Uni Pro
CAVITY: 20x45mm H3.1 treated horizontal castellated cavity battens.
CLADDING: James Hardie Oblique vertical Weatherboard Staggered.

W2
JH Oblique W/B staggered (4.3m max) — Refer to W1, structure to be 2/140x45mm H1.2 treated SG8 timber framing. Studs at 600ctrs max. Nogs at 600ctrs max.

W3
JH Oblique W/B 200mm (2.4m) — STRUCTURE: 90x45mm H1.2 treated SG8 timber framing. Studs at 600ctrs max. Nogs at 600ctrs max.
AIR BARRIER: Masons Uni Pro
CAVITY: 20x45mm H3.1 treated horizontal castellated cavity battens.
CLADDING: James Hardie Oblique Weatherboard 200mm vertical

W6
Metal Tray — STRUCTURE: 90x45mm H1.2 treated SG8 timber framing. Studs at 600ctrs max. Nogs at 600ctrs max.
AIR BARRIER: Masons Uni Pro
CAVITY: 20x45mm H3.1 treated horizontal castellated cavity battens at 600ctrs max. 1500ctrs max when behind Superdek Tray.
CLADDING: Stratco 0.55BMT Superdek, JH vertical Oblique to entry side.

INTERIOR WALLS

W7
(2.4m) — STRUCTURE: 90x45 SG8 H1.2 treated timber framing. Studs at 600ctrs, nogs at 1350ctrs max.
LININGS: 10mm GIB Standard unless noted otherwise, Refer to bracing plan. 13mm GIB Aqualine (Bathroom, WC & Garage)

W8
IT Wall — INTERTENANCY WALL - GIB GTLAB 60d

LINING: GIB Standard 13mm
FRAMING/INSULATION: 90x45mm SG8 H1.2 treated Studs at 600ctrs. Nogs at 1350ctrs. (R2.2 Pink Batts 90mm glass wool insulation)
AIR GAP: 25mm
CENTRAL BARRIER: GIB Barrierline 25mm
AIR GAP: 25mm
FRAMING/INSULATION: 90x45mm SG8 H1.2 treated Studs at 600ctrs. Nogs at 1350ctrs. (R2.2 Pink Batts 90mm glass wool insulation)
LINING: GIB Standard 13mm

NO.	DESCRIPTION	DATE
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C	Requested Updates	16.07.25
B	Requested Updates	10.07.25

Site Information

Climate Zone: 2
Earthquake Zone: 3
Exposure Zone: B
Lee Zone: No
Rainfall Range: 50 - 60mm/h
Wind Region: A
Wind Zone: High
Corrosion Zone: B

Legal Description: LOT 2 DP 435766
Total Site Area: 4065m2

NZBC Compliance

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Compliance with H1/AS1. Refer to calculations within drawing set.

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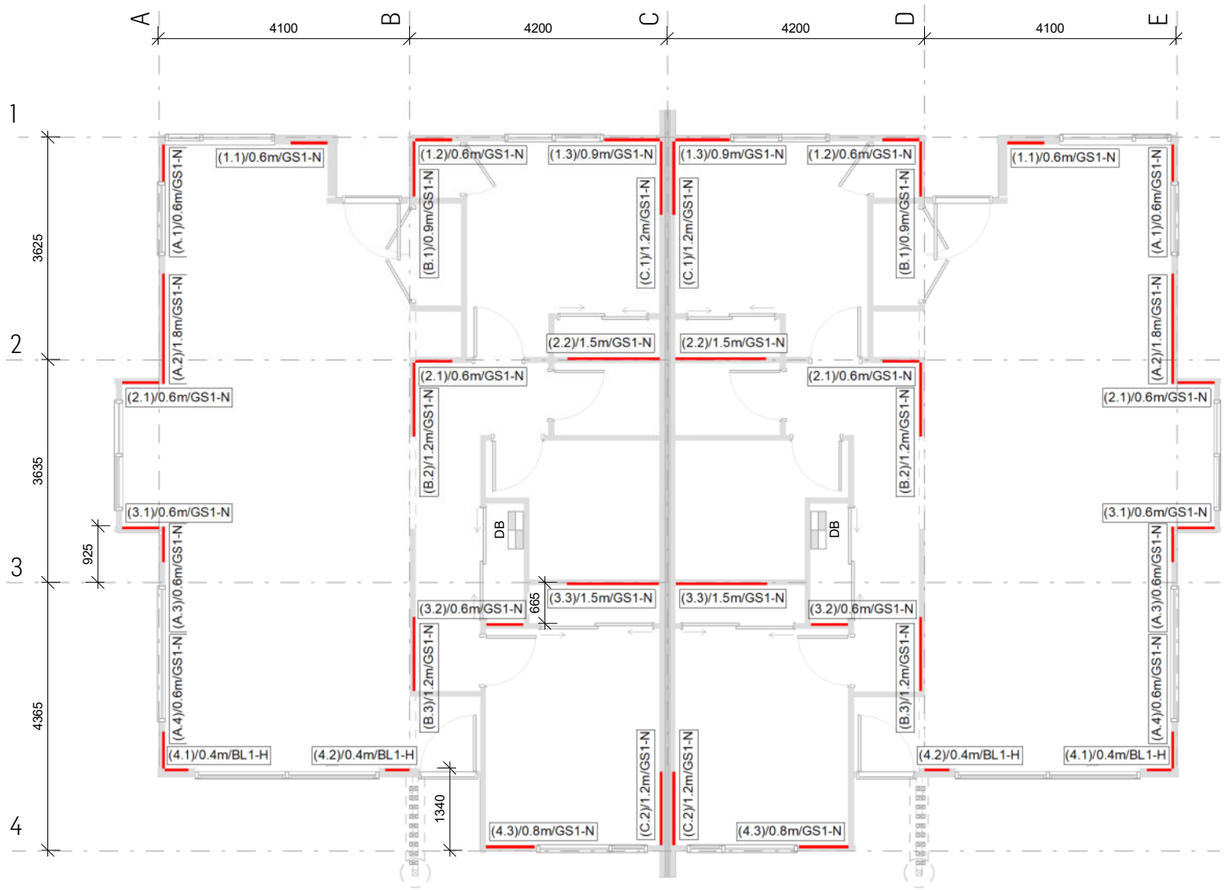
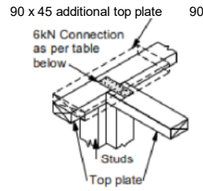
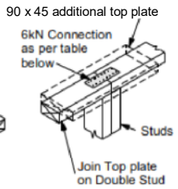


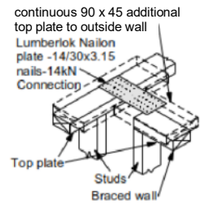
1 EA300 **BRACING PLAN**
SCALE @ A3 - 1 : 100 | SCALE @ A1 - DOUBLE SCALE



Fixing of braced wall to outside wall



Fixing of join to braced wall top plate



Fixing of isolated braced wall to outside wall with 35x140 second top plate

As per Clause 8.7.3.4 NZS3604 top plates of all bracing walls to be connected as per below:
Bracing <125 BU's - Connected to one external wall by a fixing as above of 6kN fixing capacity.
Bracing 125-250 BU's - Connected to two external walls by a fixing as above of 6kN fixing capacity.
Bracing >250 BU's - To two external walls by a fixing as above of 2.4kN/ 100 BU's fixing capacity.

Capacities of Nail Plates to Top Plate Fixing	
Up to 6kN	Tylok 6T10 Nail plate **OR** Plate-Lok

BRACING NOTES

- Bracing plan must be read in conjunction with the appended GIB bracing calculations.
- Install all bracing elements as per manufacturers documentation.
- Refer to roof plan and Mitek roof bracing specification included in the architectural specification for roof bracing requirements & installation.
- Truss to top plate connections by truss detailer.

BRACING ELEMENTS

GS1-N = Any 10mm or 13mm GIB Standard plasterboard on one side.

GS2-N = Any 10mm or 13mm GIB Standard plasterboard fixed to each side of the wall framing.

For GS1-N & GS2-N bracing elements Install bottom plate anchors to meet the requirements of NZS3604:2011 below. Alternatively interior walls can be fixed with 75 x 3.8mm shot-fired fasteners with 16mm discs, 150mm and 300mm from each end of the bracing element and at 600mm there after.

BL1-H = 10mm or 13mm GIB Braceline to one side only. For concrete floors install with GIB handibrac each end of bracing element.

BOTTOM PLATE ANCHORS

Proprietary anchors shall be within 150mm of each end of the plate and be spaced at a maximum of 900mm. (NZS3604: 7.5.12.2)

External Walls: proprietary anchors should meet the minimum capacity as follows.
a. horizontal loads in the plane of the wall = 2 kN
b. horizontal loads out of the plane of the wall = 3kN
c. vertical loads in axial tension of the fastener =7kN

Internal Walls:
a. Horizontal loads in the plane of the wall =2kN
b. Horizontal loads out of the plane of the wall =2kN

TOP PLATE CONNECTIONS

At connections between two top plates where bracing elements exist a connection plate with a minimum capacity of 6KN must be installed to comply with NZS3604:2011 Section 8.7.3.4

EA230 REV.3

BRACING PLAN

TYPE E

TW PROPERTY

FLAXMERE HOUSING

LOT 7 - 72 CAERNARVON DRIVE

BUILDING CONSENT

PROJECT No. **F563**

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NO.	DESCRIPTION	DATE
3	Type E - BC	05.09.25
D	For Consultants	25.08.25
C	Requested Updates	16.07.25
B	Requested Updates	10.07.25

Site Information

Climate Zone: 2
Earthquake Zone: 3
Exposure Zone: B
Lee Zone: No
Rainfall Range: 50 - 60mm/h
Wind Region: A
Wind Zone: High
Corrosion Zone: B

Legal Description: LOT 2 DP 435766
Total Site Area: 4065m2

NZBC Compliance

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Compliance with H1/AS1. Refer to calculations within drawing set.

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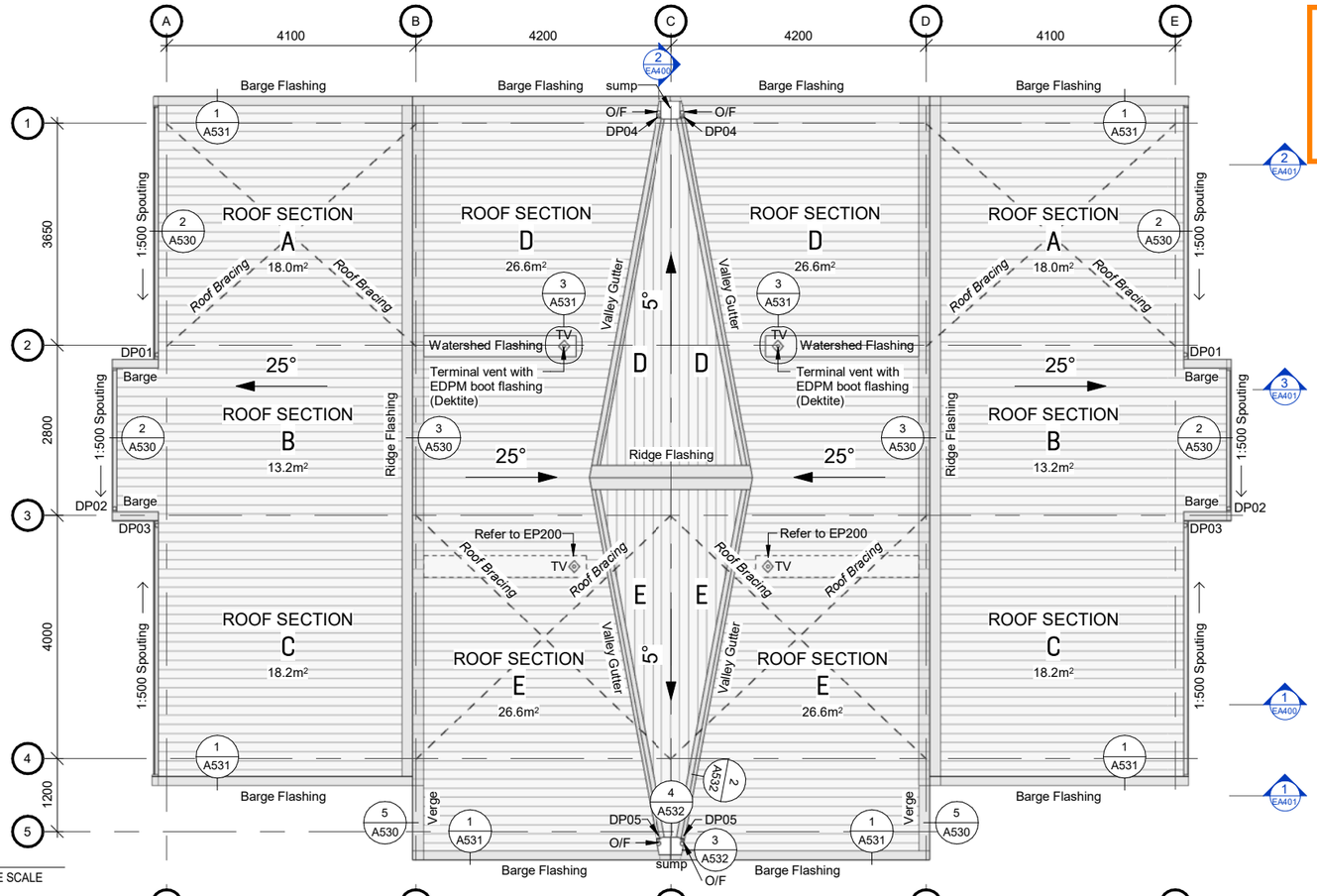
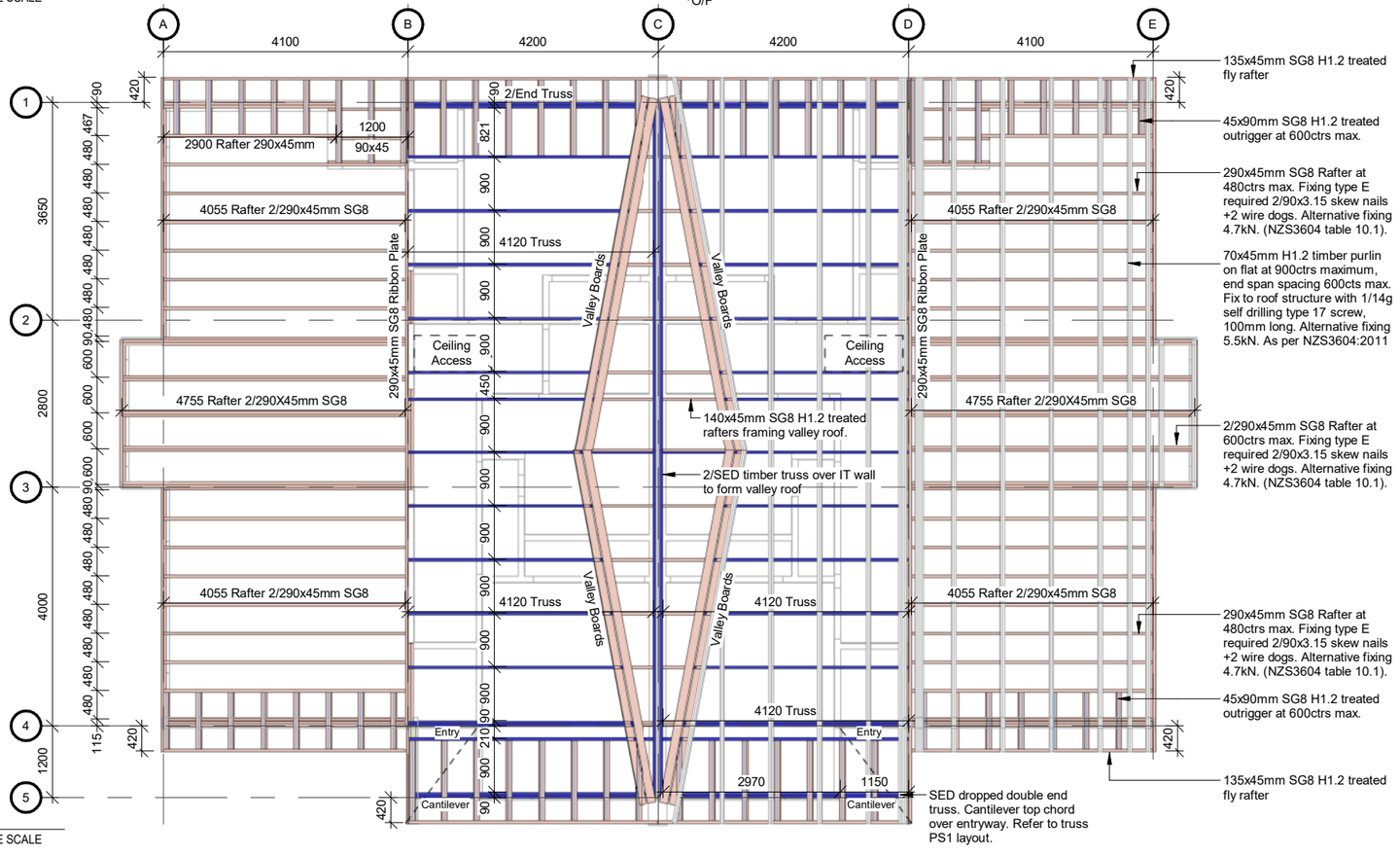


1 EA300 **ROOF PLAN**

SCALE @ A3 - 1 : 100 | SCALE @ A1 - DOUBLE SCALE



2 EA300 **ROOF FRAMING PLAN**

SCALE @ A3 - 1 : 100 | SCALE @ A1 - DOUBLE SCALE

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EA280 REV.3

ROOF PLAN

TYPE E

TW PROPERTY

FLAXMERE HOUSING

LOT 7 - 72 CAERNARVON DRIVE

BUILDING CONSENT

PROJECT No. **F563**

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ROOF CLADDING NOTES

Roof Material	Stratco Superdek Roofing. 0.55BMT. Colorsteel Maxam.
Roof Underlay	Thermakraft Covertek 405 or similar approved with Roofing manufacturer
Purlins	Purlins to be 70x45 SG8 H1.2 treated on flat at 900ctrs max. Fix at every intersection with roof framing with 1/10g self drilling screws, 80mm long. Purlin to be spaced 600mm from fascia & ridge boards as required by the allowed roofing end span.
Outriggers	45x90mm SG8 H1.2 on flat at 600ctrs max. All joints fixed with a minimum of 2/90x3.15mm nails.
Roof Framing	Trusses: Refer to truss manufacturers layouts & PS1. Rafters: NZS3604:2011 table 10.1 Ribbon plate: Ribbon plate fixed to wall framing with mitek stringer to stud type L fixing (3x90mm x 3.15 dia. nails + 2x BOWMAC StudLok SL125 @600ctrs max).
Roof Insulation	Refer to H1 Calculations & Sections
Soffit Lining	6mm JH Villaboard, butt jointed no PVC joiners
Flashings	0.7BMT Colorsteel Maxam, Refer to selections for colour.
Fascia	Metalcraft 185 metal fascia. Colorsteel Maxam.

ROOF STRUCTURE

Refer to structural engineers drawings & truss detailers layout.

Roof bracing consisting of diagonally opposing pair of continuous steel straps with min 4kN capacity in tension. Fixed to each truss top chord and top plate per manufacturers requirements

SURFACE WATER CALCULATIONS

ROOF SECTION A
Roof Area: 18.0m²
Gutter: Metalcraft Half Round Gutter
Gutter Sectional Area: 6554mm²
Roof Area Permitted for Gutter Size: 45m²
DP01: Ø65 selected downpipe
Roof Area Permitted for DP Size: 50m²
Rainfall intensity: 1 in 100

ROOF SECTION B
Roof Area: 13.2m²
Gutter: Metalcraft Half Round Gutter
Gutter Sectional Area: 6554mm²
Roof Area Permitted for Gutter Size: 45m²
DP02: Ø65 selected downpipe
Roof Area Permitted for DP Size: 50m²
Rainfall intensity: 1 in 100

ROOF SECTION C
Roof Area: 18.2m²
Gutter: Metalcraft Half Round Gutter
Gutter Sectional Area: 6554mm²
Roof Area Permitted for Gutter Size: 45m²
DP03: Ø65 selected downpipe
Roof Area Permitted for DP Size: 50m²
Rainfall intensity: 1 in 100

ROOF SECTION D
Roof Area: 26.6m²
Gutter: 550L x 390W x 105D Stainless Steel Sump
Gutter Sectional Area: 36000mm²
Roof Area Permitted for Gutter Size: 150m²
DP05: Ø65 selected downpipe
Roof Area Permitted for DP Size: 50m²
Rainfall intensity: 1 in 100

ROOF SECTION E
Roof Area: 26.6m²
Gutter: 550L x 390W x 105D Stainless Steel Sump
Gutter Sectional Area: 36000mm²
Roof Area Permitted for Gutter Size: 150m²
DP05: Ø65 selected downpipe
Roof Area Permitted for DP Size: 50m²
Rainfall intensity: 1 in 100

NO.	DESCRIPTION	DATE
3	Type E - BC	05.09.25
D	For Consultants	25.08.25

Site Information

Climate Zone: 2
Earthquake Zone: 3
Exposure Zone: B
Lee Zone: No
Rainfall Range: 50 - 60mm/h
Wind Region: A
Wind Zone: High
Corrosion Zone: B

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BUILDING ENVELOPE RISK MATRIX High Wind Zone		
RISK FACTOR	**RISK SEVERITY**	**RISK SCORE**
Wind Zone (Per NZS 3604)	High	1
Number of storeys	Low	0
Roof/Wall intersection design	Medium	1
Eaves Width	High	2
Envelope complexity	Very High	6
Deck Design	Low	0
Total Risk Score:		10

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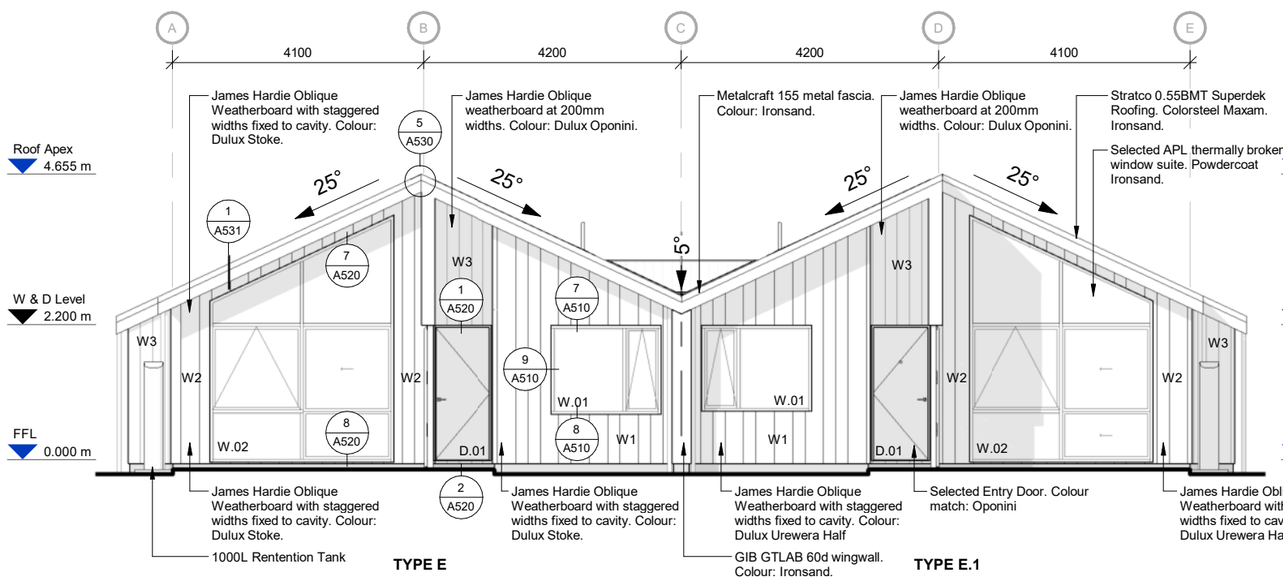
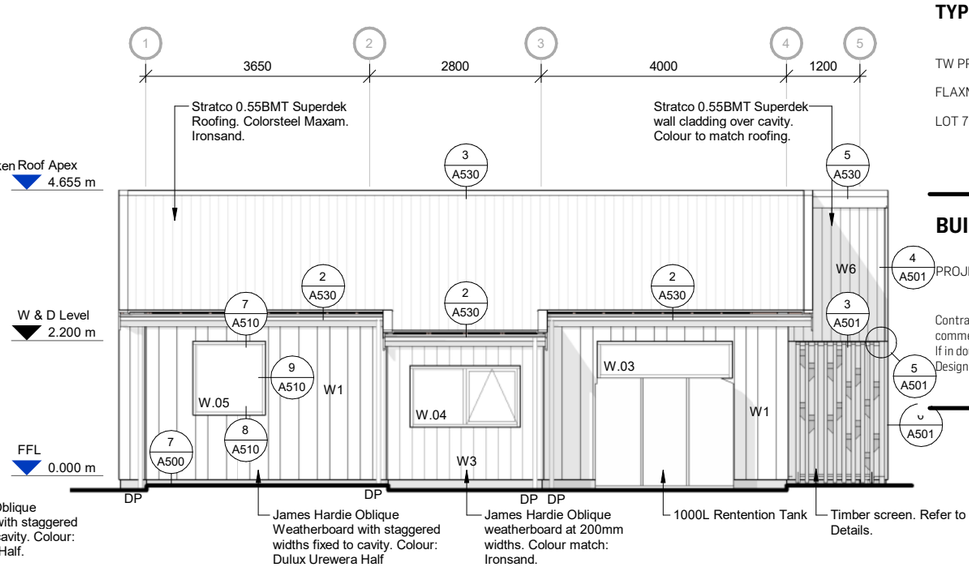


TYPE E **TYPE E.1**



EA300 REV.3

ELEVATIONS

TYPE E

TW PROPERTY

FLAXMERE HOUSING

LOT 7 - 72 CAERNARVON DRIVE

BUILDING CONSENT

PROJECT No. **F563**

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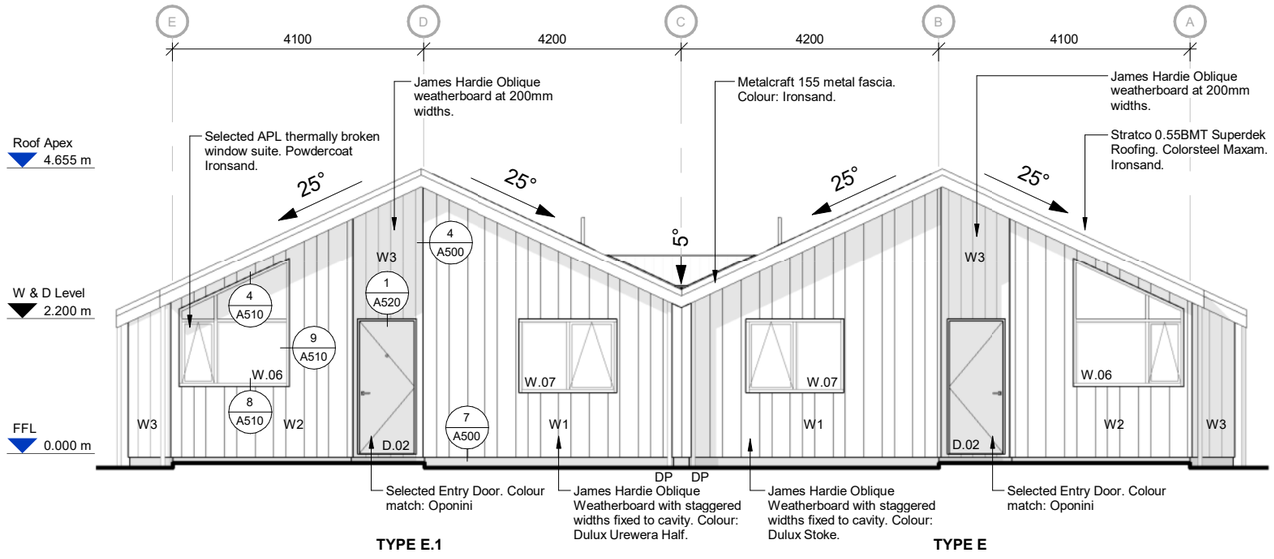
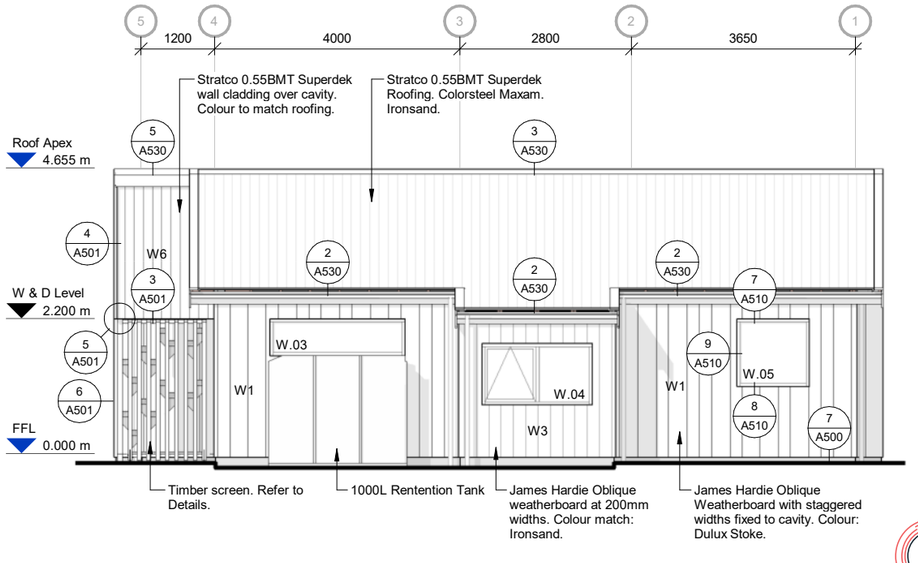
1 EA200 **TYPE E / E.1 - Elevation 1**
SCALE @ A3 - 1 : 100 | SCALE @ A1 - DOUBLE SCALE



TYPE E.1 **TYPE E**

2 EA200 **TYPE E.1 - Side Elevation**
SCALE @ A3 - 1 : 100 | SCALE @ A1 - DOUBLE SCALE



3 EA200 **TYPE E / E.1 - Elevation 3**
SCALE @ A3 - 1 : 100 | SCALE @ A1 - DOUBLE SCALE

4 EA200 **TYPE E - Side Elevation**
SCALE @ A3 - 1 : 100 | SCALE @ A1 - DOUBLE SCALE

NO.	DESCRIPTION	DATE
3	Type E - BC	05.09.25
D	For Consultants	25.08.25
C	Requested Updates	16.07.25
B	Requested Updates	10.07.25

Site Information

Climate Zone: 2
Earthquake Zone: 3
Exposure Zone: B
Lee Zone: No
Rainfall Range: 50 - 60mm/h
Wind Region: A
Wind Zone: High
Corrosion Zone: B

Legal Description: LOT 2 DP 435766
Total Site Area: 4065m2

NZBC Compliance

Compliance with NZBC E2 is by means of NZBC E2 AS1. Refer Risk Matrix provided.

Compliance with H1/AS1. Refer to calculations within drawing set.

Auckland +64 9 976 8288 ak@dgse.co.nz
Tauranga +64 7 925 6238 tr@dgse.co.nz
Napier +64 6 835 6173 np@dgse.co.nz
Palmerston North +64 6 357 4534 pn@dgse.co.nz
Wellington +64 4 920 0032 wn@dgse.co.nz
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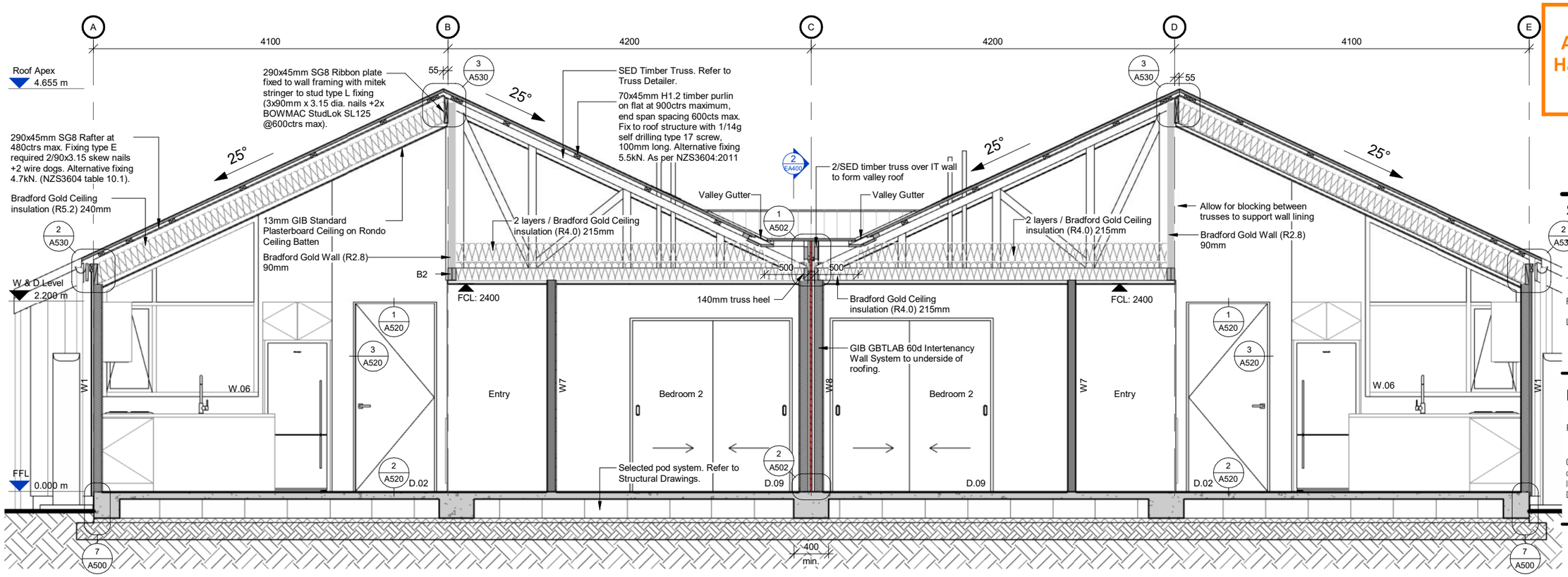
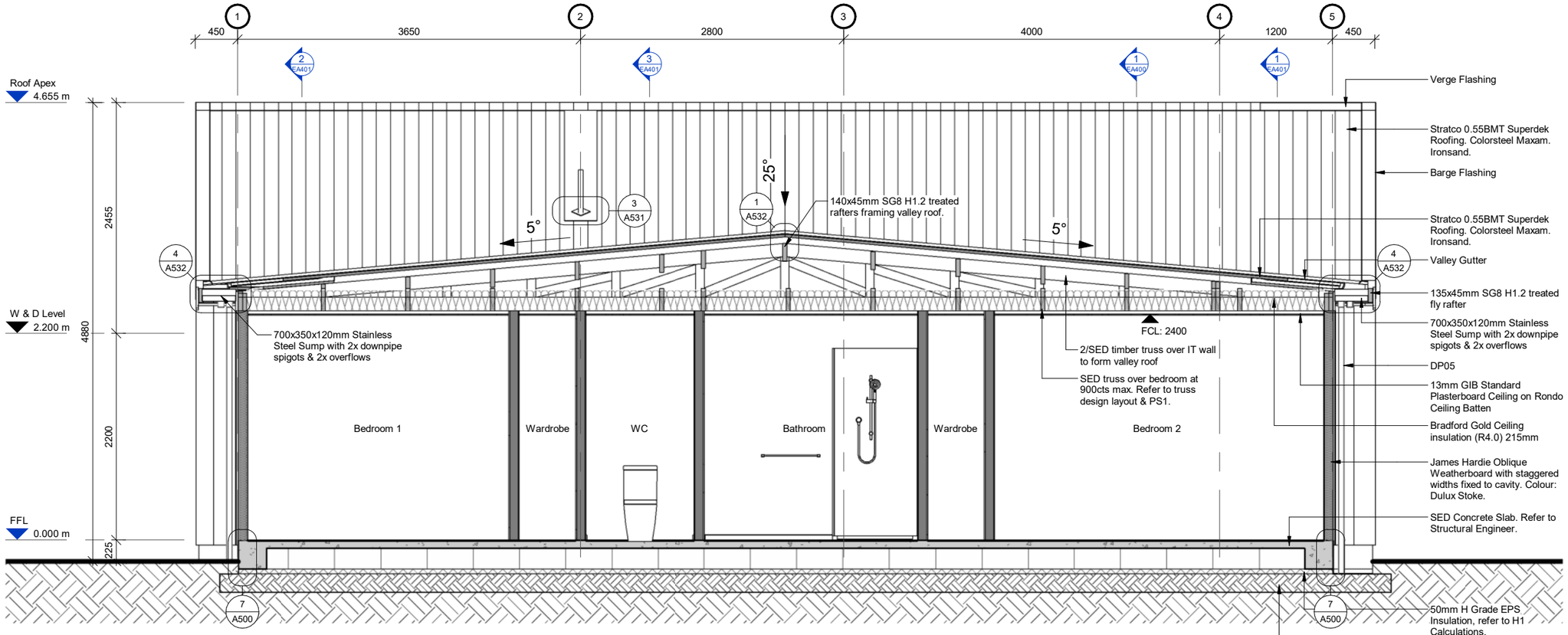


1 EA200 **Section 1**
SCALE @ A3 - 1 : 50 | SCALE @ A1 - DOUBLE SCALE



2 EA200 **Section 2**
SCALE @ A3 - 1 : 50 | SCALE @ A1 - DOUBLE SCALE

EA400 REV.3

SECTION

TYPE E

TW PROPERTY

FLAXMERE HOUSING

LOT 7 - 72 CAERNARVON DRIVE

BUILDING CONSENT

PROJECT No. **F563**

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NO.	DESCRIPTION	DATE
3	Type E - BC	05.09.25
D	For Consultants	25.08.25

Site Information

Climate Zone: 2
Earthquake Zone: 3
Exposure Zone: B
Lee Zone: No
Rainfall Range: 50 - 60mm/h
Wind Region: A
Wind Zone: High
Corrosion Zone: B

Legal Description: LOT 2 DP 435766
Total Site Area: 4065m2

NZBC Compliance

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Compliance with H1/AS1. Refer to calculations within drawing set.

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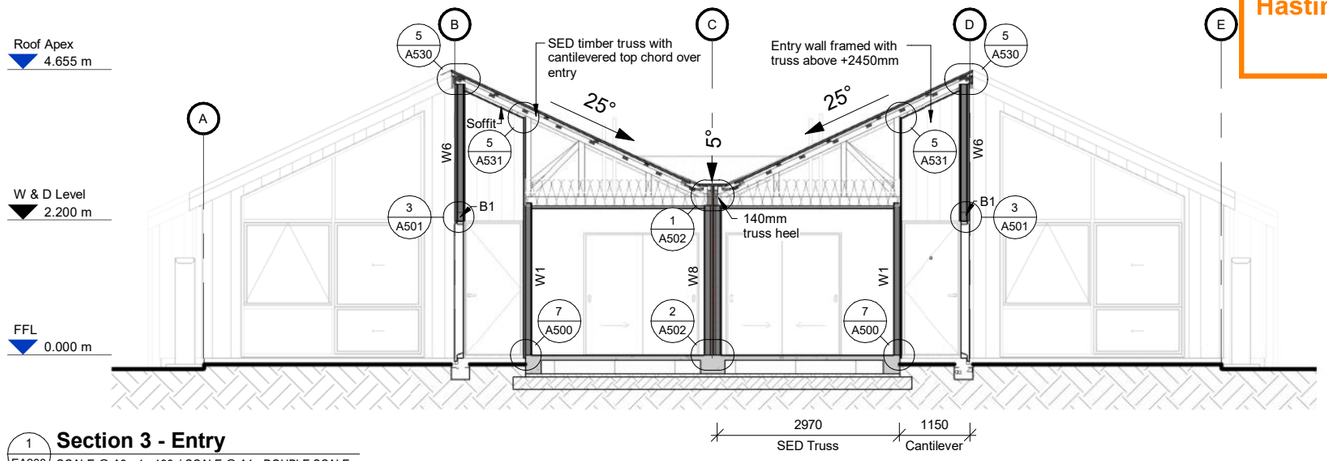
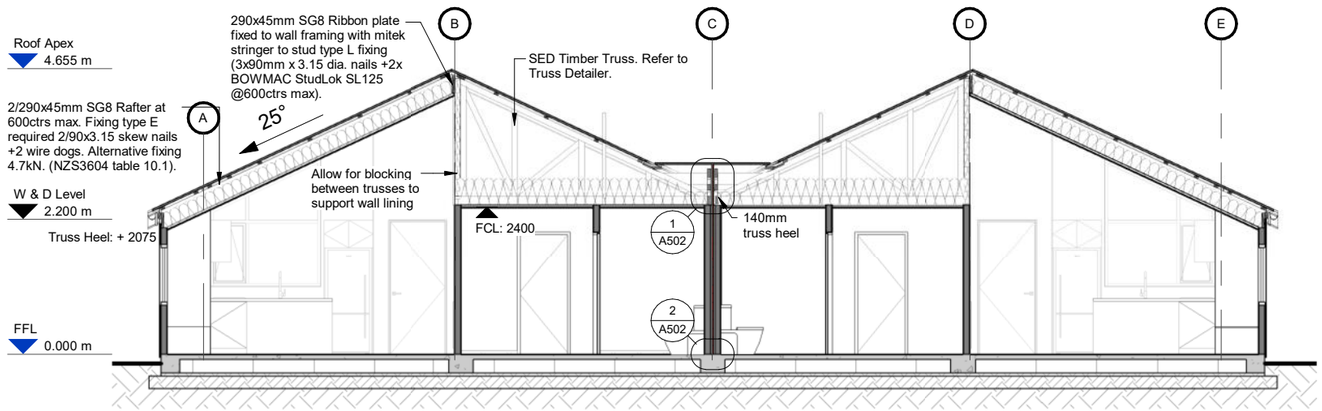
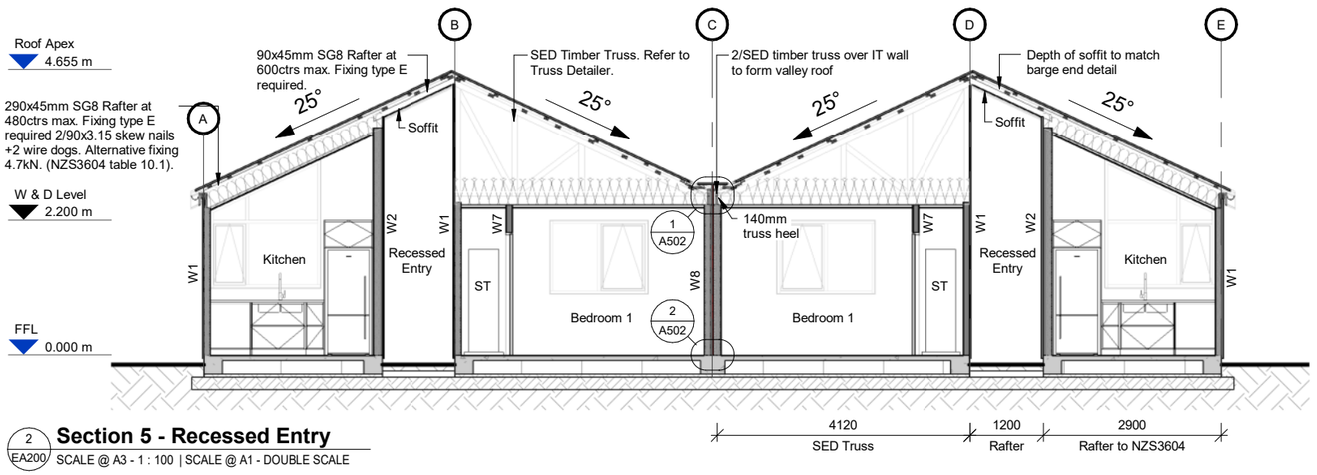


1 EA200 **Section 3 - Entry**
SCALE @ A3 - 1 : 100 | SCALE @ A1 - DOUBLE SCALE



3 EA200 **Section 4 - Window Seat**
SCALE @ A3 - 1 : 100 | SCALE @ A1 - DOUBLE SCALE



2 EA200 **Section 5 - Recessed Entry**
SCALE @ A3 - 1 : 100 | SCALE @ A1 - DOUBLE SCALE

EA401 REV.3

SECTION

TYPE E

TW PROPERTY

FLAXMERE HOUSING

LOT 7 - 72 CAERNARVON DRIVE

BUILDING CONSENT

PROJECT No. **F563**

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NO.	DESCRIPTION	DATE
3	Type E - BC	05.09.25
D	For Consultants	25.08.25

Site Information

Climate Zone: 2
Earthquake Zone: 3
Exposure Zone: B
Lee Zone: No
Rainfall Range: 50 - 60mm/h
Wind Region: A
Wind Zone: High
Corrosion Zone: B

Legal Description: LOT 2 DP 435766
Total Site Area: 4065m2

NZBC Compliance

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Compliance with H1/AS1. Refer to calculations within drawing set.

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Wellington	+64 4 920 0032	wn@dgse.co.nz
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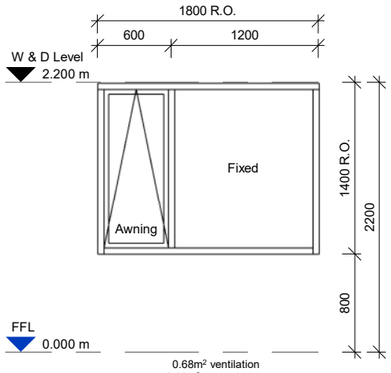
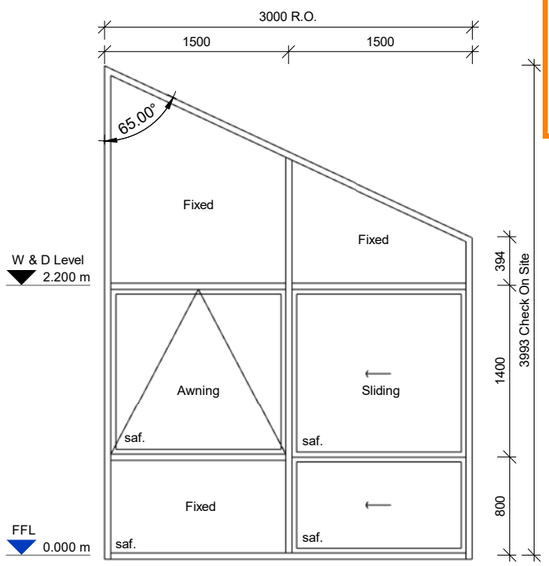


0.68m² ventilation
2.00m² Natural Light

W.01

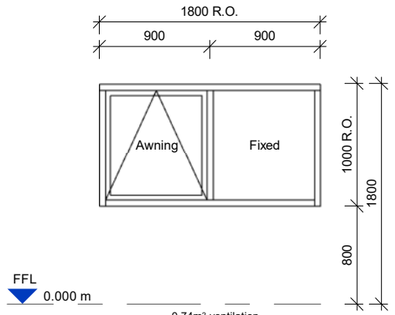
LOCATION: Bedroom 2
DESCRIPTION: Fixed + awning window
GLAZING: Double glazed
FRAME: Selected thermally broken aluminium frame with powdercoat finish.
TRIM: Single bevel 60x10mm architrave. Selected paint finish.



4.99m² ventilation
8.14m² Natural Light

W.02

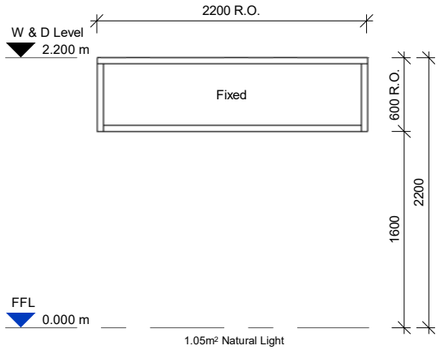
LOCATION: Living Room
DESCRIPTION: Full height glazed sliding door + awning window
GLAZING: Double glazed
FRAME: Selected thermally broken aluminium frame with powdercoat finish.
TRIM: Single bevel 60x10mm architrave. Selected paint finish.
HARDWARE: Selected pull hardware + lock.
Restrictor stay to awning window.



0.74m² ventilation
1.35m² Natural Light

W.04

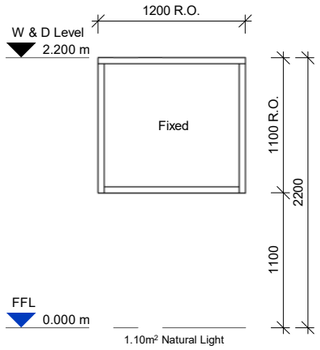
LOCATION: Window Seat
DESCRIPTION: Fixed + awning window
GLAZING: Double glazed
FRAME: Selected thermally broken aluminium frame with powdercoat finish.
TRIM: Single bevel 60x10mm architrave. Selected paint finish.



1.05m² Natural Light

W.03

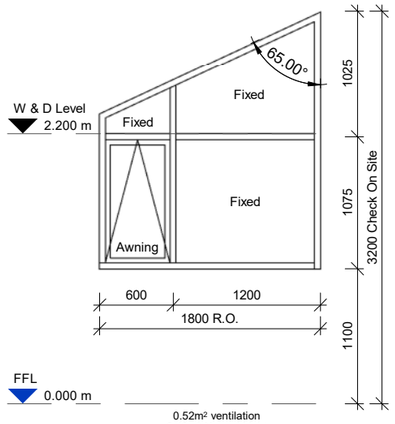
LOCATION: Living Room High Level
DESCRIPTION: Fixed window
GLAZING: Double glazed
FRAME: Selected thermally broken aluminium frame with powdercoat finish.
TRIM: Single bevel 60x10mm architrave. Selected paint finish.



1.10m² Natural Light

W.05

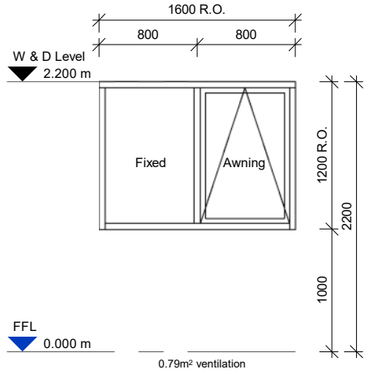
LOCATION: Kitchen
DESCRIPTION: Fixed window.
GLAZING: Double glazed
FRAME: Selected thermally broken aluminium frame with powdercoat finish.
TRIM: Single bevel 60x10mm architrave. Selected paint finish.



0.52m² ventilation
2.40m² Natural Light

W.06

LOCATION: Kitchen
DESCRIPTION: Window to ceiling with awning pane.
GLAZING: Double glazed
FRAME: Selected thermally broken aluminium frame with powdercoat finish.
TRIM: Single bevel 60x10mm architrave. Selected paint finish.



0.79m² ventilation
1.45m² Natural Light

W.07

LOCATION: Bedroom 1
DESCRIPTION: Fixed + awning window
GLAZING: Double glazed
FRAME: Selected thermally broken aluminium frame with powdercoat finish.
TRIM: Single bevel 60x10mm architrave. Selected paint finish.

WINDOW & DOOR NOTES

GENERAL

1. Contractor is to use the specification in conjunction with these drawings as the basis for the works and allow for window swings, handing etc. to provide and install items of hardware not specified, shown or listed, but required for the completion and proper finish of the works.
2. Door & Window schedules must be read in conjunction with all other architect's drawings, details, and specifications. Any discrepancies shall be referred to DGSE prior to proceeding with the works.
3. Contractor to verify handings & quantities and provide shop drawings prepared by joinery manufacturer for DGSE's approval prior to fabrication.
4. Dimensions are rough opening sizes & openings must be confirmed on site before fabrication.
5. Manufacturer and installer guarantees are to be provided for the supply and installation of all windows and doors.
6. Warranty of minimum 10 years for complete window and door installation including cost of replacement materials and installation, with insurance-backed guarantee for all components.
7. All windows and doors, including glazing, MUST be protected during construction.

ARCHITRAVES / LININGS

1. All exterior joinery to have 20mm architraved timber linings.
2. All interior doors to have 20mm architraved timber jambs.

ALUMINIUM JOINERY

1. Install following manufacturer's written specification and recommendations.
2. 10mm tolerance gap required around heads and reveals of all windows and doors.
3. All exterior windows and doors to be powdercoated (minimum of 60 microns). All extruded/pressed sills to be powdercoated (minimum 120 microns). Closed ends to be factory welded, NO site welding / NO site cutting / NO site drilling.
4. Double draught seals are required around all openable elements and must be continuous. All seals must be suitable for the selected window/door.
5. Continuous air seal required around window - refer to details and specification.
6. Depth of flexible sealant to be half the width of seal and applied in a single application in accordance with the manufacturer's recommendations to provide a watertight seal of 600Pa.
7. Refer specification for thermal performance requirement.

GLAZING

1. Weighted & sized for application in accordance with NZS 4223. Refer specificiation for thermal performance requirements.
2. Safety glazing, when required, to be heat soaked toughened safety glass to the thickness required by NZS 4223. Generally safety glazing required for fully framed panels greater that 500x1000mm and within 800mm of the floor, or for side panels greater than 500x1000mm or within 800mm of the floor. Safety glazing required for any door (except vision panel), wet area or any internal partition.
3. Restrictor stays to be provided for all opening sashes.
4. Obscure glazing to all windows in bathroom & WC.

Refer to Door schedule for ventilation & natural lighting calculations

EA600 REV.3

WINDOW SCHEDULE

TYPE E

TW PROPERTY

FLAXMERE HOUSING

LOT 7 - 72 CAERNARVON DRIVE

BUILDING CONSENT

PROJECT No. **F563**

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NO.	DESCRIPTION	DATE
3	Type E - BC	05.09.25

Site Information

Climate Zone: 2
Earthquake Zone: 3
Exposure Zone: B
Lee Zone: No
Rainfall Range: 50 - 60mm/h
Wind Region: A
Wind Zone: High
Corrosion Zone: B

Legal Description: LOT 2 DP 435766
Total Site Area: 4065m2

NZBC Compliance

Compliance with NZBC E2 is by means of NZBC E2 AS1. Refer Risk Matrix provided.

Compliance with H1/AS1. Refer to calculations within drawing set.

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Wellington	+64 4 920 0032	wn@dgse.co.nz
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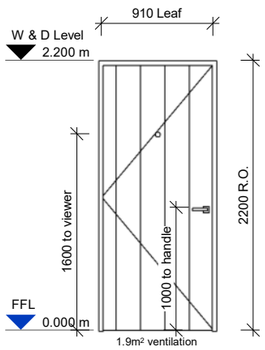
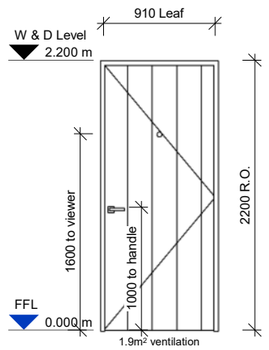


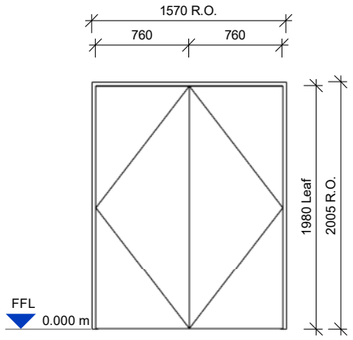
D.01

LOCATION: Entry
DESCRIPTION: Exterior powdercoated front door leaf.
FRAME: Exterior powdercoated front door leaf
TRIM: Single bevel 60x10mm architrave. Selected paint finish
HARDWARE: Refer to selections. Euro-cylinder lock or equivilent. lever type handles, keyless exit.



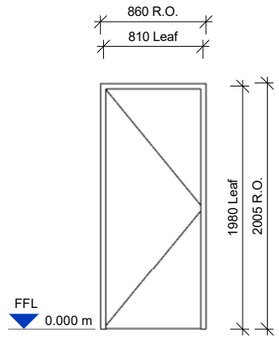
D.02

LOCATION: Kitchen Entry
DESCRIPTION: Exterior powdercoated front door leaf.
FRAME: Exterior powdercoated front door leaf
TRIM: Single bevel 60x10mm architrave. Selected paint finish
HARDWARE: Refer to selections. Euro-cylinder lock or equivilent. lever type handles, keyless exit.



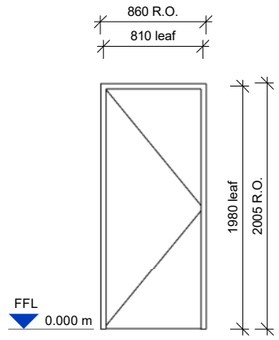
D.03

LOCATION: Laundry
DESCRIPTION: EPS core double hinged door. 20mm undercut
FRAME: 20mm timber jambs. selected paint finish.
TRIM: Single bevel 60x10mm architrave. Selected paint finish
HARDWARE: Selected lever hardware



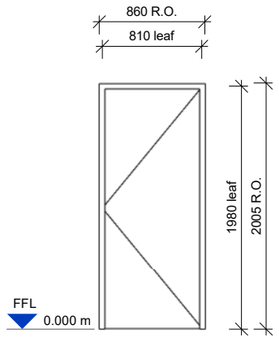
D.04

LOCATION: Bedroom 1
DESCRIPTION: EPS core hinged interior door
FRAME: 20mm timber jambs. selected paint finish.
TRIM: Single bevel 60x10mm architrave. Selected paint finish
HARDWARE: Selected lever hardware



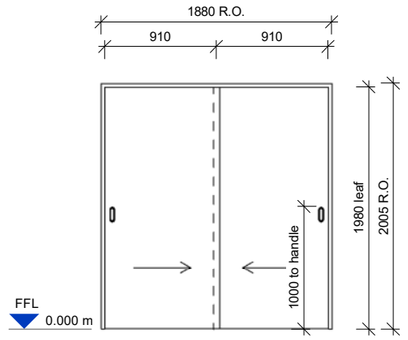
D.05

LOCATION: WC
DESCRIPTION: EPS core hinged interior door. 20mm undercut
FRAME: 20mm timber jambs. selected paint finish.
TRIM: Single bevel 60x10mm architrave. Selected paint finish
HARDWARE: Selected lever hardware



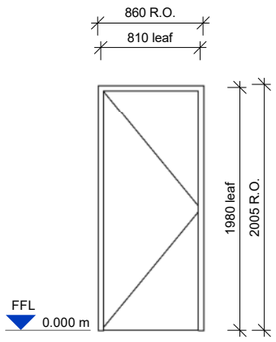
D.06

LOCATION: Bathroom
DESCRIPTION: EPS core hinged interior door. 20mm undercut
FRAME: 20mm timber jambs. selected paint finish.
TRIM: Single bevel 60x10mm architrave. Selected paint finish
HARDWARE: Selected lever hardware



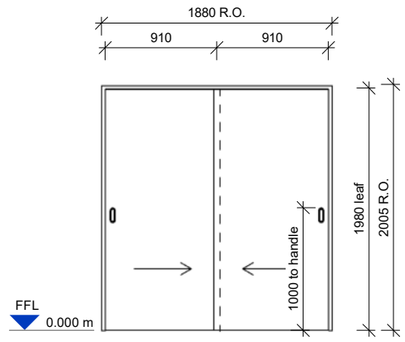
D.07

LOCATION: Hallway Storage
DESCRIPTION: Sliding wardrobe doors.
FRAME: 20mm timber jambs. selected paint finish.
TRIM: Single bevel 60x10mm architrave. Selected paint finish
HARDWARE: Selected lever hardware



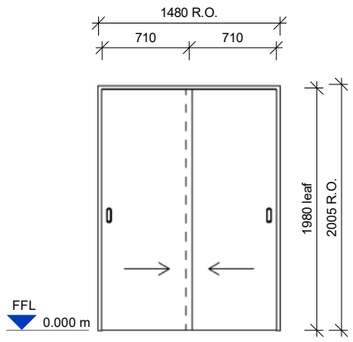
D.08

LOCATION: Bedroom 2
DESCRIPTION: EPS core hinged interior door
FRAME: 20mm timber jambs. selected paint finish.
TRIM: Single bevel 60x10mm architrave. Selected paint finish
HARDWARE: Selected lever hardware



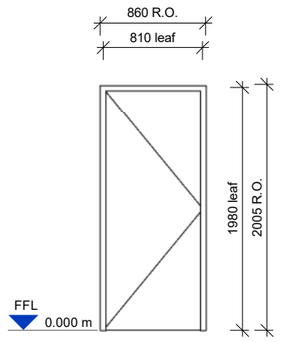
D.09

LOCATION: Bedroom 2 Wardrobe
DESCRIPTION: Sliding wardrobe doors.
FRAME: 20mm timber jambs. selected paint finish.
TRIM: Single bevel 60x10mm architrave. Selected paint finish
HARDWARE: Selected lever hardware



D.10

LOCATION: Bedroom 1 Wardrobe
DESCRIPTION: Sliding wardrobe doors.
FRAME: 20mm timber jambs. selected paint finish.
TRIM: Single bevel 60x10mm architrave. Selected paint finish
HARDWARE: Selected lever hardware



D.11

LOCATION: Bedroom 1 Cupboard
DESCRIPTION: EPS core hinged interior door
FRAME: 20mm timber jambs. selected paint finish.
TRIM: Single bevel 60x10mm architrave. Selected paint finish
HARDWARE: Selected lever hardware

EA650 REV.3

DOOR SCHEDULE

TYPE E

TW PROPERTY

FLAXMERE HOUSING

LOT 7 - 72 CAERNARVON DRIVE

BUILDING CONSENT

PROJECT No. **F563**

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WINDOW & DOOR NOTES

GENERAL

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2. Door & Window schedules must be read in conjunction with all other architect's drawings, details, and specifications. Any discrepancies shall be referred to DGSE prior to proceeding with the works.
3. Contractor to verify handings & quantities and provide shop drawings prepared by joinery manufacturer for DGSE's approval prior to fabrication.
4. Dimensions are rough opening sizes & openings must be confirmed on site before fabrication.
5. Manufacturer and installer guarantees are to be provided for the supply and installation of all windows and doors.
6. Warranty of minimum 10 years for complete window and door installation including cost of replacement materials and installation, with insurance-backed guarantee for all components.
7. All windows and doors, including glazing, MUST be protected during construction.

ARCHITRAVES / LININGS

1. All exterior joinery to have 20mm architraved timber linings.
2. All interior doors to have 20mm architraved timber jambs.

VENTILATION & NATURAL LIGHT

Kitchen/ Dining/Living /Hallway Area: 49.1m²	Mechanical extract fan and, Ventilation required: 5%=2.45m² G4 Achieved: **14.04m²** Illuminace required: 10%=4.91m² G7 Achieved: **14.04m²**
Bathroom Area: 5.4m²	Combined natural & mechanical ventilation. Intermitent extract fan 50L/s min. flow rate, 20mm undercut to door. Artifical lighting
WC Area: 2.0m²	Combined natural & mechanical ventilation. Intermitent extract fan 50L/s min. flow rate, 20mm undercut to door. Artifical lighting
Bedroom 1 Area: 9.6m²	Ventilation required: 5%=0.48m² G4 Achieved: **0.79m²** Illuminace required: 10%=0.96m² G7 Achieved: **1.45m²**
Bedroom 2 Area: 9.8m²	Ventilation required: 5%=0.49m² G4 Achieved: **0.68m²** Illuminace required: 10%=0.98m² G7 Achieved: **2.0m²**

NO.	DESCRIPTION	DATE
3	Type E - BC	05.09.25

Site Information

Climate Zone: 2
Earthquake Zone: 3
Exposure Zone: B
Lee Zone: No
Rainfall Range: 50 - 60mm/h
Wind Region: A
Wind Zone: High
Corrosion Zone: B

Legal Description: LOT 2 DP 435766
Total Site Area: 4065m2

NZBC Compliance

Compliance with NZBC E2 is by means of NZBC E2 AS1. Refer Risk Matrix provided.

Compliance with H1/AS1. Refer to calculations within drawing set.

Auckland +64 9 976 8288 ak@dgse.co.nz
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H1/AS1 REFERENCE BUILDING CALCULATIONS

Total Wall + Glazing Area	Reference Wall Area (70% total)	Reference Window Area (30%)
205.02 m²	143.51	61.51

$$HL_{reference} = \frac{182.85m^2}{A_{roof} + A_{skylight}} + \frac{143.51m^2}{A_{70\% \text{ of the total wall area}}} + \frac{181.87m^2}{A_{slab\ on\ ground\ floor}} + \frac{N/A}{A_{other\ floor}} + \frac{61.51m^2}{A_{30\% \text{ of total wall area}}}$$

$$\frac{}{6.6} + \frac{}{2} + \frac{}{1.5} + \frac{}{2.5} + \frac{}{0.46}$$

27.70 + 71.75 + 121.24 + 0 + 133.71 = **354.4** Net Heat Loss

H1/AS1 PROPOSED BUILDING CALCULATIONS

$$HL_{proposed} = \frac{A_{roof}}{R_{roof}} + \frac{A_{wall}}{R_{wall}} + \frac{A_{floor}}{R_{floor}} + \frac{A_{glazing}}{R_{window}} + \frac{A_{door,\ opaque}}{R_{door,\ opaque}} + \frac{A_{skylight}}{R_{skylight}}$$

36. 22 + 66.97 + 84.98 + 112.72 + 25.68 + N/A = **326.57**Net Heat Loss

Glazing Percentage of total wall area: **21.7%**
Proposed building thermal performance exceeds reference performance by: **7.6%**
H1 Result: **PASS**

ELEMENT AREA'S / R VALUES

Roofs	Description	Insulation	Area	Construction R Value	Reference R Value	Proposed Heat Loss
ROOF 1	ROOFING: Stratco 0.55BMT Superdek roofing. PURLINS: 70x45mm SG8 H1.2 treated at 900ctrs max. 600mm end spans. STRUCTURE: SED timber trusses at 900ctrs max. CEILING: GIB Rondo Ceiling Battens	2 layers / Bradford Gold Ceiling Insulation (R4.0) 215mm	79.70 m²	5.9	6.6	13.51
ROOF 2	Truss Heel Feathered. Refer to description of Roof 1 for buildup.	Bradford Gold Ceiling Insulation (R4.0) 215mm	11.47 m²	3.46	6.6	3.32
ROOF 3	ROOFING: Stratco 0.55BMT Superdek Tray PURLINS: 70x45mm SG8 H1.2 treated at 900ctrs max. 600mm end spans. STRUCTURE: 290x45mm SG8 H1.2 treated rafters at 480ctrs max. CEILING: GIB Rondo Ceiling Battens	Bradford Gold Ceiling (R5.2) 240mm	67.69 m²	4.86	6.6	13.93
ROOF 4	ROOFING: Stratco 0.55BMT Superdek Tray PURLINS: 70x45mm SG8 H1.2 treated at 900ctrs max. 600mm end spans. STRUCTURE: 2/290x45mm SG8 H1.2 treated rafters at 600ctrs max. CEILING: GIB Rondo Ceiling Battens	Bradford Gold Ceiling (R5.2) 240mm	23.99 m²	4.39	6.6	5.46
			182.85 m²			36.22

Wall	Description	Insulation	Area	Construction R Value	Reference R Value	Proposed Heat Loss
Insulation		Bradford Gold Wall (R2.8) 90mm	34.76 m²	2.8	2	12.41
W1	STRUCTURE: 90x45mm H1.2 treated SG8 timber framing. Studs at 600ctrs max. Nogs at 600ctrs max. AIR BARRIER: Masons Uni Pro CAVITY: 20x45mm H3.1 treated horizontal castellated cavity battens. CLADDING: James Hardie Oblique vertical Weatherboard Staggered.	Bradford Gold Wall (R2.8) 90mm	71.28 m²	2.27	2	31.40
W2	Refer to W1, structure to be 2/140x45mm H1.2 treated SG8 timber framing. Studs at 600ctrs max. Nogs at 600ctrs max.	Bradford Gold Wall (R2.8) 90mm	31.83 m²	2.46	2	12.94
W3	STRUCTURE: 90x45mm H1.2 treated SG8 timber framing. Studs at 600ctrs max. Nogs at 600ctrs max. AIR BARRIER: Masons Uni Pro CAVITY: 20x45mm H3.1 treated horizontal castellated cavity battens. CLADDING: James Hardie Oblique Weatherboard 200mm vertical	Bradford Gold Wall (R2.8) 90mm	23.18 m²	2.27	2	10.21
			161.06 m²			66.97

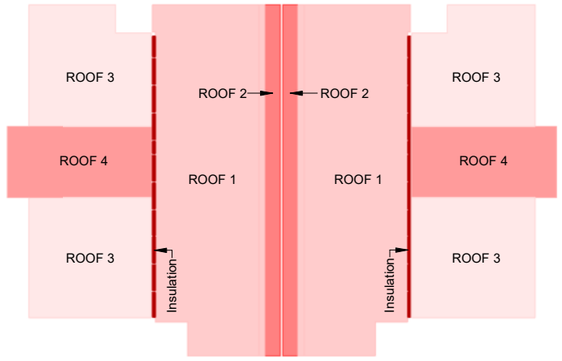
Floors	Description	Insulation	Area	Construction R Value	Reference R Value	Proposed Heat Loss
FLOOR 1	SED concrete raft floor	Firth Ribraft 220mm Pods + 50mm H Grade EPS Underslab	181.87 m²	2.14	1.5	84.98
			181.87 m²			84.98

Glazing	Description	Glazing	Area	Construction R Value	Reference R Value	Proposed Heat loss
Windows	Selected Thermally Broken Aluminium Joinery	Double Glazing, Low E IGU (R0.39)	43.96 m²	0.39	0.46	112.72
			43.96 m²			112.72

Doors	Description	Insulation	Area	Construction R Value	Reference R Value	Proposed Heat Loss
D.02	Exterior powdercoated front door leaf.		2.11 m²	0.329	0.46	6.42
D.02	Exterior powdercoated front door leaf.		2.11 m²	0.329	0.46	6.42
D.01	Exterior powdercoated front door leaf.		2.11 m²	0.329	0.46	6.42
D.01	Exterior powdercoated front door leaf.		2.11 m²	0.329	0.46	6.42
			8.45 m²			25.68

NOTES

- This calculation qualifies as an acceptable solution under Energy Efficiency Acceptable Solution H1/AS1 5th edition amendment 1 clause 2.1.3 (4/08/22) where the proposed building total heat loss is less than the reference building total heat loss, and the glazing area is no greater than 40% of the total wall area.
- Construction R- values are based on the following sources:
  - Design Navigator R-value calculator
  - H1/AS1 (5th edition)
  - Firth Ribraft R value calculator



Thermal Envelope - Roof
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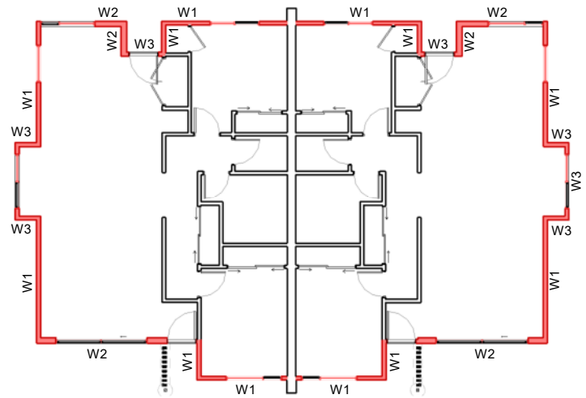

Thermal Envelope - Walls
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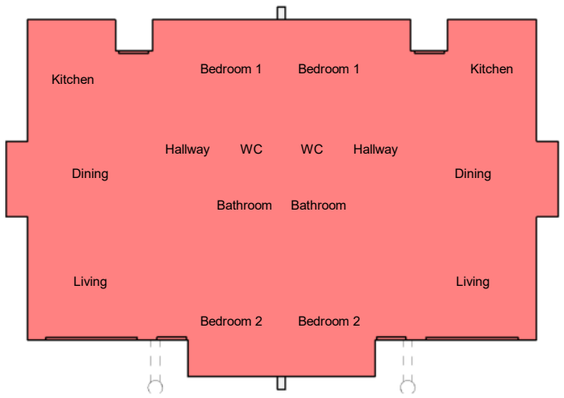

Thermal Envelope - Floor
SCALE @ A3 - 1 : 200 | SCALE @ A1 - DOUBLE SCALE

EA660 REV.3

H1 CALCULATIONS

TYPE E

TW PROPERTY

FLAXMERE HOUSING

LOT 7 - 72 CAERNARVON DRIVE

BUILDING CONSENT

PROJECT No. **F563**

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NO.	DESCRIPTION	DATE
3	Type E - BC	05.09.25
D	For Consultants	25.08.25

Site Information

Climate Zone: 2
Earthquake Zone: 3
Exposure Zone: B
Lee Zone: No
Rainfall Range: 50 - 60mm/h
Wind Region: A
Wind Zone: High
Corrosion Zone: B

Legal Description: LOT 2 DP 435766
Total Site Area: 4065m2

NZBC Compliance

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Compliance with H1/AS1. Refer to calculations within drawing set.

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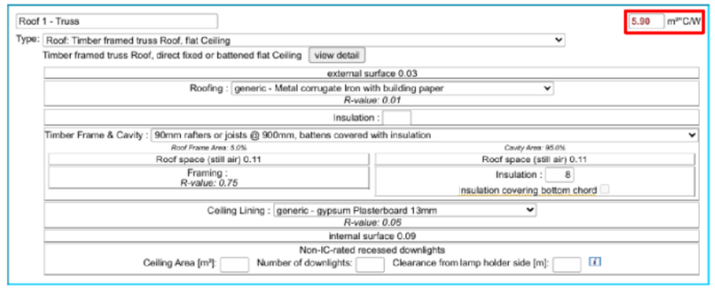
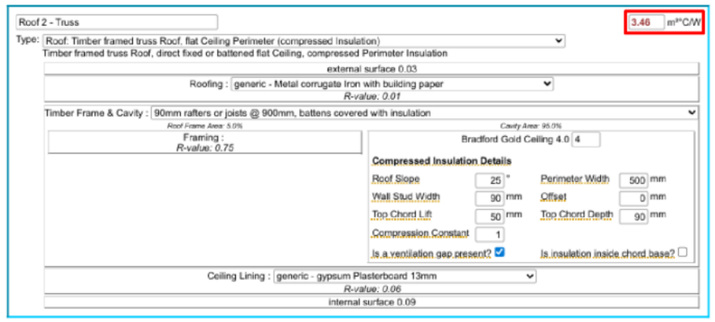
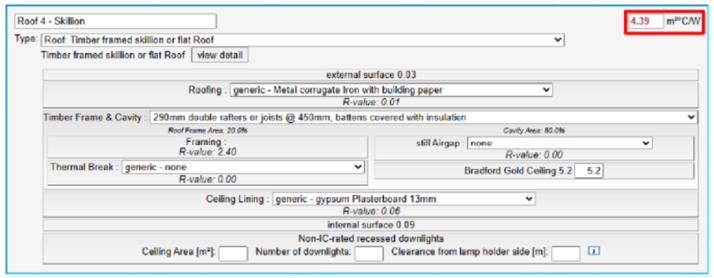
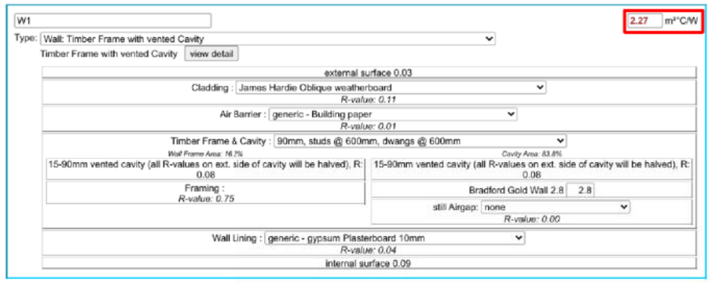
ROOF Design Navigator R Value Calculations

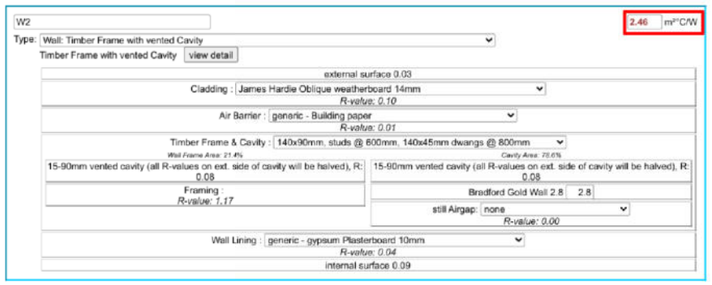


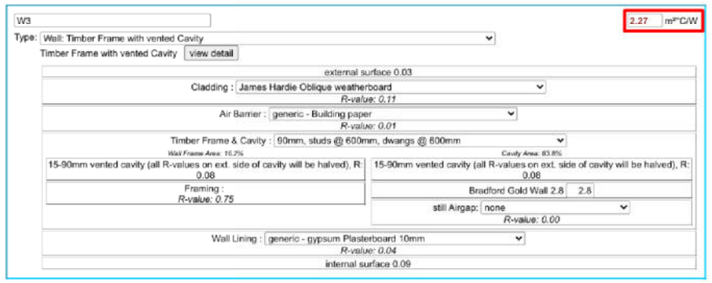




WALLS Design Navigator R Value Calculations







FLOOR Firth Ribraft R Value Calculations

H1 Solution
RibRaft® 220mm pods (min. slab 305mm)
90-140mm wall frame + HotEdge Extra® + 50mm EPS (H-grade) under slab

The minimum R-value for this zone is 1.5	
With a calculated A/P ratio of 2.8	
The R-value for your selected solution is:	
2.14	

Exterior Area	181.87m²
Exterior Perimeter	63.340m
Embedded floor heating	No
Wall Width	90mm
No Edge Insulation Percentage	100%

For a full set of CAD drawings for RibRaft solutions, please refer to the Firth Resources web page
https://www.firth.co.nz/resources/drawings/
Check the RibRaft Foundations filter to show only relevant files.

EA661 REV.3

H1 REFERENCES

TYPE E

TW PROPERTY

FLAXMERE HOUSING

LOT 7 - 72 CAERNARVON DRIVE

BUILDING CONSENT

PROJECT No. **F563**

Contractors shall verify all dimensions on site before commencing work. Do not scale from the drawings. If in doubt ask. Copyright of this drawing is vested in Designgroup Stapleton Elliott.

NO.	DESCRIPTION	DATE
3	Type E - BC	05.09.25
D	For Consultants	25.08.25

Site Information

Climate Zone: 2
Earthquake Zone: 3
Exposure Zone: B
Lee Zone: No
Rainfall Range: 50 - 60mm/h
Wind Region: A
Wind Zone: High
Corrosion Zone: B

Legal Description: LOT 2 DP 435766
Total Site Area: 4065m2

NZBC Compliance

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Compliance with H1/AS1. Refer to calculations within drawing set.

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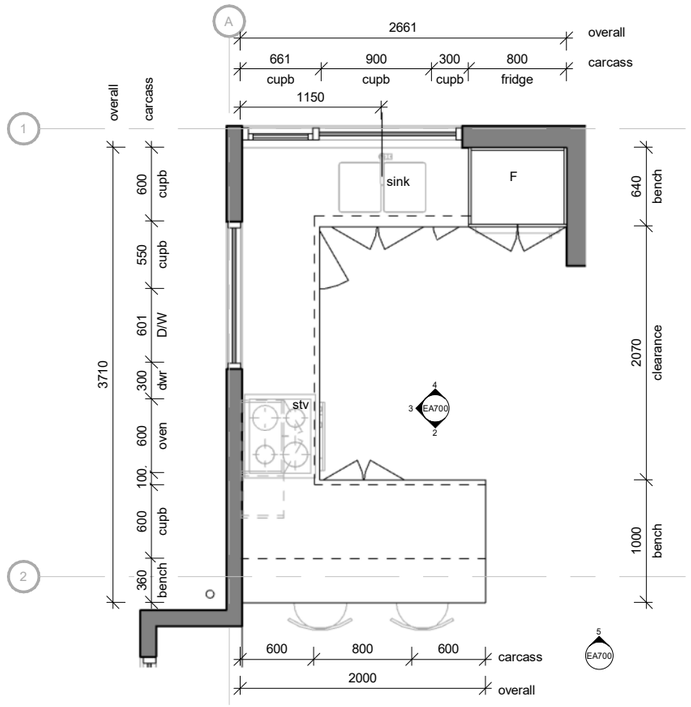
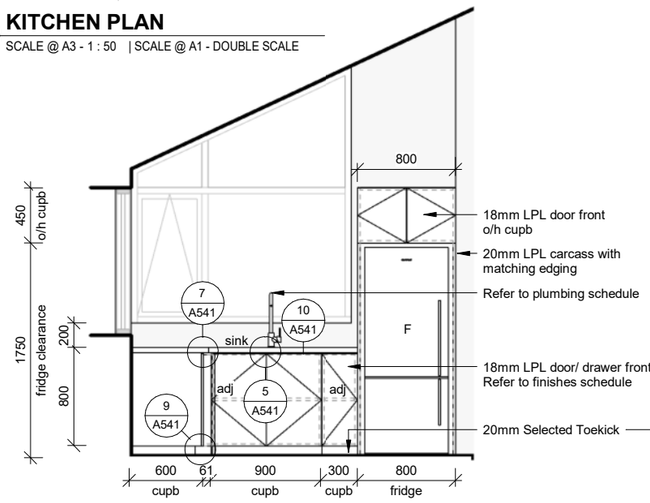


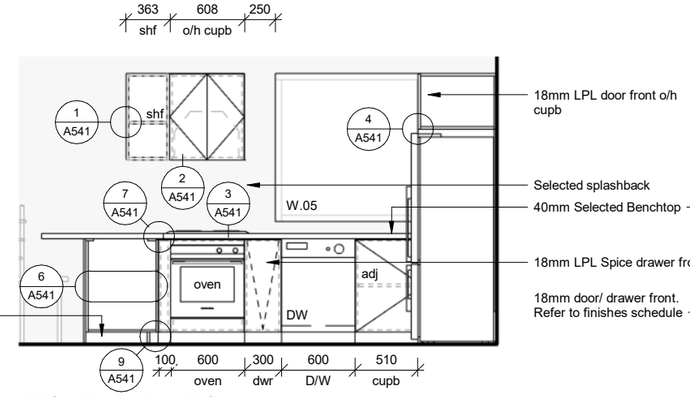
1 EA300 **KITCHEN PLAN**

SCALE @ A3 - 1 : 50 | SCALE @ A1 - DOUBLE SCALE



4 EA700 **KITCHEN ELEVATION 2**

SCALE @ A3 - 1 : 50 | SCALE @ A1 - DOUBLE SCALE



3 EA700 **KITCHEN ELEVATION 1**

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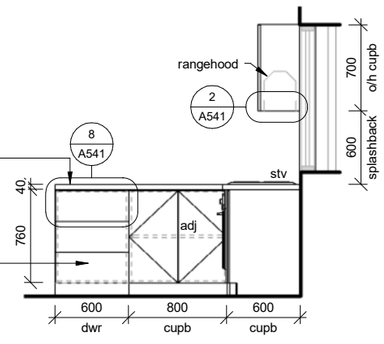

2 EA700 **KITCHEN ELEVATION 3**

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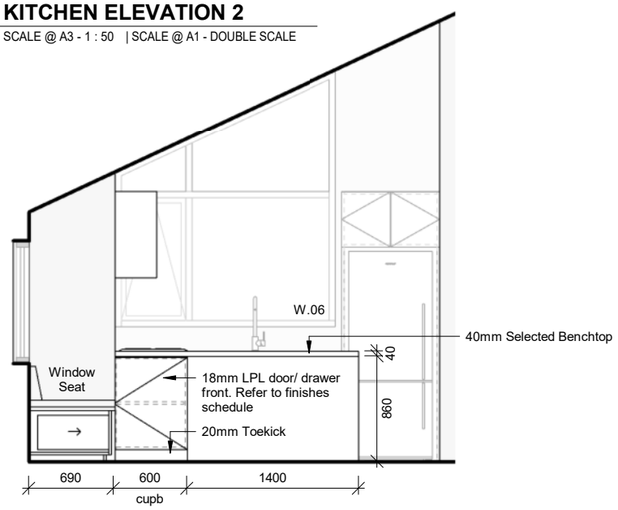

5 EA700 **KITCHEN ELEVATION 4**

SCALE @ A3 - 1 : 50 | SCALE @ A1 - DOUBLE SCALE

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EA700 REV.3

KITCHEN JOINERY

TYPE E

TW PROPERTY

FLAXMERE HOUSING

LOT 7 - 72 CAERNARVON DRIVE

BUILDING CONSENT

PROJECT No. **F563**

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NO.	DESCRIPTION	DATE
3	Type E - BC	05.09.25
B	Requested Updates	10.07.25
A	kitchen Layout	04.07.25

Site Information

Climate Zone: 2
Earthquake Zone: 3
Exposure Zone: B
Lee Zone: No
Rainfall Range: 50 - 60mm/h
Wind Region: A
Wind Zone: High
Corrosion Zone: B

Legal Description: LOT 2 DP 435766
Total Site Area: 4065m2

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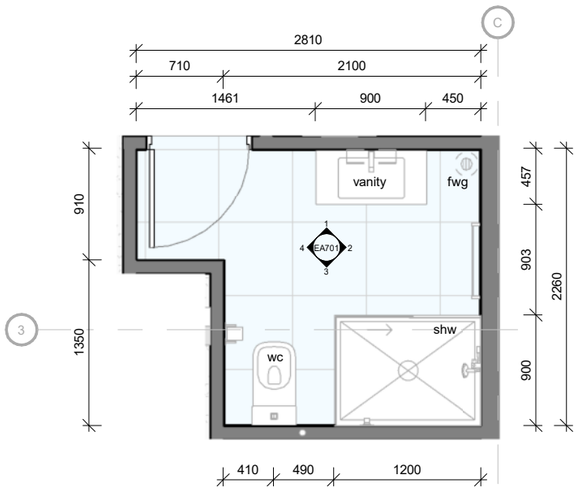
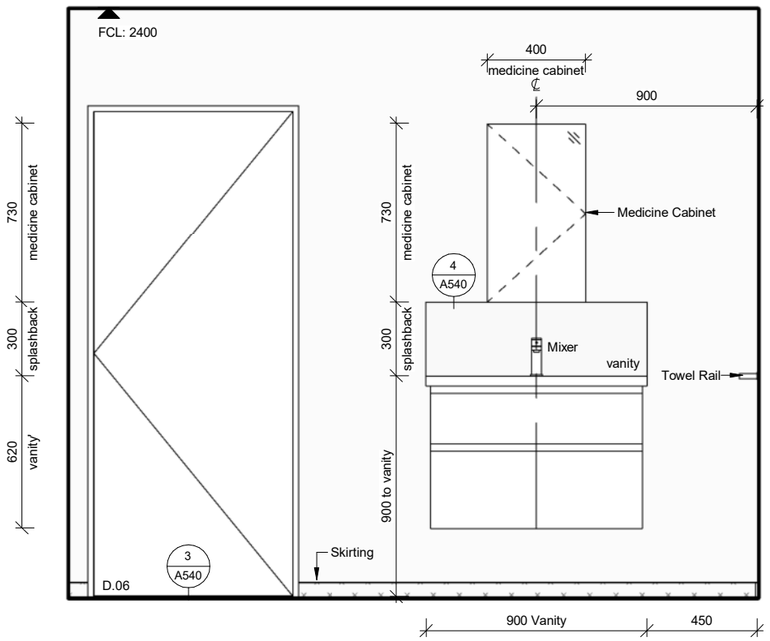
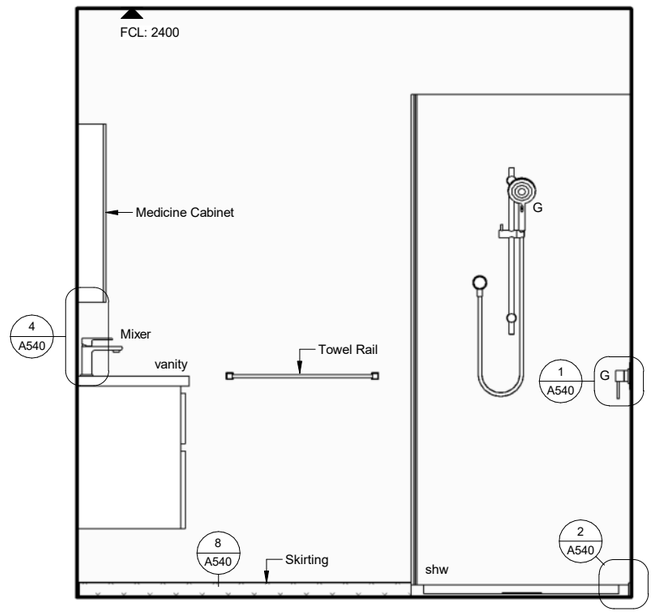


0 BATHROOM PLAN
EA300 SCALE @ A3 - 1 : 50 | SCALE @ A1 - DOUBLE SCALE



1 BATHROOM ELEVATION 1
EA701 SCALE @ A3 - 1 : 25 | SCALE @ A1 - DOUBLE SCALE



2 BATHROOM ELEVATION 2
EA701 SCALE @ A3 - 1 : 25 | SCALE @ A1 - DOUBLE SCALE

EA701 REV.3

BATHROOM

TYPE E

TW PROPERTY

FLAXMERE HOUSING

LOT 7 - 72 CAERNARVON DRIVE

BUILDING CONSENT

PROJECT No. **F563**

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SELECTIONS

Refer to specification & finishes schedules for bathroom fittings.

A) Wall Linings
painted Aqualine GIB

B) Flooring
Selected vinyl plank flooring. wet area slip resistance rating required.

C) Skirting
Selected pine skirting - Paint finish

D) FWG
Selected floor waste gully with clamp ring to finish flush with flooring (refer to specification)

E) Shower
Selected 900x1200mm proprietary Acrylic shower tray & liner. Sliding door.

F) Shower Liner
Proprietary acrylic shower liner.

G) Shower Mixer
Felton KOHC Feltonmix wall set + 6 l/m flow restrictor. Combined mixer & rose with low flow & anti scald washer

H) Towel Rail
Miles Nelson Chrome - 19mm x 900mm (x2)

I) Extract Fan
Refer to electrical plan

J) Toilet
close coupled toilet suite 665L x 775H
LeVivi Utah S-trap close-coupled

K) Toilet Roll Holder
LeVivi Bella - Chrome/LEVBELTPC

L) Vanity
Selected 900mm wall hung vanity.

M) Vanity Mixer
LeVivi Classic + 6 l/m flow restrictor - Chrome/ LEVBSNAPCP

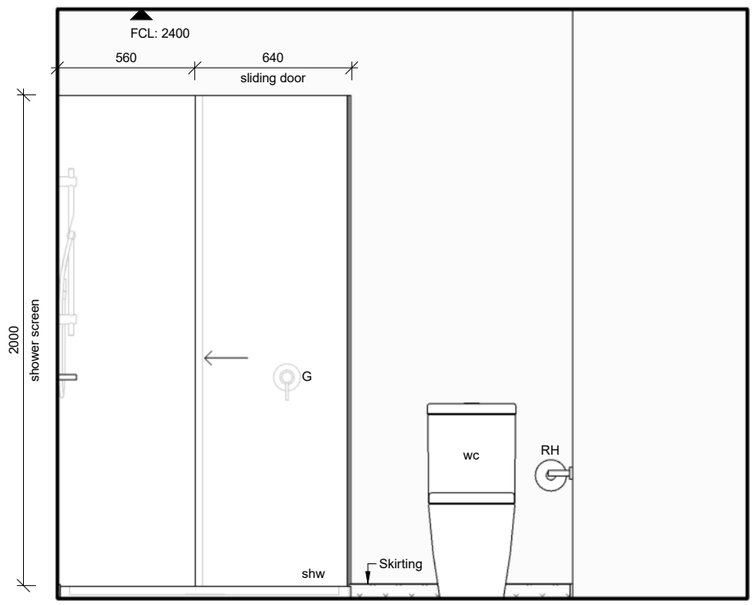
N) Medicine Cabinet
Proprietary medicine cabinet with mirrored front. LeVivi Preston 400mm - LEVPRESHCABWH

O) Tub
Laundry tub cabinet 600W x 560D x 900H with washing machine taps and child resistant catch to cabinet door

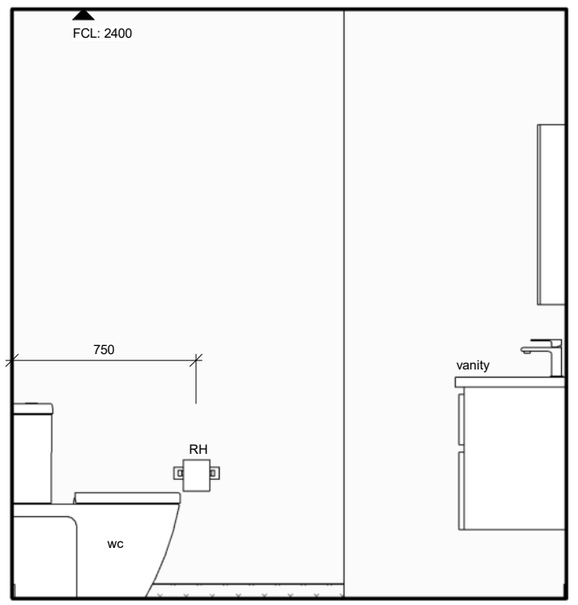
P) Splashback
4.5mm Gloss White Hardieglaze lining with white PVC jointers

Q) Wash hand basin
Wall hung basin with one tap hole. Caroma Urbane II -879010W

R) Selected round mirror
600mm diameter



3 BATHROOM ELEVATION 3
EA701 SCALE @ A3 - 1 : 25 | SCALE @ A1 - DOUBLE SCALE



4 BATHROOM ELEVATION 4
EA701 SCALE @ A3 - 1 : 25 | SCALE @ A1 - DOUBLE SCALE

NO.	DESCRIPTION	DATE
3	Type E - BC	05.09.25

Site Information

Climate Zone: 2
Earthquake Zone: 3
Exposure Zone: B
Lee Zone: No
Rainfall Range: 50 - 60mm/h
Wind Region: A
Wind Zone: High
Corrosion Zone: B

Legal Description: LOT 2 DP 435766
Total Site Area: 4065m2

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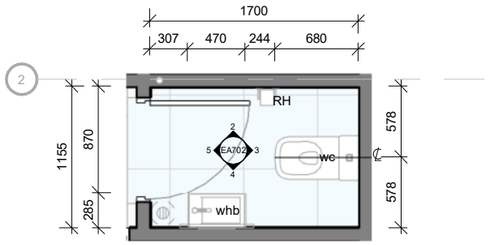

1 EA300 **WC PLAN**
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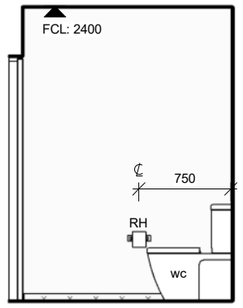

2 EA702 **WC ELEVATION 1**
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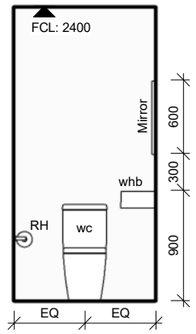
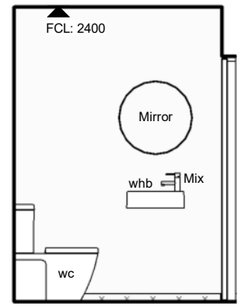
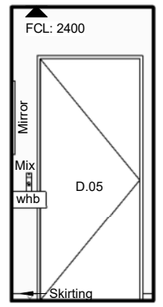


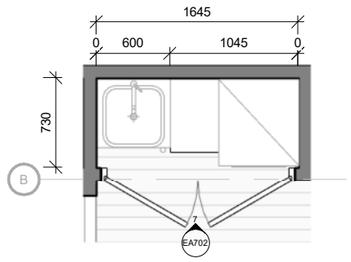
3 EA702 **WC ELEVATION 2**
SCALE @ A3 - 1 : 50 | SCALE @ A1 - DOUBLE SCALE



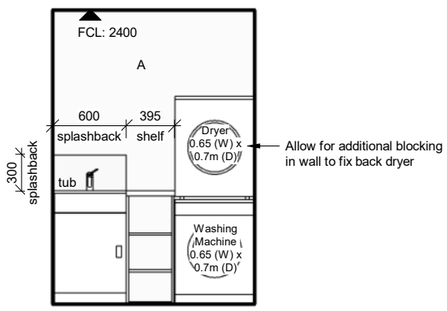
4 EA702 **WC ELEVATION 3**
SCALE @ A3 - 1 : 50 | SCALE @ A1 - DOUBLE SCALE



5 EA702 **WC ELEVATION 4**
SCALE @ A3 - 1 : 50 | SCALE @ A1 - DOUBLE SCALE



6 EA300 **LAUNDRY PLAN**
SCALE @ A3 - 1 : 50 | SCALE @ A1 - DOUBLE SCALE



7 EA702 **LAUNDRY ELEVATION 1**
SCALE @ A3 - 1 : 50 | SCALE @ A1 - DOUBLE SCALE

SELECTIONS

Refer to specification & finishes schedules for bathroom fittings.

A) Wall Linings
painted Aqualine GIB

B) Flooring
Selected vinyl plank flooring. wet area slip resistance rating required.

C) Skirting
Selected pine skirting - Paint finish

D) FWG
Selected floor waste gully with clamp ring to finish flush with flooring (refer to specification)

E) Shower
Selected 900x1200mm proprietary Acrylic shower tray & liner. Sliding door.

F) Shower Liner
Proprietary acrylic shower liner.

G) Shower Mixer
Felton KOHC Feltonmix wall set + 6 l/m flow restrictor. Combined mixer & rose with low flow & anti scald washer

H) Towel Rail
Miles Nelson Chrome - 19mm x 900mm (x2)

I) Extract Fan
Refer to electrical plan

J) Toilet
close coupled toilet suite 665L x 775H
LeVivi Utah S-trap close-coupled

K) Toilet Roll Holder
LeVivi Bella - Chrome/LEVBELTPC

L) Vanity
Selected 900mm wall hung vanity.

M) Vanity Mixer
LeVivi Classic + 6 l/m flow restrictor - Chrome/ LEVBSNAPCP

N) Medicine Cabinet
Proprietary medicine cabinet with mirrored front. LeVivi Preston 400mm - LEVPRESHCABWH

O) Tub
Laundry tub cabinet 600W x 560D x 900H with washing machine taps and child resistant catch to cabinet door

P) Splashback
4.5mm Gloss White Hardieglaze lining with white PVC jointers

Q) Wash hand basin
Wall hung basin with one tap hole. Caroma Urbane II -879010W

R) Selected round mirror
600mm diameter

EA702 REV.3

WC & LAUNDRY

TYPE E

TW PROPERTY

FLAXMERE HOUSING

LOT 7 - 72 CAERNARVON DRIVE

BUILDING CONSENT

PROJECT No. **F563**

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NO.	DESCRIPTION	DATE
3	Type E - BC	05.09.25

Site Information

Climate Zone: 2
Earthquake Zone: 3
Exposure Zone: B
Lee Zone: No
Rainfall Range: 50 - 60mm/h
Wind Region: A
Wind Zone: High
Corrosion Zone: B

Legal Description: LOT 2 DP 435766
Total Site Area: 4065m2

NZBC Compliance

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Compliance with H1/AS1. Refer to calculations within drawing set.

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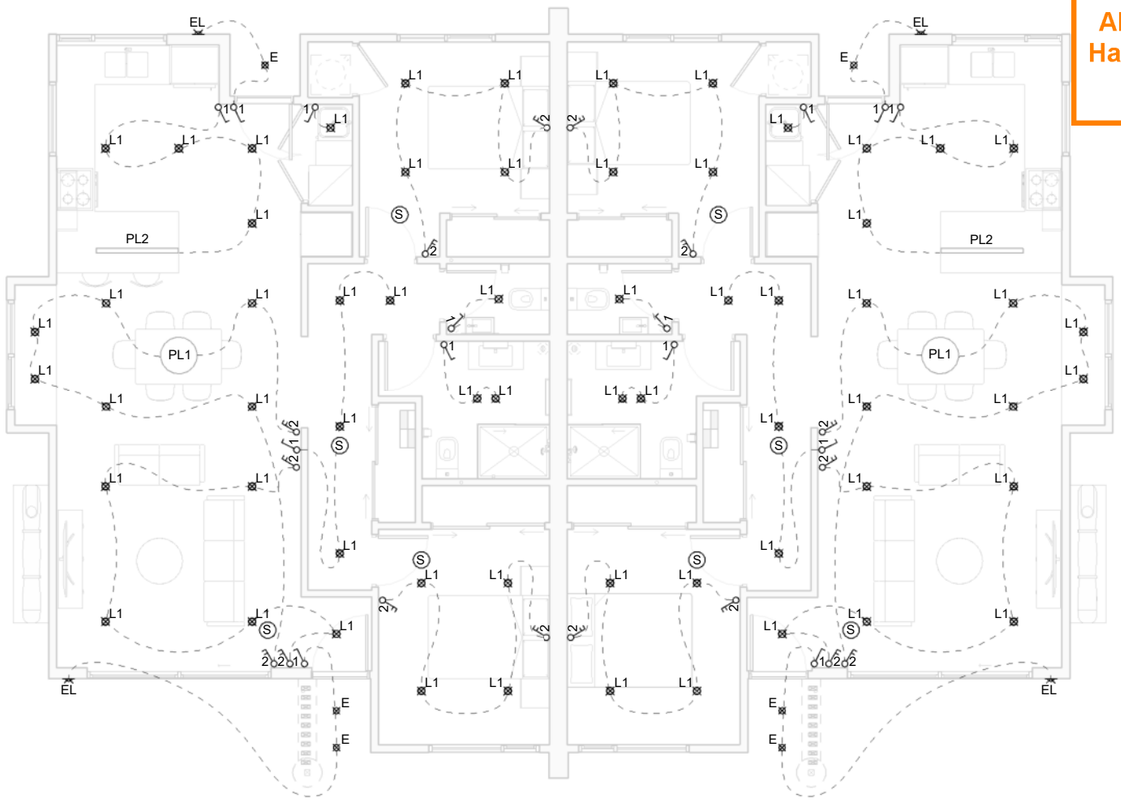
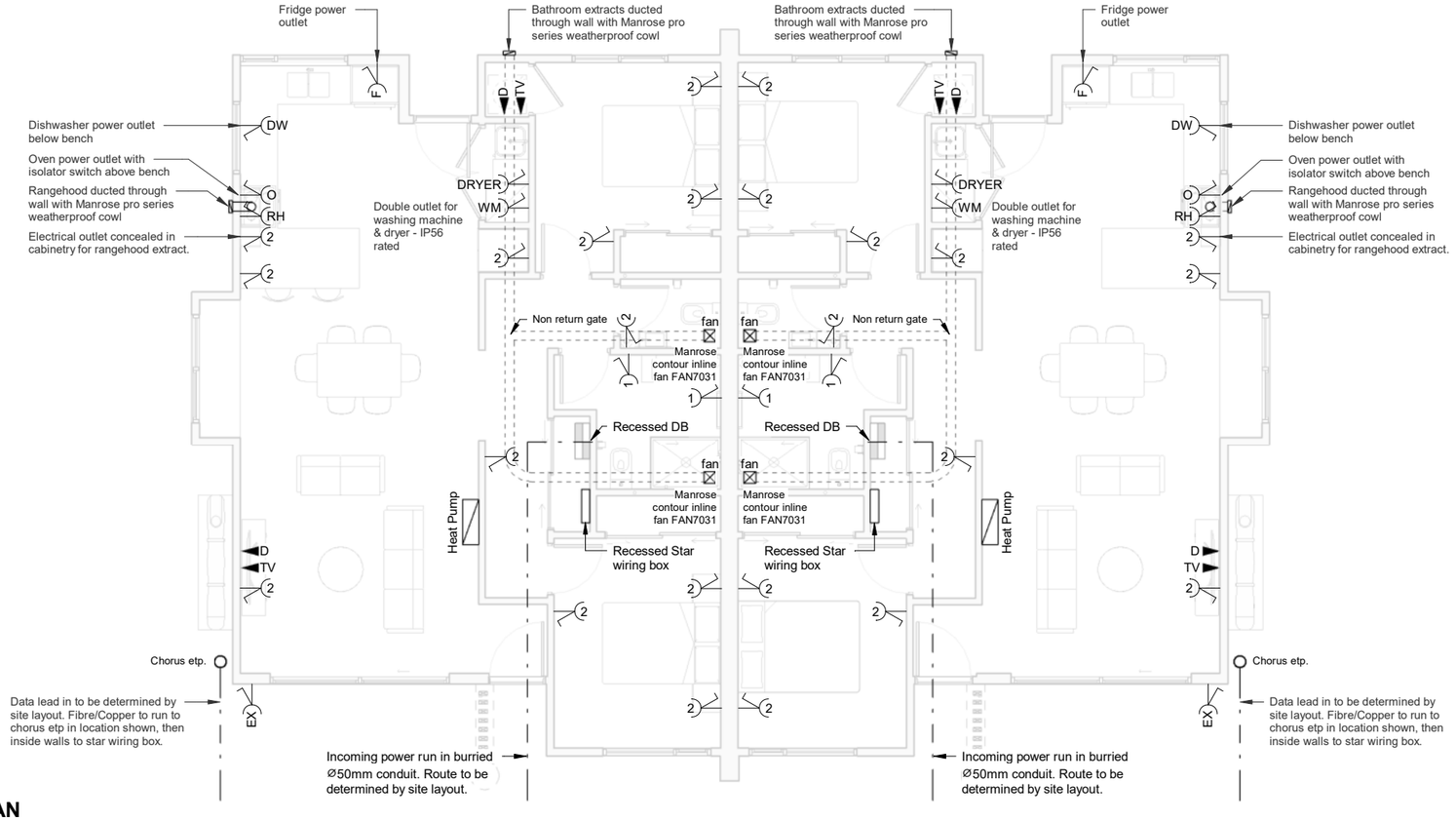


1 EA300 **LIGHTING PLAN**
SCALE @ A3 - 1 : 100 | SCALE @ A1 - DOUBLE SCALE



2 EA300 **ELECTRICAL PLAN**
SCALE @ A3 - 1 : 100 | SCALE @ A1 - DOUBLE SCALE

EE200 REV.3

LIGHTING & ELECTRICAL PLAN

TYPE E

TW PROPERTY

FLAXMERE HOUSING

LOT 7 - 72 CAERNARVON DRIVE

BUILDING CONSENT

PROJECT No. **F563**

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LIGHTING LEGEND

- E — Recessed LED Exterior Downlight
- L1 — Ambius®Ceiling LED Downlight 165mm, 12W, 3-4-5K, 950lm. Model:ADLEDAC12W165-3T Q code: Q5070230
- PL1 — Pendant Light 1 (dining table)
- PL2 — Pendant Light 2 (kitchen bench)
- EL — Wall Mounted Light - External
- 1 — Light Switch - One Way (mounted at 1m above FFL)
- 2 — Light Switch - Two Way (mounted at 1m above FFL)

ELECTRICAL

- **Distribution Board** V40 Vynco 40 way flush Mt Bare with smart meter installed inside
- S — **Smoke Detector** Heiman wireless interconnected smoke alarm - HM-633PHW White
- FAN — **Extract Fan** Ventech frameless square magnetic grille (VSQ250M). Connected to Manrose Vent Axia Multi Vent continuous Extract Ventilation FAN7200.

POWER & DATA

- 1 — Single power outlet
- 2 — Double power outlet
- EX — Exterior outlet with isolation switch
- D — Data outlet
- TV — TV single data outlet, RJ45, MATV outlet
- DW — Dishwasher outlet with isolation switch
- O — Oven outlet with isolation switch
- RH — Rangehood outlet with isolation switch
- F — Fridge outlet with isolation switch

ELECTRICAL NOTES

1. DGSE lighting plan shows switch locations in relation to light locations.
2. Contractor is to confirm final position, orientation, height & number of electrical outlets onsite with Architect prior to installation.
3. All Light switches, Power & Data outlets to be PDL Iconic series, vivid white colour.
4. Power and Data outlets to be installed at 300mm above FFL unless noted otherwise. ‘Above Bench’ = 1000mm above FFL.
5. Light switches to be installed at 1000mm above FFL unless noted otherwise.
6. Electrician to confirm all outlets are installed to code.
7. Electrical outlets in bathrooms to be RCD protected.
8. Allow for supply, provisions & installation of Chorus ONT unit. Location TBC.
9. All pipe and cable penetrations through thermal envelope to be sealed with Marshall Trade Seal adhesive collars as outlined in specification, or similar approved.
10. All data cabling to be CAT6A.
11. Allow for concealed power outlet to all heated towel rails.

NO.	DESCRIPTION	DATE
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Exposure Zone: B
Lee Zone: No
Rainfall Range: 50 - 60mm/h
Wind Region: A
Wind Zone: High
Corrosion Zone: B

Legal Description: LOT 2 DP 435766
Total Site Area: 4065m2

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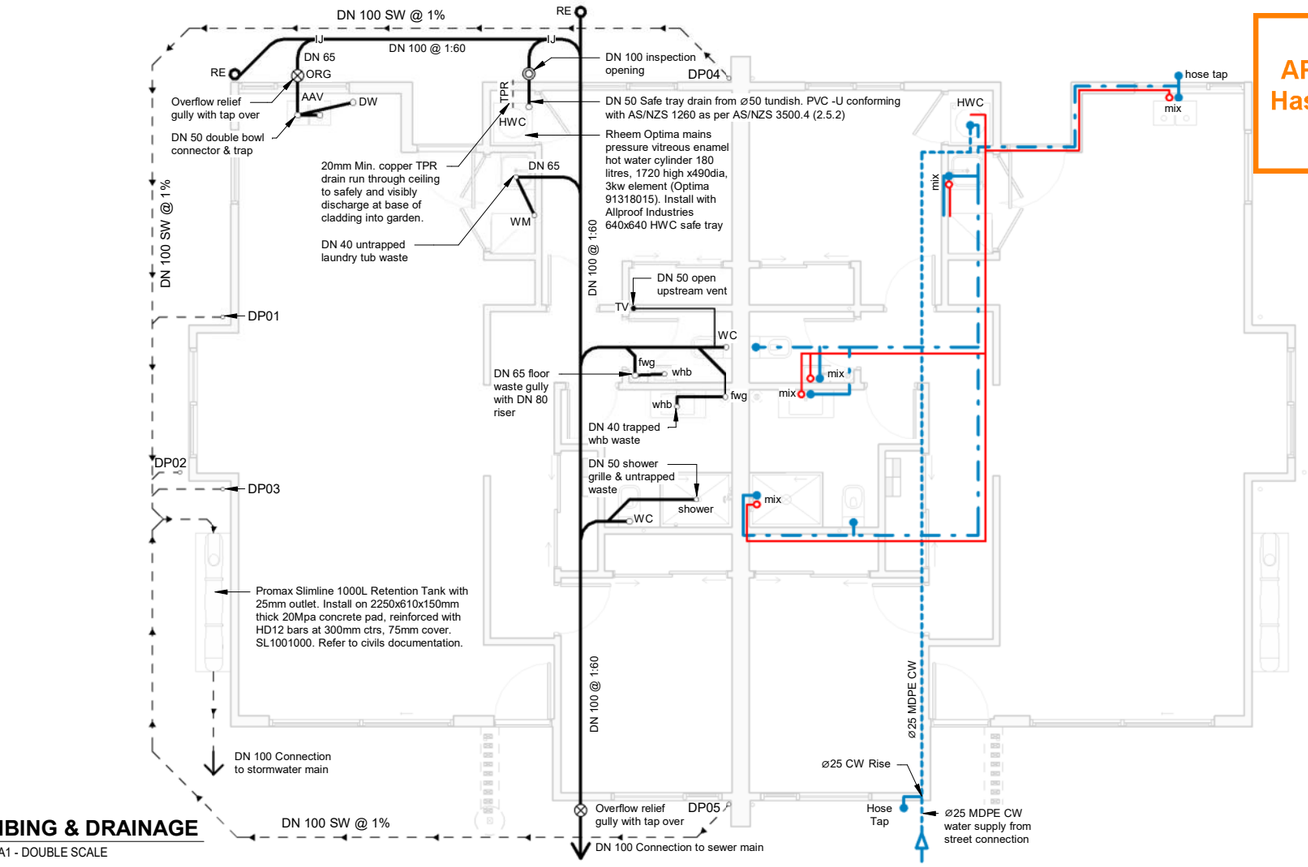

1 EA300 **UNITS 7&8 - PLUMBING & DRAINAGE**

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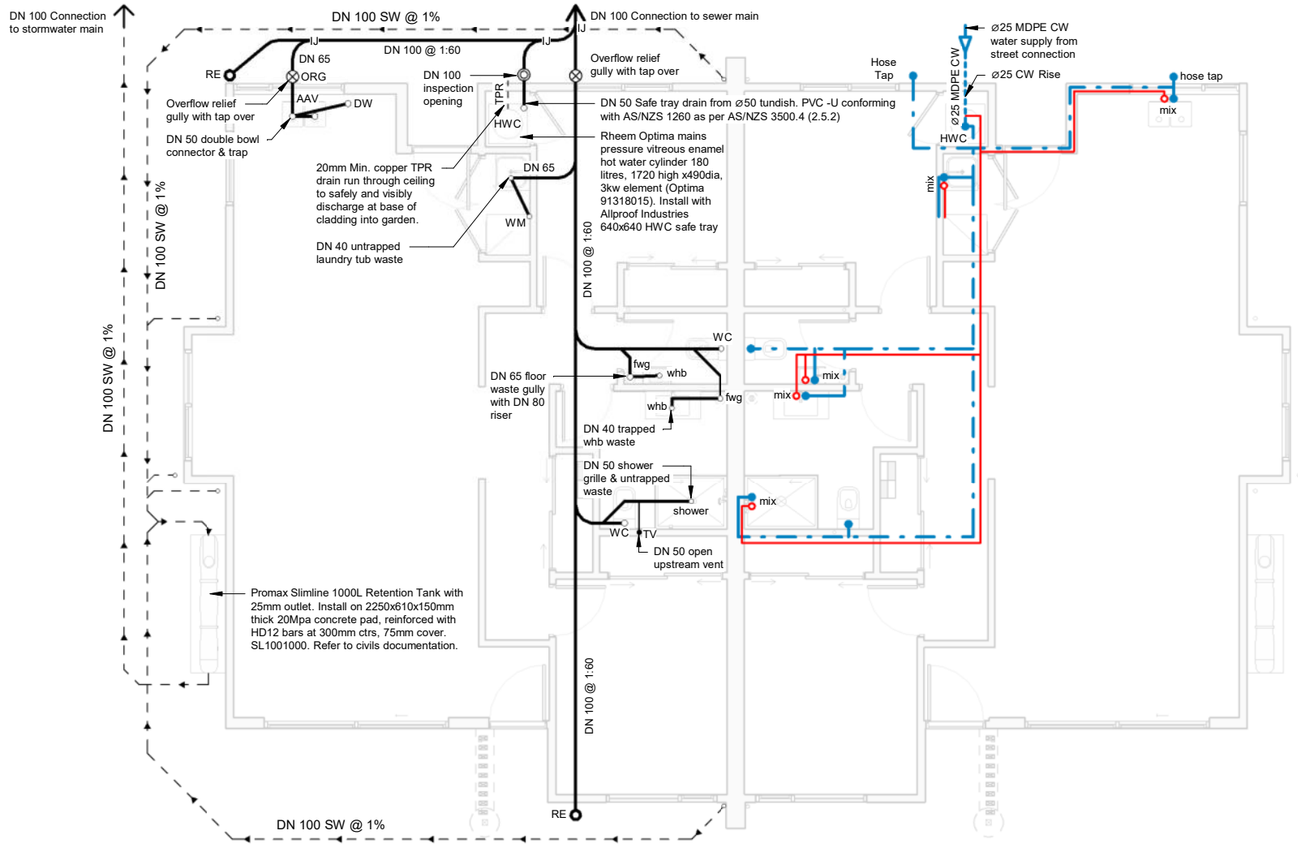

2 EA300 **UNITS 11&12 - PLUMBING & DRAINAGE**

SCALE @ A3 - 1 : 100 | SCALE @ A1 - DOUBLE SCALE

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EP200 REV.3

PLUMBING & DRAINAGE PLAN

TYPE E

TW PROPERTY

FLAXMERE HOUSING

LOT 7 - 72 CAERNARVON DRIVE

BUILDING CONSENT

PROJECT No. **F563**

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GENERAL NOTES

Refer to Civil Engineer's documentation for complete scope of work to be undertaken.

ORG NOTE

ORG to be min. 150mm below FFL & min. 75mm above finished ground level

KITCHEN SINK OVERFLOW

The kitchen sink shall be intergral over flow with confirmed capacity of 14L/min min.

PLUMBING NOTES

1. Foul water sanitary plumbing shall comply with AS/NZS 3500.
2. Stormwater drainage shall comply with NZBC E1/AS1.
3. Water supply and reticulation shall comply with NZBC G12/AS1
4. All drains shall be PVC.
5. Wrap all pipes running through foundations with Denso tape.
6. Lag all hotwater pipes with elastomeric closed cell insulation in accordance with H1/AS1.
7. All fixtures with a developed length of over 2.5m shall have air admittance valves
8. Allow for Air Admittance Valves (AAV) to the last fixture on each waste line as required.
9. Drainage pipes to run under slabs to branch drains – min size 65mm Ø
10. Conceal all vents and pipework within walls
11. Exact plumbing and drainage layout to be confirmed onsite once locations of underground pipe work has been determined.
12. Plumber to provide contractor a complete set of as built drawings and documentation on completion of the plumbing and drainage works. (Allow for one copy to owner, one copy for Architect and one copy to be submitted to council)
13. Channel drain outlets to be no more than 3.7m apart as per NZBC E2/AS1, Clause 7.3.2.1

WASTE PIPE BRANCH DRAIN MINIMUM GRADIENTS

65Ø -1:40 minimum gradient
80Ø -1:60 minimum gradient
100Ø -1:60 minimum gradient

FIXTURE MIN DN MIN GRADE

Sink 50Ø -1:40 minimum gradient
WHB 40Ø -1:40 minimum gradient
Shower 50Ø -1:40 minimum gradient
Bath 50Ø -1:40 minimum gradient
Tub 50Ø -1:40 minimum gradient
WC 80Ø -1:60 minimum gradient
Stack 100Ø -1:60 minimum gradient

WATER SUPPLY MINIMUM SIZES

Pipe diameters nominated are 'OD' for SDR 7.4

Sink	Ø15mm (hot & cold)
WHB	Ø15mm (hot & cold)
Shower	Ø15mm (hot & cold)
Tub/Washing Machine	Ø15mm (hot & cold)
WC	Ø15mm (cold)

PLUMBING LEGEND

ORG - Overflow Relief Gully
FWG – Floor Waste Gully
IP – Inspection Point
AAV – Air Admittance Valve
ST – Silt Trap
DP – Downpipe
GAS – Selected Natural Gas Connection
RE- Rodding Eye
IJ- Inspection Junction
HWC - Hot Water Cylinder
TPR - Temperature Pressure Relief Valve
TD - Tundish
CP - Cess Pit

Stormwater
Sewer
Hot Water
Cold Water

NO.	DESCRIPTION	DATE
3	Type E - BC	05.09.25

Site Information

Climate Zone: 2
Earthquake Zone: 3
Exposure Zone: B
Lee Zone: No
Rainfall Range: 50 - 60mm/h
Wind Region: A
Wind Zone: High
Corrosion Zone: B

Legal Description: LOT 2 DP 435766
Total Site Area: 4065m2

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Compliance with H1/AS1. Refer to calculations within drawing set.

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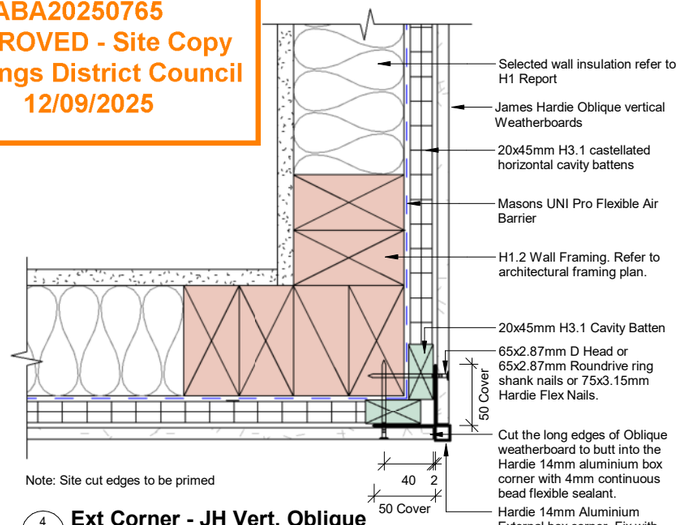
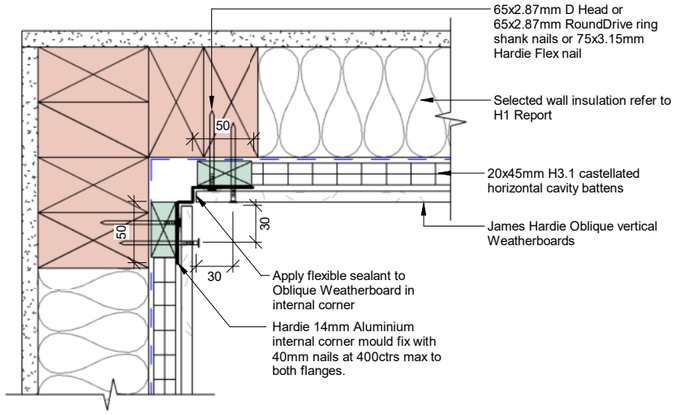
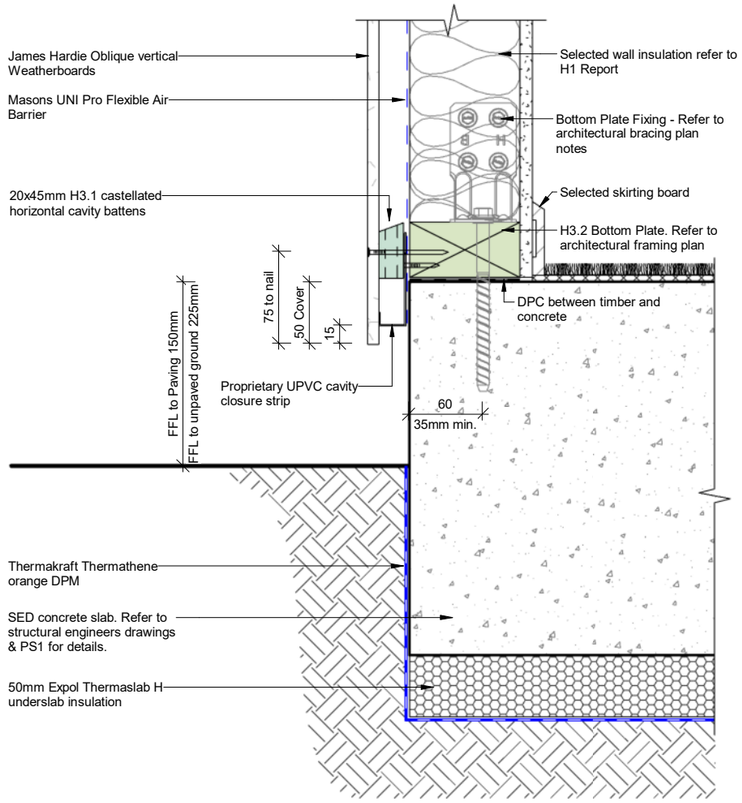


4 **Ext Corner - JH Vert. Oblique**
SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE



5 **Internal Corner - JH Vert. Oblique**
SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE



7 **JH Vert. Oblique - Slab Edge**
SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE

A500

REV.**3**

WALL DETAILS

DETAILS

TW PROPERTY

FLAXMERE HOUSING

LOT 7 - 72 CAERNARVON DRIVE

BUILDING CONSENT

PROJECT No. **F563**

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NO.	DESCRIPTION	DATE
3	BC - Type E	05.09.25
2	BC - Type C&D	02.09.25
0	BC - Type A&B	01.08.25

Site Information

Climate Zone: 2
Earthquake Zone: 3
Exposure Zone: B
Lee Zone: No
Rainfall Range: 50 - 60mm/h
Wind Region: A
Wind Zone: High
Corrosion Zone: B

Legal Description: LOT 2 DP 435766
Total Site Area: 4065m2

NZBC Compliance

Compliance with NZBC E2 is by means of NZBC E2 AS1. Refer Risk Matrix provided.

H1/AS1

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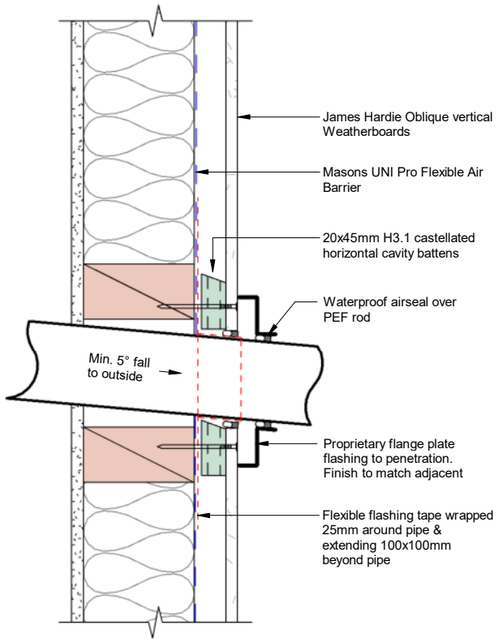
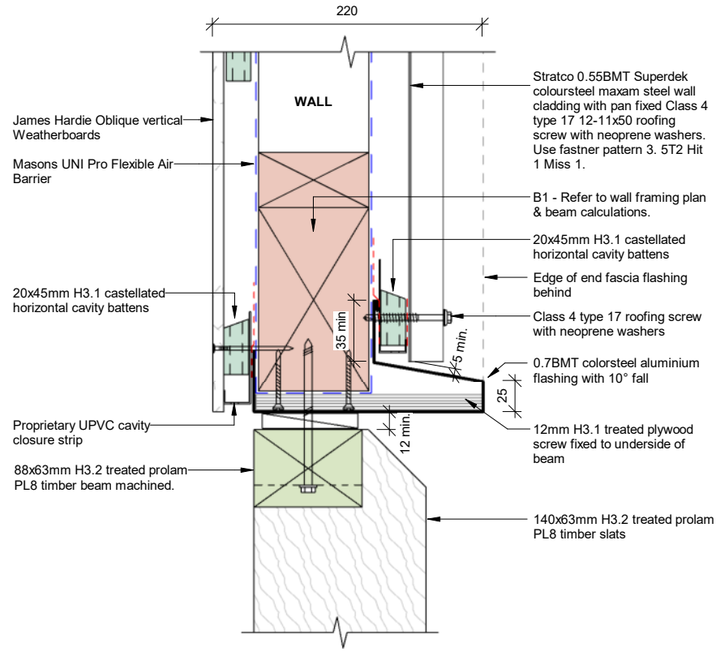
12/09/2025



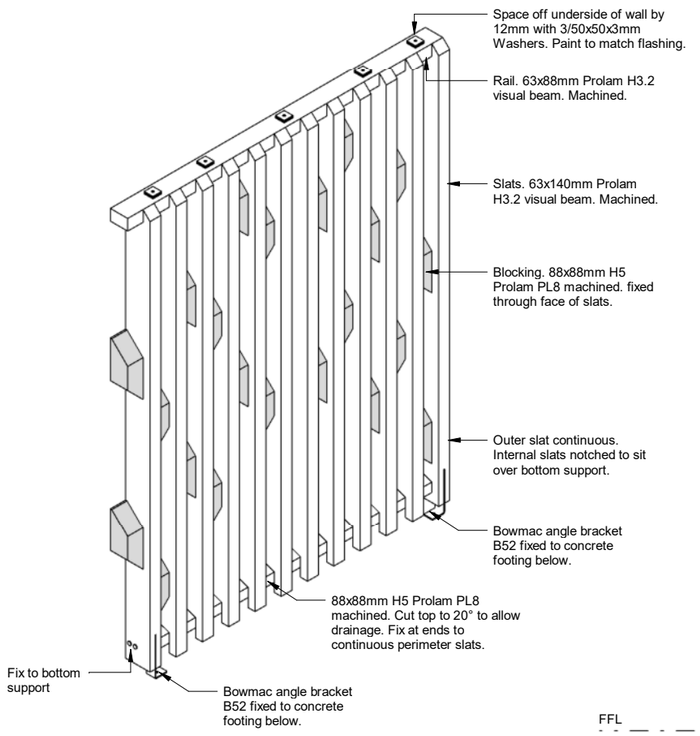
1 Typ. Pipe Penetration - JH Vert Oblique

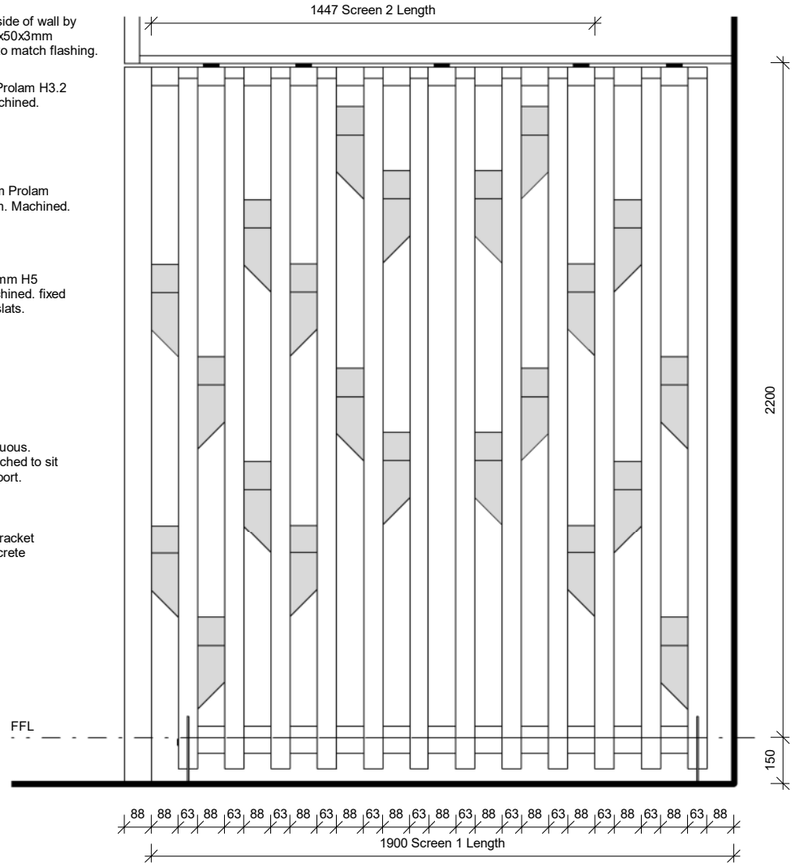
SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE



3 Section - Entry Screen Head

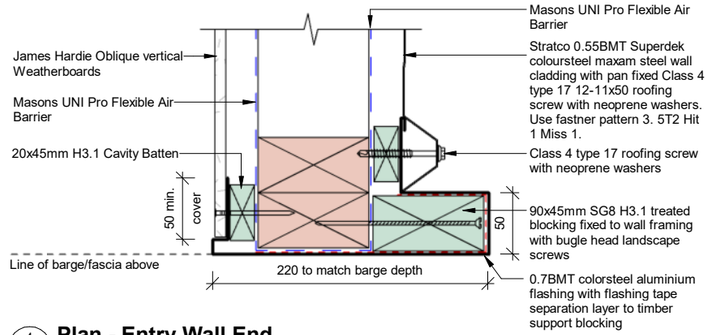
SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE





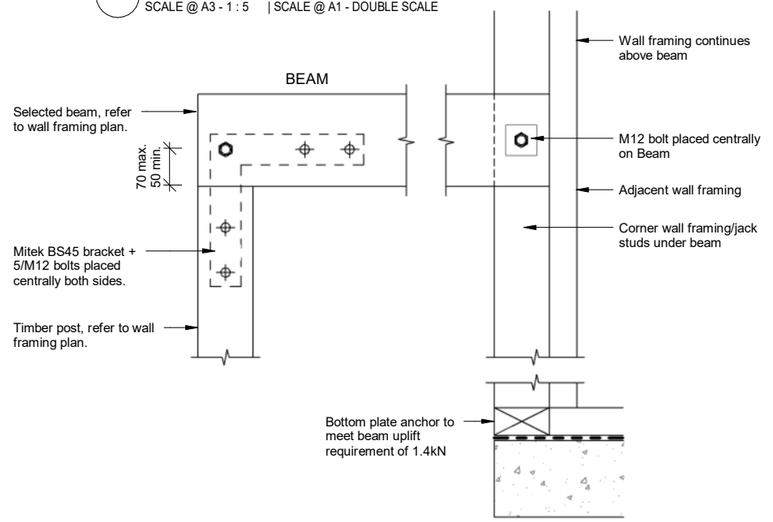
6 Elevation - Entry Screens

SCALE @ A3 - 1 : 20 | SCALE @ A1 - DOUBLE SCALE



4 Plan - Entry Wall End

SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE



5 Beam - Entry Wall Structure

SCALE @ A3 - 1 : 10 | SCALE @ A1 - DOUBLE SCALE

A501 REV.3

WALL DETAILS

DETAILS

TW PROPERTY

FLAXMERE HOUSING

LOT 7 - 72 CAERNARVON DRIVE

BUILDING CONSENT

PROJECT No. **F563**

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NO.	DESCRIPTION	DATE
3	BC - Type E	05.09.25
2	BC - Type C&D	02.09.25
0	BC - Type A&B	01.08.25

Site Information

Climate Zone: 2
Earthquake Zone: 3
Exposure Zone: B
Lee Zone: No
Rainfall Range: 50 - 60mm/h
Wind Region: A
Wind Zone: High
Corrosion Zone: B

Legal Description: LOT 2 DP 435766
Total Site Area: 4065m2

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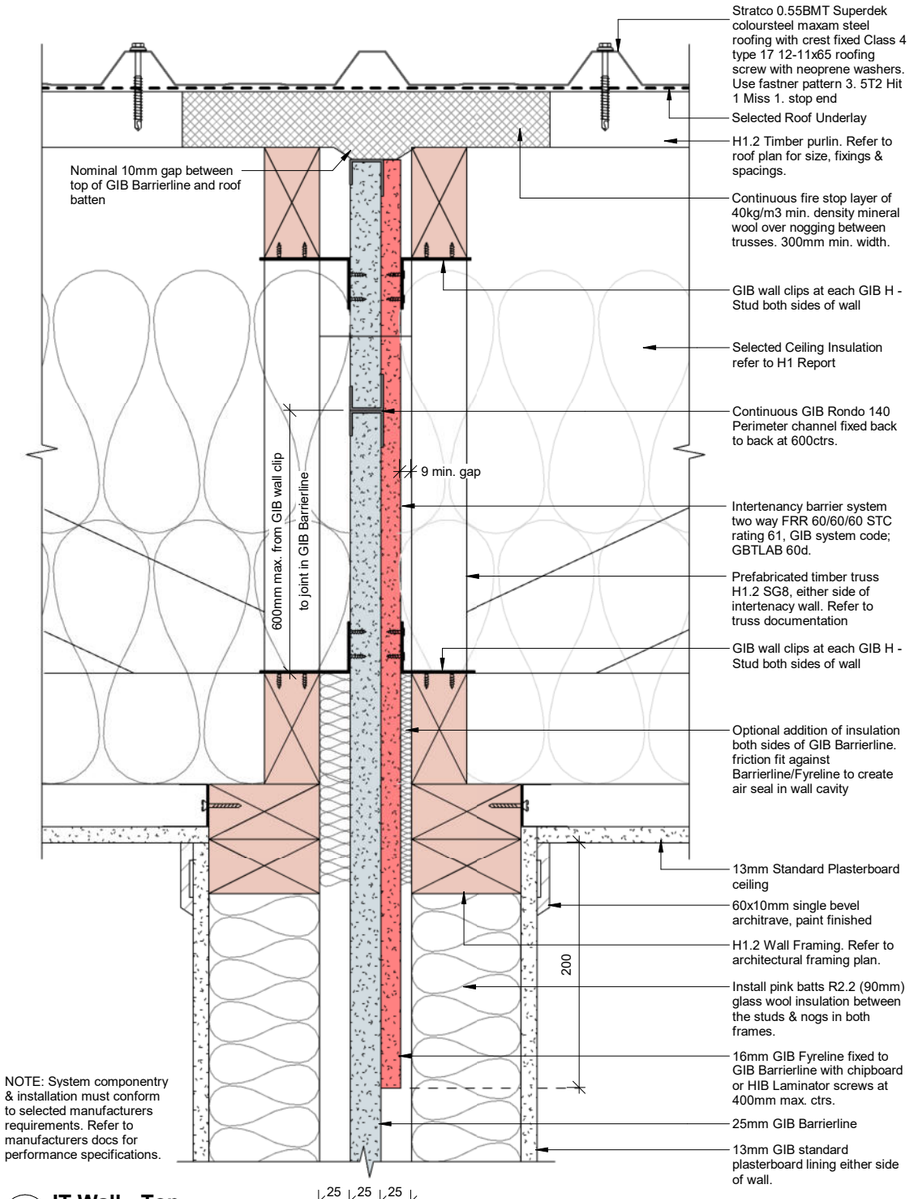
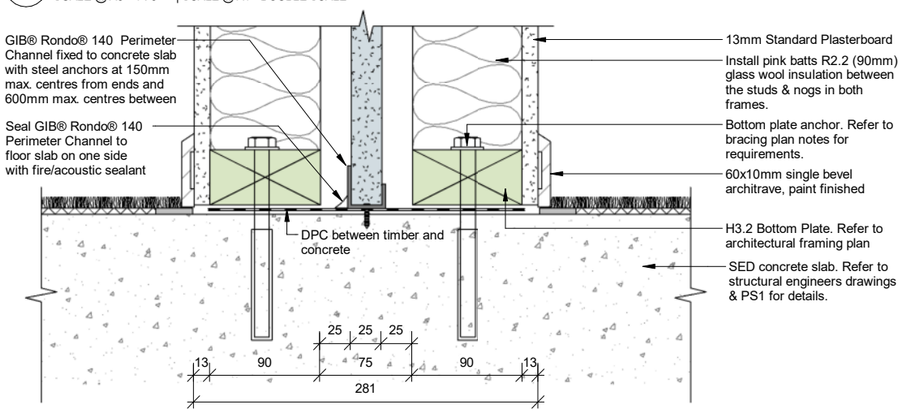


NOTE: System componentry & installation must conform to selected manufacturers requirements. Refer to manufacturers docs for performance specifications.

1 **IT Wall - Top**
SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE



2 **IT Wall - Base**
SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE

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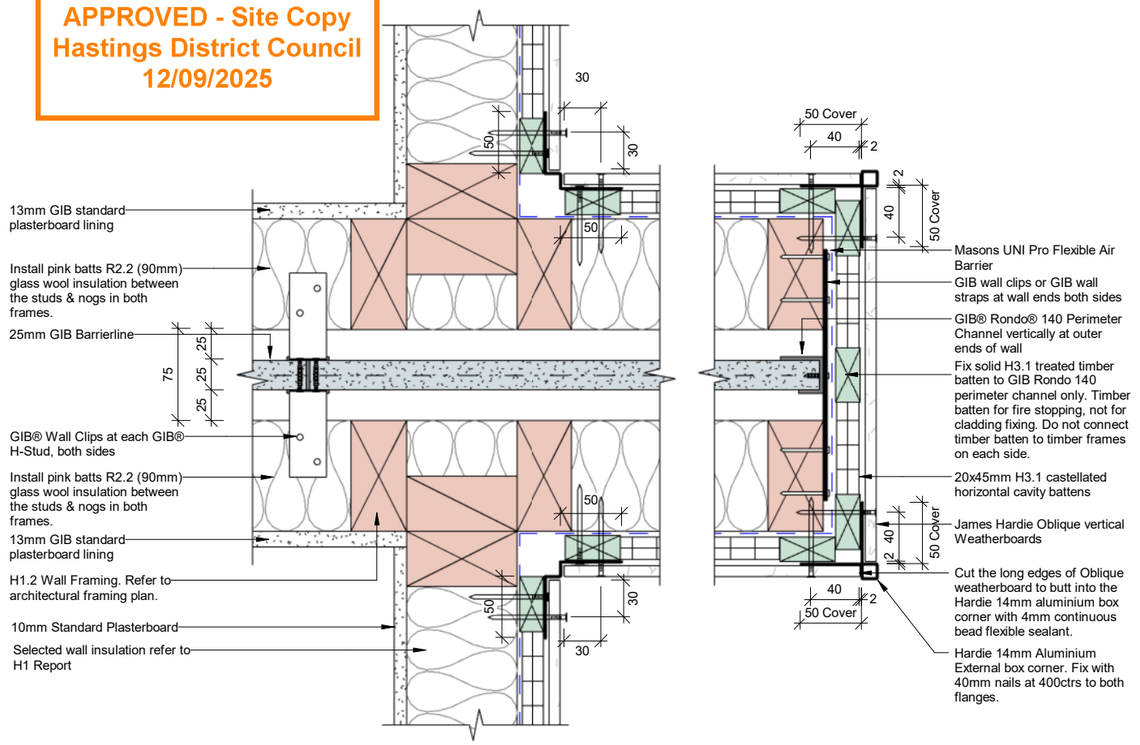
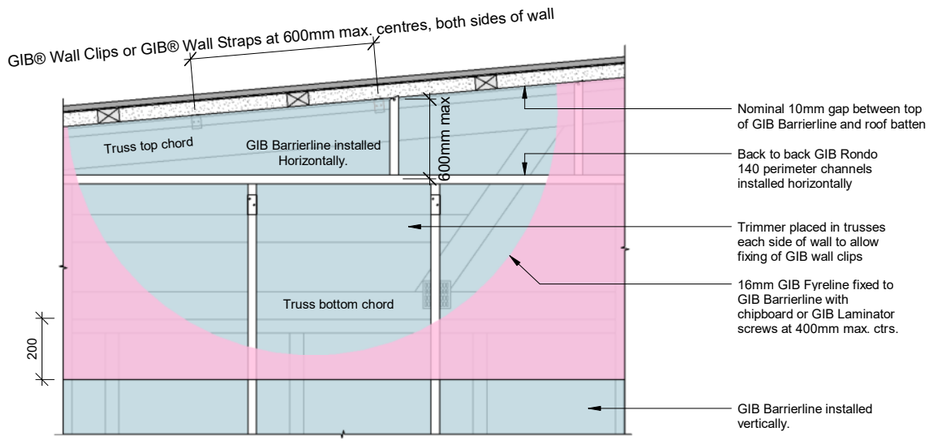


3 **IT Wall - Wingwall**
SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE



4 **IT Wall - Roof Void Side Elevation**
SCALE @ A3 - 1 : 20 | SCALE @ A1 - DOUBLE SCALE

A502 REV.3

WALL DETAILS - GBTLAB 60D

DETAILS

TW PROPERTY

FLAXMERE HOUSING

LOT 7 - 72 CAERNARVON DRIVE

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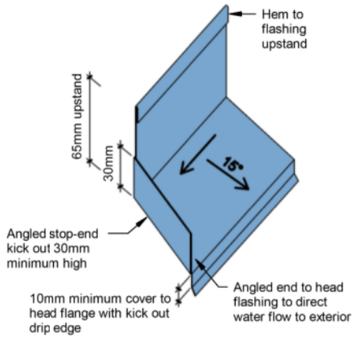
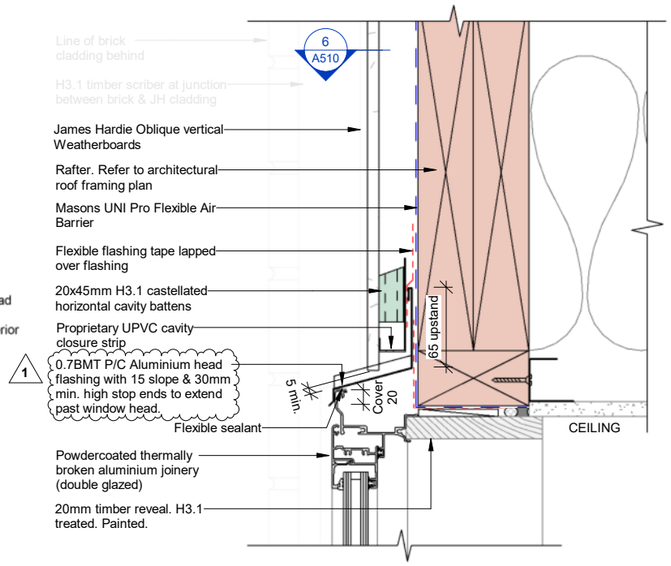
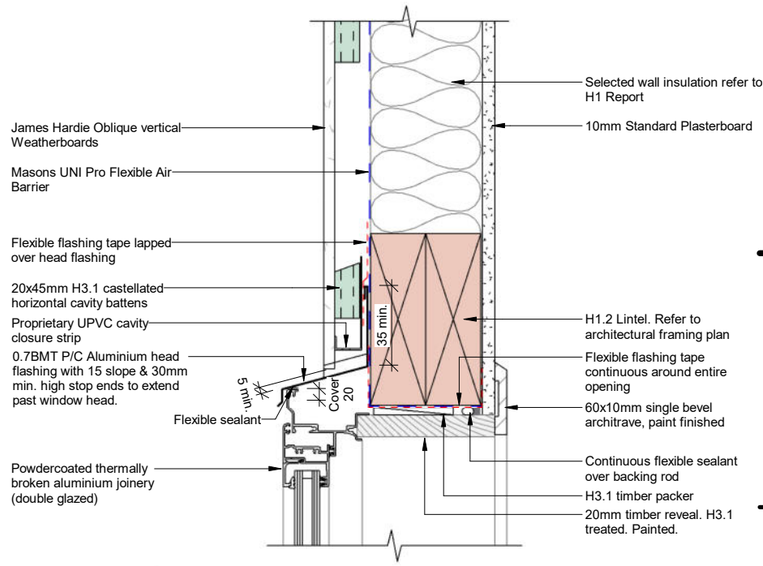


RAKING WINDOW HEAD FLASHING STOP-END



4 **Full Height Window - Head**

SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE



7 **JH Vert. Oblique - Window Head**

SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE

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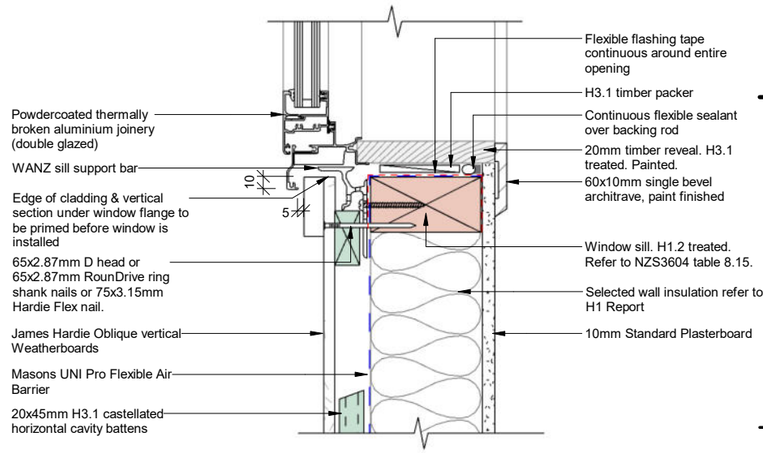
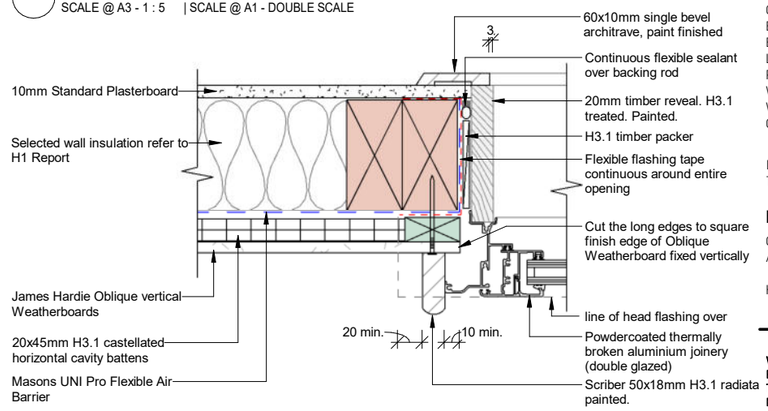


8 **JH Vert. Oblique - Window Sill**

SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE



9 **JH Vert. Oblique - Window Jamb**

SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE

A510 REV.3

WINDOW DETAILS

DETAILS

TW PROPERTY

FLAXMERE HOUSING

LOT 7 - 72 CAERNARVON DRIVE

BUILDING CONSENT

PROJECT No. **F563**

Contractors shall verify all dimensions on site before commencing work. Do not scale from the drawings. If in doubt ask. Copyright of this drawing is vested in Designgroup Stapleton Elliott.

NO.	DESCRIPTION	DATE
3	BC - Type E	05.09.25
2	BC - Type C&D	02.09.25
1	RFI 1 - Type A&B	19.08.25
0	BC - Type A&B	01.08.25

Site Information

Climate Zone: 2
Earthquake Zone: 3
Exposure Zone: B
Lee Zone: No
Rainfall Range: 50 - 60mm/h
Wind Region: A
Wind Zone: High
Corrosion Zone: B

Legal Description: LOT 2 DP 435766
Total Site Area: 4065m2

NZBC Compliance

Compliance with NZBC E2 is by means of NZBC E2 AS1. Refer Risk Matrix provided.

H1/AS1

Wellington +64 4 920 0032 wn@dgse.co.nz
Palmerston North +64 6 357 4534 pn@dgse.co.nz
Tauranga +64 7 925 6238 tr@dgse.co.nz
Napier +64 6 835 6173 np@dgse.co.nz
Auckland +64 9 976 8288 ak@dgse.co.nz

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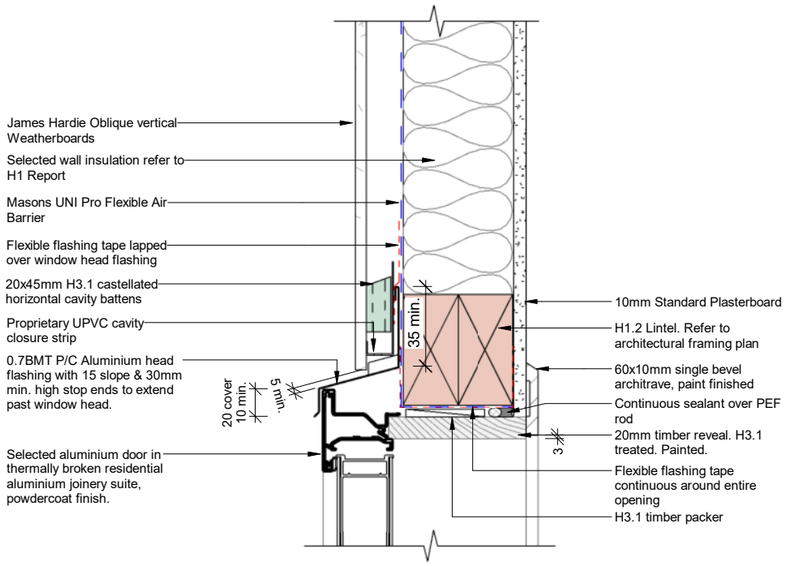
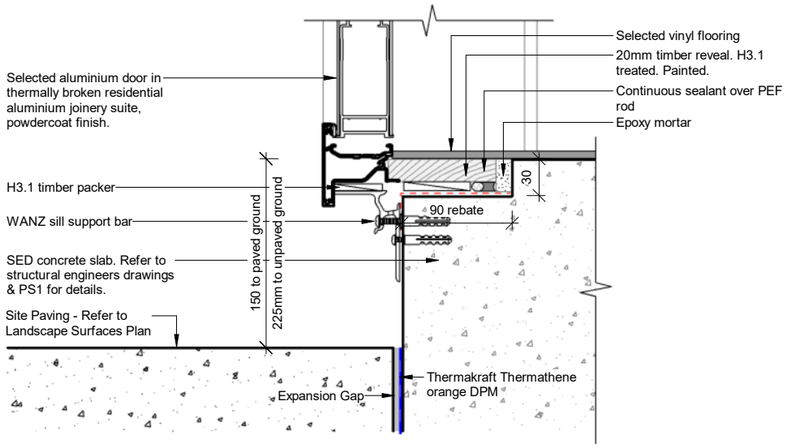
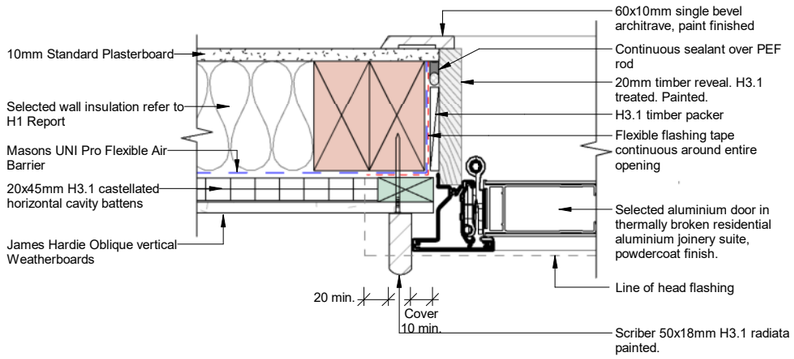


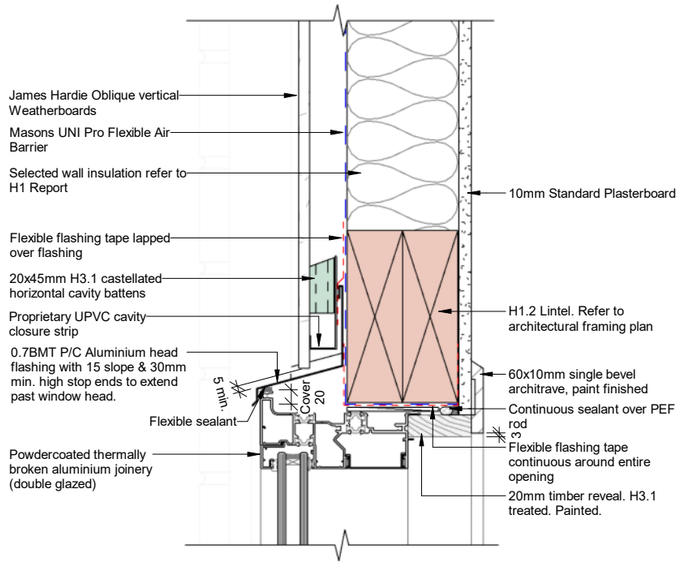
1 **JH Vert. Oblique - Ext Door Head**
SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE



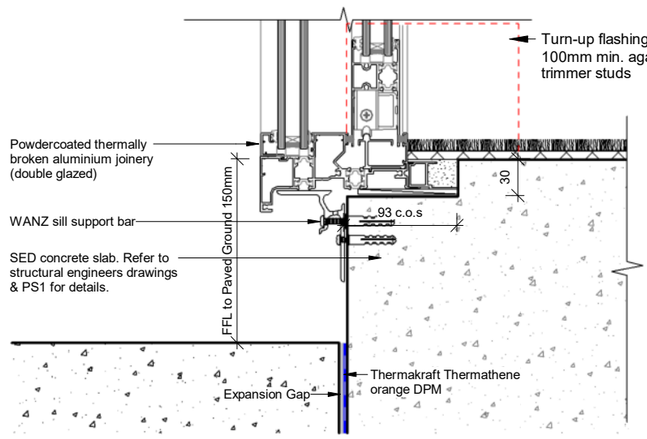
2 **JH Vert. Oblique - Ext Door Sill**
SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE



3 **JH Vert. Oblique - Ext Door Jamb**
SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE



7 **Sliding Door - Head**
SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE



8 **Sliding Door - Sill**
SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE

A520 REV.3

DOOR DETAILS

DETAILS

TW PROPERTY

FLAXMERE HOUSING

LOT 7 - 72 CAERNARVON DRIVE

BUILDING CONSENT

PROJECT No. **F563**

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NO.	DESCRIPTION	DATE
3	BC - Type E	05.09.25
2	BC - Type C&D	02.09.25
0	BC - Type A&B	01.08.25

Site Information

Climate Zone: 2
Earthquake Zone: 3
Exposure Zone: B
Lee Zone: No
Rainfall Range: 50 - 60mm/h
Wind Region: A
Wind Zone: High
Corrosion Zone: B

Legal Description: LOT 2 DP 435766
Total Site Area: 4065m2

NZBC Compliance

Compliance with NZBC E2 is by means of NZBC E2 AS1. Refer Risk Matrix provided.

H1/AS1

Wellington	+64 4 920 0032	wn@dgse.co.nz
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Napier	+64 6 835 6173	np@dgse.co.nz
Auckland	+64 9 976 8288	ak@dgse.co.nz

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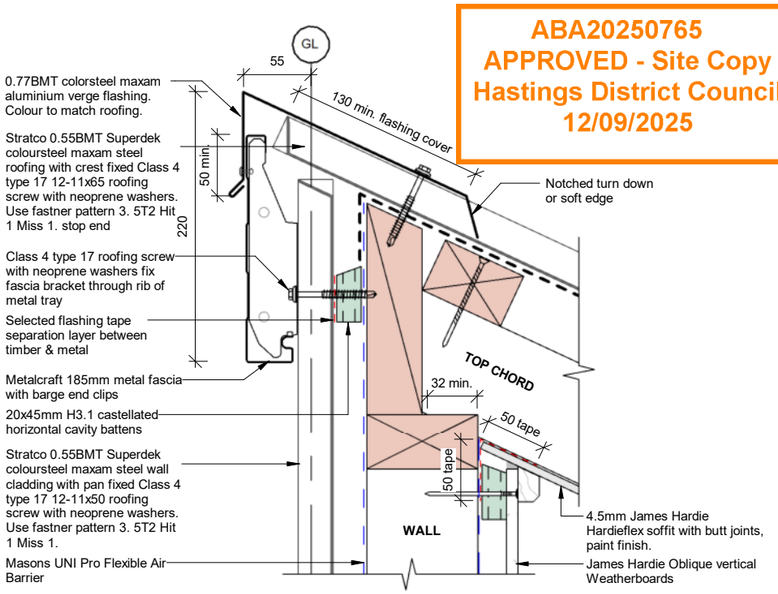
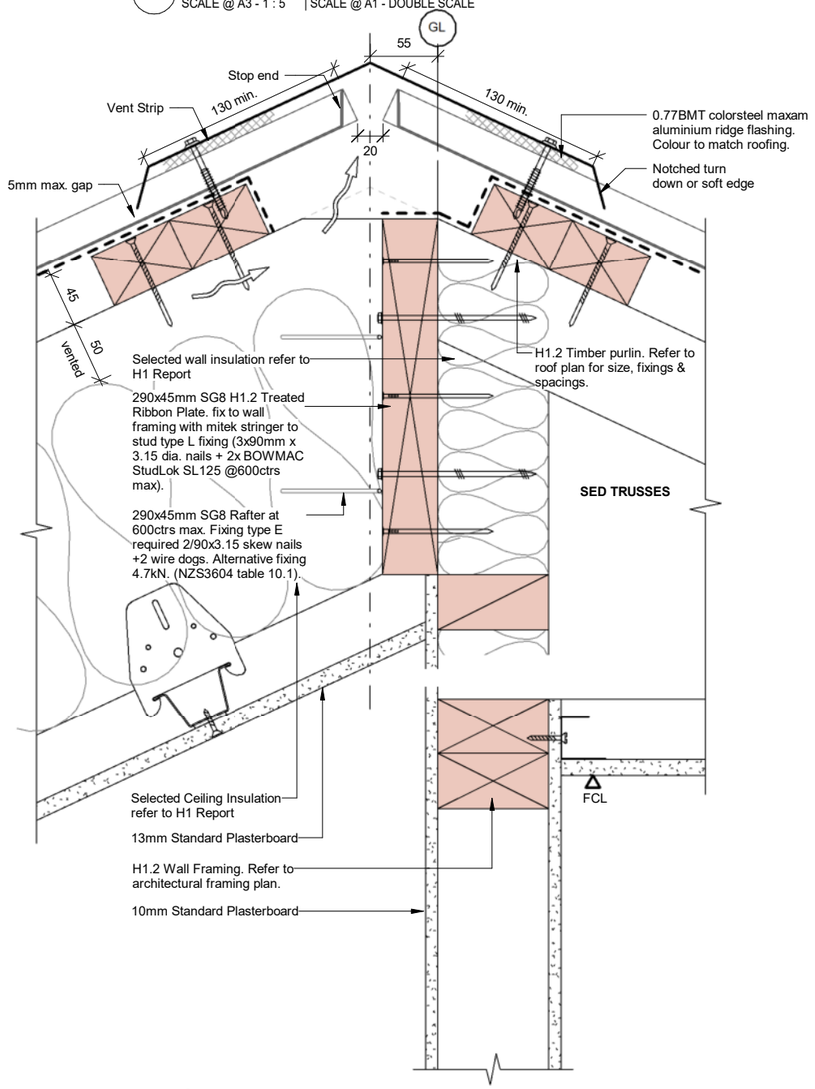
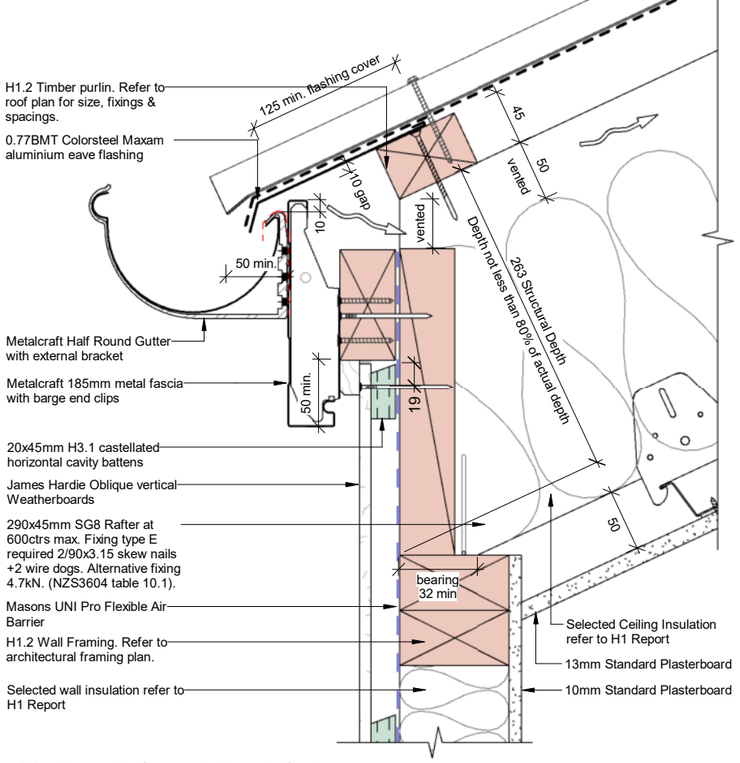


5 **Verge - Roof to Metal Cladding**
SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE



3 **Ridge - Rafter to Ribbon Plate**
SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE



2 **Eave Rafter - JH Vert. Oblique**
SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE

A530 REV.3

ROOF DETAILS

DETAILS

TW PROPERTY

FLAXMERE HOUSING

LOT 7 - 72 CAERNARVON DRIVE

BUILDING CONSENT

PROJECT No. **F563**

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NO.	DESCRIPTION	DATE
3	BC - Type E	05.09.25
2	BC - Type C&D	02.09.25
0	BC - Type A&B	01.08.25

Site Information

Climate Zone: 2
Earthquake Zone: 3
Exposure Zone: B
Lee Zone: No
Rainfall Range: 50 - 60mm/h
Wind Region: A
Wind Zone: High
Corrosion Zone: B

Legal Description: LOT 2 DP 435766
Total Site Area: 4065m2

NZBC Compliance

Compliance with NZBC E2 is by means of NZBC E2 AS1. Refer Risk Matrix provided.

H1/AS1

Wellington +64 4 920 0032 wn@dgse.co.nz
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Tauranga +64 7 925 6238 tr@dgse.co.nz
Napier +64 6 835 6173 np@dgse.co.nz
Auckland +64 9 976 8288 ak@dgse.co.nz

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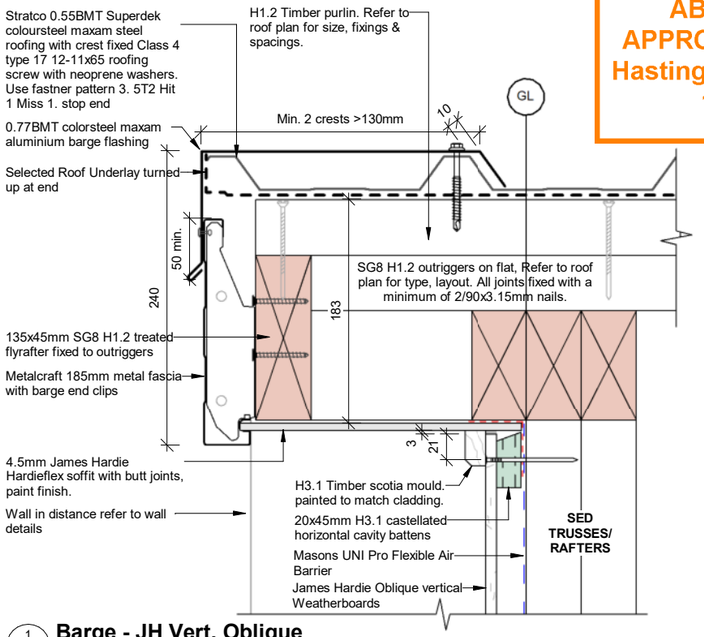
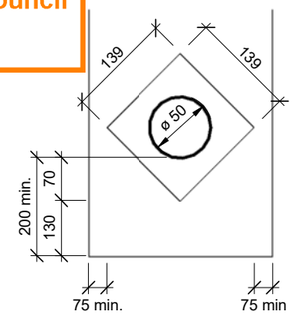
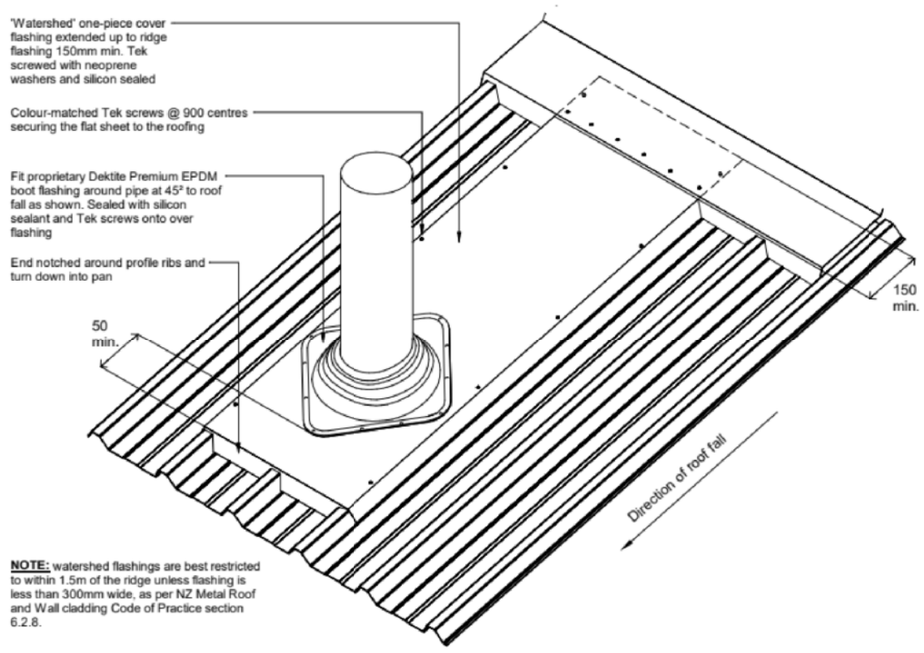


1 **Barge - JH Vert. Oblique**
SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE

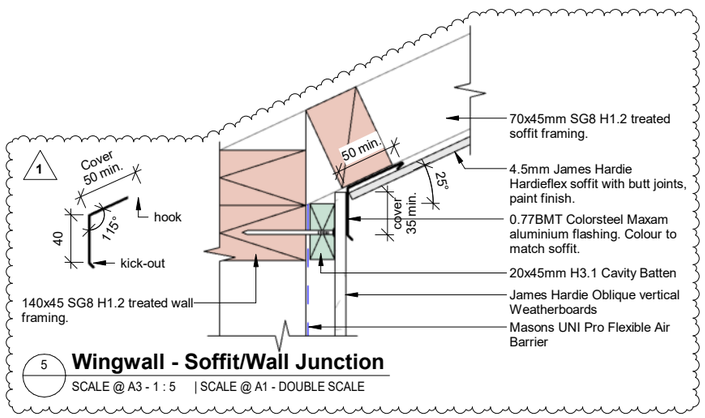
Cover Downstream of Typical Roof Penetrations





NOTE: watershed flashings are best restricted to within 1.5m of the ridge unless flashing is less than 300mm wide, as per NZ Metal Roof and Wall cladding Code of Practice section 6.2.8.

3 **Typ. Roof Penetration Detail**
SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE



5 **Wingwall - Soffit/Wall Junction**
SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE

A531 REV.3

ROOF DETAILS

DETAILS

TW PROPERTY

FLAXMERE HOUSING

LOT 7 - 72 CAERNARVON DRIVE

BUILDING CONSENT

PROJECT No. **F563**

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NO.	DESCRIPTION	DATE
3	BC - Type E	05.09.25
2	BC - Type C&D	02.09.25
1	RFI 1 - Type A&B	19.08.25
0	BC - Type A&B	01.08.25

Site Information

Climate Zone: 2
Earthquake Zone: 3
Exposure Zone: B
Lee Zone: No
Rainfall Range: 50 - 60mm/h
Wind Region: A
Wind Zone: High
Corrosion Zone: B

Legal Description: LOT 2 DP 435766
Total Site Area: 4065m2

NZBC Compliance

Compliance with NZBC E2 is by means of NZBC E2 AS1. Refer Risk Matrix provided.

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Wellington +64 4 920 0032 wn@dgse.co.nz
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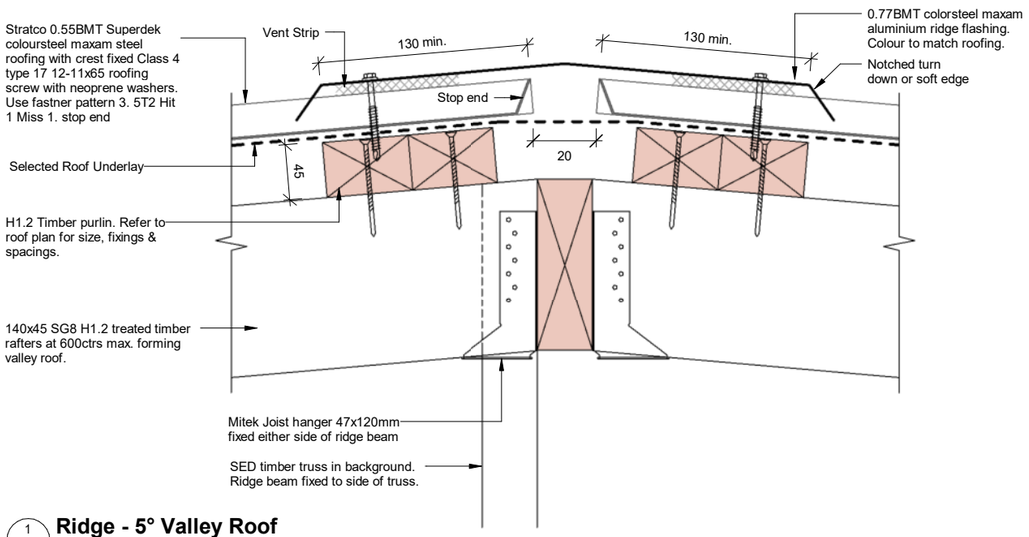
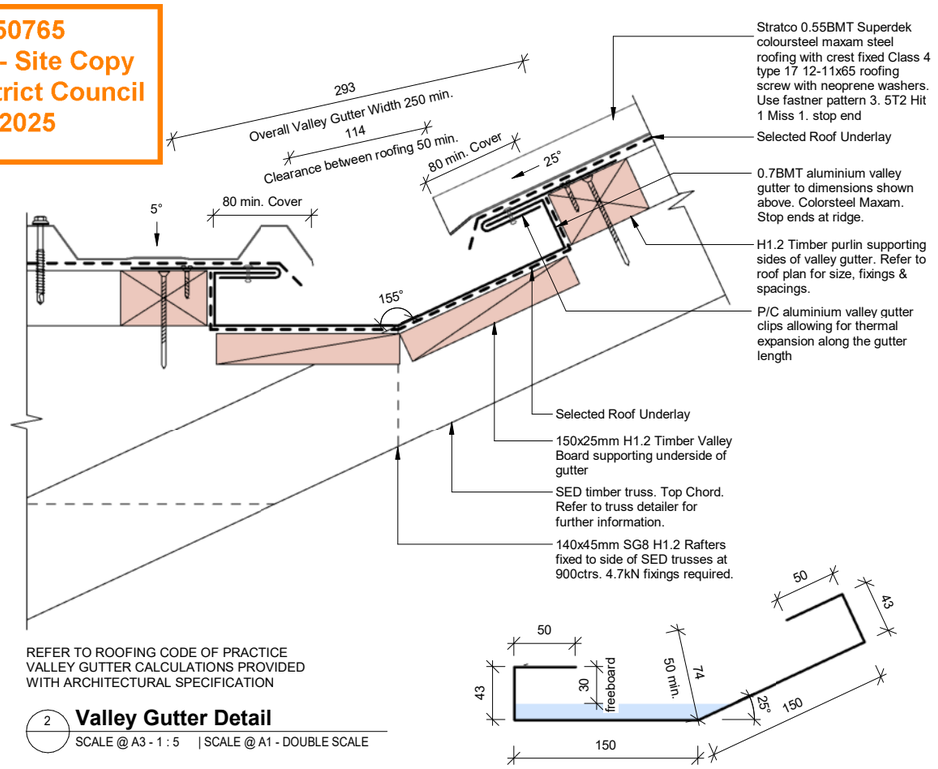
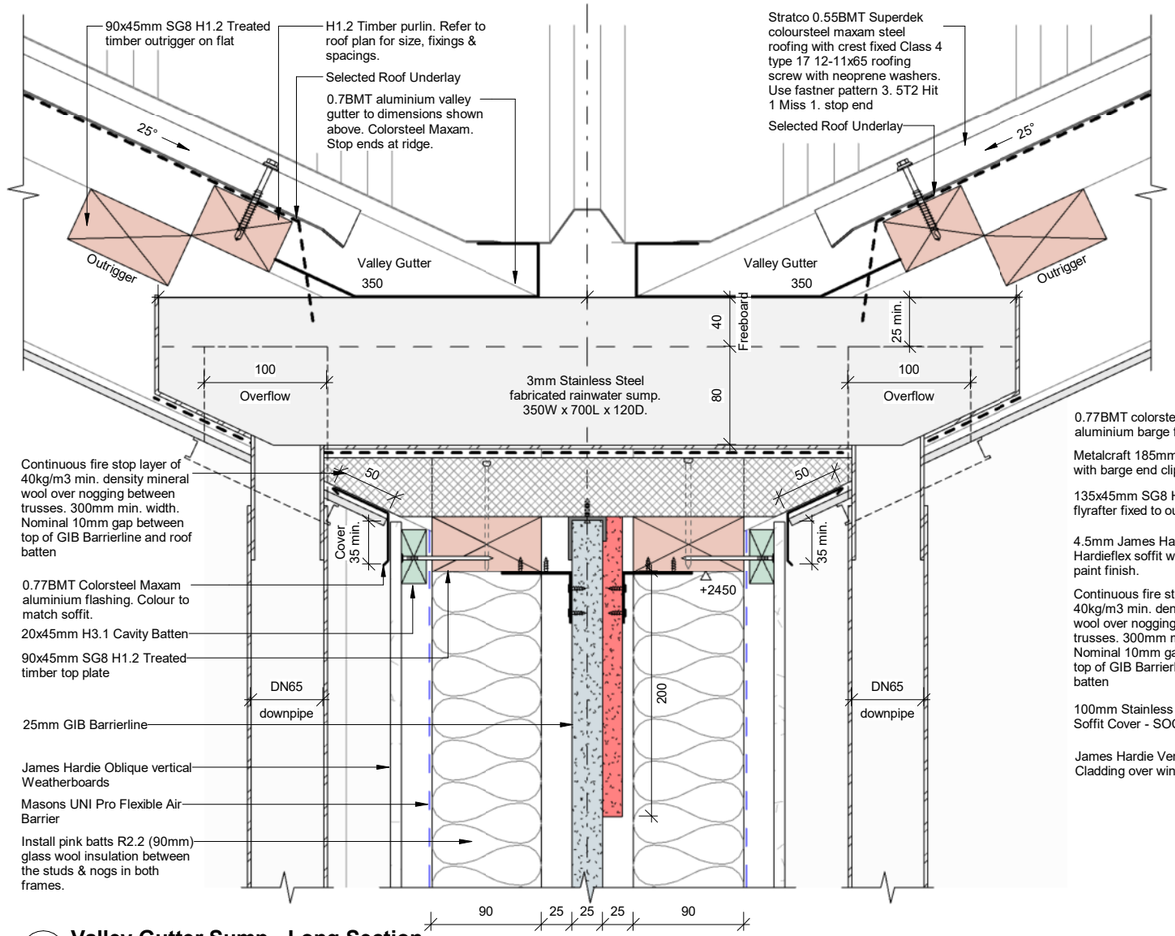


1 **Ridge - 5° Valley Roof**
SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE

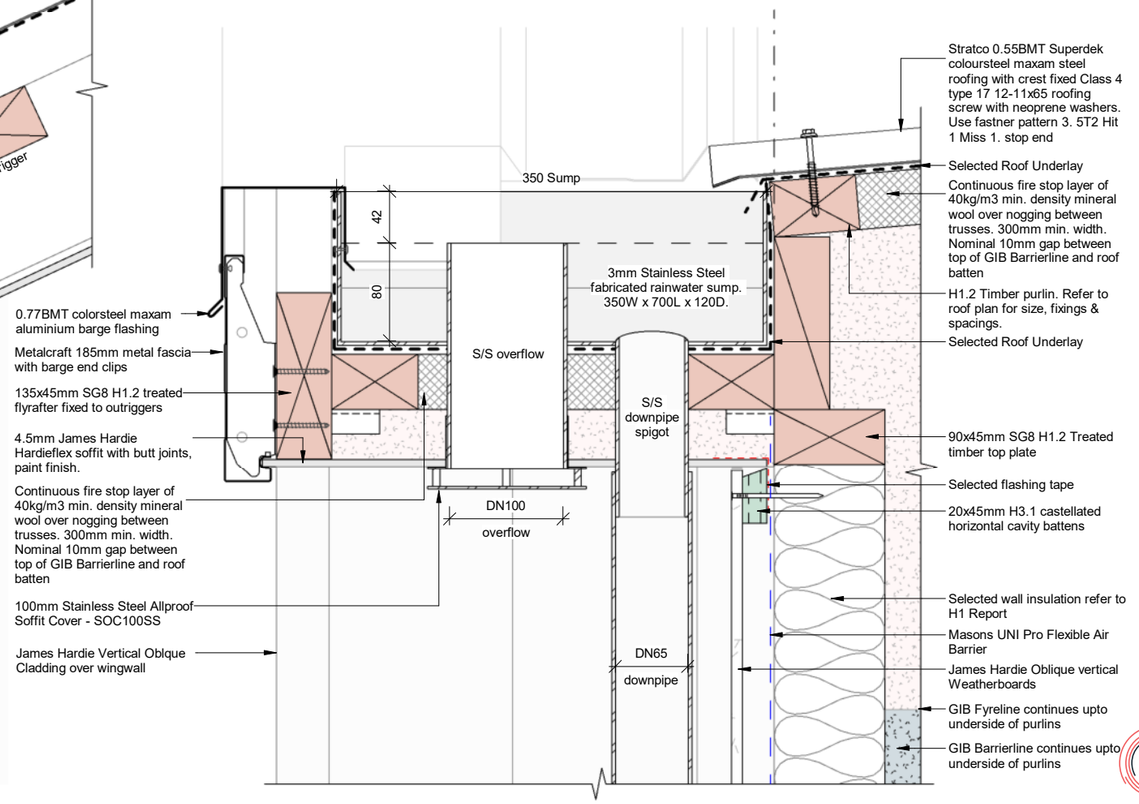


REFER TO ROOFING CODE OF PRACTICE
VALLEY GUTTER CALCULATIONS PROVIDED
WITH ARCHITECTURAL SPECIFICATION

2 **Valley Gutter Detail**
SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE



3 **Valley Gutter Sump - Long Section**
SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE



4 **Valley Gutter Sump - Cross Section**
SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE

A532 REV.3

ROOF DETAILS - VALLEY

DETAILS

TW PROPERTY

FLAXMERE HOUSING

LOT 7 - 72 CAERNARVON DRIVE

BUILDING CONSENT

PROJECT No. **F563**

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NO.	DESCRIPTION	DATE
3	BC - Type E	05.09.25

Site Information

Climate Zone: 2
Earthquake Zone: 3
Exposure Zone: B
Lee Zone: No
Rainfall Range: 50 - 60mm/h
Wind Region: A
Wind Zone: High
Corrosion Zone: B

Legal Description: LOT 2 DP 435766
Total Site Area: 4065m2

NZBC Compliance

Compliance with NZBC E2 is by means of NZBC E2 AS1. Refer Risk Matrix provided.

H1/AS1

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Auckland	+64 9 976 8288	ak@dgse.co.nz

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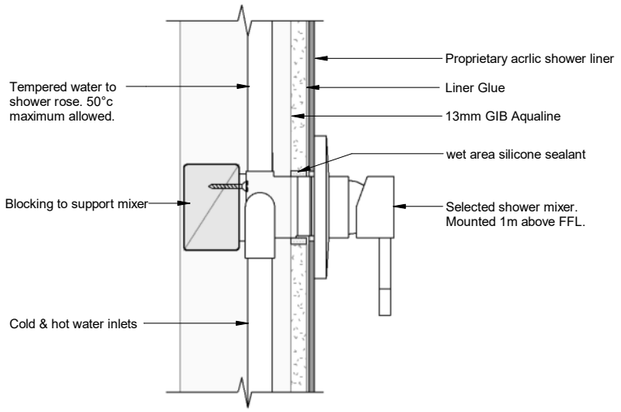
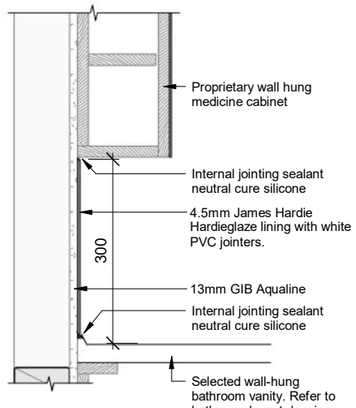
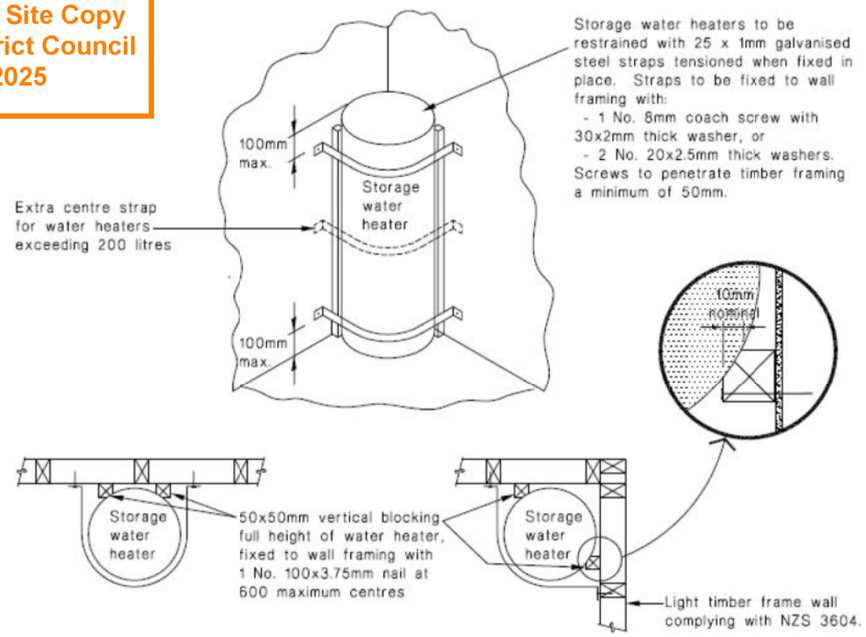


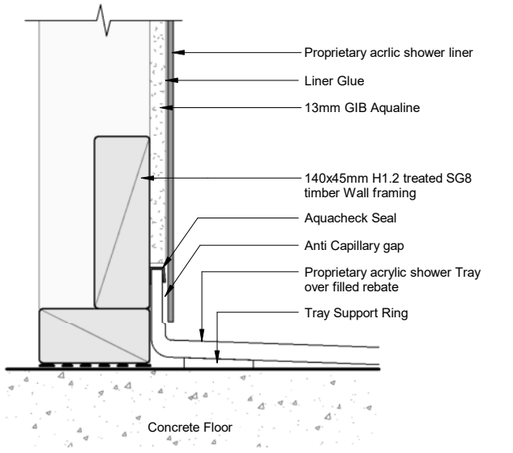
1 **Shower Mixer**
SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE



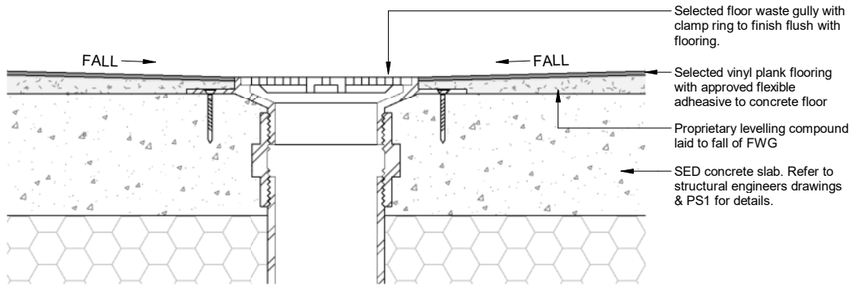
4 **WHB Splashback**
SCALE @ A3 - 1 : 10 | SCALE @ A1 - DOUBLE SCALE



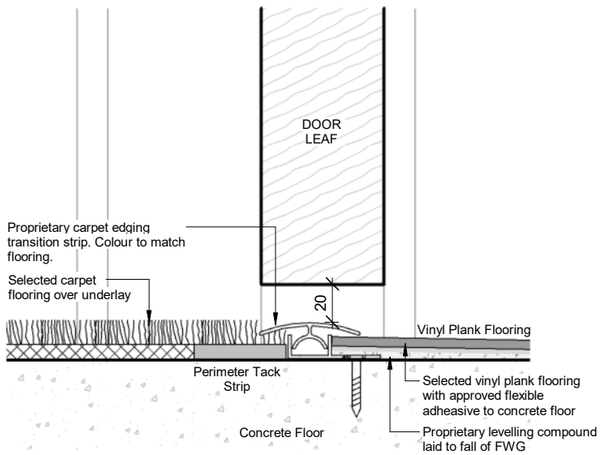
6 **Hot Water Cylinder Restraint**
SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE



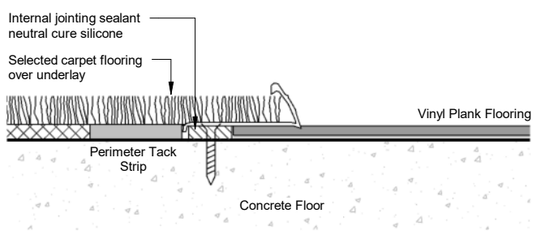
2 **Shower Tray Liner to Wall**
SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE



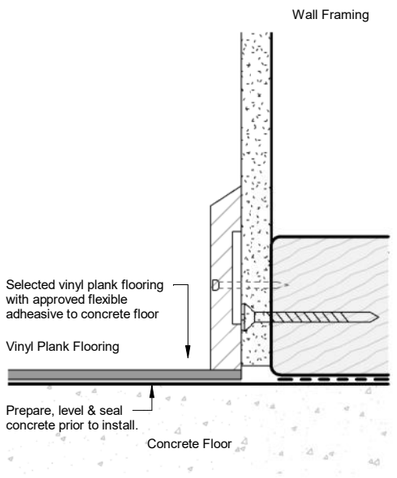
7 **Floor Waste Gully Detail**
SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE



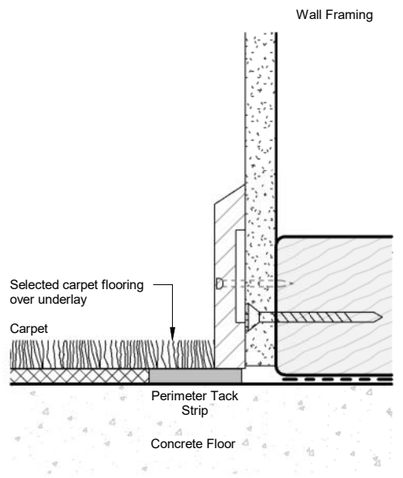
3 **Flooring - Carpet to Vinyl under doors**
SCALE @ A3 - 1 : 2 | SCALE @ A1 - DOUBLE SCALE



5 **Flooring - Carpet to Vinyl**
SCALE @ A3 - 1 : 2 | SCALE @ A1 - DOUBLE SCALE



SKIRTING - VINYL PLANK



SKIRTING - CARPET

8 **Typ. Skirting Details**
SCALE @ A3 - 1 : 2 | SCALE @ A1 - DOUBLE SCALE

A540 REV.2

INTERIOR DETAILS

DETAILS

TW PROPERTY

FLAXMERE HOUSING

LOT 7 - 72 CAERNARVON DRIVE

BUILDING CONSENT

PROJECT No. **F563**

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NO.	DESCRIPTION	DATE
2	BC - Type C&D	02.09.25
0	BC - Type A&B	01.08.25

Site Information

Climate Zone: 2
Earthquake Zone: 3
Exposure Zone: B
Lee Zone: No
Rainfall Range: 50 - 60mm/h
Wind Region: A
Wind Zone: High
Corrosion Zone: B

Legal Description: LOT 2 DP 435766
Total Site Area: 4065m2

NZBC Compliance

Compliance with NZBC E2 is by means of NZBC E2 AS1. Refer Risk Matrix provided.

H1/AS1

Wellington +64 4 920 0032 wn@dgse.co.nz
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Tauranga +64 7 925 6238 tr@dgse.co.nz
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Auckland +64 9 976 8288 ak@dgse.co.nz

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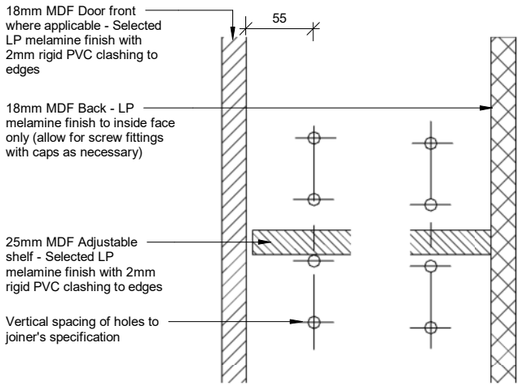
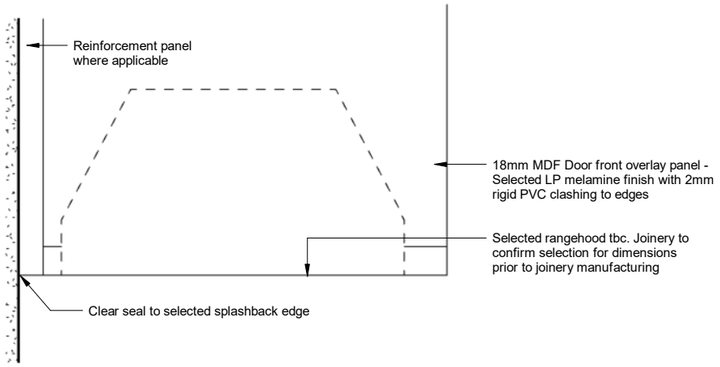
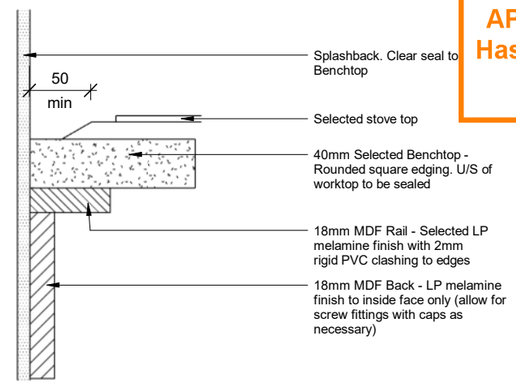


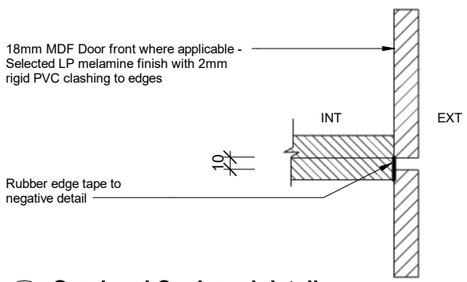
1 **Int Adjustable Shelf**
SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE



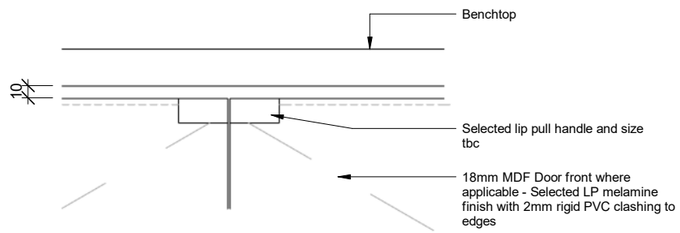
2 **Stove o/h Cupb.**
SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE



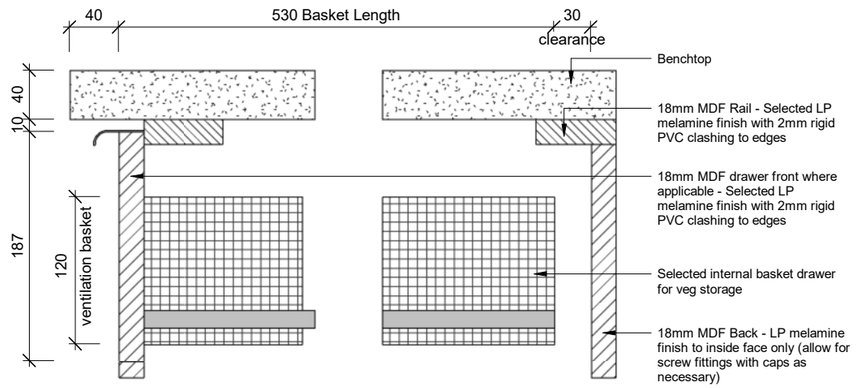
3 **Stove Splashback**
SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE



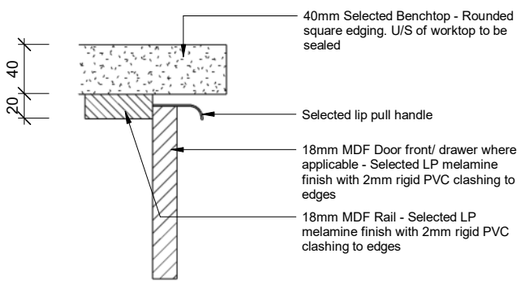
4 **Overhead Cupboard detail**
SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE



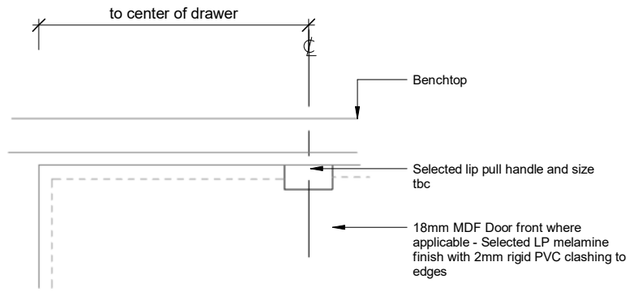
5 **Cupb. Handle Elevation**
SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE



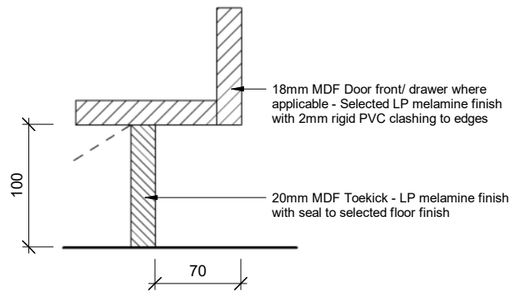
6 **Basket Veggie Drawer**
SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE



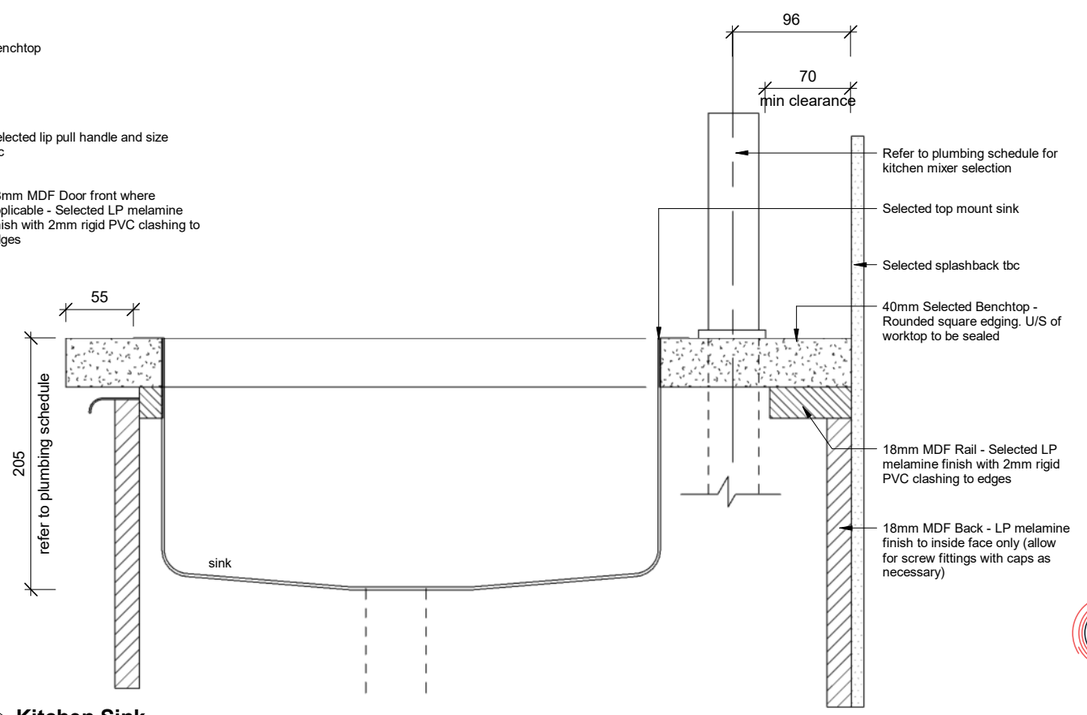
7 **Typical Overhang Detail**
SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE



8 **Drawer Handle Elevation**
SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE



9 **Toekick Detail**
SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE



10 **Kitchen Sink**
SCALE @ A3 - 1 : 5 | SCALE @ A1 - DOUBLE SCALE

A541 REV.2

KITCHEN DETAILS

DETAILS

TW PROPERTY

FLAXMERE HOUSING

LOT 7 - 72 CAERNARVON DRIVE

BUILDING CONSENT

PROJECT No. **F563**

Contractors shall verify all dimensions on site before commencing work. Do not scale from the drawings. If in doubt ask. Copyright of this drawing is vested in Designgroup Stapleton Elliott.

NO.	DESCRIPTION	DATE
2	BC - Type C&D	02.09.25
0	BC - Type A&B	01.08.25

Site Information

Climate Zone: 2
Earthquake Zone: 3
Exposure Zone: B
Lee Zone: No
Rainfall Range: 50 - 60mm/h
Wind Region: A
Wind Zone: High
Corrosion Zone: B

Legal Description: LOT 2 DP 435766
Total Site Area: 4065m2

NZBC Compliance

Compliance with NZBC E2 is by means of NZBC E2 AS1. Refer Risk Matrix provided.

H1/AS1

Wellington +64 4 920 0032 wn@dgse.co.nz
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Tauranga +64 7 925 6238 tr@dgse.co.nz
Napier +64 6 835 6173 np@dgse.co.nz
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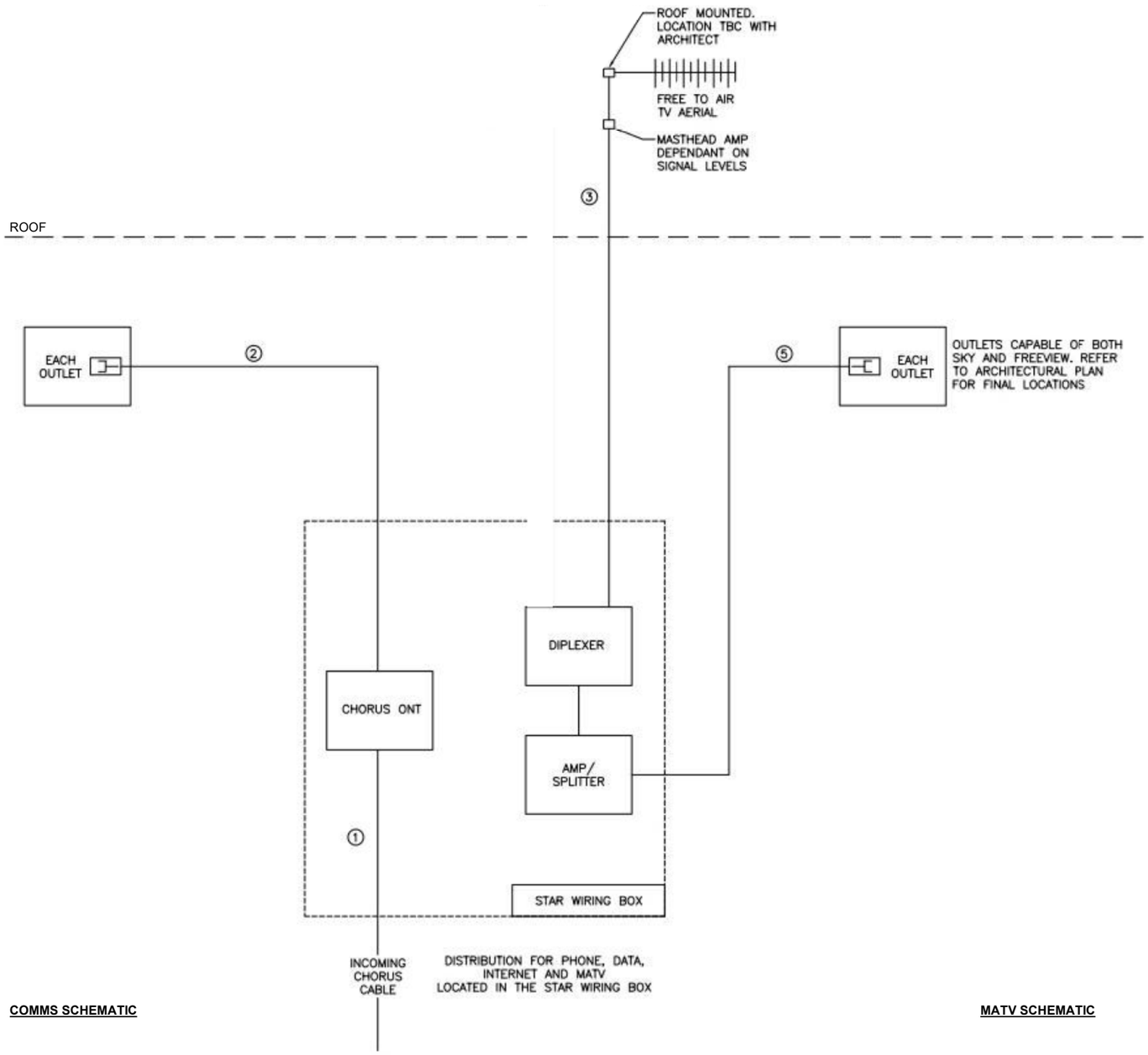

COMMS SCHEMATIC

MATV SCHEMATIC

CABLE SCHEDULE

1. 2-Fibre optic service-leads supplied by Chorus
2. CAT-6 UTP to each RJ45 outlet
3. A + RG6 Terrestrial
4. A + RG6 Satellite
5. A + RG6 Satellite/Terrestrial

COMMS NOTES

1. All works shall comply to TCF Premises Wiring Code of Practice and Chorus UFB Design guideline for new properties

2. All fibre cables will be provided by Chorus

3. Termination of fibre cables will be carried out by Chorus. All UTP connections to be RJ45

4. All data hubs (Star Box) shall have four single power outlets inside for active equipment. Liase with electrical services contractor

5. Comms schematic outlines the intent only, provide all equipment necessary to suit the number of outlets indicated on the drawings

MATV NOTES

1. Electrical contractor shall provide dedicated power outlet in Star wiring box for MATV amplifier

2. Liase installation of cables with all other sub-trades, tidy and co-ordinated with particular note to equipment positions

3. All coax to be Sky TV capable

4. All MATV connections and splitter shall be 'F' Type installed in accessible locations

5. Provide TV outlets as per plan

6. Provide sufficient MATV amplifiers and power to maintain signal strength & performance

7. The system shall be capable of receiving and decoding digital signals

8. The MATV schematic outlines the intent only, provide splitters etc to suit the number of outlets indicated on the drawings.

A550 REV.2

COMMUNICATIONS SCHEMATIC

DETAILS

TW PROPERTY

FLAXMERE HOUSING

LOT 7 - 72 CAERNARVON DRIVE

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NO.	DESCRIPTION	DATE
2	BC - Type C&D	02.09.25
0	BC - Type A&B	01.08.25

Site Information

Climate Zone: 2
Earthquake Zone: 3
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Wind Region: A
Wind Zone: High
Corrosion Zone: B

Legal Description: LOT 2 DP 435766
Total Site Area: 4065m2

NZBC Compliance

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Napier +64 6 835 6173 np@dgse.co.nz
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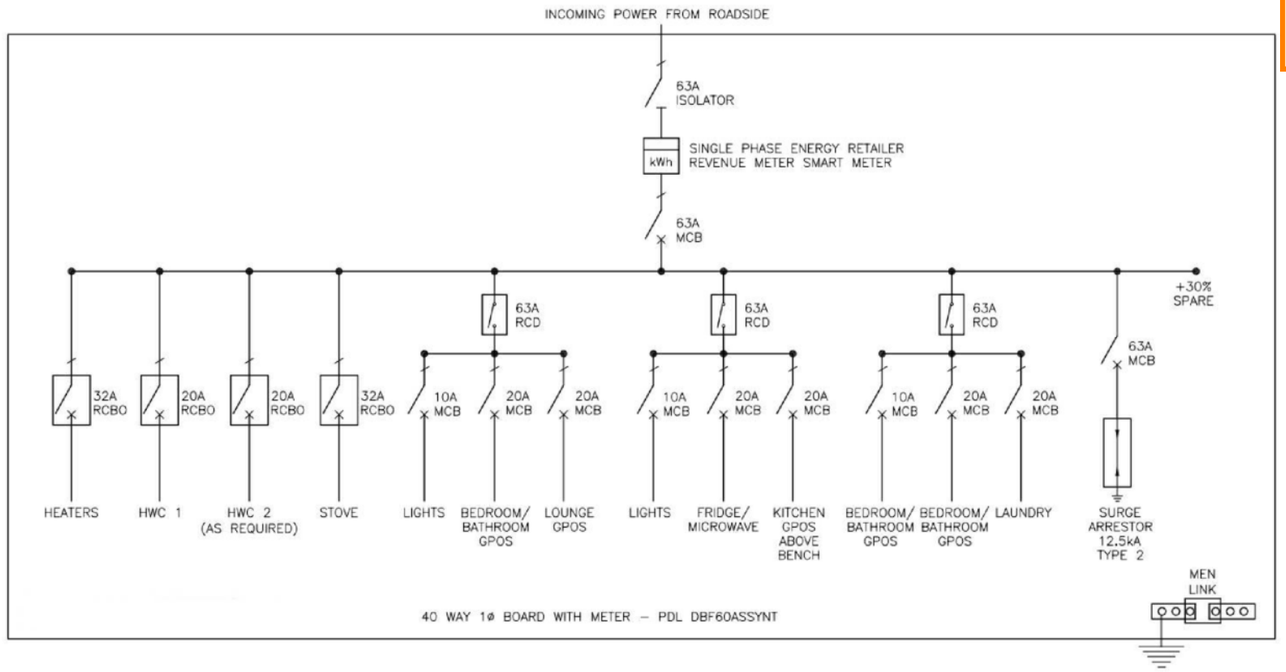
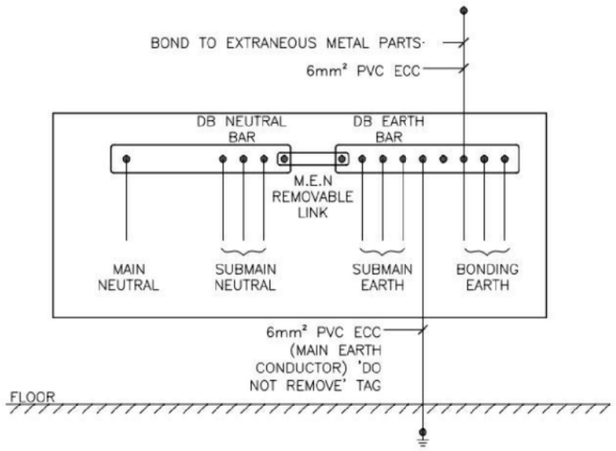


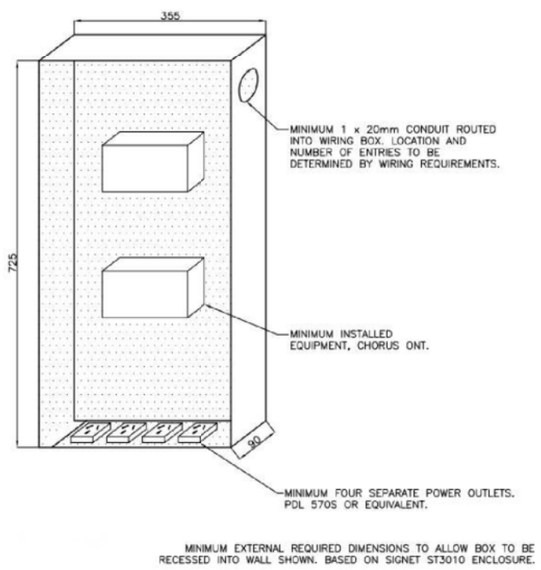
TYPICAL DB SCHEMATIC

SCALE @ A3 - 1 : 50 | SCALE @ A1 - DOUBLE SCALE



TYPICAL LV EARTHING - NTS

SCALE @ A3 - 1 : 50 | SCALE @ A1 - DOUBLE SCALE



STAR WIRING BOX - NTS

SCALE @ A3 - 1 : 100 | SCALE @ A1 - DOUBLE SCALE

EARTHING

1. Prior to construction the electrical contractor shall carry out an earth resistivity test at site. Based on the result of the earth resistivity test the electrical services contractor shall provide a main earth system to AS/NZS:3000

2. Earth electrodes shall be located in Toby pits as per Housing NZ requirements

3. Provide earth electrodes for main earth, add extra earth electrodes to suit power supply, depth, length and impedance value as to AS/NZS:3000

4. Electrical contractor to exothermically weld the earth wire connections to the earth electrodes. All connections shall be WRICON.

LIGHTING

1. Continuous lines between light fittings denote fittings controlled by a local light switch or switches, broken lines denote fittings on the same circuit

2. Light switches to be mounted at 1000mm AFFL unless stated otherwise

3. Run cables on tray or catenary wire above ceiling

4. All wiring to be concealed within either ceiling or walls

General Luminaires

Surface Mounted Luminaires

EQUIPMENT SCHEDULE

PHOTO	TYPE	DESCRIPTION
	H1	Haier® Flexis Air Conditioner 5.3kW

GENERAL NOTES

1. All work is to be best trade practice

2. Locate all existing services on site prior to commencing any work

3. All items to be installed to the manufacturers requirements and are to be seismically restrained to the requirements of NZS:4219, the building code and relevant New Zealand standards

4. All fixtures & fittings are to be suitable for the application required

5. Maintenance period of 12 months on all new equipment and guarantee period of 12 months from the date of completion

6. All electrical work to comply with AS/NZS:3000

7. Refer to DB schedule & schematics for cable size & type

8. Minimum cable size for power is 2.5mm² Cu and for lights is 1.5mm² Cu. Increase the cable size as required to meet voltage drop limit and fault loop impedance and disconnection time in accordance with AS/NZS:3000. Refer to manufacturers recommendation for appliances such as Hob, Oven, Stove etc.

POWER

1. Lines between sockets denote points on the same circuit

2. All power outlets to be mounted horizontally at 500mm to the centre AFFL or 250mm to the centre above benches/tables and 500mm from internal corners unless stated otherwise

3. Refer to internal elevations for equipment specific outlet locations, mounting heights etc. Ensure Bathroom hoist outlet poistion complies with NZS:3000 wet area zoning requirements

4. All power socket outlets obstructed in normal use and all fixed wire outlets shall have an isolator switch for manual shut down in nearby accessible location

Fixed wired outlet with local accessible isolator

1 - Oven / Stove
2 - HWC
3 - Heater

5. All internal cabling to be concealed within walls and ceilings

6. Flush boxes in walls shall be separated by the space of at least one timber stud or nog

7. The contractor shall allow for power and all other relevant electrical work to meet water & gas metering hub requirements

8. The contractor shall allow for bi-metallic cable joins c/w heavy duty heatshrink wrap for all aluminium cables

STRUCTURED CABLING

1. Outlet height to match power outlets at 500mm to the centre AFFL. Confirm setout before installation

2. TV outlet height to match power outlets at 500mm to centre AFFL

A551 REV.2

ELECTRICAL NOTES

DETAILS

TW PROPERTY

FLAXMERE HOUSING

LOT 7 - 72 CAERNARVON DRIVE

BUILDING CONSENT

PROJECT No. **F563**

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Napier +64 6 835 6173 np@dgse.co.nz
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STRUCTURAL PLANS

LOTS 7-8 AT 72 CAERNARVON DRIVE - HASTINGS

PROJECT

JOB	DOCUMENT	REV.	DATE	ISSUED BY
8529	F012	A	27.08.25	FPA

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GENERAL NOTES

1. Cresco does not accept any liability of any kind whatsoever from other parties than the owner / developer indicated within the PS1.
2. Refer to the architectural plans for dimensions, levels, rebates, recessed areas, steps, services, plumbing layout, holding down bolts and embedded items.
3. Plans to be read in conjuction with the architectural documentation. The architect must be notified for any inconsistency, error or omission in the documents, or between documents.
4. All dimensions and levels are to be checked on site before fabrication and construction.
5. Material performance to comply with all aspects of the NZ Building Code, approved documents and NZS 3604:2011.
6. Apply proprietary materials and components to the manufacturer's express written instructions.
7. Plans A3 format, do not scale drawings.
8. All dimensions are in millimetres unless otherwise noted.
9. The drawings are to be read in conjuction with the installation procedure provided in this sheet.
10. The installer shall assess the acceptability of the ground across the entire building platform before proceeding with the construction.
11. Refer to the geotechnical investigation report and/or geotechnical engineer recommendations for ground improvement works if any.

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1. SITE PREPARATION
All vegetation, topsoil and other organic or deleterious material shall be removed from the area to be covered by the building (formation area) prior to commencing construction of the system.

2. EARTHWORKS
The formation area shall be prepared in accordance of the provisions within S2 and under supervision of a qualified professional.
Where fill is required to achieve a specific level or a suitable bearing capacity, the fill is subject to site verification and must be certified by qualified professional or U.N.O, for fills that are less than 400 mm deep, shall be installed in accordance with Clause 7.5.3 of NZS 3604:2011 "Timber Framed Buildings". The installer/ engineer shall get the acceptability of the ground over the entire building platform assessed before proceeding with the construction.
Council inspectors might want to inspect site before slab construction commences.

3. PLUMBING AND SERVICES (beneath the system)
Plumbing and services required beneath the system should preferably be conveyed underground to their plan location then brought up through the system. The trenching, placing, and bedding of the pipes/ducts and the backfilling of the trenches shall conform to the requirements of the consent documentation.

4. SAND BLINDING
A layer of sand shall be placed, screeded and compacted over the building platform, extending to at least 300 mm beyond the system perimeter. The maximum thickness of this blinding layer shall be 30 mm. If the ground has been softened (i.e. has a muddy surface layer due to construction activities), remove the softened material before placing the sand. Granular fill required If excavation lowers the ground surface to more than 30 mm below the underside of the foundation.

5. DAMP PROOF MEMBRANE
The RibRaft® Thermox DPM or NZS 3604 compliant DPM shall be laid over the entire building platform (to the outer edge of the perimeter at least) directly on top of the sand blinding layer. The joints shall be lapped 50 mm and sealed with suitable pressure sensitive tape. All penetrations of the DPM by plumbing and services or punctures during construction shall also be sealed with suitable pressure sensitive tape.

6. EDGE FORMWORK
The edge formwork shall be constructed ensuring that the requirements of NZS 3109:1997 "Concrete Construction" are adhered to. The formwork shall be adequately supported and braced to prevent any buckling or warping. If the wall is to be constructed in masonry veneer, formwork for a masonry veneer rebate should be adequately fixed to the perimeter formwork. Foundation dimensions and insulation product specifications to be checked when edge insulation is required by the architect. Foundation positioning and levels might need to be certified by a land surveyor before pouring, it is recommended to organize the inspection at this stage.

7. LAYING THE PODS AND KEYSTONES
The polystyrene pods shall be laid out over the DPM in a regular waffle pattern ensuring direct contact with the ground across the entire pod. The edge beams and the internal stiffenings shall be formed using the approved 300 mm spacers. These shall be placed at a maximum of 1200 mm centres along the perimeter of the slab and one per pod or part pod. Except where an internal stiffening is required, each pod or part pod shall always be separated by 100 mm using a minimum of one approved 100 mm spacer along each edge of each pod or part pod. The ribs in both directions shall form a waffle pattern throughout the slab. It is essential that the ribs and edge beams are straight when the concrete is poured, i.e. the pods need to be lined up.

8. PLUMBING AND SERVICES (within the system)
Services shall be placed in accordance with the details provided by Cresco and along orthogonal directions matching the pods layout. Allowed diameters of the services/ducts, positioning constraints and localized strengthenings are dictated within this set of plans.

9. REINFORCING STEEL BARS
Reinforcing bars shall conform to NZS 4671:2001. All bars shall be of deformed type (Grade 500E). All bends shall be made cold without fracture and in accordance with the bend diameters given in NZS 3109 "Concrete Construction".
Unless otherwise noted, reinforcing bars shall lap as follow:
10 mm diameter bars: 600 mm
12 mm diameter bars: 720 mm
16 mm diameter bars: 960 mm
Unless otherwise specified, 50 mm cover to the edge of the beam and 50 mm cover to the DPM surface shall be allowed for. Approved spacers are designed to provide the required concrete cover.

10. MESH REINFORCING
Top reinforcing steel in the top slab, unless otherwise specified, shall consist of Welded Reinforcing Mesh complying with AS/NZS 4671:2001 and specification provided in S3, a lower characteristic stress of 500 MPa and ductility class E. The Reinforcing Mesh shall be placed over the pods and supported on 40 mm mesh chairs spaced at a minimum of 1200 mm centres, with at least two mesh chairs placed per pod and at least one per part pod. The Reinforcing Mesh shall lap a minimum of 225 mm or 1 grid space + 50 mm (which ever is the greater). The Reinforcing Mesh shall be tied (1 @600 mm) at all laps.
U.N.O. Two bars (Grade 500E and diameter specified in sheet 3), 1200mm long shall be placed across the corner, tied to the top of the mesh at re-entrant corners at 200 mm centres, with 50 mm cover from the internal corner.

11. CONCRETE PLACING AND FINISHING
Concrete placing, finishing and curing shall be in accordance with NZS 3109:1997, Clause 7.
Concrete to be poured monolitically. U.N.O. one of the following concrete mixes shall be used in the system:
1. f'c = 20 MPa 100mm slump structural mix.
2.f'c = 25 MPa 100 mm slump pump for buildings constructed in 'zone D' and 'sea spray zone' (including all areas within 500 m of the coastincluding harbours, 100 m from tidal estuaries and sheltered inlets, all offshore islands and all other areas shown in the map in 4.2.3.3 of NZS3604).
The concrete shall be compacted with the use of an immersion vibrator around all steel and into all corners of the formwork. Screeding with the aid of a level shall commence immediately after compaction. Unless specifically installed as a screeding datum, the top of the formwork shall not be assumed as level and thus shall not be used for screeding purposes. Final finishing with a trowel shall take place after all the bleed water has evaporated. The edge of the slab and rebates shall be tooled to prevent chipping of the top of the slab.Early age care of the slab shall be in accordance with good trade practice appropriate for the weather conditions.
The surface shall be a blemish free surface to class U3 finish (refer NZS 3114:1987).
Proper curing of the concrete must take place immediately after finishing the concrete.
One of the following methods of curing is recommended: (i) ponding or continuous sprinkling of water (ii) placing a wet covering or plastic membrane over the slab or (iii) using liquid membrane curing compounds. Immediate and continuous wet curing to reduce the maximum temperature and/or raise the minimum temperature can reduce the risk of this type of cracking.
Shrinkage control joints (if required in S3) shall be saw cut after hardening.
The saw cut shall be cut to a depth of 25mm and shall be cut no later than 24 hours in summer, or 48 hours in winter. The formwork shall not be removed prior to 12 hrs. after the slab has been finished. No loads to be placed on the system before adequate curing has taken place.

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LOTS 7-8 AT 72 CAERNARVON DRIVE - HASTINGS
PROJECT

8529	F012	A	27.08.25	FPA
JOB	DOCUMENT	REV.	DATE	ISSUED BY

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GENERAL NOTES	NTS	A3	S1
DOCUMENT TITLE	SCALE	FORMAT	SHEET

INSPECTION SCHEDULE

Should the Building Consent Authority require a Producer Statement - Construction Review (PS4) to be issued by CRESCO then, as a minimum, the following site visits will be required during construction:

Inspection of cut / fill (*)building platform:
Bearing Capacity Confirmation (BY OTHERS)

Pre-pour visit:
Reinforcing, pipes penetrations details, Pods layout (BY CRESCO)

(*) U.N.O by the geotechnical engineer, fill compaction density assessment is required for fills with a depth of 400 mm or more. For those with a depth of less than 400 mm the instructions provided in NZS3604 clause 7.5.3.1 are applicable unless specific unexpected issues occur (e.g. if a soft spot is identified during the cut inspection), in which case the fill compaction density assessment may still be required. When the compaction density assessment is required additional visits are likely to be needed.

A suitably qualified geotechnical engineer shall be engaged by the client to perform the the inspectin of cut/fill building platform. The owner (or nominee) is responsible for advising CRESCO when the foundation is ready for a prepour visit. A 72 hours notice is required (see instructions below). A PS4 cannot be issued unless the specified visits on this page are completed and in all cases where written approval from a CRESCO engineer is missing. Producer Statement documentation must be requested within 1 year of final inspection taking place.

At the completion of the work, the Contractor shall provide a PS3 covering all of the structural work. The format of the PS3 must be acceptable to CRESCO.
The PS3 must state that the works have been completed in accordance with all of the Contract Documents, Contract Instructions and Site Reports.

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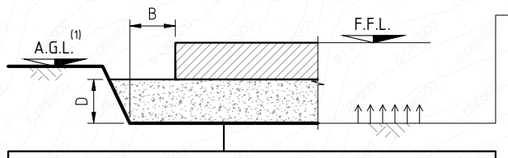
(www.cresco.co.nz/booking)

YOUR JOB NUMBER IS:

8529

BUILDING PLATFORM

The installer shall assess the acceptability of the ground across the entire building platform before proceeding with the construction. Refer to the geotechnical investigation report and/or geotechnical engineer recommendations for ground improvement works if any.



ULTIMATE BEARING CAPACITY (UBC, kPa)≥	200
ENGINEERED FILL DEPTH (2) (D, mm):	200
ENGINEERED FILL EXTENSION (B, mm):	200
A29 BIDIM GEOTEXTILE AT BASE:	---
GEOGRID (Number of layers) (3):	---

SITE VERIFICATION CHECKS:

- ULTIMATE BEARING CAPACITY (UBC)
- NO INTERFERING BURIED SERVICES
- NO EROSION OR LAND INSTABILITY
- NO UNCONTROLLED LAND FILLING
- NO ORGANINCS

The installer shall get the acceptability of the ground across the entire building platform assessed before proceeding with the construction.

Refer to the geotechnical investigation report and/or geotechnical engineer recommendations for ground improvement works if any.

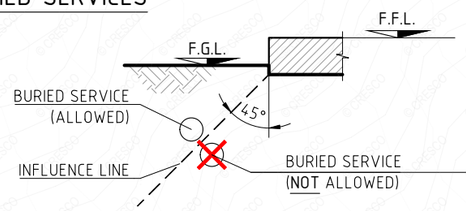
NOTES

(1) A.G.L. = -225 mm F.F.L. unless otherwise noted in the architectural plans

(2) Engineered fill: AP40 or AP65 95% dry density 200 mm compaction layers (max). when engineered fill depth "D" is zero, no engineering fill is required.

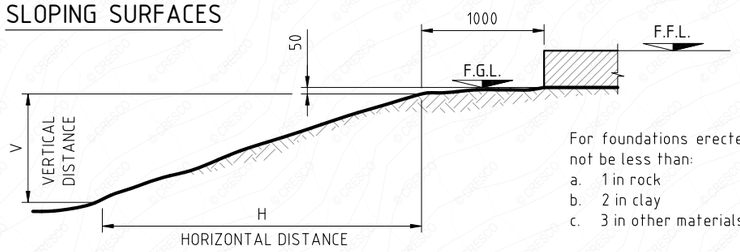
(3) Geogrid (when required) to be placed with the first geogrid sheet at base of excavation and subsequent geogrid layers @ 200 mm intervals

BURIED SERVICES



Buried services that may require future maintenance (e.g. public infrastructure) cannot be installed in this area.

SLOPING SURFACES



For foundations erected at the top of slope the H/V ratio shall not be less than:
a. 1 in rock
b. 2 in clay
c. 3 in other materials

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LOTS 7-8 AT 72 CAERNARVON DRIVE - HASTINGS
PROJECT

8529	F012	A	27.08.25	FPA
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GENERAL NOTES — DOCUMENT TITLE
NTS — SCALE
A3 — FORMAT
S2 — SHEET

CONCRETE STRENGTH

f'c ≥ 20 MPa concrete for all foundations except those constructed in sea spray zones (including all areas within 500 m of the coast, harbours, 100 m from tidal estuaries and sheltered inlets, all offshore islands and all other areas shown in the map in 4.2.3.3 of NZS3604) where **f'c ≥ 25 MPa concrete** is required.

NOTES

(1) No saw cuts are required unless specified.

(2) Crack controll bars typical at each reentrant corner except for reentrant corners where floor saw cuts have been specified. Do not exceed 50 mm cover from beam outer edge / rebate

(3) Additional reinforcing steel other than specified within the reinforcing summary might be needed as specified on the details included within this set of drawings (e.g. at pipe penetrations, steps, stiffenings...)

(4) At least 3 bottom bars when edge beam/internal stiffenings width ≥ 400 mm and at a rate of 1 additional bar per 100 mm of width increase (i.e. 3 bars for 400 mm width, 4 bars for 500 mm width and so on).

(5) The symbol represents an approximated location. Ref. to the architectural/bracing design to determinate the exact position of the hold down.

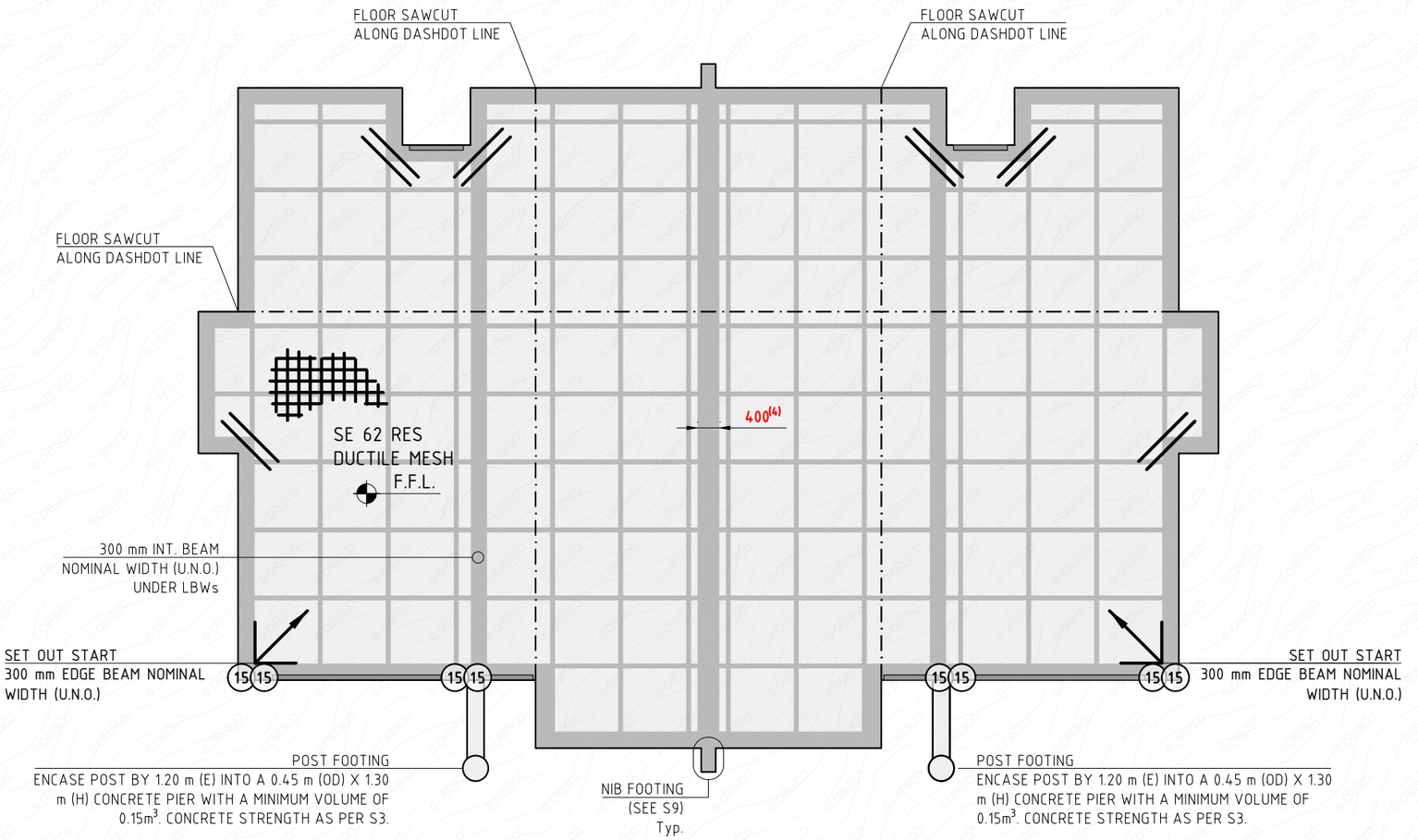
(6) Check requirement for joinery rebate (if any)

(7) If an edge insulation (25mm thk max) is used, the edge beam measurements shown on the foundation layout should not be interpreted as the width of the solid concrete. Instead, they represent the outer boundary of the foundation, which includes the edge insulation.

Refer to acceptable solution E2/AS2 provided for "ZONE E" for the corrosion protection requirements for structural fixings in "ZONES D"

DESIGN SUMMARY (3)

SITE CLASSIFICATION (LIQUEFACTION)	TC1
SITE CLASSIFICATION (EXPANSIVITY)	---
WAFFLE RAFT TYPE	RIBRAFT POLY
TOP SLAB THICKNESS (T)	85 mm
WAFFLE RAFT OVERALL DEPTH (H)	305 mm
RIB SPACING	1200 mm
INTERNAL RIB AVERAGE WIDTH	100 mm
EDGE BEAM MINIMUM WIDTH (B1)	300 mm (U.N.O.)
INTERNAL THICKENING MINIMUM WIDTH (B2)	300 mm (U.N.O.)
INTERNAL RIB BTM REINFORCING (M1)	1 HD12
INTERNAL RIB TOP REINFORCING (M2)	NOT REQUIRED
EDGE BEAM BTM REINFORCING (M3)	2 HD12 (4)
EDGE BEAM TOP REINFORCING (M4)	1 HD12
CRACK CONTROL REINFORCING (M5)	2 HD12 (2)
INTERNAL THICKENING BTM REINFORCING (M6)	2 HD12 (4)
INTERNAL THICKENING TOP REINFORCING (M7)	2 HD12
REINFORCING MESH	SE62 TOP
MESH CHAIRS	25/40 TYPE REQUIRED



THE FOUNDATION LAYOUT COMPLIES WITH THE BRACING DESIGN AS PROVIDED BY CLIENT/ARCHITECT. CRESCO SHALL BE NOTIFIED FOR ANY VARIATIONS OF THE BRACING DESIGN

THE FOUNDATION LAYOUT COMPLIES WITH THE TRUSS DESIGN AS PROVIDED BY CLIENT / ARCHITECT WHICH MAY CONTAIN LOAD BEARING WALLS AND / OR POINT LOADS

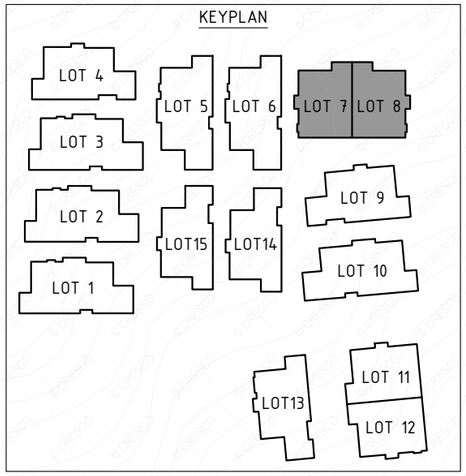
(15) 15 KN hold down bolt (If specified in this plan) (5)

POLYSTYRENE POD (1100X1100X220 TYP.)

JOINERY REBATE REF. TO ARCH. PLANS

CRACK CONTROL BARS 2 HD12 L=1200 mm (2) (If specified in this plan)

KEYPLAN



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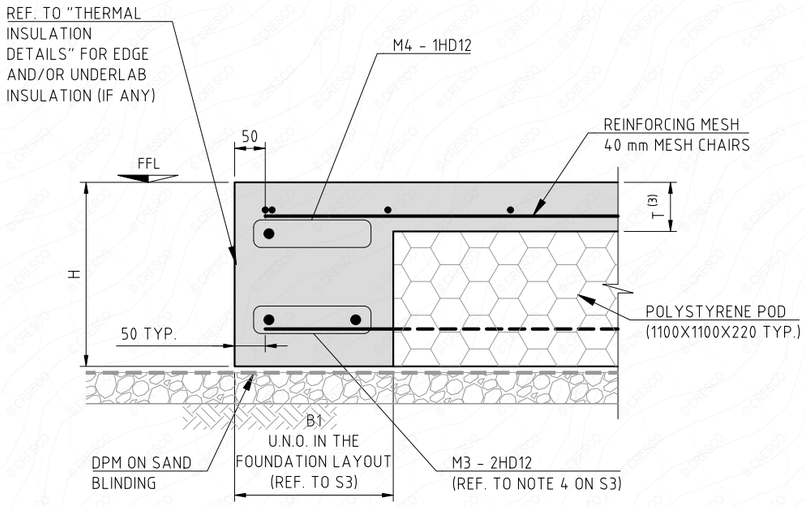
FOUNDATION LAYOUT
DOCUMENT TITLE

SCALE	FORMAT	SHEET
1:100	A3	S3

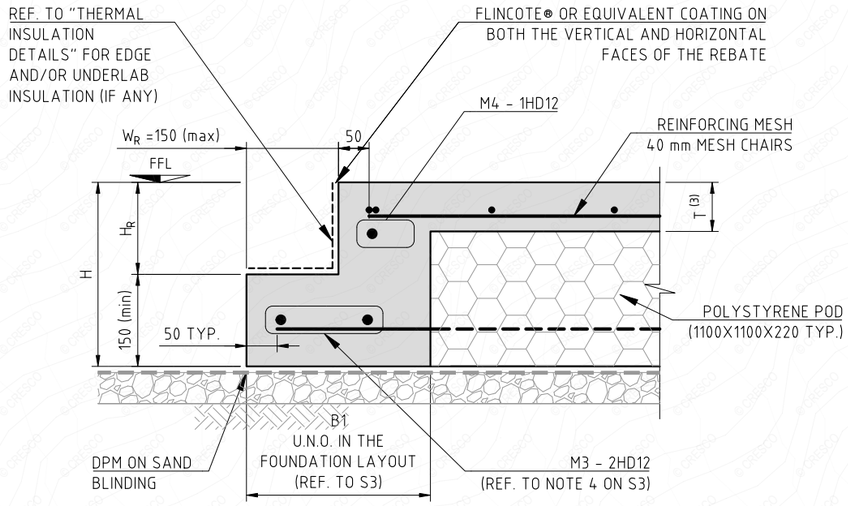
FOUNDATION EDGE (WITHOUT REBATE)

1:10 – Typical detail



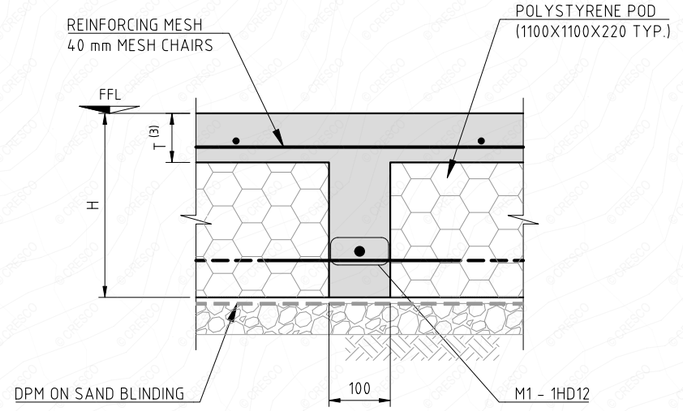
FOUNDATION EDGE (WITH REBATE)

1:10 – Typical detail



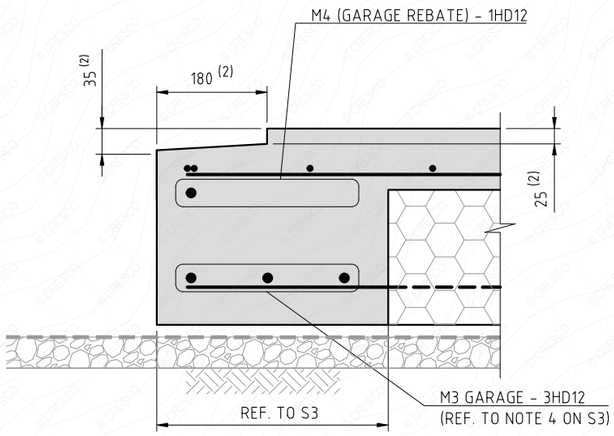
INTERNAL RIB

1:10 – Typical detail



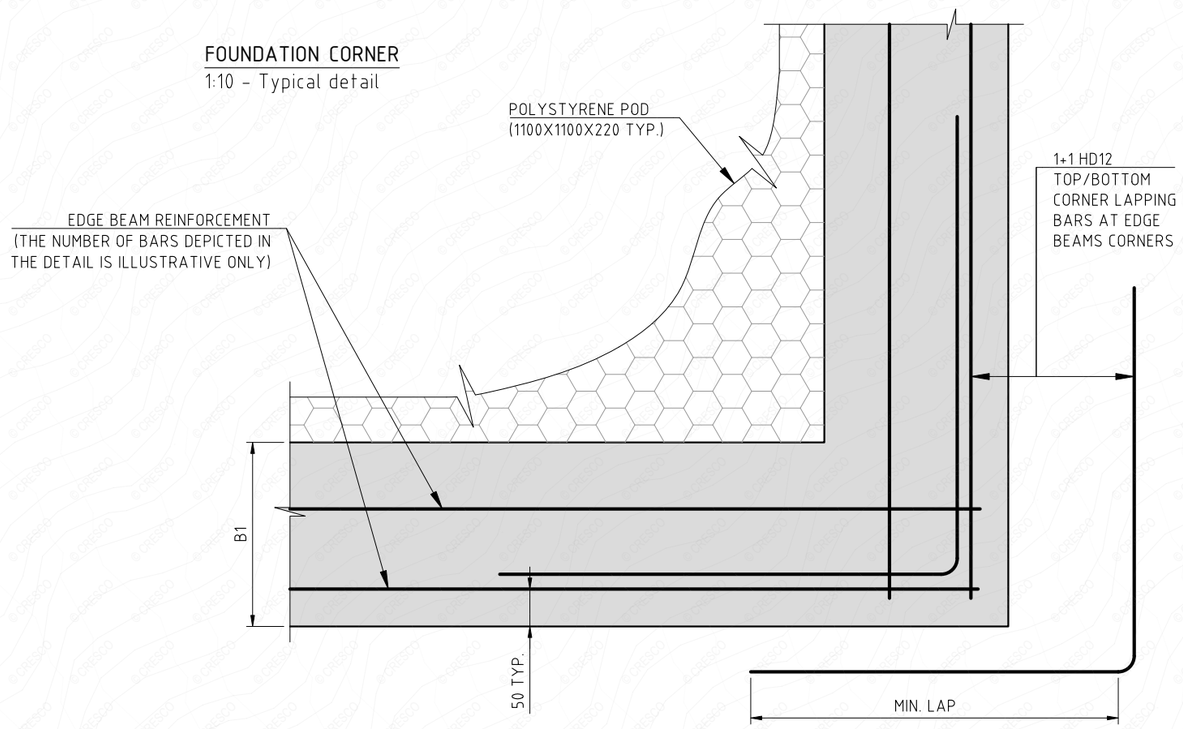
GARAGE DOOR REBATE

1:10 – Typical detail



FOUNDATION CORNER

1:10 – Typical detail



NOTES:

(1) Refer to the architectural plans for rebate measures. Under no circumstances W_R or H_R shall be greater than 150 mm.

(2) Unless otherwise noted in the architectural plans

(3) The contractor shall check the top slab thickness with the provisions of detail S8.

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EDGE BEAMS AND RIBS DETAILS

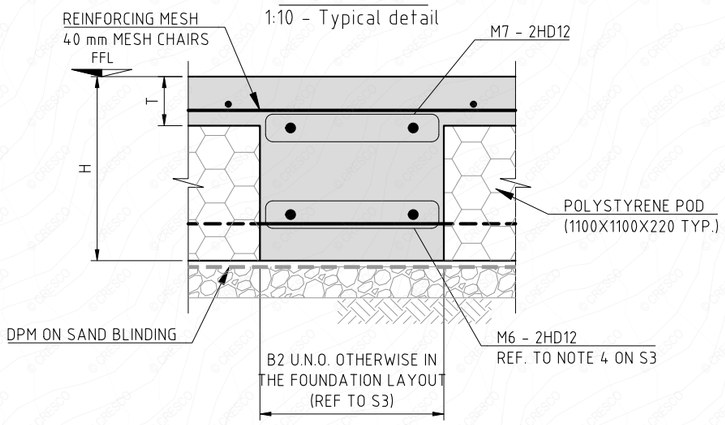
DOCUMENT TITLE

1:10 SCALE

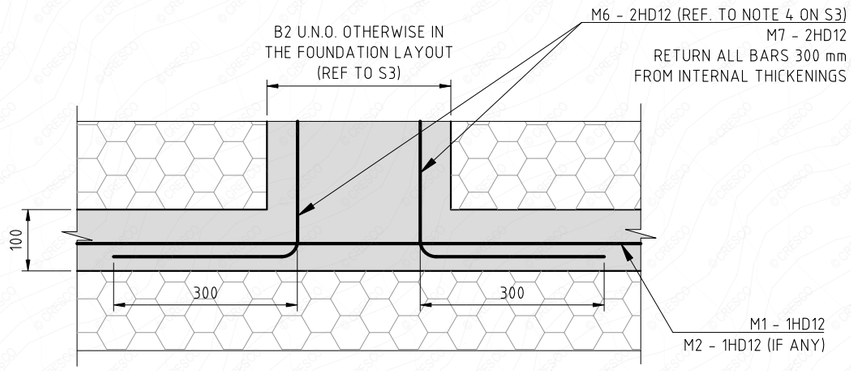
A3 FORMAT

S4 SHEET

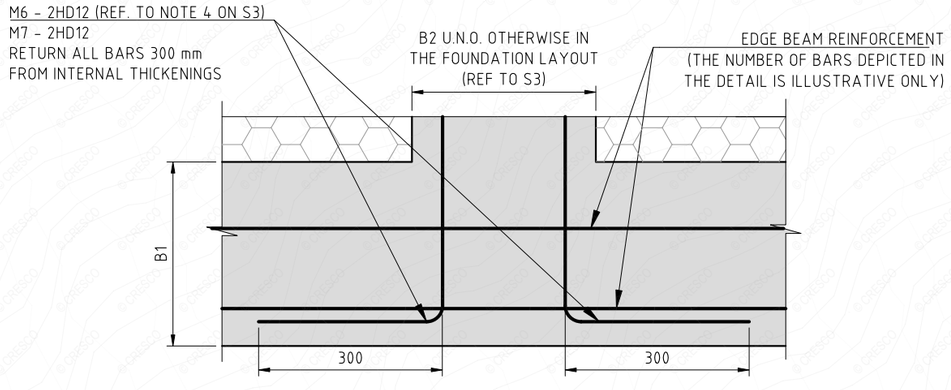
INTERNAL BEAM
1:10 - Typical detail



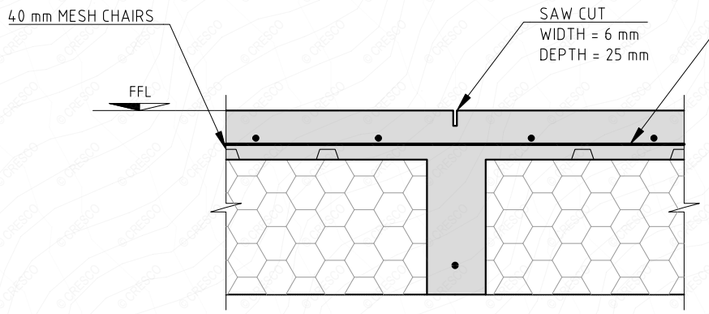
INTERNAL BEAM CROSSING RIBS
1:10 - Typical detail



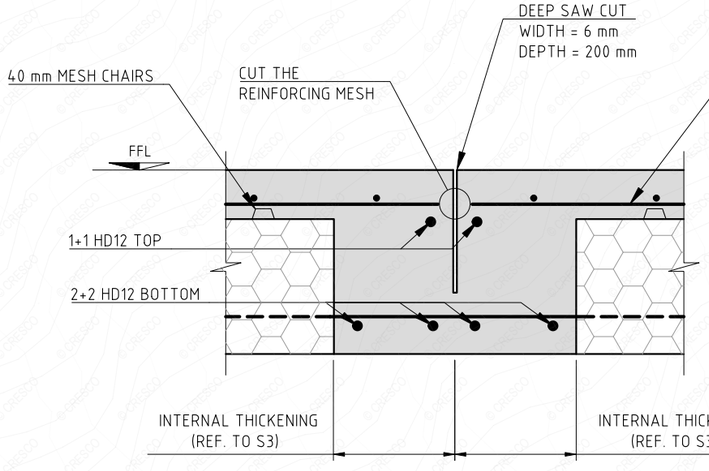
INTERNAL BEAM CROSSING EDGE BEAM
1:10 - Typical detail



FLOOR SAWCUT (where/if specified in S3)
1:10 - Typical detail



Case A
Standard saw cut (IF ANY)



Case B
Deep Floor Sawcut
(IF ANY)

Bottom reinforcing bars NOT to be cut.

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DOCUMENT TITLE	SCALE	FORMAT	SHEET
INTERNAL BEAM AND FLOOR SAWCUT	1:10	A3	S5

UNDER SLAB RUNNING OF SERVICES

Services ducts shall be conveyed underground to their plan location then brought up through the polystyrene pod and the concrete floor slab, within the limitation imposed by the table below.
Services shall not be placed within any concrete except to cross that section of concrete i.e. services shall not run along ribs or edge beams. Pipes penetrating through concrete shall be:
> Installed at right angles to the slab surface.
> Lagged with an impermeable material for the full depth of the concrete penetration.
> Lagging tape thickness for vertical penetrations must be as per table "MINIMUM LAGGING TAPE THICKNESS FOR VERTICAL PENETRATIONS". Lagging tape thickness for horizontal penetration to be at least 6mm thk.

Any services crossing ribs or the edge beam horizontally shall be placed only within the middle third of the member. Except as noted in this sheet, services crossing the ribs vertically shall also be constrained to the middle third of the width of the edge or internal load bearing rib and at no stage shall any of the reinforcement bars be relocated or cut to allow for the services (it is acceptable, however to cut the mesh). In some instances this will dictate the location of the ribs. The pods shall be cut to allow for this and if necessary, the spacing of the ribs shall be decreased locally. There shall be 600mm minimum clear spacing in each direction between penetrations through the system.

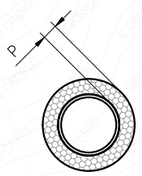
MAXIMUM DIAMETER OF PIPE SERVICES		
ELEMENT	VERTICAL SERVICES	HORIZONTAL SERVICES
300mm wide edge beam	50mm nominal bore pipe	100mm NB pipe
500mm localised wide edge beam (1)	100mm NB pipe	100mm NB pipe
300mm wide internal load bearing rib	50mm NB pipe	100mm NB pipe
100mm wide internal rib	Nil	100mm NB pipe
Slab	100mm NB pipe, or for large services up to 450mm square (3)	Nil

(1) For situations where a 100mm diameter pipe is required to pass vertically through the edge beam or internal load bearing beam, the beam shall be locally increased in width to a minimum of 500mm wide. This shall be achieved by keeping flush the outside face of the edge beam and removing 200mm from the pod. The width shall remain at 500mm for a distance of 600mm beyond the service pipe.

(2) Where a gas pipe line runs through the floor system, in addition to the requirements above, the pipeline shall enter the building through the outside face of the perimeter foundation beam, be concrete encased and located in the plane of the pods. The aim being to ensure that damage to the gas pipe will most likely occur outside the building envelope should movement occur between the ground and the floor system in a large earthquake.

(3) Larger penetrations or voids up to 450mm square (e.g. for shower waste/traps) are permitted through the slab provided all the conditions of this note are met. These openings shall be trimmed with 1 HD12 bar 1500mm long placed along each side of the opening, tied to the mesh. One set of parallel bars shall be placed on top of the mesh and the other set placed under the mesh. These openings shall not be placed over a rib or edge beam. If necessary, the rib spacing shall be reduced or the pod layout altered to ensure that the opening occurs solely in the slab above a polystyrene pod. Penetrations such as these shall not be installed in garages or other areas where large (>3kN) point loads could be present. Only one penetration greater than 120mm is permitted in the slab above any single pod or part pod. Where two large openings are required to be in close proximity, an internal rib shall separate them. For these large penetrations/voids in the slab, the services shall not be within 25mm of the edges of the void through which they pass, and the opening shall be sealed to prevent materials entering the subfloor cavities.

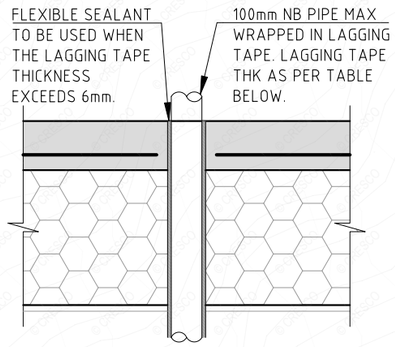
MINIMUM LAGGING TAPE THICKNESS FOR VERTICAL PENETRATIONS



TYPE OF SOIL	LAGGING TAPE THK (P)
STABLE SOIL (GOOD GROUND, TC1 - LIKE)	6 MIN
EXPANSIVE SOIL (CLASS S-M)	20 MIN
EXPANSIVE SOIL (CLASS H1,H2,E)	25 MIN / 40 RECOMMENDED AS PER AS2870
LIQUEFACTION - PRONE SOIL (TC2 - LIKE)	25 MIN / 60 RECOMMENDED AS PER MBIE GUIDANCE

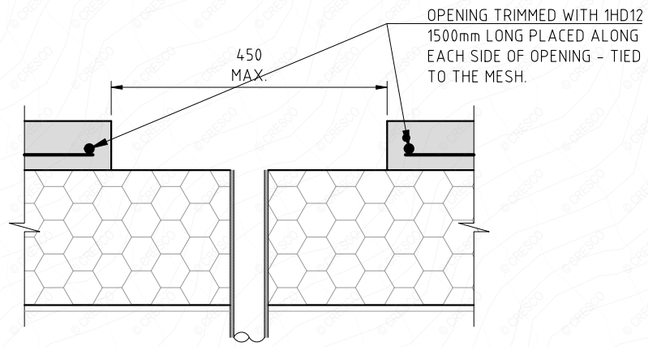
VERTICAL PENETRATION THROUGH SLAB

1:10 - Typical detail



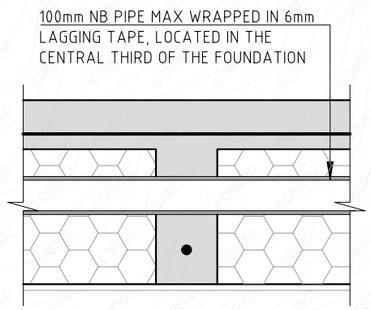
LARGE VERTICAL PENETRATION THROUGH SLAB

1:10 - Typical detail



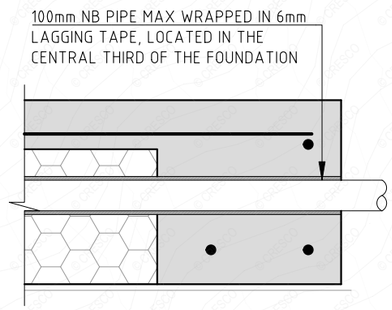
HORIZONTAL PENETRATION THROUGH RIB

1:10 - Typical detail



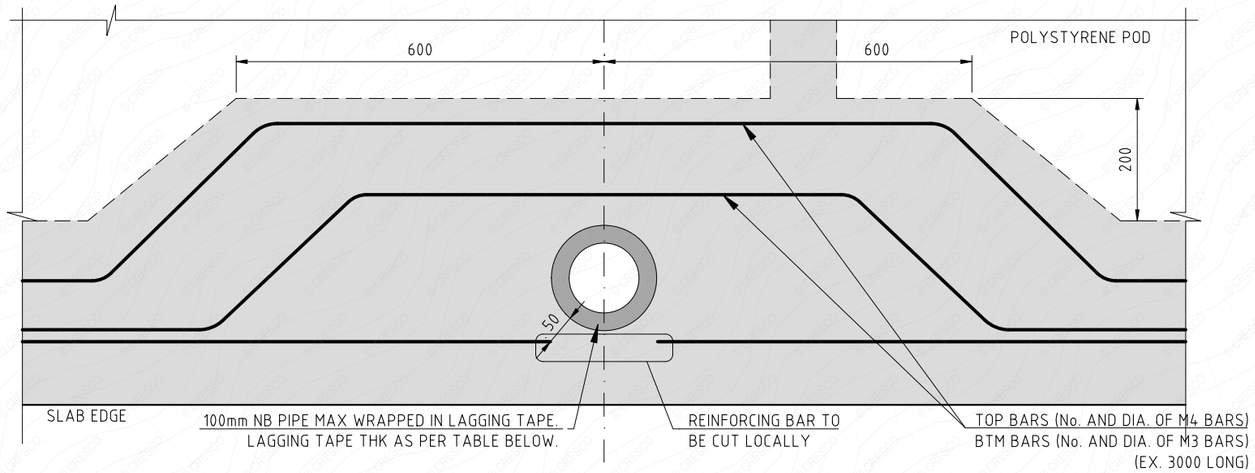
HORIZONTAL PENETRATION THROUGH EDGE BEAM

1:10 - Typical detail



LOCALISED INCREASE IN WIDTH AT EDGE BEAM WHERE VERTICAL SERVICES UP TO 100 mm NB ARE REQUIRED

1:10 - Typical detail



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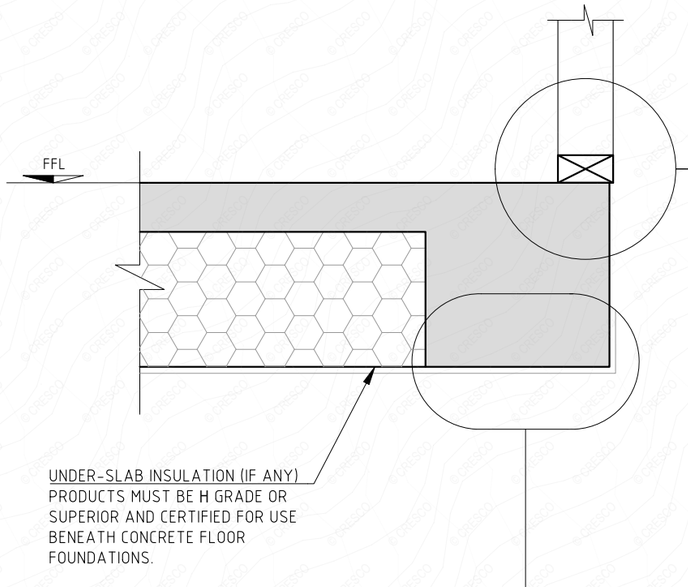
SERVICES PENETRATION DETAILS

DOCUMENT TITLE

SCALE	FORMAT	SHEET
1:10	A3	S6

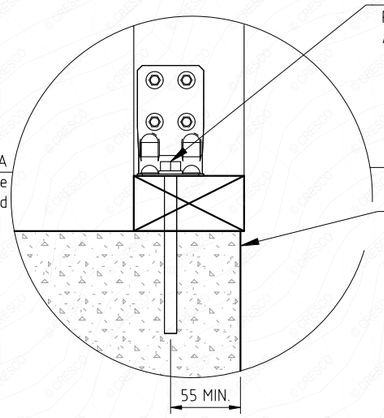
THERMAL INSULATION - NO REBATE

1:10/1:5 - Typical detail



UNDER-SLAB INSULATION (IF ANY) PRODUCTS MUST BE H GRADE OR SUPERIOR AND CERTIFIED FOR USE BENEATH CONCRETE FLOOR FOUNDATIONS.

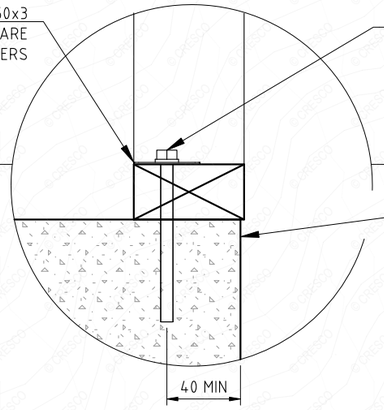
Case A
15 KN hold downs are required



15 KN CONCRETE SCREW ANCHOR
REFER TO THE DETAILS PROVIDED BY ANCHORAGE MANUFACTURERS.

EDGE INSULATION PRODUCTS (IF ANY) MAY BE INSTALLED PARTIALLY OR COMPLETELY UNDERNEATH THE BOTTOM PLATE PROVIDED HOWEVER THAT (1) THE ANCHOR'S SPECIFIED MINIMUM EDGE CLEARENCE IS OBSERVED (2) THE BOTTOM PLATE IS SUPPORTED BY SOLID CONCRETE FOR A WIDTH OF AT LEAST 65mm (3) THE TECHNICAL SPECIFICATIONS OF SELECTED PRODUCTS ARE MET.
SHOULD ANY DISCREPANCIES ARE IDENTIFIED, SEEK ADVICE WITH CRESCO.

Case B
15 KN hold downs are NOT required



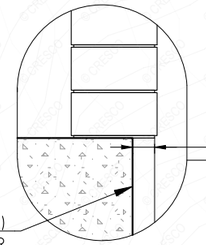
50x50x3 SQUARE WASHERS

CONSULT THE TECHNICAL SPECIFICATIONS OF THE SELECTED ANCHOR/INSULATION PRODUCT TO DETERMINE AN APPROPRIATE SPACING AND MEET THE PERFORMANCE SET OUT IN CL.7.5.12 NZS3604

EDGE INSULATION PRODUCTS (IF ANY) MAY BE INSTALLED PARTIALLY OR COMPLETELY UNDERNEATH THE BOTTOM PLATE PROVIDED HOWEVER THAT (1) THE ANCHOR'S SPECIFIED MINIMUM EDGE CLEARENCE IS OBSERVED (2) THE BOTTOM PLATE IS SUPPORTED BY SOLID CONCRETE FOR A WIDTH OF AT LEAST 65mm (3) THE TECHNICAL SPECIFICATIONS OF SELECTED PRODUCTS ARE MET.
SHOULD ANY DISCREPANCIES ARE IDENTIFIED, SEEK ADVICE WITH CRESCO.

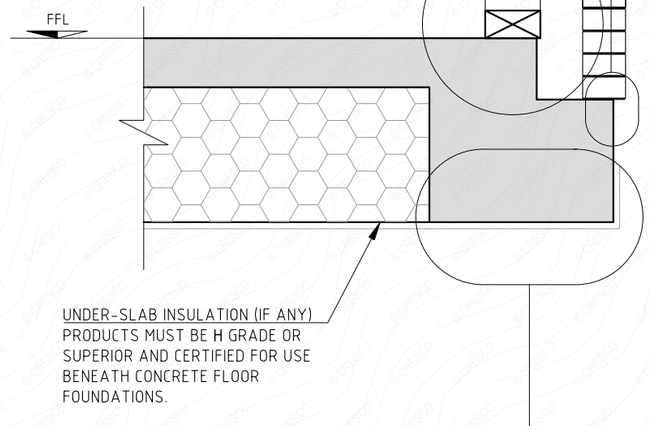
THERMAL INSULATION - REBATE

1:10/1:5 - Typical detail



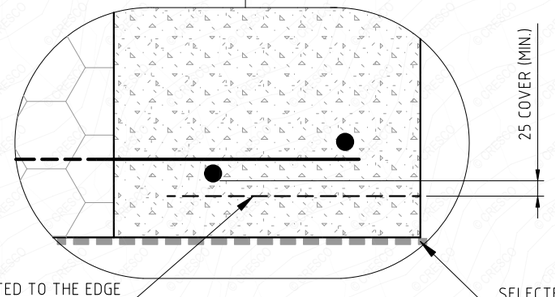
20 OVERHANG (MAX.)

EDGE INSULATION PRODUCTS (IF ANY) MAY BE INSTALLED PARTIALLY OR COMPLETELY UNDERNEATH THE BRICK VENEER PROVIDED HOWEVER THAT THE SPECIFIED MAX OVERHANG IS OBSERVED.



UNDER-SLAB INSULATION (IF ANY) PRODUCTS MUST BE H GRADE OR SUPERIOR AND CERTIFIED FOR USE BENEATH CONCRETE FLOOR FOUNDATIONS.

In the market, there are several products available for the thermal insulation of foundations, and it is the architect's responsibility to select those that best meet the project requirements. Any product that undergoes installation in compliance with the specifications provided in this drawing (i.e., minimum anchor distances from the concrete edge, anchor capacity and durability for securing the bottom plate of the framing in accordance with cl. 7.5.12. NZS3604, and the use of products specifically developed for applications beneath concrete floor foundations with the minimum grade specified in this drawing.



WHEN THE INSTALLATION OF UNDER-SLAB INSULATION IS LIMITED TO THE EDGE BEAMS ONLY USE, THE INSULATION PRODUCTS MUST BE VH GRADE OR SUPERIOR AND CERTIFIED FOR USE BENEATH CONCRETE FLOOR FOUNDATIONS.
INSULATION PRODUCTS MUST NOT EXTEND BEYOND THIS MARK

SELECTED DPM

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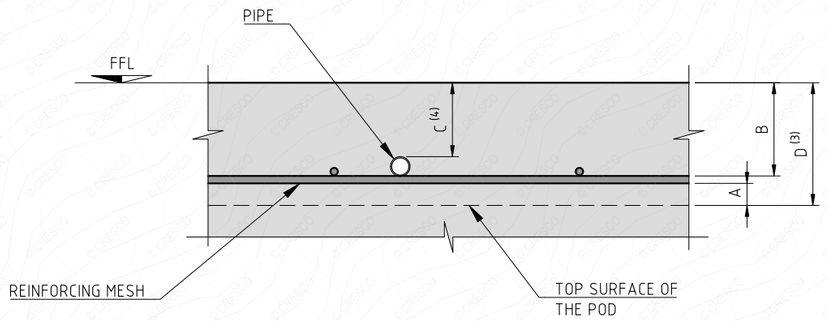
THERMAL INSULATION	1:10	A3	S7
DOCUMENT TITLE	SCALE	FORMAT	SHEET

TOP SLAB DEPTH

1:10 – Typical detail



			A (mm)	B (mm)	C (mm)	D (mm)
→ STANDARD		MESH CHAIRS H40	40	33	N/A	85
POLISHED CONCRETE (1)	GRINDING MAX = 3 mm	MESH CHAIRS H40	40	33	N/A	85
	GRINDING MAX = 10 mm	MESH CHAIRS H40	40	43	N/A	95
HYDRONIC UNDERFLOOR HEATING (2)		MESH CHAIRS H40	40	63	47	115
POLISHED CONCRETE AND HYDRONIC UNDERFLOOR HEATING		MESH CHAIRS H40	40	63	47	115

NOTES:

(1) Check requirements with the architect

(2) Underfloor Heating Pipes Diameter = 16 mm
The contractor shall always check with the installer of the underfloor heating system the compliance of this detail before commencing the works.

(3) The top slab thickness might need to be increased if
reinforcing steel bars are used in combination with the reinforcing mesh. Seek advice with Cresco.

(4) "C" to be at least 40 mm in correspondence of saw cuts.
(5) No saw cuts are required unless where specified in sheet 4.
(6) Not required unless specified in sheet 4.
(7) Depending on the recess requirements.

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LOTS 7-8 AT 72 CAERNARVON DRIVE - HASTINGS

PROJECT				
8529	F012	A	27.08.25	FPA
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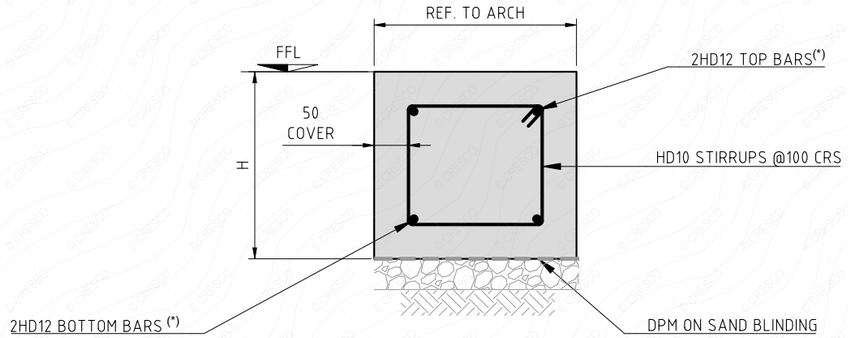
TOP SLAB DEPTH	1:10	A3	S8
DOCUMENT TITLE	SCALE	FORMAT	SHEET

NIB FOOTING

1:10 - Typical detail



(*)Top/bottom bars must be extended 800 mm into the slab or the edge beam

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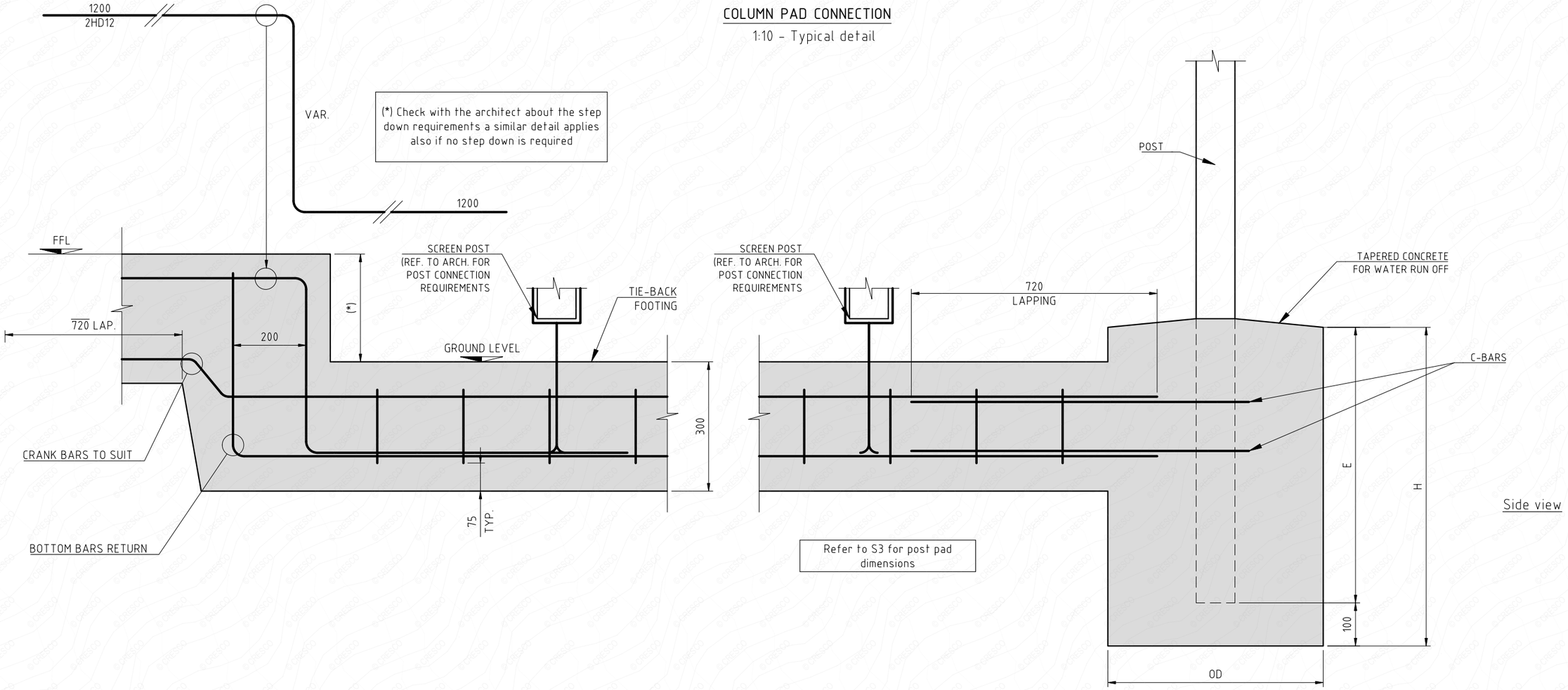
NIB FOOTING — DOCUMENT TITLE

SCALE	FORMAT	SHEET
1:10	A3	S9

COLUMN PAD CONNECTION

1:10 - Typical detail



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COLUMN PAD CONNECTION
DOCUMENT TITLE

SCALE	FORMAT	SHEET
1:10	A3	S10

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STRUCTURAL PLANS

LOTS 11-12 AT 72 CAERNARVON DRIVE - HASTINGS

PROJECT

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GENERAL NOTES

1. Cresco does not accept any liability of any kind whatsoever from other parties than the owner / developer indicated within the PS1.
2. Refer to the architectural plans for dimensions, levels, rebates, recessed areas, steps, services, plumbing layout, holding down bolts and embedded items.
3. Plans to be read in conjuction with the architectural documentation. The architect must be notified for any inconsistency, error or omission in the documents, or between documents.
4. All dimensions and levels are to be checked on site before fabrication and construction.
5. Material performance to comply with all aspects of the NZ Building Code, approved documents and NZS 3604:2011.
6. Apply proprietary materials and components to the manufacturer's express written instructions.
7. Plans A3 format, do not scale drawings.
8. All dimensions are in millimetres unless otherwise noted.
9. The drawings are to be read in conjuction with the installation procedure provided in this sheet.
10. The installer shall assess the acceptability of the ground across the entire building platform before proceeding with the construction.
11. Refer to the geotechnical investigation report and/or geotechnical engineer recommendations for ground improvement works if any.

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Cresco recommends to check that you are working off the most recent version of the plans. In the building industry, the use of misleading or incomplete construction plans may constitue a cause for setbacks on site and avoidable cost escalation. Unfortunately, plans are prone to deterioration, they may get lost and they often need to be revised during construction. Introducing iMARK™, the easy gateway for an instant access to the latest revision of all your documents. With a simple snap of your smartphone on just one document, you will be able to download from the cloud the most recent version of the set of documents making up your project. By using the iMARK™ you willl have access to all your files from the hard copy. Any QR code reader can be used to scan the iMARK™.

1. SITE PREPARATION
All vegetation, topsoil and other organic or deleterious material shall be removed from the area to be covered by the building (formation area) prior to commencing construction of the system.

2. EARTHWORKS
The formation area shall be prepared in accordance of the provisions within S2 and under supervision of a qualified professional.
Where fill is required to achieve a specific level or a suitable bearing capacity, the fill is subject to site verification and must be certified by qualified professional or U.N.O, for fills that are less than 400 mm deep, shall be installed in accordance with Clause 7.5.3 of NZS 3604:2011 "Timber Framed Buildings". The installer/ engineer shall get the acceptability of the ground over the entire building platform assessed before proceeding with the construction.
Council inspectors might want to inspect site before slab construction commences.

3. PLUMBING AND SERVICES (beneath the system)
Plumbing and services required beneath the system should preferably be conveyed underground to their plan location then brought up through the system. The trenching, placing, and bedding of the pipes/ducts and the backfilling of the trenches shall conform to the requirements of the consent documentation.

4. SAND BLINDING
A layer of sand shall be placed, screeded and compacted over the building platform, extending to at least 300 mm beyond the system perimeter. The maximum thickness of this blinding layer shall be 30 mm. If the ground has been softened (i.e. has a muddy surface layer due to construction activities), remove the softened material before placing the sand. Granular fill required If excavation lowers the ground surface to more than 30 mm below the underside of the foundation.

5. DAMP PROOF MEMBRANE
The RibRaft® Thermox DPM or NZS 3604 compliant DPM shall be laid over the entire building platform (to the outer edge of the perimeter at least) directly on top of the sand blinding layer. The joints shall be lapped 50 mm and sealed with suitable pressure sensitive tape. All penetrations of the DPM by plumbing and services or punctures during construction shall also be sealed with suitable pressure sensitive tape.

6. EDGE FORMWORK
The edge formwork shall be constructed ensuring that the requirements of NZS 3109:1997 "Concrete Construction" are adhered to. The formwork shall be adequately supported and braced to prevent any buckling or warping. If the wall is to be constructed in masonry veneer, formwork for a masonry veneer rebate should be adequately fixed to the perimeter formwork. Foundation dimensions and insulation product specifications to be checked when edge insulation is required by the architect. Foundation positioning and levels might need to be certified by a land surveyor before pouring, it is recommended to organize the inspection at this stage.

7. LAYING THE PODS AND KEYSTONES
The polystyrene pods shall be laid out over the DPM in a regular waffle pattern ensuring direct contact with the ground across the entire pod. The edge beams and the internal stiffenings shall be formed using the approved 300 mm spacers. These shall be placed at a maximum of 1200 mm centres along the perimeter of the slab and one per pod or part pod. Except where an internal stiffening is required, each pod or part pod shall always be separated by 100 mm using a minimum of one approved 100 mm spacer along each edge of each pod or part pod. The ribs in both directions shall form a waffle pattern throughout the slab. It is essential that the ribs and edge beams are straight when the concrete is poured, i.e. the pods need to be lined up.

8. PLUMBING AND SERVICES (within the system)
Services shall be placed in accordance with the details provided by Cresco and along orthogonal directions matching the pods layout. Allowed diameters of the services/ducts, positioning constraints and localized strengthenings are dictated within this set of plans.

9. REINFORCING STEEL BARS
Reinforcing bars shall conform to NZS 4671:2001. All bars shall be of deformed type (Grade 500E). All bends shall be made cold without fracture and in accordance with the bend diameters given in NZS 3109 "Concrete Construction".
Unless otherwise noted, reinforcing bars shall lap as follow:
10 mm diameter bars: 600 mm
12 mm diameter bars: 720 mm
16 mm diameter bars: 960 mm
Unless otherwise specified, 50 mm cover to the edge of the beam and 50 mm cover to the DPM surface shall be allowed for. Approved spacers are designed to provide the required concrete cover.

10. MESH REINFORCING
Top reinforcing steel in the top slab, unless otherwise specified, shall consist of Welded Reinforcing Mesh complying with AS/NZS 4671:2001 and specification provided in S3, a lower characteristic stress of 500 MPa and ductility class E. The Reinforcing Mesh shall be placed over the pods and supported on 40 mm mesh chairs spaced at a minimum of 1200 mm centres, with at least two mesh chairs placed per pod and at least one per part pod. The Reinforcing Mesh shall lap a minimum of 225 mm or 1 grid space + 50 mm (which ever is the greater). The Reinforcing Mesh shall be tied (1 @600 mm) at all laps.
U.N.O. Two bars (Grade 500E and diameter specified in sheet 3), 1200mm long shall be placed across the corner, tied to the top of the mesh at re-entrant corners at 200 mm centres, with 50 mm cover from the internal corner.

11. CONCRETE PLACING AND FINISHING
Concrete placing, finishing and curing shall be in accordance with NZS 3109:1997, Clause 7. Concrete to be poured monolitically. U.N.O. one of the following concrete mixes shall be used in the system:
1. f'c = 20 MPa 100mm slump structural mix.
2.f'c = 25 MPa 100 mm slump pump for buildings constructed in 'zone D' and 'sea spray zone' (including all areas within 500 m of the coastincluding harbours, 100 m from tidal estuaries and sheltered inlets, all offshore islands and all other areas shown in the map in 4.2.3.3 of NZS3604).
The concrete shall be compacted with the use of an immersion vibrator around all steel and into all corners of the formwork. Screeding with the aid of a level shall commence immediately after compaction. Unless specifically installed as a screeding datum, the top of the formwork shall not be assumed as level and thus shall not be used for screeding purposes. Final finishing with a trowel shall take place after all the bleed water has evaporated. The edge of the slab and rebates shall be tooled to prevent chipping of the top of the slab.Early age care of the slab shall be in accordance with good trade practice appropriate for the weather conditions.
The surface shall be a blemish free surface to class U3 finish (refer NZS 3114:1987).
Proper curing of the concrete must take place immediately after finishing the concrete.
One of the following methods of curing is recommended: (i) ponding or continuous sprinkling of water (ii) placing a wet covering or plastic membrane over the slab or (iii) using liquid membrane curing compounds. Immediate and continuous wet curing to reduce the maximum temperature and/or raise the minimum temperature can reduce the risk of this type of cracking.
Shrinkage control joints (if required in S3) shall be saw cut after hardening.
The saw cut shall be cut to a depth of 25mm and shall be cut no later than 24 hours in summer, or 48 hours in winter. The formwork shall not be removed prior to 12 hrs. after the slab has been finished. No loads to be placed on the system before adequate curing has taken place.

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GENERAL NOTES	NTS	A3	S1
DOCUMENT TITLE	SCALE	FORMAT	SHEET

INSPECTION SCHEDULE

Should the Building Consent Authority require a Producer Statement - Construction Review (PS4) to be issued by CRESCO then, as a minimum, the following site visits will be required during construction:

Inspection of cut / fill (*)building platform:
Bearing Capacity Confirmation (BY OTHERS)

Pre-pour visit:
Reinforcing, pipes penetrations details, Pods layout (BY CRESCO)

(*) U.N.O by the geotechnical engineer, fill compaction density assessment is required for fills with a depth of 400 mm or more. For those with a depth of less than 400 mm the instructions provided in NZS3604 clause 7.5.3.1 are applicable unless specific unexpected issues occur (e.g. if a soft spot is identified during the cut inspection), in which case the fill compaction density assessment may still be required. When the compaction density assessment is required additional visits are likely to be needed.

A suitably qualified geotechnical engineer shall be engaged by the client to perform the the inspectin of cut/fill building platform. The owner (or nominee) is responsible for advising CRESCO when the foundation is ready for a prepour visit. A 72 hours notice is required (see instructions below). A PS4 cannot be issued unless the specified visits on this page are completed and in all cases where written approval from a CRESCO engineer is missing. Producer Statement documentation must be requested within 1 year of final inspection taking place.

At the completion of the work, the Contractor shall provide a PS3 covering all of the structural work. The format of the PS3 must be acceptable to CRESCO.
The PS3 must state that the works have been completed in accordance with all of the Contract Documents, Contract Instructions and Site Reports.

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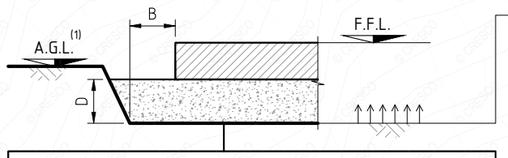
BUILDING PLATFORM

The installer shall assess the acceptability of the ground across the entire building platform before proceeding with the construction. Refer to the geotechnical investigation report and/or geotechnical engineer recommendations for ground improvement works if any.



ULTIMATE BEARING CAPACITY (UBC, kPa)≥	200
ENGINEERED FILL DEPTH (2) (D, mm):	200
ENGINEERED FILL EXTENSION (B, mm):	200
A29 BIDIM GEOTEXTILE AT BASE:	---
GEOGRID (Number of layers) (3):	---

SITE VERIFICATION CHECKS:

- ULTIMATE BEARING CAPACITY (UBC)
- NO INTERFERING BURIED SERVICES
- NO EROSION OR LAND INSTABILITY
- NO UNCONTROLLED LAND FILLING
- NO ORGANINCS

The installer shall get the acceptability of the ground across the entire building platform assessed before proceeding with the construction.

Refer to the geotechnical investigation report and/or geotechnical engineer recommendations for ground improvement works if any.

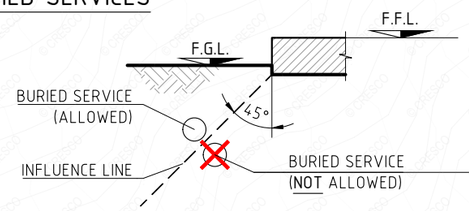
NOTES

(1) A.G.L. = -225 mm F.F.L. unless otherwise noted in the architectural plans

(2) Engineered fill: AP40 or AP65 95% dry density 200 mm compaction layers (max). when engineered fill depth "D" is zero, no engineering fill is required.

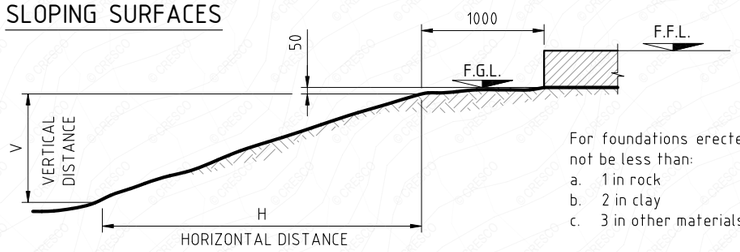
(3) Geogrid (when required) to be placed with the first geogrid sheet at base of excavation and subsequent geogrid layers @ 200 mm intervals

BURIED SERVICES



Buried services that may require future maintenance (e.g. public infrastructure) cannot be installed in this area.

SLOPING SURFACES



For foundations erected at the top of slope the H/V ratio shall not be less than:
a. 1 in rock
b. 2 in clay
c. 3 in other materials

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GENERAL NOTES — NTS — A3 — S2
DOCUMENT TITLE — SCALE — FORMAT — SHEET

CONCRETE STRENGTH

f'c ≥ 20 MPa concrete for all foundations except those constructed in sea spray zones (including all areas within 500 m of the coast, harbours, 100 m from tidal estuaries and sheltered inlets, all offshore islands and all other areas shown in the map in 4.2.3.3 of NZS3604) where **f'c ≥ 25 MPa concrete** is required.

NOTES

(1) No saw cuts are required unless specified.

(2) Crack controll bars typical at each reentrant corner except for reentrant corners where floor saw cuts have been specified. Do not exceed 50 mm cover from beam outer edge / rebate

(3) Additional reinforcing steel other than specified within the reinforcing summary might be needed as specified on the details included within this set of drawings (e.g. at pipe penetrations, steps, stiffenings...)

(4) At least 3 bottom bars when edge beam/internal stiffenings width ≥ 400 mm and at a rate of 1 additional bar per 100 mm of width increase (i.e. 3 bars for 400 mm width, 4 bars for 500 mm width and so on).

(5) The symbol represents an approximated location. Ref. to the architectural/bracing design to determinate the exact position of the hold down.

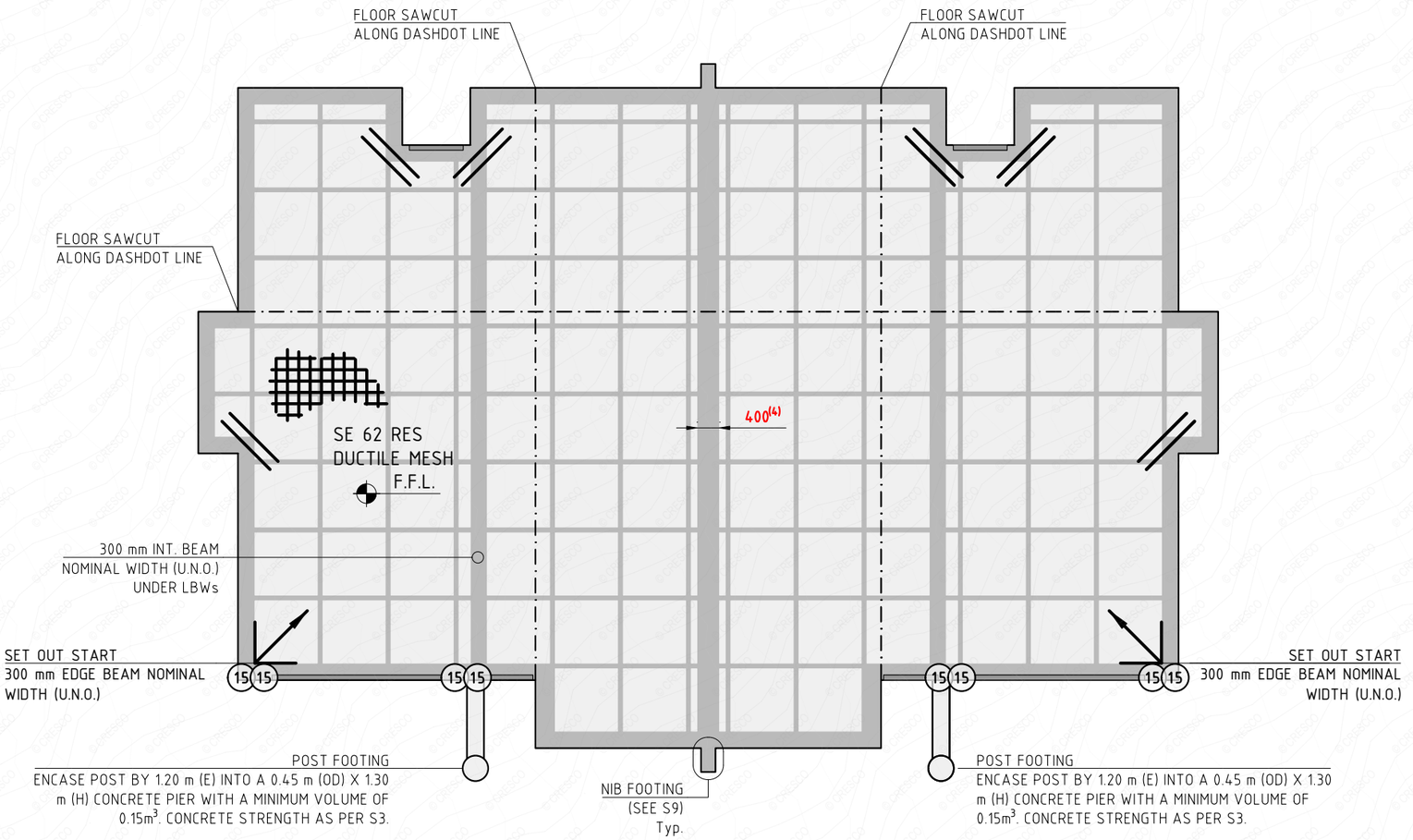
(6) Check requirement for joinery rebate (if any)

(7) If an edge insulation (25mm thk max) is used, the edge beam measurements shown on the foundation layout should not be interpreted as the width of the solid concrete. Instead, they represent the outer boundary of the foundation, which includes the edge insulation.

Refer to acceptable solution E2/AS2 provided for "ZONE E" for the corrosion protection requirements for structural fixings in "ZONES D"

DESIGN SUMMARY (3)

SITE CLASSIFICATION (LIQUEFACTION)	TC1
SITE CLASSIFICATION (EXPANSIVITY)	---
WAFFLE RAFT TYPE	RIBRAFT POLY
TOP SLAB THICKNESS (T)	85 mm
WAFFLE RAFT OVERALL DEPTH (H)	305 mm
RIB SPACING	1200 mm
INTERNAL RIB AVERAGE WIDTH	100 mm
EDGE BEAM MINIMUM WIDTH (B1)	300 mm (U.N.O.)
INTERNAL THICKENING MINIMUM WIDTH (B2)	300 mm (U.N.O.)
INTERNAL RIB BTM REINFORCING (M1)	1 HD12
INTERNAL RIB TOP REINFORCING (M2)	NOT REQUIRED
EDGE BEAM BTM REINFORCING (M3)	2 HD12 (4)
EDGE BEAM TOP REINFORCING (M4)	1 HD12
CRACK CONTROL REINFORCING (M5)	2 HD12 (2)
INTERNAL THICKENING BTM REINFORCING (M6)	2 HD12 (4)
INTERNAL THICKENING TOP REINFORCING (M7)	2 HD12
REINFORCING MESH	SE62 TOP
MESH CHAIRS	25/40 TYPE REQUIRED



THE FOUNDATION LAYOUT COMPLIES WITH THE BRACING DESIGN AS PROVIDED BY CLIENT/ARCHITECT. CRESCO SHALL BE NOTIFIED FOR ANY VARIATIONS OF THE BRACING DESIGN

THE FOUNDATION LAYOUT COMPLIES WITH THE TRUSS DESIGN AS PROVIDED BY CLIENT / ARCHITECT WHICH MAY CONTAIN LOAD BEARING WALLS AND / OR POINT LOADS

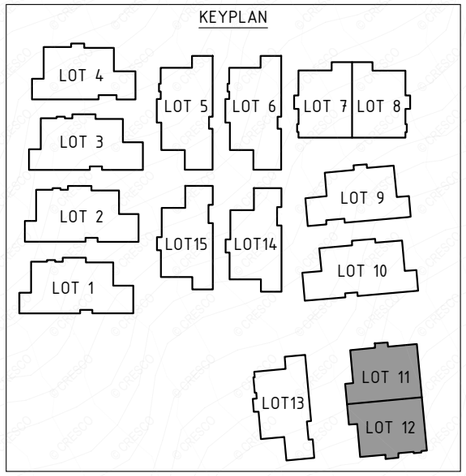
(15) 15 KN hold down bolt (If specified in this plan) (5)

POLYSTYRENE POD (1100X1100X220 TYP.)

JOINERY REBATE REF. TO ARCH. PLANS

CRACK CONTROL BARS 2 HD12 L=1200 mm (2) (If specified in this plan)

KEYPLAN



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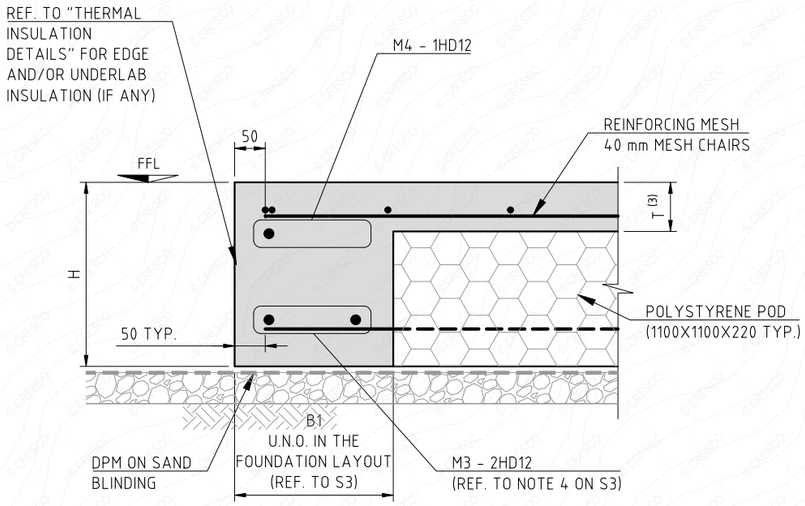
FOUNDATION LAYOUT
DOCUMENT TITLE

1:100
SCALE

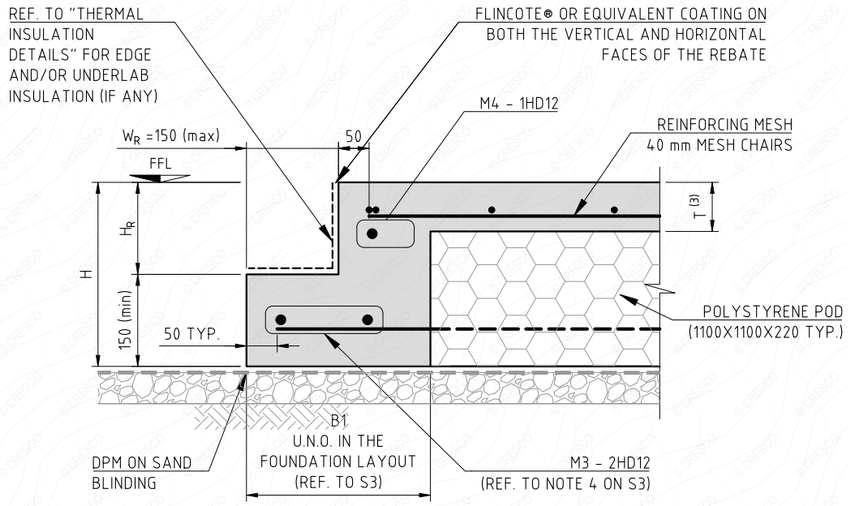
A3
FORMAT

S3
SHEET

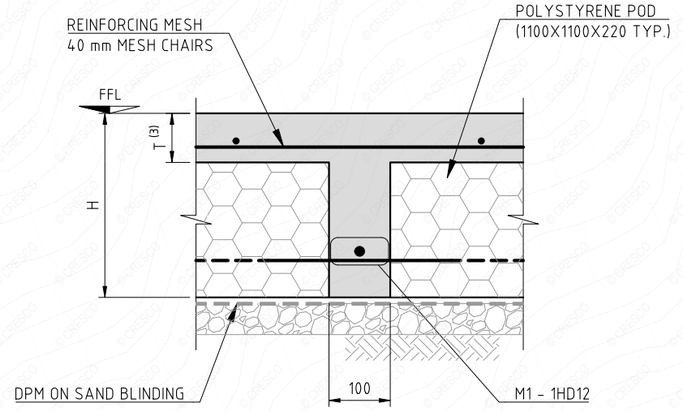
FOUNDATION EDGE (WITHOUT REBATE)
1:10 - Typical detail



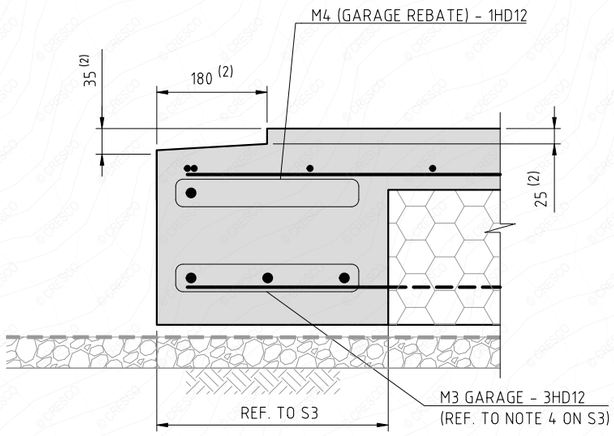
FOUNDATION EDGE (WITH REBATE)
1:10 - Typical detail



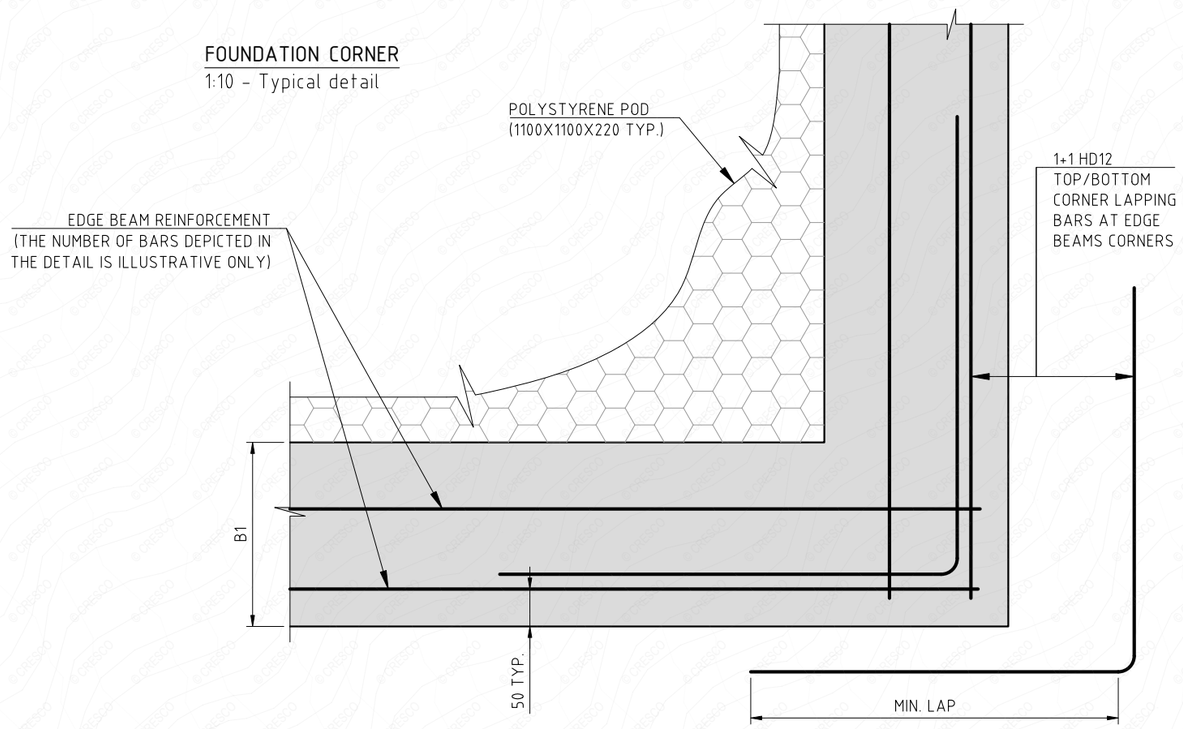
INTERNAL RIB
1:10 - Typical detail



GARAGE DOOR REBATE
1:10 - Typical detail



FOUNDATION CORNER
1:10 - Typical detail



NOTES:

(1) Refer to the architectural plans for rebate measures. Under no circumstances W_R or H_R shall be greater than 150 mm.

(2) Unless otherwise noted in the architectural plans

(3) The contractor shall check the top slab thickness with the provisions of detail S8.

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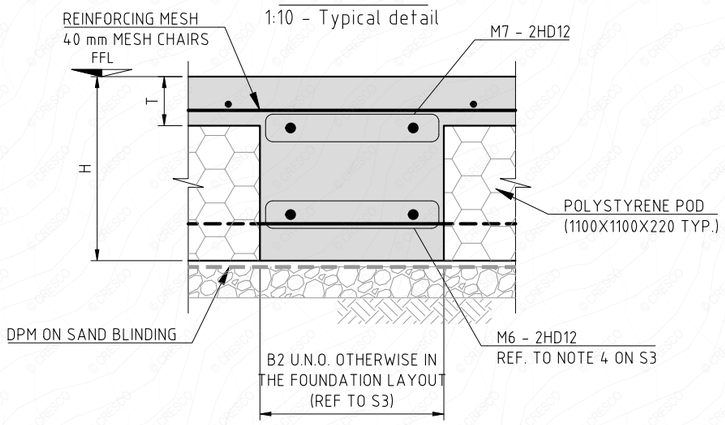
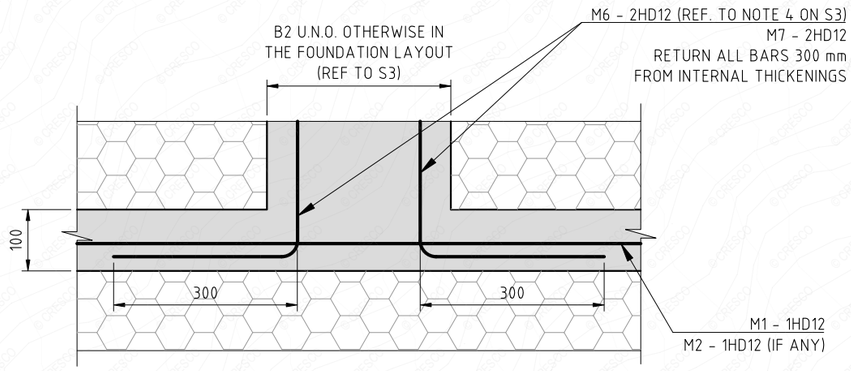
EDGE BEAMS AND RIBS DETAILS
DOCUMENT TITLE

SCALE	FORMAT	SHEET
1:10	A3	S4

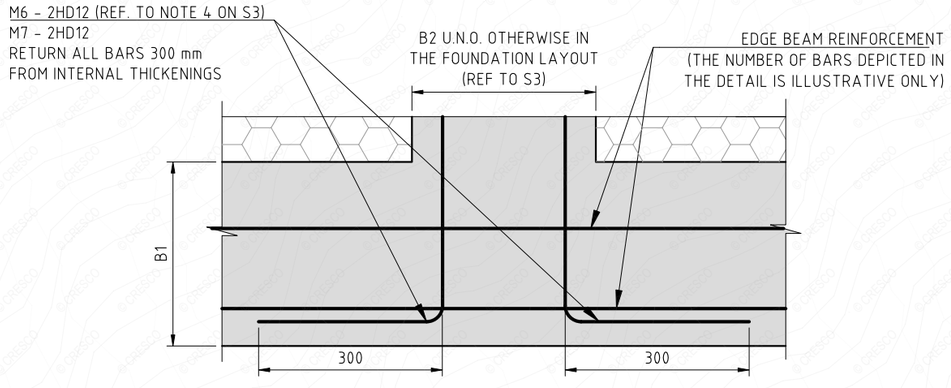
INTERNAL BEAM
1:10 - Typical detail



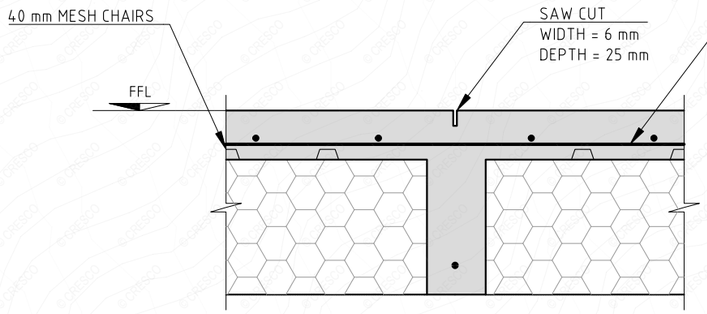
INTERNAL BEAM CROSSING RIBS
1:10 - Typical detail



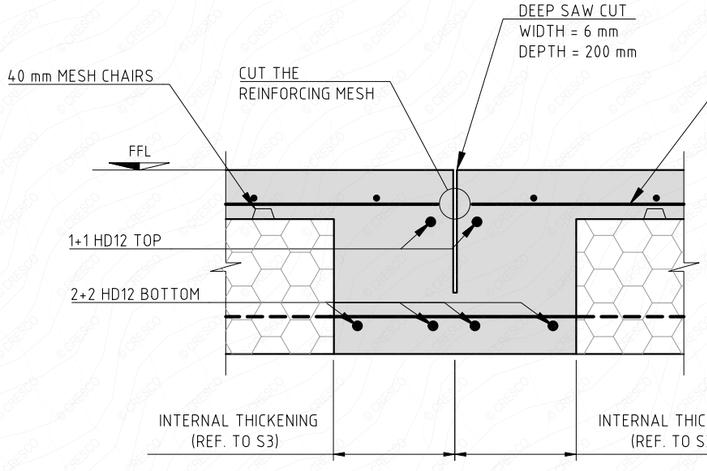
INTERNAL BEAM CROSSING EDGE BEAM
1:10 - Typical detail



FLOOR SAWCUT (where/if specified in S3)
1:10 - Typical detail



Case A
Standard saw cut (IF ANY)



Case B
Deep Floor Sawcut
(IF ANY)

Bottom reinforcing bars NOT to be cut.

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DOCUMENT TITLE	SCALE	FORMAT	SHEET
INTERNAL BEAM AND FLOOR SAWCUT	1:10	A3	S5

UNDER SLAB RUNNING OF SERVICES

Services ducts shall be conveyed underground to their plan location then brought up through the polystyrene pod and the concrete floor slab, within the limitation imposed by the table below.
Services shall not be placed within any concrete except to cross that section of concrete i.e. services shall not run along ribs or edge beams. Pipes penetrating through concrete shall be:
> Installed at right angles to the slab surface.
> Lagged with an impermeable material for the full depth of the concrete penetration.
> Lagging tape thickness for vertical penetrations must be as per table "MINIMUM LAGGING TAPE THICKNESS FOR VERTICAL PENETRATIONS". Lagging tape thickness for horizontal penetration to be at least 6mm thk.

Any services crossing ribs or the edge beam horizontally shall be placed only within the middle third of the member. Except as noted in this sheet, services crossing the ribs vertically shall also be constrained to the middle third of the width of the edge or internal load bearing rib and at no stage shall any of the reinforcement bars be relocated or cut to allow for the services (it is acceptable, however to cut the mesh). In some instances this will dictate the location of the ribs. The pods shall be cut to allow for this and if necessary, the spacing of the ribs shall be decreased locally. There shall be 600mm minimum clear spacing in each direction between penetrations through the system.

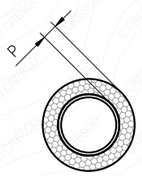
MAXIMUM DIAMETER OF PIPE SERVICES		
ELEMENT	VERTICAL SERVICES	HORIZONTAL SERVICES
300mm wide edge beam	50mm nominal bore pipe	100mm NB pipe
500mm localised wide edge beam (1)	100mm NB pipe	100mm NB pipe
300mm wide internal load bearing rib	50mm NB pipe	100mm NB pipe
100mm wide internal rib	Nil	100mm NB pipe
Slab	100mm NB pipe, or for large services up to 450mm square (3)	Nil

(1) For situations where a 100mm diameter pipe is required to pass vertically through the edge beam or internal load bearing beam, the beam shall be locally increased in width to a minimum of 500mm wide. This shall be achieved by keeping flush the outside face of the edge beam and removing 200mm from the pod. The width shall remain at 500mm for a distance of 600mm beyond the service pipe.

(2) Where a gas pipe line runs through the floor system, in addition to the requirements above, the pipeline shall enter the building through the outside face of the perimeter foundation beam, be concrete encased and located in the plane of the pods. The aim being to ensure that damage to the gas pipe will most likely occur outside the building envelope should movement occur between the ground and the floor system in a large earthquake.

(3) Larger penetrations or voids up to 450mm square (e.g. for shower waste/traps) are permitted through the slab provided all the conditions of this note are met. These openings shall be trimmed with 1 HD12 bar 1500mm long placed along each side of the opening, tied to the mesh. One set of parallel bars shall be placed on top of the mesh and the other set placed under the mesh. These openings shall not be placed over a rib or edge beam. If necessary, the rib spacing shall be reduced or the pod layout altered to ensure that the opening occurs solely in the slab above a polystyrene pod. Penetrations such as these shall not be installed in garages or other areas where large (>3kN) point loads could be present. Only one penetration greater than 120mm is permitted in the slab above any single pod or part pod. Where two large openings are required to be in close proximity, an internal rib shall separate them. For these large penetrations/voids in the slab, the services shall not be within 25mm of the edges of the void through which they pass, and the opening shall be sealed to prevent materials entering the subfloor cavities.

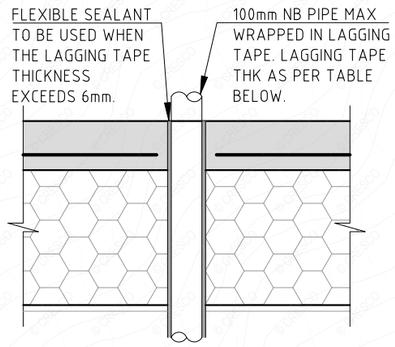
MINIMUM LAGGING TAPE THICKNESS FOR VERTICAL PENETRATIONS



TYPE OF SOIL	LAGGING TAPE THK (P)
STABLE SOIL (GOOD GROUND, TC1 - LIKE)	6 MIN
EXPANSIVE SOIL (CLASS S-M)	20 MIN
EXPANSIVE SOIL (CLASS H1,H2,E)	25 MIN / 40 RECOMMENDED AS PER AS2870
LIQUEFACTION - PRONE SOIL (TC2 - LIKE)	25 MIN / 60 RECOMMENDED AS PER MBIE GUIDANCE

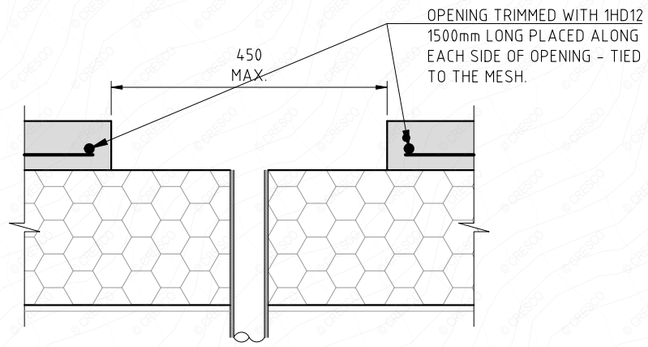
VERTICAL PENETRATION THROUGH SLAB

1:10 - Typical detail



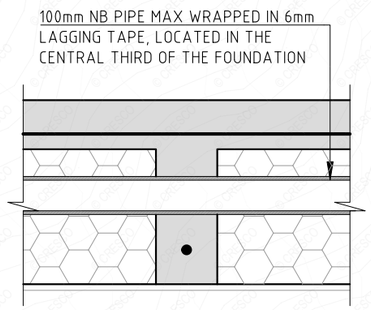
LARGE VERTICAL PENETRATION THROUGH SLAB

1:10 - Typical detail



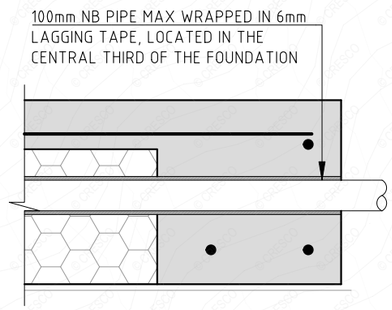
HORIZONTAL PENETRATION THROUGH RIB

1:10 - Typical detail



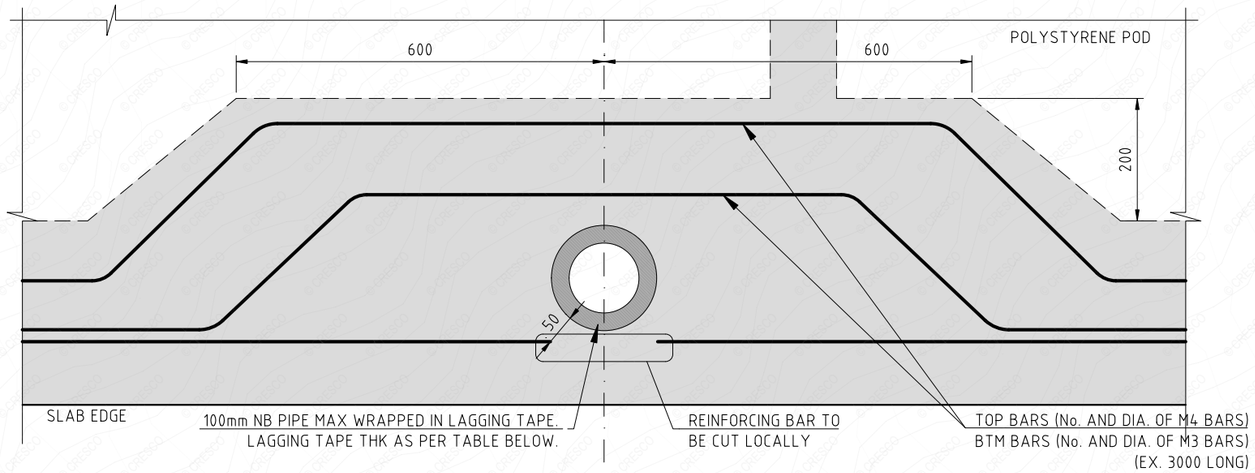
HORIZONTAL PENETRATION THROUGH EDGE BEAM

1:10 - Typical detail



LOCALISED INCREASE IN WIDTH AT EDGE BEAM WHERE VERTICAL SERVICES UP TO 100 mm NB ARE REQUIRED

1:10 - Typical detail



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SERVICES PENETRATION DETAILS — DOCUMENT TITLE

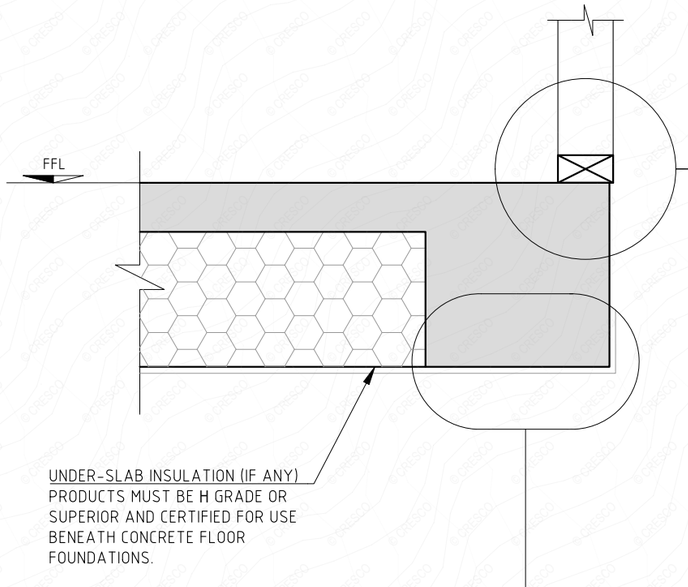
1:10 — SCALE

A3 — FORMAT

S6 — SHEET

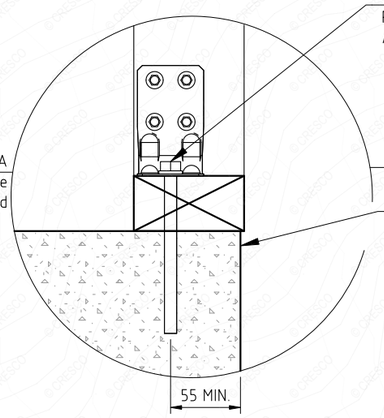
THERMAL INSULATION - NO REBATE

1:10/1:5 - Typical detail



UNDER-SLAB INSULATION (IF ANY) PRODUCTS MUST BE H GRADE OR SUPERIOR AND CERTIFIED FOR USE BENEATH CONCRETE FLOOR FOUNDATIONS.

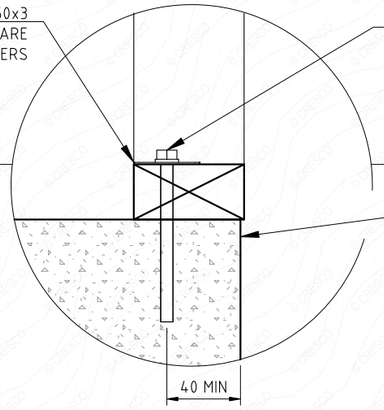
Case A
15 KN hold downs are required



15 KN CONCRETE SCREW ANCHOR
REFER TO THE DETAILS PROVIDED BY ANCHORAGE MANUFACTURERS.

EDGE INSULATION PRODUCTS (IF ANY) MAY BE INSTALLED PARTIALLY OR COMPLETELY UNDERNEATH THE BOTTOM PLATE PROVIDED HOWEVER THAT (1) THE ANCHOR'S SPECIFIED MINIMUM EDGE CLEARENCE IS OBSERVED (2) THE BOTTOM PLATE IS SUPPORTED BY SOLID CONCRETE FOR A WIDTH OF AT LEAST 65mm (3) THE TECHNICAL SPECIFICATIONS OF SELECTED PRODUCTS ARE MET.
SHOULD ANY DISCREPANCIES ARE IDENTIFIED, SEEK ADVICE WITH CRESCO.

Case B
15 KN hold downs are NOT required

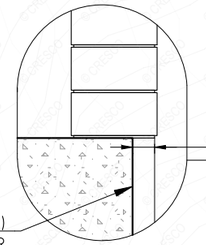


CONSULT THE TECHNICAL SPECIFICATIONS OF THE SELECTED ANCHOR/INSULATION PRODUCT TO DETERMINE AN APPROPRIATE SPACING AND MEET THE PERFORMANCE SET OUT IN CL.7.5.12 NZS3604

EDGE INSULATION PRODUCTS (IF ANY) MAY BE INSTALLED PARTIALLY OR COMPLETELY UNDERNEATH THE BOTTOM PLATE PROVIDED HOWEVER THAT (1) THE ANCHOR'S SPECIFIED MINIMUM EDGE CLEARENCE IS OBSERVED (2) THE BOTTOM PLATE IS SUPPORTED BY SOLID CONCRETE FOR A WIDTH OF AT LEAST 65mm (3) THE TECHNICAL SPECIFICATIONS OF SELECTED PRODUCTS ARE MET.
SHOULD ANY DISCREPANCIES ARE IDENTIFIED, SEEK ADVICE WITH CRESCO.

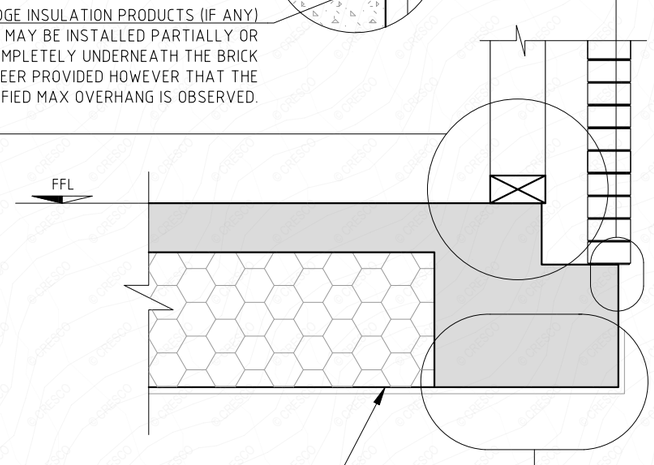
THERMAL INSULATION - REBATE

1:10/1:5 - Typical detail



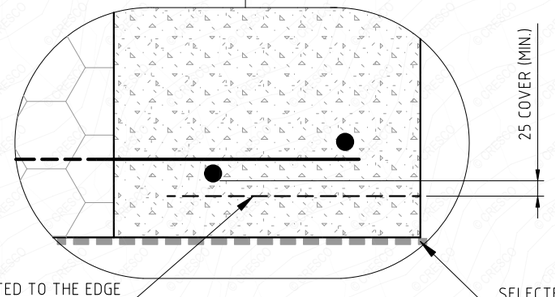
20 OVERHANG (MAX.)

EDGE INSULATION PRODUCTS (IF ANY) MAY BE INSTALLED PARTIALLY OR COMPLETELY UNDERNEATH THE BRICK VENEER PROVIDED HOWEVER THAT THE SPECIFIED MAX OVERHANG IS OBSERVED.



UNDER-SLAB INSULATION (IF ANY) PRODUCTS MUST BE H GRADE OR SUPERIOR AND CERTIFIED FOR USE BENEATH CONCRETE FLOOR FOUNDATIONS.

In the market, there are several products available for the thermal insulation of foundations, and it is the architect's responsibility to select those that best meet the project requirements. Any product that undergoes installation in compliance with the specifications provided in this drawing (i.e., minimum anchor distances from the concrete edge, anchor capacity and durability for securing the bottom plate of the framing in accordance with cl. 7.5.12. NZS3604, and the use of products specifically developed for applications beneath concrete floor foundations with the minimum grade specified in this drawing.



WHEN THE INSTALLATION OF UNDER-SLAB INSULATION IS LIMITED TO THE EDGE BEAMS ONLY USE, THE INSULATION PRODUCTS MUST BE VH GRADE OR SUPERIOR AND CERTIFIED FOR USE BENEATH CONCRETE FLOOR FOUNDATIONS.
INSULATION PRODUCTS MUST NOT EXTEND BEYOND THIS MARK

SELECTED DPM

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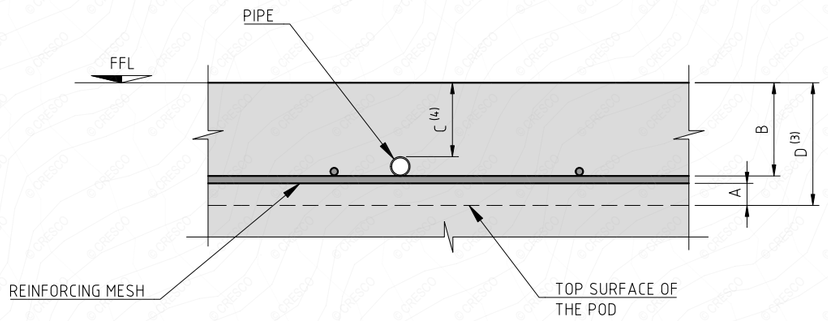
THERMAL INSULATION
DOCUMENT TITLE

1:10 SCALE
A3 FORMAT
S7 SHEET

TOP SLAB DEPTH

1:10 – Typical detail



			A (mm)	B (mm)	C (mm)	D (mm)
→ STANDARD		MESH CHAIRS H40	40	33	N/A	85
POLISHED CONCRETE (1)	GRINDING MAX = 3 mm	MESH CHAIRS H40	40	33	N/A	85
	GRINDING MAX = 10 mm	MESH CHAIRS H40	40	43	N/A	95
HYDRONIC UNDERFLOOR HEATING (2)		MESH CHAIRS H40	40	63	47	115
POLISHED CONCRETE AND HYDRONIC UNDERFLOOR HEATING		MESH CHAIRS H40	40	63	47	115

NOTES:

(1) Check requirements with the architect

(2) Underfloor Heating Pipes Diameter = 16 mm
The contractor shall always check with the installer of the underfloor heating system the compliance of this detail before commencing the works.

(3) The top slab thickness might need to be increased if
reinforcing steel bars are used in combination with the reinforcing mesh. Seek advice with Cresco.

(4) "C" to be at least 40 mm in correspondence of saw cuts.
(5) No saw cuts are required unless where specified in sheet 4.
(6) Not required unless specified in sheet 4.
(7) Depending on the recess requirements.

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TOP SLAB DEPTH — DOCUMENT TITLE

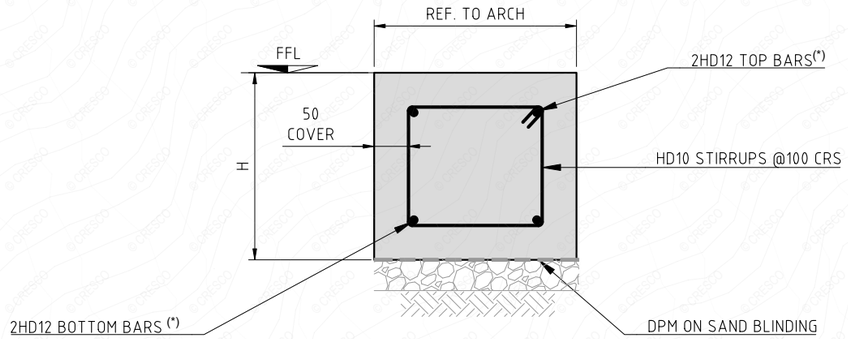
1:10 — SCALE

A3 — FORMAT

S8 — SHEET

NIB FOOTING

1:10 - Typical detail



(*)Top/bottom bars must be extended 800 mm into the slab or the edge beam

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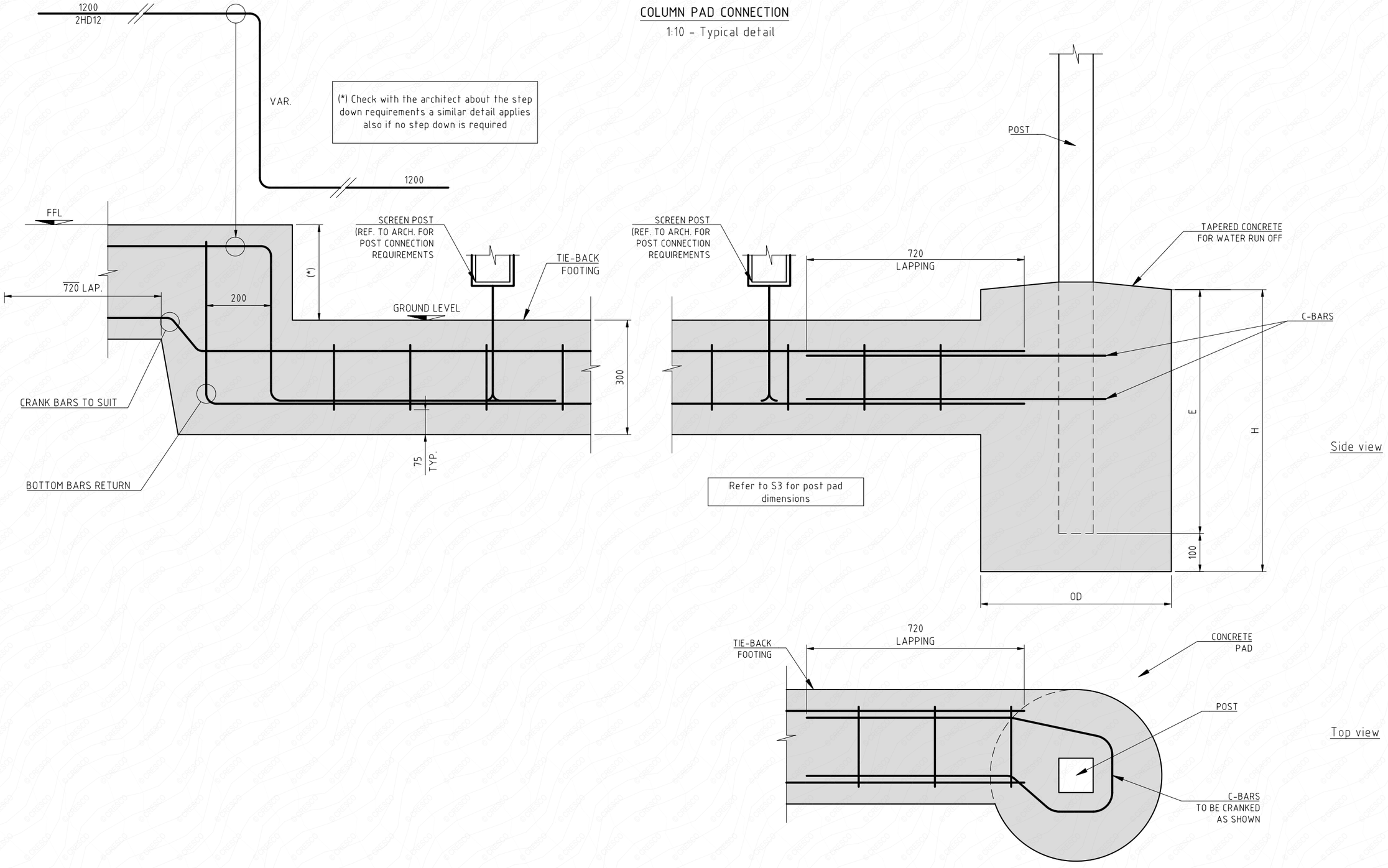
NIB FOOTING — DOCUMENT TITLE

SCALE	FORMAT	SHEET
1:10	A3	S9

COLUMN PAD CONNECTION

1:10 - Typical detail



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COLUMN PAD CONNECTION
DOCUMENT TITLE

SCALE	FORMAT	SHEET
1:10	A3	S10