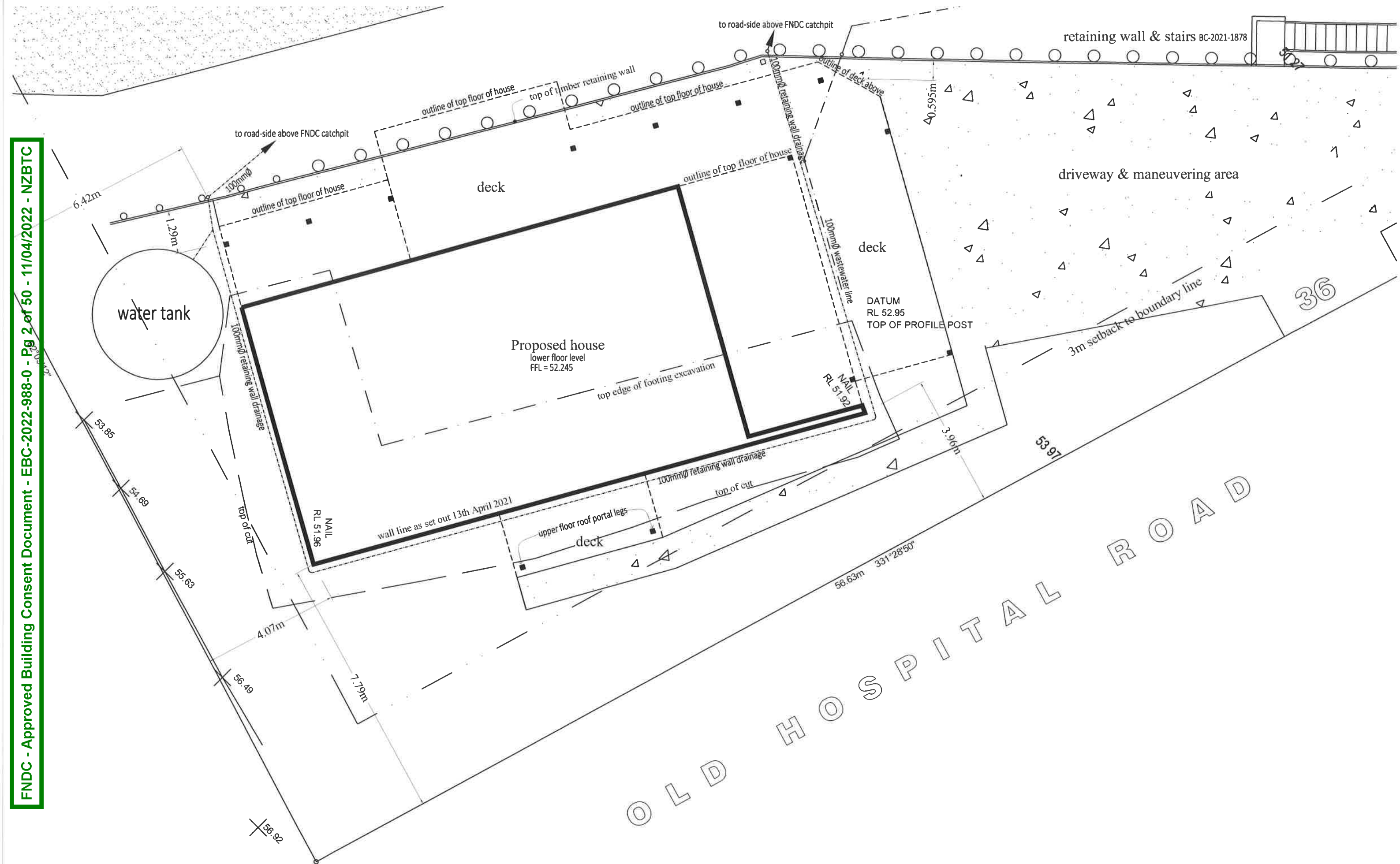


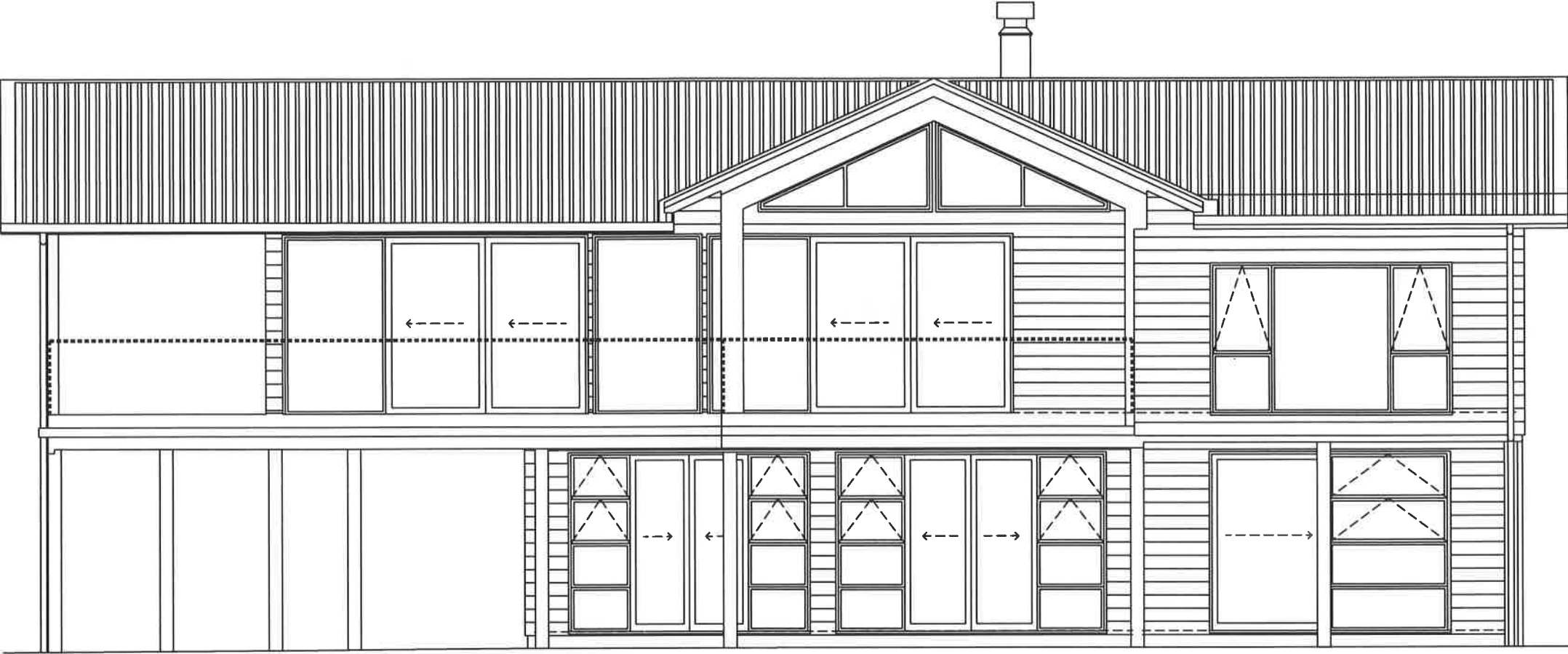


26.62% of site has impermeable surfaces
10% impermeable surfaces is permitted
 see RC2200280



site plan detail 1:100
Proposed house for Jenny & Peter Morgan, 36 Old Hospital Road, Whangaroa

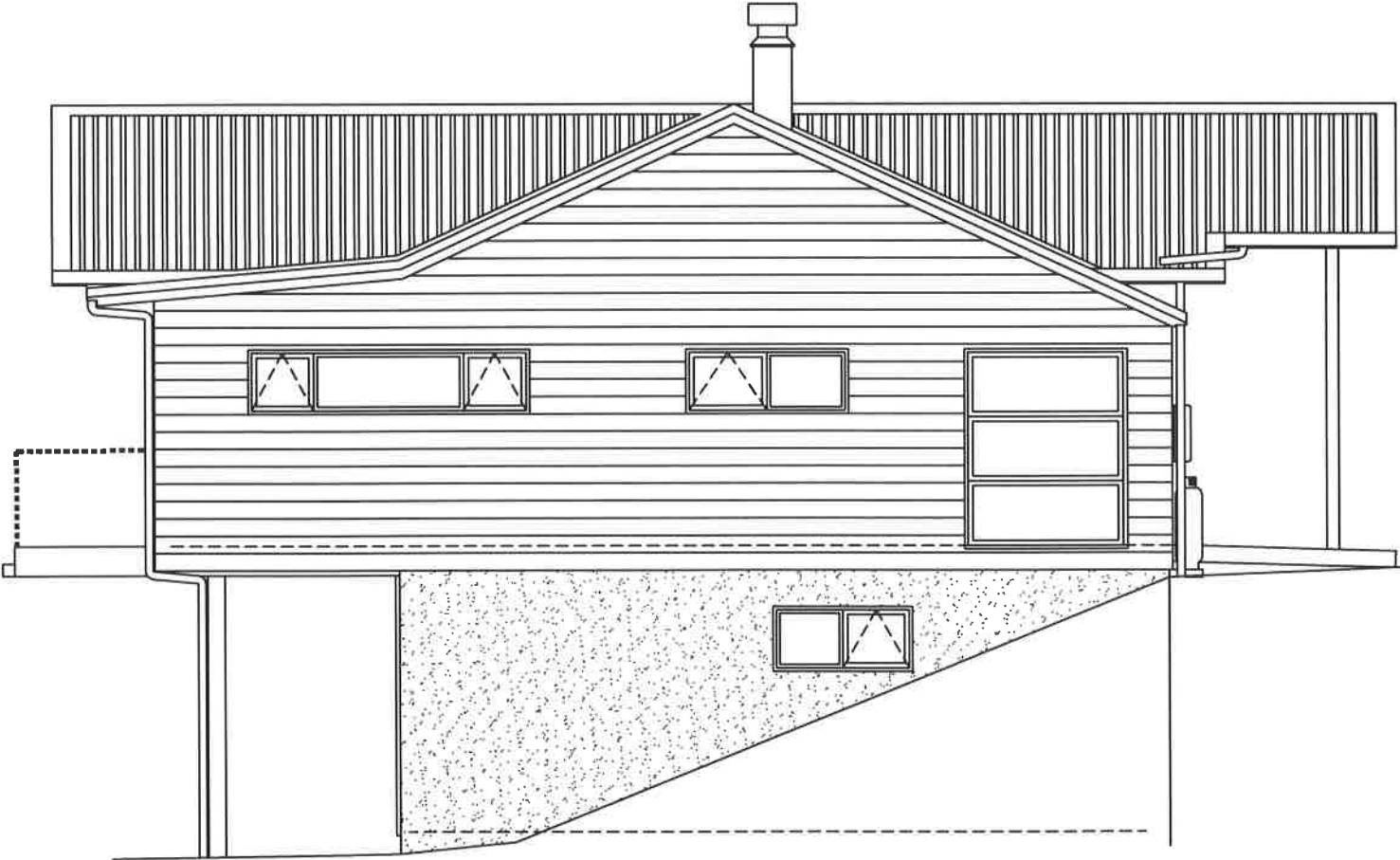
- 0.55g Coloursteel Maxx ridge & barge flashings
- Colorsteel Maxx trapezoidal roofing
- Colorsteel Maxx 125mm² gutter
- 80mmØ pvc downpipes
- selected aluminium joinery
- 2-300x75 lawson cypress portal
- Linea 180 weatherboards over a drained cavity
- 1m high Glass Vice top fixed
- 12mm toughened glass balustrade system
- H3.2 timber deck & joists
- Torch-On membrane over H3.2 timber deck
- Colorsteel Maxx gutter
- 80mmØ pvc downpipes
- 180mm² PL8 H5 posts



- complying stainless steel flue with premium dektite
- 0.55g Coloursteel Maxx ridge & barge flashings
- Colorsteel Maxx trapezoidal roofing
- Colorsteel Maxx change of pitch flashing
- Colorsteel Maxx 125mm² gutter
- 80mmØ pvc downpipes
- selected aluminium joinery
- Linea 180 weatherboards over a drained cavity
- H3.2 floor beams
- 180mm² PL8 H5 posts
- selected aluminium joinery
- existing masonry wall
- 25MPa slab

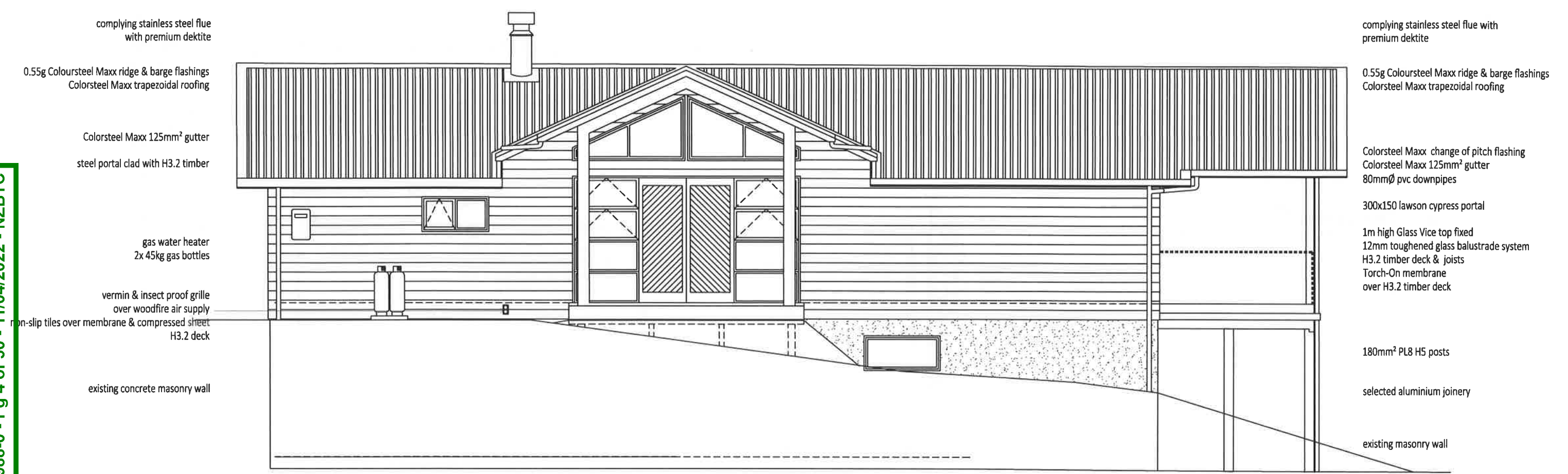
west elevation

- 0.55g Coloursteel Maxx ridge & barge flashings
- Colorsteel Maxx trapezoidal roofing
- Colorsteel Maxx 125mm² gutter
- 80mmØ pvc downpipes
- selected aluminium joinery
- Linea 180 weatherboards over a drained cavity
- 1m high Glass Vice top fixed
- 12mm toughened glass balustrade system
- H3.2 timber deck & joists
- Torch-On membrane over H3.2 timber deck
- 180mm² PL8 H5 posts
- existing masonry wall



- complying stainless steel flue with premium dektite
- 0.55g Coloursteel Maxx ridge & barge flashings
- Colorsteel Maxx trapezoidal roofing
- Colorsteel Maxx 125mm² gutter
- steel portal clad with H3.2 timber
- gas water heater
- 2x 45kg gas bottles
- non-slip tiles over membrane & compressed sheet
- H3.2 deck

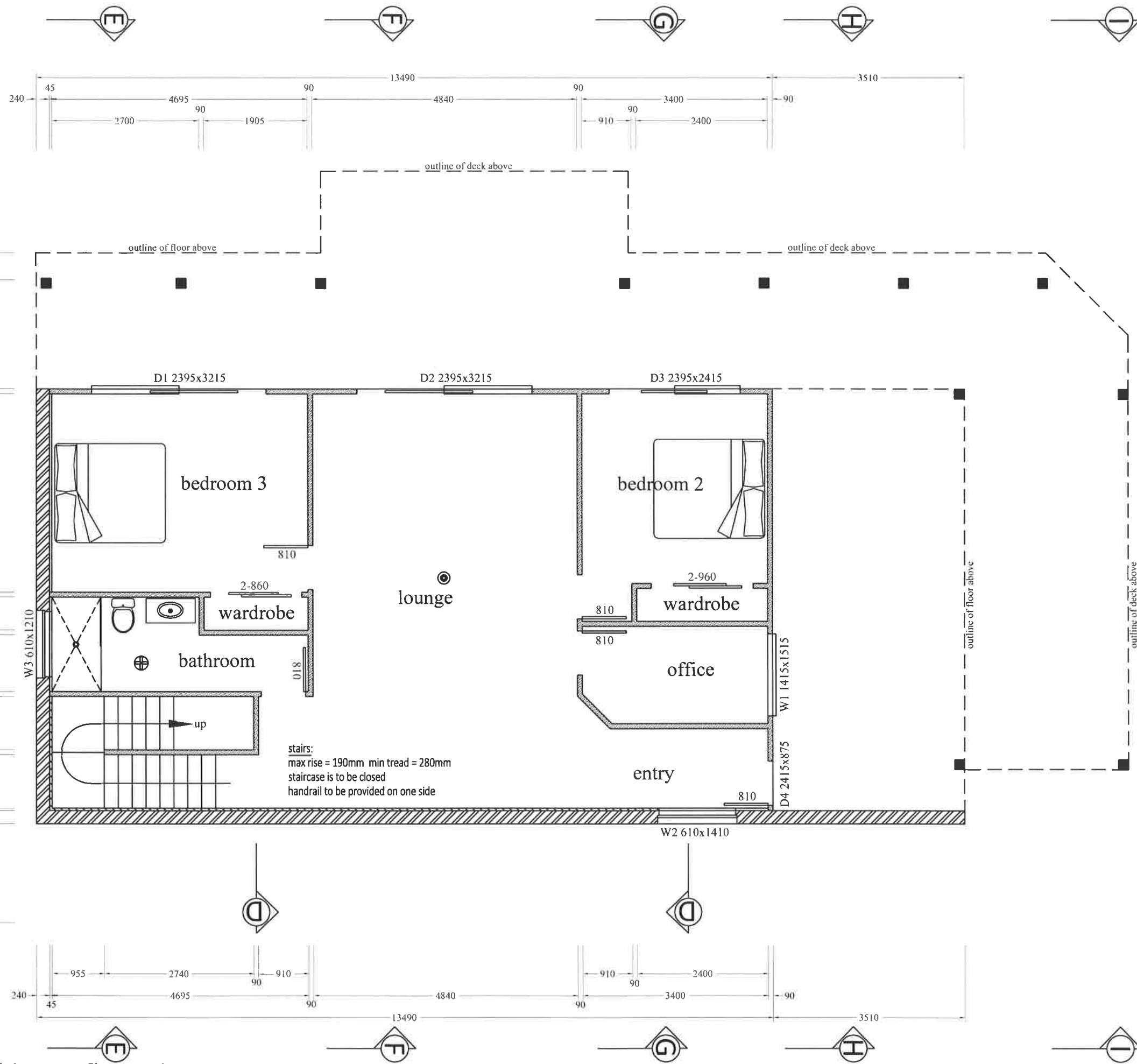
south elevation



east elevation



north elevation



Notes:

lower floor area: 107.9m²

walls:

denotes 90x45 SG8 H1.2 framed walls
 external wall: studs at 400mm centres, nogs at 900mm centres max
 internal load bearing wall: studs at 400mm centres, nogs at 900mm centres max
 internal non load bearing wall: studs at 600mm centres, nogs at 900mm centres max

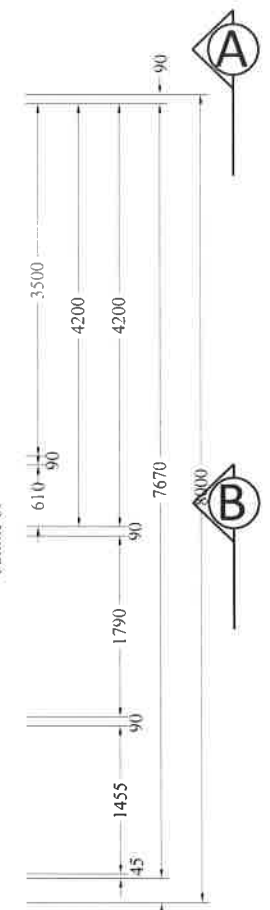
wall bottom plates are to be H3.2 with dpc under
 external walls: Fortress M12 x 150mm screwbolts at 900mm centres
 internal walls: Fortress M10 x 120mm screwbolts at 900mm centres

denotes 45x45 SG8 H3.1 strapping with verticals at 600mm centres
 fixed with dpc under with shot-fired 75mm nails at 300mm centres



denotes already built series 240 masonry block wall to NZS 4229:2013

⊙ denotes smoke alarm



insulation:
 to be by Northern Glazing method with <30% wall area glazed insulation
 installation is to comply with manufacturers specifications
 fit R1.4 50mm EPS underslab insulation
 fit R2.2 batts between framing timbers etc. to walls
 fit Expol R1.4 Platinum board between strapping members

joinery:
 all joinery measurements are nominal trim sizes
 windows, doors & flashings are to be installed as per NZBC E2/AS1
 exterior jamb liners are to be H3.1
 site measure all joinery before manufacture

wet areas:
 bathroom floor to be tiled over membrane throughout
 shower walls & wall behind wc and vanity to be tiled over Aqualine Gib

safety glass:
 glass shower door to be toughened safety glass
 in accordance with NZS 4223.1:2008

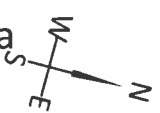
ventilation:
 bathroom ventilation by light switch operated extractor fan

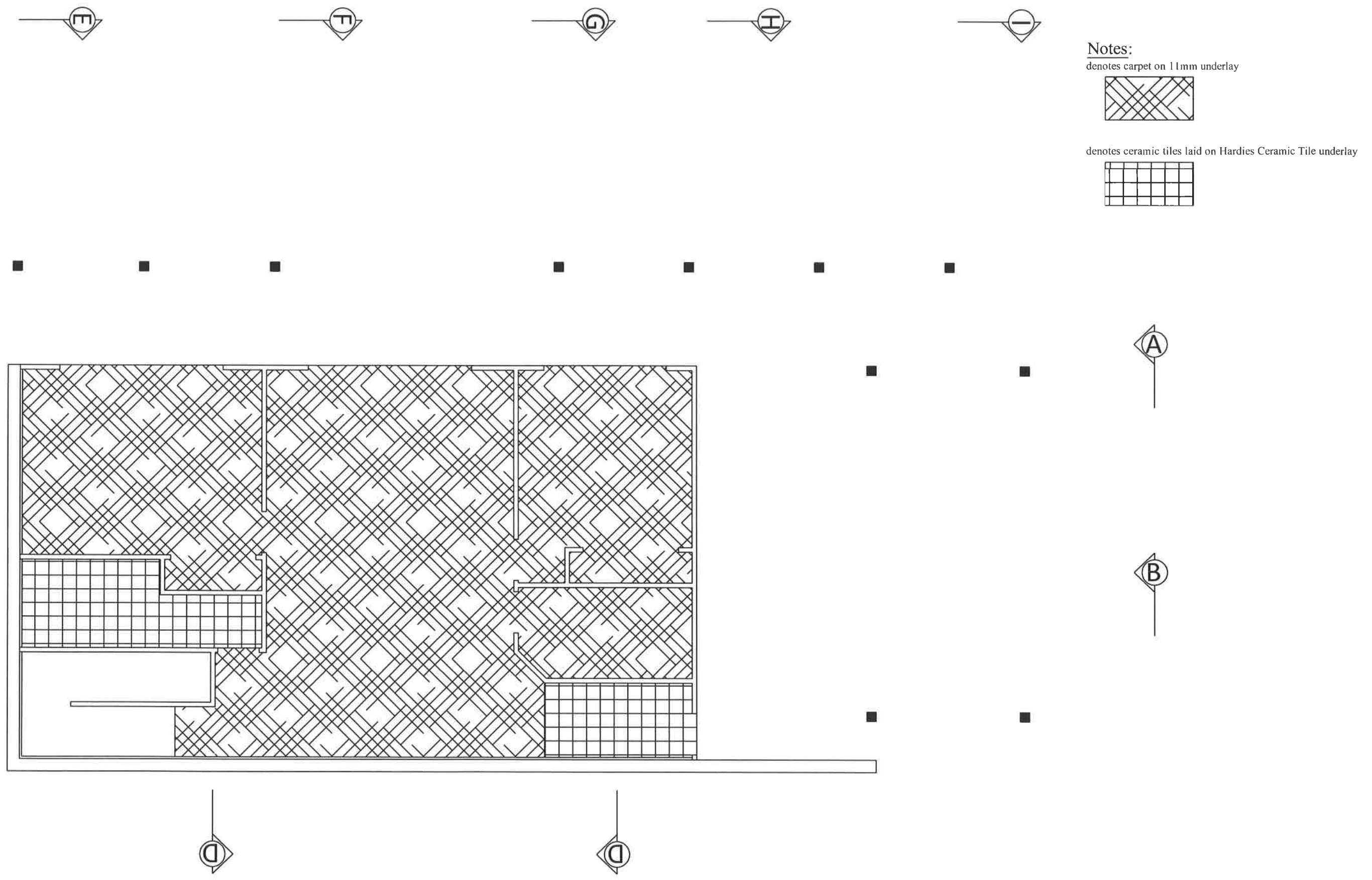
Proposed lower floor plan 1:75

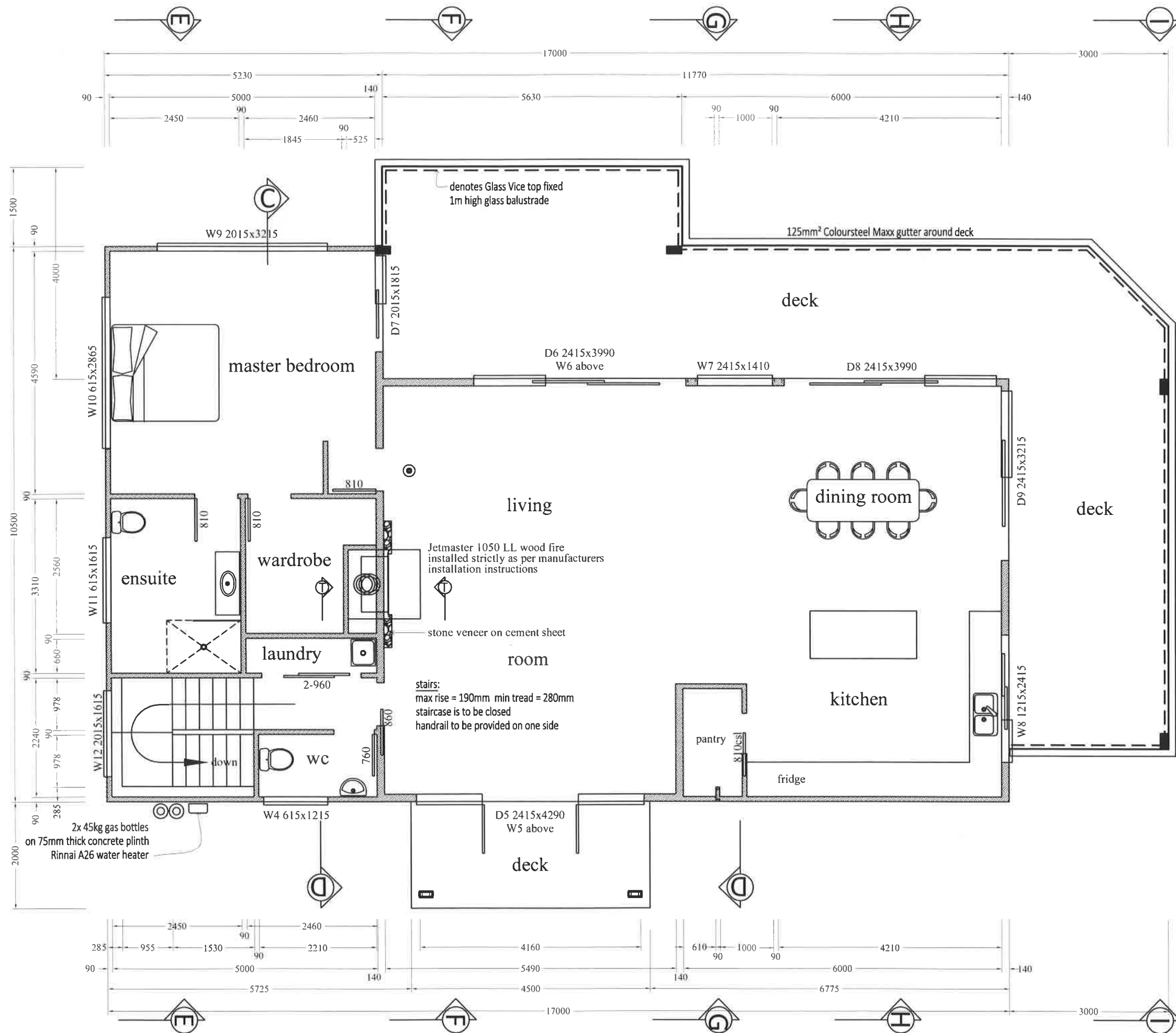
Proposed house for Jenny & Peter Morgan, 36 Old Hospital Road, Whangaroa



28/03/2022 3a







Notes:

upper floor area: 149m²

walls:

denotes 90x45 SG8 H1.2 framed walls

external wall: studs at 400mm centres, nogs at 900mm centres max

internal load bearing wall: studs at 400mm centres, nogs at 900mm centres max

internal non load bearing wall: studs at 600mm centres, nogs at 900mm centres max

wall bottom plates are to be H3.2 with dpc under
external walls: Fortress M12 x 150mm screwbolts at 900mm centre3s
internal walls: Fortress M10 x120mm screwbolts at 900mm centres

denotes smoke alarm

insulation:

to be by Northern Glazing method with <30% wall area glazed insulation
installation is to comply with manufacturers specifications

fit R1.4 50mm EPS underslab insulation

fit R2.2 batts between framing timbers etc. to walls

joinery:

all joinery measurements are nominal trim sizes

windows, doors & flashings are to be installed as per NZBC E2/AS1

exterior jamb liners are to be H3.1

site measure all joinery before manufacture

wet areas:

entire floor apart from bedroom and wardrobe is to be tiled over membrane
over Secura flooring

shower walls & wall behind wc and vanity are to be tiled over Aqualine Gib

safety glass:

glass shower screen to be toughened safety glass
in accordance with NZS 4223.1:2008

ventilation:

laundry, ensuite & kitchen ventilation by extractor fans venting to exterior

Proposed upper floor plan 1:75

Proposed house for Jenny & Peter Morgan, 36 Old Hospital Road, Whangaroa

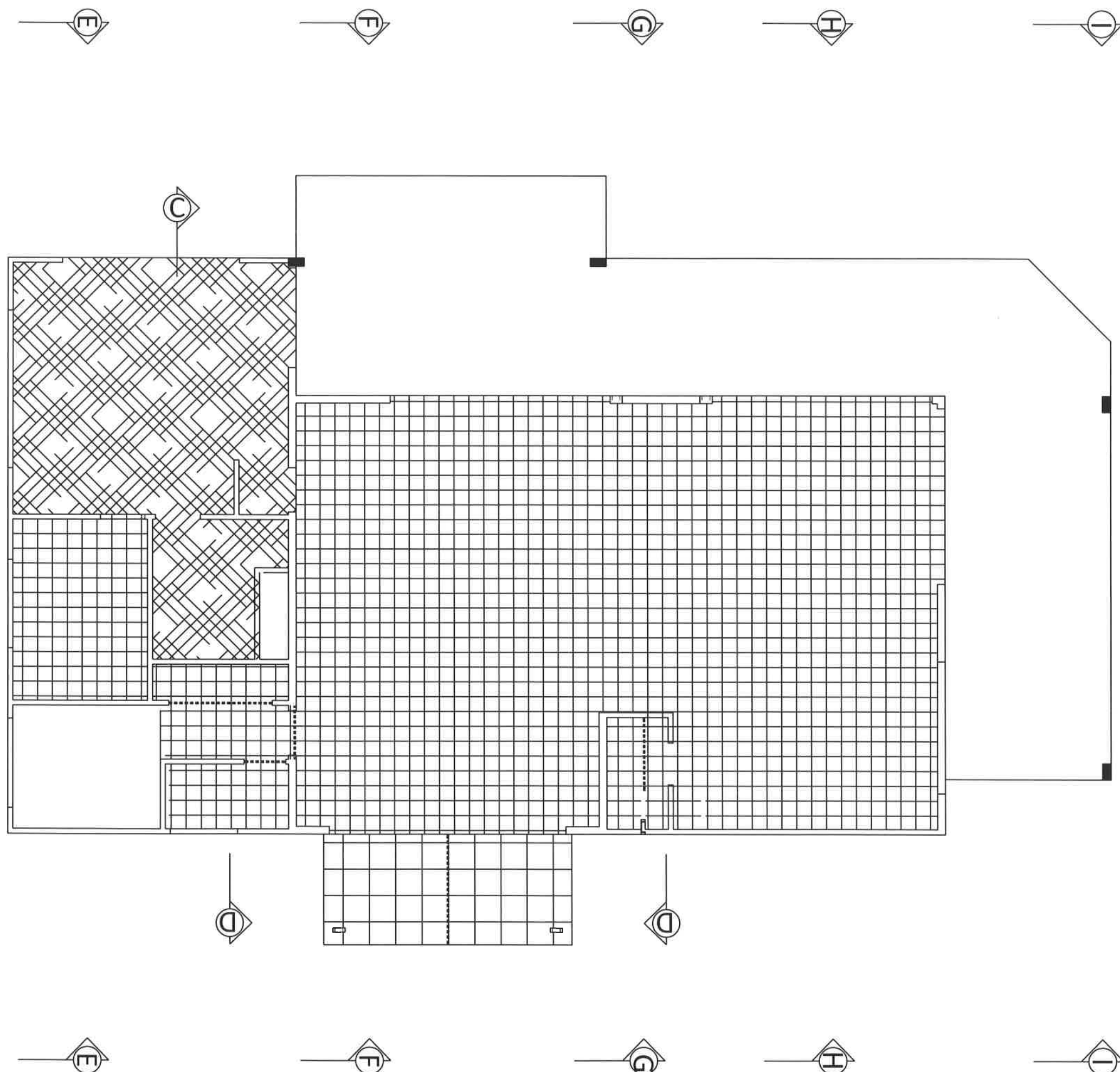


NOTES: ALL CONSTRUCTION SHALL BE TO N/S 3604.2011 AND AMENDMENTS AND OTHER RELATED DOCUMENTS THAT APPLY TO THE WORK SHOWN. ALL DIMENSIONS AND DETAIL IN THIS DRAWING SHALL BE CHECKED BY THE CONTRACTOR AND ANY DISCREPANCIES ARE AMBIGUITIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT. TEL: 09-407 9816 FAX: 09-407 9817 MOB: 0274 505 471 DO NOT SCALE DIMENSIONS. DO NOT GUESS. ANY

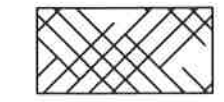
28/03/2022

4a

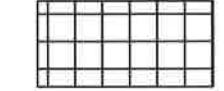




Notes:
denotes carpet on 11mm underlay on Secura flooring



denotes ceramic tiles laid on Hardies Ceramic Tile underlay over Secura flooring



denotes ceramic tiles over Hardies 18mm compressed sheet



A denotes control joints

B

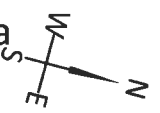
Proposed upper floor flooring plan 1:75
Proposed house for Jenny & Peter Morgan, 36 Old Hospital Road, Whangaroa

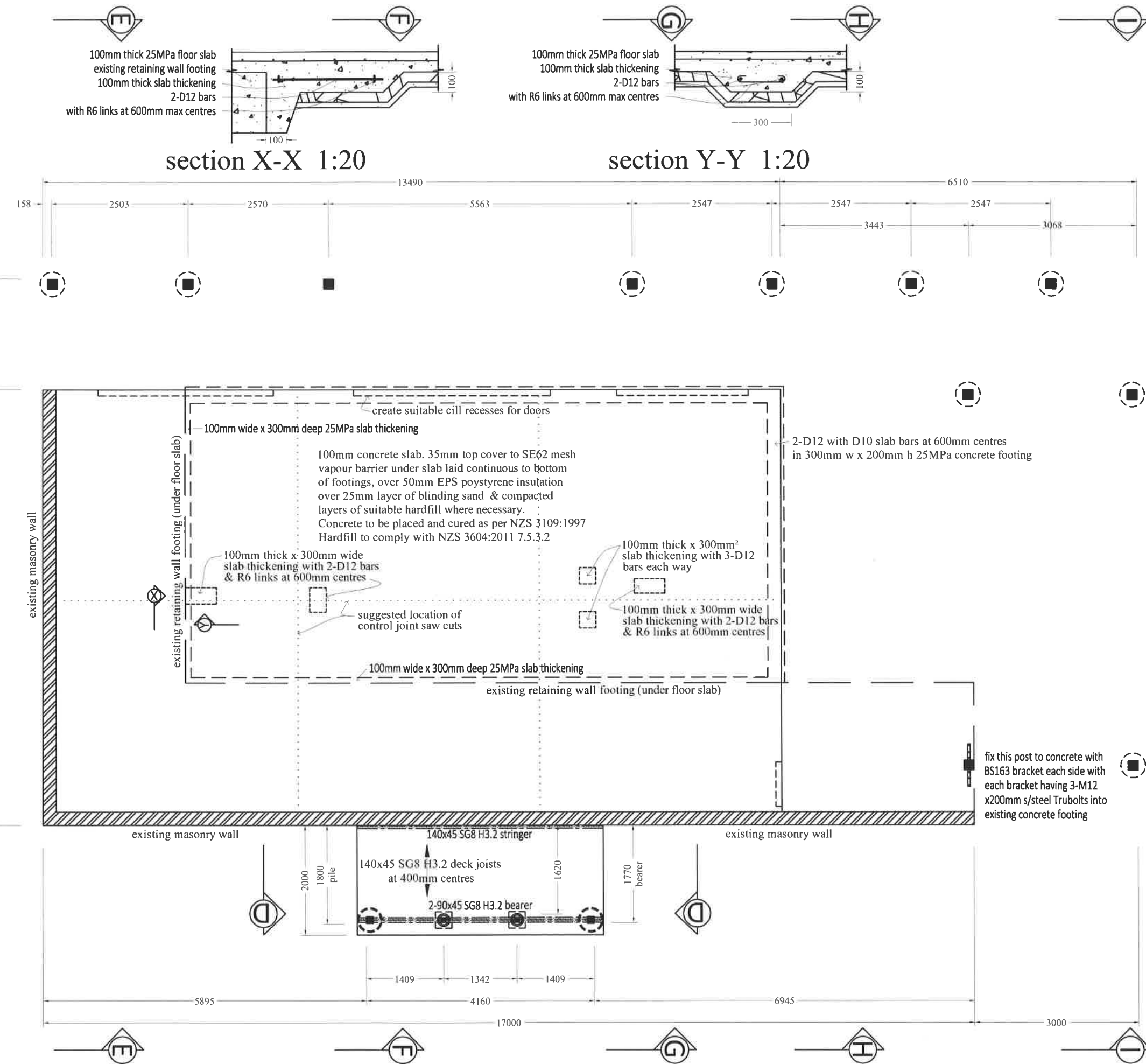


NOTES: ALL CONSTRUCTION SHALL BE TO NZS 806:2013 AND AMENDMENTS AND OTHER RELATED DOCUMENTS THAT APPLY TO THE WORK SHOWN. ALL DIMENSIONS AND DETAIL IN THIS DRAWING SHALL BE CHECKED BY THE CONTRACTOR AND ANY DISCREPANCIES OR AMBIGUITIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF CADPLANZ. TEL: 09-407 9816, FAX: 09-407 9817, MOBI: 0274 562 471. DO NOT SCALE DIMENSIONS. DO NOT GUESS. ASK.

22/03/2022

4b





Notes:

all structural timber is to be SG8 grade

all fixings; bolts, ct160's, 'U' & 'Z' wire dogs etc. are to be stainless steel

concrete is to be minimum 25MPa

bearers etc made up of 2-members up to 150mm w are to be nailed together with 2-90x3.15mm nails at 300mm centres alternating from each side

bearers etc made up of 2-members up to 300mm w are to be nailed together with 3-90x3.15mm nails at 300mm centres alternating from each side

I STATE ON REASONABLE GROUNDS THAT THESE DRAWINGS ARE IN ACCORDANCE WITH OUR CALCULATIONS WHERE APPLICABLE

TEO PILAPIL CPEng:

28 March 2022

subfloor plan 1:75

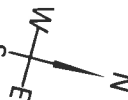
Proposed house for Jenny & Peter Morgan, 36 Old Hospital Road, Whangaroa

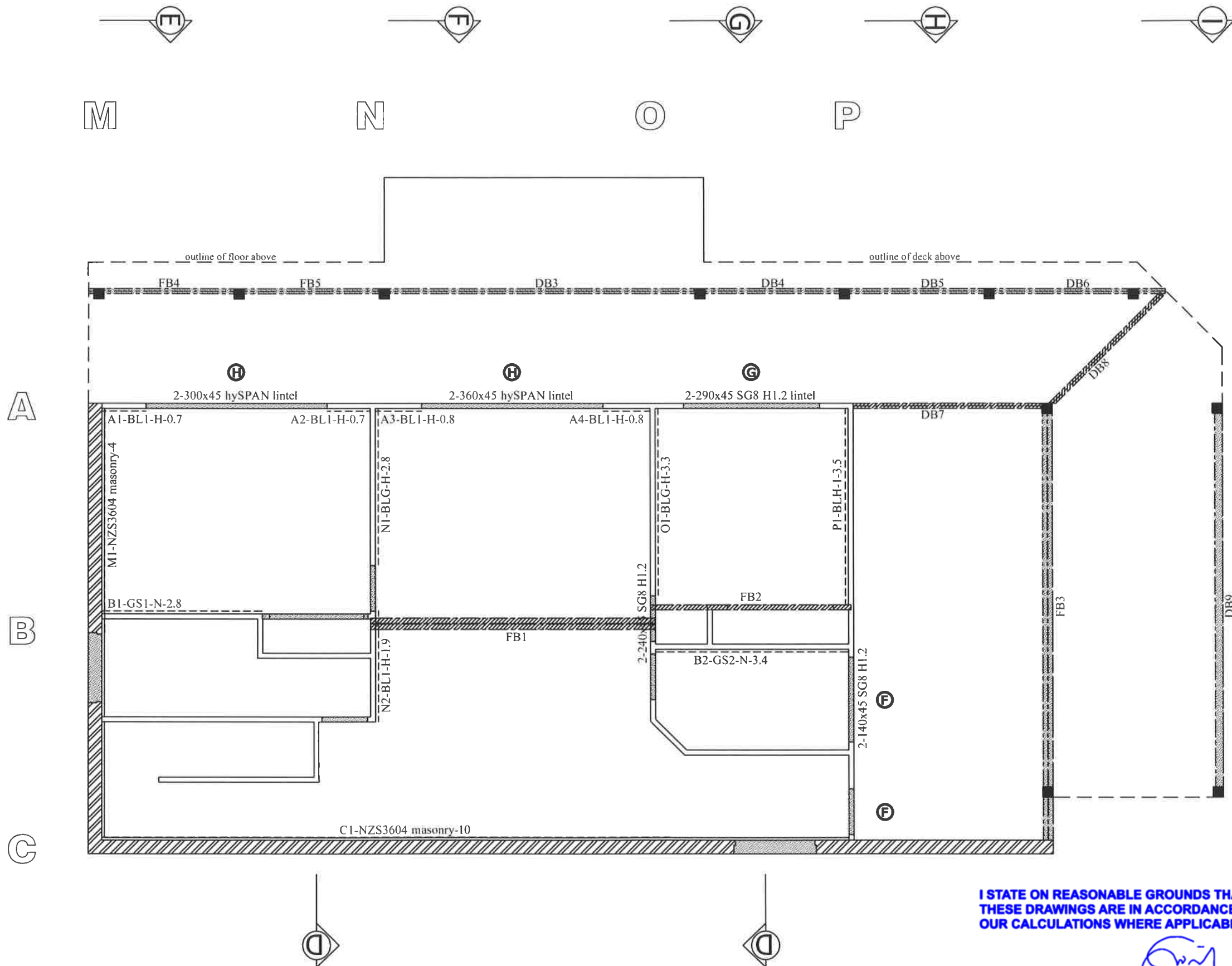


NOTES: ALL CONSTRUCTION SHALL BE TO NZS 3604:2011 AND AMENDMENTS AND OTHER RELATED DOCUMENTS THAT APPLY TO THE WORK SHOWN. ALL DIMENSIONS AND DETAIL IN THIS DRAWING SHALL BE CHECKED BY THE CONTRACTOR AND ANY DISCREPANCIES OR AMBIGUITIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CADREMAN. TEL: 09-4078816 FAX: 09-4078817 MOB: 0274 565 471 DO NOT SCALE DIMENSIONS: DO NOT GUESS. ASK!

22/03/2022

5





- Notes:**
- A** denotes wall bracing elements
- A1-BR4-1.2
- element length
- element type
- element number
- denotes 90x45 SG8 H1.2 framed walls with all load bearing walls & external walls to have 2-90x45 SG8 H1.2 studs at 600mm centres & internal non load bearing walls to have 90x45 SG8 H1.2 studs at 600mm centres
- all walls to have 90x45 SG8 H1.2 nogs at 900mm max centres
- top plate fixing= StudLok SL170 screw at 600mm centres
- B** denotes prior built full height solid filled masonry wall
- denotes 400mm high masonry lintel with HD12 top bar D12 bottom bar with R6 links at 100mm centres
- denotes lintel
- denotes lintel size 2-140x45 SG8 H1.2
- denotes lintel fixing
- unless stated all lintels are 2-90x45 SG8 H1.2
- lintels fixing to comply with Lumberlok Lintel Fixing Schedule & NZS 3604:2011 Table 8.19 nailing schedule attached to specifications
- bearers etc. made up of 2-members <150mm wide are to be nailed together with 2-90x3.15mm nails at 300mm centres alternating from each side
- bearers etc. made up of 2-members >150mm wide are to be nailed together with 3-90x3.15mm nails at 300mm centres alternating from each side

I STATE ON REASONABLE GROUNDS THAT
THESE DRAWINGS ARE IN ACCORDANCE WITH
OUR CALCULATIONS WHERE APPLICABLE

TEO PILAPIL CPEng:

28 March 2022

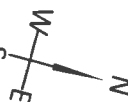
lower level bracing, framing & lintel plan 1:75
Proposed house for Jenny & Peter Morgan, 36 Old Hospital Road, Whangaroa



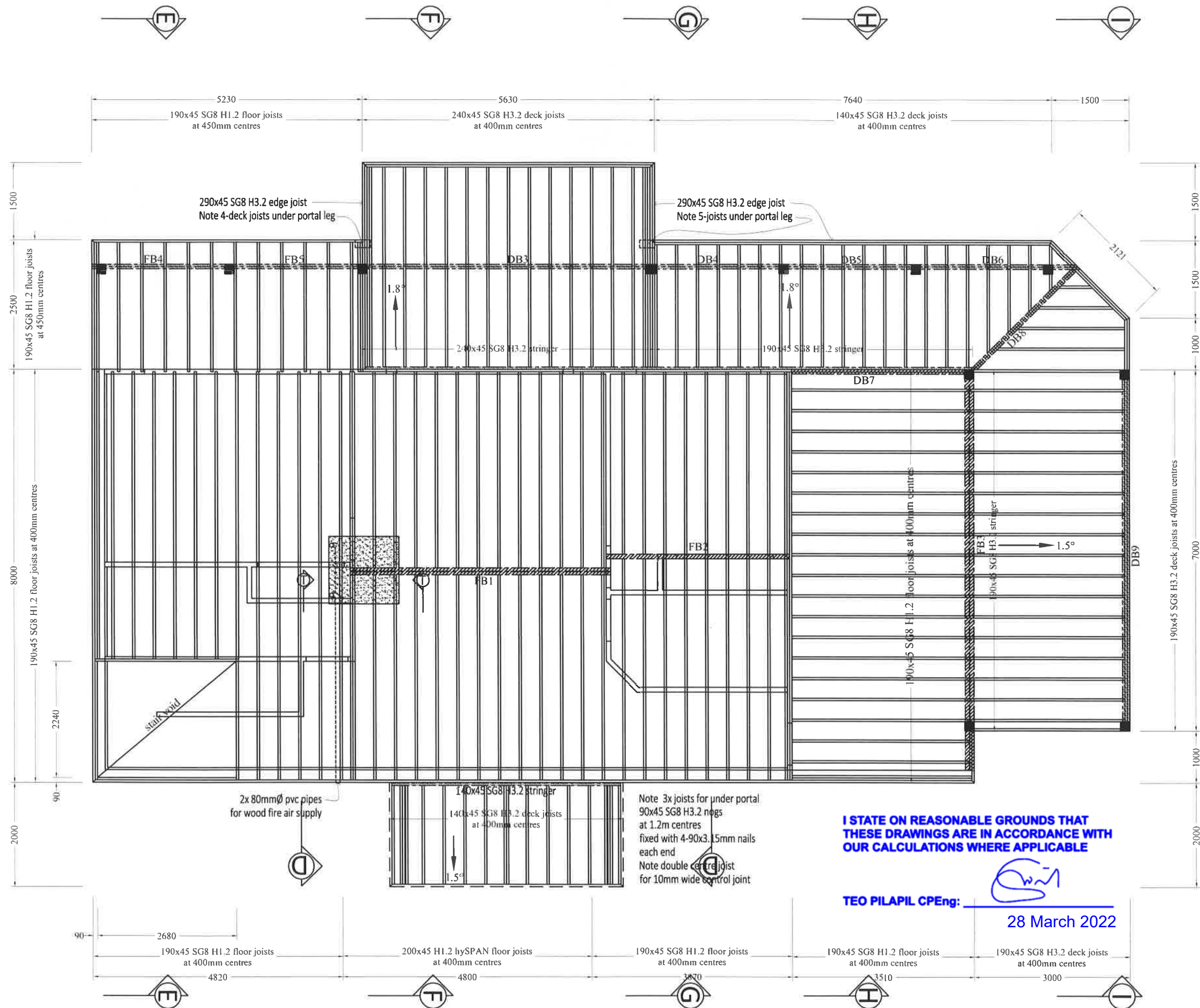
NOTES: ALL CONSTRUCTION SHALL BE TO NZS 3604:2011 AND AMENDMENTS AND OTHER RELATED DOCUMENTS THAT APPLY TO THE WORK SHOWN. ALL DIMENSIONS AND IN TAIL IN THIS DRAWING SHALL BE CHECKED BY THE CONTRACTOR AND ANY DISCREPANCIES OR AMBIGUITIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF CADPLANZ. TEL: 09-407 9816 FAX: 09-407 9817 MOB: 0274 563 471. DO NOT SCALE DIMENSIONS. DO NOT CUTS. ASK

22/03/2022

6



Beam	clear span	LD	Beam
DB3	5.6m	3.0	150UC37.3
DB4	2.3m	1.5	2-190x45 SG8 H3.2
DB5	2.3m	1.5	2-190x45 SG8 H3.2
DB6	2.3m	1.5	2-190x45 SG8 H3.2
DB7	3.35m	0.95	290x88 PL8
DB8	2.85m	0.95	FB15L (galv' plate)
DB9	6.7m	1.5	250PFC
FB1	4.84m	3.9	200UB29.1
FB2	1.87m	2.2	2-190x45 SG8 H1.2
FB3	6.7m	3.2	310UB46.2
FB4	2.4m	1.5	2-190x45 SG8 H3.2
FB5	2.4m	1.5	2-190x45 SG8 H3.2



Notes:

deck bearers:

generally fix bearers to posts with 2-M16 s/steel bolts with 50mm² washers

stringer:

190x45 & 240x45 SG8 H3.2 stringers fixed with M12 s/steel bolts at 1.2m max centres

joists:

all joists with spans over 2.5m to have full depth nogs at midspan and over supporting walls

fix nogs with 4-90x3.15mm nails each end

fix floor joists to supporting plates with 2-90x3.15mm skew nails

fix edge joist to plates with 12-90x3.15mm skew nails per 1.5m length

fix deck joists to stringers with s/steel 120 joist hangers each

with 6-30x3.15mm product nails to each flange & to bearers with

1-CPC40 with 3-Type 17-14g x 35mm s/steel screws to joists & 2-Type

17-14g x 35mm s/steel screws to bearers

plywood deck cladding:

fix 17.5mm CD H3.2 plywood fixed to joists with 10g x 50mm

s/steel countersunk screws at 150mm centres to sheet edges and

at 300mm centres elsewhere

deck membrane:

Environclad membrane is to be pencil coved 150mm up house walls &

laid into gutter over 50x50x2mm aluminium angle drip edge

flooring:

19mm Secura flooring to be fixed with 10g x 40mm self-embedding

wood screws at 200mm centres to sheet edges intermediate supports

house deck joists:

joists are to be laid on a strip of Environclad membrane

ex45mm H3.2 cut to suit deck slope with BS50 brackets & lag screws

fixing every 4th joists to house edge joist

taper cuts are coated with Metalex Green

decking:

premium pine griptread decking with 2mm between boards

denotes in-line beams

denotes under joist beams

bearers etc. made up of 2-members <150mm wide are to

be nailed together with 2-90x3.15mm nails at 300mm

centres alternating from each side

bearers etc. made up of 2-members >150mm wide are to

be nailed together with 3-90x3.15mm nails at 300mm

centres alternating from each side

denotes 75mm thick Hebel floor protector for woodfire

Beam	clear span	LD	Beam
DB3	5.6m	3.0	150UC37.3
DB4	2.3m	1.5	2-190x45 SG8 H3.2
DB5	2.3m	1.5	2-190x45 SG8 H3.2
DB6	2.3m	1.5	2-190x45 SG8 H3.2
DB7	3.35m	0.95	290x88 PL8
DB8	2.85m	1.8	FB15L
DB9	6.7m	1.5	250PFC
FB1	4.84m	3.9	200UB29.1
FB2	1.87m	2.2	2-190x45 SG8 H1.2
FB3	6.7m	3.2	310UB46.2
FB4	2.4m	1.5	2-190x45 SG8 H3.2
FB5	2.4m	1.5	2-190x45 SG8 H3.2

I STATE ON REASONABLE GROUNDS THAT
THESE DRAWINGS ARE IN ACCORDANCE WITH
OUR CALCULATIONS WHERE APPLICABLE

TEO PILAPIL CPEng:

28 March 2022

Proposed upper floor framing plan 1:75

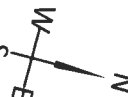
Proposed house for Jenny & Peter Morgan, 36 Old Hospital Road, Whangaroa

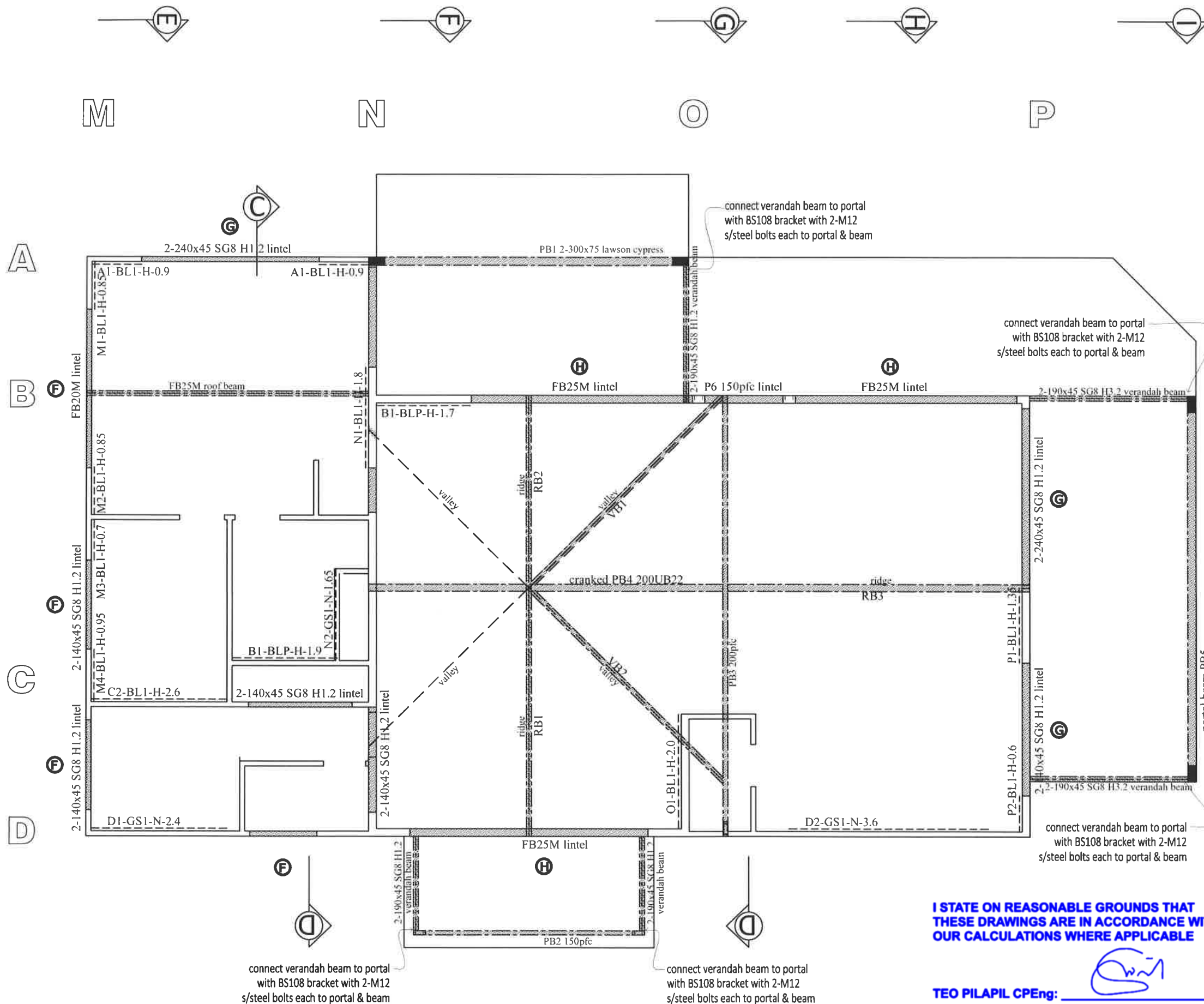


NOTES: ALL CONSTRUCTION SHALL BE TO NZS 3604:2011 AND AMENDMENTS AND OTHER RELATED DOCUMENTS THAT
APPLY TO THE WORK SHOWN. ALL DIMENSIONS AND DETAIL IN THIS DRAWING SHALL BE CHECKED BY THE
CLIENT FOR ANY DISCREPANCIES OR AMBIGUITIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF
COUNCIL. TEL: 09-407 9816 FAX: 09-407 9817 MOB: 0274 505 475. DO NOT SCALE DIMENSIONS. DO NOT GUESS. ASK.

28/03/2022

7





- Notes:**
- denotes wall bracing elements
 - A1-BR4-1.2
 - element length
 - element type
 - element number
 - denotes 90x45 & 140x45 SG8 H1.2 framed walls with all 90mm load bearing walls & external walls to have ..
 - stud length <2.4
 - 90x45 SG8 H1.2 studs at 400mm centres
 - stud length <2.7
 - 2-90x45 SG8 H1.2 studs at 600mm centres
 - 140mm load bearing walls & external walls to have ..
 - stud length <3.0
 - 140x45 SG8 H1.2 studs at 600mm centres
 - stud length <3.6
 - 140x45 SG8 H1.2 studs at 400mm centres
 - stud length <4.2
 - 2-140x45 SG8 H1.2 studs at 400mm centres
 - all internal non load bearing walls to have 90x45 or 140x45 SG8 H1.2 studs at 600mm centres
 - all walls to have ex45 SG8 H1.2 nogs at 900mm max centres
 - top plate fixing= StudLok SL170 screw at stud centres
 - denotes lintel
 - denotes lintel size
 - 2-140x45 SG8 H1.2
 - denotes lintel fixing
 - F
 - unless stated all lintels are 2-90x45 SG8 H1.2
 - lintels fixing to comply with Lumberlok Lintel Fixing Schedule & NZS 3604:2011 Table 8.19 nailing schedule attached to specifications
 - lintels etc. made up of 2-members <150mm wide are to be nailed together with 2-90x3.15mm nails at 300mm centres alternating from each side
 - lintels etc. made up of 2-members >150mm wide are to be nailed together with 3-90x3.15mm nails at 300mm centres alternating from each side

I STATE ON REASONABLE GROUNDS THAT THESE DRAWINGS ARE IN ACCORDANCE WITH OUR CALCULATIONS WHERE APPLICABLE

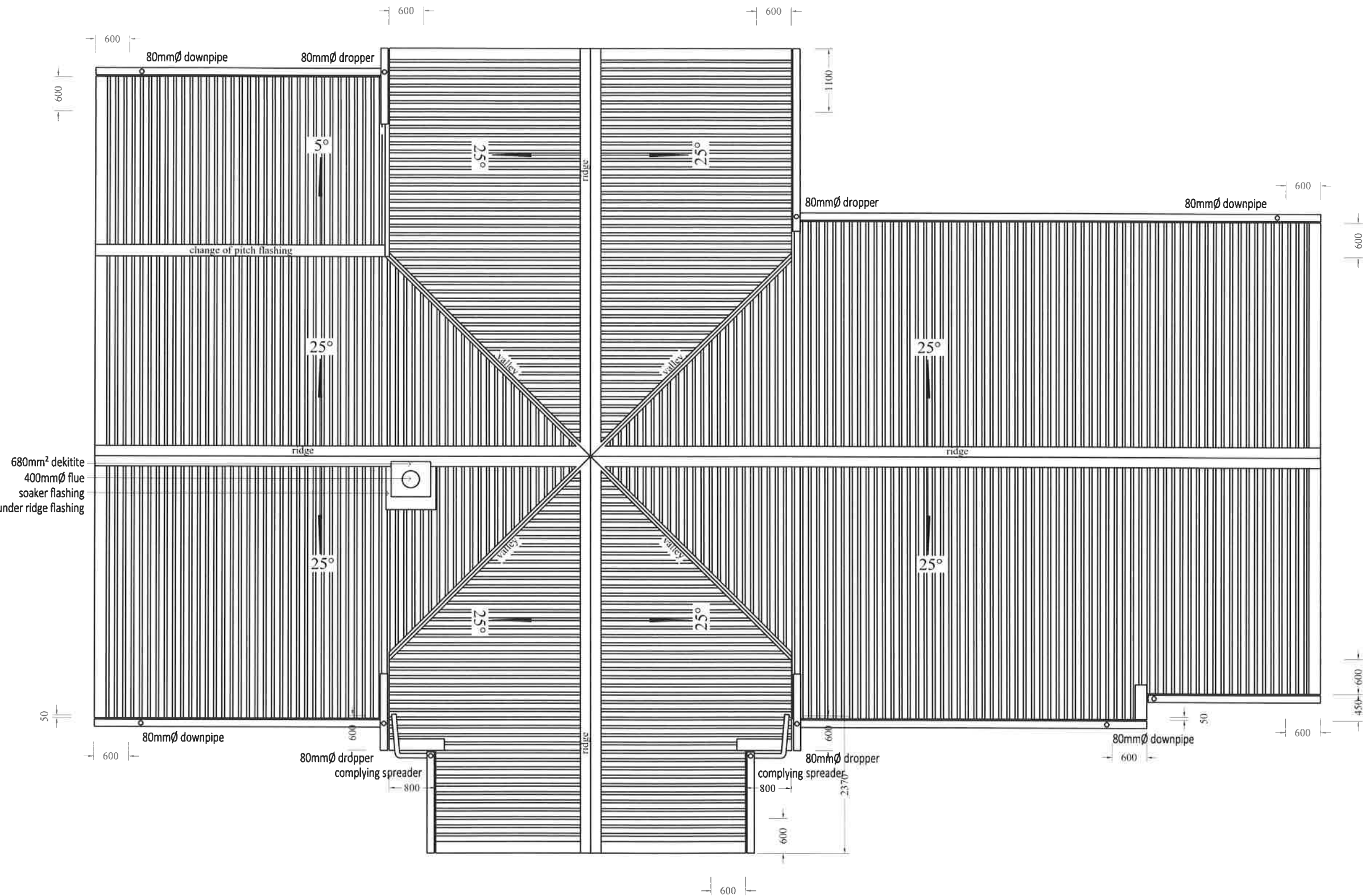
TEO PILAPIL CPEng:

[Signature]

28 March 2022

top floor bracing, framing & lintel plan 1:75
Proposed house for Jenny & Peter Morgan, 36 Old Hospital Road, Whangaroa

Beam	clear span	LD	Beam
RB1	4.3m	3.1	FB25L
RB2	3.2m	3.1	2-240x45 SG8 H1.2
RB3	5.3m	3.9	200ub22.3
VB1	4.9m	1.7	2-190x45 SG8 H1.2
VB2	4.9m	1.7	2-190x45 SG8 H1.2
PB1			2-300x75
PB2			150x75 pfc
PB3			200x75 pfc
PB4 cranked			200ub22.3
PB5			2-300x75
P6 lintel			150pfc



Notes:

trapezoidal Colorsteel Maxx roofing
Covertek 407 building paper
70x45 SG8 H1.2 purlins at 900mm centres
1-10g x 80mm roofing screw
(NZS 3604:2011 Table 10.10)
Note end spans to be 600mm

0.55g purpose made Colorsteel flashings

soaker flashing

0.55g Colorsteel Maxx soaker flashing is to extend min 250mm up & down the roof from the penetration as per NZBC E2/AS1 fig 54 & is to be supported by the roofing underneath

pvc spouting laid to 1:100 min fall to
80mmØ downpipes
downpipes to be piped to water tank
in 100mmØ pvc pipe

roof layout plan 1:75

Proposed house for Jenny & Peter Morgan, 36 Old Hospital Road, Whangaroa

fix all rafters to top plates with 2-'Z' nails &
2-90x3.15mm skew nails
fix rafters to ridge beam plates with Multigrip each side
with 2-Type 17-14g x35mm screws into each flange

90x45 SG8 H1.2 outriggers at 900mm max centres fixed to inner trusses with 4-90x3.15mm nails and fixed to gable truss with 2-90x3.15mm skew nails and 2-'Z' nails

90x45 SG8 H1.2 fly rafters are to be fixed to outriggers with 4-90x3.15mm nails.

generally use 70x45 SG8 H1.2 purlins at 900mm centres with endspans of 650mm centres & where noted on this sheet use 90x45 SG8 H1.2 purlins with 3x backspans to support 600mm overhang

fix purlins with 1-80mm x10g roofing screw

over portals 1, 2 & 5 use ex45mm rafter purlins at 600mm centres fixed to portal beam (plates) with 2-90x3.15mm nails & 2-'Z' nails nd fixed to stringer with 120 joist hangers with 4-product nails per flange

denotes 30mm x 1mm galv' strap fixed atop rafters
fixed each end with 5-30x3.15mm product nails with
1-30mmx3.15mm nail to each intersecting rafter

beams etc. made up of 2-members <150mm wide are to be nailed together with 2-90x3.15mm nails at 300mm centres alternating from each side

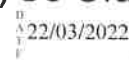
beams etc. made up of 2-members >150mm wide are to be nailed together with 3-90x3.15mm nails at 300mm centres alternating from each side

all downpipes are to be 80mmØ
stormwater is to be piped to water tanks
in 100mmØ pipe

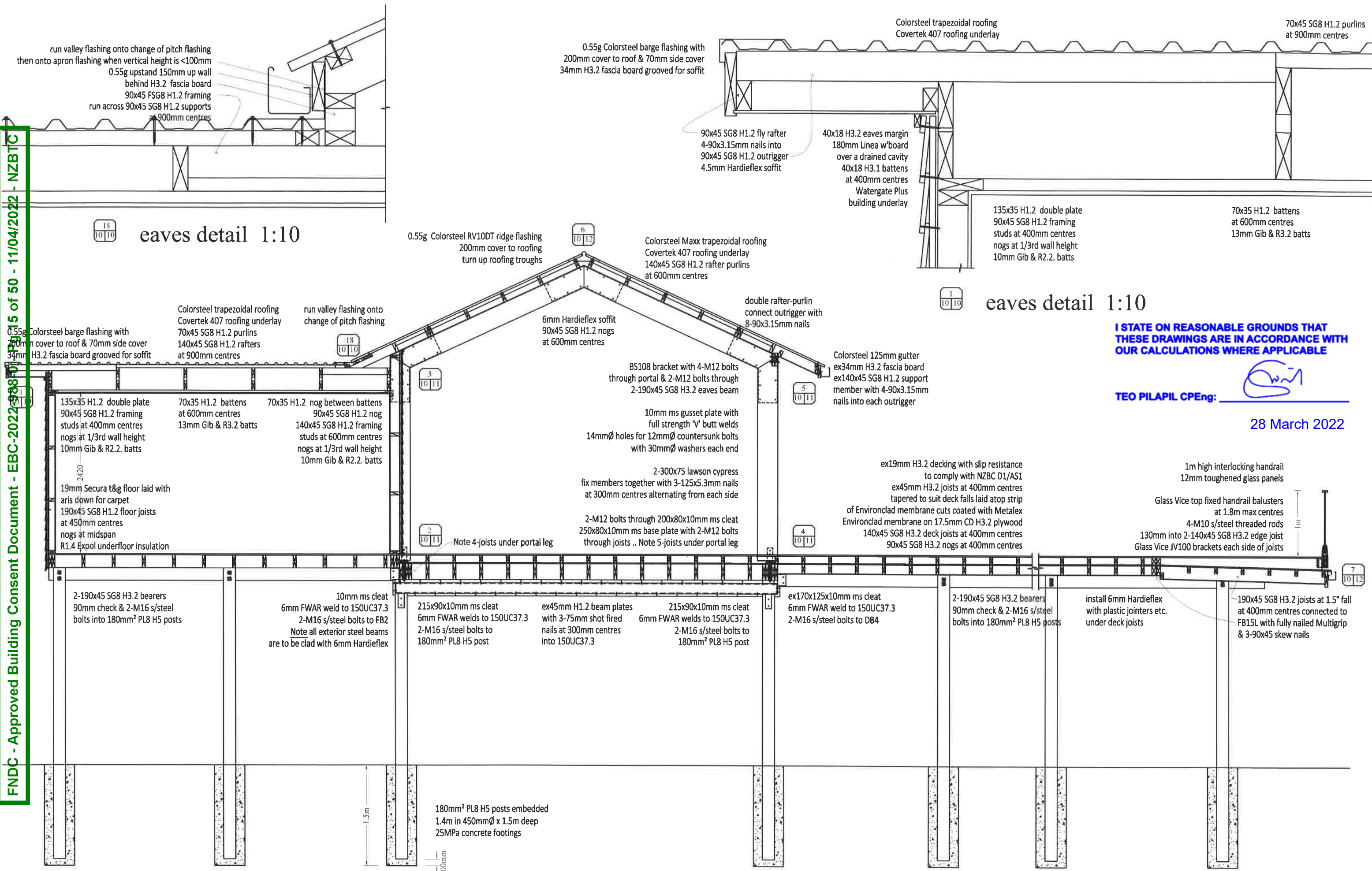
cross referencing key

sheet number where detail sourced from	1 - 6 3	detail number sheet with detail on
---	------------	---------------------------------------

28 March 2022



FNDC - Approved Building Consent Document - EBC-2022-98840-PP15 of 50 - 11/04/2022 - NZBTC



section A-A 1:50 & detail 1:10
Proposed house for Jenny & Peter Morgan, 36 Old Hospital Road, Whangaroa

I STATE ON REASONABLE GROUNDS THAT
THESE DRAWINGS ARE IN ACCORDANCE WITH
OUR CALCULATIONS WHERE APPLICABLE

TEO PILAPIL CPEng:

28 March 2022



**I STATE ON REASONABLE GROUNDS THAT
THESE DRAWINGS ARE IN ACCORDANCE WITH
OUR CALCULATIONS WHERE APPLICABLE**

Sw

 **cadplanz** NOTES: ALL CONSTRUCTION SHALL BE TO S2/S 3664 2011 AND AMENDMENTS AND OTHER RELATED DOCUMENTS THAT APPLY TO THE WORK SHOWN. ALL DIMENSIONS AND DETAIL IN THIS DRAWING SHALL BE CHECKED BY THE CONTRACTOR AND ANY DISCREPANCY FOR AMBIGUITY SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF CADPLANZ. TEL: 09-407 9816 FAX: 09-407 9817 MOB: 0274 505 473. (DO NOT SCALE DIMENSIONS). DO NOT GUSS, AND



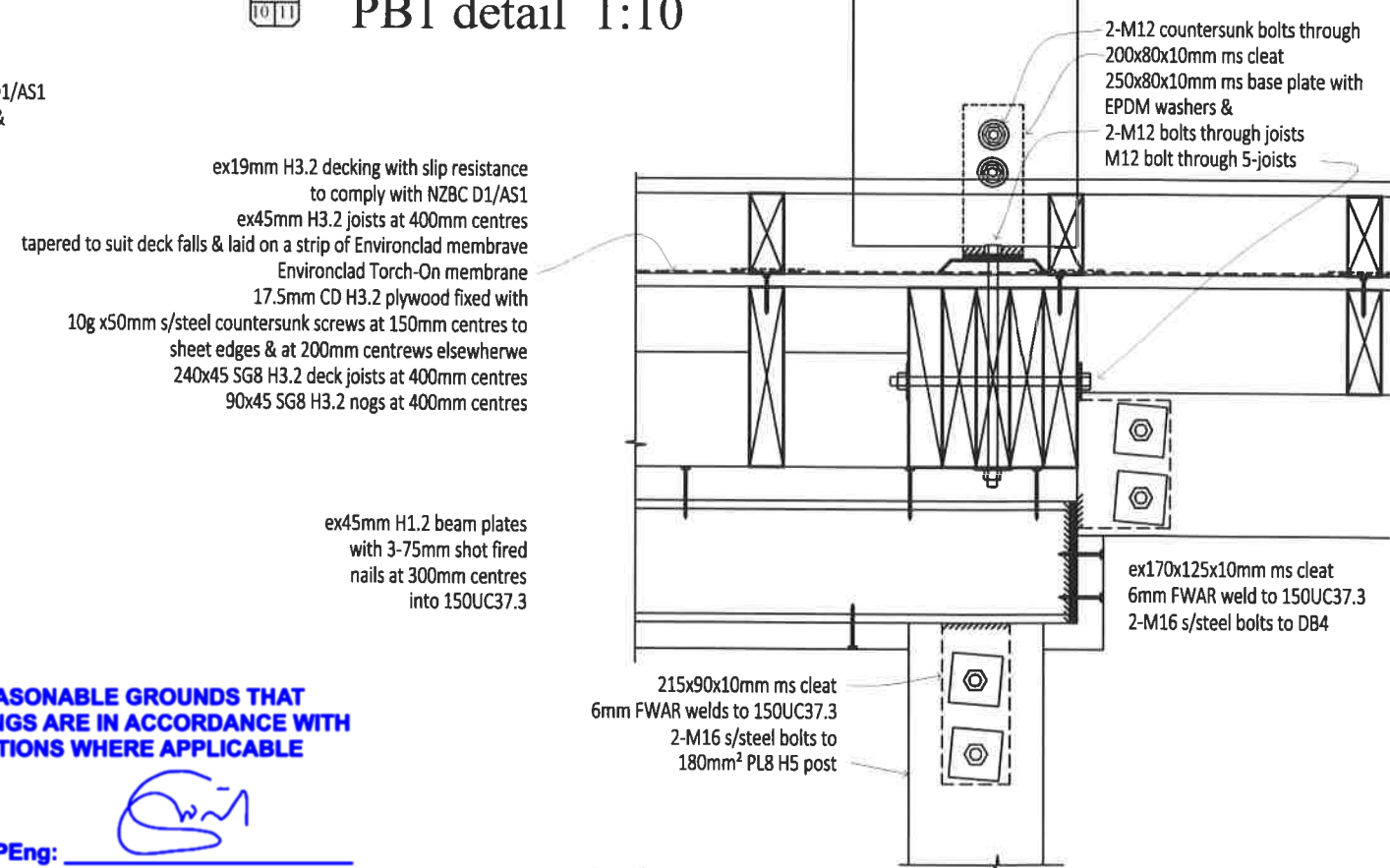
28/03/2022

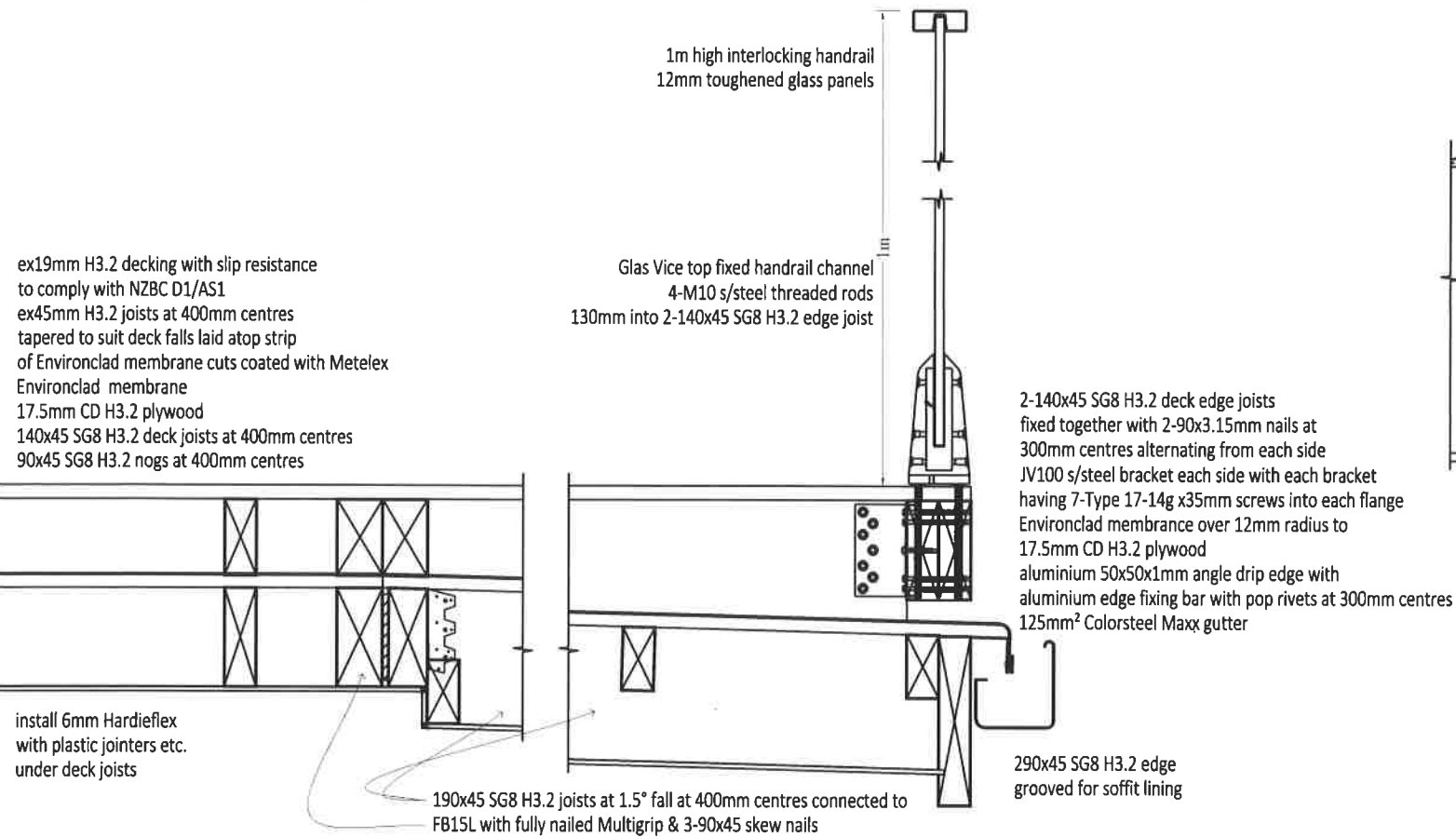


4
10 11

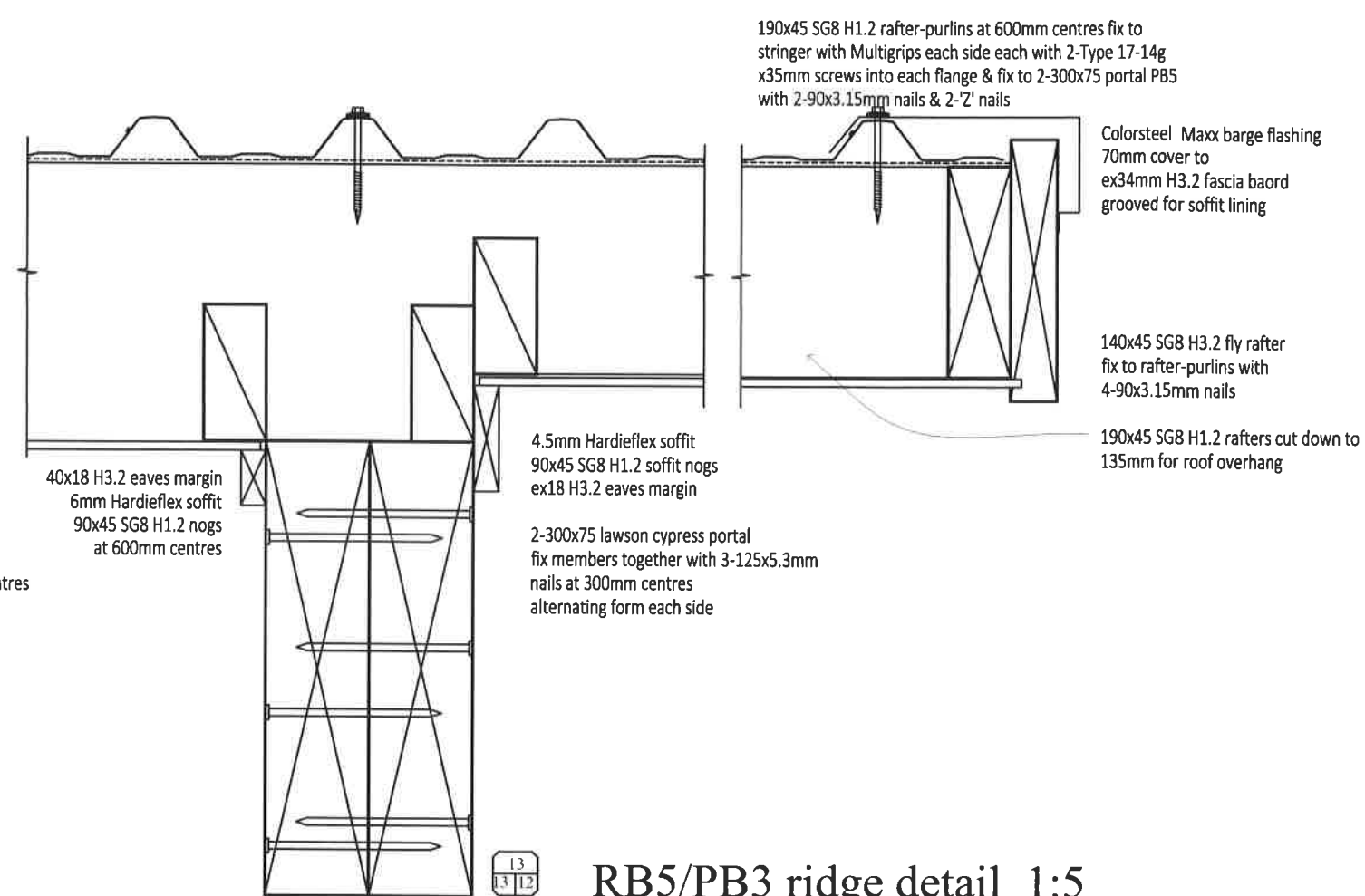
cross referencing key

sheet number where detail sourced from	1	detail number
	3	sheet with detail on





deck edge detail 1:10



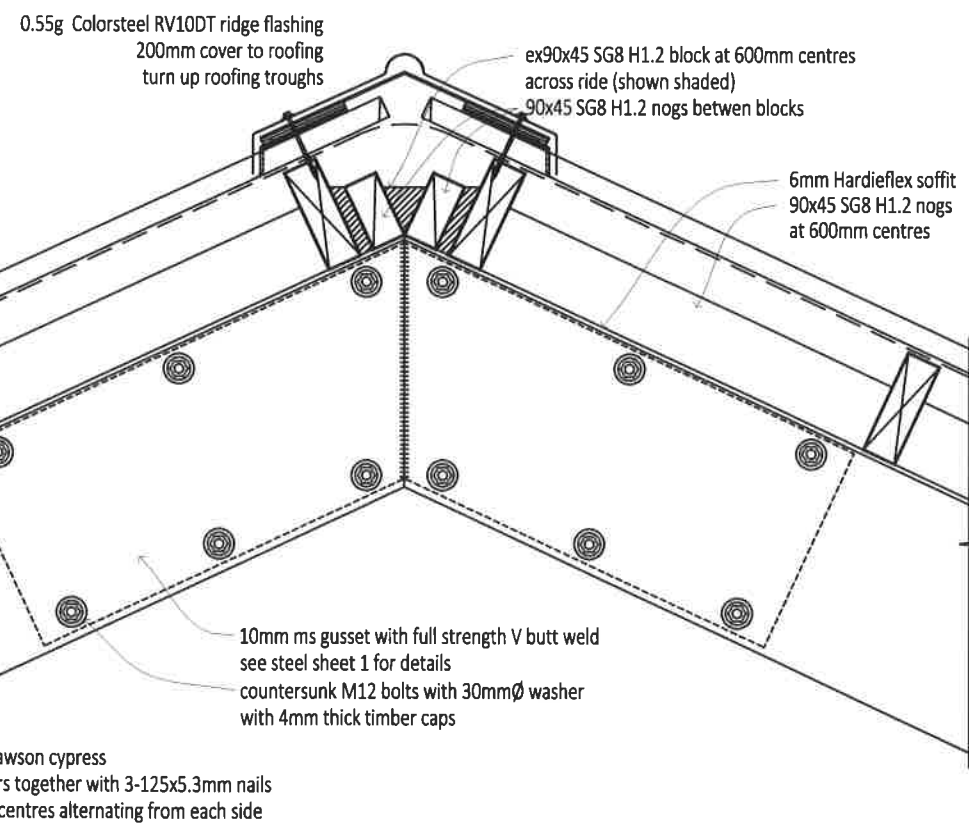
RB5/PB3 ridge detail 1:5

I STATE ON REASONABLE GROUNDS THAT
THESE DRAWINGS ARE IN ACCORDANCE WITH
OUR CALCULATIONS WHERE APPLICABLE

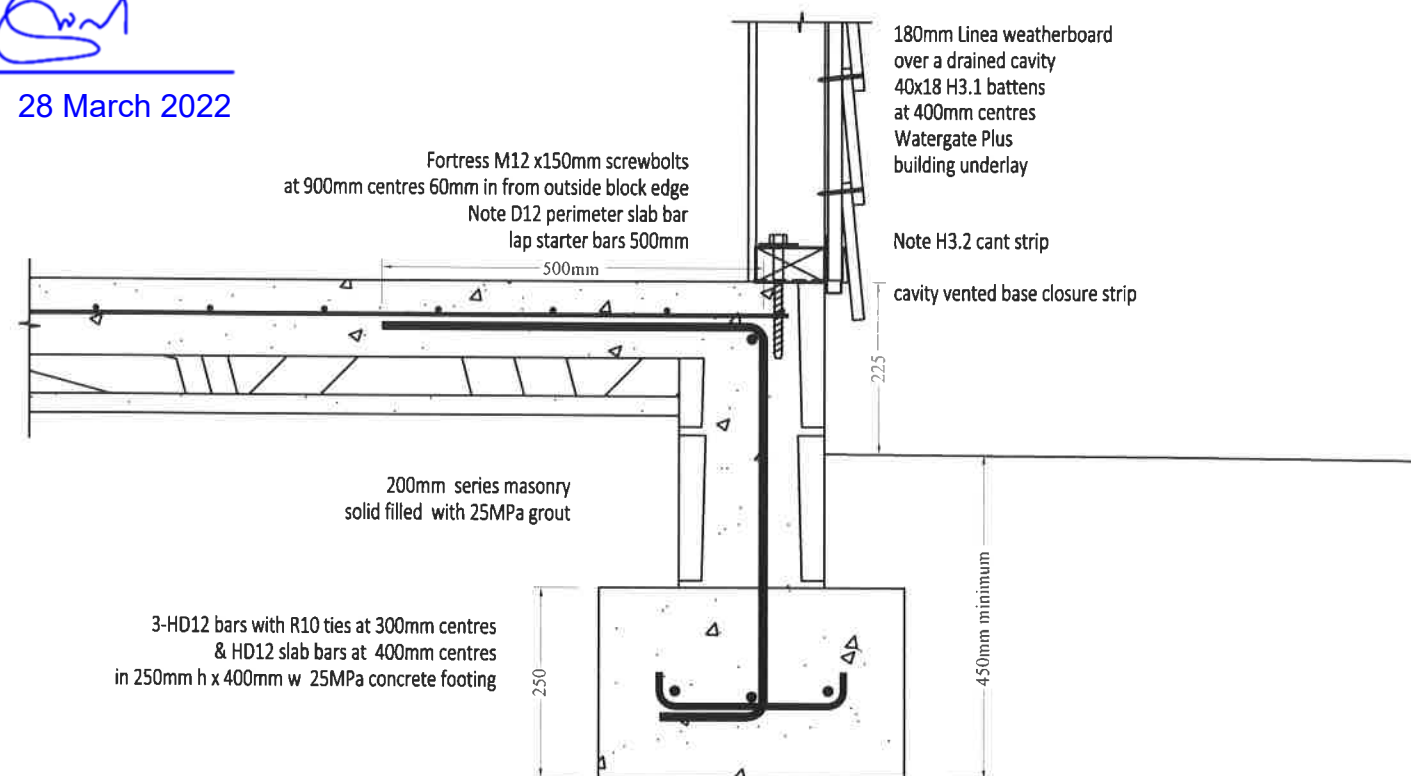
TEO PILAPIL CPEng:

[Signature]

28 March 2022



PB1 ridge detail 1:10



concrete footing detail 1:10

section A-A & B-B details 1:5,1:10

Proposed house for Jenny & Peter Morgan, 36 Old Hospital Road, Whangaroa



NOTES: ALL CONSTRUCTION SHALL BE TO NZS 900:2011 AND AMENDMENTS AND OTHER RELATED DOCUMENTS THAT
APPLY TO THE WORK SHOWN. ALL DIMENSIONS AND DETAIL IN THIS DRAWING SHALL BE CHECKED BY THE
CONTRACTOR AND ANY DISCREPANCIES OR AMBIGUITIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF
CADPLANZ LTD. TEL: 09-407-9816 FAX: 09-407-9817 MOB: 0274-565-471. DO NOT SCALE DIMENSIONS. DO NOT GUESS. ASK!

22/03/2022

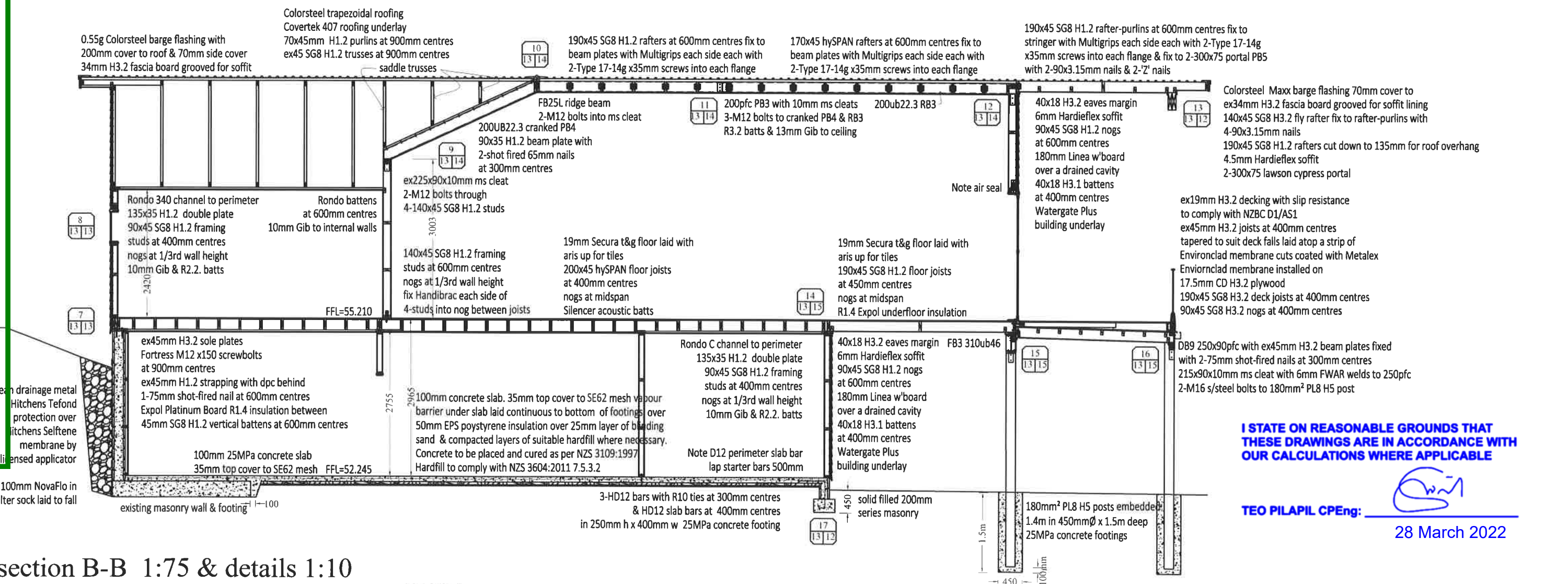
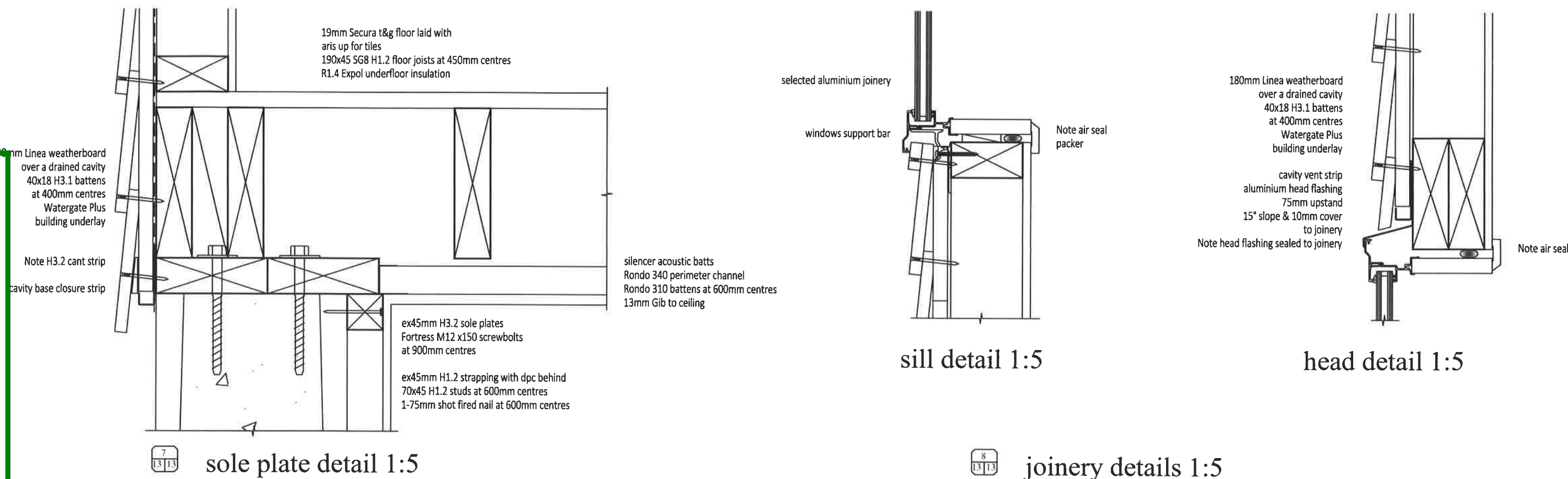
12

cross referencing key

sheet number where
detail sourced from

1-12
6-13

detail number
sheet with detail on



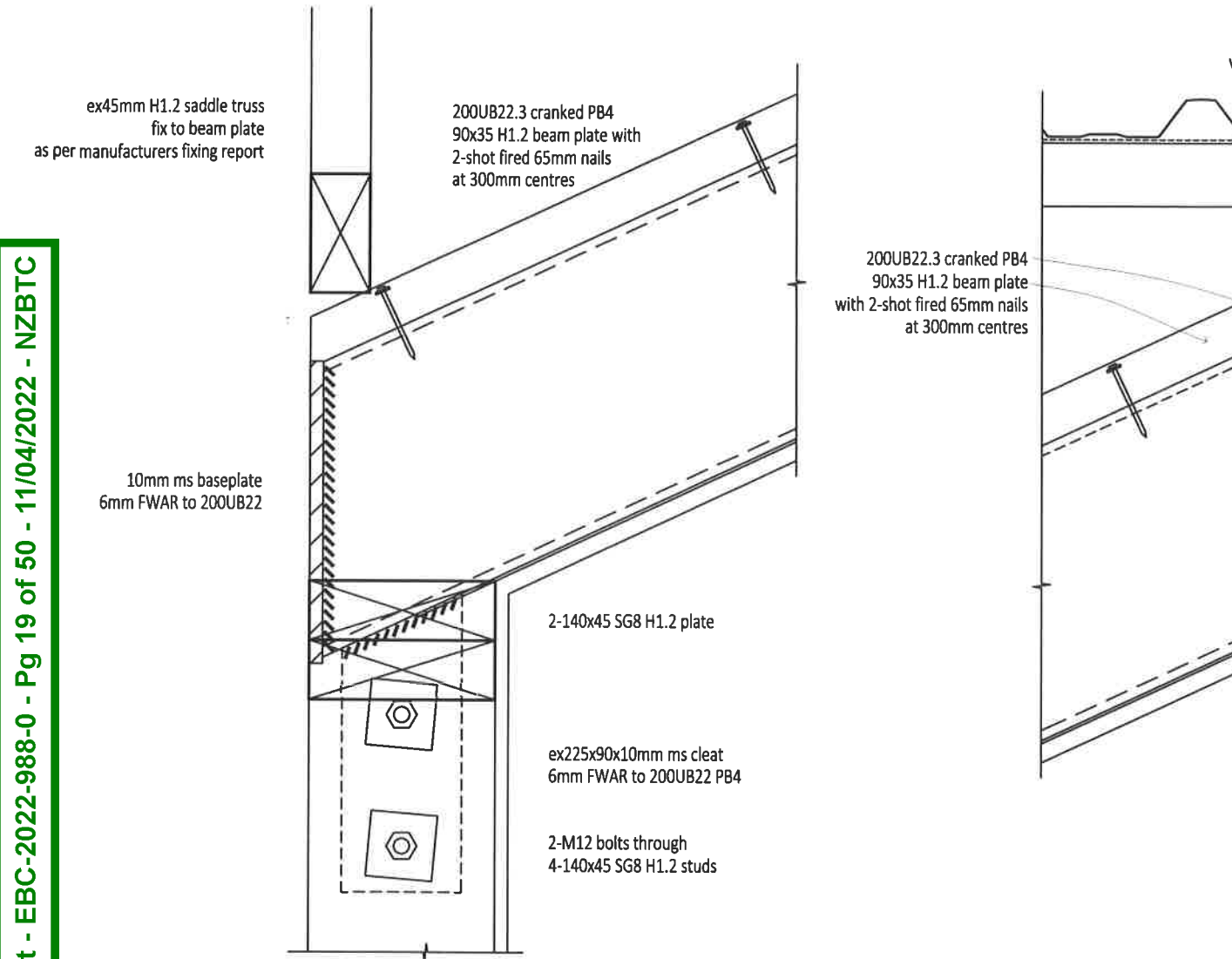
**I STATE ON REASONABLE GROUNDS THAT
THESE DRAWINGS ARE IN ACCORDANCE WITH
OUR CALCULATIONS WHERE APPLICABLE**

TEO PILAPIL CPEng:

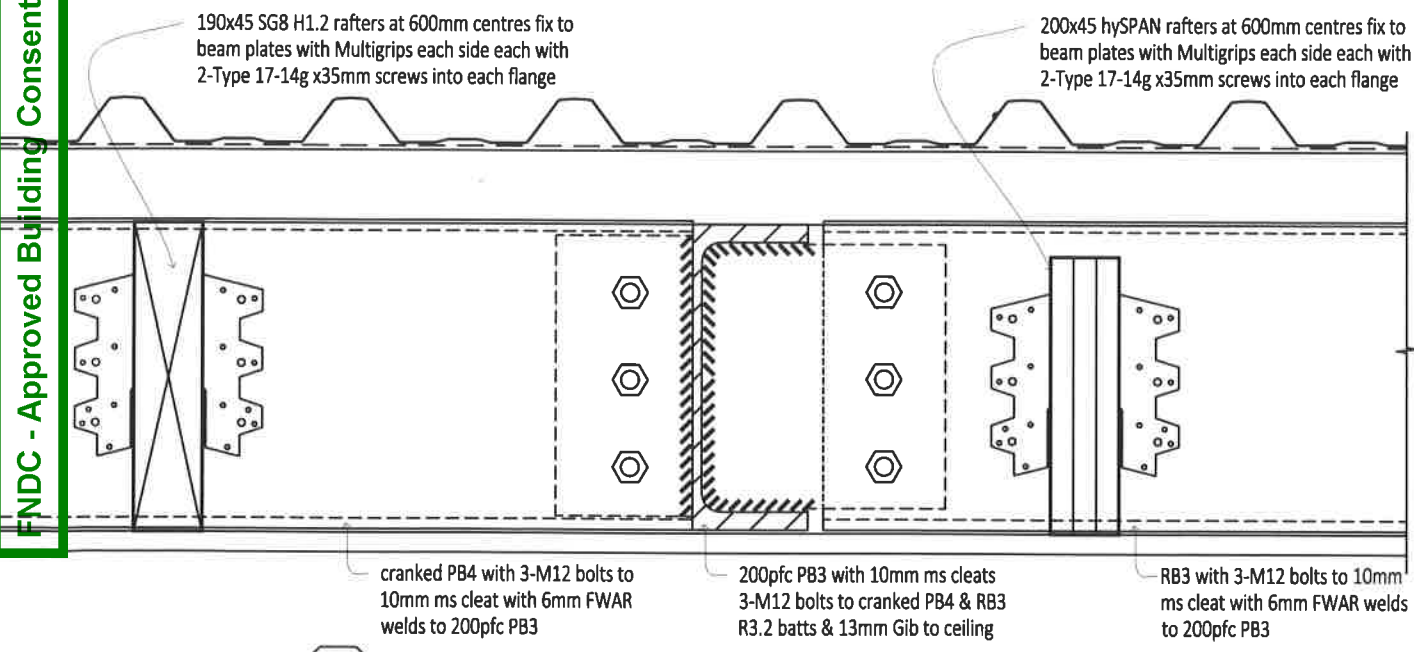
28 March 2022

section B-B 1:75 & details 1:10

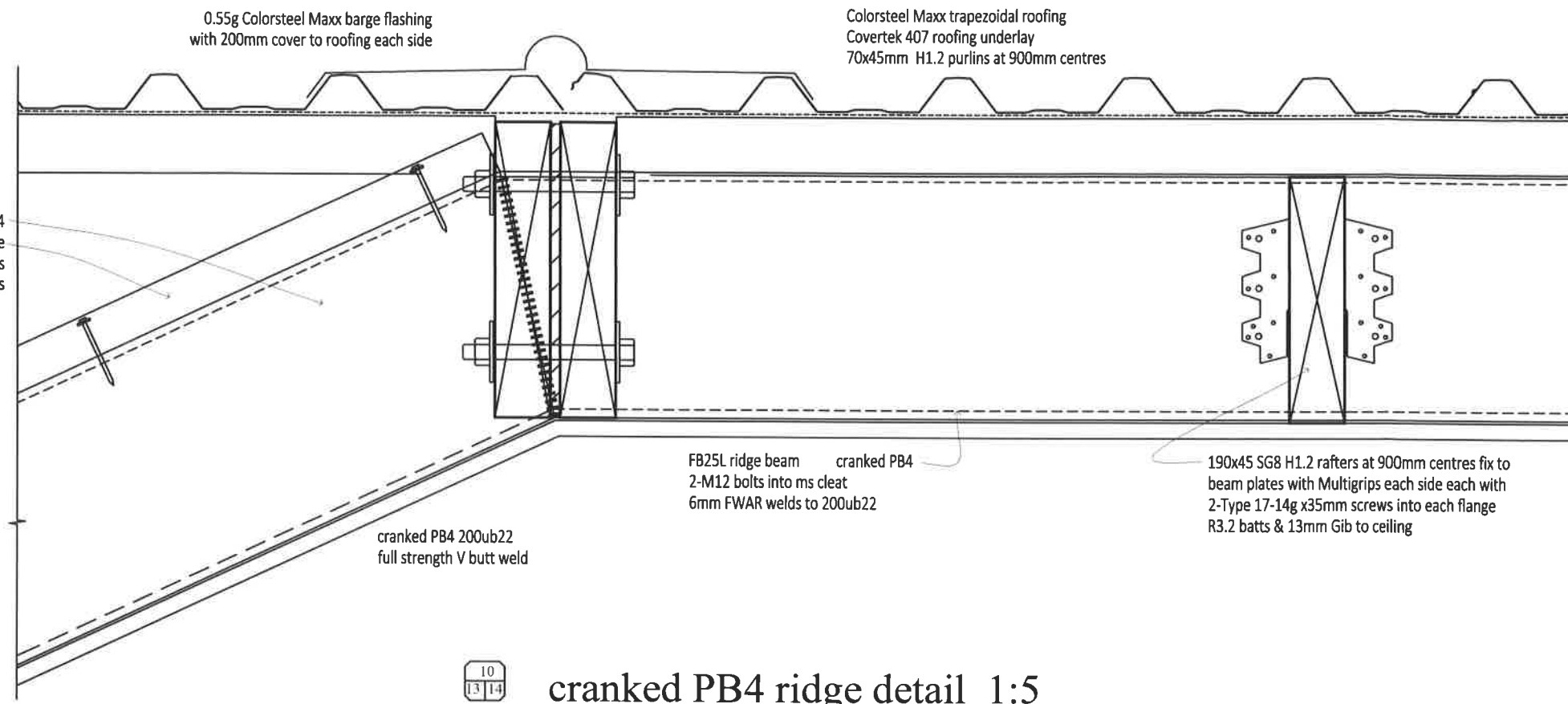
Proposed house for Jenny & Peter Morgan, 36 Old Hospital Road, Whangaroa



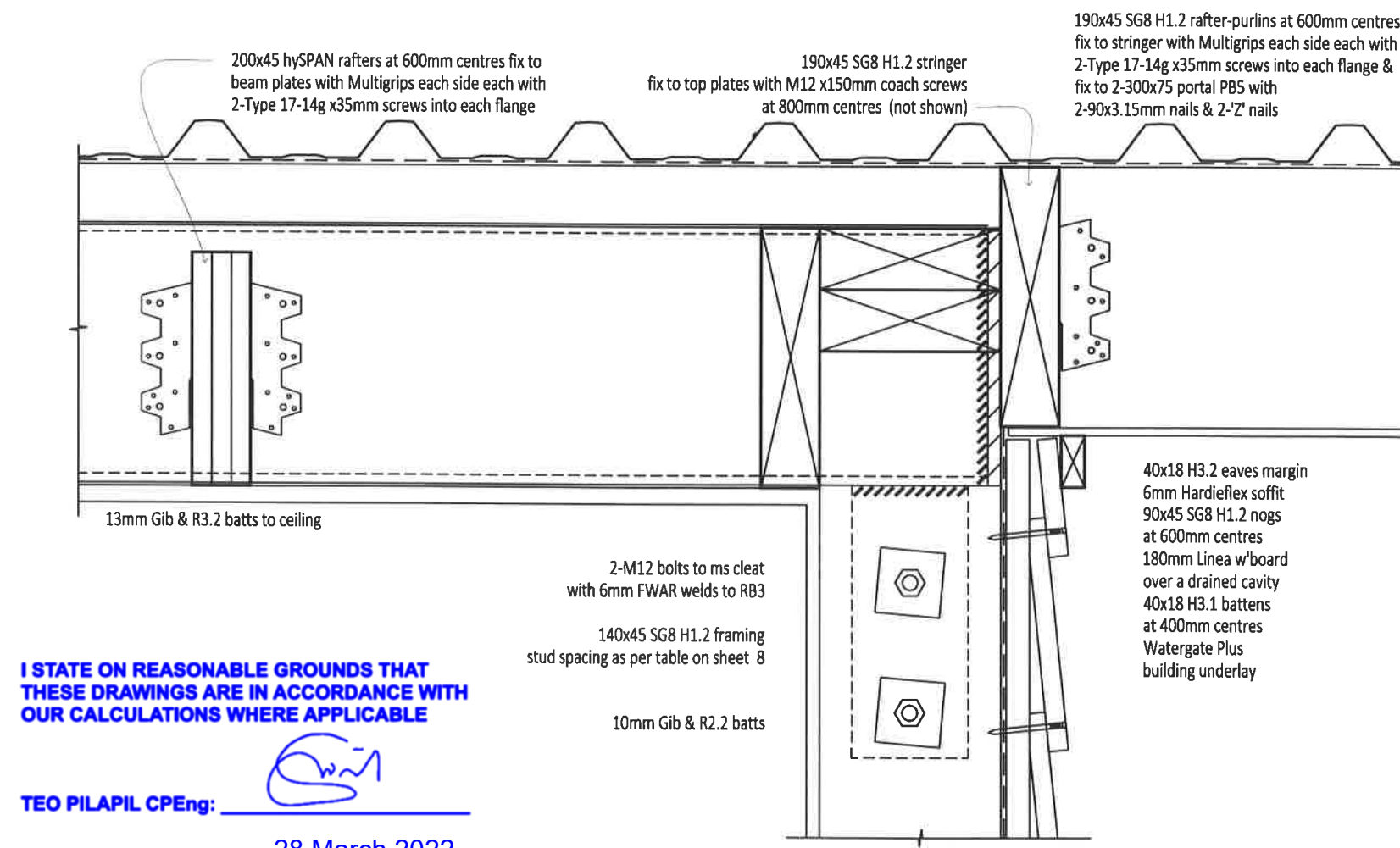
9 cranked PB4 detail 1:5



11 cranked PB4/RB3/PB3 detail 1:5



10 cranked PB4 ridge detail 1:5

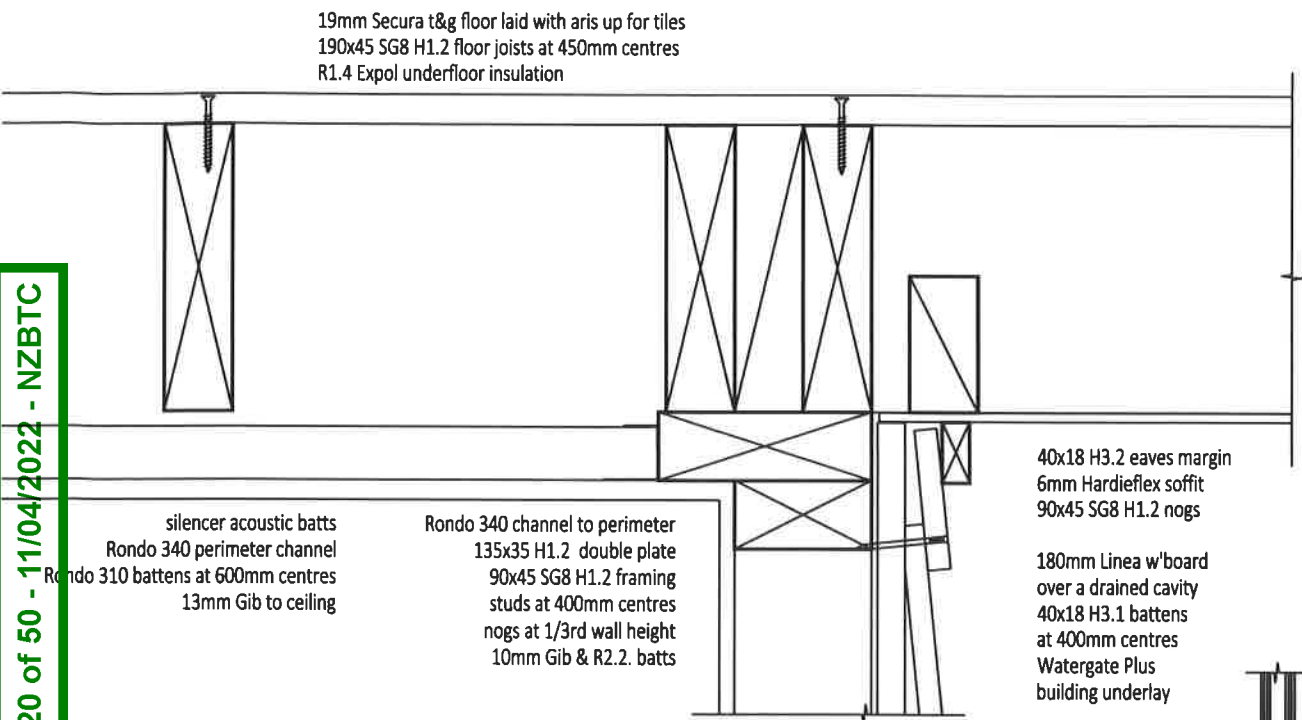


12 cranked PB4 detail 1:5

I STATE ON REASONABLE GROUNDS THAT
THESE DRAWINGS ARE IN ACCORDANCE WITH
OUR CALCULATIONS WHERE APPLICABLE

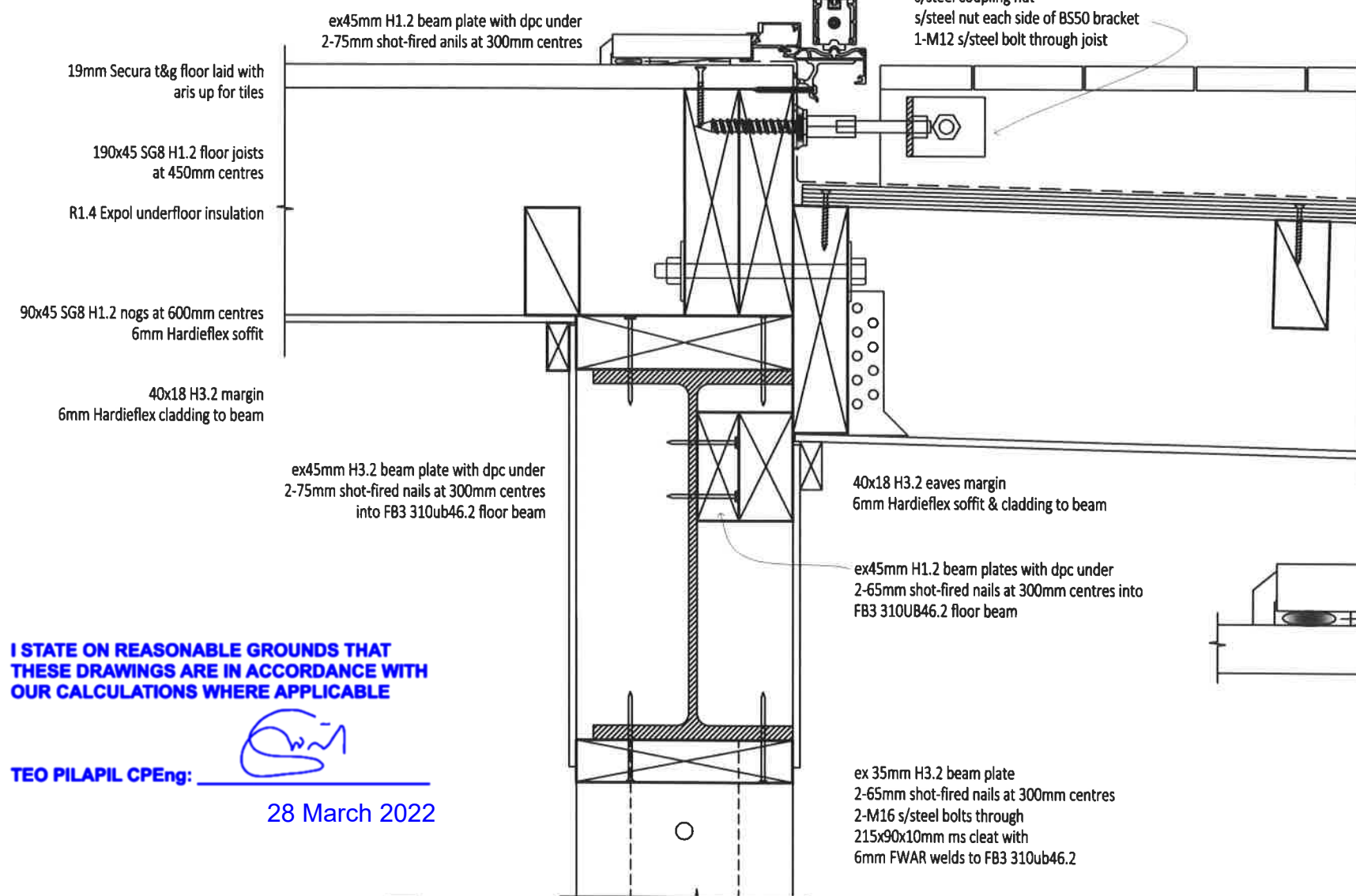
TEO PILAPIL CPEng: 
28 March 2022

section B-B details #1 1:10
Proposed house for Jenny & Peter Morgan, 36 Old Hospital Road, Whangaroa



14
13 15

wall/soffit detail 1:5



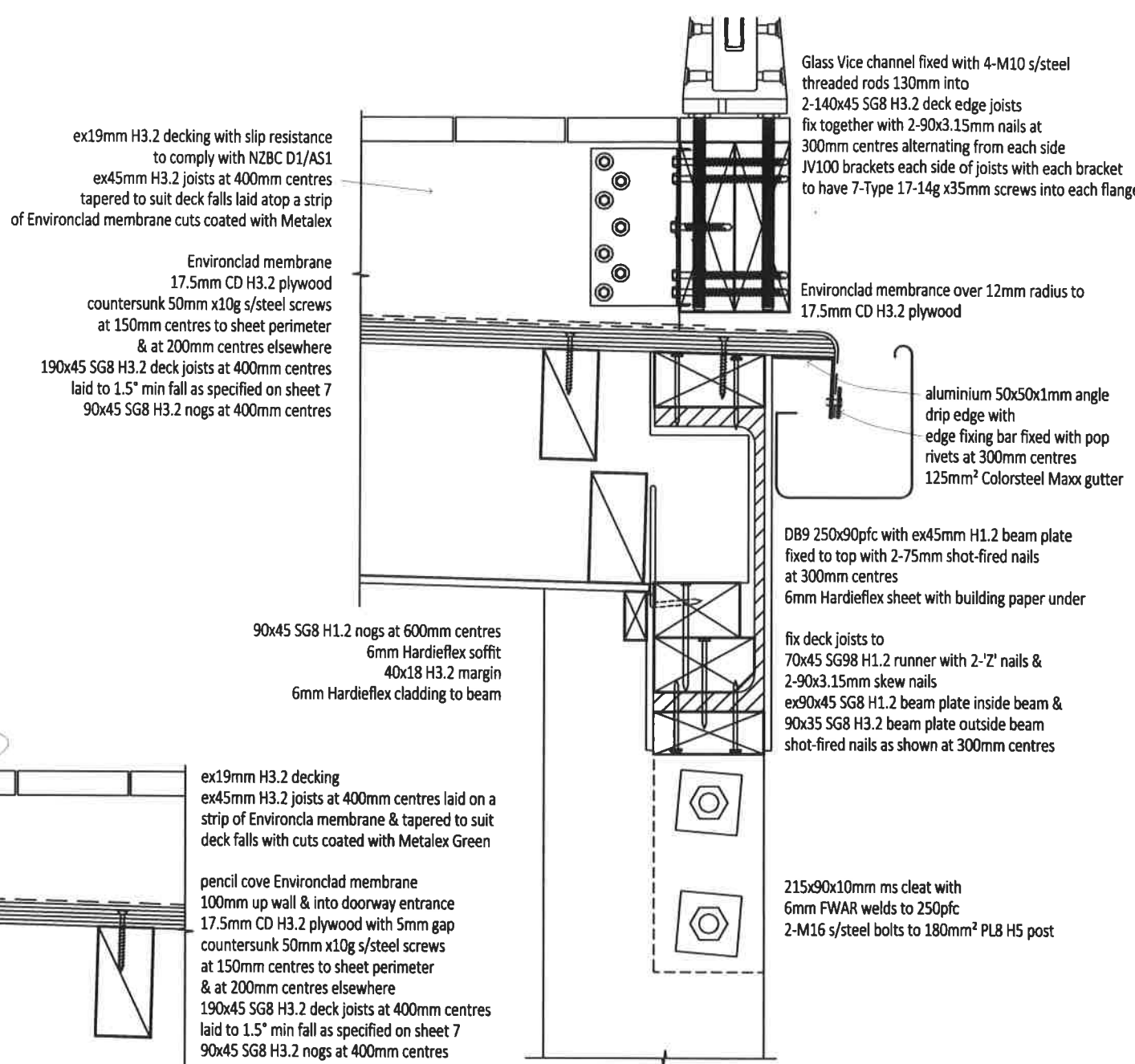
I STATE ON REASONABLE GROUNDS THAT
THESE DRAWINGS ARE IN ACCORDANCE WITH
OUR CALCULATIONS WHERE APPLICABLE

TEO PILAPIL CPEng:
28 March 2022

section B-B details #2 1:5
Proposed house for Jenny & Peter Morgan, 36 Old Hospital Road, Whangaroa

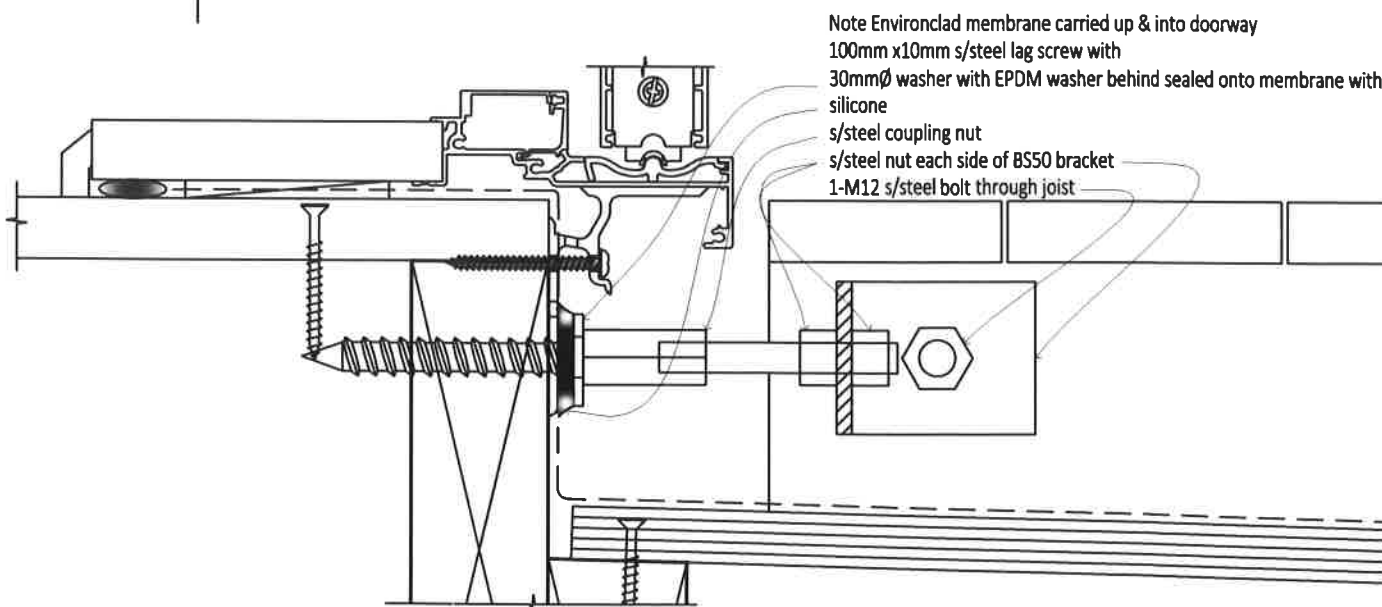
FB3 310ub46.2 detail 1:5

22/03/2022



16
13 15

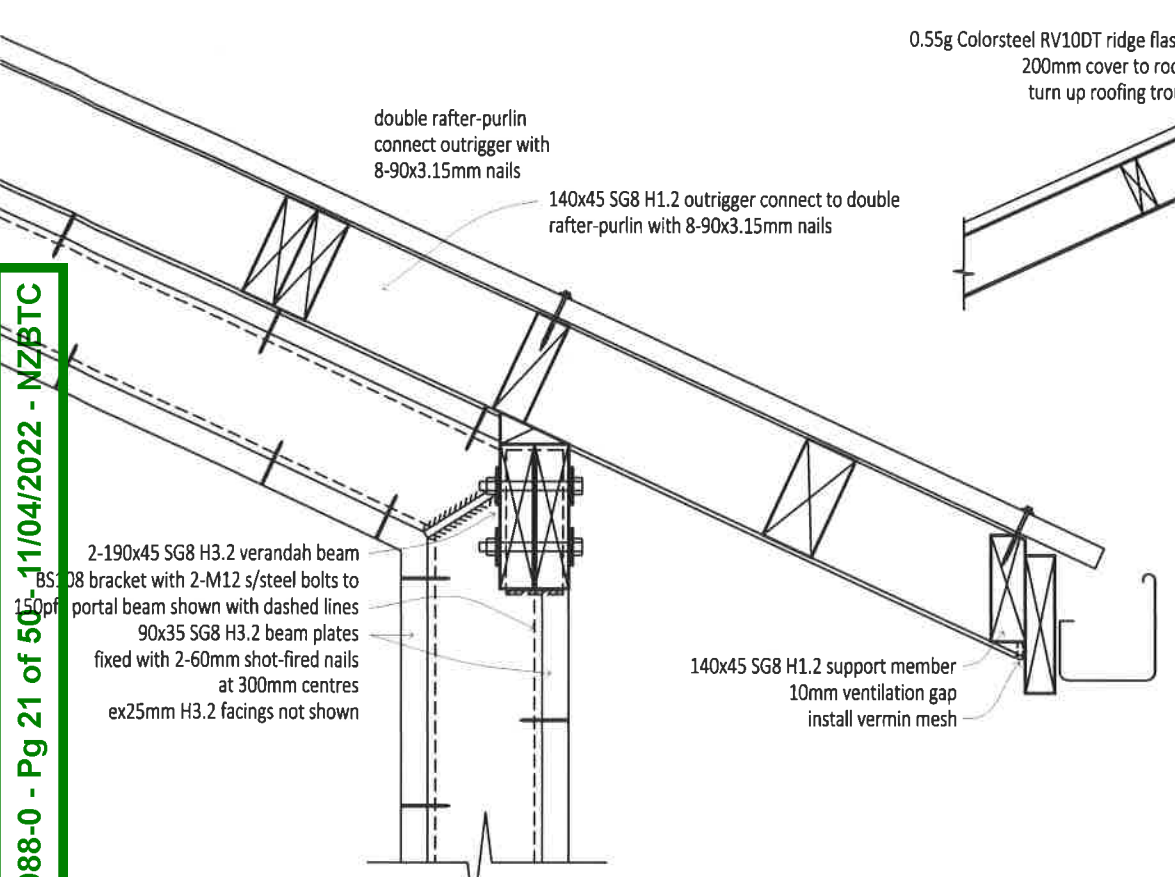
DB9 250pfc detail 1:5



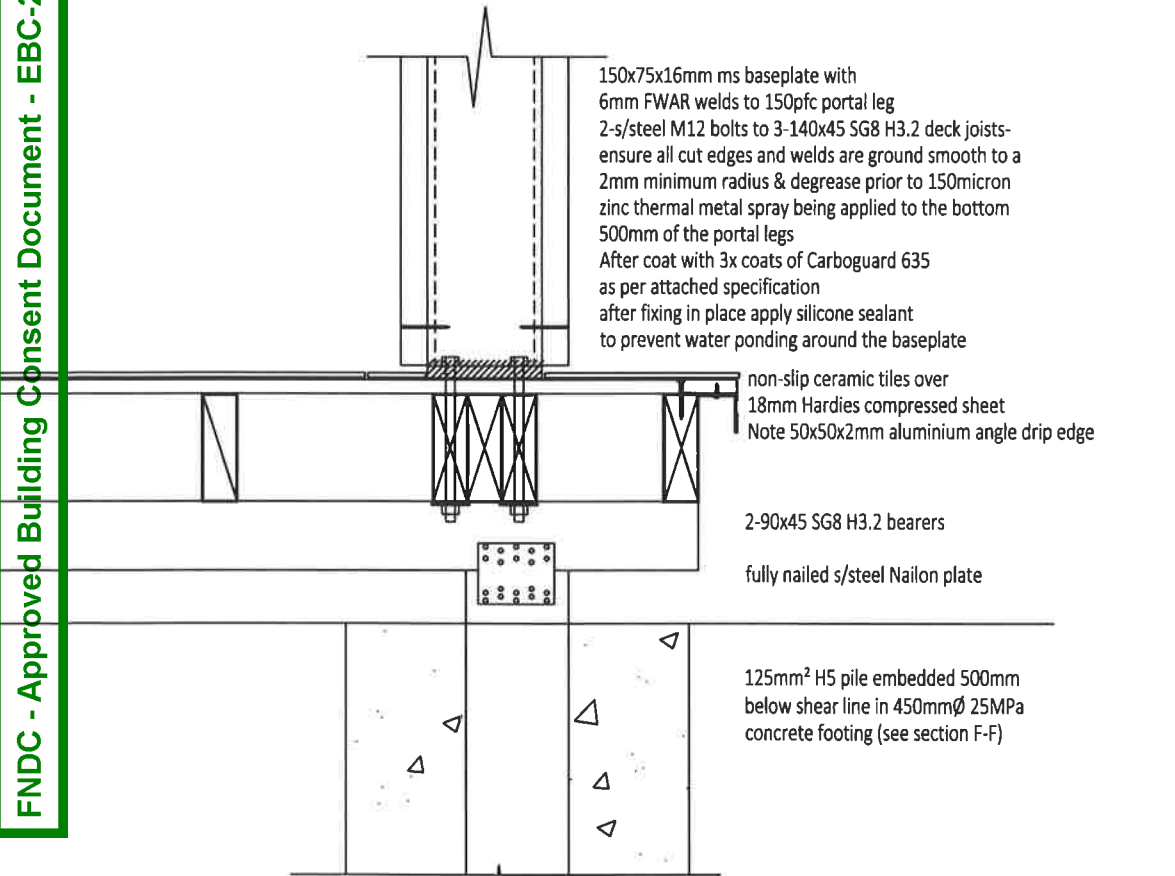
detail 15 detail 1:2.5

cross referencing key
sheet number where detail sourced from 13 15 sheet with detail on

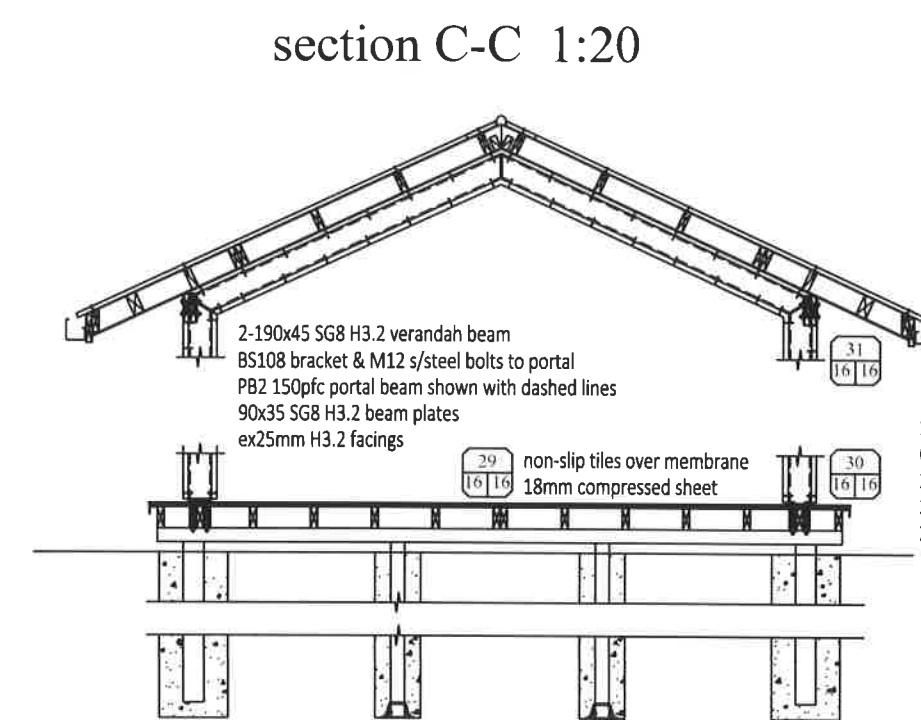
FNDC - Approved Building Consent Document - EBC-2022-988-0 - Pg 21 of 50 11/04/2022 - NZBTC



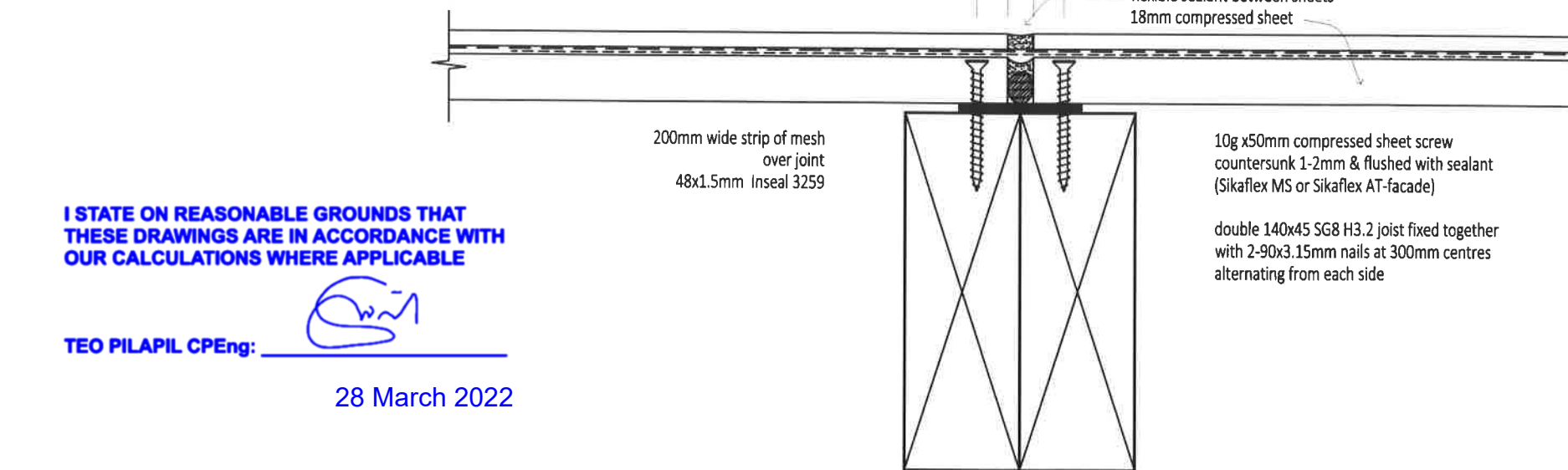
PB1 150pfc portal verandah beam detail 1:10



PB1 150pfc portal beam base detail 1:10



section D-D 1:50



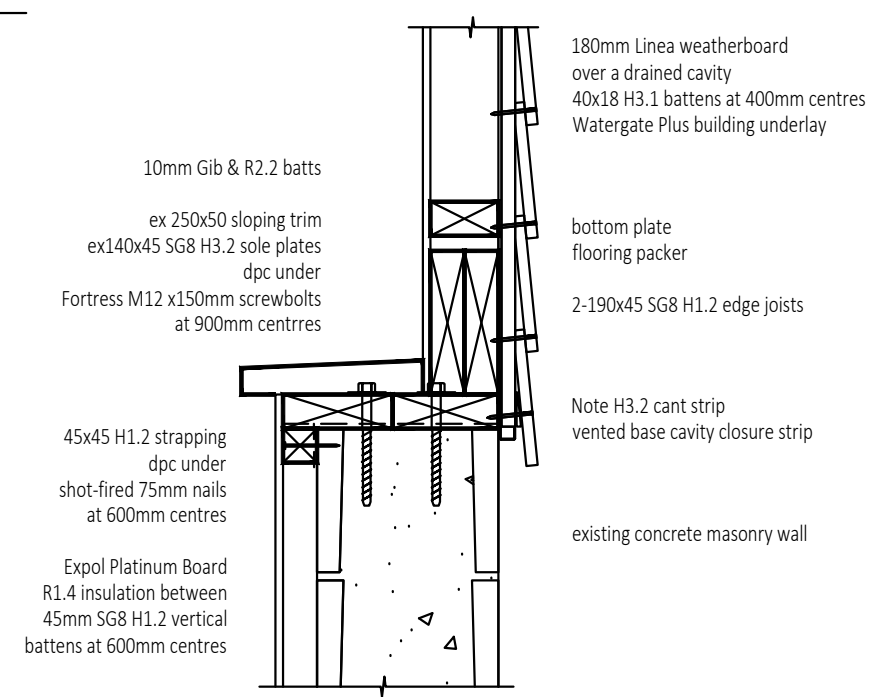
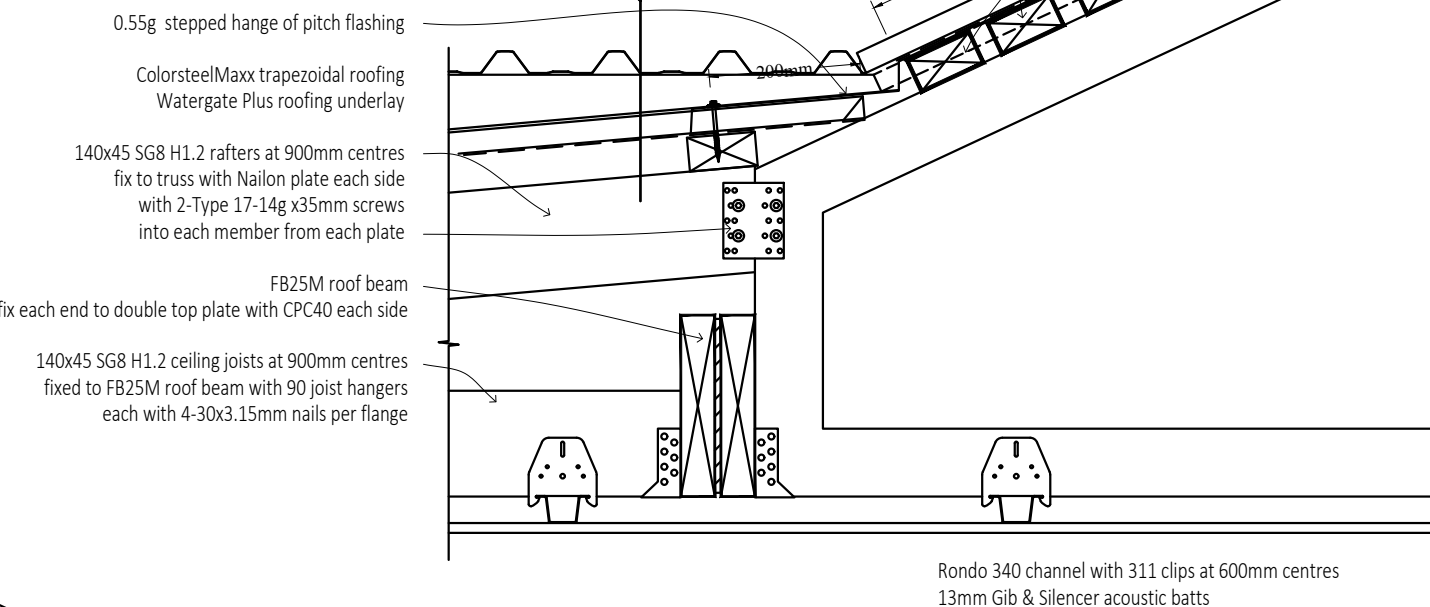
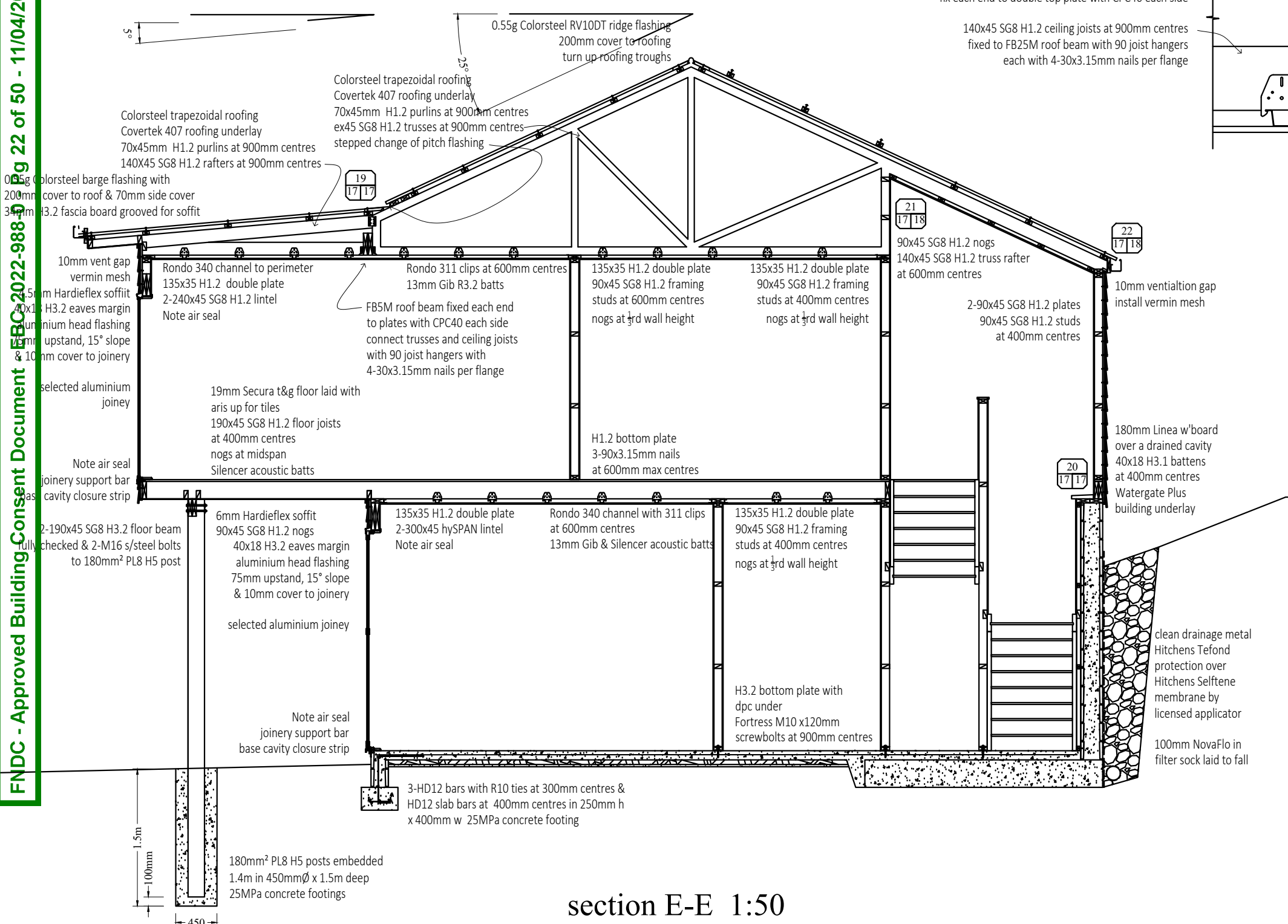
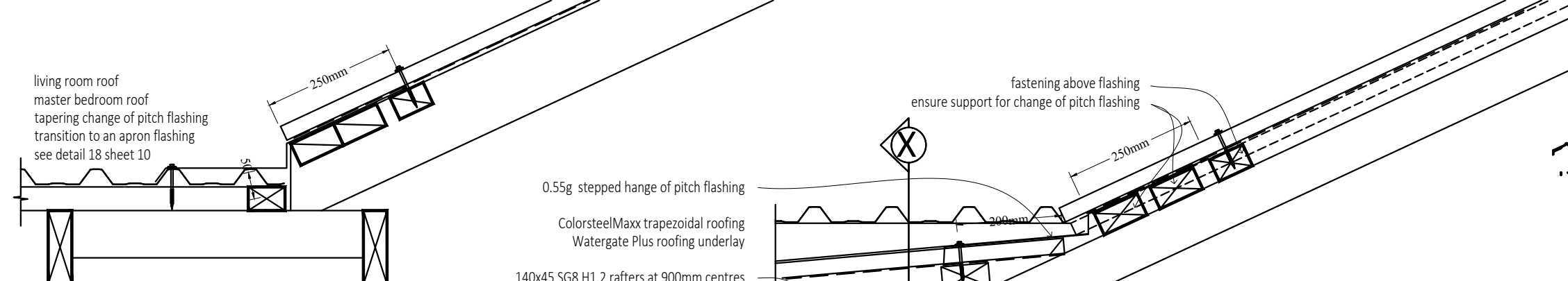
deck control joint detail 1:2.5

Note:
PB2 150pfc portal legs bottom 500mm to be zinc thermal
metal sprayed to 150micron minimum thickness before
application of 3x coats of Carboguard 635 as per
attached specification

I STATE ON REASONABLE GROUNDS THAT
THESE DRAWINGS ARE IN ACCORDANCE WITH
OUR CALCULATIONS WHERE APPLICABLE

TEO PILAPIL CPEng: 
28 March 2022

sections C-C & D-D 1:20
Proposed house for Jenny & Peter Morgan, 36 Old Hospital Road, Whangaroa



section E-E 1:50 & details 1:5, 1:10
Proposed house for Jenny & Peter Morgan, 36 Old Hospital Road, Whangaroa



NOTES: ALL CONSTRUCTION SHALL BE TO NZS 3604:2011 AND AMENDMENTS AND OTHER RELATED DOCUMENTS THAT APPLY TO THE WORK SHOWN. ALL DIMENSIONS AND DETAIL IN THIS DRAWING SHALL BE CHECKED BY THE CONTRACTOR AND ANY DISCREPANCIES OR AMBIGUITIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF CADPLANZ. TEL: 09-407 9816. FAX: 09-407 9817. MOB: 0274 505 471. DO NOT SCALE DIMENSIONS! DO NOT GUESS...ASK!

DATE 08/04/2022
SHEET 17

cross referencing key
sheet number where detail sourced from 1-3
detail number sheet with detail on 1-3

Colorsteel trapezoidal roofing
Covertek 407 roofing underlay
70x45mm H1.2 purlins at 900mm centres
ex45 SG8 H1.2 trusses at 900mm centres

70x35 H1.2 battens
at 600mm centres
R3.2 batts & 13mm Gib
to ceilings

140x45 SG8 H1.2 truss rafter
70x35 H1.2 battens at 600mm centres
R3.2 batts & 13mm Gib to ceiling

90x45 SG8 H1.2 nogs at 600mm centres between trusses
fix each end with 4-90x3.15mm nails
10mm Gib & R2.2 batts

135x35 SG8 H1.2 double top plate
90x45 SG8 H1.2 top plate

22
17 18

truss/top plate detail 1:5

I STATE ON REASONABLE GROUNDS THAT
THESE DRAWINGS ARE IN ACCORDANCE WITH
OUR CALCULATIONS WHERE APPLICABLE

TEO PILAPIL CPEng:

28 March 2022

21
17 18

truss detail 1:5

Linea weatherboard over building underlay
40x18 H3.1 cavity battens
40x10 H3.1 scribe cut neatly to shape
ex19mm H3.2 cover boards (50mm cover)
SealnFlex-1 sealant
backing rod

2-300x75 lawson cypress
portal legs

ex50x70 s/steel flashing
SealnFlex sealant-1
backing rod
Linea weatherboard over
building underlay
40x18 H3.1 cavity battens
wall framing

cladding detail 1:5

125mm² Colorsteel Maxx gutter
ex34mmH3.2 fascia board

10mm ventilation gap
install vermin mesh
180mm Linea weatherboard
over a drained cavity
40x18 H3.1 battens at 400mm centres
Watergate Plus building underlay

Note 2-90x45 SG8 H1.2 top plate

cranked portal PB4 200ub22.3
valley beam VB1 2-190x45 SG8 H1.2
1-M12 bolt through RB2 2-240x45 SG8 H1.2 &
8mm ms cleat

cranked portal PB4 200ub22.3
valley beam VB2 2-190x45 SG8 H1.2
1-M12 bolt through RB1 FB25L &
8mm ms cleat

240x150x8mm ms cleat
6mm FWAR welds to PB4
2-M12 bolts to RB1 FB25L
Note cut back RB1 FB25L flitch plate
by 160mm to accommodate cleat

45
9b 18

ridge beams/valley beams/ PB4 detail 1:5

section E-E details & cladding detail 1:5
Proposed house for Jenny & Peter Morgan, 36 Old Hospital Road, Whangaroa

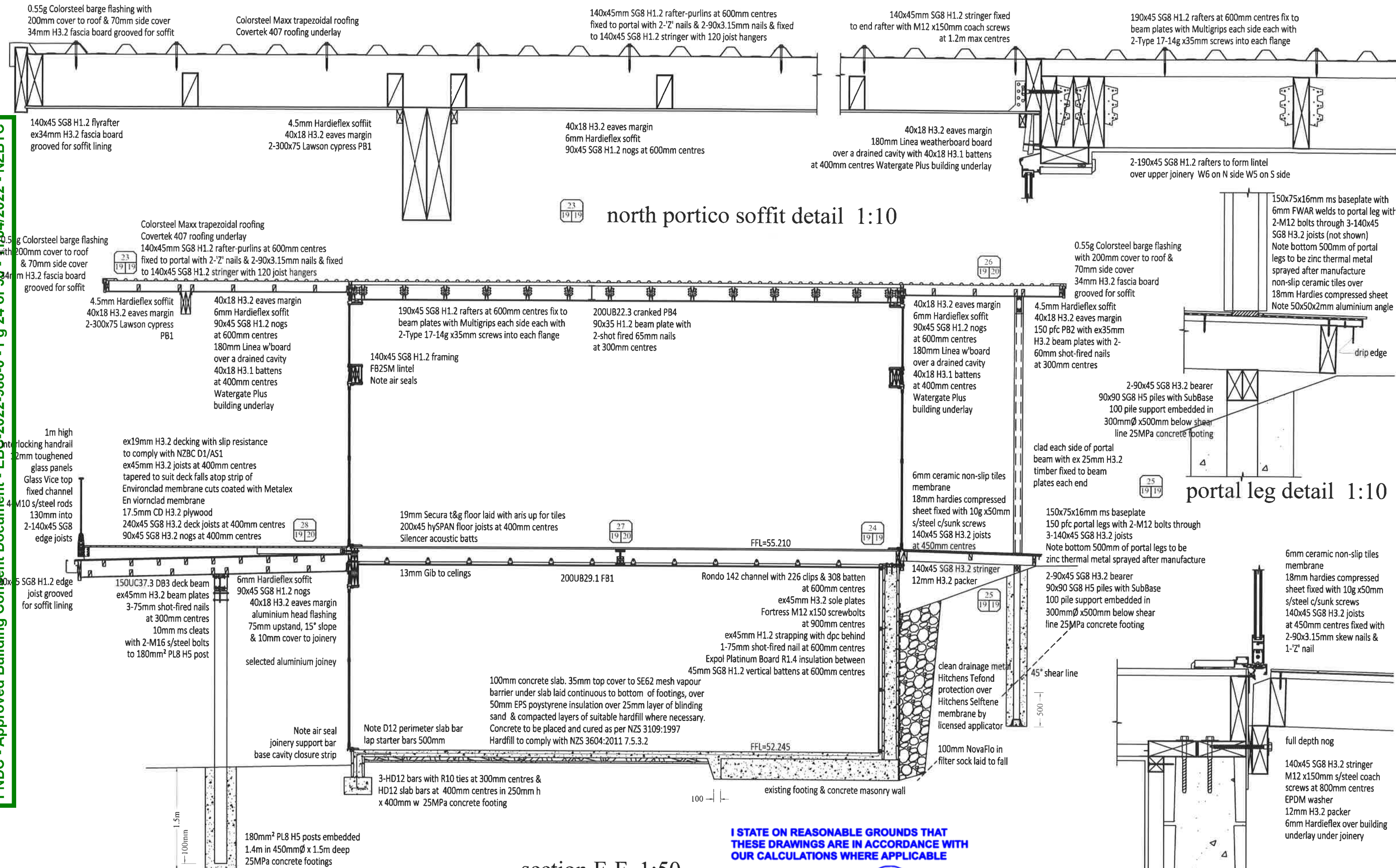


NOTES: ALL CONSTRUCTION SHALL BE TO NZS 3604:2011 AND AMENDMENTS AND OTHER RELATED DOCUMENTS THAT
APPLY TO THE WORK SHOWN. ALL DIMENSIONS AND DETAIL IN THIS DRAWING SHALL BE CHECKED BY THE
CONTRACTOR AND ANY DISCREPANCIES OR AMBIGUITIES SHALL BE REPORTED TO THE IMMEDIATE ATTENTION OF
CADWALL/ TEL: 09-407 9816 FAX: 09-407 9817 MOB: 0274 309 471. DO NOT SCALE DIMENSIONS. DON'T GUESS. ASK.

22/03/2022

18

cross referencing key
sheet number where 1 - detail number
detail sourced from 6 - sheet with detail on



section F-F 1:50 & details 1:10

Proposed house for Jenny & Peter Morgan, 36 Old Hospital Road, Whangaroa



NOTES: ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE 2011 INTERNATIONAL RESIDENTIAL CODE AND ALL AMENDMENTS AND OTHER RELATED DOCUMENTS THAT APPLY TO THE WORK. WORK SHALL BE DONE IN ACCORDANCE WITH THE 2011 INTERNATIONAL RESIDENTIAL CODE AND ALL AMENDMENTS AND OTHER RELATED DOCUMENTS THAT APPLY TO THE WORK. ALL DIMENSIONS AND DETAIL IN THIS DRAWING SHALL BE CHECKED BY THE CONTRACTOR AND ANY DISCREPANCIES OR AMBIGUITIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF CADPAC. TEL: (904) 487-9816 FAX: (904) 487-9817 OR EMAIL: (904) 487-9817. DO NOT SCALE DIMENSIONS. DO NOT GUESS. ANY

28/03/2022

19

**I STATE ON REASONABLE GROUNDS THAT
THESE DRAWINGS ARE IN ACCORDANCE WITH
OUR CALCULATIONS WHERE APPLICABLE**

TEO PILAPIL CPEng:

28 March 2022

deck stringer detail 1:10

cross referencing key

sheet number where detail sourced from	1 6	3	detail number sheet with detail on
---	--------	---	---------------------------------------

NOTES: ALL CONSTRUCTION SHALL BE TO SPS 304.201 AND AMENDMENTS AND OTHER RELATED DOCUMENTS THAT APPLY TO THE WORK SHOWN. ALL DIMENSIONS AND DATA IN THIS DRAWING SHALL BE CHECKED BY THE CONTRACTOR AND ANY DISCREPANCIES OR AMBIGUITIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF CADPLAN/ T11 09-407-5816 FAX 09-407-0817 MOB 0274 503-475. DO NOT SCALE DIMENSIONS. DO NOT GUESS. ASK.

20

deck details 1:10

cross referencing key

sheet number where
detail sourced from

1
6

detail number
sheet with detail on



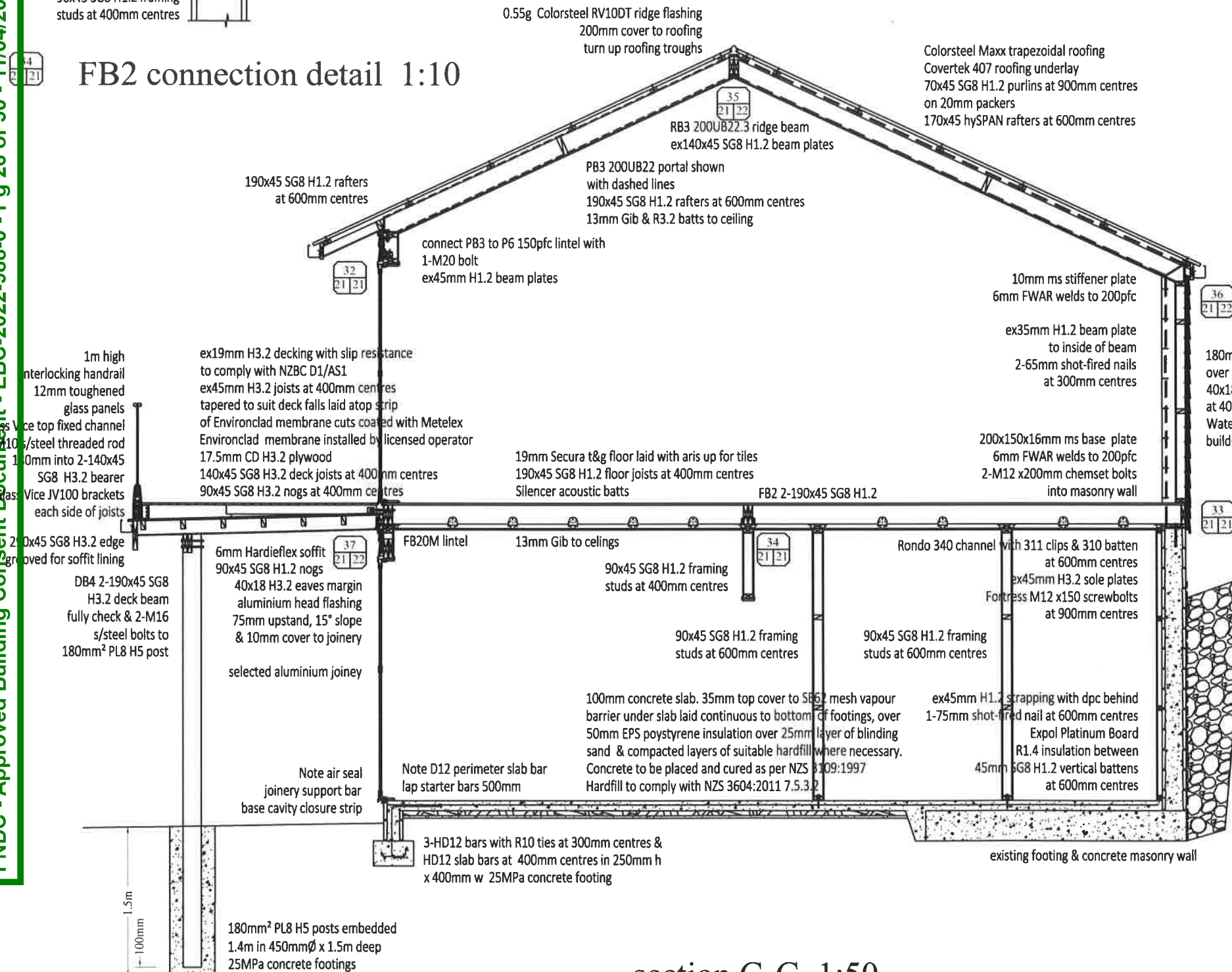
19mm Secura t&g floor laid with aris up for tiles
190x45 SG8 H1.2 floor joists at 400mm centres
fixed to FB2 2-190x45 SG8 H1.2 with 120 joist
hangers with 6-product nails per flange

I STATE ON REASONABLE GROUNDS THAT
THESE DRAWINGS ARE IN ACCORDANCE WITH
OUR CALCULATIONS WHERE APPLICABLE

TEO PILAPIL CPEng:

28 March 2022

FB2 connection detail 1:10



section G-G 1:50

section G-G 1:50 & details 1:5

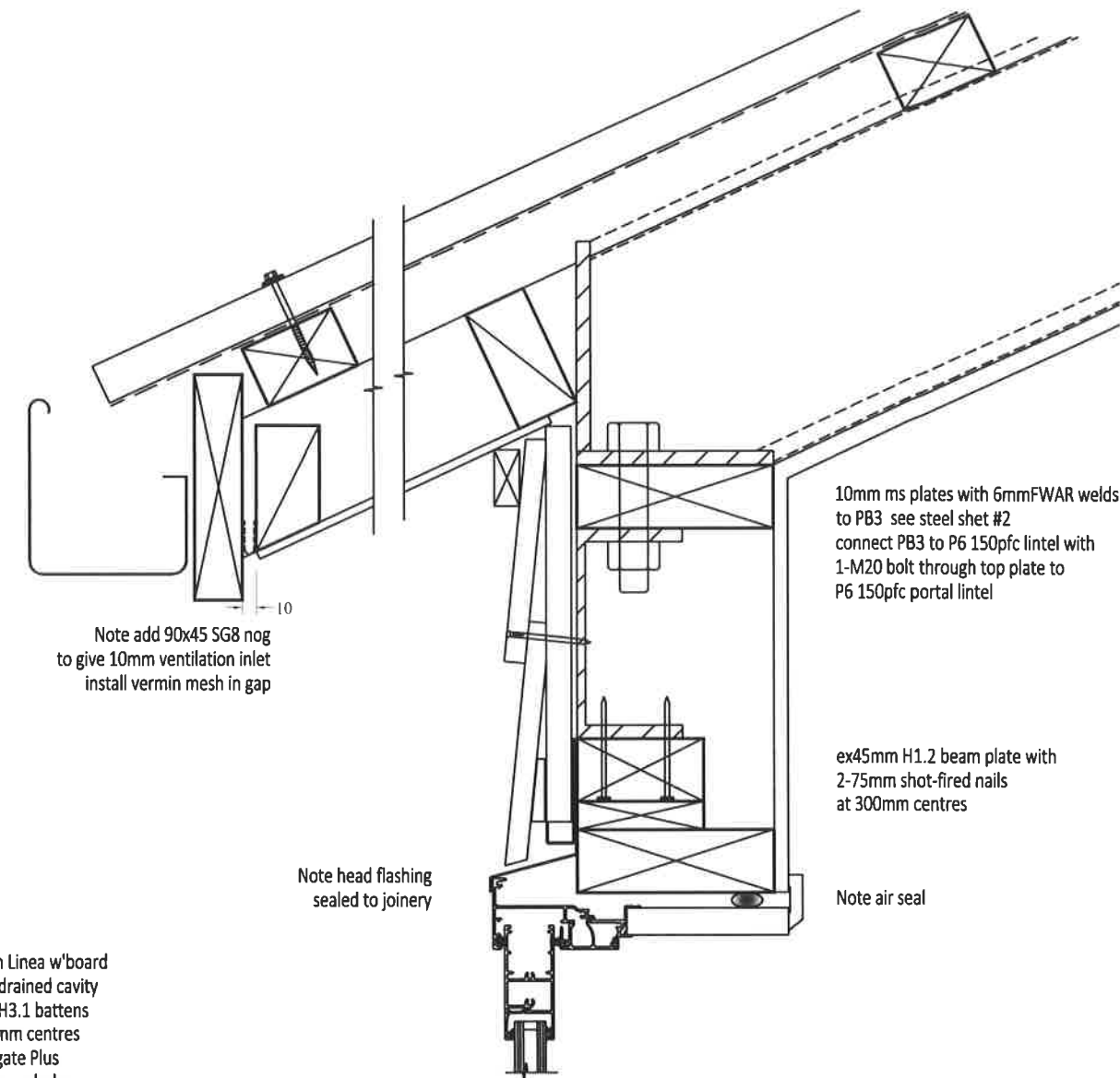
Proposed house for Jenny & Peter Morgan, 36 Old Hospital Road, Whangaroa



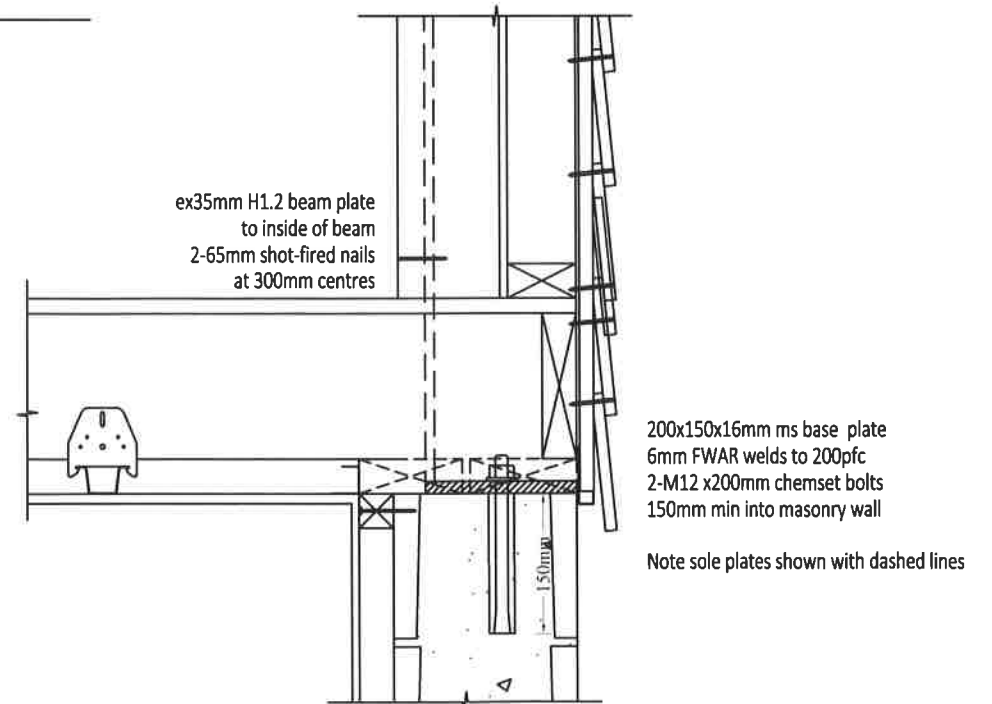
NOTES: ALL CONSTRUCTION SHALL BE TO NZS 3604:2011 AND AMENDMENTS AND OTHER RELATED DOCUMENTS THAT APPLY TO THE WORK SHOWN. ALL DIMENSIONS AND DETAIL IN THIS DRAWING SHALL BE CHECKED BY THE CONTRACTOR AND ANY DISCREPANCIES SHOULD BE REPORTED TO THE DMB THAT ATTENDS YOUR CADPLANZ TEL: 06-407 9806 FAX: 06-407 9817 MOB: 0274 569 471. DO NOT SCALE DIMENSIONS. DO NOT GUESS. ASK.

22/03/2022

21

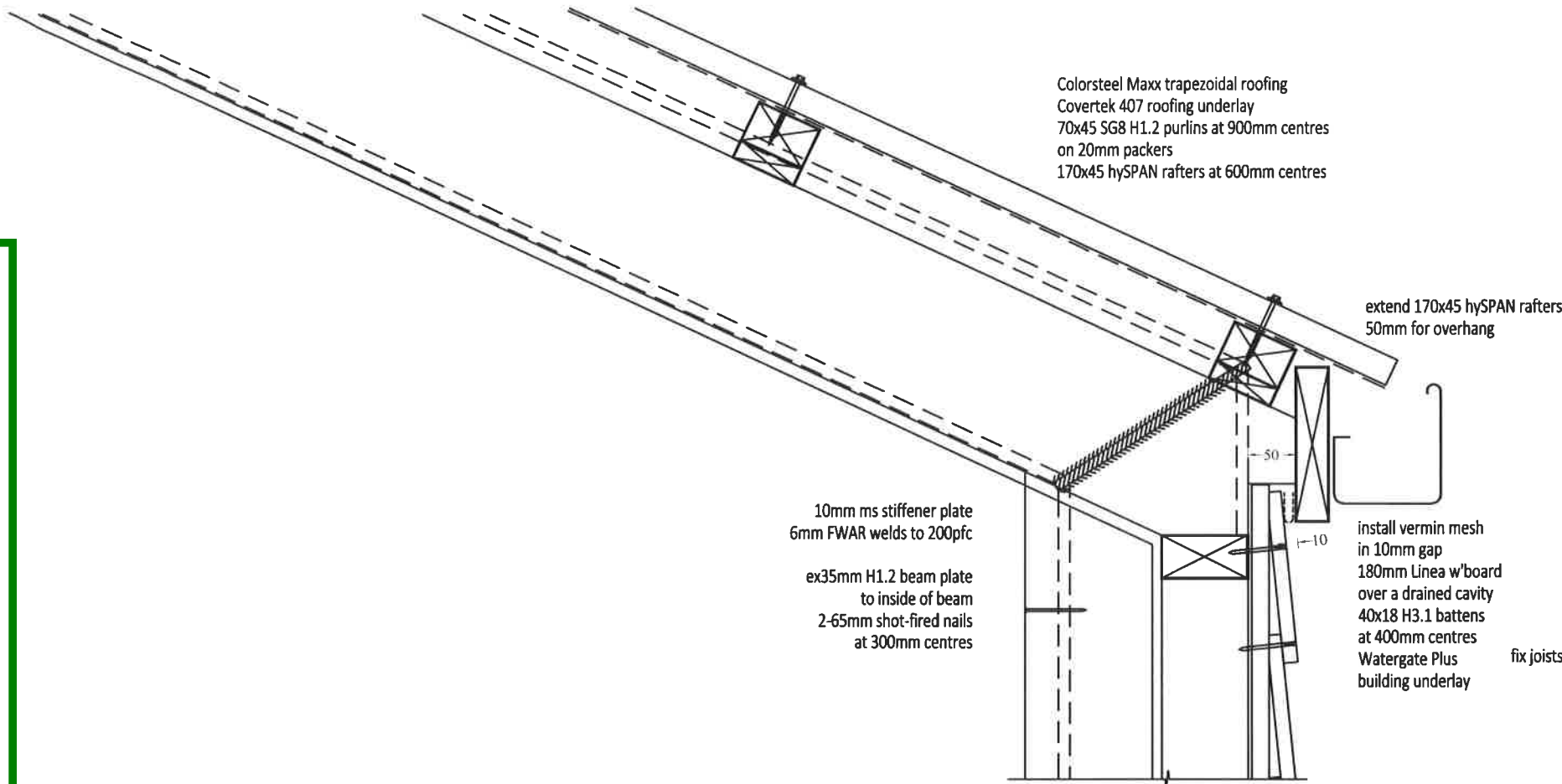


PB3/P6 connection detail 1:5

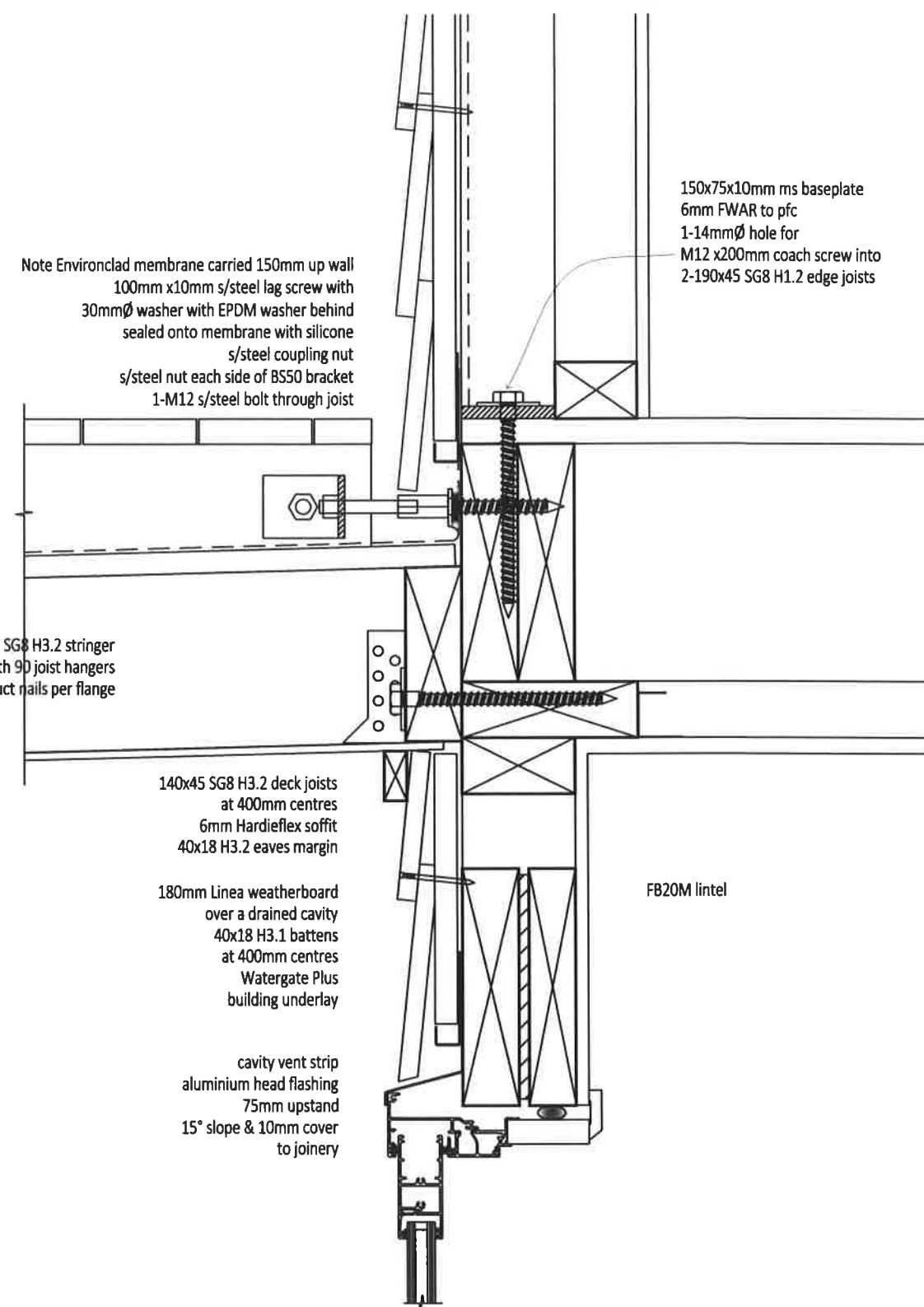


PB3 base connection detail 1:10

cross referencing key
sheet number where 1- detail number
detail sourced from 6-3- sheet with detail on



36
21 22 PB3 200UB22 portal knee detail 1:10

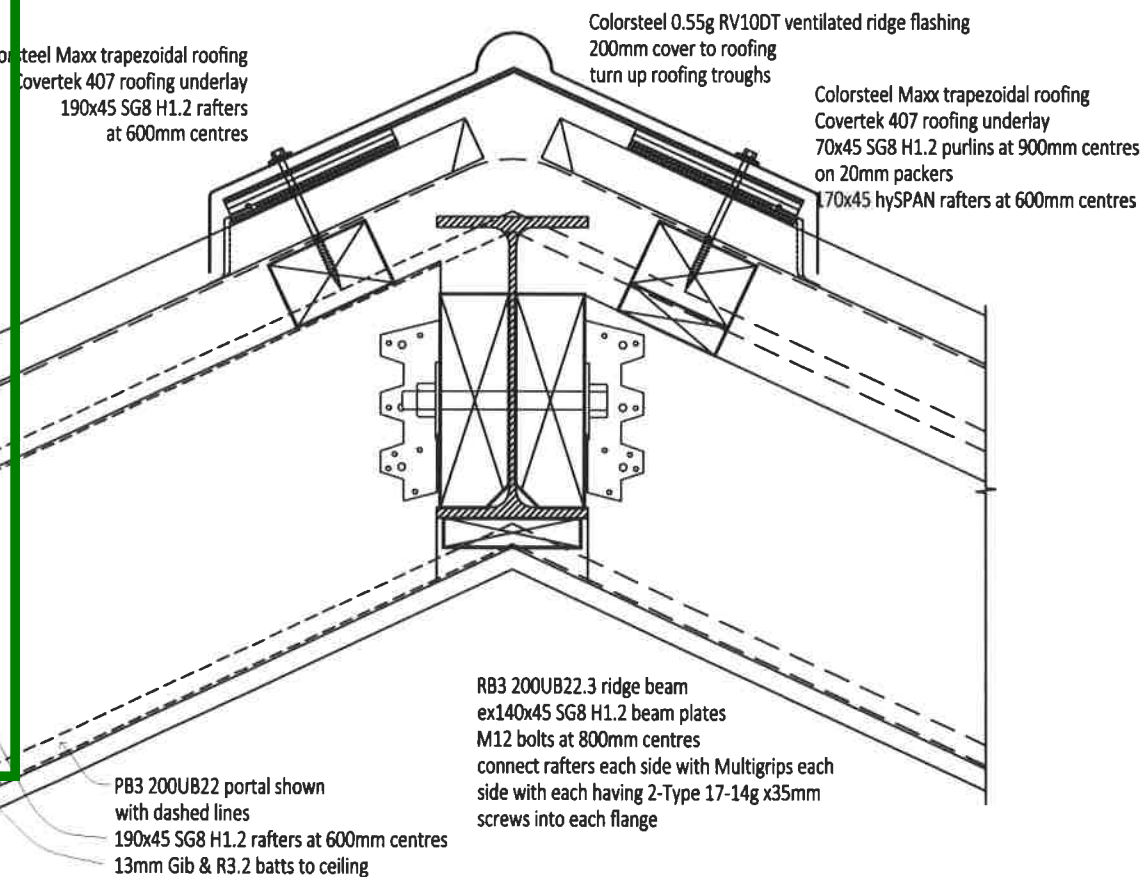


37
21 22 P6 150pfc portal lintel base detail 1:5

I STATE ON REASONABLE GROUNDS THAT
THESE DRAWINGS ARE IN ACCORDANCE WITH
OUR CALCULATIONS WHERE APPLICABLE

TEO PILAPIL CPEng:

28 March 2022



35
21 22 PB3/RB3 ridge detail 1:5

section G-G details 1:5 & masonry joinery detail 1:7.5

Proposed house for Jenny & Peter Morgan, 36 Old Hospital Road, Whangaroa

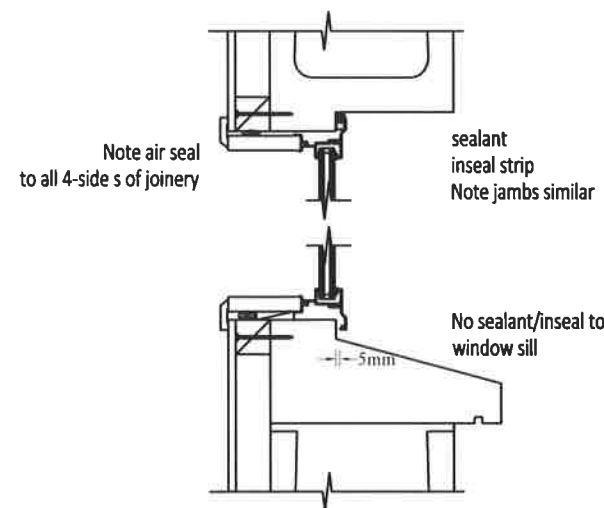


NOTES: ALL CONSTRUCTION SHALL BE TO NZS 3604:2011 AND AMENDMENTS AND OTHER RELATED DOCUMENTS THAT
APPLY TO THE WORK SHOWN. ALL DIMENSIONS AND DETAIL IN THIS DRAWING SHALL BE CHECKED BY THE
CONTRACTOR AND ANY DISCREPANCIES FOR AMBIGUITIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF
CADPLANZ. TEL: 09-407 9016 FAX: 09-407 9817 MOB: 0274 505 371 DO NOT SCALE DIMENSIONS. DO NOT GUESS. ASK

22/03/2022

22

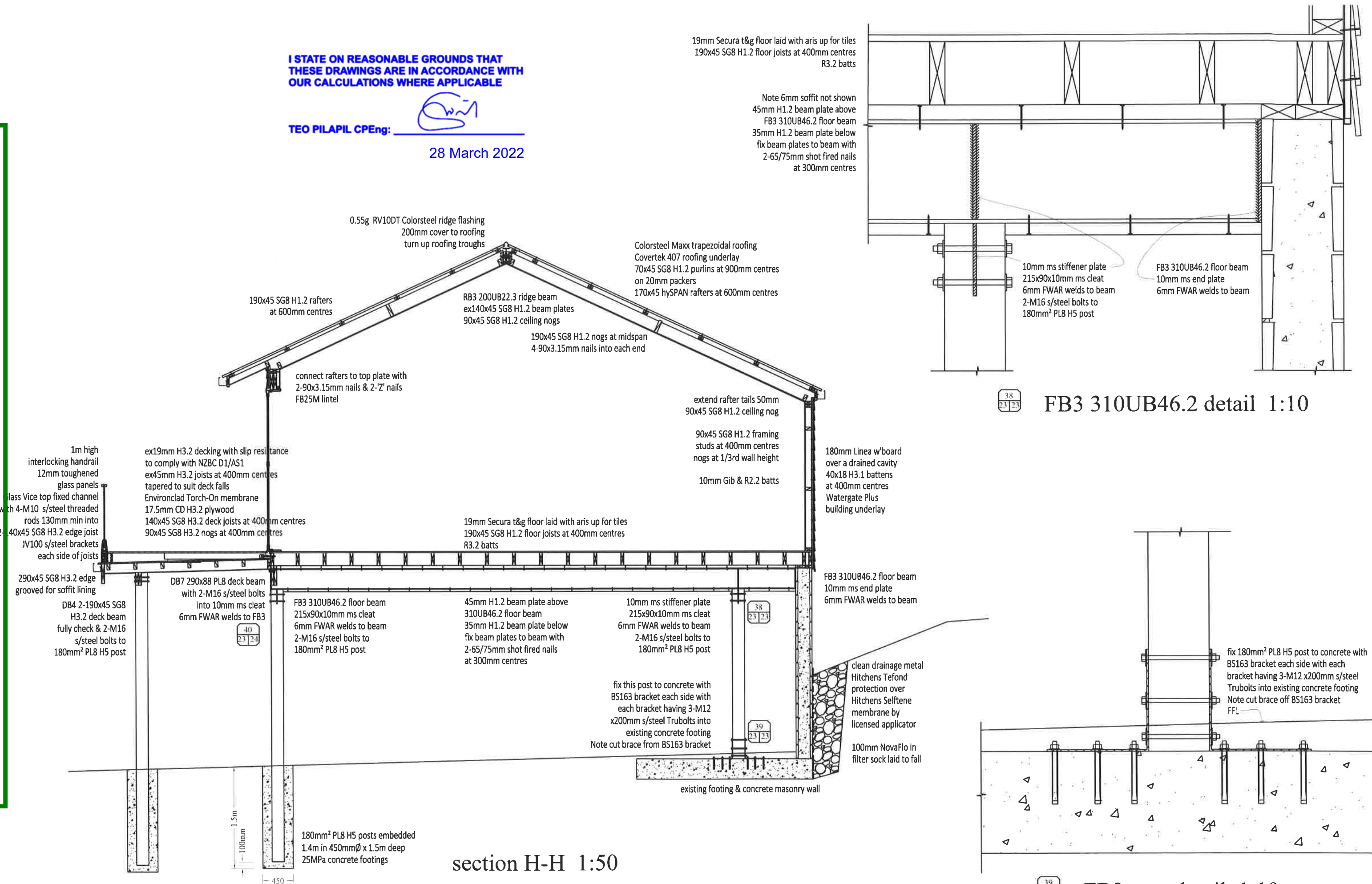
masonry/joinery detail 1:7.5



I STATE ON REASONABLE GROUNDS THAT
THESE DRAWINGS ARE IN ACCORDANCE WITH
OUR CALCULATIONS WHERE APPLICABLE

TEO PILAPIL CPEng:

28 March 2022



section H-H 1:50

Proposed house for Jenny & Peter Morgan, 36 Old Hospital Road, Whangaroa



NOTES: ALL CONSTRUCTION SHALL BE TO NZS 3604:2011 AND AMENDMENTS AND OTHER RELATED DOCUMENTS THAT APPLY TO THE WORK SHOWN. ALL DIMENSIONS AND DETAIL IN THIS DRAWING SHALL BE CHECKED BY THE CONTRACTOR AND ANY DISCREPANCIES OR AMBIGUITIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS. THE ENGINEER'S RESPONSIBILITY IS LIMITED TO THE DESIGN AND CALCULATIONS SHOWN IN THIS DRAWING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONSTRUCTION AND FINISHES. THE ENGINEER'S RESPONSIBILITY IS LIMITED TO THE DESIGN AND CALCULATIONS SHOWN IN THIS DRAWING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONSTRUCTION AND FINISHES.

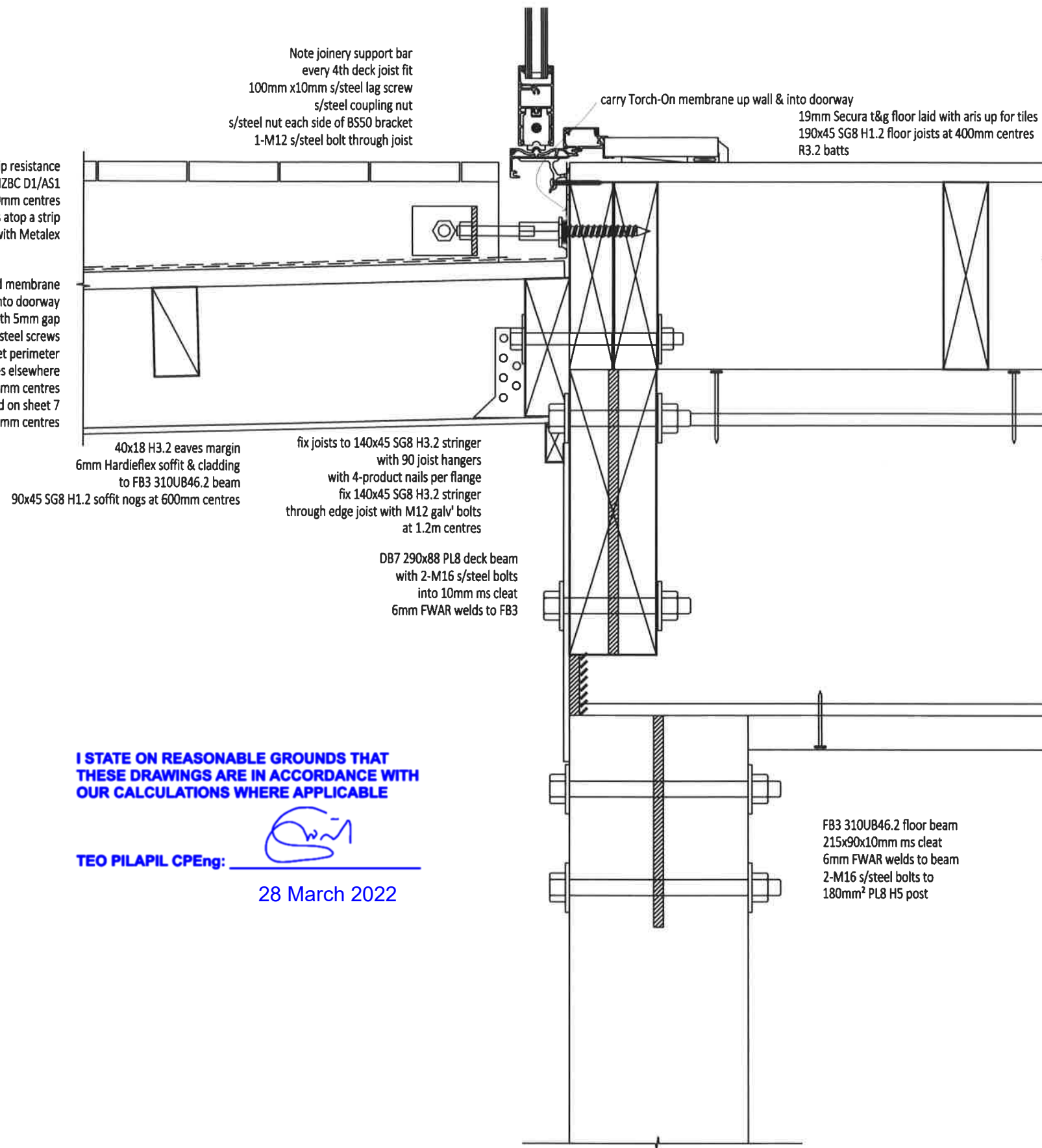
28/03/2022

23

39
23 23

FB3 post detail 1:10

cross referencing key
sheet number where detail sourced from 1-3 sheet with detail on



I STATE ON REASONABLE GROUNDS THAT
THESE DRAWINGS ARE IN ACCORDANCE WITH
OUR CALCULATIONS WHERE APPLICABLE

TEO PILAPIL CPEng:

[Signature]

28 March 2022

40
23 24

DB7/FB3 connection details 1:5

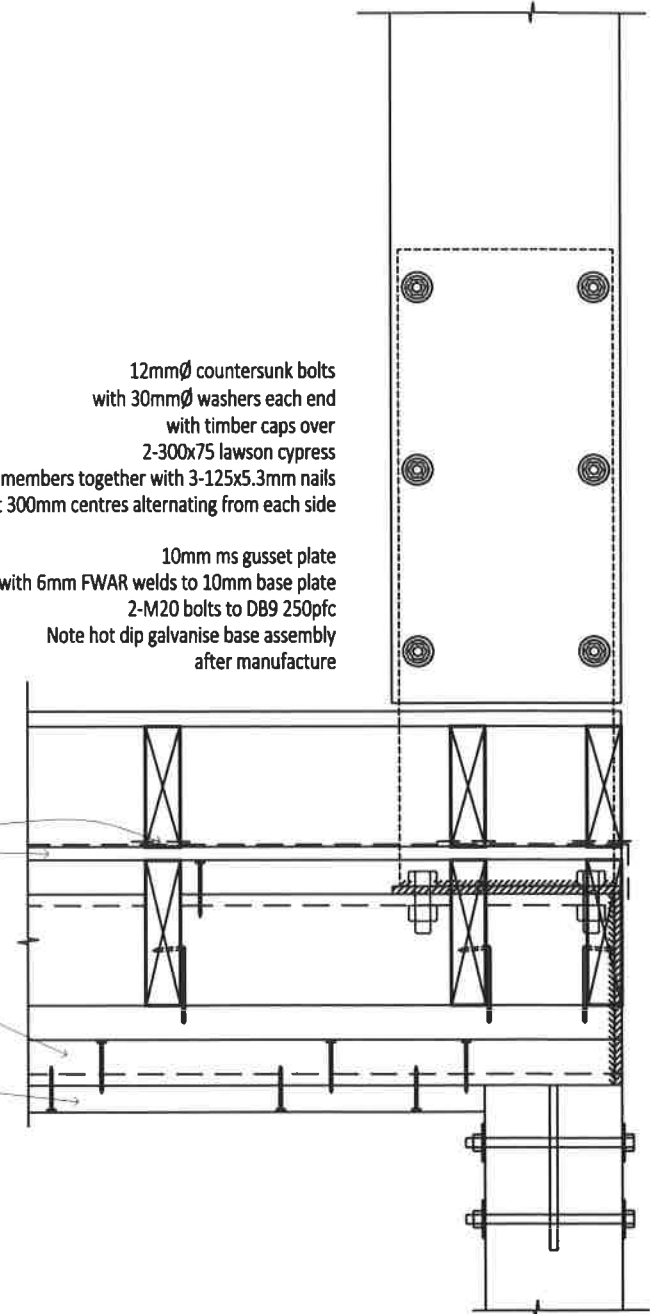
45mm H1.2 beam plate above
FB3 310UB46.2 floor beam
35mm H1.2 beam plate below
fix beam plates to beam with
2-65/75mm shot fired nails
at 300mm centres

12mmØ countersunk bolts
with 30mmØ washers each end
with timber caps over
2-300x75 lawson cypress
fix members together with 3-125x5.3mm nails
at 300mm centres alternating from each side

10mm ms gusset plate
with 6mm FWAR welds to 10mm base plate
2-M20 bolts to DB9 250pfc
Note hot dip galvanise base assembly
after manufacture

ex19mm H3.2 decking with slip resistance
to comply with NZBC D1/AS1
ex45mm H3.2 joists at 400mm centres
tapered to suit deck falls laid atop a strip of
Environclad membrane cuts coated with Metalex
Environclad membrane by licensed applicator
17.5mm CD H3.2 plywood

190x45 SG8 H3.2 deck joists at 400mm centres
fix to plate with 2-90x3.15mm skew nails
& 1-2" nail
ex45mm H1.2 beam plate with 75mm shot-fired
nails at 300mm centres into pfc
ex35mm H1.2 beam plate with 75mm shot-fired
nails at 300mm centres into pfc



43
25 24

DB9/PB5 connection details 1:10

sections H-H & I-I details 1:5

Proposed house for Jenny & Peter Morgan, 36 Old Hospital Road, Whangaroa

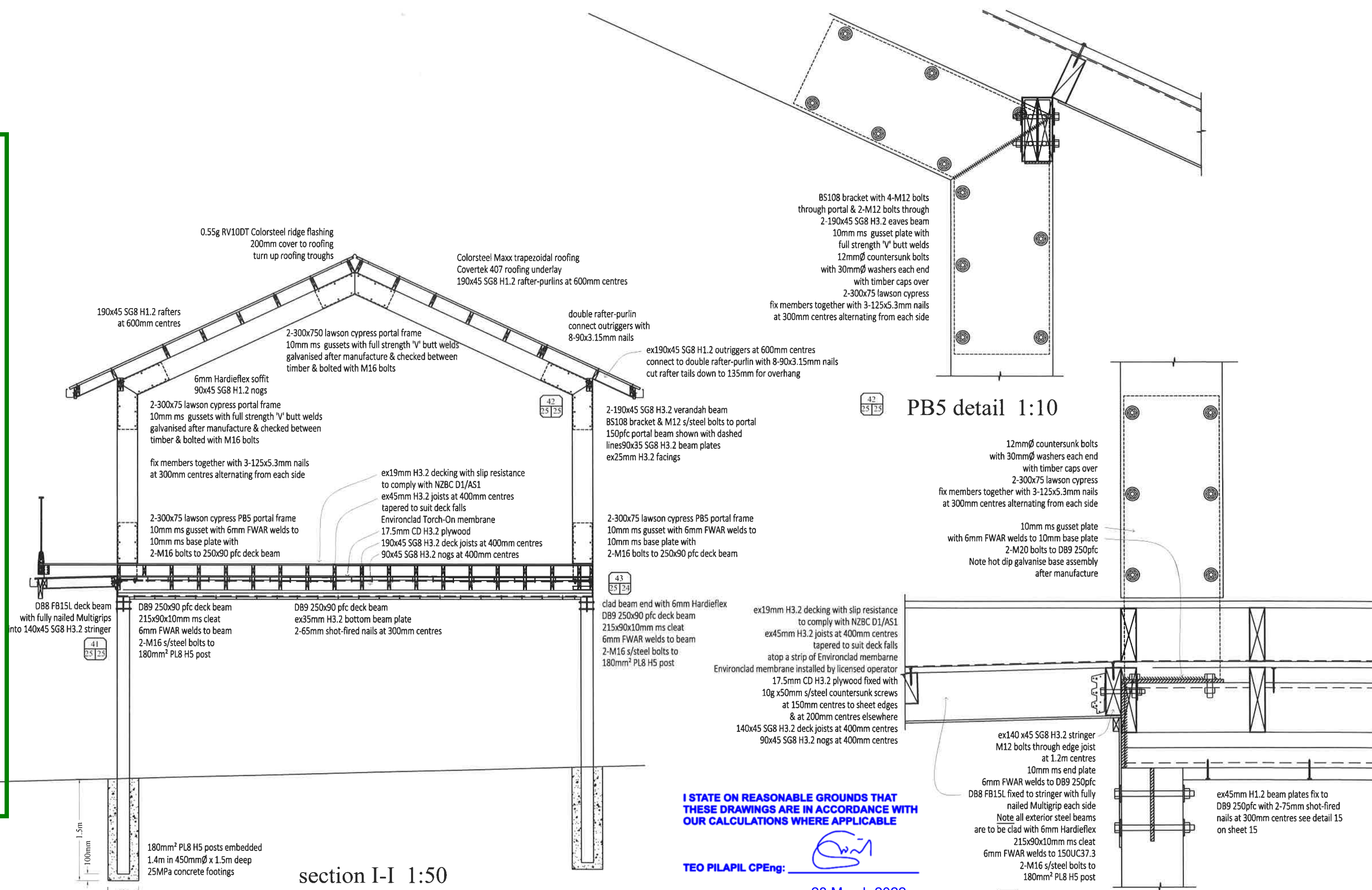


NOTES: ALL CONSTRUCTION SHALL BE TO NZS 3604:2011 AND AMENDMENTS AND OTHER RELATED DOCUMENTS THAT APPLY TO THE WORK SHOWN. ALL DIMENSIONS AND DETAILS IN THIS DRAWING SHALL BE CHECKED BY THE CONTRACTOR AND ANY DISCREPANCIES OR AMBIGUITIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF CADPLANZ. TEL: 09-407 0810 FAX: 09-407 0817 MOB: 0274 565 471. DO NOT SCALE DIMENSIONS. DO NOT GUESS. ASK.

22/03/2022

24

cross referencing key
sheet number where detail sourced from 1-3 sheet with detail on



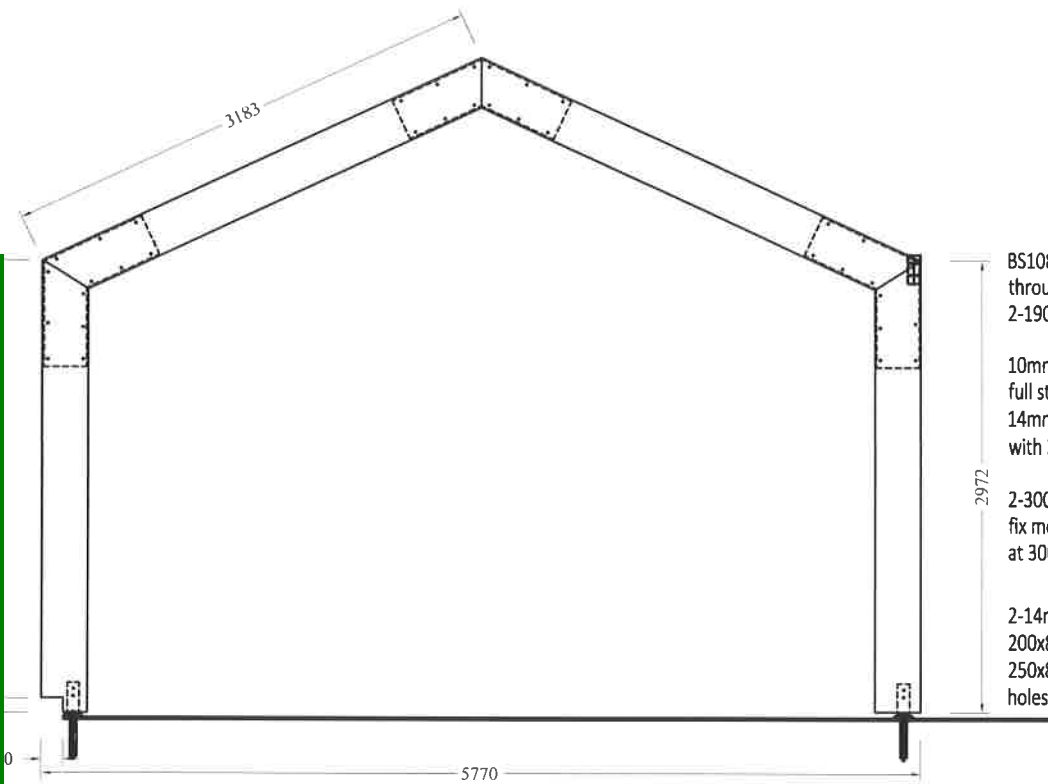
**I STATE ON REASONABLE GROUNDS THAT
THESE DRAWINGS ARE IN ACCORDANCE WITH
OUR CALCULATIONS WHERE APPLICABLE**

TEO PILAPIL CPEng:

28 March 2022

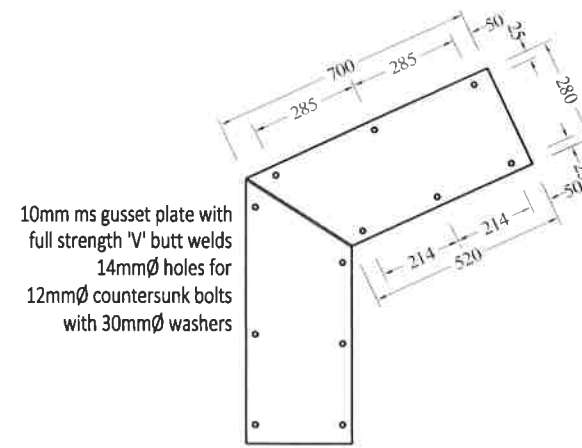
section I-I 1:50

Proposed house for Jenny & Peter Morgan, 36 Old Hospital Road, Whangaroa



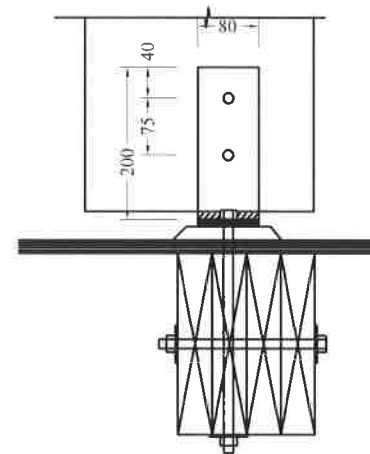
PB1 2-300x75 lawson cypress 1:50

- BS108 bracket with 4-M12 bolts through portal & 2-M12 bolts through 2-190x45 SG8 H3.2 eaves beam
- 10mm ms gusset plate with full strength 'V' butt welds 14mmØ holes for 12mmØ countersunk bolts with 30mmØ washers each end
- 2-300x75 lawson cypress fix members together with 3-125x5.3mm nails at 300mm centres alternating from each side
- 2-14mmØ holes for 2-M12 bolts in 200x80x10mm ms cleat with 6mm FWAR welds to 250x80x10mm ms base plate with 2-14mmØ holes for M12 bolts through joists

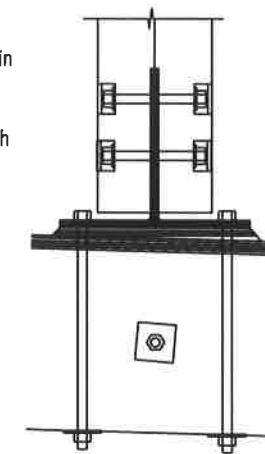


- 10mm ms gusset plate with full strength 'V' butt welds 14mmØ holes for 12mmØ countersunk bolts with 30mmØ washers

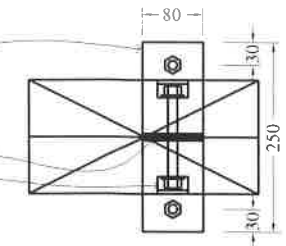
PB1 & PB5 gusset plate details 1:20



- 2-300x75 lawson cypress
- 2-14mmØ holes for 2-M12 bolts in 200x80x10mm ms cleat with 6mm FWAR welds to 250x80x10mm ms base plate with 2-14mmØ holes for M12 bolts through joists torch on membrane ex17.5mm H3.2 ply upstand
- 4-240x45 SG8 H3.2 joists
- 1-M12 bolts fixing joists together



- 250x80x10mm ms base plate with 2-14mmØ bolts for M12 bolts through joists
- 200x80x10mm ms cleat with 2-M12 countersunk bolts through 2-300x75 lawson cypress

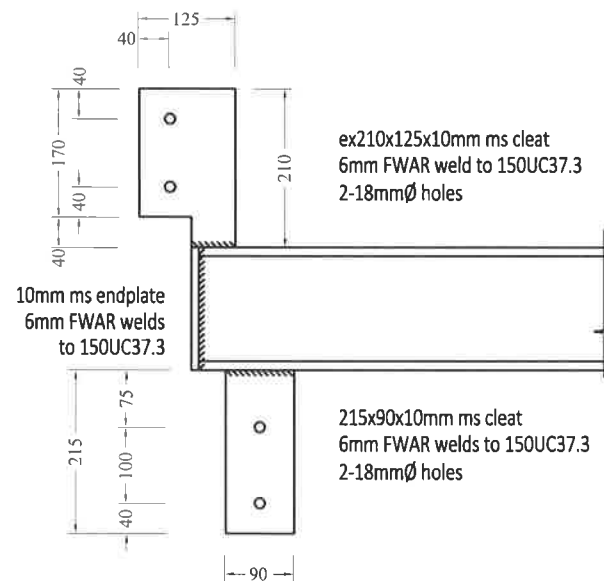


PB1 base plate details 1:10

I STATE ON REASONABLE GROUNDS THAT THESE DRAWINGS ARE IN ACCORDANCE WITH OUR CALCULATIONS WHERE APPLICABLE

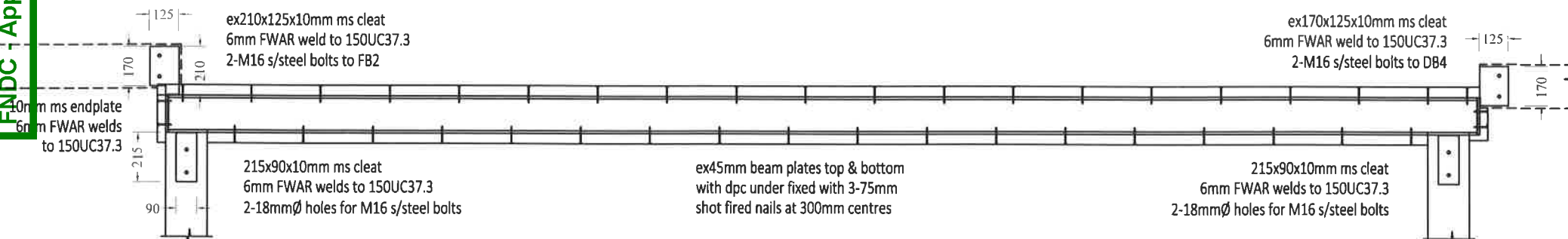
TEO PILAPIL CPEng:

28 March 2022



150UC37.3 south end detail 1:10

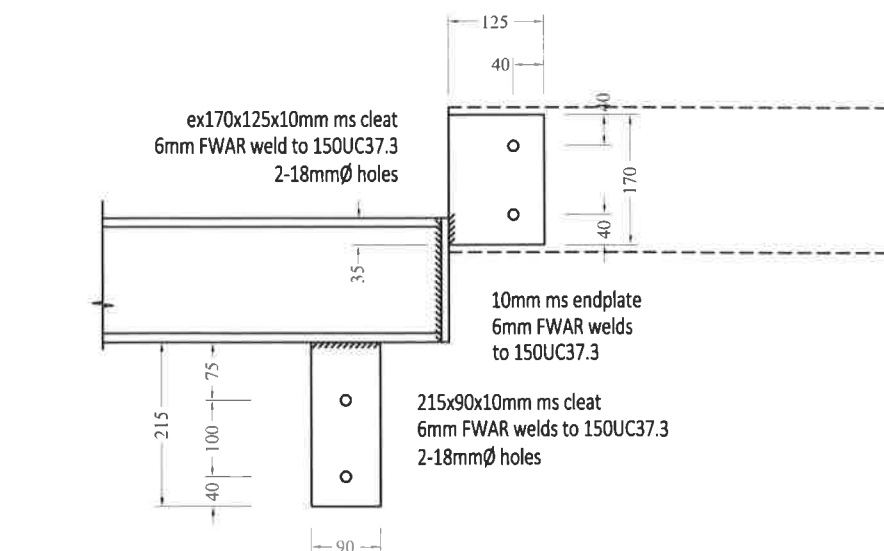
Note:
All welds shall be General Purpose to AS/NZS 1554.1:2004 by a welder currently certificated under NZS 2980:2018 using 410MPa consumables.
structural steelwork shall be hot dipped galvanised to HDG 900 after all fabrication is completed if mentioned.
The fabricator shall issue to the Project Manager a PS3 certificate on completion of all his work.
Check all measurements on site



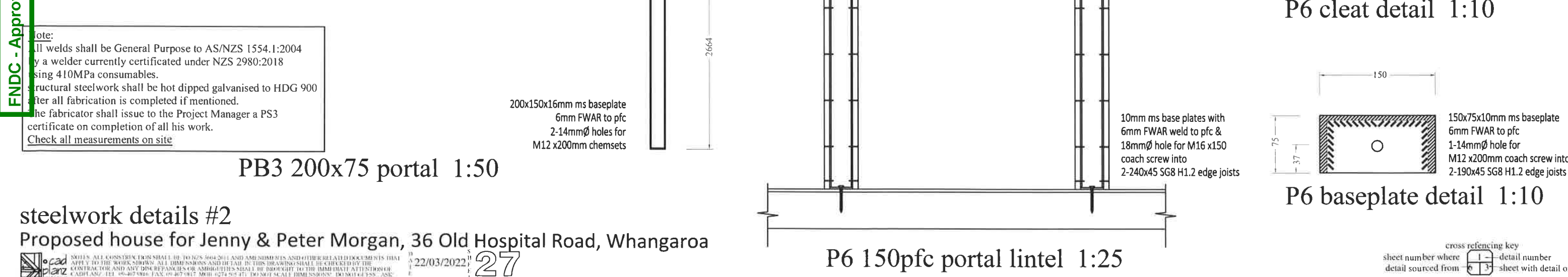
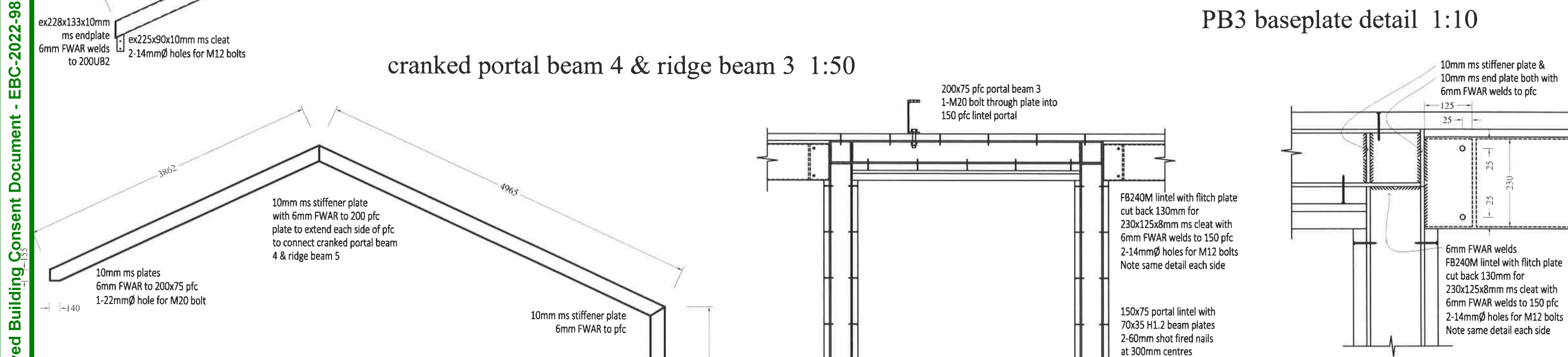
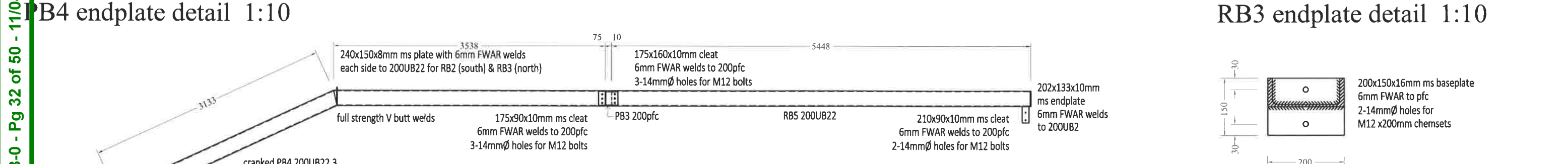
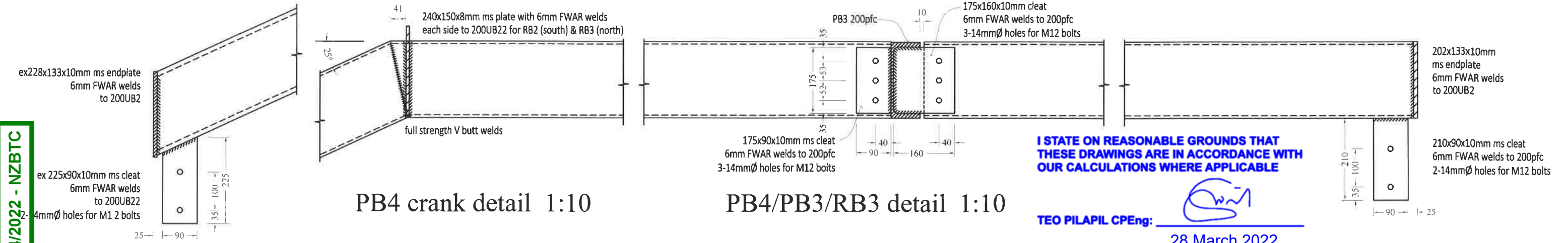
steelwork details #1

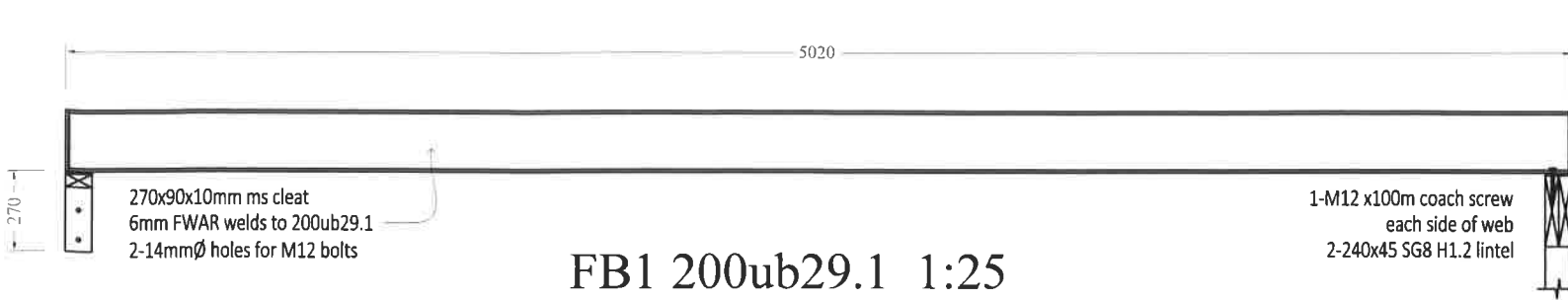
DB3 150UC37.3 1:25

Proposed house for Jenny & Peter Morgan, 36 Old Hospital Road, Whangaroa

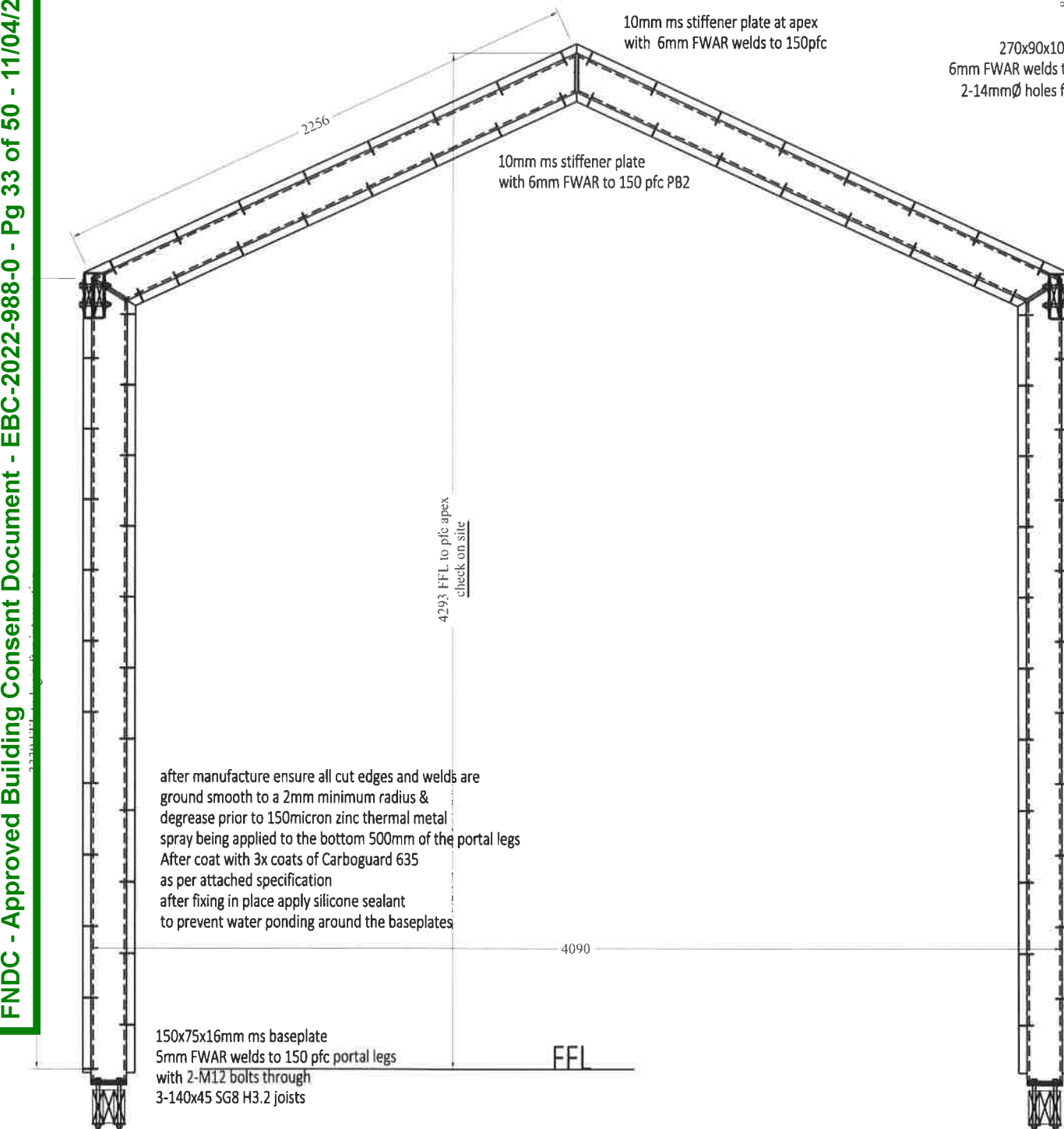


150UC37.3 north end detail 1:10





FB1 200ub29.1 1:25



portal beam 2 1:25

steelwork details #3

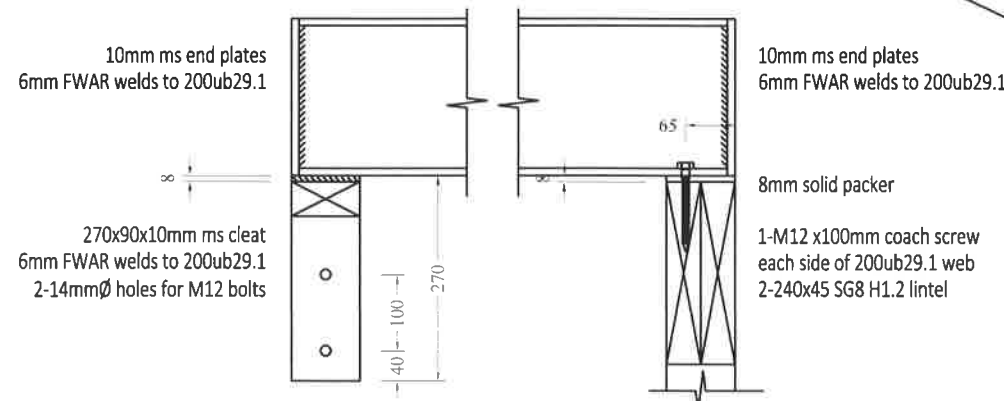
Proposed house for Jenny & Peter Morgan, 36 Old Hospital Road, Whangaroa



NOTES: ALL CONSTRUCTION SHALL BE TO NZS 3604:2011 AND AMENDMENTS AND OTHER RELATED DOCUMENTS THAT
APPLY TO THE WORKSHOWN. ALL DIMENSIONS AND DETAIL IN THIS DRAWING SHALL BE CHECKED BY THE
CONTRACTOR AND ANY DISCREPANCIES OR AMBIGUITIES SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION FOR
CLARIFICATION. CALL: 09-407 9816 FAX: 09-407 9817 MOBILE: 0274 503 473 DO NOT SCALE DIMENSIONS. DO NOT GUSS. ASK.

28/03/2022

28



FB1 200ub29.1 details 1:10

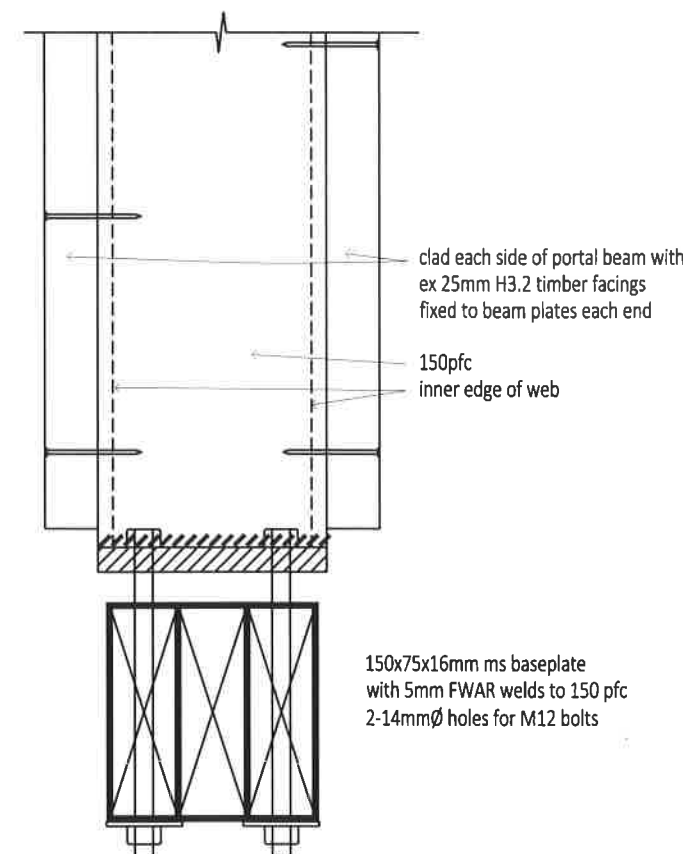
BS108 bracket with 2-M12 bolts
through PB2 & 2-M12 bolts through
2-190x45 SG8 H3.2 eaves beam

10mm ms stiffener plate with
6mm FWAR welds to 150pfc

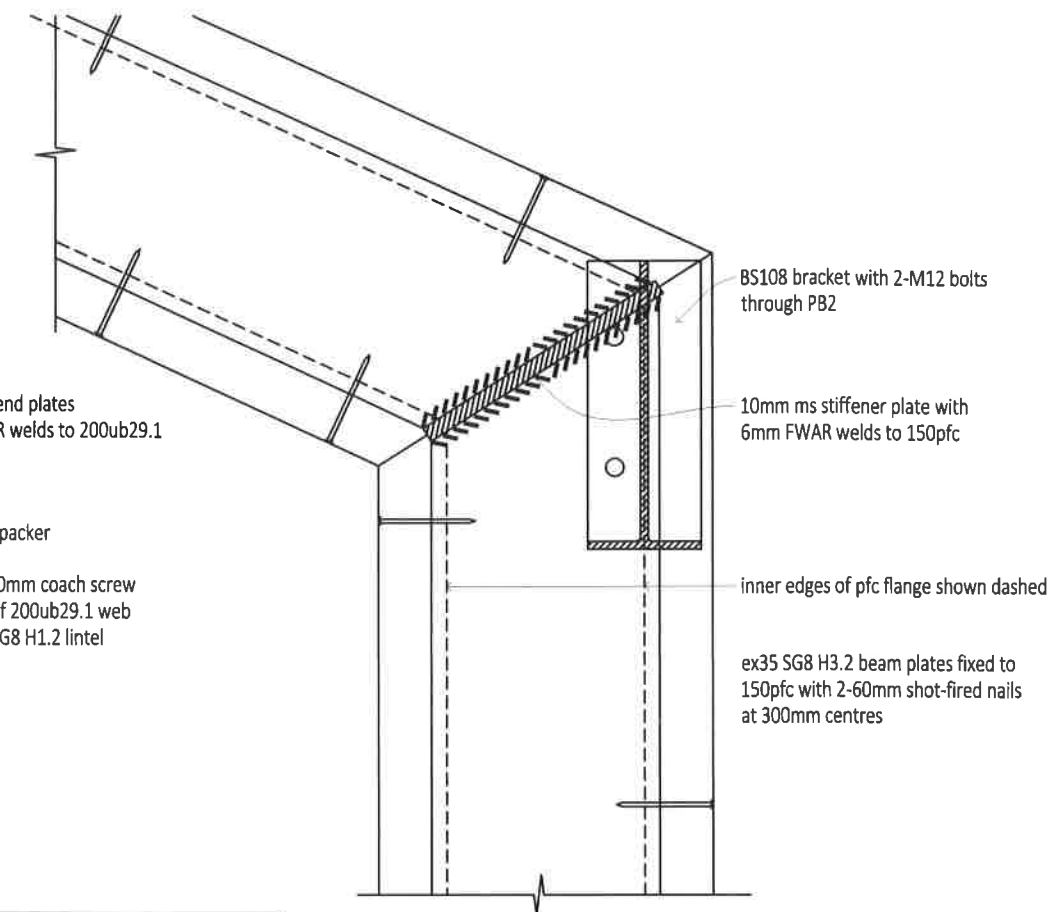
ex35 SG8 H3.2 beam plates fixed to
150pfc with 2-60mm shot-fired nails
at 300mm centres

Note:

All welds shall be General Purpose to AS/NZS 1554.1:2004
by a welder currently certified under NZS 2980:2018
using 410MPa consumables.
structural steelwork shall be hot dipped galvanised to HDG 900
after all fabrication is completed if mentioned.
The fabricator shall issue to the Project Manager a PS3
certificate on completion of all his work.
Check all measurements on site



PB2 base cleat 1:5



PB2/BS108 detail 1:5

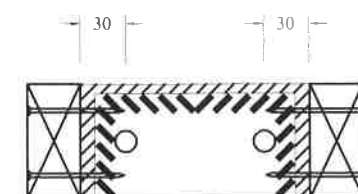
**I STATE ON REASONABLE GROUNDS THAT
THESE DRAWINGS ARE IN ACCORDANCE WITH
OUR CALCULATIONS WHERE APPLICABLE**

TEO PILAPIL CPEng:

28 March 2022

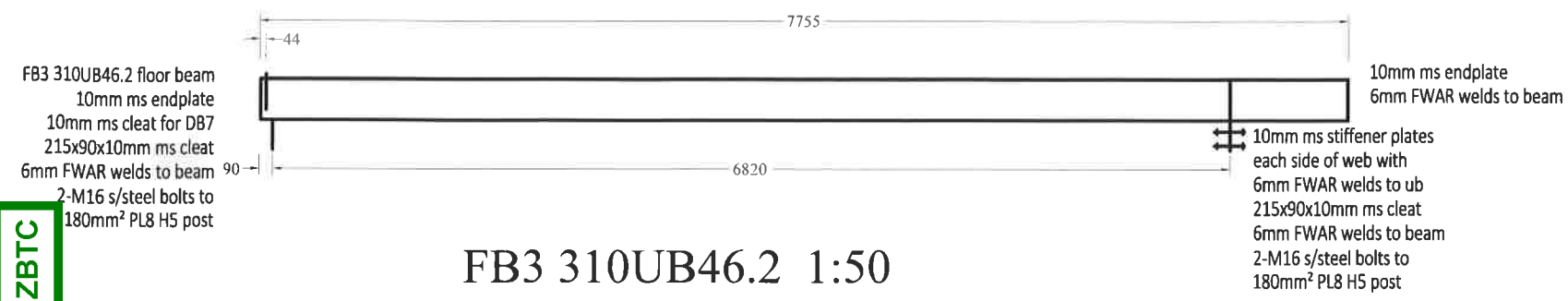
Note:

PB2 150pfc portal legs bottom 500mm to be zinc thermal
metal sprayed to 150micron minimum thickness before
application of 3x coats of Carboguard 635 as per
attached specification



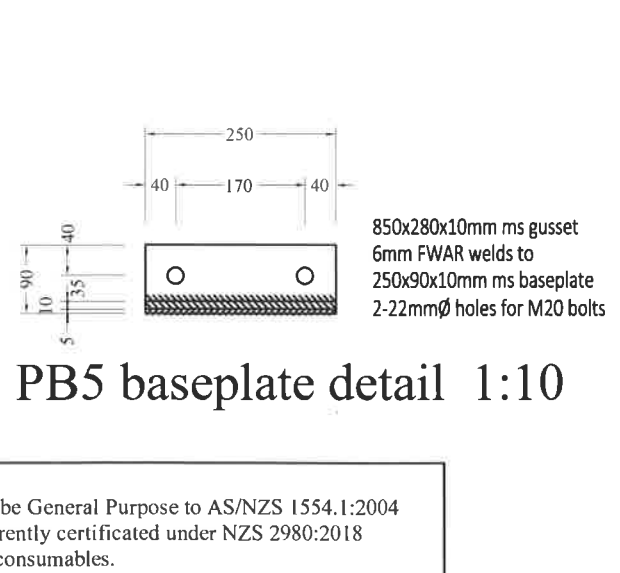
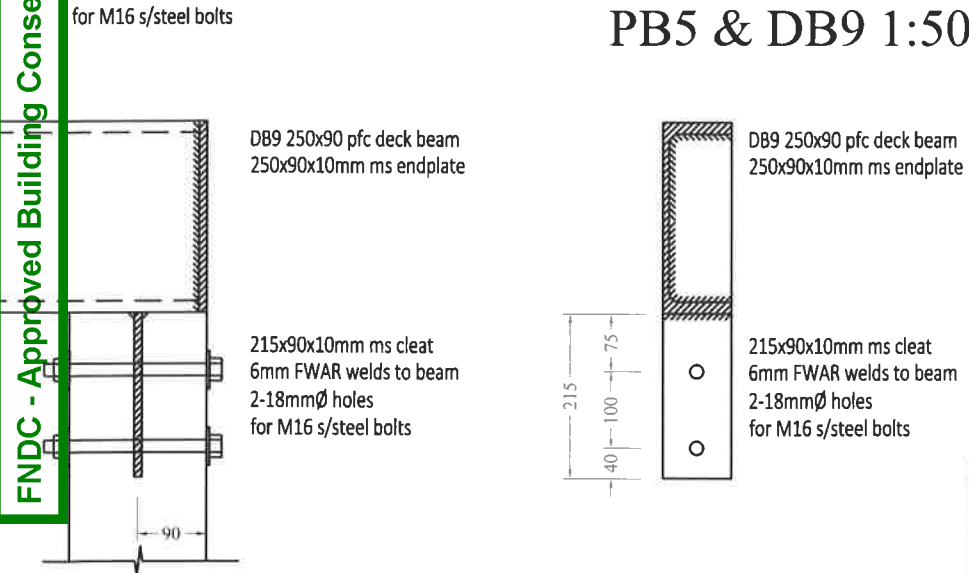
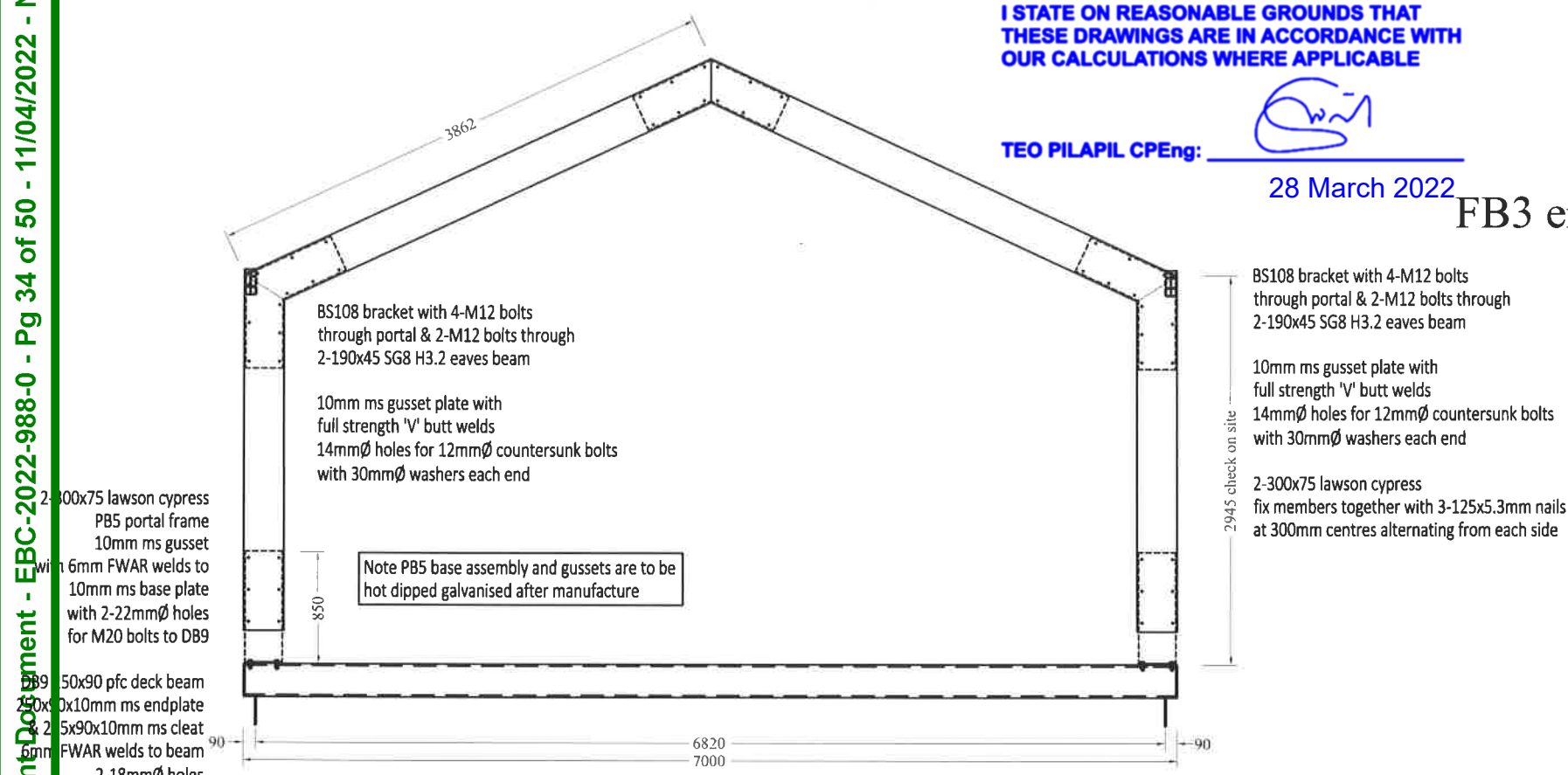
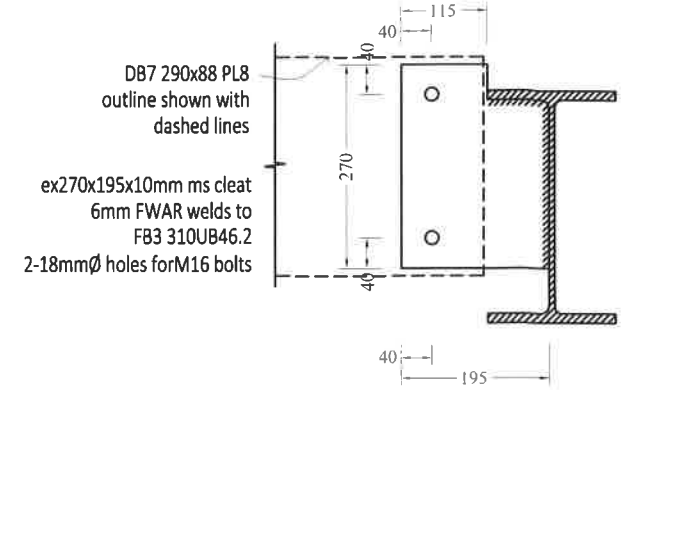
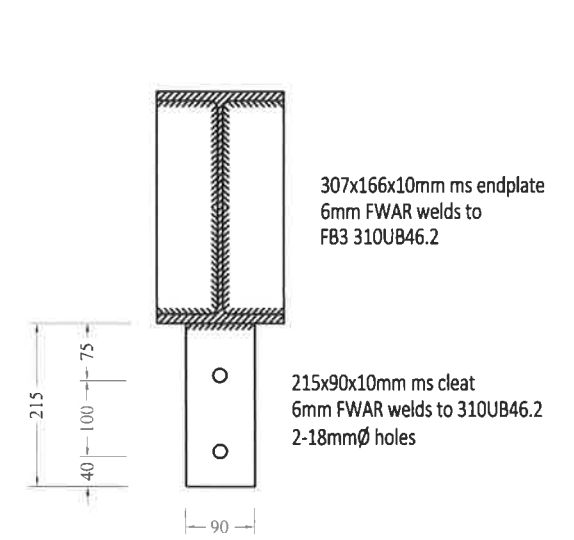
PB2 base cleat 1:5

cross referencing key
sheet number where detail sourced from 1-3 sheet with detail on

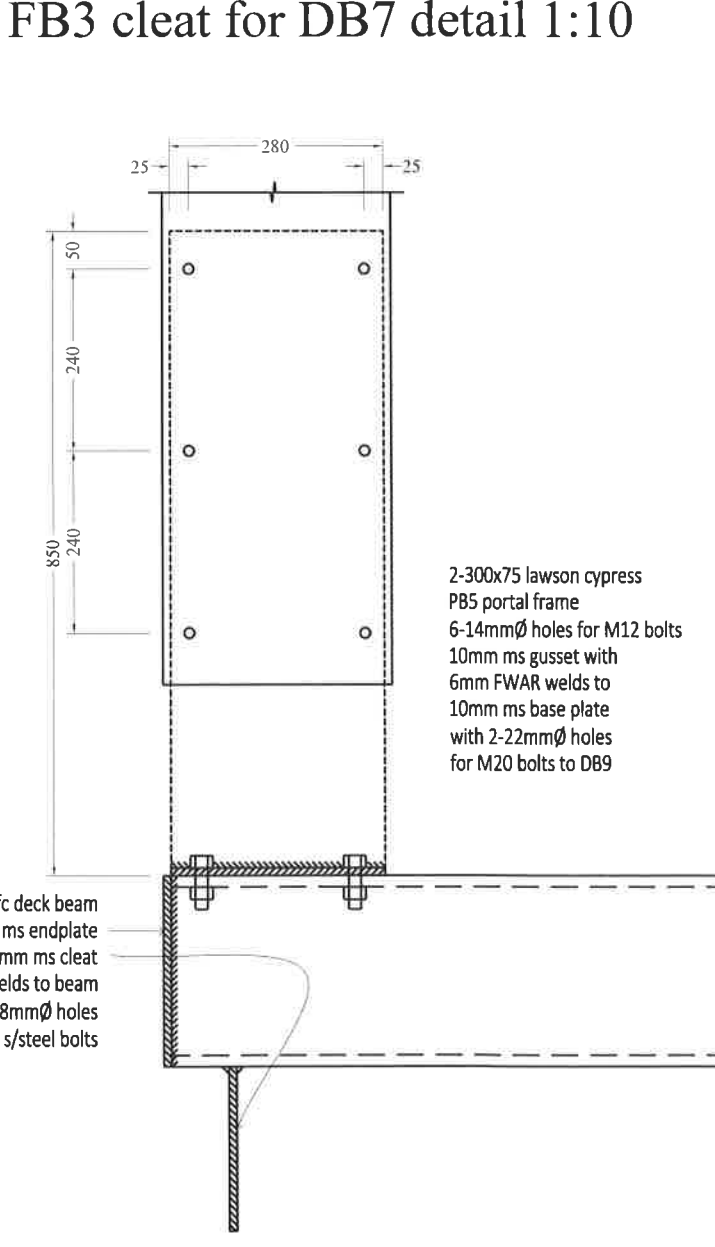
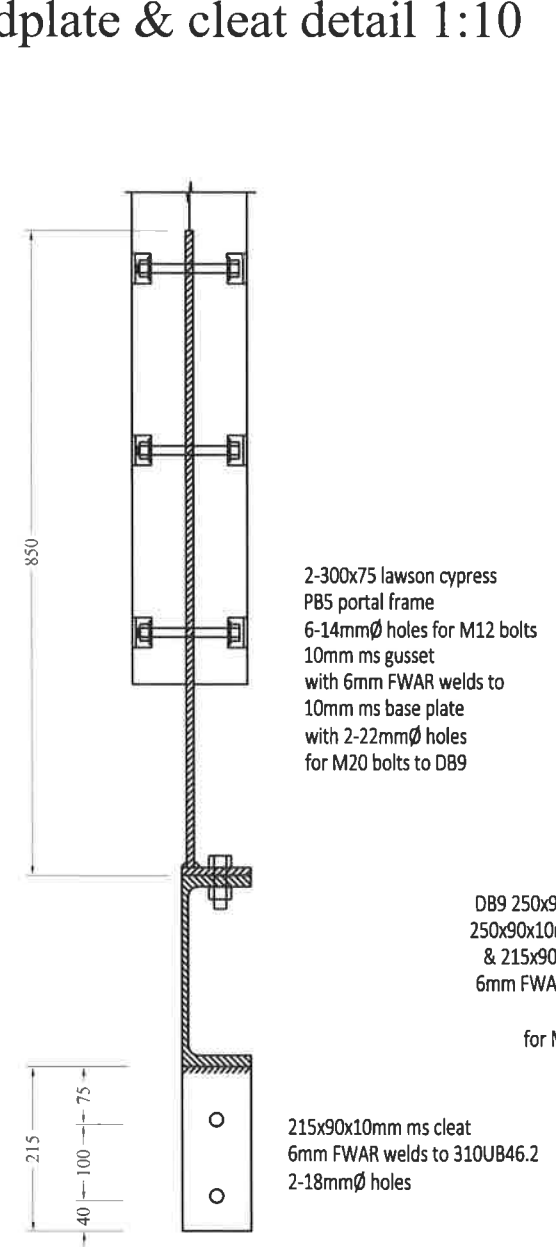


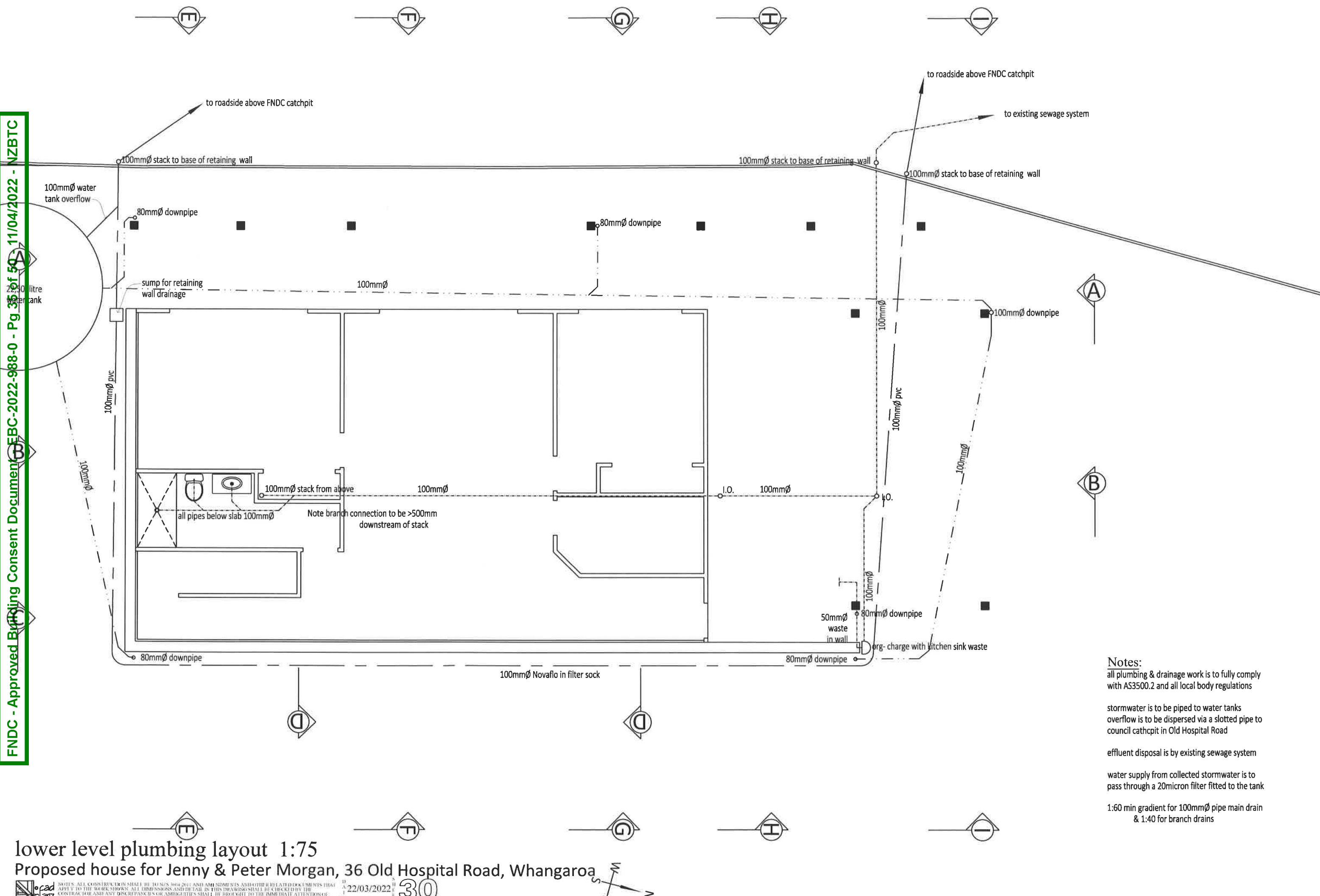
I STATE ON REASONABLE GROUNDS THAT THESE DRAWINGS ARE IN ACCORDANCE WITH OUR CALCULATIONS WHERE APPLICABLE

TEO PILAPIL CPEng: 
28 March 2022



Note:
All welds shall be General Purpose to AS/NZS 1554.1:2004 by a welder currently certificated under NZS 2980:2018 using 410MPa consumables.
structural steelwork shall be hot dipped galvanised to HDG 900 after all fabrication is completed if mentioned.
The fabricator shall issue to the Project Manager a PS3 certificate on completion of all his work.
Check all measurements on site





Notes:
all plumbing & drainage work is to fully comply with AS3500.2 and all local body regulations

stormwater is to be piped to water tanks
overflow is to be dispersed via a slotted pipe to council catchpit in Old Hospital Road

effluent disposal is by existing sewage system

water supply from collected stormwater is to pass through a 20micron filter fitted to the tank

1:60 min gradient for 100mm Ø pipe main drain
& 1:40 for branch drains

lower level plumbing layout 1:75
Proposed house for Jenny & Peter Morgan, 36 Old Hospital Road, Whangaroa

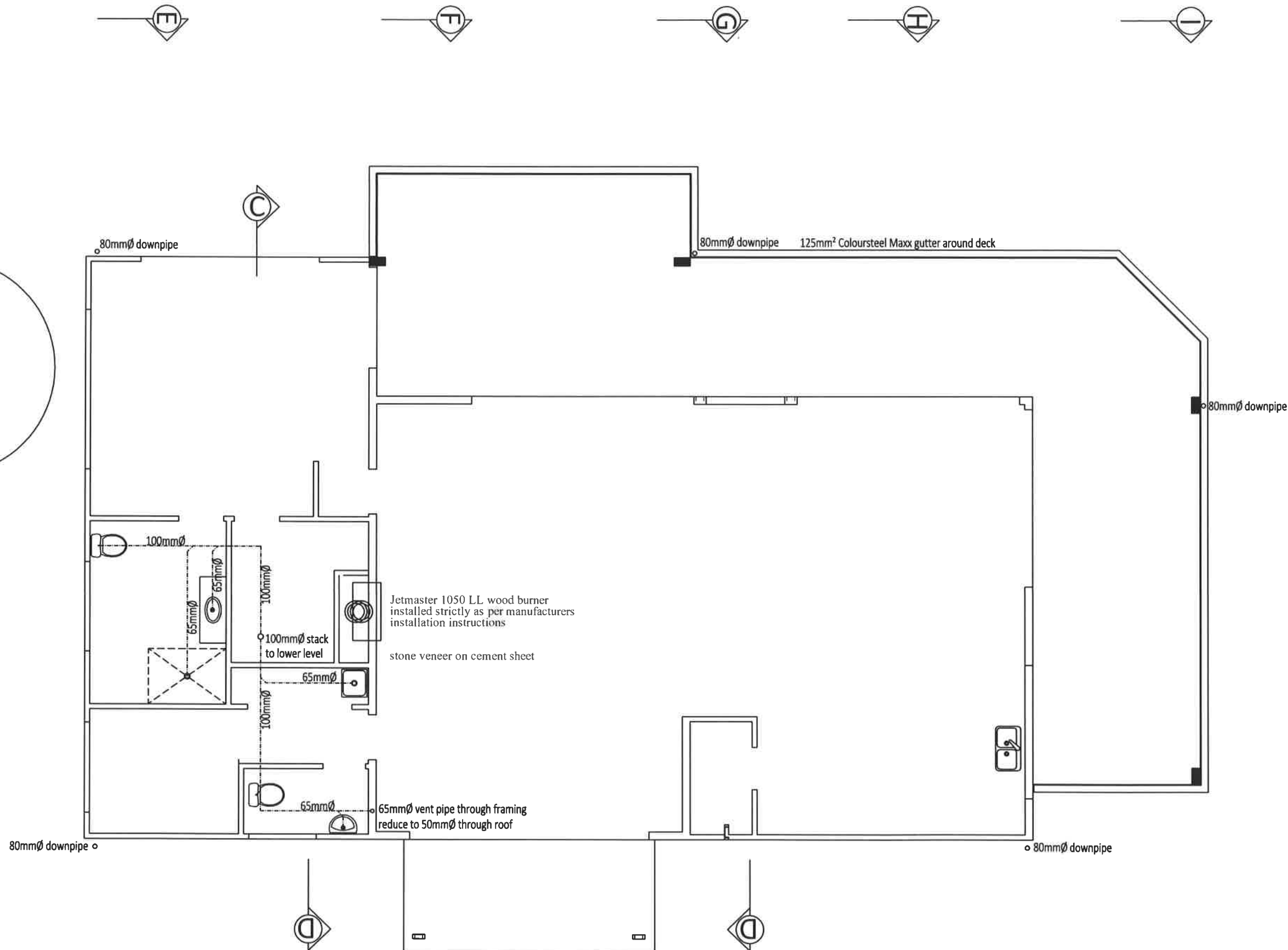


NOTES: ALL CONSTRUCTION SHALL BE TO NZS 3604:2011 AND AMENDMENTS AND OTHER RELATED DOCUMENTS THAT APPLY TO THE WORK SHOWN. ALL DIMENSIONS AND DETAIL IN THIS DRAWING SHALL BE CHECKED BY THE CONTRACTOR FOR ANY DISCREPANCIES OR AMBIGUITIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT. TEL: 09 407 9946 FAX: 09 407 9817 MOB: 0274 505 471. DO NOT SCALE DIMENSIONS. DO NOT GUESS. ASK

22/03/2022

30





A

Notes:

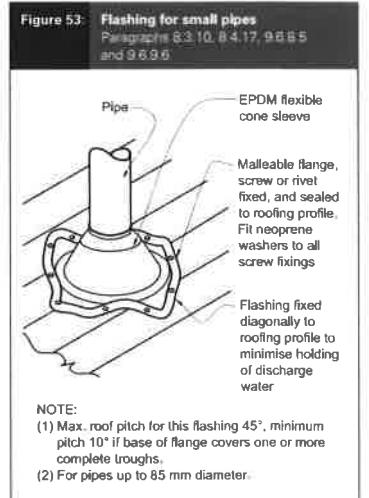
all plumbing & drainage work is to fully comply with AS3500.2 and all local body regulations

stormwater is to be piped to water tanks
overflow is to be dispersed via a slotted pipe to its natural catchment
effluent disposal is by existing sewage system

1:60 min gradient for 100mmØ main pipes
1:40 gradient for branch drains

roof vent:
fit dektite flashing boot over
50mmØ roof vent as per
NZBC E2/AS1 fig 53

B



upper level plumbing layout 1:75

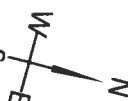
Proposed house for Jenny & Peter Morgan, 36 Old Hospital Road, Whangaroa

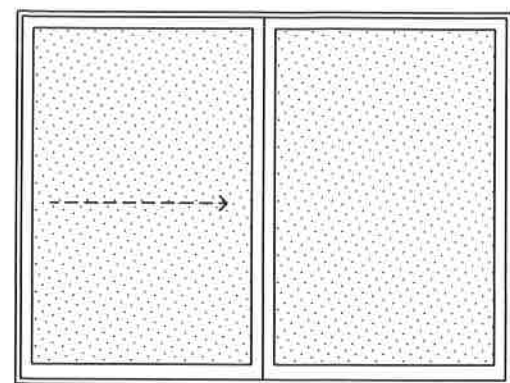


NOTES: ALL CONSTRUCTION SHALL BE TO NZS 3604:2011 AND AMENDMENTS AND OTHER RELEVANT DOCUMENTS THAT APPLY TO THE WORK SHOWN. ALL DIMENSIONS AND DETAIL IN THIS DRAWING SHALL BE CHECKED BY THE CONTRACTOR AND ANY DISCREPANCIES FOR AMENDMENTS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF CADPLANZ. TEL: 09-407 0816 FAX: 09-407 0817 MOB: 0274 509 171. DO NOT SCALE DIMENSIONS. DO NOT GUESS. ASK.

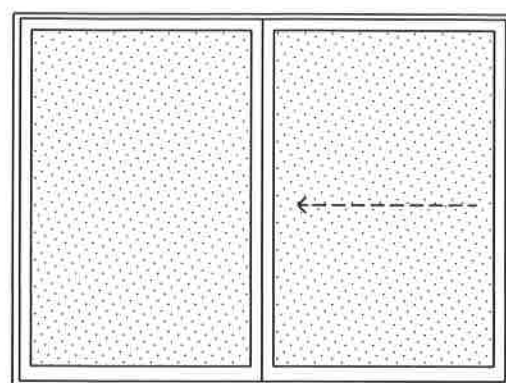
22/03/2022

31

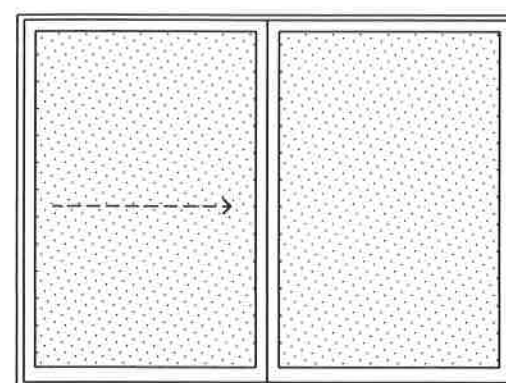




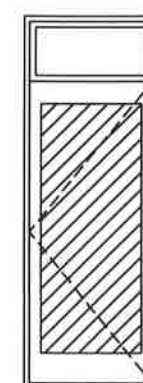
D1 2395x3215
90mm wall



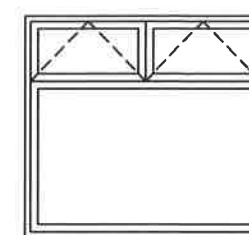
D1 2395x3215
90mm wall



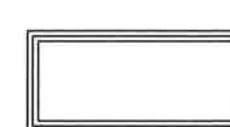
D3 2395x2415
90mm wall



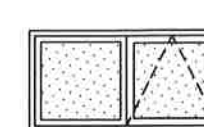
D4 2395x875
90mm wall



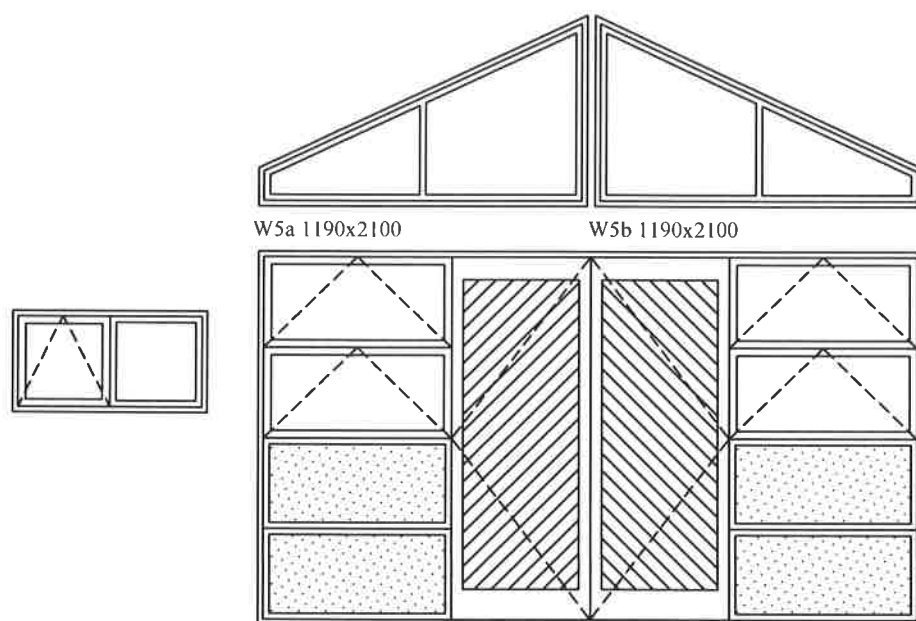
W1 1415x1515
90mm wall



W2 600x1400
240mm masonry wall
obscure



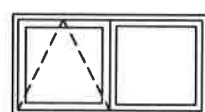
W3 600x1200
240mm masonry wall
obscure
waterproof jambs with Hardieglaze



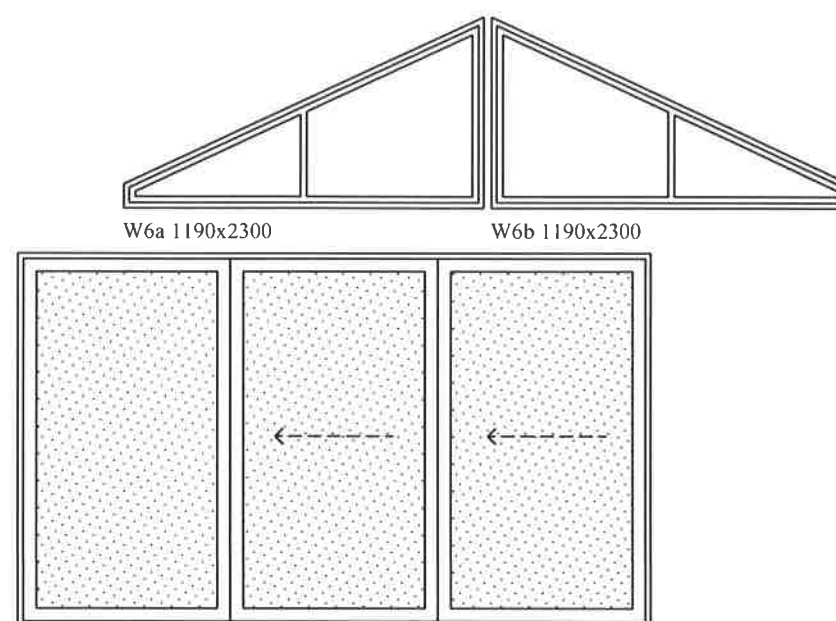
W5a 1190x2100

W5b 1190x2100

D5 2415x4290
140mm wall



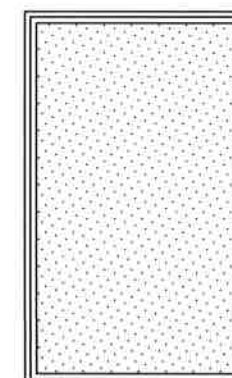
W4 615x1215
90mm wall
obscure



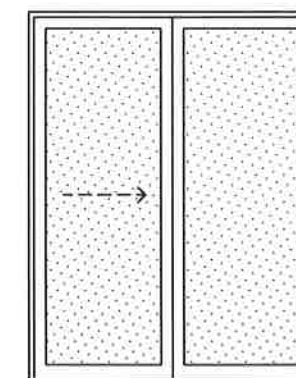
W6a 1190x2300

W6b 1190x2300

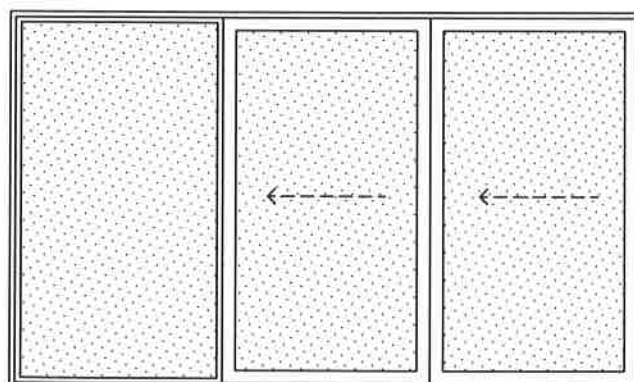
D6 2415x3990
140mm wall



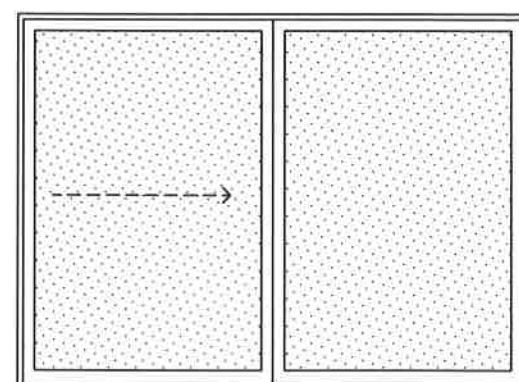
W7 2415x1410
140mm wall



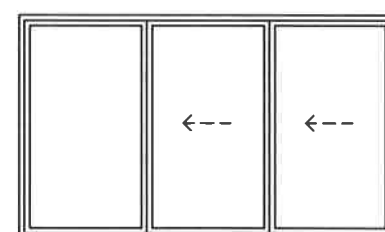
D7 2415x1815
140mm wall



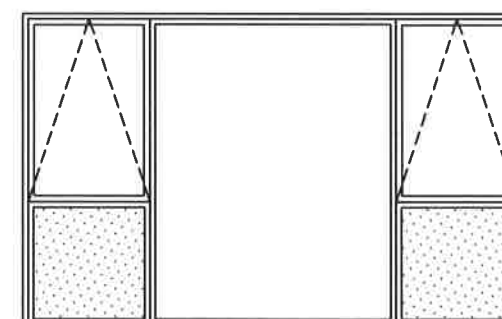
D8 2415x3990
140mm wall



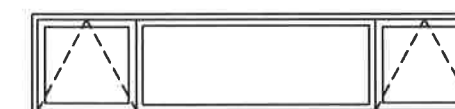
D9 2415x3215
140mm wall



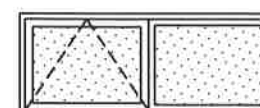
W8 1215x2415
90mm wall



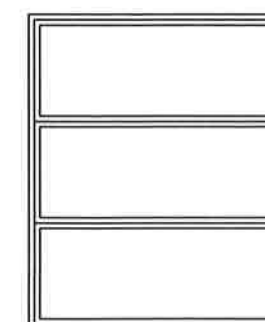
W9 2015x3215
90mm wall



W10 615x2865
90mm wall



W11 615x1615
90mm wall
obscure



W12 2015x1615
90mm wall
obscure

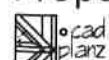
Notes:

depicts safety glazing to NZS 4223.3:2016



joinery schedule

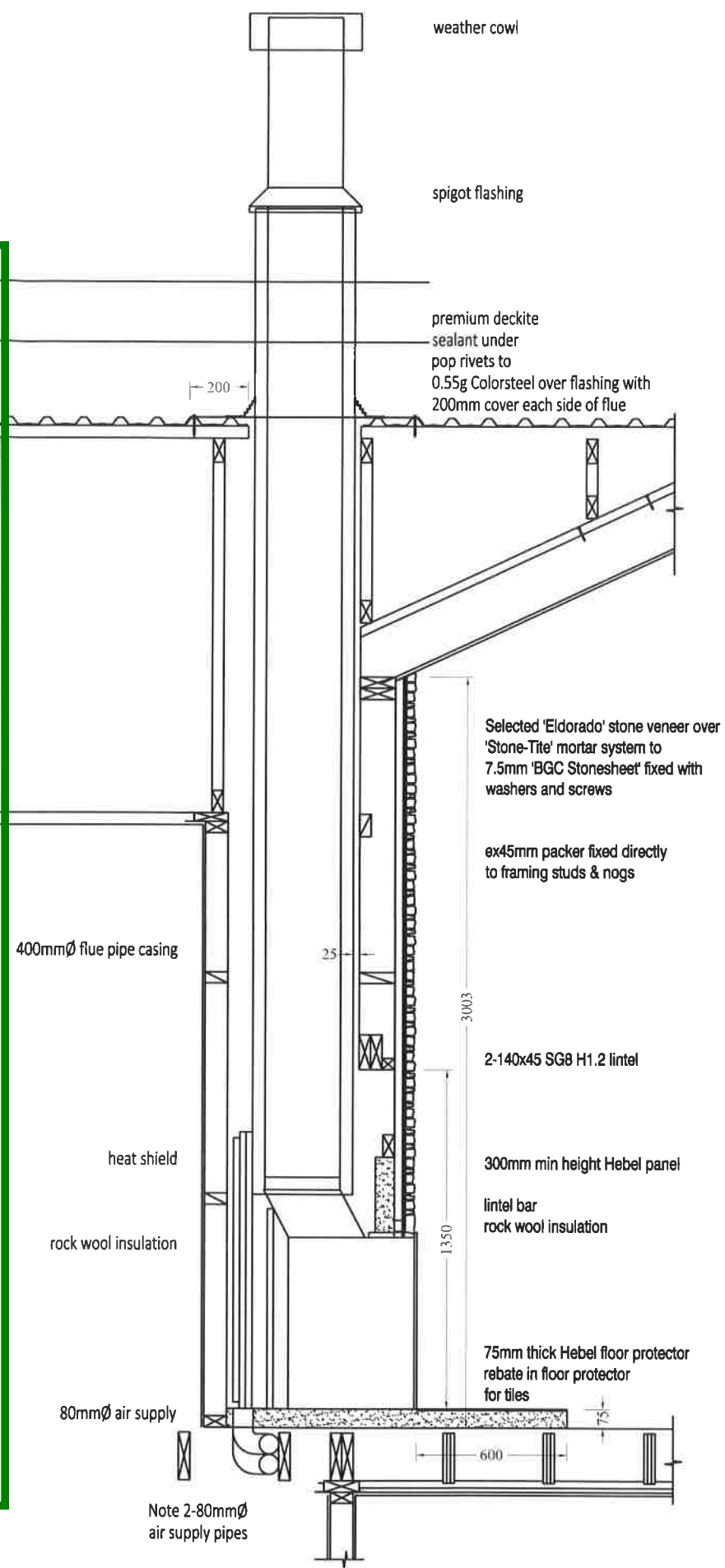
Proposed house for Jenny & Peter Morgan, 36 Old Hospital Road, Whangaroa



NOTES: ALL CONSTRUCTION SHALL BE TO NZS 4223.3:2016 AND AMENDMENTS AND OTHER RELATED DOCUMENTS THAT APPLY TO THE WORK SHOWN. ALL DIMENSIONS AND DETAILS IN THIS DRAWING SHALL BE CHECKED BY THE CONTRACTOR AND ANY DISCREPANCIES OR AMBIGUITIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT. TEL: 09-422 0016 FAX: 09-422 0017 MOB: 0274 325 471 DO NOT SCALE DIMENSIONS. DRAWN: JESS. JNK.

22/03/2022

32



section T-T 1:25

lower level plumbing layout 1:75

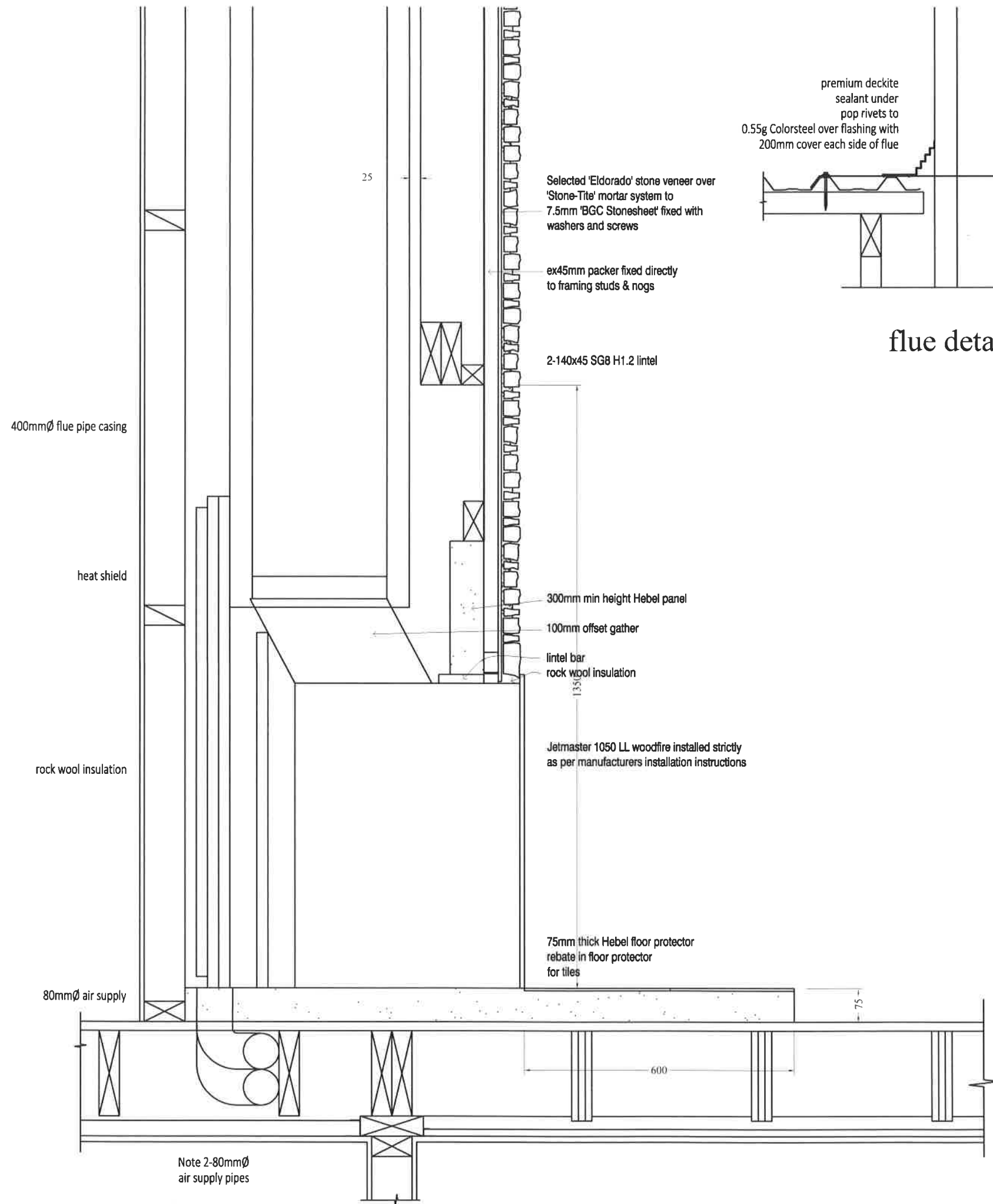
Proposed house for Jenny & Peter Morgan, 36 Old Hospital Road, Whangaroa



NOTES: ALL CONSTRUCTION SHALL BE TO NYS 9004 2011 AND AMENDMENTS AND OTHER RELATED DOCUMENTS THAT APPLY TO THE WORK. SHOW ALL DIMENSIONS AND DETAIL IN THIS DRAWING SHALL BE CHECKED BY THE CONTRACTOR AND ANY DISCREPANCIES OR AMBIGUITIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF CADPLAN/ TEL: 904-407-9816 FAX: 904-407-9817 MOB: 0274-562-471 DO NOT SCALE DIMENSIONS. DO NOT GUESS. ASK.

22/03/2022

33



section T-T detail 1:10

NOTES: ALL CONSTRUCTION SHALL BE TO NYS 9004 2011 AND AMENDMENTS AND OTHER RELATED DOCUMENTS THAT APPLY TO THE WORK. SHOW ALL DIMENSIONS AND DETAIL IN THIS DRAWING SHALL BE CHECKED BY THE CONTRACTOR AND ANY DISCREPANCIES OR AMBIGUITIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF CADPLAN/ TEL: 904-407-9816 FAX: 904-407-9817 MOB: 0274-562-471 DO NOT SCALE DIMENSIONS. DO NOT GUESS. ASK.

22/03/2022

33

DESIGN
RIGHT



BY ALIDE ELKINK,
FREELANCE TECHNICAL
WRITER, WELLINGTON

Raking window head detail

Raked windows make an interesting feature with a sloped rather than horizontal window head that may follow the roofline. Careful design and installation is needed so they are weathertight, particularly at the low end of the rake.

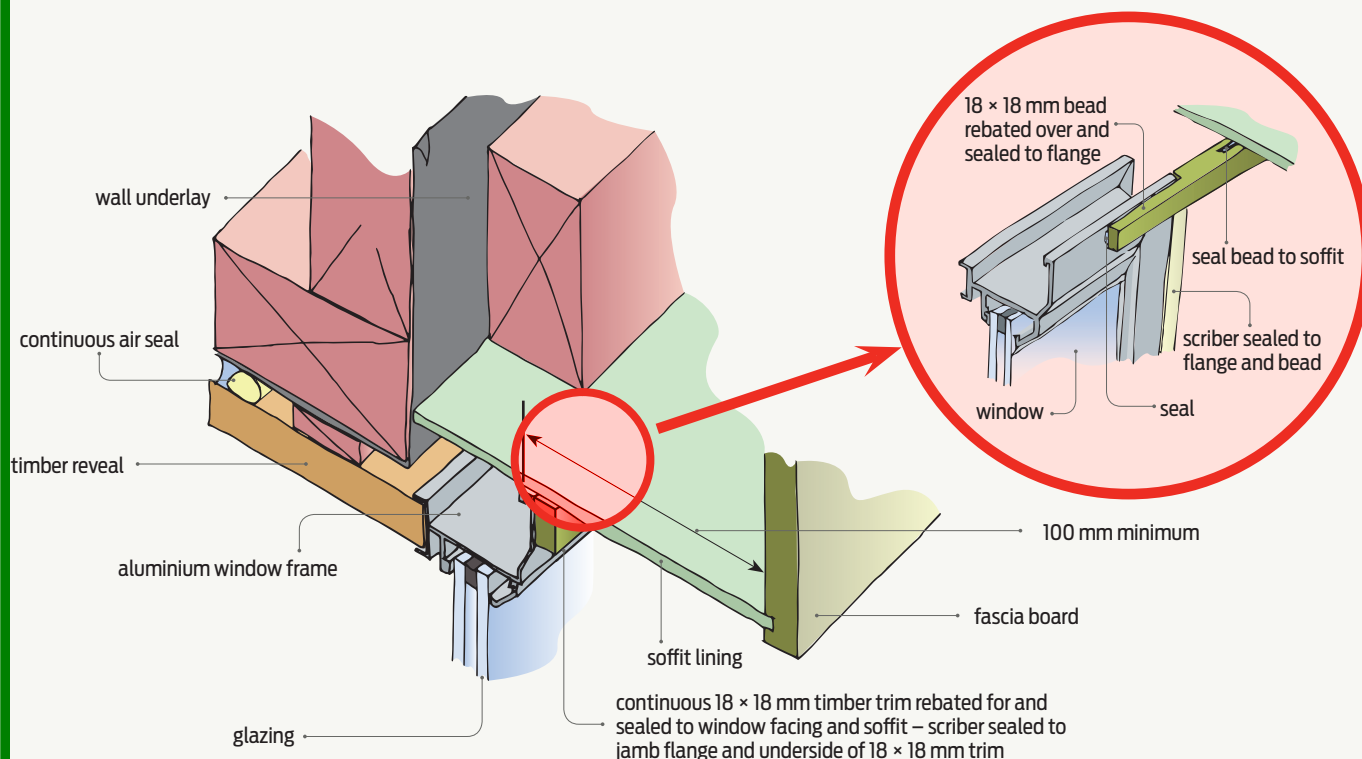


Figure 1 Raked window head directly under soffit (based on traditional soffit installation).
A window head detail based on BRANZ's soffit details in *Build 158* will be published in *Build 163*.

RAKED WINDOWS are often found where high-level glazing follows the roofline. The sloping head means that it may have rainwater flowing along as well as across the head flashing. Water accumulating at the low end of the rake makes this area of a raking window particularly vulnerable to water entry.

Always an alternative method

Acceptable Solution E2/AS1 to New Zealand Building Code clause E2 *External moisture* only applies to aluminium windows (with flanges that

overlap the cladding) with a horizontal head.

No solution is provided in E2/AS1 for the installation of any raked windows. For a building consent application, the raked window head detail must be designed and submitted as an alternative method.

However, some of the requirements of E2/AS1 may be applied to a raked window head detail (see Figures 1 and 2). For example, E2/AS1 allows a window directly under a horizontal soffit to be installed without a head flashing. Figure 1 shows this applied to raked windows.

Applicable E2/AS1 requirements

E2/AS1 window head flashings must deflect water to the outside of the wall cladding and:

- have a 15° minimum cross-fall
- have a minimum upstand behind the cladding above of:
 - 40 mm (35 mm minimum cladding cover plus 5 mm gap for drainage and ventilation) in low (L), medium (M), high (H) and very high (VH) wind zones
 - 65 mm (60 mm minimum cladding cover plus 5 mm gap) in extra high (EH) wind zones

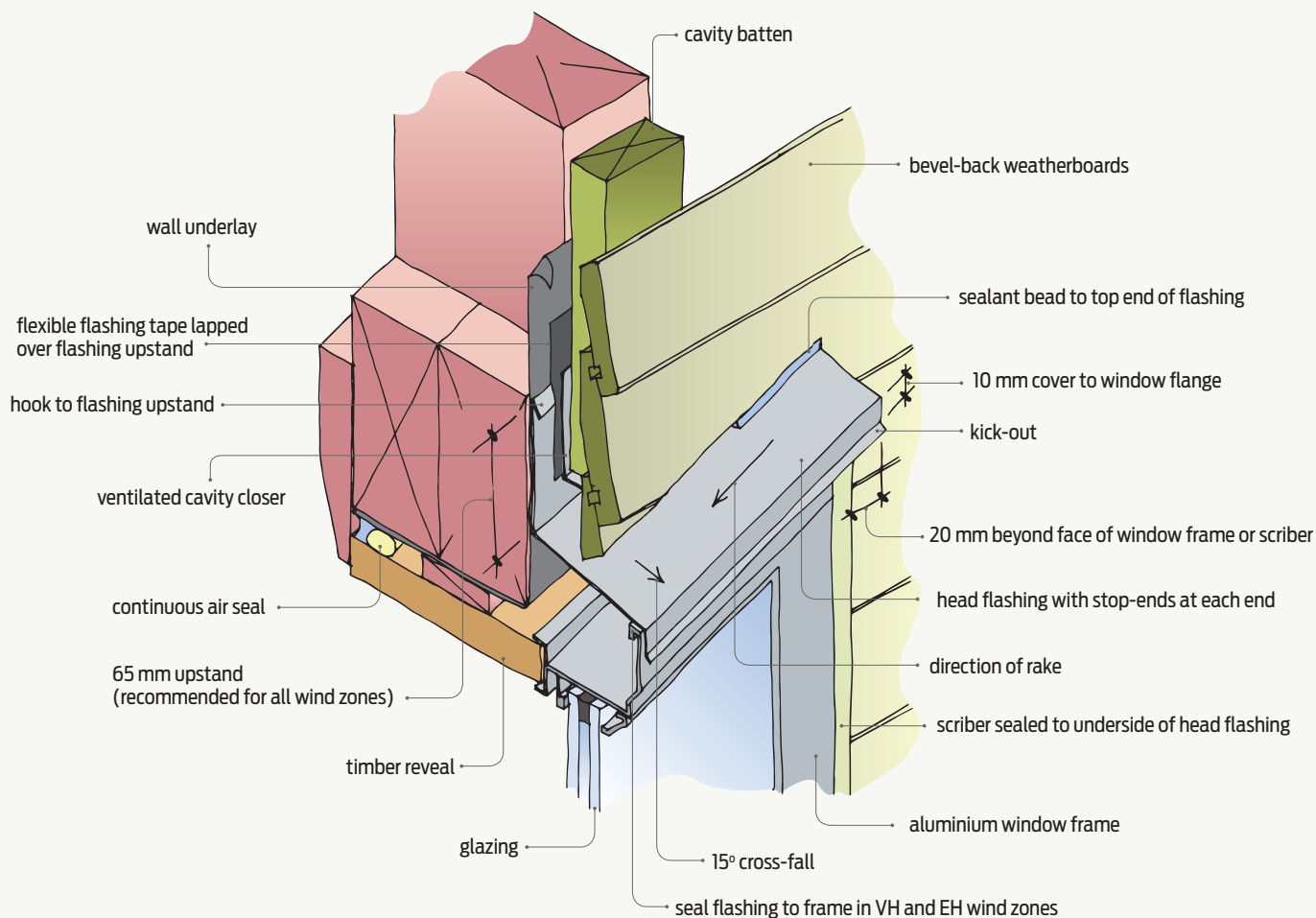


Figure 2 Raked flashed window head – preferred option.

- have:
 - in L, M, H and VH wind zones, either a hem or hook or a 25 mm increase in the upstand beyond the requirement of E2/AS1 Table 7
 - in EH wind zones, a hem or hook and a 25 mm increase in the upstand beyond the requirement of E2/AS1 Table 7
- be sealed to the face of the wall underlay with flexible flashing tape or be overlapped by an extra layer of wall underlay from above
- provide 10 mm minimum cover to the face of the window flange, and the exposed bottom

- edge of a head flashing must be folded out to form a bird's beak or kick-out
 - extend at least 20 mm beyond the face of the window frame or the scribe or rustic plug where horizontal weatherboards are installed (see Figure 2)
 - have sealant installed between the underside of the head flashing and the top of the window flange in VH and EH wind zones.
- For direct-fixed cladding, E2/AS1 requires a 50 mm length of sealant at each end of the flashing between the cladding and flashing. For

raked windows, install the sealant at the top end of the flashing only to allow the stop-end to discharge water.

Where a drained and vented cavity is installed, a horizontal flashing must have a 10 mm stop-end at each end that finishes at the inside face of the cladding. Raked windows require a 10 mm stop-end at the top and a kickout at the bottom (see Figure 3). The stop-ends **must not** pass through the cladding. The base of the drainage cavity above the window head must be closed off by a ventilated cavity closer. ➤

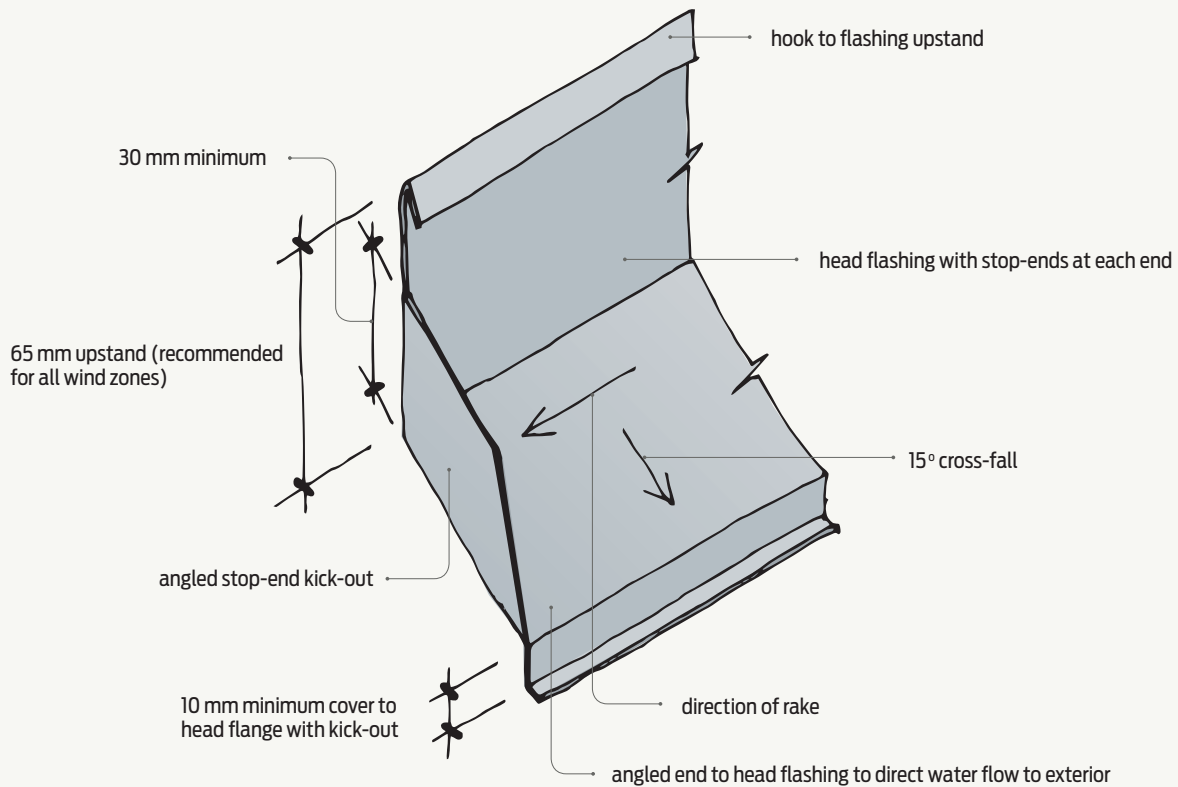


Figure 3 Head flashing shaped to deflect water.

Pointers when detailing a raked window head

The key elements to the detailing of a raked aluminium head (Figure 2) that overlaps the cladding are:

- getting water off the flashing at the bottom of the rake
- stopping water getting in at the top of the rake.

Key elements of Acceptable Solution E2/AS1 that can be applied to the raked flashing installation are the interaction of the flashing upstands (suggested increase in height), cladding cover and cover to the window flange.

Option 1 – Head as apron flashing

The preferred option is to consider the raked head flashing as an apron flashing with a stop-end kick-out (see Figure 3) at the bottom of the rake. This will discharge water to the outside for both cavity and direct-fixed claddings (having a cavity is preferred). A flashing stop-end as detailed in E2/AS1 is designed to prevent water being driven past the end of the flashing into a cavity. When applied to a raked window, it has two flaws:

- It does not deflect water to the outside face of the cladding as it terminates at the back face of the cladding.

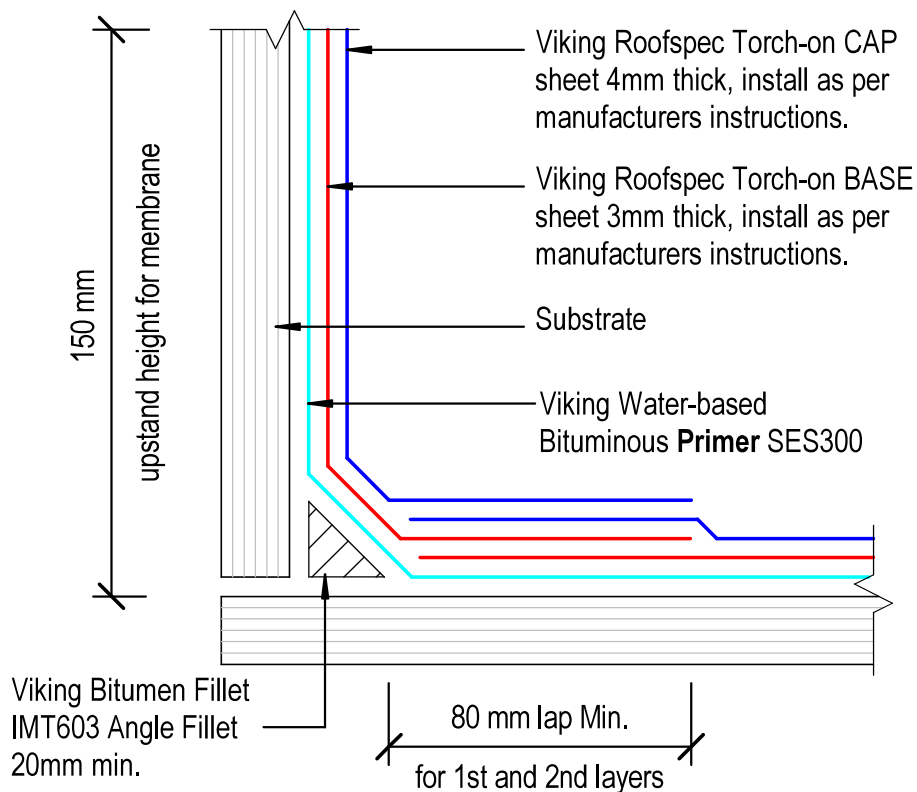
- It is not of sufficient size to deflect the amount of water that may be present.

Key requirements include:

- sealing any cut in the cladding to allow the installation of the kick-out flashing
- sealing the top of the scribe to the underside of the head flashing.

Option 2 – Timber bead

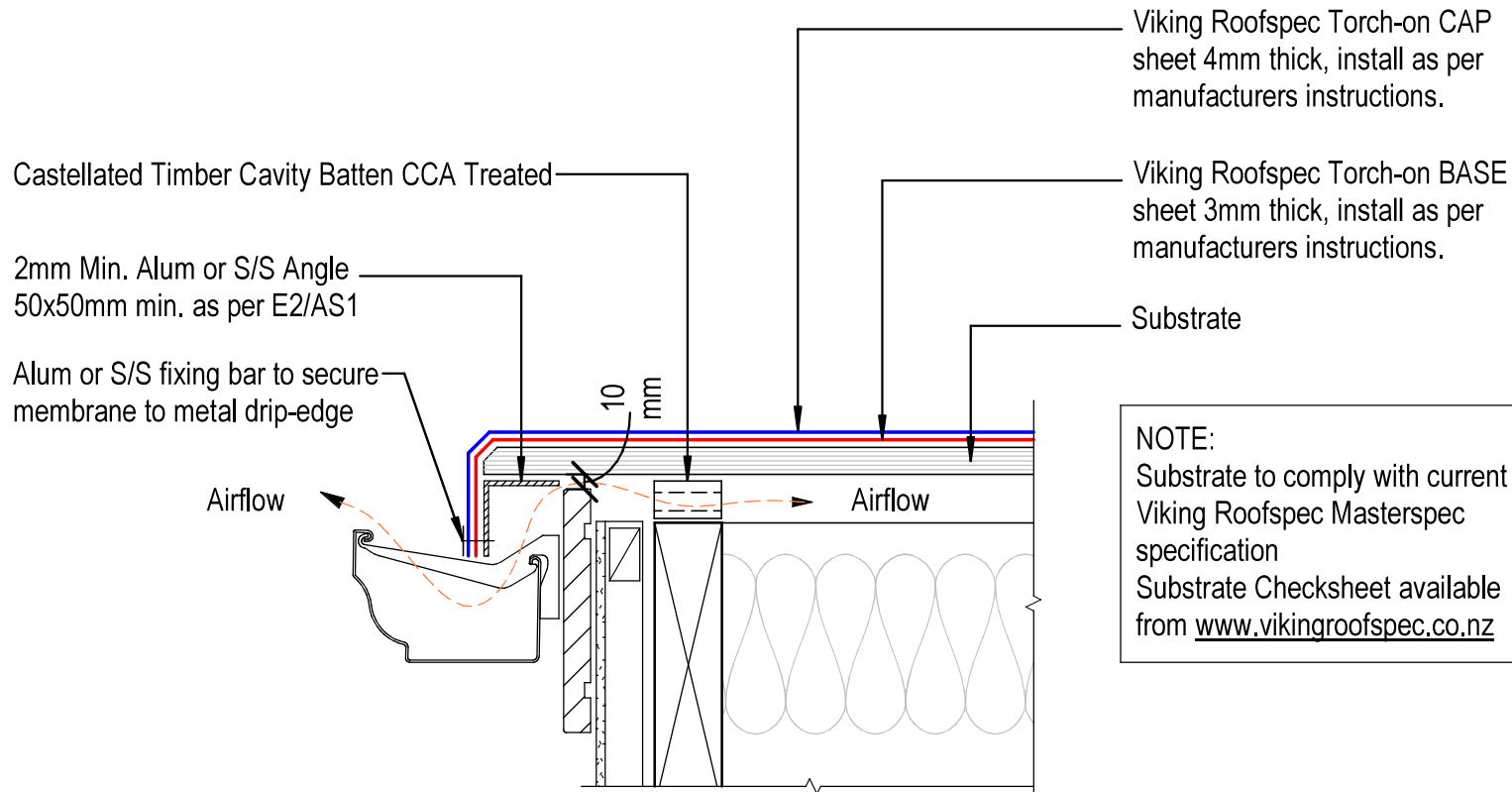
A second option where the top of the window fits directly under a flat sheet soffit (see Figure 1) is to protect the junction at the raked head with a timber bead that is sealed to both the window flange and the soffit. ➡



NOTE:
Substrate to comply with current Viking Roofspect Masterspec specification
Substrate Checksheet available from www.vikingroofspect.co.nz

IMPORTANT NOTES for all following details:

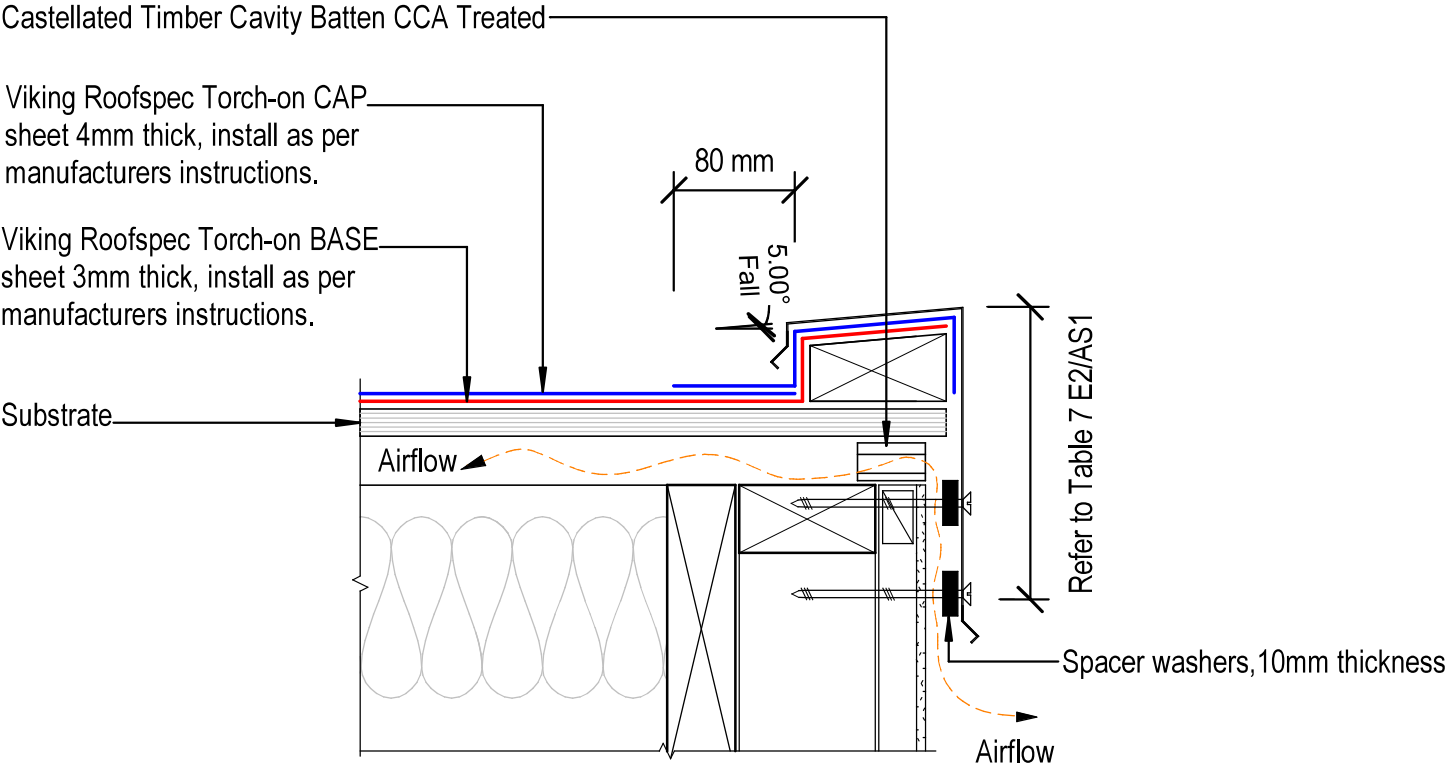
- Specification:** These details are for use with all Viking Torch-on Membranes Gemini APP, Lybra SBS or Phoenix Super APAO selections. Contact Viking Roofspect to assist with the best selection for your needs.
- Priming:** All substrates and surfaces where Torch-on membrane is being applied must be primed with Viking SES300 Bituminous primer. All Metal flashings or Proprietary fittings such as drip-edges, drains, sumps and scuppers must be sanded then primed with Viking Solvent-based Bituminous Primer SES297.
- Substrates:** All Substrates are to comply with Viking Torch-on System requirements. All external corners must be min. 5mm radius , with Internal corners to have min. 20mm Angle Fillet installed. A Bitumen Fillet is best.
- Detailing:** All upstand transitions are to be installed as per this detail VT02 Internal gutters, door thresholds, wall upstands, skylight upstands etc. Reasoning: To allow for membrane movement near fillets at substrate transition from horizontal to vertical planes



NOTE:
E2.3.5 Concealed spaces and cavities in buildings must be constructed in a way that prevents external moisture being accumulated or transferred and causing condensation, fungal growth, or the degradation of building elements

NOTE: VENTING
Alternatively vent through Soffit or through top of roof with
Viking Cavity Vents

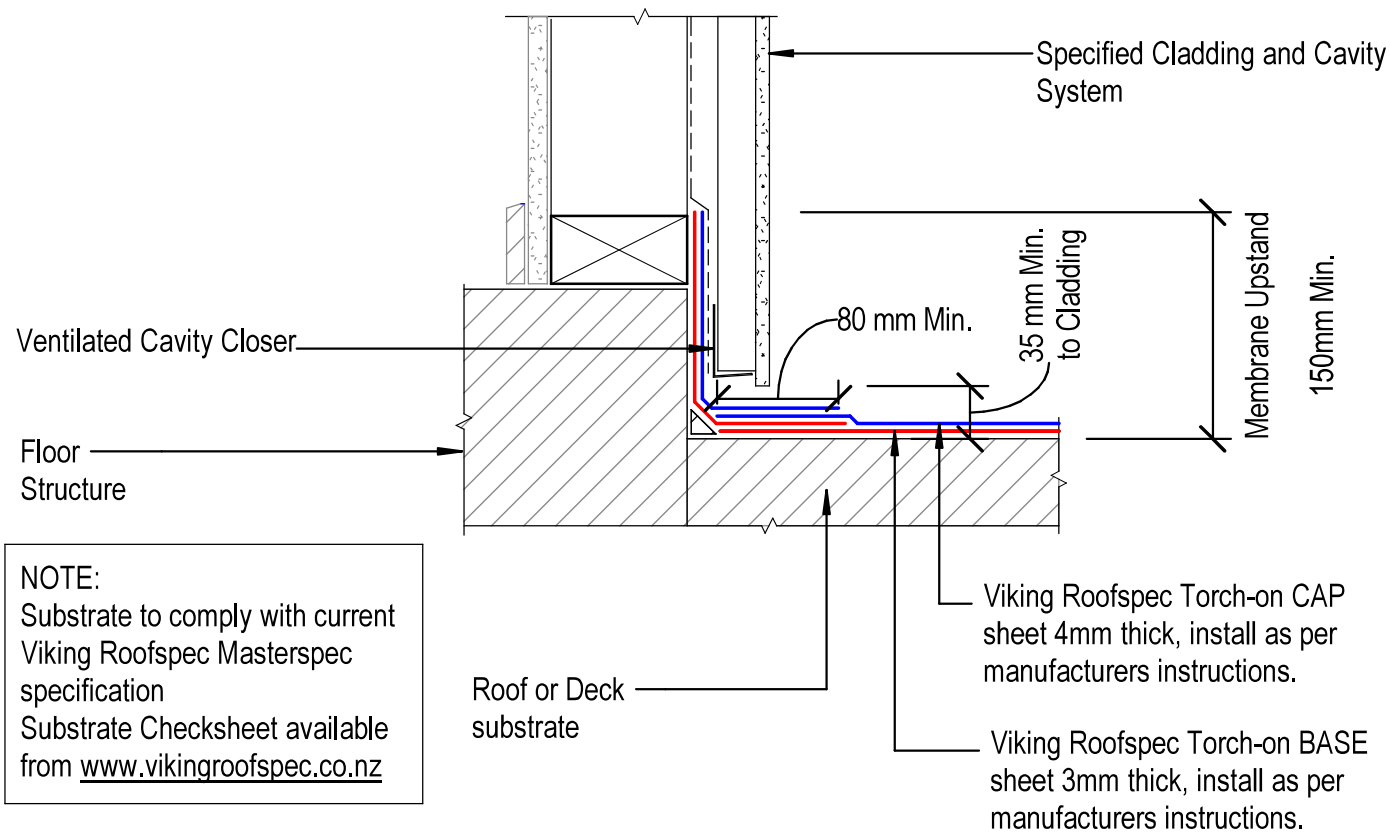
--



NOTE:
Substrate to comply with current
Viking Roofs spec Masterspec
specification
Substrate Checksheet available
from www.vikingroofs spec.co.nz

NOTE: VENTING
Alternatively vent through Soffit or through
top of roof with Viking Cavity Vents

	DRAWING TITLE		NOTES:		DRAWING	
	Torch-On Ventilation_Cavity vent at Parapet		- Viking Waterproof Membrane as notated can be Viking Gemini, Lybra or Phoenix Super. - All fixings, cladding and structure are indicative only unless notated.		Viking Torch-On systems are CodeMarked	
			 Cert # GM-CM30092-RevB		INFORMATION ONLY	
		Scale:	Date:	Drawn:	Viking	
		Not to Scale	23/11/2020		Detail Ref: VIK_TOR_021A_VENTPAPA	



**Torch-On
Apron_Upstand behind cladding**

NOTES:

- Viking Waterproof Membrane as notated can be Viking Gemini, Lybra or Phoenix Super.
- All fixings, cladding and structure are indicative only unless notated.

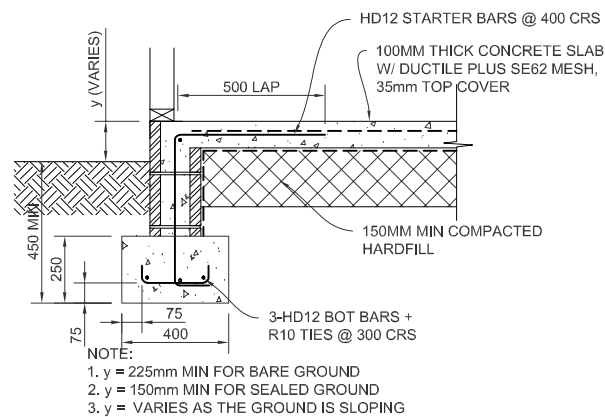


Viking Torch-On systems are CodeMarked

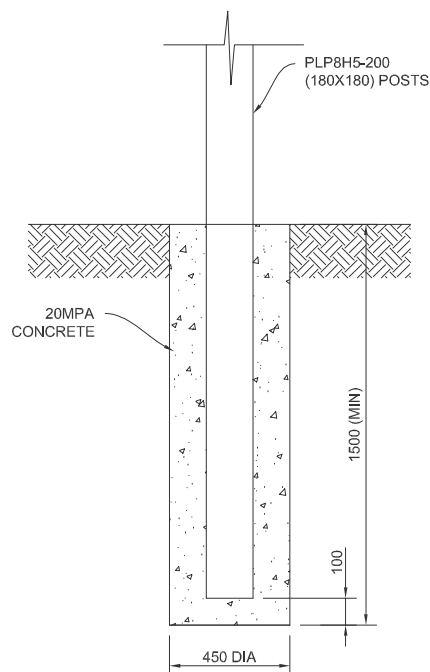
DRAWING

INFORMATION ONLY

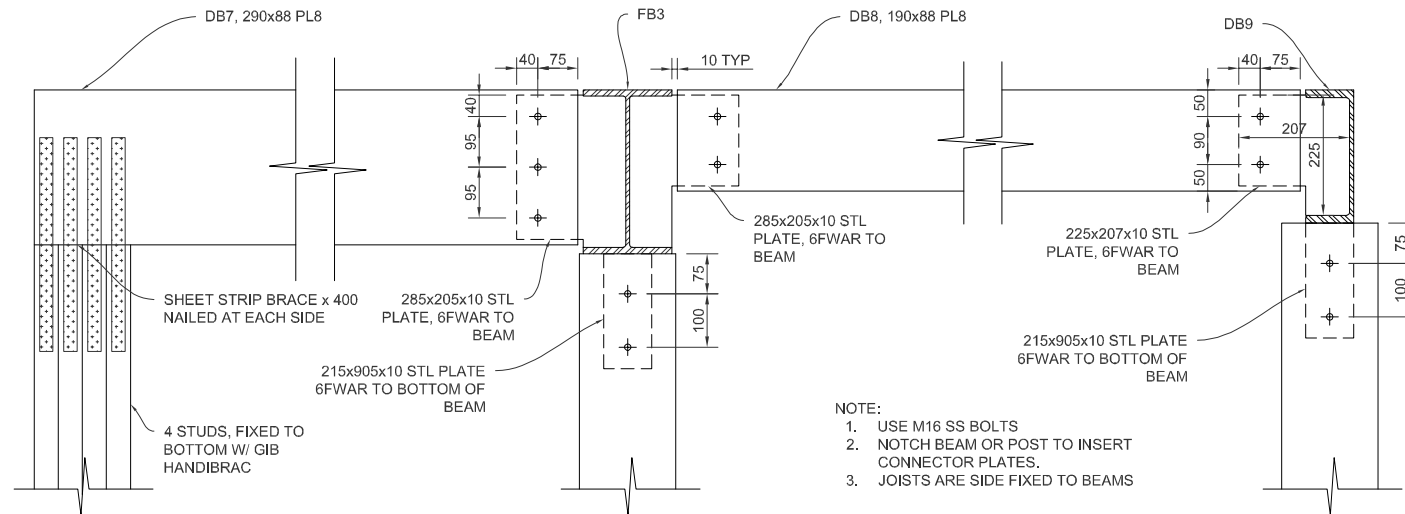
Scale:	Date:	Drawn:	Viking
Not to Scale	23/11/2020		
Detail Ref:	VIK_TOR_080_APRNUPST		



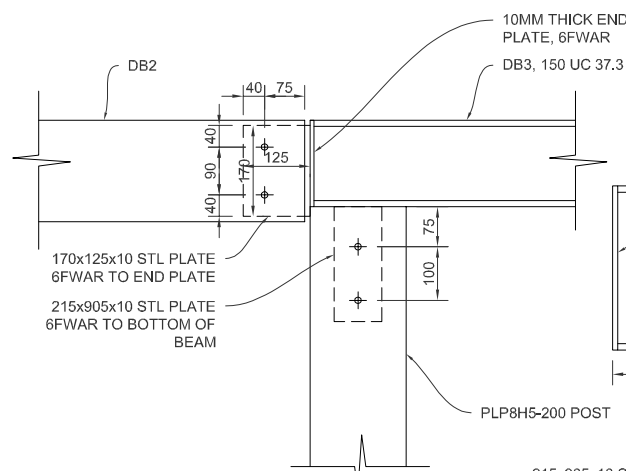
1 FOOTING DETAIL
S01 SCALE 1:20



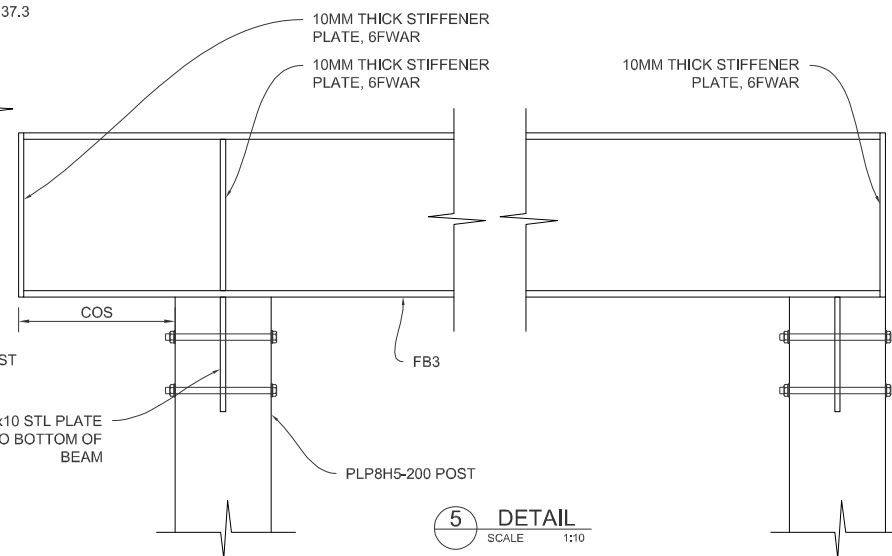
2 DETAIL
S02 SCALE 1:20



4 DETAIL
SCALE 1:10



3 DETAIL
SCALE 1:10



5 DETAIL
SCALE 1:10

			Surveyed	
			Designed	
1	Final Issue	18 Oct 2021	Drawn	
No.	Revisions	Date	Reviewed	
© COPYRIGHT: This drawing must not be copied, altered, reproduced or clipped/ or by any means without the written permission of IAS Structures.			Approved	

Project

36 OLD HOSPITAL RD, WHANGAROA
PROPOSED HOUSE ALTERATION

Sheet Title

DETAILS

	Drawing Status
--	----------------

CONSENT

Project No.:	230-FND-2
--------------	-----------

Drawing S01

Scale 1:20, 1:10 (A3)

Revision	1
----------	---

