

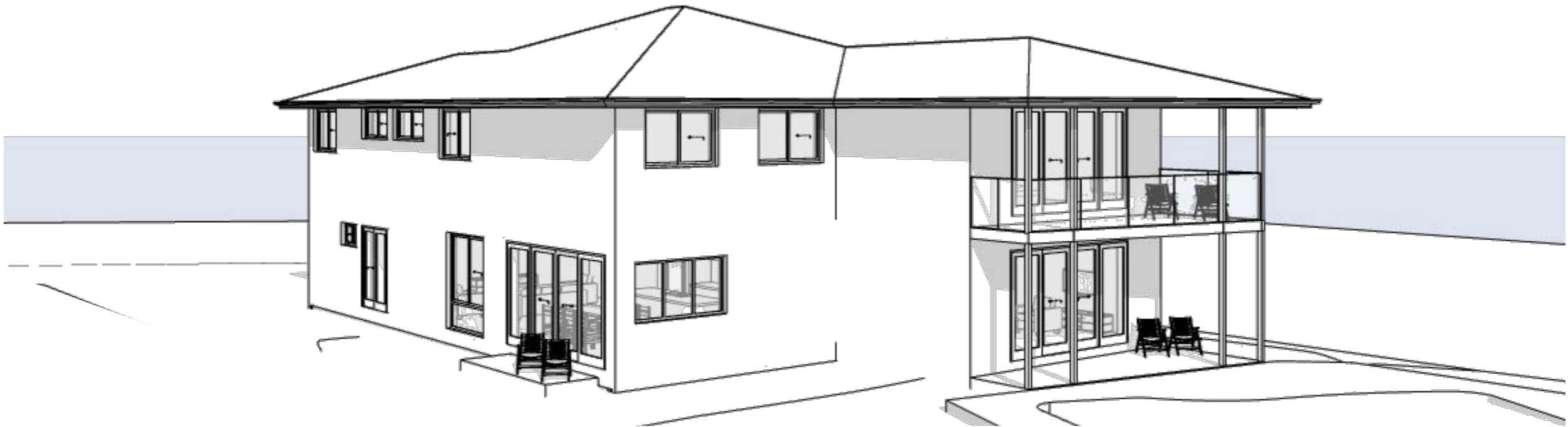
PROPOSED RESIDENCES

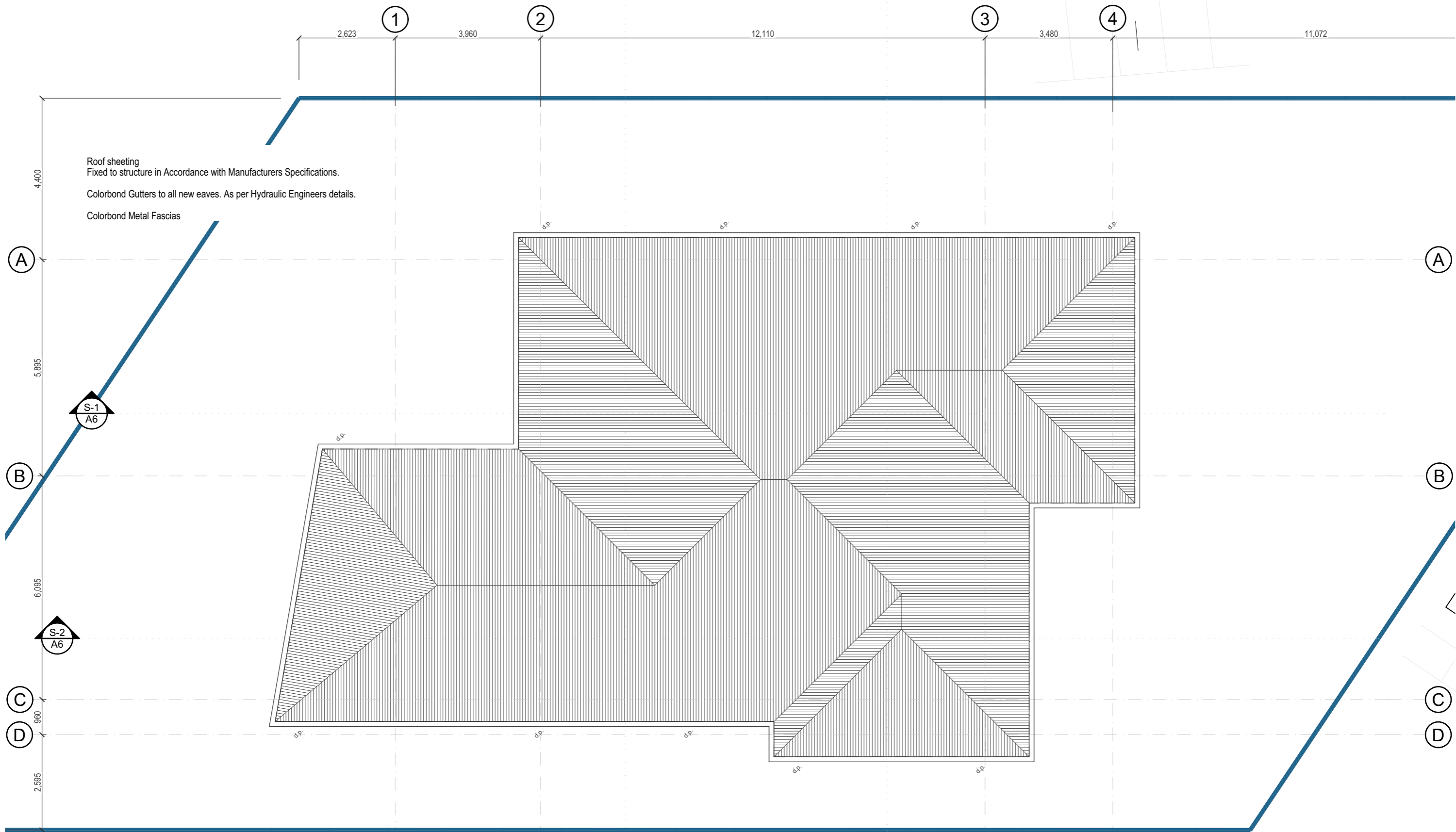
MICHELLE + SHAUN WALSH

4B HOLLOWAY PLACE CURL CURL NSW 2096



DRAWING No.	DESCRIPTION
	COVER PAGE
	PERSPECTIVES
A1	ROOF PLAN
A2	FIRST FLOOR PLAN
A3	GROUND FLOOR PLAN
A4	ELEVATION SHEET 1
A5	ELEVATION SHEET 2
A6	SECTIONS SHEET 1
A7	SECTIONS SHEET 2
A8	DRIVEWAY LONG SECTION
D1	DEMOLITION PLAN
N1	WINDOW DOOR COLOUR SCHEDULES
N2	BASIX COMMITMENTS SHEET 1
N3	BASIX COMMITMENTS SHEET 2
S1	SITE ANALYSIS
S2	SITE PLAN and CALCULATIONS
S3	SITE and WASTE MANAGEMENT
S4	SHADOW DIAGRAM - 9AM JUNE 21 - WINTER SOLSTICE
S5	SHADOW DIAGRAM - 12PM JUNE 21 - WINTER SOLSTICE
S6	SHADOW DIAGRAM - 3PM JUNE 21 - WINTER SOLSTICE







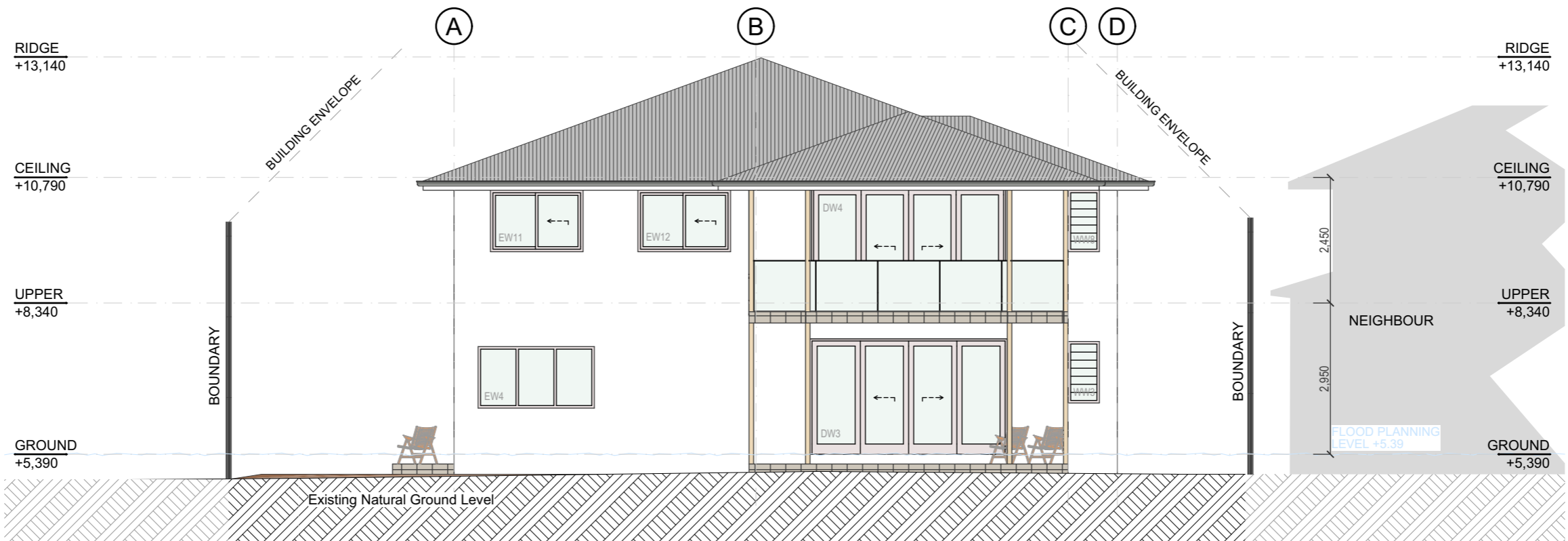




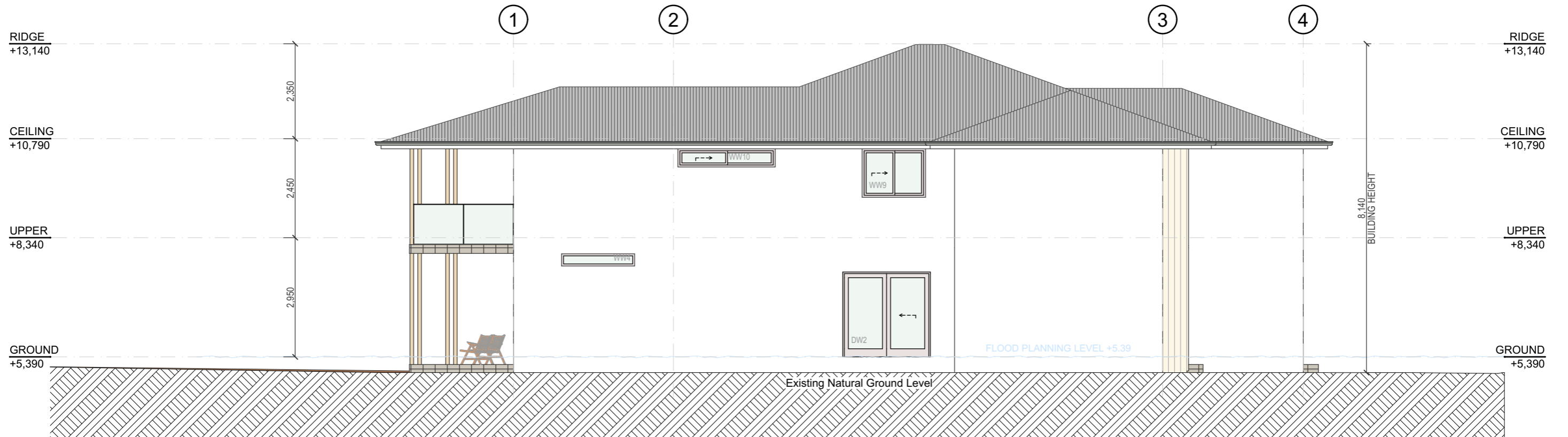
SOUTHERN ELEVATION

GENERAL WINDOW AND DOOR NOTE:
All windows to be Powder Coated Aluminium with fly screens.
Front door to be Solid Core Timber Feature door.
All other external doors to be Powder Coated Aluminium.

EXTERNAL CLADDINGS:
Walls : A combination of Newtech Wood Castellations Cladding and rendered Hebel.
Roof : Colorbond Custom Orb roof Sheeting



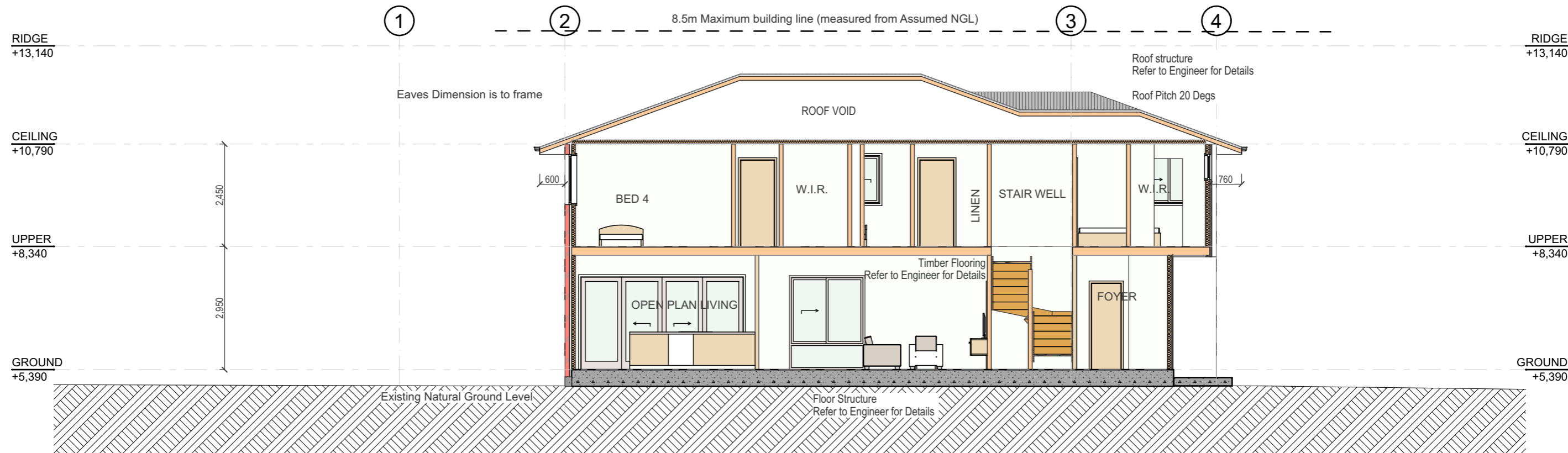
NORTHERN ELEVATION



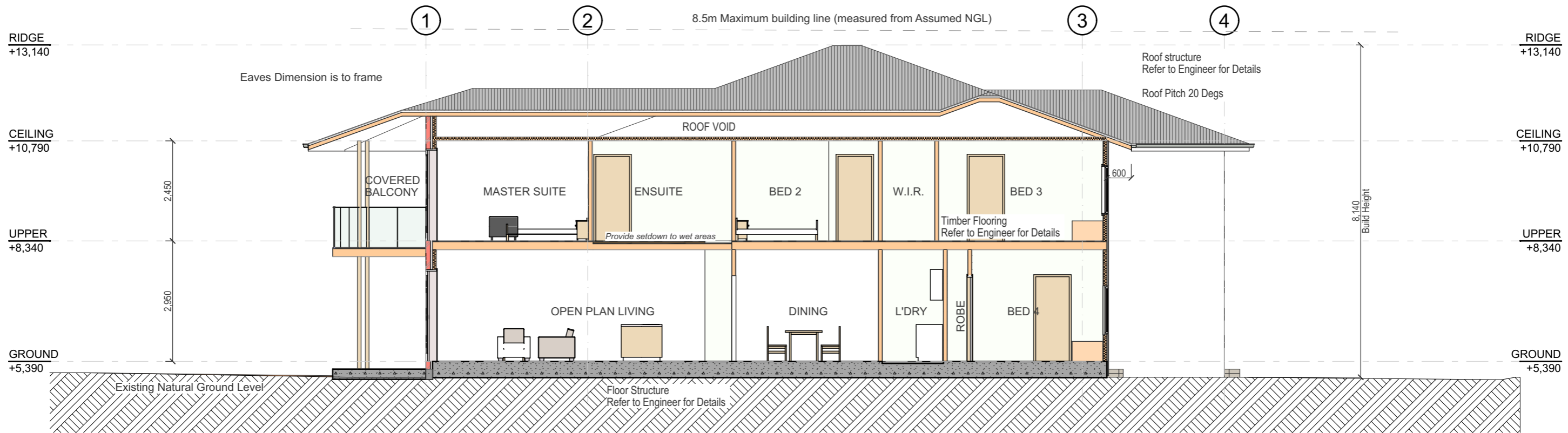
WESTERN ELEVATION



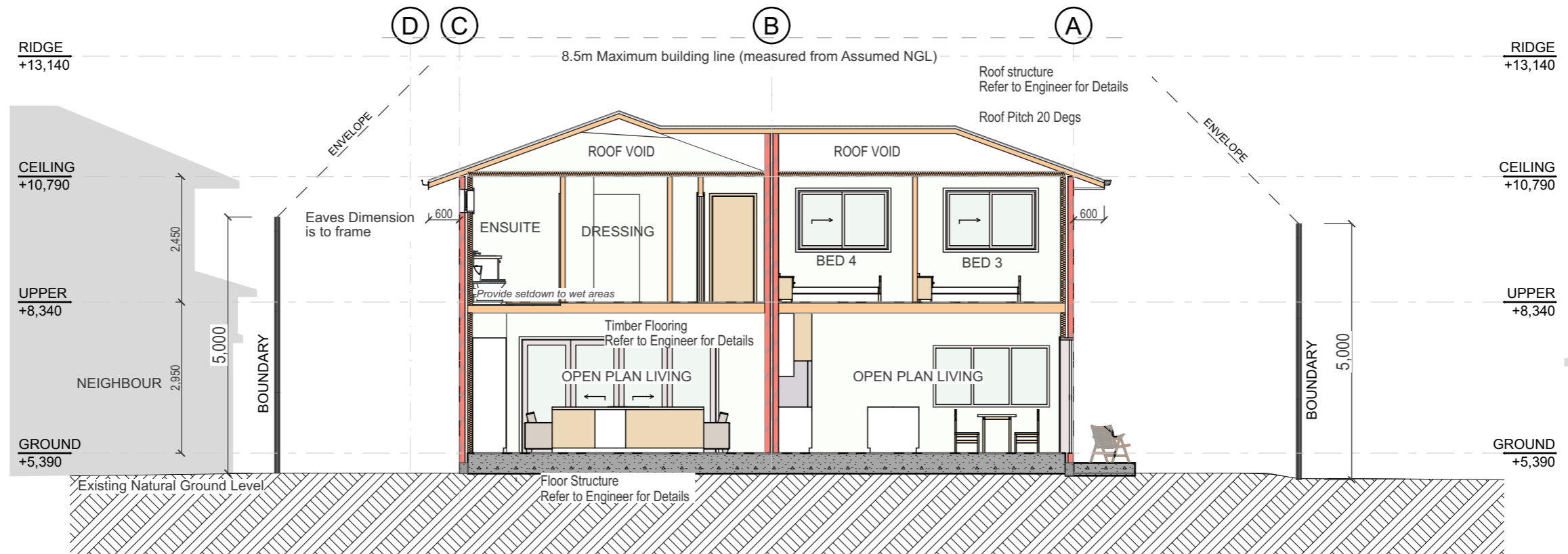
EASTERN ELEVATION



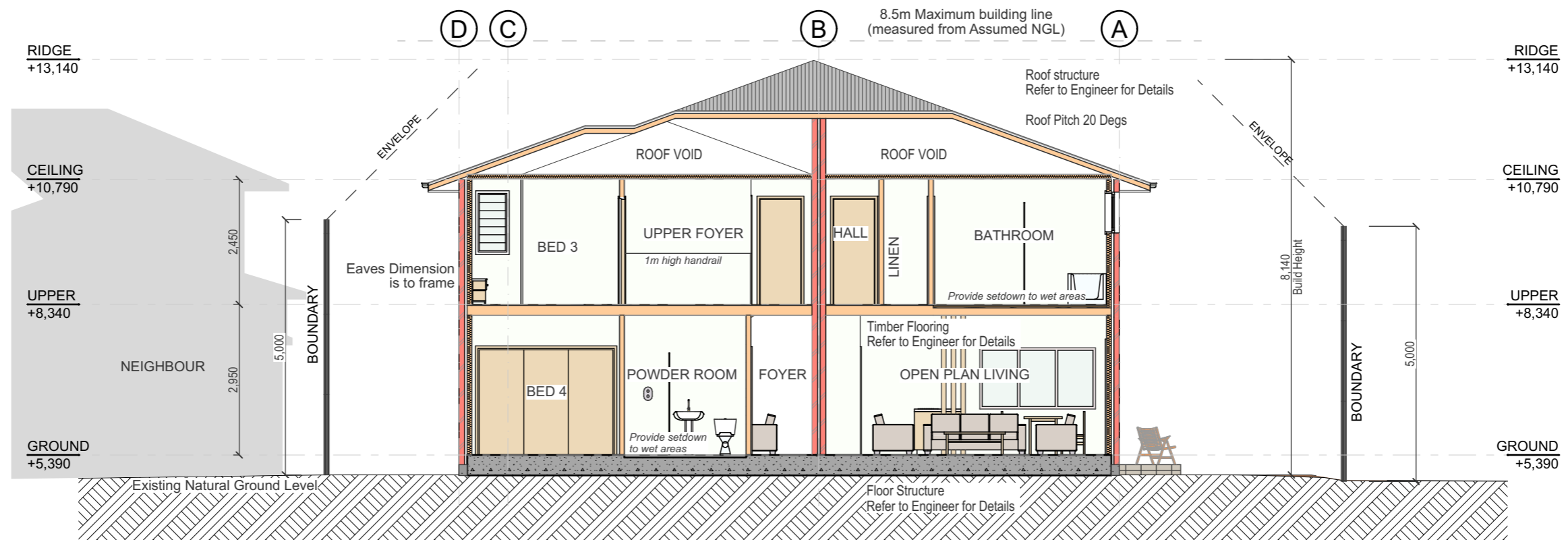
S-1 LONG SECTION NORTH



S-2 LONG SECTION SOUTH

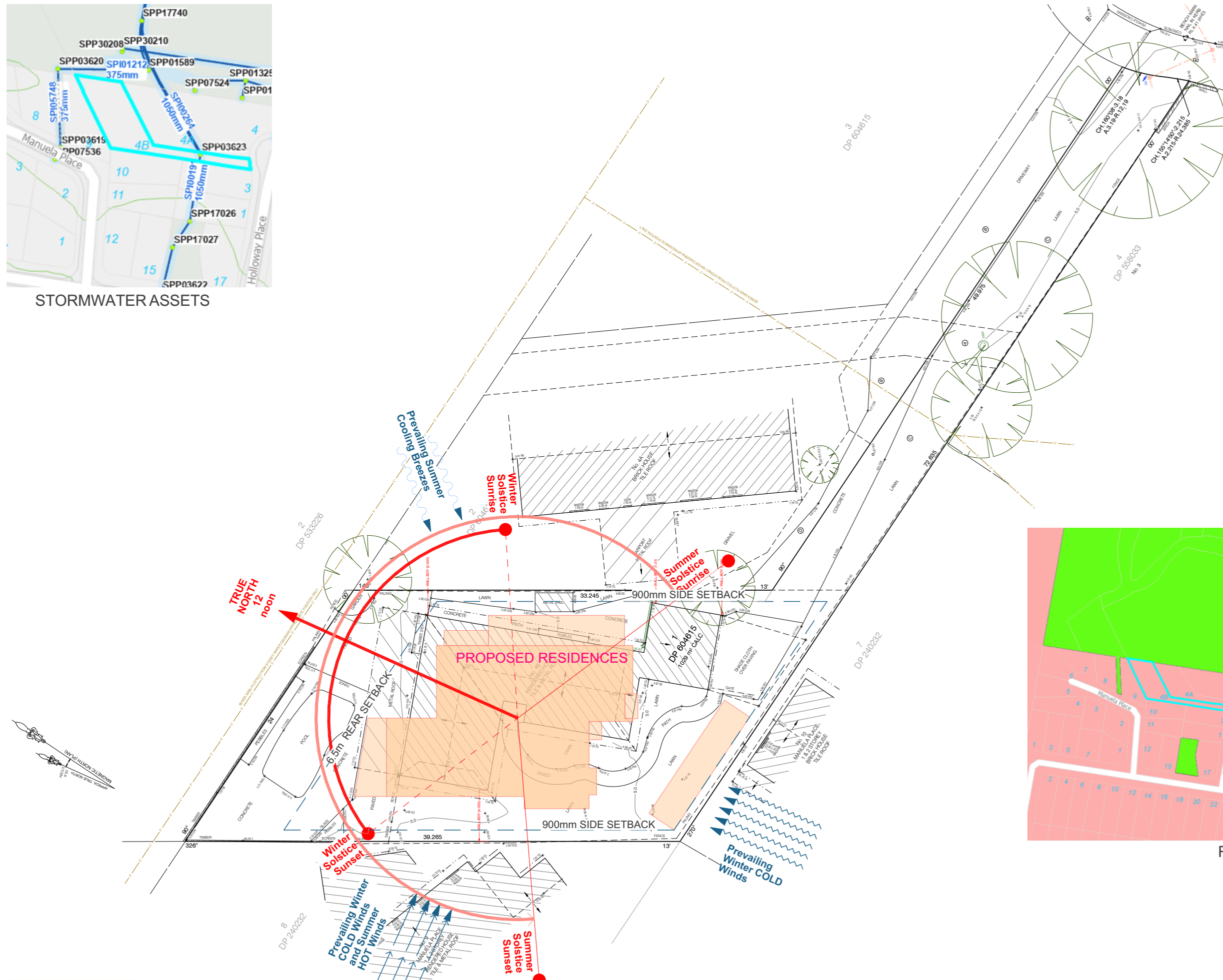
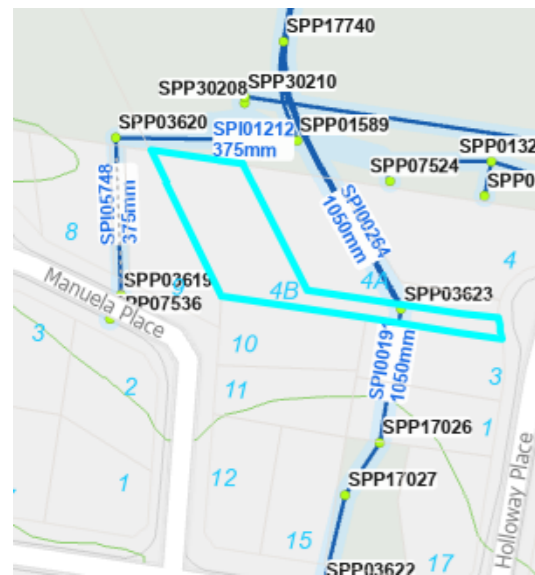


S-3 CROSS SECTION WEST



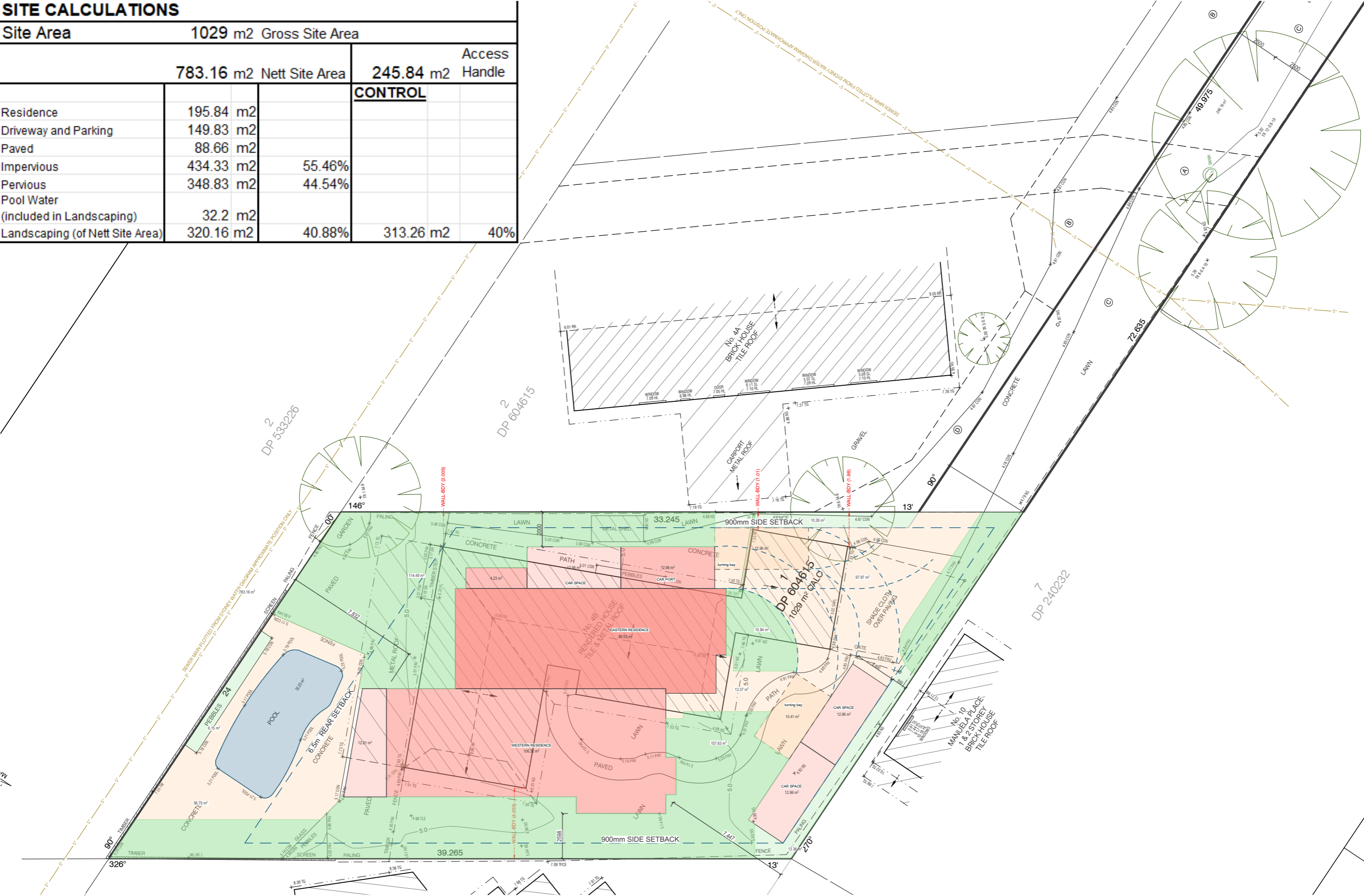
S-4 CROSS SECTION EAST

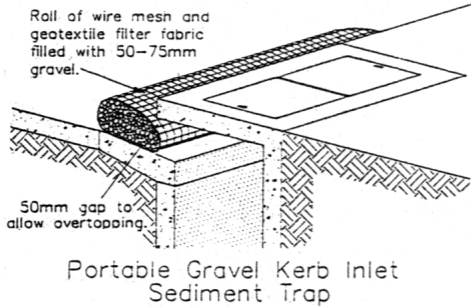
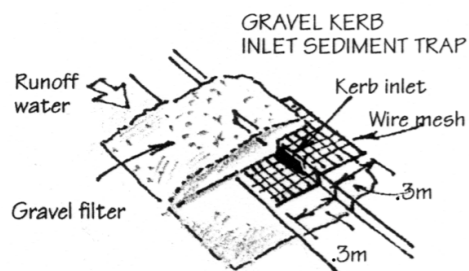




SITE CALCULATIONS

Site Area		1029 m2 Gross Site Area	
783.16 m2 Nett Site Area		Access Handle	
		245.84 m2	
		CONTROL	
Residence	195.84 m2		
Driveway and Parking	149.83 m2		
Paved	88.66 m2		
Impervious	434.33 m2	55.46%	
Pervious	348.83 m2	44.54%	
Pool Water (included in Landscaping)	32.2 m2		
Landscaping (of Nett Site Area)	320.16 m2	40.88%	313.26 m2 40%





GUTTER PROTECTION

Provide protection to down hill Grate in Gutter by means of Sand bags or blue metal wrapped in geotextile fabric. When soil or sand builds up around this sediment barrier, the material should be relocated to the site for disposal.

SITE ACCESS

Vehicular access to the site must be via a single entry point that is stabilised to prevent the tracking of sediment onto the roads and footpath. Soil, earth, mud, clay, concrete washing, paint or similar materials must be removed from the roadway, by means other than washing, on a daily basis.

ON-GOING WASTE MANAGEMENT

Residents to manage waste on a daily basis - by separating materials into re-usables, recyclables, waste and garden organics for inclusion in appropriate disposal bins. Bins to be placed kerbside on specified days for collection by council.

ON-SITE PRACTICES

All trenches must be filled immediately after services are laid. Excess materials such as cement, water from tool cleaning, paintbrushes and brick and concrete slurry, must not be washed into stormwater system. It is against the law to pollute waters with any solid, liquid or gas. Where possible construct a depression or earth dam below brick, concrete or tile cutting. If this is not possible, pass water through a filter.

SEDIMENT NOTE:

1. All Erosion and Sediment Control measures to be inspected and maintained daily, by the site manager.
2. Minimise disturbed areas, remove excess soil from excavation area as soon as possible.
3. All material stockpile to be clear from drains, gutters and footpaths, or within sediment fence.
4. Drainage to be connected to Stormwater as soon as possible. If stored on site, it must be filtered before releasing into the stormwater system or waterways.
5. Roads and footpaths to be swept daily.

BUILDING WASTE DISPOSAL

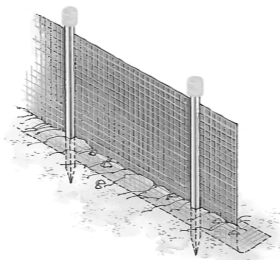
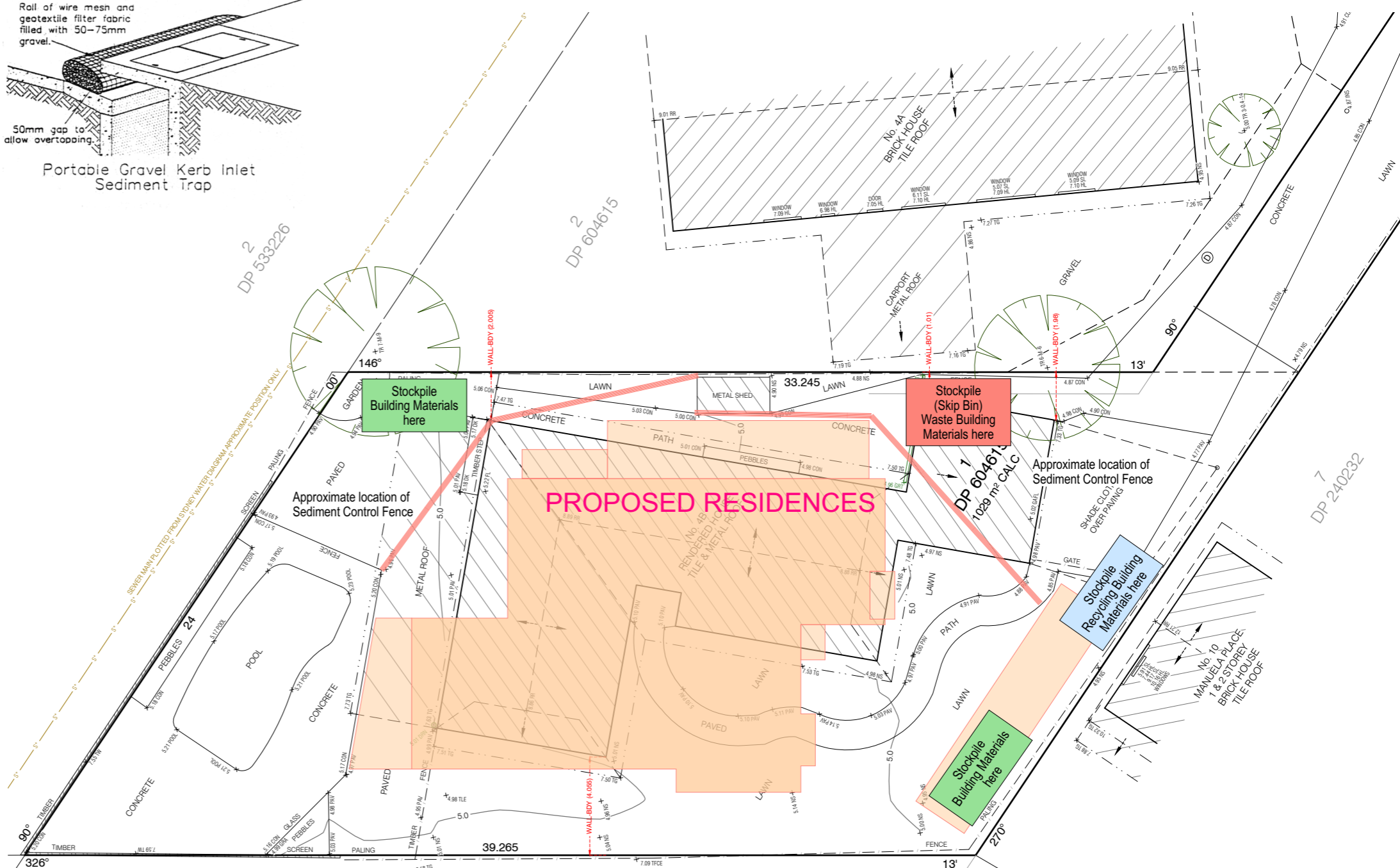
All waste materials are to be sorted and transported to the local authorized waste management centre for potential re-use or recycling. Garden waste to be delivered to an authorized Recycling centre for chipping for reuse as mulch. Any Asbestos materials located on the site during the demolition process is to be properly disposed of in accordance with the guidelines of the relevant regulatory authority. Every attempt will be made to keep waste to a minimum.

STOCK PILES

All stockpiles are to be kept on-site where possible. Any materials placed on the footpaths or nature strips require council's permission. All stockpiles are to be placed away from the drainage lines and street gutters. It is best to locate these on the highest part of the site if possible. Place waterproof covering over stockpiles. If required provide diversion drain & bank around stockpiles.

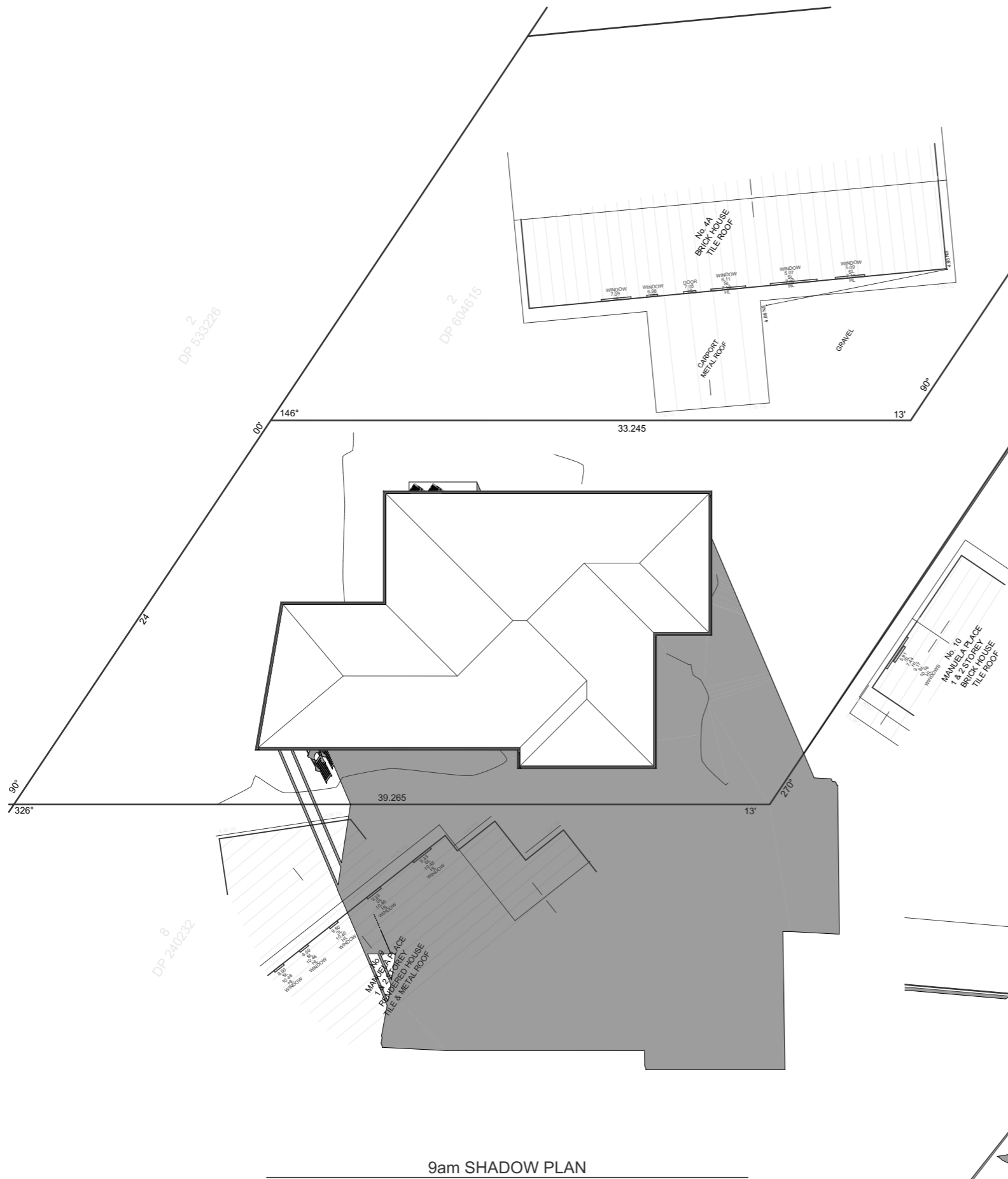
DUST CONTROL

To reduce dust generated by wind action, the removal of the top soil is to be minimised. To prevent dust generation, watering down of the site, especially during the movement of machinery is required. Where excavating into rock, keep the surface moist to minimise dust. Construct a gravel entry/exit point using blue metal and restrict all vehicle movements within the site to a minimum. Ensure wind breaks, such as existing fences are maintained during the construction phase until new landscaping is provided or reinstated. Prevent dust by covering stockpiles.

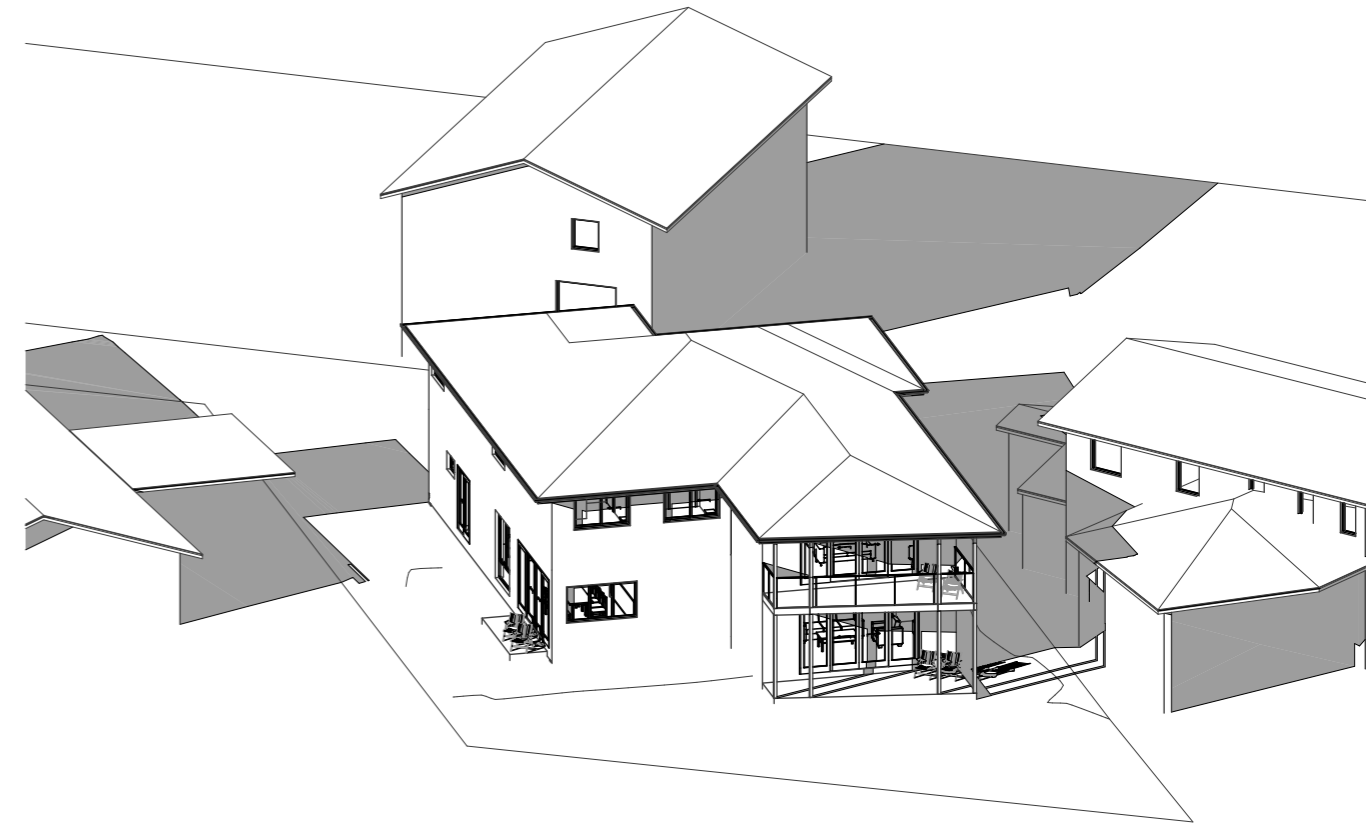


SEDIMENT CONTROL FENCE

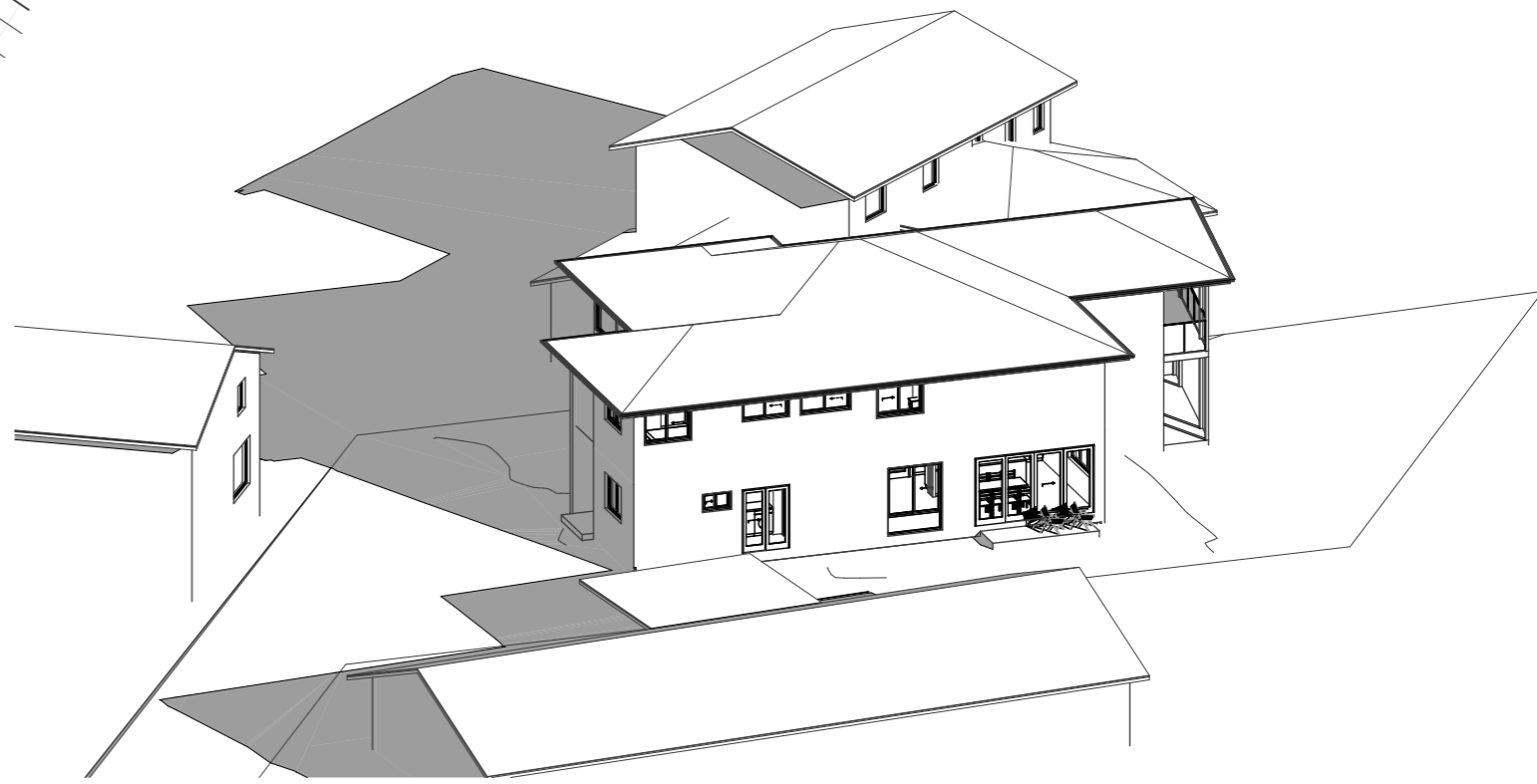
- 1 Excavate a trench a minimum of 200mm wide and 200mm deep on the uphill side of the proposed line of silt fence.
- 2 Drive adequate length support posts to a depth (minimum 400mm) appropriate for the site conditions downhill of the trench.
 - A. Post spacing is typically at 2m centres with wire attached along the top between posts to assist with support of the silt fence.
 - B. Post spacing can be increased up to 4m centres if supported by 2.5mm diameter high tensile wire at mid height and along the top with hog rings, clips or pins every 150mm connecting the silt fence along the top wire.
- 3 Roll out silt fence and position up against the support posts and fold over top wire. Hog rings, clips or pins are used to attach the silt fence to the top wire (at the required spacing).
- 4 Bury bottom section along the base and up the side of the trench leaving a minimum exposed height of 600mm and backfill with soil. Compact to ensure good anchorage. Place safety caps on posts.



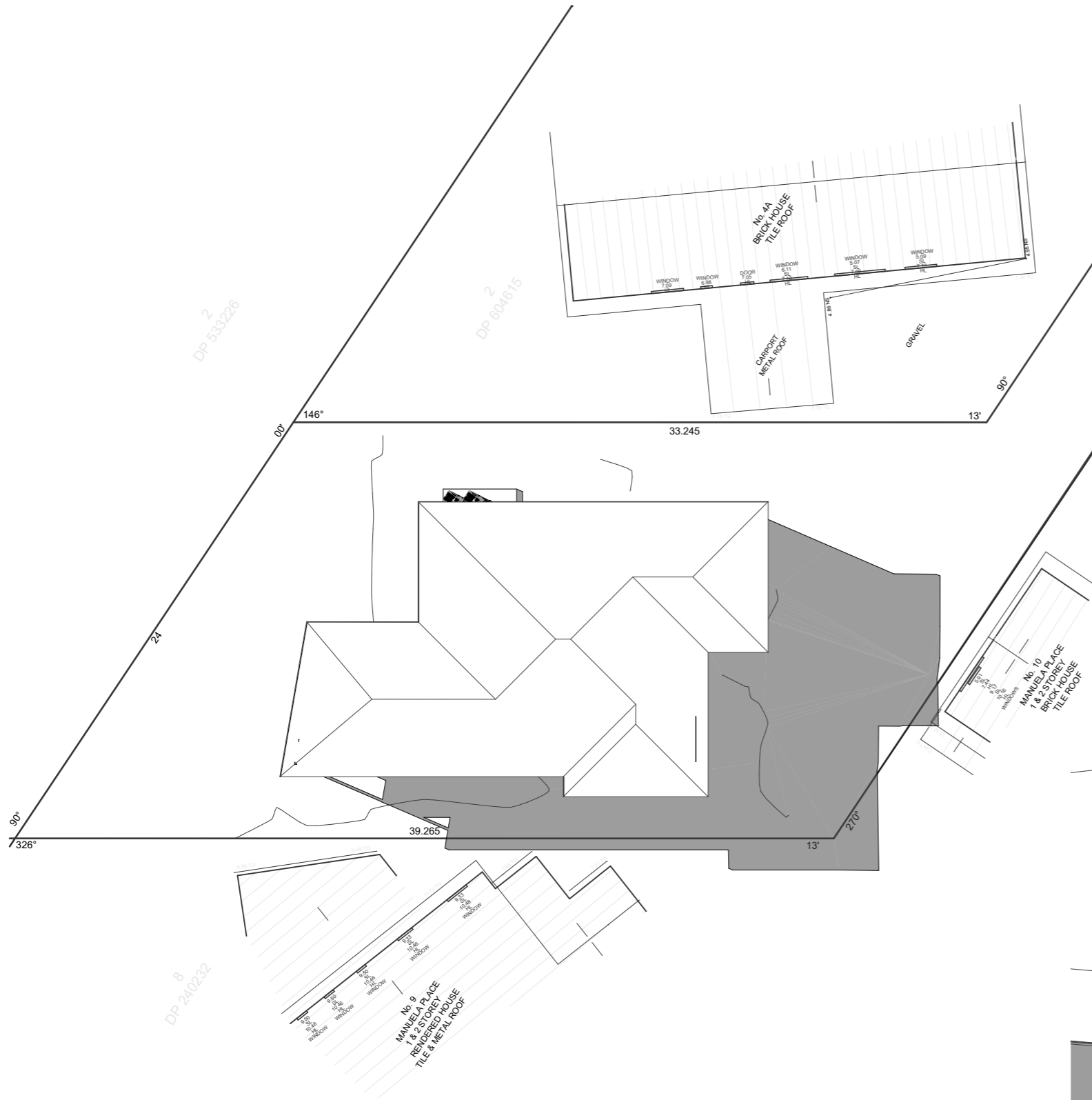
9am SHADOW PLAN



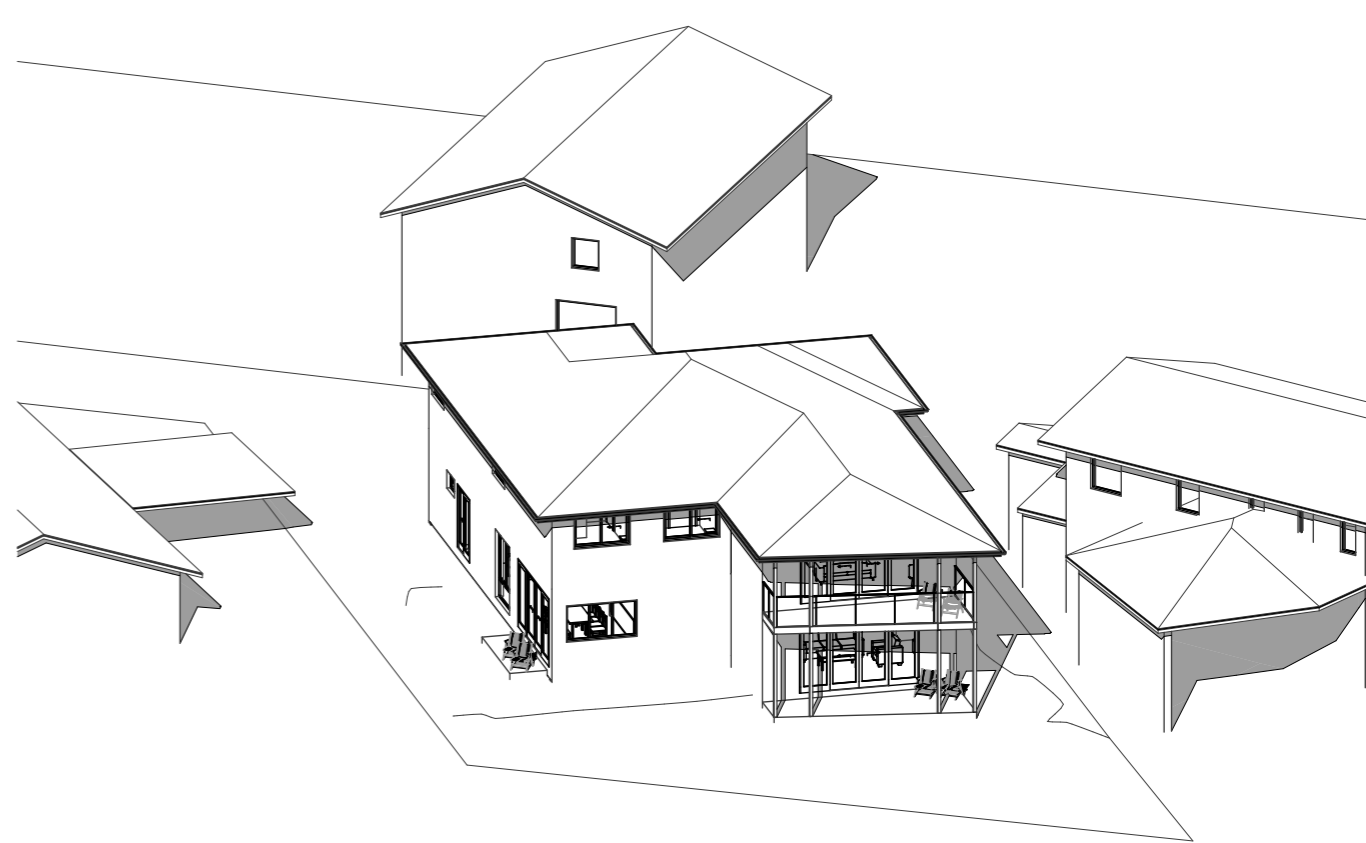
9am NORTH EAST PERSPECTIVE



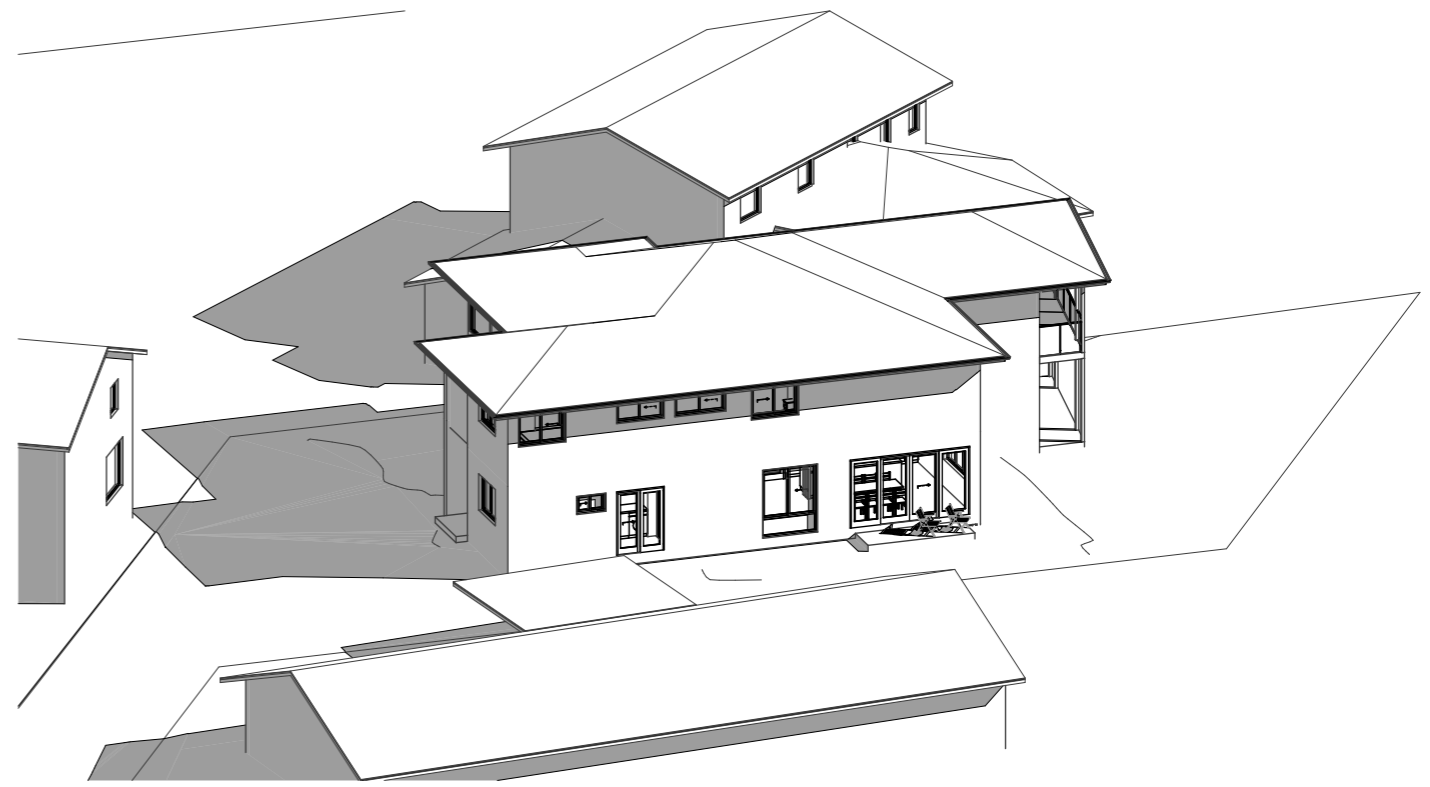
9am EAST PERSPECTIVE



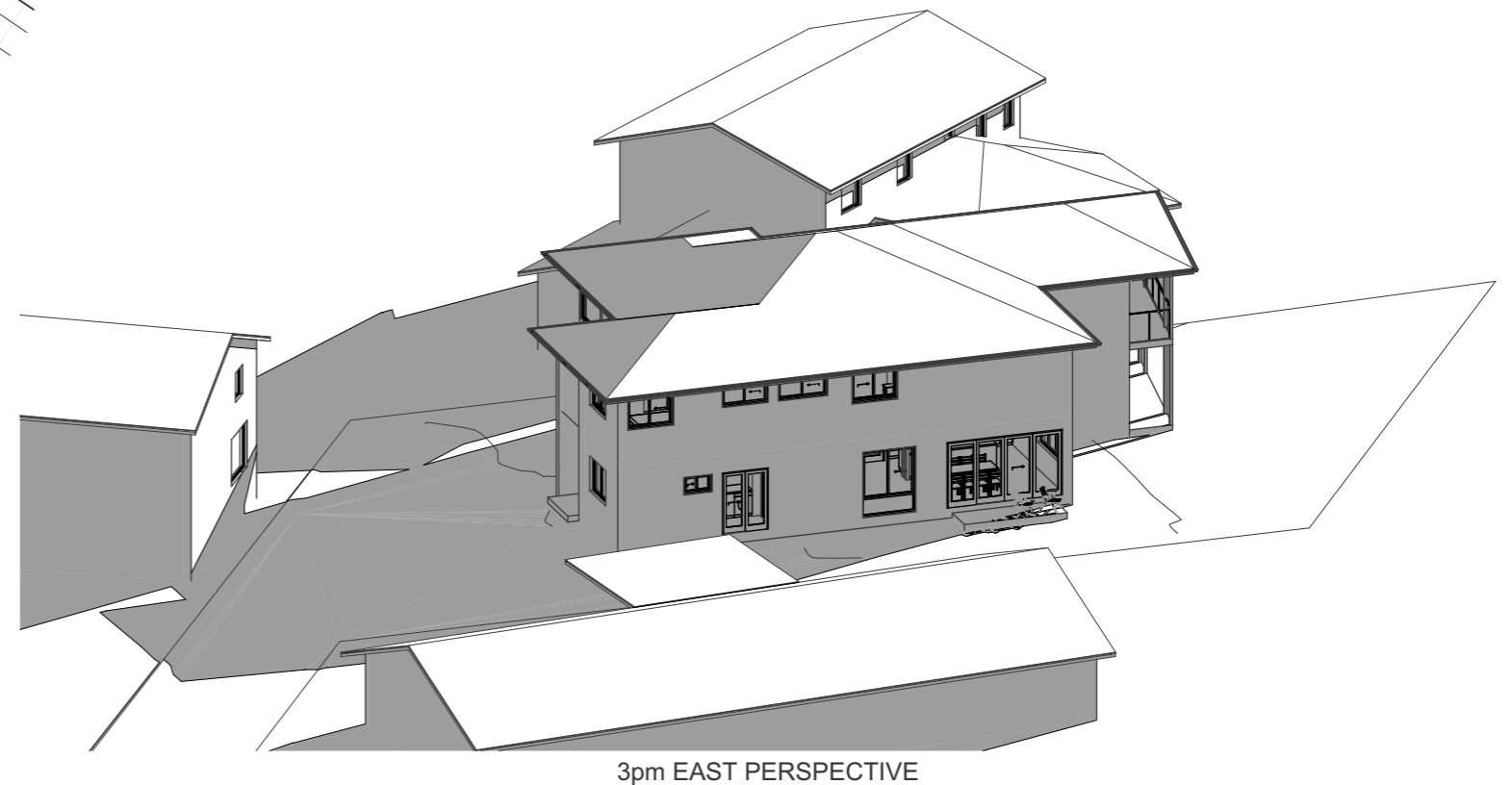
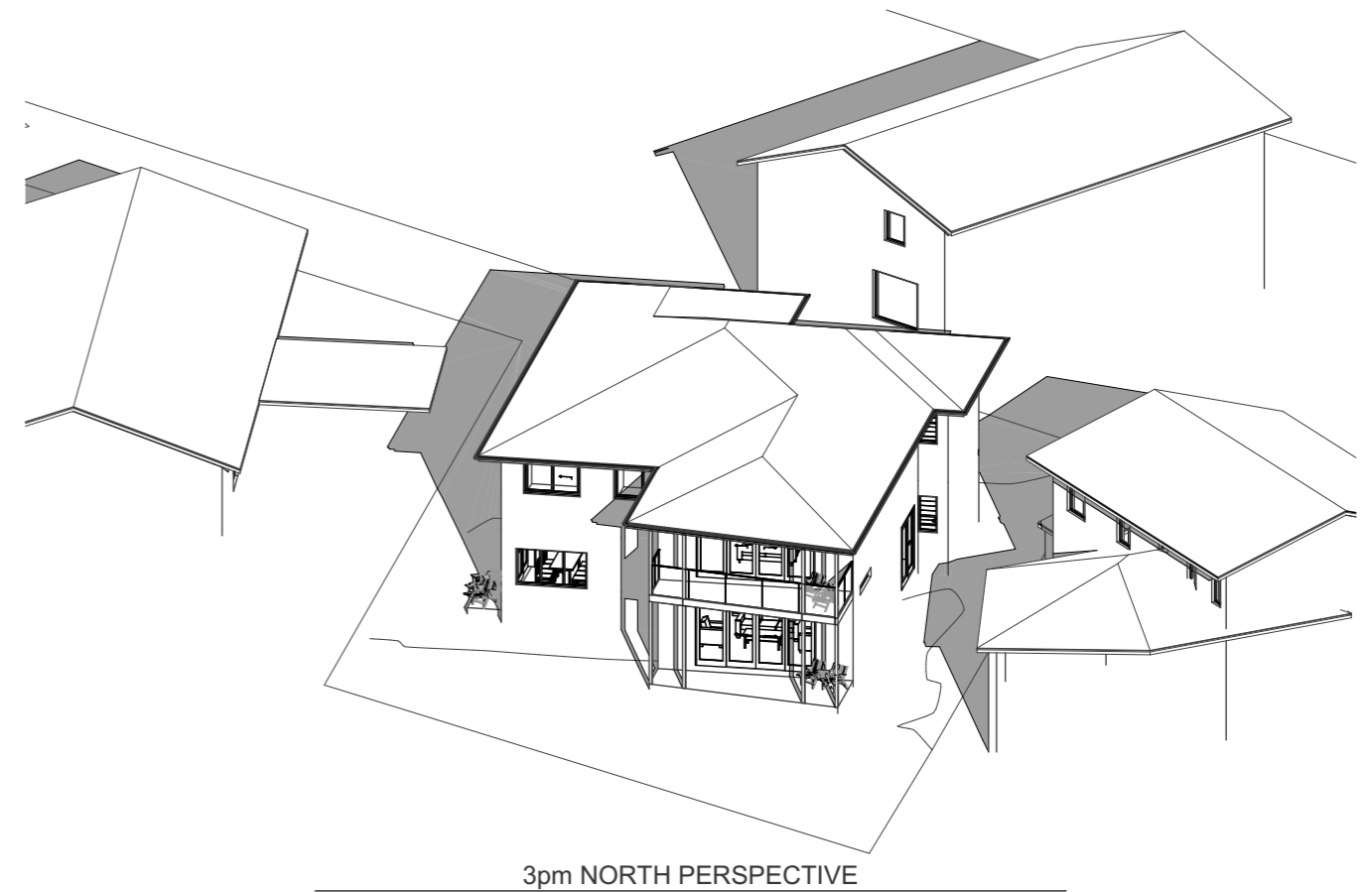
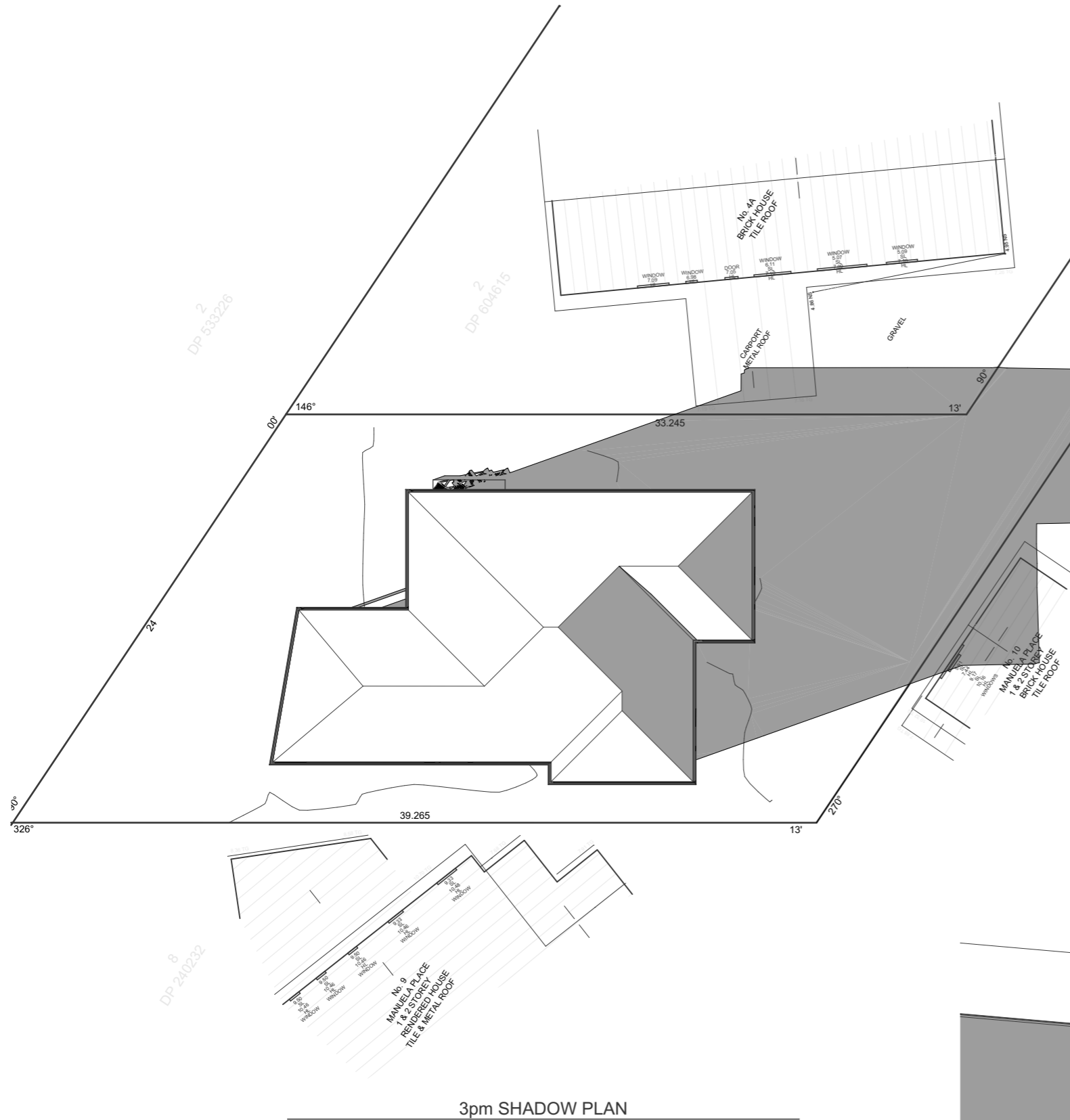
12pm SHADOW PLAN



12pm NORTH EAST PERSPECTIVE



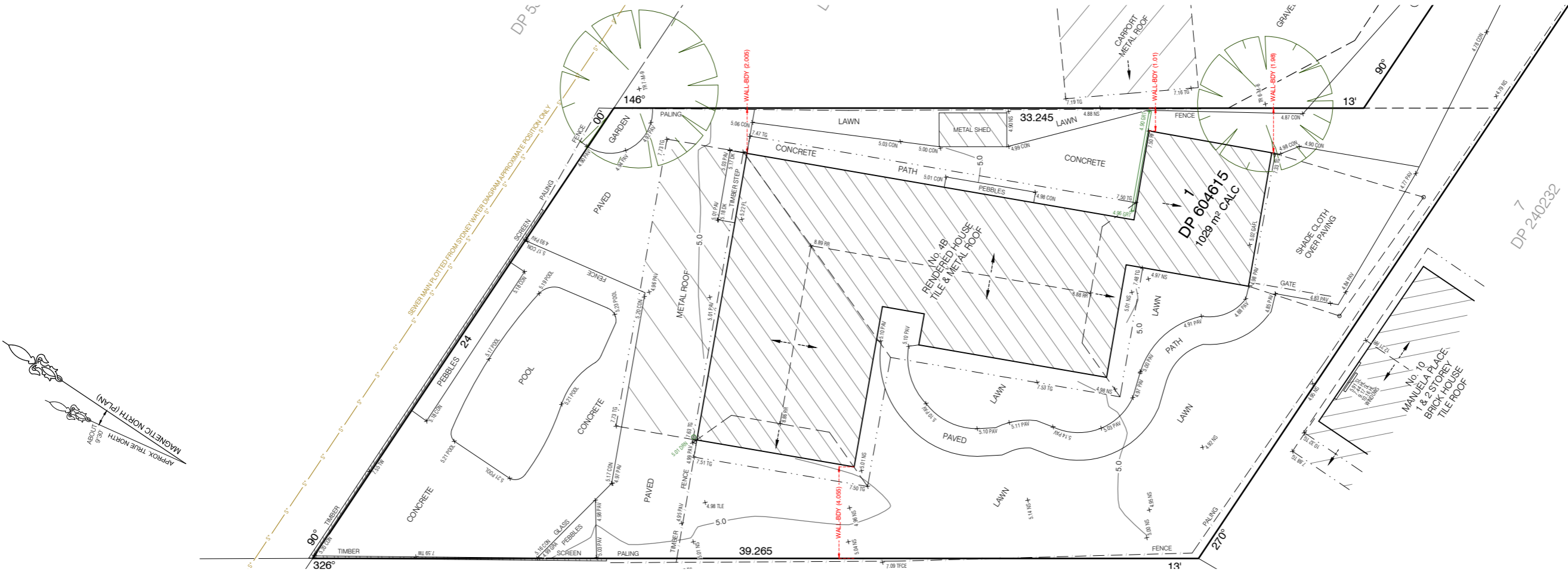
12pm EAST PERSPECTIVE



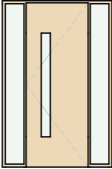
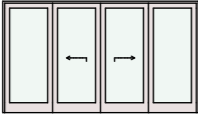
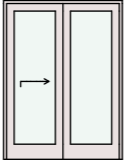
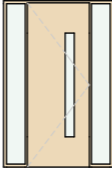
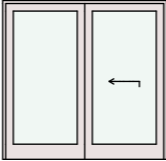
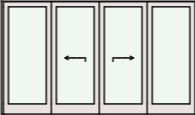
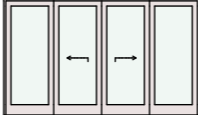
EXISTING RESIDENCE AND ALL SHED STRUCTURES AS NOTED TO BE DEMOLISHED.

POOL TO REMAIN



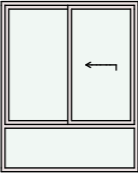



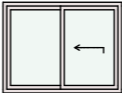
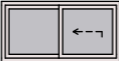

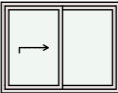
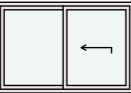
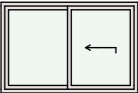
Provide Site Security fencing around perimeter of the site in Accordance with Council Guidelines.




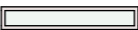




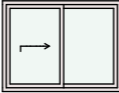
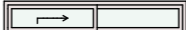


DOOR SCHEDULE

							
ID	DE1	DE2	DE3	DW1	DW2	DW3	DW4
W x H	1,450×2,200	3,950×2,250	1,570×2,100	1,450×2,200	2,170×2,100	3,850×2,250	3,790×2,250
BASIX Surface Area	3.19	8.89	3.30	3.19	4.56	8.66	8.53
Home Story Name	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND	UPPER

WINDOW SCHEDULE

ELEVATION												
ID	EW1	EW2	EW3	EW4	EW5	EW6	EW7	EW8	EW9	EW10	EW11	EW12
W x H	1,570×1,200	970×600	1,810×2,250	2,270×1,200	1,700×600	1,570×1,200	1,570×1,200	1,570×800	1,690×800	1,570×1,200	1,810×1,200	1,810×1,200
HEAD HEIGHT	2,200	2,100	2,250	2,100	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200
BASIX Surface Area	1.88	0.58	4.07	2.72	1.02	1.88	1.88	1.26	1.35	1.88	2.17	2.17
Home Story Name	GROUND	GROUND	GROUND	GROUND	UPPER	UPPER	UPPER	UPPER	UPPER	UPPER	UPPER	UPPER

									
WW1	WW2	WW3	WW4	WW5	WW6	WW7	WW8	WW9	WW10
1,970×1,200	610×1,200	610×1,200	1,810×300	2,410×600	1,970×1,200	610×1,200	610×1,200	1,570×1,200	2,410×450
1,850	2,100	2,200	2,550	2,200	1,850	2,200	2,200	2,200	2,200
2.36	0.73	0.73	0.54	1.45	2.36	0.73	0.73	1.88	1.08
GROUND	GROUND	GROUND	GROUND	UPPER	UPPER	UPPER	UPPER	UPPER	UPPER

COLOUR SCHEME :

Roof to be SURF MIST
Solar Absorptance : 0.33
NCC Light Classification
BASIX Light Classification

Exterior Render walls to be Dulux
White Exchange half

Feature Wall to beb Newtech Wood
Castellation Cladding - Canadian
Cedar

DOOR & WINDOW NOTE:

All windows to be Powder Coated Aluminium with fly screens.
All windows and doors shall conform to the Relevant Australian Standard.
All upper bedroom windows shall be provided with child safety locks / screens to comply with BCA / NCC Part 3.9.2 IF sill height is less than 1.7m.
All windows and doors are to be weather stripped as per NCC.
All glazed assemblies will comply with As 2047 and AS 1288.
All glazing to have a max reflectivity index of 25%

Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carriedout. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

1. Commitments for multi-dwelling housing

(a) Dwellings

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must plant indigenous or low water use species of vegetation throughout the area of land specified for the dwelling in the "Indigenous species" column of the table below, as private landscaping for that dwelling. (This area of indigenous vegetation is to be contained within the "Area of garden and lawn" for the dwelling specified in the "Description of Project" table).	✓	✓	
(c) If a rating is specified in the table below for a fixture or appliance to be installed in the dwelling, the applicant must ensure that each such fixture and appliance meets the rating specified for it.		✓	✓
(d) The applicant must install an on demand hot water recirculation system which regulates all hot water use throughout the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below.		✓	✓
(e) The applicant must install: (aa) a hot water diversion system to all showers, kitchen sinks and all basins in the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below; and (bb) a separate diversion tank (or tanks) connected to the hot water diversion systems of at least 100 litres. The applicant must connect the hot water diversion tank to all toilets in the dwelling.		✓	✓
(f) The applicant must not install a private swimming pool or spa for the dwelling, with a volume exceeding that specified for it in the table below.	✓	✓	
(g) If specified in the table, that pool or spa (or both) must have a pool cover or shading (or both).		✓	
(g) The pool or spa must be located as specified in the table.	✓	✓	
(h) The applicant must install, for the dwelling, each alternative water supply system, with the specified size, listed for that dwelling in the table below. Each system must be configured to collect run-off from the areas specified (excluding any area which supplies any other alternative water supply system), and to divert overflow as specified. Each system must be connected as specified.	✓	✓	✓

	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	4 star (>= 4.5 but < 5 L/min)	6 star	5 star	5 star	-	-	-	-	-	-	-	-	-	-

Alternative water source

Dwelling no.	Alternative water supply systems	Size	Configuration	Landscape connection	Toilet connection (s)	Laundry connection	Pool top-up	Spa top-up
All dwellings	Central water tank (No. 1)	See central systems	See central systems	yes	no	yes	no	no

(ii) Energy

(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(b) The applicant must install each hot water system specified for the dwelling in the table below, so that the dwelling's hot water is supplied by that system. If the table specifies a central hot water system for the dwelling, then the applicant must connect that central system to the dwelling, so that the dwelling's hot water is supplied by that central system.	✓	✓	✓
(c) The applicant must install, in each bathroom, kitchen and laundry of the dwelling, the ventilation system specified for that room in the table below. Each such ventilation system must have the operation control specified for it in the table.		✓	✓
(d) The applicant must install the cooling and heating system/s specified for the dwelling under the "Living areas" and "Bedroom areas" headings of the "Cooling" and "Heating" columns in the table below, in/for at least 1 living/bedroom area of the dwelling. If no cooling or heating system is specified in the table for "Living areas" or "Bedroom areas", then no systems may be installed in any such areas. If the term "zoned" is specified beside an air conditioning system, then the system must provide for day/night zoning between living areas and bedrooms.		✓	✓
(e) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Artificial lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that the "primary type of artificial lighting" for each such room in the dwelling is fluorescent lighting or light emitting diode (LED) lighting. If the term "dedicated" is specified for a particular room or area, then the light fittings in that room or area must only be capable of being used for fluorescent lighting or light emitting diode (LED) lighting.		✓	✓
(f) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Natural lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that each such room or area is fitted with a window and/or skylight.	✓	✓	✓

(ii) Energy

(g) This commitment applies if the applicant installs a water heating system for the dwelling's pool or spa. The applicant must: (aa) install the system specified for the pool in the "Individual Pool" column of the table below (or alternatively must not install any system for the pool). If specified, the applicant must install a timer, to control the pool's pump; and (bb) install the system specified for the spa in the "Individual Spa" column of the table below (or alternatively must not install any system for the spa). If specified, the applicant must install a timer to control the spa's pump. <th>Show on DA plans</th> <th>Show on CC/CDC plans & specs</th> <th>Certifier check</th>	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(h) The applicant must install in the dwelling: (aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances & other efficiency measures" column of the table below; (bb) each appliance for which a rating is specified for that dwelling in the "Appliances & other efficiency measures" column of the table, and ensure that the appliance has that minimum rating; and (cc) any clothes drying line specified for the dwelling in the "Appliances & other efficiency measures" column of the table.		✓	✓
(i) If specified in the table, the applicant must carry out the development so that each refrigerator space in the dwelling is "well ventilated".		✓	
(j) The applicant must install the photovoltaic system specified for the dwelling under the "Photovoltaic system" heading of the "Alternative energy" column of the table below, and connect the system to that dwelling's electrical system.	✓	✓	✓

Individual pool

Individual spa

Appliances other efficiency measures

Dwelling no.	Pool heating system	Pool Pump	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Dishwasher	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
All dwellings	-	-	-	-	-	electric cooktop & electric oven	-	-	yes	yes

Alternative energy

Dwelling no.	Photovoltaic system (min rated electrical output in peak kW)	Photovoltaic collector installation	Orientation inputs
All dwellings	-	-	-

(iii) Thermal Performance and Materials

(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	✓		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		✓	
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must:	✓	✓	✓

(iii) Thermal Performance and Materials

(aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or (bb) On a suspended floor, install insulation with an R-value of not less than 1.0 underneath the slab and around the vertical edges of the perimeter of the slab.	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(h) The applicant must construct the floors and walls of the development in accordance with the specifications listed in the table below.	✓	✓	✓
(i) The applicant must show on The plans accompanying The development application for The proposed development, The locations of ceiling fans set out in The Assessor Certificate.	✓		
(j) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), the locations of ceiling fans set out in the Assessor Certificate.		✓	

Thermal loads

Dwelling no.	Area adjusted heating load (in MJ/m ² /yr)	Area adjusted cooling load (in MJ/m ² /yr)	Area adjusted total load (in MJ/m ² /yr)
East	17.2	12.7	29.900
All other dwellings	20.7	9.2	29.900

Construction of floors and walls

Dwelling no.	Concrete slab on ground (m ²)	Suspended floor with open subfloor (m ²)	Suspended floor with enclosed subfloor (m ²)	Suspended floor above garage (m ²)	Primarily rammed earth or mudbrick walls
East	80.6	0.5	-	-	no
All other dwellings	92.8	-	-	-	no

Floor types

	Concrete slab on ground				Suspended floor above enclosed subfloor		Suspended floor above open subfloor			
Dwelling no.	Area (m ²)	Insulation	Low emissions option	Dematerialisation	Construction type	Area (m ²)	Insulation	Construction type	Area (m ²)	Insulation
East	80.6	-	-	conventional slab	-	-	-	treated softwood, frame: timber - H2 treated softwood	0.5	fibreglass batts or roll
All other dwellings	92.8	-	-	conventional slab	-	-	-	-	-	-

Floor types

	First floor above habitable rooms or mezzanine			Suspended floor above garage			Garage floor				
Dwelling no.	Construction type	Area (m ²)	Insulation	Construction type	Area (m ²)	Insulation	Construction type	Area (m ²)	Insulation	Low emissions option	Dematerialisation
East	treated softwood, frame: timber - H2 treated softwood	74.00	-	-	-	-	-	0.00	-	-	conventional slab
All other dwellings	treated softwood, frame: timber - H2 treated softwood	85.9	-	-	-	-	-	0.00	-	-	conventional slab

External walls

	External wall type 1				External wall type 2			
Dwelling no.	Wall type	Area (m ²)	Insulation	Low emissions option	Wall type	Area (m ²)	Insulation	Low emissions option
East	AAC veneer, frame: timber - H2 treated softwood	128.9	fibreglass batts or roll	none	framed (fibre cement sheet or boards), frame : timber - H2 treated softwood	10.6	fibreglass batts or roll	none
All other dwellings	AAC veneer, frame: timber - H2 treated softwood	143.2	fibreglass batts or roll	none	framed (fibre cement sheet or boards), frame : timber - H2 treated softwood	18.9	fibreglass batts or roll	none

External walls

	External wall type 3				External wall type 4			
Dwelling no.	Wall type	Area (m ²)	Insulation	Low emissions option	Wall type	Area (m ²)	Insulation	Low emissions option
East	framed (solid or reconstituted timber weatherboard), frame: timber - H2 treated softwood	79.3	fibreglass batts or roll	none	-	-	-	-
All other dwellings	framed (solid or reconstituted timber weatherboard), frame: timber - H2 treated softwood	82.6	fibreglass batts or roll	none	-	-	-	-

Internal walls

	Internal walls shared with garage			Internal wall type 1			Internal wall type 2		
Dwelling no.	Wall type	Area (m ²)	Insulation	Wall type	Area (m ²)	Insulation	Wall type	Area (m ²)	Insulation
East	-	-	-	plasterboard, frame: timber - H2 treated softwood	100.3	-	plasterboard, frame: timber - H2 treated softwood	45.9	fibreglass batts or roll
All other dwellings	-	-	-	plasterboard, frame: timber - H2 treated softwood	129.9	-	plasterboard, frame: timber - H2 treated softwood	31.3	fibreglass batts or roll

Ceiling and roof

	Flat ceiling / pitched roof		Raked ceiling / pitched or skillion roof		Flat ceiling / flat roof	
Dwelling no.	Construction type	Area (m ²)	Insulation	Construction type	Area (m ²)	Insulation
East	framed - metal roof,	85.00	Ceiling: fibreglass batts or	-	-	Ceiling, Roof:
All other dwellings	-	-	-	-	-	-

Ceiling and roof

	Flat ceiling / pitched roof		Raked ceiling / pitched or skillion roof		Flat ceiling / flat roof	
Dwelling no.	Construction type	Area (m ²)	Insulation	Construction type	Area (m ²)	Insulation
East	framed - metal roof, frame: timber - H2 treated softwood	100.00	roll, Roof: foil backed blanket	-	-	Ceiling, Roof:
All other dwellings	framed - metal roof, frame: timber - H2 treated softwood	100.00	Ceiling: fibreglass batts or roll, Roof: foil backed blanket	-	-	Ceiling, Roof:

Glazing type

Frame types

Dwelling no.	Single glazing (m ²)	Double glazing (m ²)	Triple glazing (m ²)	Aluminium frames (m ²)	Timber frames (m ²)	uPVC frames (m ²)	Steel frames (m ²)	Composite frames (m ²)
East	36.2	-	-	36.2	-	-	-	-
All other dwellings	35.5	-	-	35.5	-	-	-	-

2. Commitments for single dwelling houses

(a) Dwellings

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must plant indigenous or low water use species of vegetation throughout the area of land specified for the dwelling in the "Indigenous species" column of the table below, as private landscaping for that dwelling. (This area of indigenous vegetation is to be contained within the "Area of garden and lawn" for the dwelling specified in the "Description of Project" table).	✓	✓	
(c) If a rating is specified in the table below for a fixture or appliance to be installed in the dwelling, the applicant must ensure that each such fixture and appliance meets the rating specified for it.		✓	✓
(d) The applicant must install an on demand hot water recirculation system which regulates all hot water use throughout the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below.		✓	✓
(e) The applicant must install: (aa) a hot water diversion system to all showers, kitchen sinks and all basins in the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below; and (bb) a separate diversion tank (or tanks) connected to the hot water diversion systems of at least 100 litres. The applicant must connect the hot water diversion tank to all toilets in the dwelling.		✓	✓
(f) The applicant must not install a private swimming pool or spa for the dwelling, with a volume exceeding that specified for it in the table below.	✓	✓	
(g) If specified in the table, that pool or spa (or both) must have a pool cover or shading (or both).		✓	
(g) The pool or spa must be located as specified in the table.	✓	✓	
(h) The applicant must install, for the dwelling, each alternative water supply system, with the specified size, listed for that dwelling in the table below. Each system must be configured to collect run-off from the areas specified (excluding any area which supplies any other alternative water supply system), and to divert overflow as specified. Each system must be connected as specified.	✓	✓	✓

(ii) Energy

(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(b) The applicant must install each hot water system specified for the dwelling in the table below, so that the dwelling's hot water is supplied by that system. If the table specifies a central hot water system for the dwelling, then the applicant must connect that central system to the dwelling, so that the dwelling's hot water is supplied by that central system.	✓	✓	✓
(c) The applicant must install, in each bathroom, kitchen and laundry of the dwelling, the ventilation system specified for that room in the table below. Each such ventilation system must have the operation control specified for it in the table.		✓	✓

	Hot water	Bathroom ventilation system		Kitchen ventilation system		Laundry ventilation system	
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
All dwellings	gas instantaneous - 6 star	individual fan, ducted to façade or roof	manual on / timer off	individual fan, ducted to façade or roof	manual on / timer off	natural ventilation only, or no laundry	-

	Cooling		Heating		Natural lighting	
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bathrooms or toilets	Main kitchen
East	1-phase airconditioning - non ducted / 2.5 star (average zone)	1-phase airconditioning - non ducted / 2.5 star (average zone)	1-phase airconditioning - non ducted / 2.5 star (average zone)	1-phase airconditioning - non ducted / 2.5 star (average zone)	3	no
All other dwellings	1-phase airconditioning - non ducted / 2.5 star (average zone)	1-phase airconditioning - non ducted / 2.5 star (average zone)	1-phase airconditioning - non ducted / 2.5 star (average zone)	1-phase airconditioning - non ducted / 2.5 star (average zone)	2	no

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(d) The applicant must install the cooling and heating system/s specified for the dwelling under the "Living areas" and "Bedroom areas" headings of the "Cooling" and "Heating" columns in the table below, in/for at least 1 living/bedroom area of the dwelling. If no cooling or heating system is specified in the table for "Living areas" or "Bedroom areas", then no systems may be installed in any such areas. If the term "zoned" is specified beside an air conditioning system, then the system must provide for day/night zoning between living areas and bedrooms.		✓	✓
(e) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Artificial lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that the "primary type of artificial lighting" for each such room in the dwelling is fluorescent lighting or light emitting diode (LED) lighting. If the term "dedicated" is specified for a particular room or area, then the light fittings in that room or area must only be capable of being used for fluorescent lighting or light emitting diode (LED) lighting.		✓	✓
(f) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Natural lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that each such room or area is fitted with a window and/or skylight.	✓	✓	✓
(g) This commitment applies if the applicant installs a water heating system for the dwelling's pool or spa. The applicant must: (aa) install the system specified for the pool in the "Individual Pool" column of the table below (or alternatively must not install any system for the pool). If specified, the applicant must install a timer, to control the pool's pump; and (bb) install the system specified for the spa in the "Individual Spa" column of the table below (or alternatively must not install any system for the spa). If specified, the applicant must install a timer to control the spa's pump.		✓ ✓	
(h) The applicant must install in the dwelling: (aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances & other efficiency measures" column of the table below; (bb) each appliance for which a rating is specified for that dwelling in the "Appliances & other efficiency measures" column of the table, and ensure that the appliance has that minimum rating; and (cc) any clothes drying line specified for the dwelling in the "Appliances & other efficiency measures" column of the table.		✓ ✓ ✓	✓
(i) If specified in the table, the applicant must carry out the development so that each refrigerator space in the dwelling is "well ventilated".		✓	
(j) The applicant must install the photovoltaic system specified for the dwelling under the "Photovoltaic system" heading of the "Alternative energy" column of the table below, and connect the system to that dwelling's electrical system.	✓	✓	✓
(iii) Thermal Performance and Materials	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(iii) Thermal Performance and Materials	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	✓		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		✓	
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must: (aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or (bb) On a suspended floor, install insulation with an R-value of not less than 1.0 underneath the slab and around the vertical edges of the perimeter of the slab.	✓	✓	✓
(h) The applicant must construct the floors and walls of the development in accordance with the specifications listed in the table below.	✓	✓	✓
(i) The applicant must show on The plans accompanying The development application for The proposed development, The locations of ceiling fans set out in The Assessor Certificate.	✓		
(j) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), the locations of ceiling fans set out in the Assessor Certificate.		✓	

3. Commitments for common areas and central systems/facilities for the development (non-building specific)

(a) Buildings 'Other'

(i) Materials	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Floor types", "External wall types", "Internal wall types", "Ceiling and roof types", "Frames" and "Glazing" tables below.			✓
(b) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all specifications included in the tables below.		✓	
(c) The applicant must construct the floors, walls, roof, ceiling and roof, windows, glazed doors and skylights of the development in accordance with the specifications listed in the tables below. In the case of glazing, a 5% variance from the area values listed in the "Frames" and "Glazing" tables is permitted.	✓	✓	✓
(d) The applicant must show through receipts that the materials purchased for construction are consistent with the specifications listed in the below tables.			✓

Floor types			
Floor type	Area (m2)	Insulation	Low emissions option
-	-	-	-

External wall types				
External wall type	Construction type	Area (m2)	Low emissions option	Insulation
-	-	-	-	-

Internal wall types			
Internal wall type	Construction type	Area (m2)	Insulation
-	-	-	-

Reinforcement concrete frames/columns		
Building has reinforced concrete frame/columns?	Volume (m³)	Low emissions option
-	-	-

Ceiling and roof types			
Ceiling and roof type	Area (m²)	Roof Insulation	Ceiling Insulation
-	-	-	

Glazing types				Frame types			
Single glazing (m²)	Double glazing (m²)	Triple glazing (m²)	Aluminium frames (m²)	Timber frames (m²)	uPVC frames (m²)	Steel frames (m²)	Composite frames (m²)
-	-	-	-	-	-	-	-

(b) Common areas and central systems/facilities

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a showerhead, toilet, tap or clothes washer into a common area, then that item must meet the specifications listed for it in the table.		✓	✓
(b) The applicant must install (or ensure that the development is serviced by) the alternative water supply system(s) specified in the "Central systems" column of the table below. In each case, the system must be sized, be configured, and be connected, as specified in the table.	✓	✓	✓
(c) A swimming pool or spa listed in the table must not have a volume (in kLs) greater than that specified for the pool or spa in the table.	✓	✓	
(d) A pool or spa listed in the table must have a cover or shading if specified for the pool or spa in the table.		✓	
(e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table.		✓	✓
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		✓	✓

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	no common facility	no common facility	no common facility	no common laundry facility

Central systems	Size	Configuration	Connection (to allow for...)
Central water tank - rainwater or stormwater (No. 1)	2000.00	To collect run-off from at least: - 185.00 square metres of roof area of buildings in the development	-

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a ventilation system to service a common area specified in the table below, then that ventilation system must be of the type specified for that common area, and must meet the efficiency measure specified.		✓	✓
(b) In carrying out the development, the applicant must install, as the "primary type of artificial lighting" for each common area specified in the table below, the lighting specified for that common area. This lighting must meet the efficiency measure specified. The applicant must also install a centralised lighting control system or Building Management System (BMS) for the common area, where specified.		✓	✓

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(c) The applicant must install the systems and fixtures specified in the "Central energy systems" column of the table below. In each case, the system or fixture must be of the type, and meet the specifications, listed for it in the table.	✓	✓	✓

Central energy systems	Type	Specification
Other	-	-