

WRAGGE RESIDENCE PROPOSED ALTERATIONS AND SECONDARY DWELLING ADDITION

102 GRACE AVENUE,
FORESTVILLE
NSW 2087

PLAN OR DOCUMENT CERTIFICATION

I AM A QUALIFIED STRUCTURAL DRAFTSPERSON
I HOLD THE FOLLOWING QUALIFICATIONS

BUILDING CERTIFICATE - SYDNEY TAFE
MEMBER: BUILDING DESIGNERS ASSOCIATION AUSTRALIA - Accreditation No. 6255

FURTHER I AM APPROPRIATELY QUALIFIED TO CERTIFY THIS
COMPONENT OF THE PROJECT.

I HEREBY STATE THAT THESE PLANS OR DETAILS COMPLY WITH THE
CONDITIONS OF DEVELOPMENT CONSENT OF THE APPROPRIATE
LOCAL GOVERNMENT AUTHORITY AND / OR THE RELEVANT AUSTRALIAN
BUILDING INDUSTRY STANDARDS.

SALLY GARDNER 15/11/18

NAME

DATE

Sally Gardner

SIGNATURE

19th, November 2018



47 Towradgi Street, Narrabeena, NSW, 2099 Australia
ABN 17 751 732 195
Accreditation Number 6255
www.designanddraft.com.au

SPECIFICATION :

- "Approval" - obtained by either an "Accredited Certifying Authority" or "Local Council".
- The Owner will directly pay all fees associated with the following: building approval from Council or Accredited Certifier, any footpath and kerb deposits with the local council, insurance fees to Building Services Corporation, Long Service Leave Levies and approval fees by water and sewerage authorities. All other fees are to be paid by the Builder.
The amount of any local authority deposits which are forfeited due to damage or other causes, will be deducted from payments due to the Builder.
- The Builder is to provide at his/her own expense, adequate Public Risk Insurance and arrange indemnification under the Workers Compensation Act. Works insurance to be as stated in the contract conditions.
- All tenderers are to visit the site to satisfy themselves as to the nature and extent of the works, facilities available and difficulties entailed in the works, as variations will not be allowed due to work arising owing to neglect of this clause.
- These drawings shall be read in conjunction with all structural and other consultant's drawings and specifications and with any such written instructions as may be issued during the course of the contract.
- Set out dimensions shown on the drawings shall be verified by the Builder on site before commencement of any work. Dimensions shall not be obtained by scaling the drawings. Use only figured dimensions. All dimensions are in millimetres.
- The Builder is to ensure all construction, levels and other items comply with the conditions of the Building Approval.
- Any detailing in addition to what is supplied shall be resolved between the Owner and the Builder, to the Owner's approval, except for any structural details or design which is to be supplied by the Engineer.
- All work to be carried out in a tradesman like manner and in accordance with the standards, codes and regulations of the Standards Association of Australia, National Construction Code of Australia and any Statutory Authority having jurisdiction over the works.
- All structural work is to be in accordance with the structural details prepared by a suitably qualified Structural Engineer. Including but not limited to, all piers, footings, concrete slabs, retaining walls, steelwork, formwork, underpinning, additional structural loads, timber framing, wind bracing and associated connections. Builder to obtain prior to finalising tender, unless previously obtained by owners.
- All brickwork is to be selected by owners and is to comply with AS 1640. All masonry is to comply with AS 3700.
- Provide all metalwork and flashings necessary to satisfactorily complete the works.
- All timber construction to be in accordance with AS 1684 - "Timber Framing Code".
- All glazing installed is to comply with AS 1288, AS 2047 and in accordance with manufacturer's recommendations.

- All wall and ceiling linings to be plasterboard or cement render as selected and villaboard or equal in wet areas. Workmanship is to comply with the relevant Australian Standards or installed in accordance with manufacturer's specifications.
- All bathrooms and wet areas to be adequately waterproofed to manufacturer's specification and in accordance with AS 3740 and Part 3.8.1 of the National Construction Code - Volume 2, provisions for Class 1 and Class 10 buildings.
- All architraves and skirtings to be to owner's selection or provide standard colonial mouldings or to match existing. Paint or stain finish as selected.
- All plumbing and drainage works to be installed and completed by a licenced tradesperson and in accordance with the statutory body having authority over the works. Connect all waste to Sydney Water sewer line.
- Connect all stormwater to existing system or street drainage system in accordance with AS 3500 and part 3.1.2 Drainage, of the National Construction Code - Volume 2, provisions for Class 1 and Class 10 buildings.
- Smoke detector alarms to be installed in accordance with AS3786 and part 3.7.2 of the National Construction Code - Volume 2, provisions for Class 1 and Class 10 buildings
- Termite protection measures to comply with AS3660 and be installed to manufacturer's specification.
- Stairs and Balustrades to comply with part 3.9.1 & 3.9.2 of the National Construction Code - Volume 2, provisions for Class 1 and Class 10 buildings.
- Electrical works to be in accordance with SAA wiring rules and be done by a licensed tradesman. Obtain electrical layout prior to proceeding. All electrical power (GPO) and light outlets to be determined by owner.
- Any work indicated on the plans but not specified and any item not shown on the plans which is obviously necessary as part of proper construction and/or finish, is to be considered as shown and specified and is to be undertaken at the Builder's expense.
- Variations will not be permitted without prior written approval by the owners.
- The Builder shall provide sediment and siltration control measures as required by Council and maintain them throughout the duration of the works.
- A legible copy of the plans bearing approval stamps, must be maintained on the job site at all times. Hours of construction shall be restricted to the times as required by the building approval.
- The Builder is to arrange for all inspections required by the relevant authorities and/or lending institutions, to their requirements.
- The Builder is to obtain approval for interruptions to existing services and minimise the duration and number of interruptions. Any interruptions to existing services and equipment is to be undertaken by appropriately qualified tradespersons.
- The Builder shall restore, reinstate or replace any damage to existing structures or landscaping caused by the construction works or workmen.
- Provide protection to existing trees to remain, or as required by the Approval Conditions.

DRAWING SCHEDULE

- Title Sheet
- N1. Specification & Drawing List
- N2. Schedules & Basix Notes - Residence
- N3. Schedules & Basix Notes - Secondary Dwelling
- E1. Existing Ground Floor Plan
- E2. Existing Lower Floor Plan
- A1. Roof Plan
- A2. Proposed Upper Floor Plan
- A3. Proposed Lower Floor Plan
- A4. North East Elevation
- A5. North West Elevation
- A6. South West Elevation
- A7. South East Elevation
- A8. Sections A-A & C-C
- A9. Section B-B
- A10. Swimming Pool Details
- S1. Site Analysis Plan
- S2. Site Plan and Calculations
- S3. Sediment Control & Site Management Plan
- S4. Shadow Diagram at 9am
- S5. Shadow Diagram at 12 noon
- S6. Shadow Diagram at 3pm

WINDOW SCHEDULE - RESIDENCE

NO.	HEIGHT	WIDTH	LOCATION	FRAME / GLAZING STYLE	U value : SHGC	Additional Basix Requirements
W7	1.200	3.110	Kitchen 1	Powder Coated Aluminium framed Bi-fold window with clear glazing	6.44 : 0.75	
W8	2.100	1.070	Kitchen 1	Powder Coated Aluminium framed Hinged door with clear glazing	6.44 : 0.75	
W9	2.100	1.350	Stairs 1	Powder Coated Aluminium framed Fixed window with clear glazing	6.44 : 0.75	
W10	2.100	2.620	Dining	Powder Coated Aluminium framed Glazed French doors with clear sidelights	6.44 : 0.75	
W11	0.600	2.550	Dining	Powder Coated Aluminium framed Fixed / Sliding window with clear glazing	6.44 : 0.75	
W12	2.100	3.130	Living 1	Powder Coated Aluminium framed Stacking Sliding doors with clear glazing	6.44 : 0.75	
W13	2.100	0.870	Powder / Laundry	Powder Coated Aluminium framed Hinged door with clear glazing	6.44 : 0.75	Requires adjustabe Awning >900mm
W14	1.100	0.340	Powder / Laundry	Powder Coated Aluminium framed Louvred window with clear glazing	6.44 : 0.75	
W15	2.100	1.330	Study	Powder Coated Aluminium framed Fixed / Sliding window with clear glazing	6.44 : 0.75	Requires adjustabe Awning >900mm

All sizes listed include the frame and are nominal sizes for BASIX Certification.
All glazing assemblies will comply with AS2047 and AS1288
All external glazing is to have a maximum reflectivity index of 25%.

DOOR & WINDOW NOTE:
All Doors and Windows to be keyed alike with deadlocks to all sashes & doors. Provide weather strips and door seals around openings to prevent drafts.
All new bedroom windows, where the floor level of the room is 2.0m or more above outside finished ground level, must be supplied with either permanently fixed robust mesh screens or permanent window locks which prevent the window from opening more than 125mm, if the lowest openable portion of the window is within 1.7m of the floor, in accordance with NCC requirements, for child safety.
Wind loading compliance to all new windows and glazed doors to be confirmed by the Engineer prior to ordering and installation.

BASIX NOTES

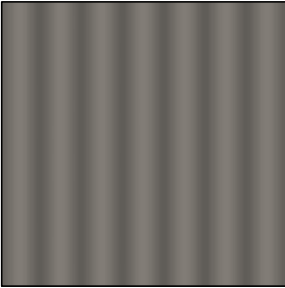

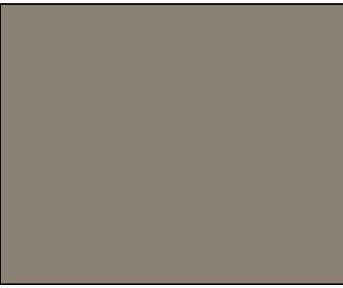
TAPS: Must have a flow rate no greater than 9 litres per minute or a minimum 3 star water rating.
TOILETS: Must have a flow rate no greater than 4 litres per average flush or a minimum 3 star water rating.
SHOWER HEADS: Must have a flow rate no greater than 9 litres per minute or a 3 star water rating.
Install aerators on bathroom hand basins & kitchen sinks.

LIGHTING : Basix requirements
A minimum of 40% of new or altered light fixtures must be fitted with flourescent, compact flourescent or light-emitting diode (LED) lamps.

BASIX INSULATION SCHEDULE

Construction	Additional insulation required (R-value)
concrete slab on ground floor.	nil
external wall: cavitiy brick	nil
external wall: brick veneer (R0.54)	R1.16 (or R1.70 including construction)

COLOUR / MATERIAL SCHEDULE

ROOF	ROOF GABLE FACING	EXTERNAL WALLS
<div></div> <div>Custom-Orb Sheeting Colour classification in accordance with NSW Basix (Dark - solar absorbance > 0.70) "Wallaby" - Colorbond roof sheeting.</div>	<div></div> <div>Timber Weatherboard Cladding "Natural White" - Dulux external wall colour.</div>	<div></div> <div>Cement Render finish "Bogart" - Dulux external wall colour.</div>

BASIX REQUIREMENTS

Landscape:
The applicant must plant indigenous or low water use species of vegetation throughout 2.0 square metres of the site.

Fixtures:
Kitchen Taps: Must have a minimum 3 star water rating.
Bathroom Taps: Must have a minimum 3 star water rating.
Toilets: Must have a minimum 4 star water rating.
Showerheads: Must have a minimum 3 star rating (>4.5 but <=6 L/m).
Install aerators on bathroom hand basins & kitchen sinks.

Hot Water:
The owner is required to install a : gas instantaneous hot water system with a performance of 4.5 stars or better.

Cooling system
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area: Ceiling Fans + 1-phase airconditioning; Energy rating: 4.5 Star (new rating)
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: Ceiling Fans

Heating system
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: 1 phase Airconditioning; Energy rating: 4.5 Star.
The bedrooms must not incorporate any heating system, or any ducting which is designed to accommodate a heating system.

Ventilation
The applicant must install the following exhaust systems in the development:
At least 1 Bathroom: Individual fan not ducted: manual switch On/off.
Kitchen: Individual fan: ducted to facade: manual switch On/off.
Laundry: Natural ventilation only.

Artificial Lighting
The applicant must ensure that the "primary type of artificial lighting" is fluorescent or light emitting diode (LED) lighting in each of the following rooms, and where the word "dedicated" appears, the fittings for those lights must only be capable of accepting fluorescent or light emitting diode (LED) lamps:

- at least 2 of the bedrooms / study;
- at least 1 of the living / dining rooms;
- the kitchen;
- all bathrooms/toilets;
- the laundry;
- all hallways;

Natural lighting
The applicant must install a window and/or skylight in 1 bathrooms, toilets in the development for natural lighting.

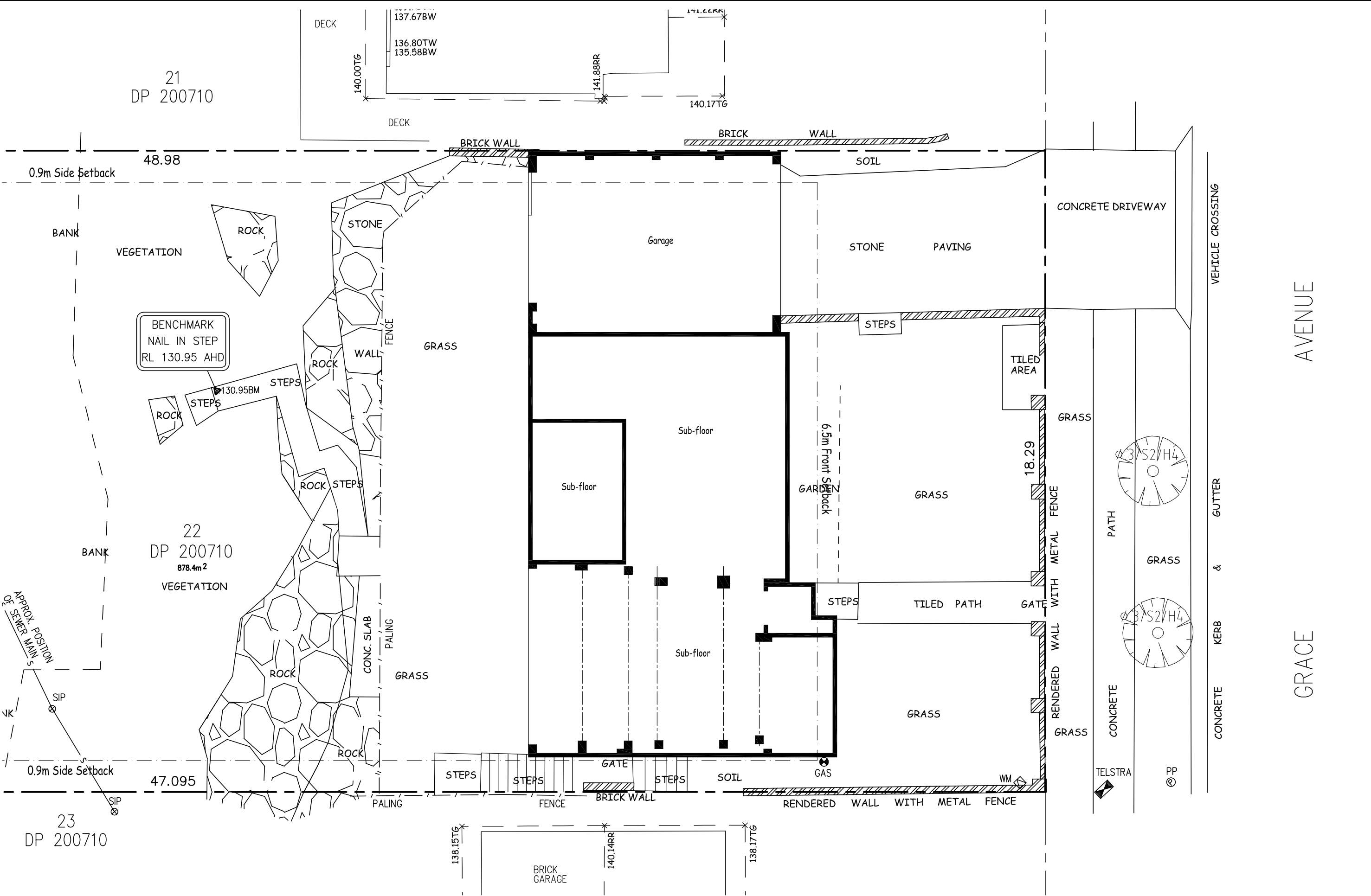
Other:
The applicant must install a gas cooktop & electric oven in the kitchen of the dwelling.
The applicant must construct each refrigerator space in the development so that it is "well ventilated", as defined in Basix definitions.
The applicant must install a fixed outdoor clothes drying line as part of the development.

WINDOW SCHEDULE - SECONDARY DWELLING

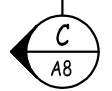
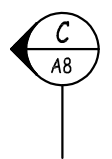
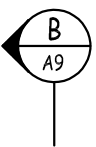
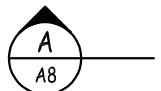
NO.	HEIGHT	WIDTH	LOCATION	FRAME / GLAZING STYLE	U value : SHGC	Additional Basix Requirements
W1	1.200	3.000	Bed 1	Powder Coated Aluminium framed Fixed / Sliding window with clear glazing	4.5 : 0.50	Nil
W2	0.900	0.750	Bath	Powder Coated Aluminium framed Louvred window with clear glazing	4.5 : 0.50	Nil
W3	1.200	2.500	Bed 2	Powder Coated Aluminium framed Fixed / Sliding window with clear glazing	4.5 : 0.50	Nil
W4	0.900	0.750	Stairs	Powder Coated Aluminium framed Louvred window with clear glazing	4.5 : 0.50	Nil
W5	2.100	3.850	Living	Powder Coated Aluminium framed Stacking Sliding doors with clear glazing	4.5 : 0.50	Nil
W6	0.900	2.250	Living	Powder Coated Aluminium framed Fixed / Sliding window with clear glazing	4.5 : 0.50	Nil

THERMAL COMFORT INSULATION SCHEDULE

Construction	Additional insulation required (R-value)
External wall (EW1) – Brick Veneer	no insulation required
External wall (EW2) – Extruded Poly Cavity Panel Direct Fix	no insulation required
External wall (EW3) – Brick Veneer	Bulk insulation R1.5
Internal wall (IW1) – Cavity Brick, plasterboard	no insulation required
Internal wall (IW2) – Cavity wall, direct fix plasterboard, single gap	no insulation required
Internal wall (IW3) – Brick, plasterboard	no insulation required
External floor – Concrete slab on ground	no insulation required
Internal floor – Timber above plasterboard 19mm	no insulation required
External ceiling – Framed, plasterboard	Bulk insulation R2.5
Internal ceiling – Timber above plasterboard	no insulation required

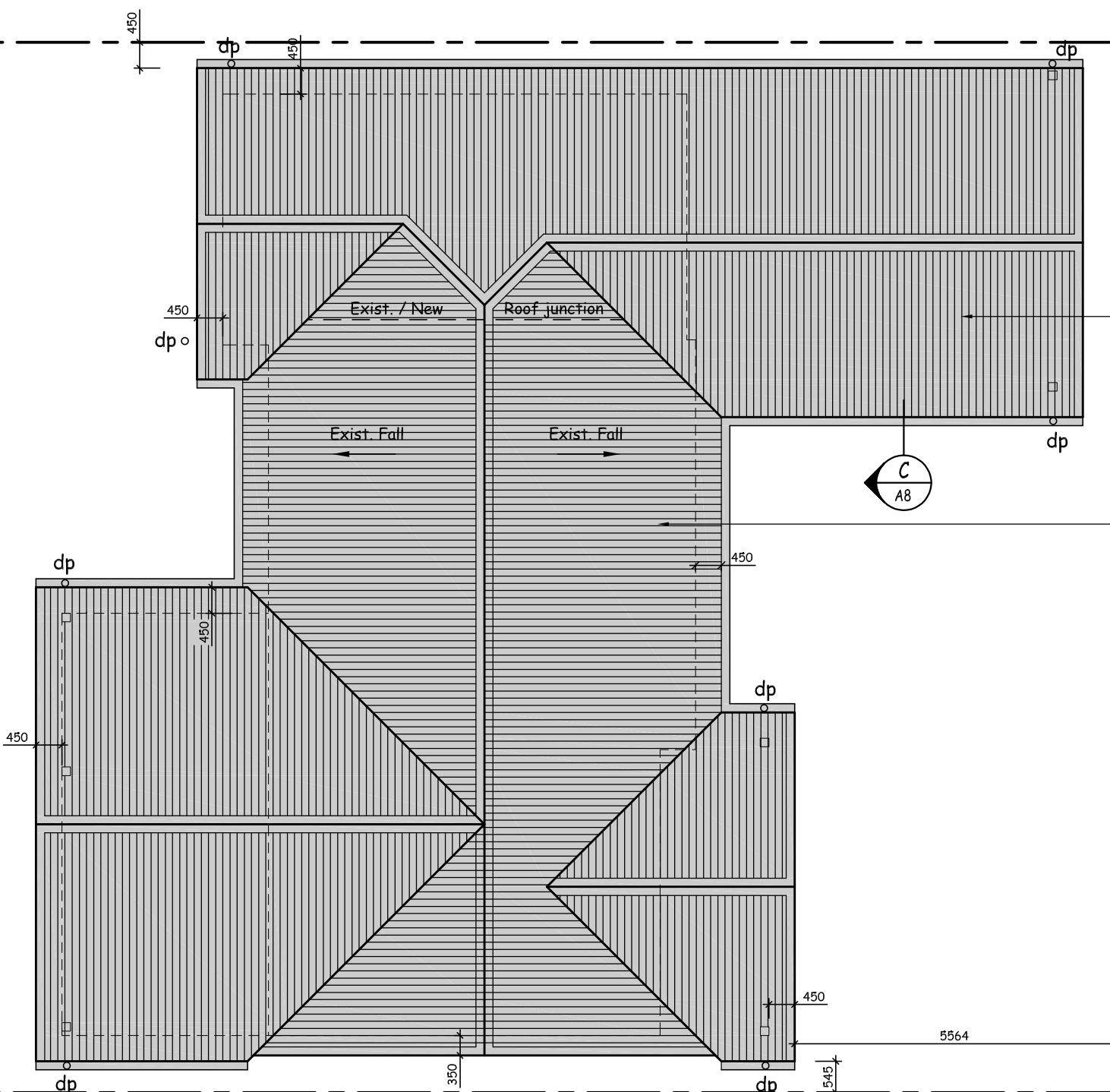


21
DP 200710



22
DP 200710
878.4m²

23
DP 200710



Colorbond "Custom-Orb" roof sheeting fixed to framing or trusses in accordance with the manufacturers specifications. Colour to match existing roof or as selected by owners. Reflective sarking to be installed under sheeting. Provide all ridge, barge and other fittings as required to complete the roof and leave fully cleaned.

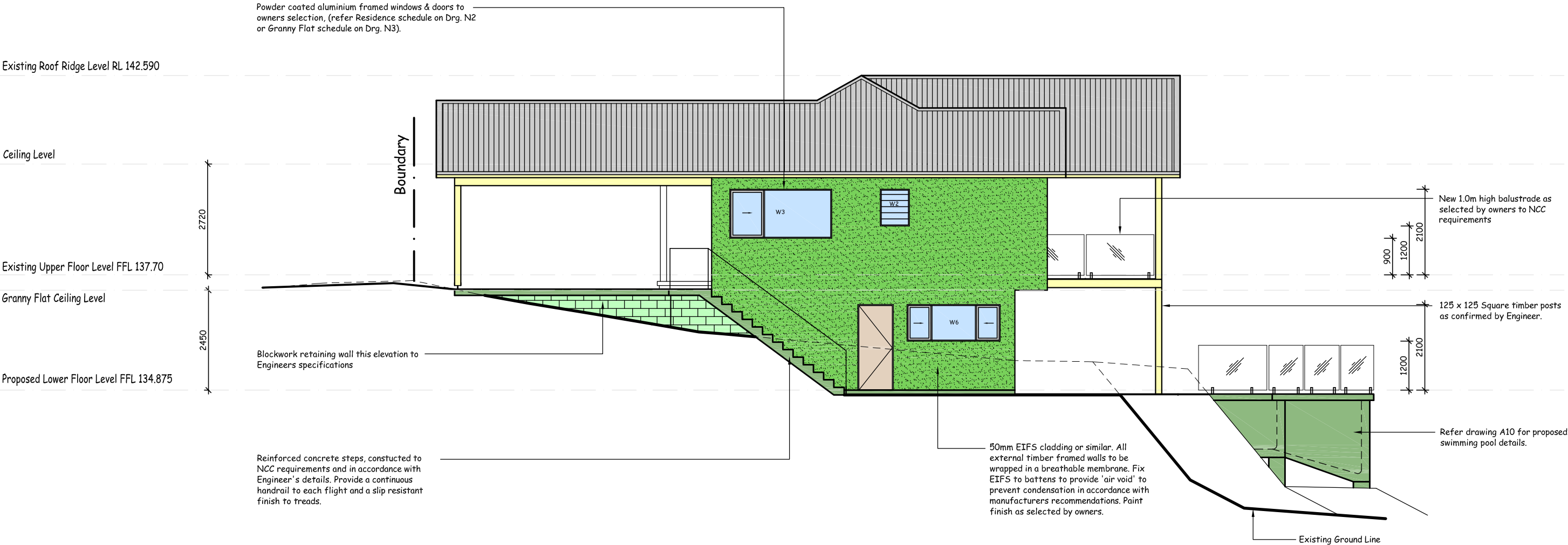
Remove existing roof tiles and replace with Colorbond "Custom-Orb" roof sheeting fixed to existing framing or trusses in accordance with the manufacturers specifications. Colour as selected by owners. Reflective sarking to be installed under sheeting. Provide all ridge, barge and other fittings as required to complete the roof and leave fully cleaned.

Provide Colorbond downpipes in accordance with Hydraulic Engineer's details. Colour as selected by owners. Connect head to gutter & foot to drainage system with brackets at 2700mm max. spacing, with a minimum of 2 brackets per downpipe. All new downpipes are to be connected to the existing stormwater system that discharges to an existing Council stormwater collection system.

Timber Fascia Boards shall be of seasoned solid timber primed or stained all round prior to fixing and not less than 19mm finished thickness for 600mm maximum centres.

Provide Colorbond Guttering to all new eaves in accordance with Hydraulic Engineer's details. Set gutter with sufficient fall to all downpipes and secure with brackets max. 1200mm apart.

Note: Construction and materials used on the new works is to equal or exceed the requirements of AS3959-2009 Construction of Buildings in Bushfire Prone Areas. Refer Bushfire consultants report included with this proposal for details.



NORTH EAST ELEVATION

Note: Construction and materials used on the new works is to equal or exceed the requirements of AS3959-2009 Construction of Buildings in Bushfire Prone Areas. Refer Bushfire consultants report included with this proposal for details.

Existing Roof Ridge Level RL 142.590

Ceiling Level

Existing Upper Floor Level FFL 137.70

Granny Flat Ceiling Level

Proposed Lower Floor Level FFL 134.875

50mm EIFS cladding or similar. All external timber framed walls to be wrapped in a breathable membrane. Fix EIFS to battens to provide 'air void' to prevent condensation in accordance with manufacturers recommendations. Paint finish as selected by owners.

Powder coated aluminium framed windows & doors to owners selection, (refer Residence schedule on Drg. N2 or Granny Flat schedule on Drg. N3).

A cement render finish is to be applied to all external exposed brickwork. Render is to have a painted finish as selected by owners.



New 1.0m high balustrade as selected by owners to NCC requirements

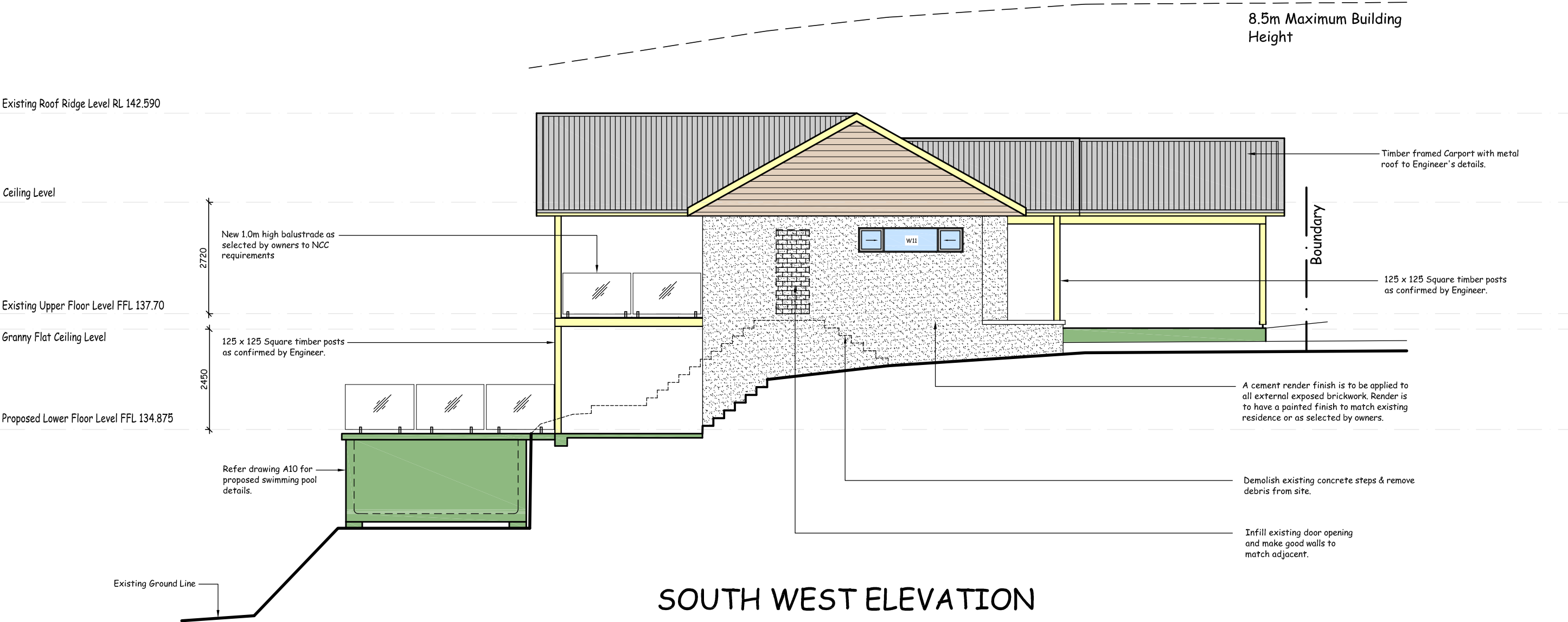
125 x 125 Square timber posts as confirmed by Engineer.

Existing Ground Line

Refer drawing A10 for proposed swimming pool details.

NORTH WEST ELEVATION

Note: Construction and materials used on the new works is to equal or exceed the requirements of AS3959-2009 Construction of Buildings in Bushfire Prone Areas. Refer Bushfire consultants report included with this proposal for details.



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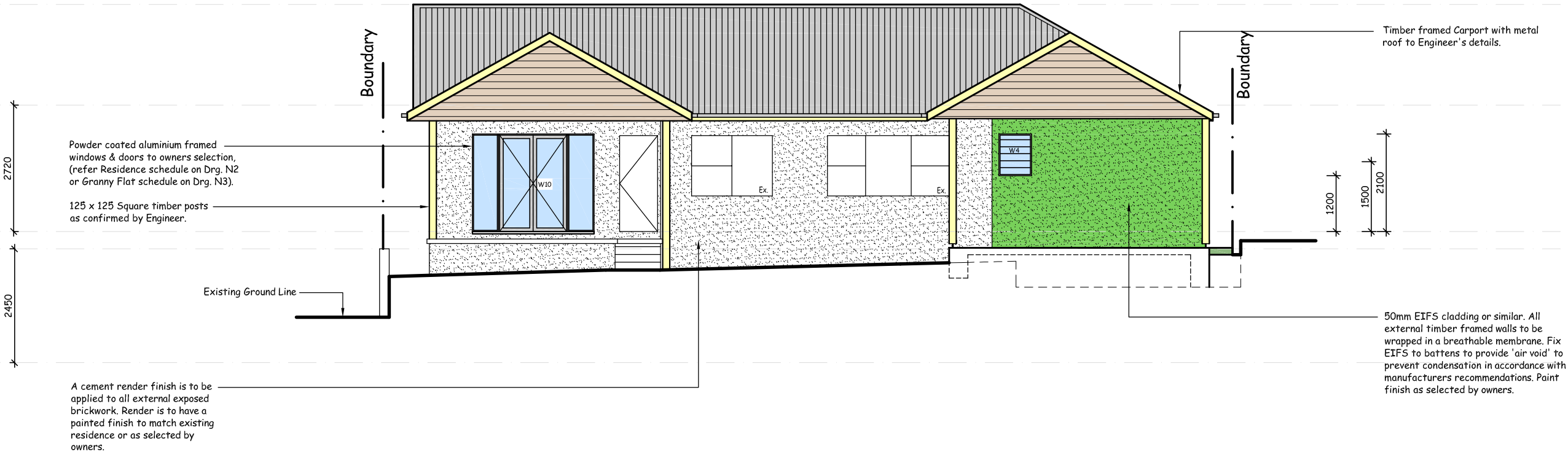
Existing Roof Ridge Level RL 142.590

Ceiling Level

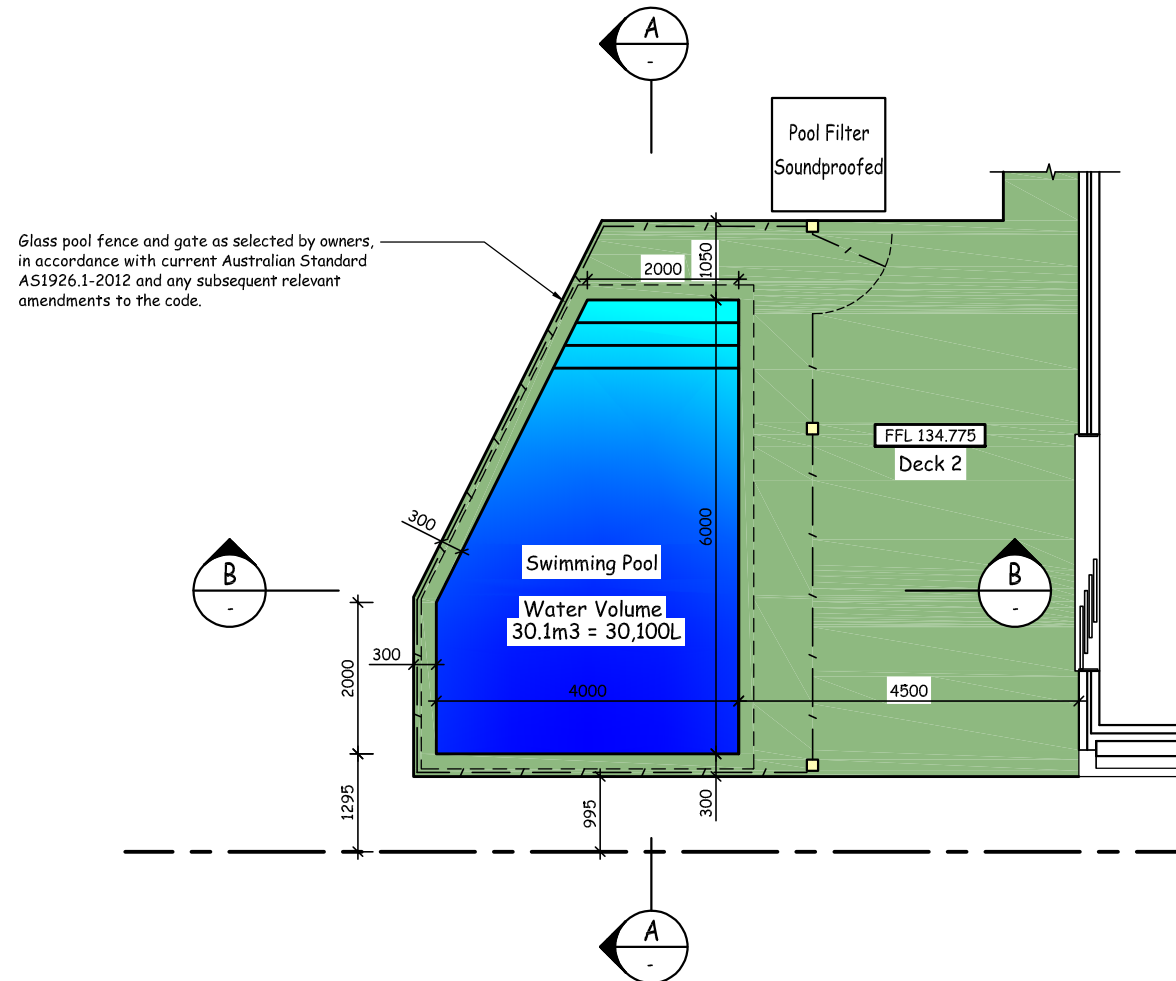
Existing Upper Floor Level FFL 137.70

Granny Flat Ceiling Level

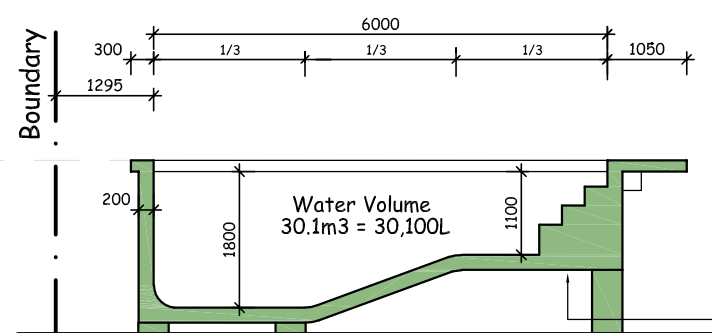
Proposed Lower Floor Level FFL 134.875



SOUTH EAST ELEVATION

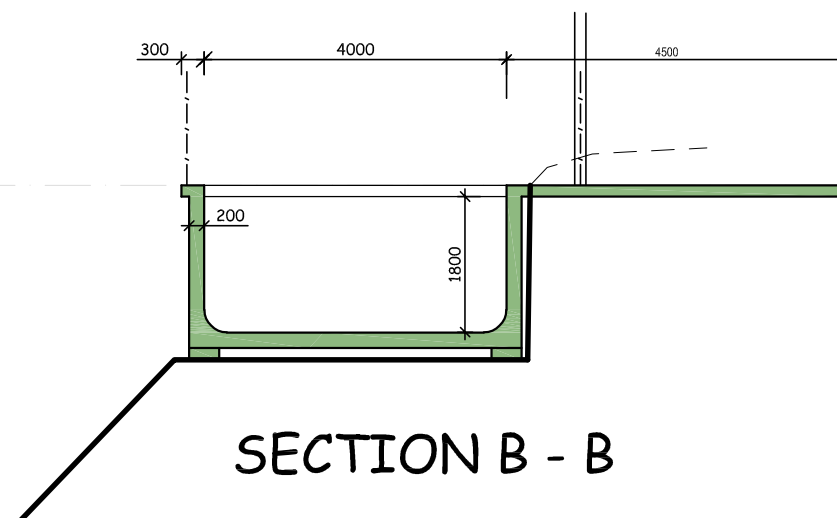


POOL LOCATION PLAN



SECTION A - A

Structural pool shell to Engineer's details.



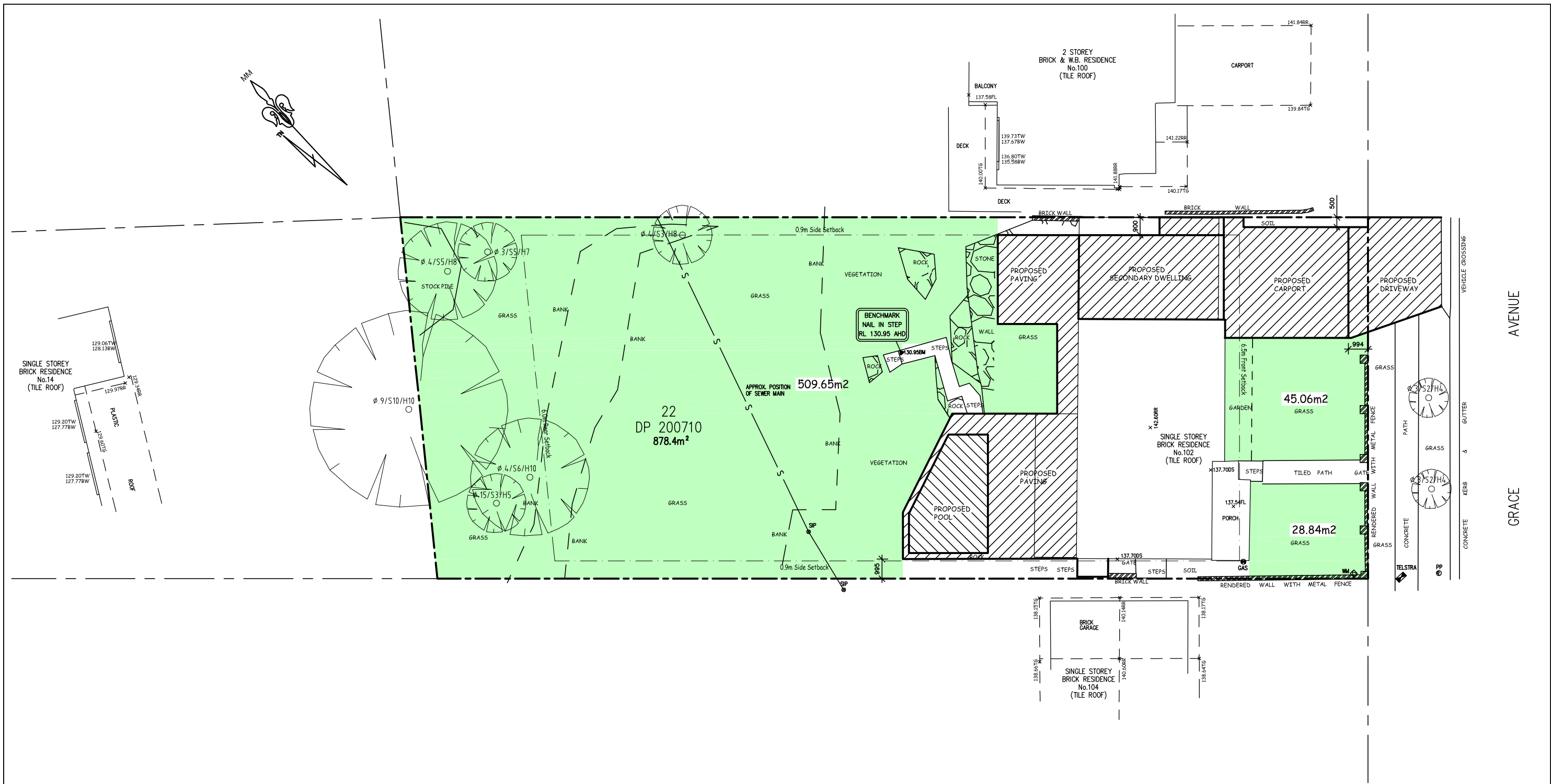
SECTION B - B

POOL OWNER NOTES

- 1 If owner is dissatisfied with initial pool setout, location or depths, the Builder should be Notified BEFORE steel reinforcement is fixed.
- 2 The position of skimmers, lights, return lines etc. on this drawing is indicative only and final position to be determined on Site.
- 3 Safety Fencing should be in accordance with Local Councils requirements and Conform to Australian Standards.

POOL BUILDER ; GENERAL NOTES

1. This Design applies only for Ground levels as shown.
2. All workmanship and materials shall comply with relevant current SAA Codes, By-laws and Ordinances of the Local Building Authority including but not limited to AS 2783-1985 and The Swimming Pools Act-1992.
3. The overall Dimensions shall be checked on Site. Dimensions shown are concrete sizes and do not include Finishes. These drawings are to be read in conjunction with the Engineers drawings.
4. Provide temporary drain hole in both shallow and deep ends of Pool shell. Hydostatic Valve to be cleared of Debris on completion of Concreting.
5. Underside of Pool shell to be separated from the underlying material by 75mm layer of Crushed Stone. Place membrane between Pool Shell and Bluemetal. Corrugated Iron alternative on Rock ONLY. Fill main drain sump with Bluemetal.
6. Pool filter pump must be enclosed within a soundproofed enclosure to minimise noise nuisance.

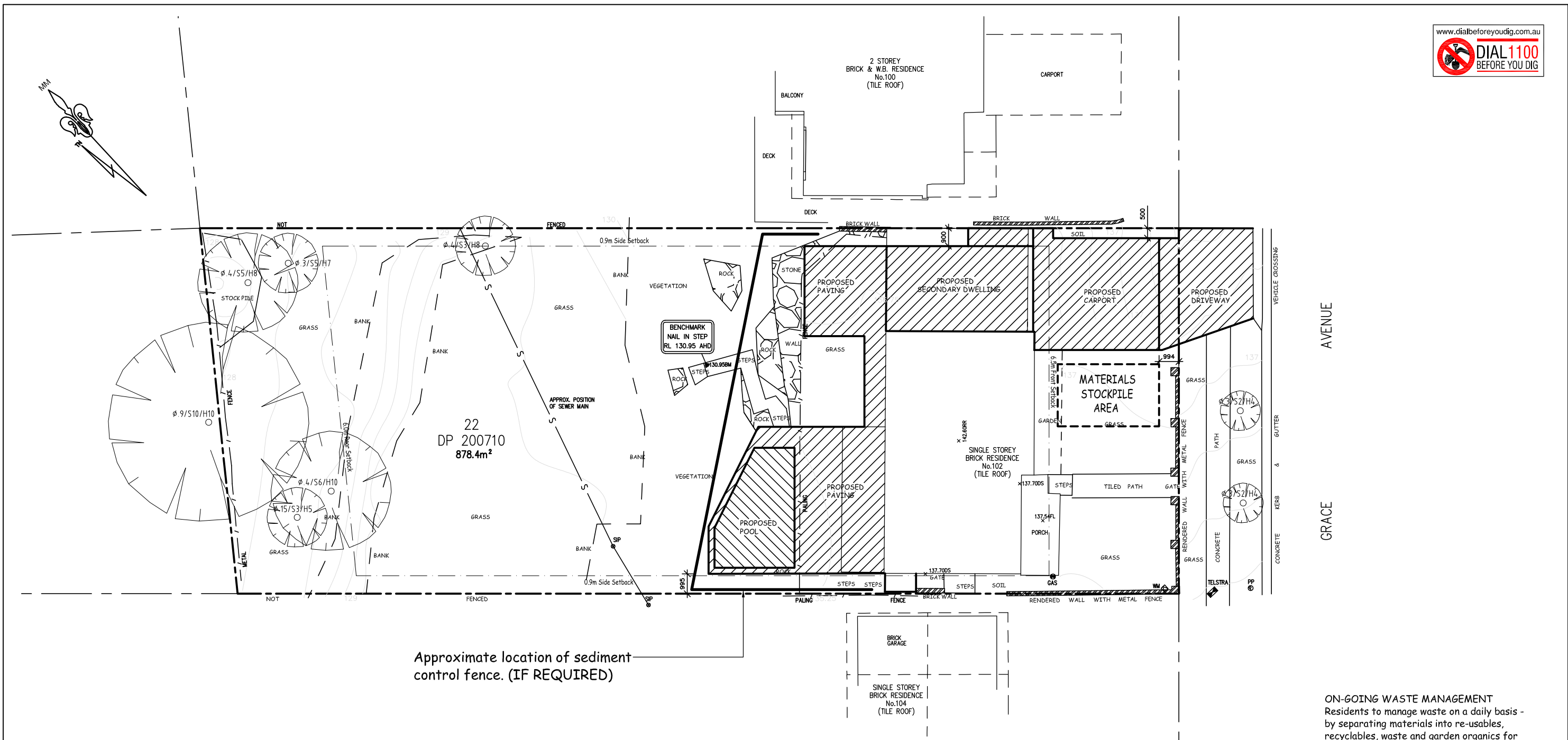


SITE DEVELOPMENT CALCULATIONS - R2 LOW DENSITY RESIDENTIAL

	Existing m2	Existing %	Proposed m2	Proposed %	Control	Compliance
Site Area = 878.4 m2						
Residence	87.25		118.33			
Driveway	31.54		5.44			
Paving / Deck	34.62		91.28			
Parking Facility	36.39		36.50			
Site Coverage	189.80	21.61	251.55	28.64	60% max.	YES
Total Landscaped Open Space	679.79	77.39	603.55	68.71	40% min.	YES
(Excludes areas of less than 2.0m wide)						
Total Pervious Site Area	688.60	78.39	626.85	71.36		

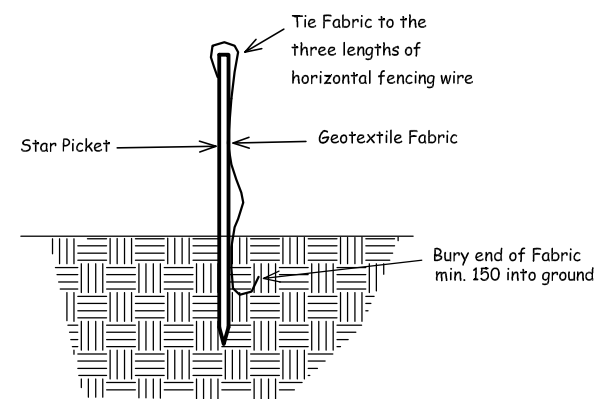


Denotes Proposed Landscape Area
(excludes areas less than 2.0m wide)



Approximate location of sediment control fence. (IF REQUIRED)

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.



Sediment Control Fence

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 excavated area as soon as possible.
3. All material stockpile to be clear from drains, gutters and footpaths, or within sediment fence area.
4. Drainage to be connected to stormwater as soon as possible. If stored on site, it must be filtered before releasing into stormwater system or waterways.
5. Roads and footpaths to be swept daily.

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's 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 waste water through a filtration system prior to release.

DUST CONTROL :

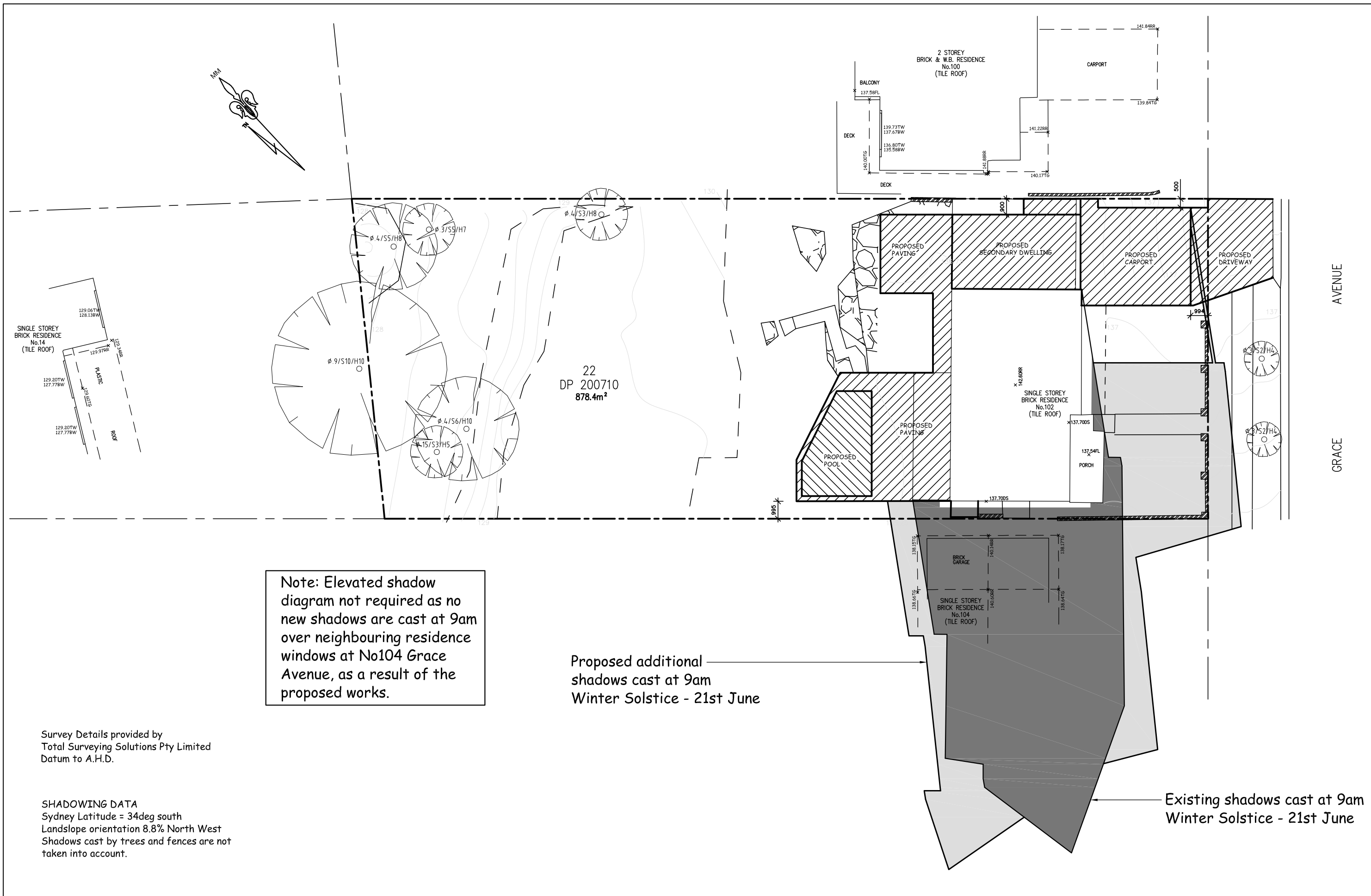
To reduce dust generated by wind action, the removal of the top soil is to be minimised. To prevent dust generation, watering down of the site, especially during the movement of machinery is required.
Where excavating into rock, keep the surface moist to minimise dust. Ensure wind breaks, such as existing fences are maintained during the construction phase until new landscaping is provided or reinstated. Prevent dust by covering stockpiles.

BUILDING WASTE DISPOSAL

All waste material to be sorted and transported to the local authorized waste management centre for potential re-use by 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.

STOCKPILES :

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.



Note: Elevated shadow diagram not required as no new shadows are cast at 9am over neighbouring residence windows at No104 Grace Avenue, as a result of the proposed works.

Proposed additional shadows cast at 9am Winter Solstice - 21st June

Existing shadows cast at 9am Winter Solstice - 21st June

Survey Details provided by
Total Surveying Solutions Pty Limited
Datum to A.H.D.

SHADOWING DATA
Sydney Latitude = 34deg south
Landslope orientation 8.8% North West
Shadows cast by trees and fences are not taken into account.

