



166 PAKENHAM ROAD, PAKENHAM

Attachment 8 Biodiversity Assessment

PREPARED FOR UNIVERSAL PROPERTY GROUP PTY LTD

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Biodiversity Assessment, 166 Pakenham Road, Pakenham



Prepared for:

The Bathla Group

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A photograph of the study area taken during the current assessment.

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Executive Summary

Ecolink Consulting Pty Ltd was engaged by The Bathla Group to undertake a Biodiversity Assessment of 166 Pakenham Road, Pakenham, Victoria (the study area). The Biodiversity Assessment was undertaken to support a planning permit application for the future residential subdivision and development of the property.

The study area is located approximately 52 kilometres south-east of Melbourne's Central Business District. It is approximately 0.6 hectares in size and situated within an increasingly urban area on the northern edge of Pakenham. The study area is located near the base of a hill, rising to the east. The study area is currently a vacant paddock, which was once part of a larger property, and has now been subdivided and developed. Trees are largely absent from the study area and the vegetation is dominated by exotic and weedy plant species. There are no waterways or dams within the study area. The study area is zoned General Residential Zone – Schedule 1 and is also covered by an Ecological Significance Overlay – Schedule 4, which protects the character of the Pakenham North ridge.

Department of Environment, Land, Water and Planning modelling suggests that the historical vegetation within the study area was historically covered by Ecological Vegetation Class (EVC) 128: Grassy Forest. While the likely historic presence of this EVC was confirmed by the current assessment, little remnant vegetation was shown to remain within the study area.

A site assessment was undertaken on 19 May 2022 by Principal Ecologists [REDACTED] and [REDACTED]. A total of 38 flora species were recorded during the assessment. This comprised ten indigenous species and 28 exotic species, including the naturalised Sweet Pittosporum *Pittosporum undulatum*. Two patches of low quality native vegetation were recorded within the study area. Both of these patches were extensions of patches that occurred within the Pakenham Road road reserve, and were recolonising the western boundary of the study area, now that grazing pressure from these paddocks has been removed. An additional two, dead, scattered indigenous trees were also recorded within this part of the study area (outside these patches of native vegetation), near the north-western boundary of the study area.

The remnant vegetation near the study area is likely to provide habitat to a range of common fauna species and also provide movement habitat for species moving across the landscape. However, much of the study area supported only low quality fauna habitats that favour generalist and common species. Fifteen fauna species were recorded within the study area during the current assessment. This included 14 birds (10 native and four introduced) and one native mammal.

No threatened flora or fauna species were recorded during the current site assessment and none have historically been recorded within the study area. While White-throated Needletails *Hirundapus caudacutus* or Grey-headed Flying-foxes *Pteropus poliocephalus* may use the airspace over the study area, the proposed development of the study area is unlikely to significantly impact either of these species. There are no threatened ecological communities within the study area.

It is recommended that the native vegetation within the Pakenham Road road reserve is protected and retained in the future development of the study area. Avoiding and minimising impacts to this native vegetation is consistent with the requirements and objectives of the *Guidelines for the*

Removal, Destruction or Lopping of Native Vegetation, the Environment Protection Overlay – Schedule 4, which apply to the study area.

In this context, and based on the relevant legislation and policies, the following recommendations are made:

- During the development design phase:
 - Minimise impacts to the native vegetation within Patches 1 and 2 as far as possible, particularly those parts of the patches that are located within the road reserve of Pakenham Road; and,
 - Retain the two scattered indigenous trees in the north of the study area, if safe to do so; and,
- Once the final development design is approved the proponent should:
 - Secure offsets required for residual impacts to native vegetation, as per the *Guidelines for the Removal, Destruction or Lopping of Native Vegetation*. This offset should comprise:
 - 0.008 General Habitat Units:
 - With a minimum Strategic Biodiversity Score of 0.528;
 - Located with the Port Phillip and Western Port Catchment Management Authority area or the Cardinia Shire Council municipality.
 - Undertake surveys in impacted areas of public land (such as road reserves) for protected flora species under the *Flora and Fauna Guarantee Act 1988* (Vic), and complete an application for a *Permit to Take Protected Flora* if an additional access point to Pakenham Road is proposed;
- During construction works:
 - Retain a buffer of fifteen metres from the retained parts of the patches of native vegetation within the Pakenham Road road reserve from ground disturbance;
 - Avoid indirect impacts to retained patches of native vegetation and scattered indigenous trees;
 - Avoid impacts to the Tree Protection Zones for trees which are proposed to be retained. An arborist may advise smaller Tree Protection Zones;
 - Protect any retained vegetation from accidental impacts during construction, or the unauthorised dumping of fills and refuse, in accordance with a Construction Environment Management Plan. This should include fencing exclusion areas; and
 - Prevent further impacts to biodiversity values through vehicle hygiene protocols, soil management and weed management.
- Implement animal welfare protocols for the removal of trees;
- Undertake weed management prior to, during and post-construction, as detailed in a Weed Management Plan. Target noxious weeds such as:
 - Blackberry *Rubus fruticosus* spp. agg;
 - Bridal Creeper *Asparagus asparagoides*;
 - Montpellier Broom *Genista monspessulana*;
 - Soursob *Oxalis pes-caprae* and

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- Spear Thistle *Cirsium vulgare*.

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Introduction

Ecolink Consulting Pty Ltd was engaged by The Bathla Group to undertake a Biodiversity Assessment at 166 Pakenham Road, Pakenham, Victoria (the study area). The Biodiversity Assessment was undertaken to assist with planning and regulatory approval for the future residential development of the property.

The assessment addresses the requirements of Clause 52.17 of the Cardinia planning scheme by mapping and assessing the location, extent and quality of native vegetation in accordance with the *Guidelines for the Removal, Destruction or Lopping of Native Vegetation* (Department of Environment Land Water and Planning 2017). The Biodiversity Assessment also recommends mitigation measures and offset requirements based on relevant legislation and policies, where appropriate.

Therefore, the purpose of the Biodiversity Assessment is to:

- Determine the ecological values of the study area;
- Evaluate the extent and quality of native vegetation within the study area, required under the *Guidelines for the Removal, Destruction or Lopping of Native Vegetation* (Department of Environment Land Water and Planning 2017);
- Evaluate any impacts that are likely to occur to any ecological values as a result of the potential loss of vegetation at the study area; and,
- Make recommendations to minimise or mitigate impacts to these ecological values, based on relevant legislation and policies.

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Methods

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Desktop Assessment

In order to determine the ecological values that have previously been recorded within the study area, and its vicinity, the following databases and literature were consulted:

- The Commonwealth Department of Agriculture, Water and the Environment's Protected Matters Search Tool (Department of Agriculture Water and the Environment 2022a) to determine Matters of National Environmental Significance, under the *Environment Protection and Biodiversity Conservation Act 1999 Act (Cth)* (EPBC Act), that are modelled to occur in the vicinity of the study area;
- Planning Schemes Online (Department of Environment Land Water and Planning 2022d) to identify the planning zones and overlays relating to environmental matters e.g. Vegetation Protection Overlays, or Environmental Significance Overlays;
- The NatureKit webpage (Department of Environment Land Water and Planning 2022c) from the Department of Environment, Land, Water and Planning (DELWP) to identify the historic and current Ecological Vegetation Classes (EVCs) ;
- The Victorian Biodiversity Atlas (Department of Environment Land Water and Planning 2022f) for records of threatened¹ flora and fauna within three kilometres of the study area;
- The Native Vegetation Information Management System (NVIM) to determine biodiversity offset requirements (Department of Environment Land Water and Planning 2022b);
- Nearmap aerial photography (Nearmap 2022) to understand historic land uses;
- The 'Weeds of National Significance' database (Department of Agriculture Water and the Environment 2022b); and,
- Other relevant legislation and policies (as required).

Site Assessment

A site assessment was undertaken on 20 May 2022 by Principal Ecologists [REDACTED] and [REDACTED]. Both ecologists are suitably qualified and experienced to undertake such assessments and Simon holds a current Vegetation Quality Assessments (Habitat Hectares) Accreditation with DELWP.

All flora species observed within the study area were recorded, with the exception of planted vegetation that was not considered a 'weed' (i.e. planted vegetation that was not spreading or reproducing). Where a species was not able to be confidently identified in the field, a sample was collected and later identified. Plants were identified to species level wherever possible, however, some plants that were planted, cultivars, hybrids, or plants that did not contain suitable fertile material used for identification were recorded to genus level.

¹ Threatened flora and fauna includes species listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999 (Cth)*, and the *Flora and Fauna Guarantee Act 1988 (Vic)*.

Vegetation communities such as EVCs and nationally significant vegetation communities were recorded (if observed) and compared with their corresponding benchmarks or thresholds to ensure that they were accurately assigned.

A list of all fauna species observed within, and immediately surrounding, the study area was produced. This list consists of species seen, heard, or identified by other evidence of their presence (e.g. feathers, scats). Leica 12 X 50 binoculars and call mimicry/playback were used to assist in the identification species.

The species, size (Diameter and Breast Height and Tree Protection Zone) and location of all 'scattered' indigenous trees was recorded using an iPad mini tablet that has an internal Global Positioning System (GPS) and the GIS Pro application (accuracy +/- 5 metres). The presence of hollows and birds' nests was also noted.

The presence of fauna habitat was noted, particularly in relation to potential habitats for threatened species. The greatest amount of time was spent surveying the highest quality fauna habitats (e.g. trees, water bodies, crevices or under ground debris) during the assessment.

Guidelines for the Removal, Destruction or Lopping of Native Vegetation

The *Guidelines for the Removal, Destruction or Lopping of Native Vegetation* (the Guidelines) (Department of Environment Land Water and Planning 2017) are required to be addressed under Clause 52.17 of the Planning Scheme. The Guidelines require that information regarding the biodiversity values of the site were obtained through:

- Site-based information that was measured or observed at a site, including:
 - Extent of native vegetation patches;
 - Large trees;
 - Native vegetation condition assessed in accordance with the *Vegetation Quality Assessment Manual – Guidelines for Applying the Habitat Hectares Scoring Method* (Department of Sustainability and Environment 2004);
 - Ecological Vegetation Classes (EVC); and
 - Sensitive wetlands and coastal areas.
- Landscape scale information that cannot be measured or observed at the site and includes maps and models procured from DELWP.

The Guidelines require a Habitat Hectare assessment in instances where the impact is to be assessed under the Detailed Assessment Pathway. It was not possible to determine the risk-based pathway for the loss of native vegetation prior to the site assessment, and we therefore opted to complete the Habitat Hectare assessment in accordance with the methodology prescribed within the *Vegetation Quality Assessment Manual – Guidelines for Applying the Habitat Hectares Scoring Method* (Department of Sustainability and Environment 2004) where patches² of vegetation were

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² A 'patch' is defined as an area with at least 25% cover abundance of perennial native vegetation, or a group (i.e. three or more) trees forming a continuous canopy.

observed. All indigenous vegetation was assessed, and then assigned a quality rating based on the Habitat Hectare score (Department of Sustainability and Environment 2004).

To determine offsets, the location and species of indigenous ‘scattered trees’³, and any ‘large trees’⁴ within patches were also mapped. Details of the location and extent of native vegetation (patches, scattered trees and large trees) that are proposed for removal were provided to DELWP who produced a Native Vegetation Removal report which details the required offsets for impacts to native vegetation patches, Large Trees and scattered trees.

Limitations and Qualifications

The following limitations and qualifications apply to this report:

- The results of the desktop assessment are reliant on data obtained from various databases and other reports. These databases all have internal vetting procedures, however the accuracy of these historical data and some of the results provided within these reports cannot be verified. The desktop assessment does, however, rely on the most accurate data available.
- As with all ecological assessments, a greater survey effort is likely to yield additional flora and fauna records. Where these additional flora and fauna records may alter the recommendations made within this report (e.g. where additional threatened species may utilise habitats within the study area, or where threatened species may be impacted by the proposed development), further assessment has been recommended within this report, depending on the implications of relevant policies and legislation.
- Some flora and fauna species may only be recorded during certain times or seasons (e.g. plants that only contain above-ground biomass and are only visible annually, nocturnal mammals and birds, migratory birds, or fauna identified through seasonal breeding calls such as some frog species).

On the basis of the above, the author has made an informed decision about the likely presence of threatened species that may be present, or that may utilise habitats within the study area, based on a detailed desktop assessment, a review of the species’ biology, and an understanding of the ecological values of the local area.

Therefore, despite the limitations to the assessment listed above, the results gained by both a desktop and a field-assessment are adequate to address the purposes of this report.

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³ Scattered trees are defined as a native canopy tree that does not form a patch

⁴ Large trees are defined as meeting the size threshold specified in the bioregional EVC Benchmark

Results

The Study Area

Study Area Description

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The study area is located 2.6 kilometres north of the Pakenham town centre and approximately 52 kilometres south-east of Melbourne's Central Business District. It is located on the eastern side of Pakenham Road and is approximately 0.6 hectares in size (Figure 1). It was previously the 'front' paddock of a larger land-holding that extended to the east of the study area, but is now a vacant paddock. Residential subdivision is being undertaken to the east of the study area, with established residential dwellings located to the west of the study area, along Pakenham Road. The study area, however, is located along the northern extent of Pakenham's urban development, beyond which the landscape supports hobby farms and larger agricultural enterprises. South of the study area, the Galway Gold Estate occupies the eastern side of Pakenham Road. This Estate has been released for development and a number of houses on standard density blocks are currently being built, or have recently been settled.

Trees are absent from the study area and the vegetation is dominated by exotic and weedy species (Plate 1). Works to construct Blessing Road, which runs along the eastern boundary of the study area, commenced in August 2019, along with other works to facilitate the subdivision (Nearmap 2022). This resulted in impacts to vegetation in the north of the study area, as the area was used to store equipment and materials for the subdivision (Plate 2).

The topography of the landscape is hilly, and rises to the east of the study area. There are no waterways or dams within the study area.

Local Planning Controls

General Residential Zone

The study area is known as Lot A on PS811821, and zoned General Residential Zone – Schedule 1 within the Cardinia Planning Scheme (Department of Environment Land Water and Planning 2022d).

Environmental Significance Overlay – Schedule 4

The study area is covered by an Environment Significance Overlay – Schedule 4 (ESO4) under the Cardinia Planning Scheme. The ESO4 relates to the protection and enhancement of the significant environmental and landscape values associated with the Pakenham North ridge. It also relates to the protection of the visual amenity of the skyline and ridge by ensuring that buildings and development do not adversely impact these values. It does this by protecting areas that support significant biodiversity values and encouraging replanting of native vegetation in other areas to enhance those biodiversity values and natural systems (Department of Environment Land Water and Planning 2022d). These objectives are considered in the recommendations of this report.

No other planning overlays, relevant to the current assessment, such as Vegetation Protection or Significant Landscape Overlays, are applicable to the study area.

Flora

Flora Communities

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The study area is located within the Highlands Southern Fall bioregion of Victoria. DELWP modelling of the vegetation within the study area suggests that it was historically covered by Ecological Vegetation Class (EVC) 128: Grassy Forest. EVC 128: Grassy Forest is described as a 'low growing forest to 20 metres tall with an understorey of small and medium shrubs and a rich diversity of herbs. Large shrubs and understorey trees may also be conspicuous' (Department of Environment Land Water and Planning 2022a). The Conservation Status of EVC 128: Grassy Forest is 'Vulnerable' within the Highlands Southern Fall bioregion.

Current modelling of vegetation by DELWP suggests that much of this vegetation remains in the study area, however the site assessment confirmed that the vegetation was highly disturbed from its natural state, and little native vegetation remains (discussed further below).

Flora Species

Thirty-eight flora species were recorded during the assessment. This comprised 10 indigenous species, 27 exotic species and Sweet Pittosporum *Pittosporum undulatum* which is a Victorian native species, but regarded as an environmental weed within the local area.

The vegetation within the study area was dominated by exotic pasture grasses and annual weeds. This included exotic grasses such as Kikuyu *Cenchrus clandestinus*, Couch *Cynodon dactylon*, and Cocksfoot *Dactylis glomerata*, as well as pasture species such as White Clover *Trifolium repens*, and environmental weeds such as Flaxleaf Fleabane *Erigeron bonariensis*, Cape Weed *Arctotheca calendula*, Ribwort *Plantago lanceolata* and Flatweed *Hypochaeris radicata*. Trees and midstorey vegetation were absent from the study area, although regenerating Black Wattle *Acacia mearnsii* were observed in the north, and near the middle of the study area, with some Montpellier Broom *Genista monspessulana*, which is an exotic species and noxious weed within the landscape.

Native species within the study area were sparse, and included scattered occurrences of the Black Wattles mentioned above, as well as native grasses including Common Blown-grass *Lachnagrostis filiformis* s.l., and Silvertop Wallaby-grass *Rytidosperma pallidum*. Some native herbs were also recorded, including Running Postman *Kennedia prostrata* and Common Raspwort *Gonocarpus tetragynus*, however both of these species were located on the fill brought into the study area during the earthworks to facilitate the subdivision to the north of the study area, and are unlikely to be indigenous to the site.

The Pakenham Road road reserves supported a higher density of indigenous species, including Narrow-leaf Peppermint *Eucalyptus radiata* in the overstorey, and Thatch Saw-sedge *Gahnia radula* in the understorey (Plate 3). Despite this, much of this area, too, was dominated by exotic species including Kikuyu, as well as exotic overstorey species such as Sweet Pittosporum, and garden escapees including Oak *Quercus* spp. and stone-fruit trees *Prunus* sp..

Vegetation Quality Assessment

Two small patches of native vegetation were recorded in the Pakenham Road road reserve, along the western edge of the study area during the current assessment (Table 1; Figure 1; Plate 3 and 4).

Both of these patches extended slightly into the study area along this boundary. Both patches were representative of EVC 128: Grassy Forest and were assigned low Habitat Hectare Scores of 19 and 25 (out of 100), respectively.

Table 1. Habitat Hectare Score for the patches of native vegetation within the study area.

Patch		1	2
Bioregion		Highlands Southern Fall	Highlands Southern Fall
EVC name		Grassy Forest	Grassy Forest
EVC number		128	128
Conservation rating within bioregion		Vulnerable	Vulnerable
Assessment Criteria		Maximum Score	Patch Score
Site Condition	a. Large old trees	10	3
	b. Canopy cover	5	4
	c. Understorey	25	5
	d. Lack of weeds	15	0
	e. Recruitment	10	1
	f. Organic litter	5	3
	g. Logs	5	0
	h. Total (sum of a-g)	75	16
Landscape Value	j. Patch size	10	1
	k. Neighbourhood	10	1
	l. Distance to core	5	1
m. Habitat Score (sum of h-l)		100	19
n. Habitat score out of 1 ($m \div 100$)			0.19
o. Size			0.082
p. Large Old Trees (LOTs)			0.061
			1
			2

Table Notes:

Habitat Hectare Scores are rounded to two decimal places

Large Trees are Eucalypts with >70cm DBH in EVC 128: Grassy Forest

Scattered Tree Assessment

Two scattered indigenous trees were recorded during the current assessment, in the Pakenham Road road reserve, in the north of the study area (Figure 1; Plate 5). Both of these trees are dead, however one is classified as a Large tree, while the other is classified as a Small tree (Table 2).

Table 2. Scattered indigenous trees recorded within the study area during the current assessment.

Tree No.	Common Name	Species Name	Size Class	Diameter at Breast Height (cm)	Tree Protection Zone (m)	Latitude	Longitude
1	Dead	Unknown	Large	78	N/A	145.47905	-38.05349
2	Dead	Unknown	Small	63	N/A	145.47905	-38.05345

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Threatened Flora Species and Ecological Communities

Eleven threatened flora species have previously been recorded within three kilometres of the study area (Department of Environment Land Water and Planning 2022f). A further 17 threatened flora species are predicted to occur within the study area based on the Protected Matters Search Tool (Department of Agriculture Water and the Environment 2022a). A consolidated list of these threatened flora species, as well as their conservation status under the EPBC Act, the *Flora and Fauna Guarantee Act 1988* (Vic) (FFG Act) Threatened List: October 2021 (Department of Environment Land Water and Planning 2021a), their preferred habitats and the likelihood of occurrence for each species is provided in Table A3.

There are no historical records of threatened flora species within the study area, but two records of Green Scentbark *Eucalyptus fulgens* immediately west of the study area (Figure 2). No threatened flora species were recorded during the current assessment (Table A3, Figure 2). Given the results of the site assessment and the high level of disturbance to the vegetation within the study area identified through historic aerial photography, it is highly unlikely that any threatened flora species remain within the study area, or would be impacted by the proposed development of the study area.

The modelling used by the Protected Matters Search Tool suggests that two nationally significant vegetation communities may also occur within the study area:

- Natural Damp Grassland of the Victoria Coastal Plains; and,
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (Department of Agriculture Water and the Environment 2022a).

Given the general lack of native vegetation that persists within study area, the vegetation that remains does not meet the criteria to qualify as these communities, and as such no threatened communities were recorded within the study area.

Fauna

Fauna Species

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Fifteen fauna species were recorded within the study area during the current assessment (Table A2). This included 14 birds (10 native and four introduced) and one native mammal. Additional fauna species would be recorded with greater time on-site.

All of these species are common to the area. The trees within the road reserve are likely to provide habitat to arboreal mammals, including possums and bats, which were not recorded during the current assessment. No reptiles were recorded during the assessment, although it is likely that skinks and snakes would occur within the study area, amongst areas containing dense understorey vegetation and organic litter or debris. They may also traverse the paddocks when moving between areas of higher quality habitats. Further discussion of fauna species encountered is included below.

Fauna Habitats

The open areas that comprise much of the study area are likely to provide habitat to generalist species, such as Australian Magpie *Gymnorhina tibicen* and Little Raven *Corvus mellori*, which are widespread and common species throughout open areas, suburban areas and farmlands throughout

Melbourne. This habitat is unlikely to support any significant species, nor provide important habitat to any common species within the landscape.

Threatened Fauna Species and Communities

Twelve threatened fauna species have previously been recorded within three kilometres of the study area (Department of Environment Land Water and Planning 2022f) (Figure 2). A further 23 threatened fauna species are predicted to occur within the study area, based on the Protected Matters Search Tool (Department of Agriculture Water and the Environment 2022a). A consolidated list of these threatened flora species as well as their conservation status under the EPBC Act and the FFG Act Threatened List: October 2021 (Department of Environment Land Water and Planning 2021a), their preferred habitats and the likelihood of occurrence for each species is provided in Table A4.

There are no historical records of threatened fauna species within the study area, and no threatened flora species were recorded during the current assessment (Table A4, Figure 2).

The study area may provide air space over which highly mobile threatened birds, such as White-throated Needletail *Hirundapus caudacutus* and mammals, such as Grey-headed Flying-fox *Pteropus poliocephalus*, may occasionally fly when moving around the landscape, however the study area itself does not provide important resources to these species, and the development of the study area is unlikely to impact either of these species. The same is true for the other threatened species that have previously been recorded near the study area, or have modelled habitat in which they may occur: while they may persist within the wider landscape, the low ecological values, homogenous vegetation and ongoing disturbance within the study area makes it extremely unlikely that any persist within the study area.

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Discussion

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A detailed summary of the legislation that was considered when preparing this report is provided in Appendix 2. The discussion presented in this section of the report does not reiterate information provided in Appendix 2, but summarises the results and recommendations arising from the interpretation of this legislation.

Environment Protection and Biodiversity Conservation Act 1999 (Cth)

The desktop assessment identified eleven flora and 27 fauna species, as well as two threatened ecological communities, listed under the EPBC Act, which may occur within the study area. Most of the threatened flora and fauna species listed on the EPBC Act that are predicted to occur within the vicinity study area are, in fact, unlikely to occur due to the absence of suitable habitats or the degraded nature of habitats within the study area. Despite this, there remains a moderate likelihood that White-throated Needletails and Grey-headed flying-foxes occasionally fly over the study area, however the proposed development is unlikely to significantly impact either species. No threatened flora species or ecological communities are likely to persist within the study area.

A referral to the Commonwealth Department of Agriculture, Water and the Environment is not recommended for the proposed development of the study area, as it is unlikely that there will be any significant impacts on matters of national environmental significance.

Flora and Fauna Guarantee Act 1988 (Vic)

The desktop assessment identified 17 flora species and 35 fauna species listed under the FFG Act that may occur within the study area (Tables A3 and A4). However, no species listed as threatened under the FFG Act were recorded within the study area and, apart from the two discussed above, none are likely to occur on the basis of the modification of the vegetation within the study area, and the limited fauna habitat that it supports.

The FFG Act also lists species as ‘protected flora’ on public land. Protected flora includes whole families or genera (as well as species), such as daisies, heaths, orchids, and most Acacias. These species and genera are not necessarily regarded as threatened, but require an approved *Permit to Take Protected Flora* from DELWP prior to their removal when located on public land. Road upgrades and crossovers to access the proposed subdivision may impact flora species listed as protected under the Act. The current development plan does not propose any such crossovers or impacts, however if a crossover to access Pakenham Road is proposed, targeted surveys for Protected Flora species within the road reserve are recommended to determine the requirement for a *Permit to Take Protected Flora*.

Planning and Environment Act 1987 (Vic)

The proposed development will require planning permit approval from the Shire of Cardinia Council prior its removal, destruction or lopping, pursuant Clause 52.17 of the Cardinia Planning Scheme (Department of Environment Land Water and Planning 2022d). In seeking a permit for these impacts, the applicant is required demonstrate how it applied the three-step approach avoid, minimise and offset impacts native vegetation (discussed below).

Consideration of the requirements of the ESO4 is also required. The ESO4 requires that impacts to ecological values are minimised. Given the low quality ecological values observed during the current assessment, this is unlikely to significantly constrain development. The native vegetation recorded within the Pakenham Road road reserve, along the western boundary of the study area is recommended for retention, which will be consistent with both the ESO4 and the three-step approach described within the *Guidelines for the Removal, Destruction or Lopping of Native Vegetation* (Department of Environment Land Water and Planning 2017). It is likely, however, that the portions of these patches that extend into the study area will be impacted (discussed below).

Catchment and Land Protection Act 1994 (Vic)

Primary considerations of the *Catchment and Land Protection Act 1994* (Vic) relate to soil and water conservation, as well as the management of pest plants and animals. The current assessment identified five weed species that are listed as 'noxious' within the Port Phillip and Western Port Catchment Management Area (Table A1). Blackberry *Rubus fruticosus* spp. agg., Montpellier Broom *Genista monspessulana* and Spear Thistle *Cirsium vulgare* are 'Regionally Controlled' species, while Bridal Creeper *Asparagus asparagoides* and Soursob *Oxalis pes-caprae* are listed as 'Restricted' species. The proponent is required to 'control the spread' of all 'Regionally Controlled' species from their property, and there are limitations on the collection and trade of 'Restricted' species.

Blackberry, Bridal Creeper and Montpellier Broom are also Weeds of National Significance, although there are no legislative obligations to manage these species under this listing (Department of Agriculture Water and the Environment 2022b).

The proposed development should aim to remove these plants when construction commences, and ensure they are removed during the future the landscaping and maintenance of the study area. It is expected that weed management would form part of a Construction Environment Management Plan (or equivalent).

The Construction Environment Management Plan will, amongst other things, manage the potential spread of the abovementioned noxious weeds during the development and remove any weeds that establish post-immediately construction. To achieve this, as a minimum, the Construction Environment Management Plan should include sections relating to:

- Maintenance of vehicle hygiene and vehicle wash-down areas;
- Using clean fill (if required);
- Managing noxious that may establish post-construction through spraying with herbicide or hand-removal;
- Avoiding the use of noxious species during any landscaping of the property; and,
- Erosion and sediment control to EPA Standards in order to avoid impacts downslope.

It is also recommended that locally indigenous species be considered within the plant palette for future landscaping of the estate, as appropriate.

Wildlife Act 1975 (Vic)

It is likely that some locally common species of fauna will be displaced by the proposed development. Furthermore, there remains a low likelihood that animals may be accidentally injured

when disturbing soil and removing vegetation. All native vertebrate wildlife is protected under the *Wildlife Act 1975* (Vic), and therefore contractors must use due care when removing vegetation from the study area. It is recommended that a zoologist or wildlife handler salvage any wildlife from trees prior to their removal.

Guidelines for the Removal, Destruction or Lopping of Native Vegetation

The Three-step Approach

Applicants who wish to remove native vegetation must generally demonstrate how the application meets the three-step approach to:

1. Avoid the removal, destruction or lopping of native vegetation;
2. Minimise impacts from the removal, destruction or lopping of native vegetation that cannot be avoided; and
3. Provide an offset to compensate for the biodiversity impact from the removal, destruction or lopping of native vegetation (Department of Environment Land Water and Planning 2017).

Avoidance and Minimisation Statement

Avoidance is generally demonstrated through appropriate development design. This can be achieved by avoiding development that will impact the patch of vegetation within the road reserve of Pakenham Road, along the western edge of the study area. This avoidance should focus on protection of the trees within the road reserve, by excluding construction activities from within the tree protection zones of these trees. During construction a CEMP, or equivalent will likely be required to ensure that there are no indirect impacts to patches native vegetation, or scattered trees or their tree protection zones. Specialist arboricultural advice may be sought to minimise tree protection zones.

Despite the implementation of these measures, there remains an impact to the vegetation along the northern boundary of the study area, which will result in the loss of two trees within the road reserve, as a result of encroachments to their Tree Protection Zones. These trees will require offsets.

Offsets

No native vegetation has been removed within the last five years that requires additional consideration relating to the offset calculation. Data relating to the location of the impacted vegetation was issued to DELWP, who generated a Native Vegetation Removal report (Appendix 3). These reports use the data collected during the current assessment and modelled vegetation quality scores to determine offset requirements. The Native Vegetation Removal reports also includes the species specific offset test, which determines if the proposed vegetation removal will have a proportional impact on any Victorian rare or threatened species habitat above a specific offset threshold, which is set at 0.005 per cent of total habitat for each species. The results of the Native Vegetation Removal report is summarised below (Table 3).

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Table 3. Offset requirements for impacted native vegetation within the study area.

Offset Parameter	Result
Location Category	Location 1
Assessment Pathway	Basic
Total Extent Removed	0.008 hectares
General Offset Requirements	0.020 General Habitat Units
Minimum Strategic Biodiversity Score	0.528
Offset Location	Port Philip and Westernport CMA or within the Cardinia Shire Council municipality
Tree Offset	Nil

It is expected that offsets would be achieved through a third-party offset, through a vegetation broker, as securing the offsets on site is not practicable. Based on recent trades with brokers, the cost to offset this vegetation will be approximately \$2,080.00⁵ (excluding GST), although offset trades are based on a market based system, and this price is subject to approval and a quotation from a vegetation broker.

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⁵ At the time of writing, an allowance of approximately \$140,000.00 per General Habitat Unit, plus \$1,000.00 per large tree, should be made to achieve these offsets, plus approximately \$1,000.00 in brokerage fees (plus GST for all values provided).

References

- Department of Agriculture Water and the Environment (2022a). The Protected Matters Search Tool. Available at <http://www.environment.gov.au/arcgis-framework/apps/pmst/pmst.jsf>. Accessed 10 January 2022. Department of Agriculture, Water and the Environment, Canberra.
- Department of Agriculture Water and the Environment (2022b). Weeds of National Significance. Available at <http://www.weeds.org.au/WoNS/>. Accessed 10 January 2022. Department of the Environment, Canberra.
- Department of Environment and Primary Industries (2013). 'Permitted Clearing of Native Vegetation; Biodiversity Assessment Guidelines.' (Department of Environment and Primary Industries: Melbourne).
- Department of Environment Land Water and Planning (2017). 'Guidelines for the Removal, Destruction or Lopping of Native Vegetation.' (Department of Environment Land Water and Planning: Melbourne).
- Department of Environment Land Water and Planning (2021a). 'Flora and Fauna Guarantee Act 1988 - Threatened List. October 2021.' Department of Environment Land Water and Planning, Melbourne, Victoria.
- Department of Environment Land Water and Planning (2021b). 'Flora and Fauna Guarantee Act 1988; Public authority duty.' Department of Environment Land Water and Planning, Melbourne.
- Department of Environment Land Water and Planning (2022a). EVC Benchmarks. Available at www.depi.vic.gov.au Accessed 10 January 2022. Department of Environment Land Water and Planning, Melbourne.
- Department of Environment Land Water and Planning (2022b). Native Vegetation Information Management System. Available at www.nvim.depi.vic.gov.au. Accessed 10 January 2022. Department of Environment Land Water and Planning, Melbourne.
- Department of Environment Land Water and Planning (2022c). NatureKit. Available at <http://maps.biodiversity.vic.gov.au/viewer/?viewer=NatureKit>. Accessed 10 January 2022. Department of Environment Land Water and Planning, Melbourne.
- Department of Environment Land Water and Planning (2022d). Planning Schemes Online. Available at <http://services.land.vic.gov.au/maps/pmo.jsp>. Accessed 10 January 2022. Department of Environment Land Water and Planning, Victoria.
- Department of Environment Land Water and Planning (2022e). Vegetation Quality Assessment list of accredited assessors. Available at https://www.environment.vic.gov.au/_data/assets/pdf_file/0026/51785/DELWP-VQA-AccreditedAssessorList8July2019.wbk.pdf. Accessed 10 January 2022. Department of Environment, Land, Water and Planning, Melbourne.
- Department of Environment Land Water and Planning (2022f). Victorian Biodiversity Atlas. Available at <https://vba.dse.vic.gov.au/vba/index.jsp>. Accessed 10 January 2022. Department of Environment Land Water and Planning, Melbourne.
- Department of Sustainability and Environment (2004). 'Habitat Hectares Native Vegetation: Sustaining a Living Landscape. Vegetation Quality Assessment Manual – Guidelines for Applying the Habitat Hectares Scoring Method. Version 1.3.' (Department of Sustainability and Environment: Melbourne).
- Department of Sustainability and Environment (2007). 'Ministerial Guidelines for the environmental assessment of environmental effects under the Environmental Effects Act 1978 ' Department of Sustainability and Environment, Melbourne.
- Nearmap (2022). PhotoMaps by Nearmap. Available at <http://maps.au.nearmap.com/>. Accessed 25 May 2020. Nearmap, Victoria.

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Plates



Plate 1. Vegetation within the study area is dominated by exotic grass species.



Plate 2. The northern parts of the study area had been recently impacted by construction works for the adjoining development.

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Plate 3. Remnant native trees within the Pakenham Road road reserve (Patch 2).



Plate 4. Patch 1 extends from the Pakenham Road road reserve into the study area, as Thatch Saw-sedge plants recolonise the pastures.

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Plate 5. Two dead 'scattered trees' are located within the Pakenham Road road reserve, in the north of the study area (left of image), with Patch 2 near the traffic sign.

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Figures

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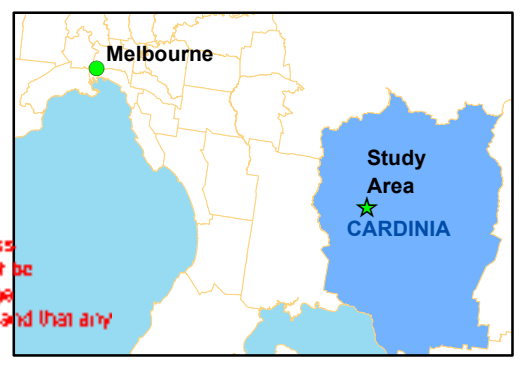
Tree numbers after Ryder Arboriculture and Environment Impact Assessment 2022



Figure 1: Results of the current assessment.
166 Pakenham Road, Pakenham, Victoria

Legend

- Study Area
- Townhouse
- Impacted Vegetation
- Lots
- Driveway
- Patches of Native Vegetation
- ▲ Large Trees in Patches
- ▲ Scattered Trees
- Footpath
- Road



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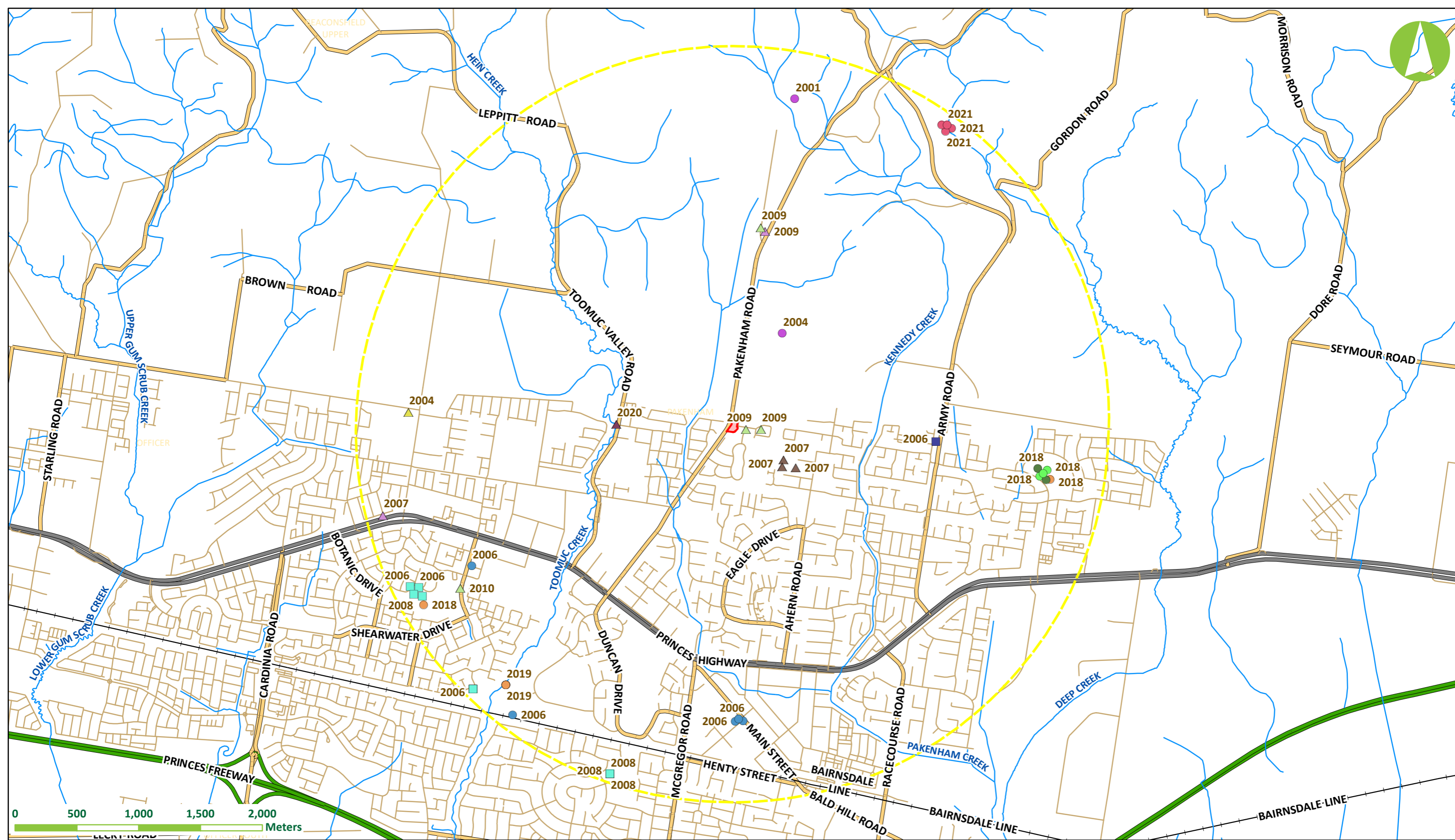


Figure 2: Threatened flora and fauna species within 3kms of the study area within the last 30 years

166 Pakenham Road, Pakenham, Victoria

- Legend**
- Study Area
 - 3km Study Area Buffer
 - Eastern Great Egret
 - Gang-gang Cockatoo
 - Southern Toadlet
 - ▲ Austral Crane's-bill
 - ▲ Mugga
 - Common Name**
 - Hardhead
 - Powerful Owl
 - ▲ Cobra Greenhood
 - ▲ Giant Honey-myrtle
 - ▲ Green Scentbark
 - Australian Little Bittern
 - Growling Grass Frog
 - Blue-billed Duck
 - Growling Grass Frog
 - ▲ Green Scentbark

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Appendices

Appendix 1. Flora and Fauna Tables.

Table A1. Flora species recorded within the study area

Origin	Common Name	Scientific Name	Weeds of National Significance	Noxious Weed Classification
	Black Wattle	<i>Acacia mearnsii</i>	-	-
*	Blackberry	<i>Rubus fruticosus</i> spp. agg.	Yes	Regionally Controlled
*	Bridal Creeper	<i>Asparagus asparagoides</i>	Yes	Restricted
*	Brown-top Bent	<i>Agrostis capillaris</i>	-	-
*	Cape Weed	<i>Arctotheca calendula</i>	-	-
*	Clustered Dock	<i>Rumex conglomeratus</i>	-	-
*	Cocksfoot	<i>Dactylis glomerata</i>	-	-
	Common Blown-grass	<i>Lachnagrostis filiformis</i> s.l.	-	-
*	Common Centaury	<i>Centaureum erythraea</i>	-	-
	Common Raspwort	<i>Gonocarpus tetragynus</i>	-	-
	Cotton Fireweed	<i>Senecio quadridentatus</i>	-	-
*	Couch	<i>Cynodon dactylon</i> var. <i>dactylon</i>	-	-
*	Curled Dock	<i>Rumex crispus</i>	-	-
*	Drain Flat-sedge	<i>Cyperus eragrostis</i>	-	-
	Finger Rush	<i>Juncus subsecundus</i>	-	-
*	Flatweed	<i>Hypochaeris radicata</i>	-	-
*	Flaxleaf Fleabane	<i>Erigeron bonariensis</i>	-	-
*	Kikuyu	<i>Cenchrus clandestinus</i>	-	-
*	Montpellier Broom	<i>Genista monspessulana</i>	Yes	Regionally Controlled
	Narrow-leaf Peppermint	<i>Eucalyptus radiata</i> s.l.	-	-
*	Oak	<i>Quercus</i> spp.	-	-
*	Ox-tongue	<i>Helminthotheca echioides</i>	-	-
*	Paspalum	<i>Paspalum dilatatum</i>	-	-
*	Pigweed	<i>Portulaca oleracea</i>	-	-
	Prickly Currant-bush	<i>Coprosma quadrifida</i>	-	-
*	Prostrate Knotweed	<i>Polygonum aviculare</i> s.l.	-	-
*	Prunus	<i>Prunus</i> spp.	-	-
*	Rat-tail Grass	<i>Sporobolus africanus</i>	-	-
*	Red-flower Mallow	<i>Modiola caroliniana</i>	-	-
*	Rough Sow-thistle	<i>Sonchus asper</i> s.l.	-	-
	Running Postman	<i>Kennedia prostrata</i>	-	-
	Silvertop Wallaby-grass	<i>Rytidosperma pallidum</i>	-	-
*	Small-flower Mallow	<i>Malva parviflora</i>	-	-

Origin	Common Name	Scientific Name	Weeds of National Significance	Noxious Weed Classification
*	Soursob	<i>Oxalis pes-caprae</i>	-	Restricted
*	Spear Thistle	<i>Cirsium vulgare</i>	-	Regionally Controlled
#	Sweet Pittosporum	<i>Pittosporum undulatum</i>	-	-
	Thatch Saw-sedge	<i>Gahnia radula</i>	-	-
*	White Clover	<i>Trifolium repens var. repens</i>	-	-

Table Notes:

* – Exotic + – planted and now naturally spreading

This table does not include ornamental plants, trees or shrubs that were not spreading or reproducing beyond where they were planted.

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Table A2. Fauna species recorded within the study area

Origin	Common Name	Scientific Name
Birds		
*	Spotted Dove	<i>Spilopelia chinensis</i>
	Galah	<i>Eolophus roseicapillus</i>
	Sulphur-crested Cockatoo	<i>Cacatua galerita</i>
	Rainbow Lorikeet	<i>Trichoglossus moluccanus</i>
	Eastern Rosella	<i>Platycercus eximius</i>
	Red Wattlebird	<i>Anthochaera carunculata</i>
	Australian Magpie	<i>Cracticus tibicen</i>
	Grey Butcherbird	<i>Cracticus torquatus</i>
	Little Raven	<i>Corvus mellori</i>
	Magpie-lark	<i>Grallina cyanoleuca</i>
	Welcome Swallow	<i>Hirundo neoxena</i>
*	Common Starling	<i>Sturnus vulgaris</i>
*	Common Myna	<i>Acridotheres tristis</i>
*	Common Blackbird	<i>Turdus merula</i>
Mammals		
	Eastern Grey Kangaroo	<i>Macropus giganteus</i>

Definitions

* - Introduced species

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Table A3. Threatened flora species that have previously been recorded within, or within 3 kilometres of the study area (Department of Environment Land Water and Planning 2022f), or that has habitat that may occur within the vicinity of the study area (Department of Agriculture Water and the Environment 2022a).

Common Name	Species Name	National Status	FFG Act Status	Habitat Preferences	Most Recent Record	Habitat Present on Site	Likelihood of Presence*
Austral Crane's-bill	<i>Geranium solanderi</i> var. <i>solanderi</i>	-	Endangered	Damp to dryish, usually sheltered sites, in grassy woodlands, often along drainage lines or in seepage areas.	2004 (1)	No	Unlikely
Clover Glycine	<i>Glycine latrobeana</i>	Vulnerable	Vulnerable	Grassy woodland; plains grassland; box woodland; dry sclerophyll forest.	NPR	No	Unlikely
Cobra Greenhood	<i>Pterostylis grandiflora</i>	-	Endangered	Valley sclerophyll forest, grassy low open forest	2007 (100)	No	Unlikely
Dense Leek-orchid	<i>Prasophyllum spicatum</i>	Vulnerable	Critically Endangered	Coastal and hinterland heath and heathy woodland	NPR	No	Unlikely
Giant Honey-myrtle	<i>Melaleuca armillaris</i> subsp. <i>armillaris</i>	-	Endangered	Mainly confined to near-coastal sandy heaths, scrubs slightly raised above saltmarsh, riparian scrubs, rocky coastlines and foothill outcrops eastwards from about Marlo. Occurrences to the west are naturalised.	2009 (2)	No	Unlikely
Green Scentbark	<i>Eucalyptus fulgens</i>	-	Endangered	Damp sclerophyll forests	2010 (6)	Yes	Low
Green-striped Greenhood	<i>Pterostylis chlorogramma</i>	Vulnerable	Endangered	Open forest and woodland	NPR	No	Unlikely
Leafy Greenhood	<i>Pterostylis cucullata</i>	Vulnerable	-	Tea-tree heath	NPR	No	Unlikely
Matted Flax-lily	<i>Dianella amoena</i>	Endangered	Critically Endangered	Grassy Wetland; Red Gum woodland; plains grassland; grassy woodlands.	NPR	No	Unlikely
Mugga	<i>Eucalyptus sideroxylon</i> subsp. <i>sideroxylon</i>	-	Endangered	Woodlands on poor, shallow soils, including sands, gravels, ironstones and clays	2020 (1)	No	Unlikely

Common Name	Species Name	National Status	FFG Act Status	Habitat Preferences	Most Recent Record	Habitat Present on Site	Likelihood of Presence*
River Swamp Wallaby-grass	<i>Amphibromus fluitans</i>	Vulnerable	-	Beside swamps in grassy low open forest, riparian scrub. Required moist soils, tolerates inundation.	NPR	No	Unlikely
Round-leaf Pomaderris	<i>Pomaderris vacciniifolia</i>	Critically Endangered	Critically Endangered	Valley sclerophyll forest	NPR	No	Unlikely
Shelford Leek-orchid	<i>Prasophyllum fosteri</i>	-	Critically Endangered	Basalt plains grassland near Mt Mercer.	1932 (3)	No	Unlikely
Spiny Peppercross	<i>Lepidium aschersonii</i>	Vulnerable	Endangered	Heavy clay soil near salt lakes on volcanic plain, but with outlying records from near Lake Omeo and the Grampians	NPR	No	Unlikely
Strzelecki Gum	<i>Eucalyptus strzeleckii</i>	Vulnerable	Critically Endangered	Fragmented populations in the Strzelecki Ranges, on a range of sites including ridges, slopes and along the banks of streams, but particularly foothills and flats	NPR	No	Unlikely
Swamp Everlasting	<i>Xerochrysum palustre</i>	Vulnerable	Critically Endangered	Seasonal or permanent wetlands	NPR	No	Unlikely
Swamp Fireweed	<i>Senecio psilocarpus</i>	Vulnerable	-	High-quality herb-rich wetlands on plains	NPR	No	Unlikely

Table Notes:

NPR – Not previously recorded

*** Likelihood of Presence Definitions:**

Unlikely – Site does not contain habitat and/or it is outside the species' known, current distribution.

Low – Site contains some marginal habitat, but the species was not observed and has not been recently recorded in previous surveys in the area.

Moderate – Site contains preferred habitat that may support a population of the species. However, other factors, such as fragmentation, disturbance or predators may be impacting any local population.

High - Site contains the preferred habitat which is likely to support the species.

Present – Preferred habitat is present on the site, and the species was observed on the site, or recently recorded at the site.

NPR – No previous record, modelled presence only under the EPBC Protected Matters Search results.

Threatened status based on the *Flora and Fauna Guarantee Act 1988* - Threatened List: June 2021 (Department of Environment Land Water and Planning 2021a).

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Table A4. Threatened fauna species that have previously been recorded within, or within 3 kilometres of the study site (Department of Environment Land Water and Planning 2022f), or that has habitat that may occur within the vicinity of the site (Department of Agriculture Water and the Environment 2022a).

Common Name	Species Name	National Status	Victorian Status	Habitat Preferences	Most Recent Record	Habitat Present on Site	Likelihood of Presence*
Birds							
Hardhead	<i>Aythya australis</i>	-	Vulnerable	Deep, vegetated swamps, open water.	2019 (4)	No	Unlikely
Blue-billed Duck	<i>Oxyura australis</i>	-	Vulnerable	Well-vegetated freshwater swamps, large dams, lakes. More open waters in winter.	2019 (4)	No	Unlikely
White-throated Needletail	<i>Hirundapus caudacutus</i>	Vulnerable	Vulnerable	Aerial insectivore that rarely lands to perch, often sleeping on the wing	1991 (1)	No	Moderate
Greater Sand Plover	<i>Charadrius leschenaultii</i>	Vulnerable	Vulnerable	Tidal mudflats and sandflats, beaches, saltmarsh, estuaries	NPR	No	Unlikely
Australian Painted-snipe	<i>Rostratula australis</i>	Endangered	Critically Endangered	Uncommon summer migrant to Victoria. Lowlands on shallow freshwater swamps with emergent vegetation, and flooded salt marshes.	NPR	No	Unlikely
Eastern Curlew	<i>Numenius madagascariensis</i>	Critically Endangered	Critically Endangered	Estuaries, tidal mudflats, mangroves, shallow river margins, coastal or inland	NPR	No	Unlikely
Curlew Sandpiper	<i>Calidris ferruginea</i>	Critically Endangered	Critically Endangered	Estuaries, tidal mudflats, mangroves, shallow river margins, coastal or inland	NPR	No	Unlikely
Australasian Bittern	<i>Botaurus poiciloptilus</i>	Endangered	Critically Endangered	Reed beds, dense vegetation of freshwater swamps and creeks.	NPR	No	Unlikely
Australian Little Bittern	<i>Ixobrychus dubius</i>	-	Endangered	freshwater wetlands, where they inhabit dense emergent vegetation of reeds and sedges, and inundated shrub thickets. They are also occasionally found in brackish and saline wetlands such as mangrove swamps, Juncus-dominated salt marsh and the wooded margins of coastal lagoons.	2006 (5)	No	Unlikely
Eastern Great Egret	<i>Ardea alba</i>	-	Vulnerable	Floodwaters, rivers and shallows of wetlands,	2019 (9)	No	Unlikely

Common Name	Species Name	National Status	Victorian Status	Habitat Preferences	Most Recent Record	Habitat Present on Site	Likelihood of Presence*
	<i>modesta</i>			intertidal mud flats.			
Powerful Owl	<i>Ninox strenua</i>	-	Vulnerable	Tall open forest and woodland.	2021 (4)	No	Unlikely
Grey Falcon	<i>Falco hypoleucos</i>	-	Vulnerable	Shrubland, grassland and wooded watercourses of arid and semi-arid regions, although it is occasionally found in open woodlands near the coast	NPR	No	Unlikely
Gang-gang Cockatoo	<i>Callocephalon fimbriatum</i>	Endangered	-	They inhabit cool, wet forests, particularly alpine bushland, but may visit urban parks and gardens to feed	2004 (18)	No	Unlikely
Swift Parrot	<i>Lathamus discolor</i>	Critically Endangered	Critically Endangered	Winter migrant from Tasmania. Generally prefers Box-Ironbark forests and woodlands inland of the Great Dividing Range during winter.	NPR	No	Unlikely
Painted Honeyeater	<i>Grantiella picta</i>	Vulnerable	Vulnerable	Open box-ironbark forests and woodlands, particularly where trees are infested with mistletoe.	NPR	No	Unlikely
Regent Honeyeater	<i>Anthochaera phrygia</i>	Critically Endangered	Critically Endangered	Depends on nectar and insects from Box-Ironbark Eucalypt forests. Only breeding habitat lies in Northeast Victoria and central coast of NSW	NPR	No	Unlikely
Pilotbird	<i>Pycnoptilus floccosus</i>	Vulnerable	-	Temperate wet sclerophyll forests and occasionally temperate rainforest, where there is dense undergrowth with abundant debris	NPR	No	Unlikely
Mammals							
Spot-tailed Quoll	<i>Dasyurus maculatus maculatus</i>	Endangered	Endangered	Forests including large intact areas of vegetation for foraging.	NPR	No	Unlikely
Swamp Antechinus	<i>Antechinus minimus</i>	Vulnerable	Vulnerable	Heathy forest, wetlands, heathland and coastal scrub.	NPR	No	Unlikely

Common Name	Species Name	National Status	Victorian Status	Habitat Preferences	Most Recent Record	Habitat Present on Site	Likelihood of Presence*
<i>maritimus</i>							
Southern Brown Bandicoot	<i>Isoodon obesulus obesulus</i>	Endangered	Endangered	Heathy forest, heathland and coastal scrub.	NPR	No	Unlikely
Southern Greater Glider	<i>Petauroides volans</i>	Vulnerable	Vulnerable	Wet sclerophyll forests, requires large tree hollows for nesting	NPR	No	Unlikely
Yellow-bellied Glider	<i>Petaurus australis</i>	Vulnerable	-	Occur in tall mature eucalypt forest generally in areas with high rainfall and nutrient rich soils	NPR	No	Unlikely
Long-nosed Potoroo	<i>Potorous tridactylus trisulcatus</i>	Vulnerable	Vulnerable	Heathy woodland	NPR	No	Unlikely
Broad-toothed Rat	<i>Mastacomys fuscus mordicus</i>	Vulnerable	Vulnerable	A range of habitats from sub-alpine to coastal heathland, with high vegetative coverage in high rainfall areas	NPR	No	Unlikely
Smoky Mouse	<i>Pseudomys fumeus</i>	Endangered	Endangered	Dry sclerophyll forests with tussocky understorey	NPR	No	Unlikely
Grey-headed Flying-fox	<i>Pteropus poliocephalus</i>	Vulnerable	Vulnerable	Roost sites commonly occur in gullies, in vegetation with dense canopy cover and close to water.	NPR	No	Moderate
Frogs							
Southern Toadlet	<i>Pseudophryne semimarmorata</i>	-	Endangered	Dry forest, woodland, grassland and heath in moist soaks and depressions; uses leaf litter for shelter.	2006 (1)	No	Unlikely
Growling Grass Frog	<i>Litoria raniformis</i>	Vulnerable	Vulnerable	Permanent lakes, swamps, dams and lagoons.	2008 (71)	No	Unlikely
Fish							
Australian Grayling	<i>Prototroctes maraena</i>	Vulnerable	Endangered	Clear gravelly streams; deep slow flowing pools.	NPR	No	Unlikely
Dwarf Galaxias	<i>Galaxiella pusilla</i>	Vulnerable	Endangered	Slow moving waters, including ephemeral drains.	NPR	No	Unlikely

Common Name	Species Name	National Status	Victorian Status	Habitat Preferences	Most Recent Record	Habitat Present on Site	Likelihood of Presence*
Macquarie Perch	<i>Macquaria australasica</i>	Endangered	Endangered	Deep, rocky holes with considerable cover and flowing water over unsilted cobble and gravel substrate.	1970 (1)	No	Unlikely
Murray Cod	<i>Maccullochella peelii</i>	Vulnerable	Endangered	Small clear, rocky, upland streams with riffle and pool structure on the upper western slopes of the Great Dividing Range to large, meandering, slow-flowing, often silty rivers in the alluvial lowland reaches of the Murray-Darling Basin.	1960 (1)	No	Unlikely
Yarra Pygmy Perch	<i>Nannoperca obscura</i>	Vulnerable	Vulnerable	Slow flowing creeks or still lakes with abundant aquatic vegetation and log snags	NPR	No	Unlikely
Invertebrates							
Foothill Burrowing Crayfish	<i>Engaeus victoriensis</i>	-	Endangered	Burrows in grey, clay-dominated soils in wet sclerophyll forest at the foot of the Dandenong Ranges	1911 (1)	No	Unlikely
Golden Sun Moth	<i>Synemon plana</i>	Critically Endangered	Vulnerable	Tussock grasslands preferably dominated by Wallaby Grasses and Spear Grasses.	NPR	No	Unlikely

Table Notes:

This table excludes species listed exclusively as 'migratory' or 'marine' under the EPBC Protected Matters Search results.

NPR – Not previously recorded

*** Likelihood of Presence Definitions:**

Unlikely – Site does not contain habitat and/or it is outside the species' known, current distribution. Birds and bats may fly over.

Low – Site contains some marginal habitat, but the species was not observed and has not been recorded in previous recent surveys in the area. Birds and bats may fly over.

Moderate – Site contains preferred habitat that may support a population of the species. Birds and bats may opportunistically or seasonally forage at the site.

High – Site contains preferred habitat which is likely to support the species. Birds and bats are likely to regularly (at least seasonally) forage or roost at the site.

Present – Preferred habitat is present on the site, and the species was observed on the site, or recently recorded on the site.

NPR– No previous record, modelled presence only under the EPBC Protected Matters Search results.

Threatened status based on the *Flora and Fauna Guarantee Act 1988* - Threatened List: June 2021 (Department of Environment Land Water and Planning 2021a).

Appendix 2. Legislation

Commonwealth Legislation

Environment Protection and Biodiversity Conservation Act 1999 (Cth)

The *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) is to provide for the conservation of 'Matters of National Environmental Significance'. The Act defines eight Matters of National Environmental Significance:

- World Heritage properties;
- National Heritage Places;
- Ramsar wetlands of international significance;
- Nationally listed threatened species and ecological communities;
- Listed migratory species;
- Commonwealth marine areas;
- The Great Barrier Reef Marine Park; and,
- Nuclear actions.

Under the Act, actions that are likely to have a significant impact upon Matters of National Environmental Significance require approval from the Federal Environment Minister. This approval is sought through a referral process for a particular action. An action includes any project, development, undertaking, activity or series of activities. Consideration of the requirement for an 'EPBC Referral' to the Minister has been made within this report.

State Legislation

Environmental Effects Act

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The *Environment Effects Act 1978* (Vic) provides for assessment of proposed projects (works) that are capable of having a significant effect on the environment. The Act does this by enabling the Minister administering the Environment Effects Act to decide that an Environment Effects Statement (EES) should be prepared.

The Minister might typically require a proponent to prepare an EES when:

- There is a likelihood of regionally or State significant adverse effects on the environment
- There is a need for integrated assessment of potential environmental effects (including economic and social effects) of a project and relevant alternatives, and
- Normal statutory processes would not provide a sufficiently comprehensive, integrated and transparent assessment (Department of Sustainability and Environment 2007).

Referral criteria: individual potential environmental effects

- Individual types of potential effects on the environment that might be of regional or State significance, and therefore warrant referral of a project, are:
- Potential clearing of 10 ha or more of native vegetation from an area that:
 - is of an Ecological Vegetation Class identified endangered by the Department of Sustainability and Environment (in accordance with Appendix 2 of Victoria's Native Vegetation Management Framework); or

- is, or is likely to be, of very high conservation significance (as defined in accordance with Appendix 3 of Victoria’s Native Vegetation Management Framework); and
- is not authorised under an approved Forest Management Plan or Fire Protection Plan
- Potential long-term loss of a significant proportion (e.g. 1 to 5 percent depending on the conservation status of the species) of known remaining habitat or population of a threatened species within Victoria
- Potential long-term change to the ecological character of a wetland listed under the Ramsar Convention or in ‘A Directory of Important Wetlands in Australia’
- Potential extensive or major effects on the health or biodiversity of aquatic, estuarine or marine ecosystems, over the long term
- Potential extensive or major effects on the health, safety or well-being of a human community, due to emissions to air or water or chemical hazards or displacement of residences
- Potential greenhouse gas emissions exceeding 200,000 tonnes of carbon dioxide equivalent per annum, directly attributable to the operation of the facility (Department of Sustainability and Environment 2007).

Flora and Fauna Guarantee Act 1988 (Vic)

The *Flora and Fauna Guarantee Act 1998* (Vic) (FFG Act) provides a legal framework for enabling and promoting the conservation of all Victoria’s native flora and fauna, and to enable management of potentially threatening processes on public land. The Act lists native species, communities, and processes that threaten native flora and fauna, under Schedules of the Act. This enables the assessor and regulators to establish management measures to mitigate impacts on listed values within Victoria.

The FFG Act was amended in 2021 and now contains an obligation or duty on public authorities and ministers to consider potential biodiversity impacts when exercising their functions. The FFG Act requires ministers and public authorities (including Councils) reasonably consider the objectives of the Act where projects may impact upon biodiversity, so far as is consistent with the proper exercising of their functions.

The types of potential impacts on biodiversity that should be considered include:

- Long and short term impacts;
- Detrimental and beneficial impacts;
- Direct and indirect impacts;
- Cumulative impacts; and,
- Potentially threatening processes (Department of Environment Land Water and Planning 2021b).

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It is therefore anticipated that regulators will give due consideration to the FFG Act when considering the approval for the project.

In additional, a ‘Permit to Take Protected Flora’ is required to ‘take’ listed flora species that are members of listed communities or protected flora from public land. ‘Taking’ flora is defined as any

action which results in the removal or death of a native plant. A permit is not required under the FFG Act for private land, unless listed species are present and the land is declared 'critical habitat' for the species. On public land the permit is issued by DELWP.

An evaluation of the likelihood of the presence of significant flora and fauna species on the subject site, including those listed under the FFG Act that have previously been recorded in the vicinity of the site, has been undertaken.

Planning and Environment Act 1987 (Vic)

The *Planning and Environment Act 1987 (Vic)* (P&E Act), later amended by the *Planning and Environment (Planning Schemes) Act 1996 (Vic)* provides the foundation of planning schemes in Victoria. Planning schemes set out policies and provisions for the development and protection of land within each municipality in Victoria.

The *Planning and Environment (Planning Schemes) Act 1996* provides for the Minister for Planning to prepare a set of standard provisions for planning schemes called the Victoria Planning Provisions (VPP). The VPP is a state-wide reference document or template from which planning schemes are sourced and constructed. Incorporation of references such as the *Guidelines for the Removal Destruction or Lopping of Native Vegetation* into Section 12 of the VPP ensures that all municipalities must consider this policy. Local zones and overlays, such as Environmental Significance Overlays, may be incorporated into Section 30 and 40 of the planning provisions by each Council, but only remain relevant within that municipality.

The objectives of the P&E Act are to integrate local land use, development planning and development policy with environmental, social, economic, conservation and resource management policies at State, regional and municipal levels through a set of planning schemes. The Act also establishes a clear procedure for public participation in decision making in amending planning schemes.

Some important sections of the planning scheme, in relation to the ecological values of a site, include:

- Section 12 of the State Planning Policy Framework, which identifies, and aims to protect, key biodiversity assets from inappropriate development;
- Clause 52.17 which identifies where native vegetation removal is exempt from requiring a planning permit; and
- Clause 66 which identifies all of the mandatory referral authorities. In particular, the Victorian Department of Environment, Land Water and Planning is identified as the recommending referral authority if a proponent proposes:
 - *'To remove, destroy or lop native vegetation in the Detailed Assessment Pathway as defined in the Guidelines for the removal, destruction or lopping of native vegetation;*
 - *To remove, destroy or lop native vegetation if a property vegetation plan applies to the site; and*

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- To remove, destroy or lop native vegetation on Crown land which is occupied or managed by the responsible authority' (Department of Environment Land Water and Planning 2022d).

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Catchment and Land Protection Act 1994 (Vic)

The *Catchment and Land Protection Act 1994 (Vic)* (CALP Act) is the principle legislation relating to the management of pest plants and animals in Victoria. Under this Act, landowners have a responsibility to avoid causing or contributing to land degradation. Where possible, landowners are required to conserve soil, protect water resources, eradicate 'regionally prohibited' weeds, prevent the growth and spread of 'regionally controlled' weeds and control pest animals. The CALP Act lists the species that are considered weeds and pest animals.

Wildlife Act 1975 (Vic)

Victoria's *Wildlife Act 1975 (Vic)* and the *Wildlife Regulations 2002 (Vic)* protect all indigenous vertebrate fauna, some non-indigenous vertebrate fauna, and some invertebrate fauna listed as 'threatened' under the FFG Act. The *Wildlife Act 1975 (Vic)* prevents intentional injury to wildlife and stipulates that a licence should be granted where there is a possibility that wildlife are injured, or where wildlife is to be kept, relocated or traded.

In most cases, where the proponent is planning to develop a site, a planning permit approval provides this licencing approval, however, this report advises if an additional permit is required. Circumstances where this legislation may not be relevant is where fish are involved, on public land where additional regulatory approval is required, or where other permits are required (such as where fauna are required to undergo invasive procedures or installation of telemetry systems).

Fisheries Act 1995 (Vic)

The *Fisheries Act 1995 (Vic)* provides the legislative framework for the regulation, management conservation of Victorian fish species and their habitats. As with the Victorian *Wildlife Act 1975* described above, the key method to ensure compliance is through licencing. Where fish, or their habitats, are likely to be impacted, this report will identify additional requirements.

Other relevant policy

Guidelines for the Removal, Destruction or Lopping of Native Vegetation (Department of Environment Land Water and Planning 2017c)

The *Guidelines for the Removal, Destruction or Lopping of Native Vegetation* (Department of Environment Land Water and Planning 2017) were released by DELWP in December 2017. These guidelines supersede the Biodiversity Assessment Guidelines (Department of Environment and Primary Industries 2013).

A permit to remove native vegetation under clause 52.16 and 52.17 of the Victoria Planning Provisions is required unless:

- The table of exemptions to this clause specifically states that a permit is not required;
- It is native vegetation or an area specified in the schedule to the clause;

- A Native Vegetation Precinct Plan corresponding to the land is incorporated into the relevant planning scheme; or
- Bushfire exemptions apply in bushfire prone areas (Department of Environment Land Water and Planning 2017).

The Guidelines describe the permitting process for applications to remove native vegetation on private and public property within Victoria. A key strategy of the State Planning Policy Framework, relating to biodiversity, is to ensure that there is no net loss to biodiversity as a result of the removal, destruction or lopping of native vegetation. This is achieved through iteratively applying the three-step approach:

1. Avoiding the removal, destruction or lopping of native vegetation.
2. Minimising impacts from the removal, destruction or lopping of native vegetation that cannot be avoided.
3. Providing an offset to compensate for the biodiversity impact from the removal, destruction or lopping of native vegetation (Department of Environment Land Water and Planning 2017; p. 4).

Native vegetation is defined in the Victoria Planning Provisions as ‘plants that are indigenous to Victoria, including trees, shrubs, herbs and grasses’ (Department of Environment Land Water and Planning 2017).

Native vegetation is further classified into two categories (Department of Environment Land Water and Planning 2017):

- A remnant patch of native vegetation (measured in hectares) is either:
 - An area of vegetation where at least 25 per cent of the total perennial understorey plant cover is native, or
 - Any area with three or more native canopy trees where the drip line of each tree touches the drip line of at least one other tree, forming a continuous canopy, or
 - Any mapped wetland included in the *Current Wetlands Map*, available in DELWP systems and tools.

OR

- A scattered tree (measured in number of trees), is a native canopy tree that does not form a patch (Department of Environment Land Water and Planning 2017).

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In addition, a canopy tree with a Diameter at Breast Height (DBH) greater than or equal to the large tree benchmark for the relevant bioregional EVC is defined as a large tree. Large trees can be either a large scattered tree or a large tree within a patch.

The contribution that is made by native vegetation to the biodiversity values of Victoria is determined through an assessment of both site-based information and landscape scale information.

At a site-based level, the contribution is determined through an assessment of:

- The extent of native vegetation;

- The number of large trees (either within a patch or scattered trees), relative to the appropriate EVC benchmark;
- The native vegetation condition, which is determined through a Habitat Hectare assessment
- The conservation status of the Ecological Vegetation Class (EVC) to which the vegetation can be classified; and,
- The presence of sensitive wetlands and coastal areas.

At a landscape scale, the value of the vegetation is determined with reference to its strategic context in the Victorian landscape (Department of Environment and Primary Industries 2013). This is determined by the vegetation's 'Strategic Biodiversity Score' (SBS) and its 'Habitat Importance Score' (HIS) for its value to rare and threatened species (Department of Environment Land Water and Planning 2017).

All native vegetation within Victoria has a SBS that has been determined through spatial modelling, based on its rarity, level of depletion, species habitats, and condition and connectivity (Department of Environment Land Water and Planning 2017). SBS scores are between 0 and 1 and are used to determine the offset required for the loss of that vegetation. Native vegetation only has a HIS score if it is habitat for a particular rare or threatened species (Department of Environment Land Water and Planning 2017). There are two types of rare or threatened species habitats that may be provided by native vegetation:

- **Highly localised habitats for rare or threatened species** – where impact to this particular patch of native vegetation could result in a significant biodiversity impact, such as a breeding colony or species with a limited geographic extent.
- **Dispersed rare or threatened species habitats** – where habitat for the threatened species has become depleted or fragmented over time (Department of Environment Land Water and Planning 2017).

The HIS is used to apply the decision guidelines in relation to the removal of a patch of native vegetation and to determine offset requirements (Department of Environment Land Water and Planning 2017).

Applications to remove native vegetation are categorised against one of three assessment pathways. These pathways are categorised as:

- Basic – limited impacts on biodiversity.
- Intermediate – could impact on large trees, endangered EVCs, and sensitive wetlands and coastal areas.
- Detailed – could impact on large trees, endangered EVCs, sensitive wetlands and coastal areas, and could significantly impact on habitat for rare or threatened species (Department of Environment Land Water and Planning 2017).

This is initially determined in two ways, based on the 'location map' and the extent risk of the vegetation proposed to be removed. The location risk is determined with reference to the *Native Vegetation Location Risk* map available on DELWP's website. This map shows whether native vegetation is classified as Location 1, 2 or 3.

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The extent risk is determined based on the amount of native vegetation that is proposed for removal and includes the area (in hectares) of impact to native vegetation, the number of scattered trees, and the number of large trees (Table A5).

Table A5. Assessment pathways for removal of remnant patches of native vegetation (Department of Environment Land Water and Planning 2017).

Extent	Location		
	Location 1	Location 2	Location 3
Less than 0.5 hectares and not including any large trees	Basic	Intermediate	Detailed
Less than 0.5 hectares and including one or more large trees	Intermediate	Intermediate	Detailed
0.5 hectares or more	Detailed	Detailed	Detailed

All applications to remove native vegetation must include the following information:

1. Information about the native vegetation to be removed, including:
 - a. The assessment pathway and reason for the assessment pathway;
 - b. A description of the native vegetation to be removed;
 - c. Maps showing the native vegetation and property in context;
 - d. The offset requirement, determined in accordance with section 5 of the Guidelines that will apply if the native vegetation is approved to be removed.
2. Topographic and land information relating to the native vegetation to be removed;
3. Recent, dated photographs of the native vegetation to be removed;
4. Details of any other native vegetation approved to be removed, or that was removed without the required approvals, on the same property or on contiguous land in the same ownership as the applicant, in the five year period before the application for a permit is lodged;
5. An 'Avoid and Minimise' statement;
6. A copy of any Property Vegetation Plan contained within an agreement made pursuant to section 69 of the *Conservation, Forests and Lands Act 1987* (Vic) that applies to the native vegetation to be removed;
7. Where the removal of native vegetation is to create defensible space, a written statement explaining why the removal of native vegetation is necessary;
8. If the application is under Clause 52.16, a statement that explains how the proposal responds to the Native Vegetation Precinct Plan considerations at decision guideline 8, and
9. An offset statement providing evidence that an offset that meets the offset requirements for the native vegetation to be removed has been identified, and can be secured in accordance with the Guidelines (Department of Environment Land Water and Planning 2017; p. 20-21).

If the application will be assessed under the Detailed Assessment Methodology, the following additional requirements apply:

10. A site assessment report of the native vegetation to be removed, including:

- a. A habitat hectare assessment of any patches of native vegetation, including the condition, extent (in hectares), Ecological Vegetation Class and bioregional conservation status.
 - b. The location, number, circumference (in centimetres measured at 1.3 metres above ground level) and species of any large trees within patches.
 - c. The location, number, circumference (in centimetres measured at 1.3 metres above ground level) and species of any scattered trees, and whether each tree is small or large.
11. Information about impacts on rare or threatened species habitat, including:
- a. The relevant section of the Habitat importance map for each rare or threatened species requiring a species offset.
 - b. For each rare or threatened species that the native vegetation to be removed is habitat for, according to the Habitat importance maps: - the species' conservation status - the proportional impact of the removal of native vegetation on the total habitat for that species - whether their habitats are highly localised habitats, dispersed habitats, or important areas of habitat within a dispersed species habitat (Department of Environment Land Water and Planning 2017; p. 22).

Ten decisions guidelines are identified within the Guidelines that the responsible or referral authority must consider when deciding on an application to remove native vegetation. These are summarised as follows:

1. The degree to which the application avoids and minimises impacts to native vegetation, and where vegetation is proposed to be removed, the highest quality vegetation is avoided;
2. The role that the vegetation to be removed has in relation to landscape services such as erosion control, ground-water quality, waterway quality;
3. The role of the vegetation in the preservation of landscape features;
4. Whether any part of the native vegetation to be removed, destroyed or lopped is protected under the *Aboriginal Heritage Act 2006* (Vic);
5. The need to remove, destroy or lop native vegetation to create defensible space to reduce the risk of bushfire to life and property, having regard to other available bushfire risk mitigation measures;
6. Whether the native vegetation to be removed is in accordance with any Property Vegetation Plan that applies to the site;
7. Whether an offset that meets the offset requirements for the native vegetation to be removed has been identified and can be secured in accordance with the Guidelines;
8. Whether the application is consistent with a Native Vegetation Precinct Plan (where relevant);
9. For applications in both the Intermediate and Detailed Assessment Pathway only, the impacts on biodiversity values that would occur as a result of vegetation removal; and,
10. For applications in the Detailed Assessment Pathway only, the impacts on habitat for rare or threatened species (Department of Environment Land Water and Planning 2017).

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Offset requirements

In all cases where native vegetation is approved for removal, the proponent is liable for the security of an offset site that meets the requirements under the Guidelines. An offset can be either a:

- First party offset – on the same property as the proposed removal of native vegetation, or on another property owned or managed (in the case of Crown land) by the party requiring the offset, or
- Third party offset – on another party’s property. Third party offsets are traded as native vegetation credits.

In most cases a third party offset is the simplest and most cost effective means of securing the required offset.

There are three components to offset requirements:

1. Offset type (general or species).
2. Offset amount (measured in general or species habitat units).
3. Offset attributes.

Two types of offset are identified: General Offsets and Specific Offsets. Specific Offsets may only be required if the native vegetation to be removed is habitat for rare or threatened species that are identified in an Intermediate or Detailed Assessment Pathway application (Department of Environment Land Water and Planning 2017). To determine this, a ‘Specific Biodiversity Equivalence Score’ is calculated by multiplying the habitat hectares with the HIS for each species that may be impacted. For each of the species, this figure is divided by the sum of all the Specific Biodiversity Value Scores calculated for the remaining vegetation under investigation to give a specific offset threshold for each species. If the amount of vegetation removed exceeds this threshold, then a Specific Offset is required. If it does not exceed the threshold, then only a General Habitat Offset is required (Table A6)(Department of Environment Land Water and Planning 2017).

Table A6 summarises the offset requirements for each of the Assessment Pathways and offset types.

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Table A6. Offset requirements for the removal of native vegetation

Assessment Pathway	Offset Type	Offset amount		Offset attributes	
		Risk Adjusted Biodiversity Equivalence	Species Habitat Requirement	Vicinity	Strategic Biodiversity Score
Basic Assessment Pathway	General offset	1.5 times the general biodiversity equivalence score ¹ of the native vegetation to be removed.	No restrictions.	In the same Catchment Management Authority boundary as the native vegetation to be removed.	At least 80 per cent of the SBS of the native vegetation to be removed.
Intermediate or Detailed Assessment Pathway	General offset	1.5 times the general biodiversity equivalence score of the native vegetation to be removed.	No restrictions.	In the same Catchment Management Authority boundary as the native vegetation to be removed.	At least 80 per cent of the SBS of the native vegetation to be removed.
	Specific offset	For each species impacted, 2 times the specific biodiversity equivalence score of the native vegetation to be removed.	Likely habitat for each rare or threatened species that a specific offset is required for, according to the specific-general offset test.	No restrictions.	No restrictions.

¹ The general biodiversity equivalence score is determined by multiplying the vegetation's habitat hectare score by its SBS.

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Appendix 3. Native Vegetation Removal Report

See separate document

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Native Vegetation Removal Report

NVRR ID: 311_20231219_OOQ

This report provides information to support an application to remove, destroy or lop native vegetation in accordance with the [Guidelines for the removal, destruction or lopping of native vegetation](#) (the Guidelines). This report **is not an assessment by DEECA** of the proposed native vegetation removal. Offset requirements have been calculated using modelled condition scores.

Report details

Date created: 19/12/2023

Local Government Area: CARDINIA SHIRE

Registered Aboriginal Party: Bunurong

Coordinates: 145.47904, -38.05376

Address:

PAKENHAM ROAD PAKENHAM 3810

166 PAKENHAM ROAD PAKENHAM 3810

Summary of native vegetation to be removed

Assessment pathway	Basic Assessment Pathway		
Location category	Location 1 The native vegetation extent map indicates that this area is not typically characterised as supporting native vegetation. It does not meet the criteria to be classified as Location Category 2 or 3. The removal of less than 0.5 hectares of native vegetation in this area will not require a Species Offset.		
Total extent including past and proposed removal (ha) <i>Includes endangered EVCs (ha): 0</i>	0.02	<i>Extent of past removal (ha)</i>	0
		<i>Extent of proposed removal - Patches (ha)</i>	0.020
		<i>Extent of proposed removal - Scattered Trees (ha)</i>	0.000
No. Large Trees proposed to be removed	0	<i>No. Large Patch Trees</i>	0
		<i>No. Large Scattered Trees</i>	0
No. Small Scattered Trees	0		

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Offset requirements if approval is granted

Any approval granted will include a condition to secure an offset, before the removal of native vegetation, that meets the following requirements:

General Offset amount ¹	0.008 General Habitat Units
Minimum strategic biodiversity value score ²	0.528
Large Trees	0
Vicinity	Melbourne Water CMA or CARDINIA SHIRE LGA

NB: values within tables in this document may not add to the totals shown above due to rounding

The availability of third-party offset credits can be checked using the Native Vegetation Credit Register (NVCR) Search Tool - <https://nvcr.delwp.vic.gov.au>

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1. The General Offset amount required is the sum of all General Habitat Units in Appendix 1.

2. Minimum strategic biodiversity value score is 80 per cent of the weighted average score across habitat zones where a General Offset is required. Page 2



Application requirements

Applications to remove, destroy or lop native vegetation must include all the below information. If an appropriate response has not been provided the application is not complete.

Application Requirement 1 - Native vegetation removal information

If the native vegetation removal is mapped correctly, the information presented in this Native Vegetation Removal Report addresses Application Requirement 1.

Application Requirement 2 - Topographical and land information

This statement describes the topographical and land features in the vicinity of the proposed works, including the location and extent of any ridges, hilltops, wetlands and waterways, slopes of more than 20% gradient, low-lying areas, saline discharge areas or areas of erosion.

Application Requirement 3 - Photographs of the native vegetation to be removed

Application Requirement 3 is not addressed in this Native Vegetation Removal Report. All applications must include recent, timestamped photos of each Patch, Large Patch Tree and Scattered Tree which has been mapped in this report.

Application Requirement 4 - Past removal

If past removal has been considered correctly, the information presented in this Native Vegetation Removal Report addresses Application Requirement 4.

Application Requirement 5 - Avoid and minimise statement

This statement describes what has been done to avoid and minimise impacts on native vegetation and associated biodiversity values.

Application Requirement 6 - Property Vegetation Plan

This requirement only applies if an approved Property Vegetation Plan (PVP) applies to the property
Does a PVP apply to the proposal?

Application Requirement 7 - Defendable space statement

Where the removal of native vegetation is to create defendable space, this statement:

- Describes the bushfire threat; and

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- Describes how other bushfire risk mitigation measures were considered to reduce the amount of native vegetation proposed for removal (this can also be part of the avoid and minimise statement).

This statement is not required if, the proposed defensible space is within the Bushfire Management Overlay (BMO), and in accordance with the 'Exemption to create defensible space for a dwelling under Clause 44.06 of local planning schemes' in Clause 52.12-5.

Application Requirement 8 - Native Vegetation Precinct Plan

This requirement is only applicable if you are removing native vegetation from within an area covered by a Native Vegetation Precinct Plan (NVPP), and the proposed removal is not identified as 'to be removed' within the NVPP.

Does an NVPP apply to the proposal?

Application Requirement 9 - Offset statement

This statement demonstrates that an offset is available and describes how the required offset will be secured. The Applicant's Guide provides information relating to this requirement.

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Next steps

Applications to remove, destroy or lop native vegetation must address all the application requirements specified in the Guidelines. If you wish to remove the mapped native vegetation you are required to apply for approval from the responsible authority (e.g. local Council). This Native vegetation removal report must be submitted with your application and meets most of the application requirements. The following requirements need to be addressed, as applicable.

Application Requirement 3 - Photographs of the native vegetation to be removed

Recent, dated photographs of the native vegetation to be removed **must be provided** with the application. All photographs must be clear, show whether the vegetation is a Patch of native vegetation, Patch Tree or Scattered Tree, and identify any Large Trees. If the area of native vegetation to be removed is large, provide photos that are indicative of the native vegetation.

Ensure photographs are attached to the application. If appropriate photographs have not been provided the application is not complete.

Application Requirement 6 - Property Vegetation Plan

If a PVP is applicable, it must be provided with the application.

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Appendix 1: Description of native vegetation to be removed

General Habitat Units for each zone (Patch, Scattered Tree or Patch Tree) are calculated by the following equation in accordance with the Guidelines.

General Habitat Units = extent without overlap x condition score x general landscape factor x 1.5, where the general landscape factor = 0.5 + (strategic biodiversity value score/2)

The General Offset amount required is the sum of all General Habitat Units per zone.

Native vegetation to be removed



Information provided by or on behalf of the applicant			Information calculated by NVR Map							
Zone	Type	DBH (cm)	EVC code (modelled)	Bioregional conservation status	Large Tree(s)	Condition score (modelled)	Polygon extent (ha)	Extent without overlap (ha)	SBV score	General Habitat Units
1	Patch	-	HSF_0128	Vulnerable	-	0.380	0.006	0.006	0.660	0.003
2	Patch	-	HSF_0128	Vulnerable	-	0.330	0.011	0.011	0.660	0.005
3	Patch	-	HSF_0128	Vulnerable	-	0.364	0.001	0.001	0.660	0.000
4	Patch	-	HSF_0128	Vulnerable	-	0.340	0.002	0.002	0.660	0.001

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Appendix 2: Images of mapped native vegetation

1. Property in context



-  Proposed Removal
-  Property Boundaries




200 m

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2. Aerial photograph showing mapped native vegetation



 Proposed Removal



40 m

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3. Location Risk Map

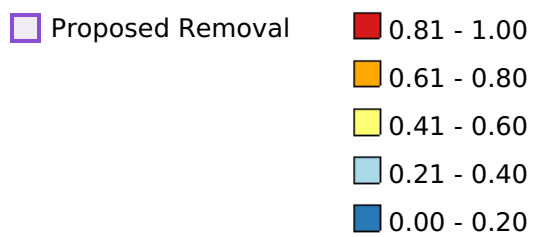


- Proposed Removal
- Location 1
- Location 2
- Location 3



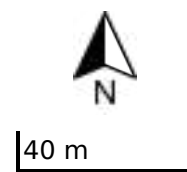
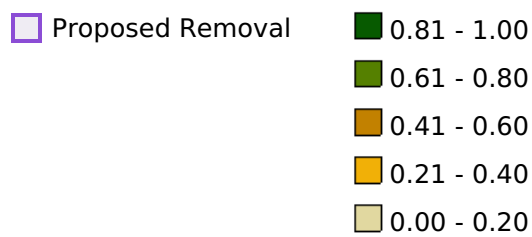
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4. Strategic Biodiversity Value Score Map



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5. Condition Score Map




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6. Endangered EVCs

Not Applicable

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166 PAKENHAM ROAD, PAKENHAM

Attachment 9 Bushfire Management Plan

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PLANNING



December 2023

Bushfire Management Statement 166 Pakenham Road, Pakenham, Victoria



Prepared for:

The Bathla Group

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Cover Photograph

A photograph of the study area taken during the current site assessment, looking west.

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1 Introduction

This Bushfire Management Statement (BMS) relates to the proposed residential townhouse development at 166 Pakenham Road, Pakenham, Victoria (the study area). The study area is located approximately 2.6 kilometres north of the Pakenham town centre, and approximately 52 kilometres south-east of Melbourne's Central Business District. The study area is vacant, having previously been used as a paddock for grazing livestock.

The study area is zoned General Residential Zone and is located within the Cardinia Shire Council municipality. The property is not covered by a Bushfire Management Overlay, but the northern half of the study is located within a designated Bushfire Prone Area. The development has been assessed with regards to 53.02 Bushfire Planning of the Cardinia Planning Scheme to support the subdivision and development of the property.

The BMS contains two components:

- A locality and site description that is used to identify the existing conditions of the site and surrounds, in accordance with the application requirements of Clause 44.06-2; and
- A Bushfire Management Statement, that is used to calculate the defensible space and construction requirements and show how the application meets the relevant objectives, standards, mandatory standards and decision guidelines of Clause 53.02-4 Bushfire Protection Objectives. This includes a 'bushfire hazard site assessment' and 'bushfire hazard landscape assessment'.

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2 Locality and Site Description

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2.1 The Site

2.1.1	Site shape, dimensions, size and planning controls
The shape of the site is:	An irregular, rectangle that extends along its longest boundary to the east of Pakenham Road.
The site has a total area of:	Approximately 0.6 hectares.
The zoning of the site is:	General Residential Zone.
The overlays that apply to the site are:	<ul style="list-style-type: none"> • Environmental Significance Overlay – Schedule 4 (ESO 4) – Pakenham North Ridge • Development Contributions Plan – Schedule 1
2.1.2	Existing use and development on the site
The current use of the site is:	Vacant
The buildings or works located on the site are:	None
2.1.3	Existing access arrangements
The main vehicle access to the site is provided from:	Pakenham Road, which runs the length of the eastern boundary of the study area
Roads and access within the site are currently constructed from the following materials:	None
2.1.4	Existing vegetation
Describe the vegetation on the site, including the type, location, extent and any other relevant information:	<p>The vegetation within the study area is highly modified from its natural state with little native vegetation remaining. It is currently covered by an exotic understorey that has been grazed by livestock in the past and disturbed by earthworks during the creation of the adjoining residential subdivision.</p> <p>Trees and midstorey vegetation are largely absent from the study area, but some native trees and shrubs persist in the Pakenham Road road reserve, and regenerating Black Wattles are growing near the middle of the study area.</p>
2.1.5	Other
Describe other features and constraints on the site that may be relevant to bushfire hazard, which may influence future use and development of the site:	<p>The study area is located near the bottom of a hill that rises to the east of the study area.</p> <p>The study area is largely surrounded by residential development that is proposed or currently under construction. The exception to this is the land to the north of the study area, which remains agricultural land. This land is separated from the study area by the proposed extension of Blessing Rise.</p>

2.2 The locality and surrounding land

2.2.1

Existing use and development on adjacent sites

Describe the land and existing land uses in all directions around the subject land:

The study area is surrounded by residential development on all aspects, except for the north.

North: The properties to the north of the study area remain largely agricultural, consisting of grazed paddocks, with scattered paddocks trees, wind rows and some areas of relatively natural bushland.

East: The land to the east was previously part of the study area prior to its subdivision and development in 2019. Prior to that date it was similar to the study area, but since that time the construction of roads and installation of services has taken place to prepare it for residential construction. Some houses have already been built in this area, and other lots are being prepared for construction.

South: The Galway Rise Estate has gradually been developed to the south of the study area since it was subdivided and infrastructure constructed. Like the properties to the east of the study area, the Galway Rise Estate comprises medium density residential lots and dwellings, with little vegetation remaining in the Estate, apart from exotic grass and other understorey species.

West: Established residential development occurs on the western side of Pakenham Road. .

See also Attachment 1.

2.2.2

Access to infrastructure and existing road networks

Describe the infrastructure and constraints on the site and in the surrounding area (where relevant) including the roads, town water and power supply to the site:

The site has full access to town infrastructure, including sealed, two way roads, reticulated water supply and mains power.

Most of the study area is surrounded by either Pakenham Road to the west, or Blessing Road to the north and north-east. The development proposes a central road to enable access and egress to the north.

2.2.3

Landscape

Describe the surrounding landscape:

The study area is located within a largely urban part of Pakenham. Vegetation within the landscape is highly modified from its natural state, and the study area is surrounded by grazed paddocks where fuel loads are minimal. Patches of woodland are located further from study area, beyond the 150 metre area of investigation.

The landform near the study area is hilly, with a rise from Pakenham Road to the east and a small fall to the south of the study area.

2.2.4	Other characteristics
Are there other features or characteristics in the area relevant to bushfire hazard?	None

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Plate 1. Looking north through the study area, toward the classifiable Grassland vegetation on the adjoining property, beyond the windrow.



Plate 2. Looking south through the study area, towards the township of Pakenham.

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Plate 3. Looking east across the study area up the hill towards the newly subdivided estate.



Plate 4. Looking west through the study area towards Pakenham Road and the established urban development on its western side. The remnant trees within the road reserve are also pictured.

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3 Bushfire Management Statement

3.1 Landscape, Siting and Design Objectives

53.02-4.1 Landscape, siting and design objectives

These objectives:

- Consider how the location affects the bushfire risk to new development
- Select a site for the proposed development on the land
- Consider whether simple design improvements can enhance a building's resilience to embers.

Approved measure AM 2.1 Broader landscape

- The bushfire risk to the development from the landscape beyond the site can be mitigated to an acceptable level

Justification:

The surrounding landscape is defined as a Broader Landscape Type 1 scenario for the following reasons:

- The study area is located in a generally urban area, which is largely cleared of native vegetation within the 150 metre area of interest. Remaining classifiable vegetation comprises grasslands that are grazed and/or slashed, making extreme bushfire behaviour unlikely;
- Bushfire is only likely to approach from the north, where Classifiable Vegetation is grassland which has a relatively low fuel loads. Areas of higher fuel loads (woodlands) persist more than 250 metres away from the eastern boundary of the study area, uphill and at a low risk aspect to the study area;
- The type and extent of vegetation in the local area is unlikely to result in neighbourhood scale destruction of property;
- Emergency access to the subdivision and surrounds is good, provided by the existing road network (Pakenham Road (north/south)), and the proposed new road within the development that will allow traffic movement north towards Blessing Road and then Pakenham Road.

All other Approved Measures can be achieved as detailed below.

Approved measure AM 2.2 Siting

A building is sited to ensure the site best achieves the following:

- The maximum separation distance between the building and the bushfire hazard.
- The building is in close proximity to a public road.
- Access can be provided to the building for emergency service vehicles.

Justification:

- The proposed development will cover the entire site, therefore options to microsite the development are not possible.
- Properties surrounding the study area contain very low fuel loads comprising small residential gardens and planted ornamental trees, or grazed pastures to the north (Attachment 3). However, the classifiable vegetation to the north is separated from the proposed development by Blessing Road, which provides a buffer of approximately 19 metres between the development and this vegetation.
- Access to the development will be achieved via Blessing Road in the north of the study area, which then accesses Pakenham Road.
- The development will have access to the reticulated water supply, with a large number of hydrants currently occurring around the study area (Attachment 2).

Approved measure AM 2.3 Building Design

- A building is designed to reduce the accumulation of debris and entry of embers.

Justification:

The proposed subdivision will require buildings within each lot to be built to the required BAL Rating as outlined below and as stipulated within the residential building standard Australian Standard AS 3959-2009 (Standards Australia 2018) and the ‘Planning for Bushfire Victoria; Guidelines for meeting Victoria’s bushfire planning requirements’ (Table 3, pg 22).

The Bushfire Landscape Concept Plan is shown as Attachment 4.

3.2 Water Supply and Access Objectives

53.02-4.3 Water supply and access objective

This objective is to provide a static water supply for all development and to ensure access on the site is designed and constructed to enhance safety.

Approved measure AM 4.1

A building used for a dwelling (including an extension or alteration to a dwelling), a dependent person’s unit, industry, office or retail premises is provided with:

- A static water supply for fire-fighting and property protection purposes specified in Table 4 to Clause 53.02-5.
- Vehicle access that is designed and constructed as specified in Table 5 to Clause 53.02-5.

The water supply may be in the same tank as other water supplies provided that a separate outlet is reserved for fire-fighting water supplies.

Justification:

Hydrants provide a communal water supply as an alternative measure to a static water supply (i.e. water tanks), which is encouraged by the CFA (Department of Transport Planning and Local Infrastructure 2014). Hydrants were recorded along Pakenham Road, the established estate to the west of Pakenham Road and throughout the Blessing Rise Estate.

The following design and construction requirements will apply to all the proposed internal roads:

- Curves will have a minimum inner radius of 10 metres.
- The average grade will be no more than 1 in 7 (14.4%) (8.1°) with a maximum of no more than 1 in 5 (20%) (11.3°) for no more than 50 metres.
- Dips will have no more than a 1 in 8 (12.5%) (7.1°) entry and exit angle.
- A load limit of at least 15 tonnes will apply and roads will be of all-weather construction.
- Provide a minimum trafficable width of 3.5 metres.
- Be clear of encroachments for at least 0.5 metres on each side and at least 4 metres vertically.
- A cleared area of 0.5 metres is required to allow for the opening of vehicle doors along driveways.

Further Vegetation Management and Fire Fighting Management prescriptions, which are based on the standard CFA Requirements (Country Fire Authority 2011), are provided on the Bushfire Hazard Landscape Plan (Attachment 4).

3.3 Subdivision Objectives

53.02-2.4 Subdivision objectives

These objectives;

- To provide lots that are capable of being developed in accordance with the objectives of Clause 53.02
- Specify bushfire protection measures for all lots at the subdivision stage

Approved measure AM 5.1

An application to subdivide land, other than where **AM 5.2** applies, demonstrates that each proposed lot is capable of meeting:

- The defensible space in accordance with Column A, B or C of Table 2 to Clause 53.02-3
- The approved measures in Clause 53.02-2.1 and Clause 53.02-2.3

Justification:

Approved measure AM 5.2 applies.

Approved measure AM 5.2

An application to subdivide land zoned for residential or rural residential purposes must be accompanied by a plan that shows:

- A building envelope for a single dwelling on each lot that complies with **AM 2.2** and provides defensible space in accordance with:
 - Columns A or B of Table 2 to Clause 53.02-3 for a subdivision that creates 10 or more lots; or

- Columns A, B or C of Table 2 to Clause 53.02-3 for a subdivision that creates less than 10 lots.
- Defendable space wholly contained within the boundaries of the proposed subdivision
- Vegetation management requirements, including inner zone standards (as appropriate), to implement and maintain the defendable space required under this approved measure
- Water supply and vehicle access that complies with **AM 4.1**

Justification:

Classifiable vegetation only persists to the north of the study area. This vegetation has been classified as grassland (Attachment 2), and comprises a mixture of exotic and native grasses that are regularly grazed and slashed. This vegetation is buffered from the proposed development by Blessing Rise, which provides a 19 metre gap between the vegetation to the north and the study area. The proposed townhouses are located a further two metres from Blessing Rise, providing more than the requisite BAL 12.5 defendable space (19 metres).

Elsewhere the proposed subdivision adjoins existing and developing residential development or Pakenham Road. These areas in the south of the study area are located outside the Bushfire Prone Area, but could achieve defendable space objectives anyway.

Based on the above, all lots will have a defendable space in accordance with Column A (BAL 12.5) of Table 2 to Clause 53.02-3 (Attachment 3). This defendable space will fall within Blessing Rise to the north and north-east, Pakenham Road to the south, and existing/proposed development to the south and south-east (which is, in any case, outside the area covered by the Bushfire Management Overlay), ensuring the eaves on any dwelling built within the study area is not within 19 metres of any classifiable vegetation.

Water supply and access objectives, as outlined above, comply with AM 4.1.

Refer to the Bushfire Landscape Concept Plan (Attachment 4) for detailed vegetation management requirements to maintain defendable space.

Approved measure AM 5.3

An application to subdivide land to create 10 or more lots provides a perimeter road adjoining the hazardous vegetation to support firefighting.

Justification:

A perimeter road is not proposed for the subdivision, however existing roads already flank three of the four aspects to the study area (Pakenham Road to the west and Blessing Rise to the north and north-east). The following design and construction requirements will apply to all the proposed internal roads:

- Curves will have a minimum inner radius of 10 metres.
- The average grade will be no more than 1 in 7 (14.4%) (8.1°) with a maximum of no more than 1 in 5 (20%) (11.3°) for no more than 50 metres.
- Dips will have no more than a 1 in 8 (12.5%) (7.1°) entry and exit angle.
- A load limit of at least 15 tonnes will apply and roads will be of all-weather construction.
- Provide a minimum trafficable width of 3.5 metres.
- Be clear of encroachments for at least 0.5 metres on each side and at least 4 metres

vertically. A cleared area of 0.5 metres is required to allow for the opening of vehicle doors along driveways.

- A turning area for fire fighting vehicles, comprising either a Y or T head built to specifications for an 8.8m service vehicle or a turning circle with a minimum 8 metre radius or a through road to the south.

Approved measure AM 5.4

A subdivision manages the bushfire risk to future development from existing or proposed landscaping, public open space and communal areas.

Justification:

The proposed subdivision will be designed to ensure defensible space and construction requirements are not compromised over time. This will be achieved by having all of the defensible space located within the residential subdivision or areas where vegetation is managed and/or in areas where there is no classifiable vegetation.

Further, extreme bushfire behaviour is unlikely due to the generally low risk nature of the classifiable vegetation within the local area, with only small areas of lower risk, classifiable vegetation (grassland) persisting within the 150 metre area of interest.

Landscaping in public open space will follow the CFA Landscape Guidelines (Country Fire Authority 2011).

Alternative measure Alt M 5.5

A building envelope for a subdivision that creates 10 or more lots required under AM 5.2 may show defensible space in accordance with Column C of Table 2 to Clause 53.02-3 where it can be demonstrated that:

- All other requirements of **AM 5.2** have been met
- Less defensible space and a higher construction standard is appropriate having regard to the bushfire hazard landscape assessment.

Justification:

All requirements of AM 5.2 have been met.

3.4 Other Relevant Planning Provisions

The Planning Policy Framework (PPF) provides the broad framework for bushfire protection policy and provisions in the planning scheme. This includes policy seeking to ‘assist to strengthen community resilience to bushfire’ (Department of Environment Land Water and Planning 2022). This report has been designed having regard to the overarching policy objectives of the PPF.

The Cardinia Shire Council has applied a Bushfire Management Overlay to the northern parts of the property and surrounding landscape to the north of the study area. This Bushfire Management Statement has been prepared to respond to the requirements of a Bushfire Management Overlay, and Clause 53.02 – Bushfire Planning.

The decision guidelines require that before deciding on an application or approval of a plan, the responsible authority must consider, among other things, whether the proposal will ‘produce

acceptable outcomes' in relation to the degree of fire hazard associated with the location of the land and the use, development or management of the land so as to minimise any such hazard. This Bushfire Management Statement has made an assessment of fire hazard, resulting in a design response which is responsive to the opportunities and constraints presented by the site and its surrounds.

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4 Overall Conclusion

The proposed construction of a dwelling will meet the standards for a BAL 12.5 rating, which is consistent with Clause 53.02 – Bushfire Planning requirements.

The property is located within a Landscape Type 1 scenario where bushfire attack is extremely unlikely and with surrounding infrastructure that mitigates the likely impacts of bushfire. There is no classifiable vegetation within the defendable space of the proposed development, or within the 150 metre area of interest

The proposed development allows for suitable access for fire fighting vehicles close to the development, with access to the reticulated water system, and static water sources.

Note: *The information provided within this document does not provide guarantees for the safety of buildings, infrastructure or people. Households within Bushfire Prone Areas are encouraged to prepare, practice and review a Bushfire Survival Plan that includes:*

- *Actions before the bushfire season;*
- *Actions during the bushfire season (the Fire Danger Period);*
- *Actions leading up to Fire Risk Days; and,*
- *Your back-up plan.*

Further information and a template for a Bushfire Survival Plan is provided on the CFA website at: cfa.vic.gov.au/plan-prepare.

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Attachment 1 – Landscape Plan

Include a plan or aerial photo of the site that includes:

- *site shape, dimensions, size, orientation and contours*
- *the existing use and siting of buildings or works on the land*
- *existing access arrangements*
- *existing vegetation types, condition and coverage*
- *any other features and constraints of the site relevant to bushfire hazard*
- *north point*
- *legend/key*
- *scale.*








Plan included on next page.

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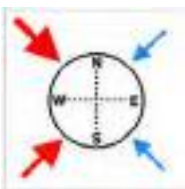
Attachment 1: Landscape Plan

166 Pakenham Road, Pakenham, Victoria

Legend

-  Study Area
-  150m Area of Interest
-  Fire Station
- Bushfire History**
-  BUSHFIRE, 1983
-  BUSHFIRE, 2013
-  10m Contour Levels
-  Public Land

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Closest Neighbourhood Safer Place:
Narre Warren North (Municipal Reserve)
approximately 18 kms north-west of the study area.

Closest Neighbourhood Safer Place:
Junction Village Recreation Reserve.
Approximately 24 kms south-west of the study area.

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Attachment 2 – Existing Site Plan

Include a plan or aerial photo of the site and surrounds (at least 150 metres from the site in all directions) that includes:

- *existing land uses*
- *access to infrastructure*
- *existing road networks*
- *the landscape, including any major landscape features, significant vegetation and topography*
- *any other features or characteristics in the area relevant to bushfire hazard*
- *north point*
- *legend/key*
- *scale.*

Any photos of existing site features can also be attached here.

Plan included on next page.

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Note: Development layout not to scale and indicative only



Attachment 2: Detailed Site Plan
 166 Pakenham Road, Pakenham,
 Victoria

- Legend**
- Study Area
 - 150m Area of Interest
 - Proposed Development**
 - Road
 - Building Envelopes
 - Lot Boundaries

- Classifiable Vegetation**
- Grassland
 - Woodland
 - Fire Hydrant
 - 10m Contour Levels
 - BAL 12.5 Defendable Space (W 22m; N, S, E 19m)

Vegetation that is not marked is considered 'Excludable' or 'Low-threat' vegetation

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Attachment 3 – Bushfire Site Assessment

Table 4.1 Classifiable vegetation under the AS 3959 assessment methodology:

Aspect	North	South	East	West
Vegetation Type	Forest	Forest	Forest	Forest
	Woodland	Woodland	Woodland	Woodland
	Shrubland	Shrubland	Shrubland	Shrubland
	Scrub	Scrub	Scrub	Scrub
	Mallee/Mulga	Mallee/Mulga	Mallee/Mulga	Mallee/Mulga
	Rainforest	Rainforest	Rainforest	Rainforest
	Grassland	Grassland	Grassland	Grassland
	Excludable	Excludable	Excludable	Excludable

Table 4.2 The distance of the proposed development from the classifiable vegetation:

	North	South	East	West
Distance from the proposed development to vegetation	~20m	>150m	~190m	>150m

Table 4.3 The effective slope under the vegetation:

	North	South	East	West
Flat/Upslope	Yes	Yes	Yes	Yes
Downslope	>0-5°	>0-5°	>0-5°	>0-5°
	>5-10°	>5-10°	>5-10°	>5-10°
	>10-15°	>10-15°	>10-15°	>10-15°
	>15-20°	>15-20°	>15-20°	>15-20°

Table 4.4 BAL determination and defensible space:

BAL Standard	Vegetation Classification	Maximum Slope Class	Defendable Space
12.5	Grassland	Flat/Upslope	19m
12.5	Grassland	>0-5°	22m

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Attachment 4 – Bushfire Landscape Concept Plan











Plan included on next page.

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Attachment 4: Bushfire Landscape Concept Plan

166 Pakenham Road, Pakenham, Victoria

Legend

-  Study Area
-  150m Area of Interest
- Proposed Development**
-  Road
-  Building Envelopes
-  Lot Boundaries
- Classifiable Vegetation**
-  Grassland
-  Woodland
-  BAL 12.5 Defendable Space (19m N, S, E; 22m W)
-  Fire Hydrant
-  10m Contour Levels



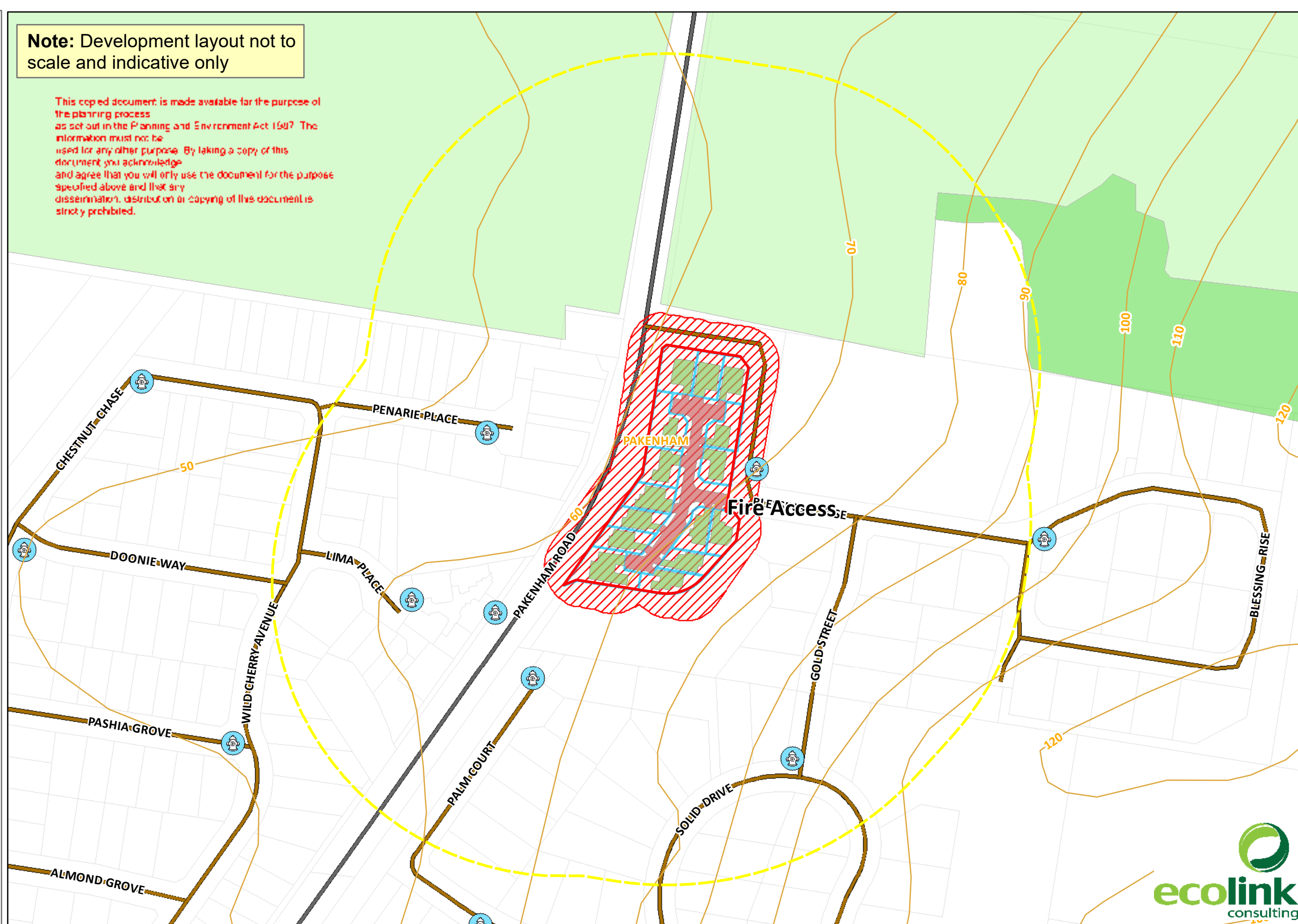
0 20 40 60 80 Meters

This plan is based on the Landscaping for Bushfire; garden design and plant selection (CFA 2011).



Note: Development layout not to scale and indicative only

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Vegetation Management:
Vegetation on each allotment will be managed in the following condition:

- Grass will be short cropped and maintained during the declared fire danger period.
- All leaves and vegetation debris will be removed at regular intervals during the declared fire danger period.
- Remnant trees shown on this plan will be retained.
- Within 10 metres of a building, flammable objects will not be located close to the vulnerable parts of the building.
- Plants greater than 10 centimetres in height will not be placed within 3m of a window or glass feature of any dwelling.
- Shrubs will not be located under the canopy of trees.
- Individual and clumps of shrubs will not exceed 5 sq. metres in area and will be separated by at least 5 metres.
- Trees will not overhang or touch any elements of any dwelling.
- There will be a clearance of at least 2 metres between the lowest tree branches and ground level.

Fire-fighting access meets the following requirements:

- Curves have a minimum inner radius of 10m
- Average grade is no more than 1 in 7, with a maximum of no more than 1 in 5 for no more than 50m
- All weather construction with a minimum trafficable width of 3.5m
- Clear of encroachments for more than 0.5m on each side and 4m in height
- No dips

Water requirements will follow Table 4 in Clause 53-02:

- The development will have access to the public reticulated water supply through fire hydrants in the fronting streets

Limitations:

- The scale is approximate only.
- The landowners may alter the design for their gardens, but will not contradict the advice provided within this Plan (e.g. suitable activities may include vegetable gardens, new garden beds, pathways).
- Where the landowners are unsure if a proposed activity will contradict this Plan, written approval will be sought from the CFA and Council prior to commencement.
- This Plan does not indemnify against bushfire and does not preclude the landowners from having and implementing a Bushfire Safety Plan.

References

- Country Fire Authority (2011). 'Landscaping for bushfire. Garden Design and Plant Selection.' (CFA: Burwood East).
- Department of Environment Land Water and Planning (2022). Planning Schemes Online. Available at <http://services.land.vic.gov.au/maps/pmo.jsp>. Accessed 10 January 2022. Department of Environment Land Water and Planning, Victoria.
- Department of Transport Planning and Local Infrastructure (2014). 'Planning Practice Note 65 - Preparing and Assessing a Planning Application under the Bushfire Provisions in Planning Schemes.' (Department of Transport, Planning and Local Infrastructure Melbourne).
- Standards Australia (2018). 'Australian Standard for Construction of Buildings in Bushfire Prone Areas (AS 3959).' Standards Australia, Sydney.

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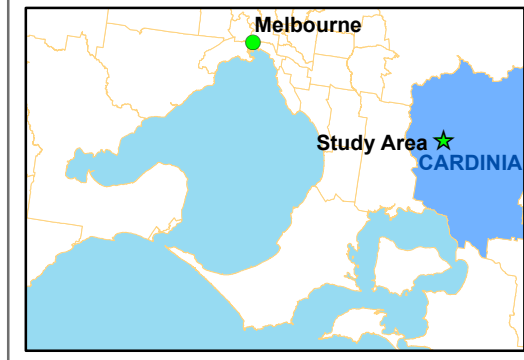
166 Pakenham Road, Pakenham, Victoria

Legend

- Study Area
- 150m Area of Interest
- Proposed Development**
- Road
- Building Envelopes
- Lot Boundaries
- Classifiable Vegetation**
- Grassland
- Woodland
- BAL 12.5 Defendable Space (19m N, S, E; 22m W)
- 🚒 Fire Hydrant
- 10m Contour Levels

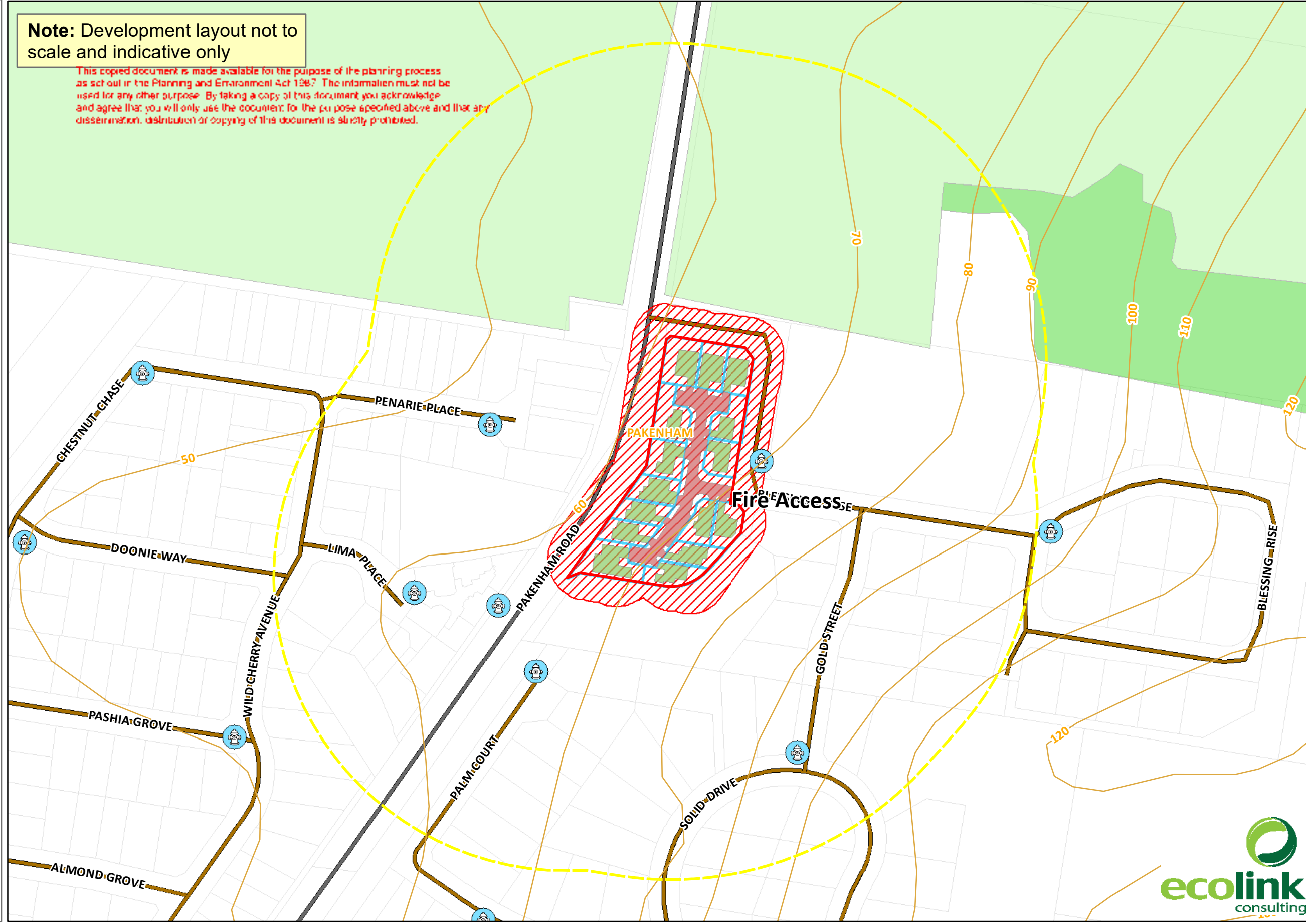


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1 SITE & SURROUNDINGS
DA-01 1:300

LEGEND

- EXISTING SITE
- E-1 EASEMENT FOR ELECTRICITY SUPPLY
- E-3 EASEMENT FOR SEWERAGE
- EASEMENT TO BE REMOVED
- EASEMENT TO BE RETAINED
- TREES
- SRZ
- TPZ
- A SITE
- B NEIGHBOURHOOD PROPERTY

* REFER ARBORICULTURAL IMPACT ASSESSMENT FOR TREE DETAIL



AERIAL VIEW OF SITE AND SURROUNDING



VIEW 1

SOURCE : GOOGLE MAP
IMAGE CAPTURE : SEPT 2023



VIEW 2

SOURCE : GOOGLE MAP
IMAGE CAPTURE : SEPT 2023

REV	DATE	DESCRIPTION	BY
1	24.04.2024	UPDATED AS PER COUNCIL RFI DATED 22.02.2024	VR / PS

Bathla
137 Gilba Road Girraween Sydney NSW 2145
P O Box 270, Wentworthville NSW 2145
T: 02 9636 2465 | F: 02 9688 4762
info@bathla.com.au | www.bathla.com.au

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3. CONTRACTOR TO VERIFY ALL DIMENSIONS ON SITE BEFORE COMMENCING WORK. RESOLVE ALL DISCREPANCIES WITH THE ARCHITECT BEFORE PROCEEDING. FIGURED DIMENSIONS TO BE TAKEN IN PREFERENCE TO SCALED DRAWINGS.

DO NOT SCALE

PROJECT:
166 PAKENHAM ROAD
PAKENHAM

DRAWING TITLE:
SITE & SURROUNDINGS

DA ISSUE			
NORTH:	DATE:	SCALE:	DRAWING No:
	05/07/24	As indicated	DA-01
	DRAWN BY:	CHECKED BY:	REV:
	VR / PS	Checker	1

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1 SITE ANALYSIS / ROOF PLAN
DA-02 1:250

LEGEND

SITE BOUNDARY	VEHICULAR MOVEMENT
WIND DIRECTION	VEHICULAR ACCESS
PROPOSED BUILDING	TREES
NEIGHBOURHOOD PROPERTIES	SRZ
PRIVATE OPEN SPACE	TPZ

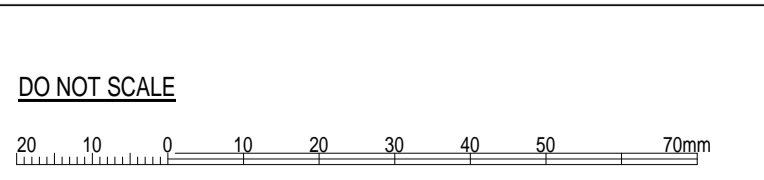
* REFER ARBORICULTURAL IMPACT ASSESSMENT FOR TREE DETAIL

REV	DATE	DESCRIPTION	BY
3	24.04.2024	UPDATED AS PER COUNCIL RFI DATED 22.02.2024	VR / PS
2	11.01.2024	UPDATED AS PER COUNCIL COMMENTS	HR
1	31.07.2023	ISSUED FOR TOWN PLANNER SUBMISSION	HR

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PROJECT:
166 PAKENHAM ROAD
PAKENHAM

DRAWING TITLE:
SITE ANALYSIS / ROOF PLAN

DA ISSUE			
NORTH:	DATE:	SCALE:	DRAWING No:
	11.01.2024	As indicated	DA-02
	DRAWN BY:	CHECKED BY:	REV:
	VR/PS	JAYANTI	3

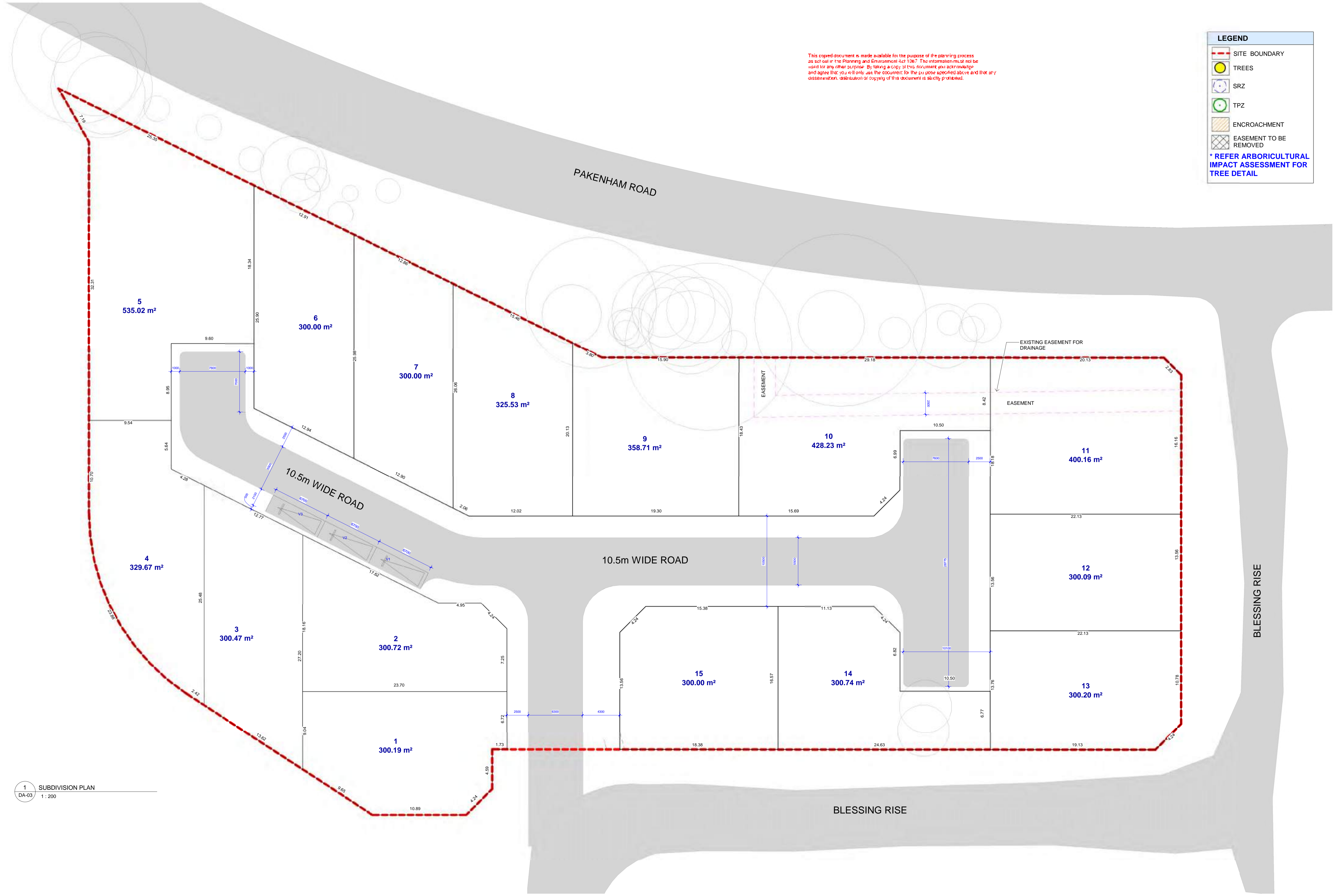
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LEGEND

- SITE BOUNDARY
- TREES
- SRZ
- TPZ
- ENCROACHMENT
- EASEMENT TO BE REMOVED

* REFER ARBORICULTURAL IMPACT ASSESSMENT FOR TREE DETAIL

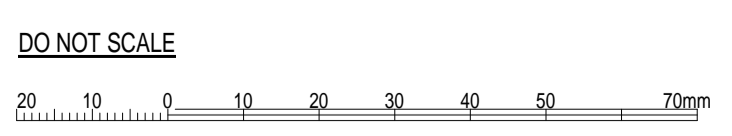


1 SUBDIVISION PLAN
DA-03 1:200

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PROJECT:
166 PAKENHAM ROAD
PAKENHAM

DRAWING TITLE:
FUTURE SUBDIVISION PLAN

NORTH 	DATE:	SCALE:	DRAWING No:
	11.01.2024	As indicated	DA-03
	DRAWN BY:	CHECKED BY:	REV:
JM	VV	3	

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REV	DATE	DESCRIPTION	BY
3	24.04.2024	UPDATED AS PER COUNCIL RFI DATED 22.02.2024	VR / PS
2	11.01.2024	UPADATED AS PER COUNCIL COMMENTS	HR
1	31.07.2023	ISSUED FOR TOWN PLANNER SUBMISSION	HR

ESD SCHEDULE

(to be read in conjunction with sustainable Design Assessment)

WATER EFFICIENCY AND STORMWATER MANAGEMENT

The development will include efficient fittings and fixtures to reduce the volume of mains water used in the development. The following WELS star ratings will be specified:

- Toilets – 4 Star
- Taps (bathroom and kitchen) – 5 Star
- Dishwasher – 5 Star

RAINWATER COLLECTION AND USE

Rainwater runoff from part of the roof area of each residential lots will be collected and stored in rainwater tanks. Each dwelling will be provided with a 4,000L tank (68,000L for the entire development)

If required, a charged pipe system or multiple tanks will be installed to collect water from part of the roof of each dwelling.

In the case of a charged pipe system, the charged pipes will not be running underneath the building footprint (slab) and the stakeholders (builder/developer/architect) will be required to explicitly acknowledge this solution and have the capacity to install it.

Rainwater collected will be used for toilet flushing and laundry in each residential lot. These initiatives will reduce significantly the stormwater impacts of the development and help achieve compliance with the STORM calculator

STORMWATER TREATMENT - RAINGARDENS

Part of the driveway/road runoff will be diverted towards a minimum of 10m² of raingarden before being released at the legal point of discharge.

This will treat the stormwater runoff from part of the roof areas by filtering coarse pollutants before returning the outflows to the legal point of discharge on site.

The raingardens could be implemented within the landscaped areas adjacent to the treated driveways/road and will be installed at least 300mm away from the boundary or structural footings. The exact location should be confirmed with the civil drainage engineer and landscape consultant. The raingardens treating the driveways/roof areas can be installed in-ground.

STORMWATER TREATMENT - RAINGARDENS

All appliances if provided in the development as part of the base building work (e.g. dishwasher) will be chosen within one WELS star of the best available.

WATER EFFICIENT LANDSCAPING

Native or drought-tolerant plants will be implemented for the landscaped areas on site. Use of water or irrigation will not be required after an initial period when plants are getting established. If irrigation is required, it will be connected to rainwater tanks.

TRANSPORT

Bicycle Parking – Residents and Visitors

Residents will be able to securely park their bicycles within each residential lot's garage or POS. This will provide for a total of at least 17 bicycle spaces provided for residents and their visitors. The bike spaces will not be installed over the bonnet.

URBAN ECOLOGY

A large, landscaped area will be provided around the site and within the private open spaces. It will provide the occupants with a pleasant surrounding environment. The design will incorporate a mix of native species to help maintain local biodiversity.

ENERGY EFFICIENCY

Energy and its key elements should be integrated into the design of the proposed development. These elements contribute to reducing greenhouse gas emissions by utilising energy-efficient appliances, energy conservation measures and renewable energy.

Thermal Performance
Energy ratings will be completed at the building approval stage. A commitment is made that the development will meet the energy efficiency requirements of a minimum 6.5-Star average energy rating with no individual dwellings scoring less than 6.0-Stars (10% improvement above BCA requirements). This will be achieved using appropriate insulation levels in all external walls, roofs and floors as well as the use of double-glazing windows throughout habitable rooms. For the purpose of the BESS assessment, 6.5-star average results have been assumed.

Heating and Cooling Systems

Heating and cooling systems can account for up to 40% of a household's energy use. Therefore, to reduce energy consumption heating and cooling will be provided by energy-efficient air conditioners chosen with 3-Star rating minimum (cooling and heating) or within one star of the best available product in the range at the time of purchase whichever is greater.

COP/EER 85% or better than the most efficient equivalent capacity unit available if no star rating is available.

Please note that 3 Star energy rating has been entered in BESS as an average however actual star rating will depend on the product range.

Hot Water Heating

Hot water for the residential lots will be provided with gas instantaneous hot water units chosen as 6 Star minimum or within one star of the best available whichever is greater. Efficiency will be chosen at 85% or better than the most efficient equivalent capacity unit available if no star rating is available.

Internal Lighting

Energy consumption from artificial lighting within the residential lots will be reduced by using LED lighting. A lighting level of 4W/m² will not be exceeded in the residential lots. The use of light internal colours will improve daylight penetration thus reducing the need for artificial lighting

External Lighting

External lighting for the residential lots and common areas (driveway/pathway) will be LED and will include controls such as motion detectors or timers to minimise consumption during off-peak times.

Clothes Drying

External retractable clothes drying lines or racks will be provided for each residential lots within the identified private open spaces.

TOTAL SITE AREA - 6612M²

LOT NO	LOT AREA (m ²)	POS AREA(m ²)	SITE COVERAGE (%)	LOWER GROUND FLOOR AREA(m ²)	LOWER GROUND FLOOR COVERAGE (%)	GROUND FLOOR AREA(m ²)	GROUND FLOOR COVERAGE (%)	FIRST FLOOR AREA (m ²)	FIRST FLOOR COVERAGE (%)	LOT DRIVEWAY (m ²)	PORCH (m ²)	BALCONY (m ²)	PATIO (m ²)	LANDSCAPE AREA (m ²)
1	300.19	82	37.87%	-	-	113.68	37.87%	92.94	30.96%	21.00	3.30	14.59	9.03	148.13
2	300.72	116	37.94%	-	-	114.10	37.94%	80.03	26.61%	18.56	1.96	9.68	7.81	150.71
3	300.47	74	40.30%	121.09	40.30%	86.63	28.83%	-	-	27.57	4.15	-	9.48	149.32
4	329.67	86	33.07%	109.02	33.07%	97.22	29.49%	-	-	24.71	2.98	-	8.88	165.04
5	535.02	138	27.88%	149.17	27.88%	164.20	30.69%	-	-	31.07	5.32	17.33	17.09	271.94
6	300	65	38.36%	115.08	38.36%	93.72	31.24%	-	-	26.39	4.72	-	13.78	131.16
7	300	65	39.52%	118.55	39.52%	98.13	32.71%	-	-	25.65	4.68	-	15.04	123.67
8	325.53	84	36.95%	120.27	36.95%	111.14	34.14%	-	-	33.62	5.01	7.48	13.37	143.71
9	358.71	117	33.81%	121.29	33.81%	108.08	30.41%	-	-	31.39	2.48	-	11.43	188.48
10	428.23	221	22.26%	95.36	22.26%	92.24	21.54%	-	-	28.09	4.14	-	7.53	283.40
11	400.16	188	34.11%	-	-	136.50	34.11%	100.45	33.47%	31.62	2.75	-	9.75	212.36
12	300.09	54	44.85%	-	-	134.61	44.85%	99.05	32.99%	30.45	2.59	-	9.32	115.91
13	300.20	51	45.60%	-	-	136.90	45.60%	101.02	33.65%	29.75	3.18	-	9.75	114.48
14	300.74	133	27.52%	82.76	27.52%	80.67	26.82%	-	-	18.10	3.44	-	9.66	178.27
15	300	74	37.37%	112.11	37.37%	100.71	33.57%	-	-	34.93	3.04	-	8.32	127.28
TOTAL				1148.16		1674.38		473.49		407.59	52.59		160.9	2495.86

TOTAL SITE AREA - 6612M²

- TOTAL GARDEN AREA - 2495.86M²
- INTERNAL PRIVATE ROAD AREA - 966.56M²
- DRIVEWAY AREA (NATURE STRIP) - 180.29M²
- PATHWAY AREA - 97.78M²
- GREEN AREA (NATURE STRIP) - 411.78M²

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COMPLIANCE TABLE

CONTROL	REQUIRED	PROPOSED	COMPLIANCE
MAIN BUILDING SETBACK	4.5m	4.5m or more	Yes
MAX. PROJECTION OF LIVING AREA OR GARAGE	1m	1m	Yes
REAR SETBACK	min. 3m	4m or more	Yes
SECONDARY BUILDING SETBACK (CORNER LOT)	2.0m and 4.0m	2.0m and 4.0m	Yes
SIDE SETBACK	1.0m	1.0m or more	Yes
BUILDING HEIGHT	12M max	< 12M and Standard B17	Yes
SITE COVERAGE	max. 60% OF LOT AREA	Less than 60% OF LOT AREA	Yes
PRIVATE OPEN SPACE	40 m ²	more than 40 m ²	Yes
UNIT CAR PARKING	2 car spaces	2 car spaces	Yes
VISITOR CAR PARKING	-	3 car spaces	Yes
FENCE HEIGHT	Max 2.0m (Transport Zone 2) 1.5m (other street)	2.0m and 1.5m	Yes

ESD SCHEDULE

(to be read in conjunction with sustainable Design Assessment)

CONSTRUCTION, BUILDING & WASTE MANAGEMENT

Building Management and its key elements should be integrated into the design of the proposed development. These principles contribute to ensuring efficient and effective ongoing building performance. Waste management and its key elements should be integrated into the design of the proposed development. These principles contribute to ensuring minimal waste is transported to landfill through disposal, recycling and on-site waste storage and/or collection methods.

Metering and Monitoring

Separate utility meters (water, gas, and electricity) will be provided for each townhouse. This will allow residents to monitor and reduce their consumption.

Construction Waste Management

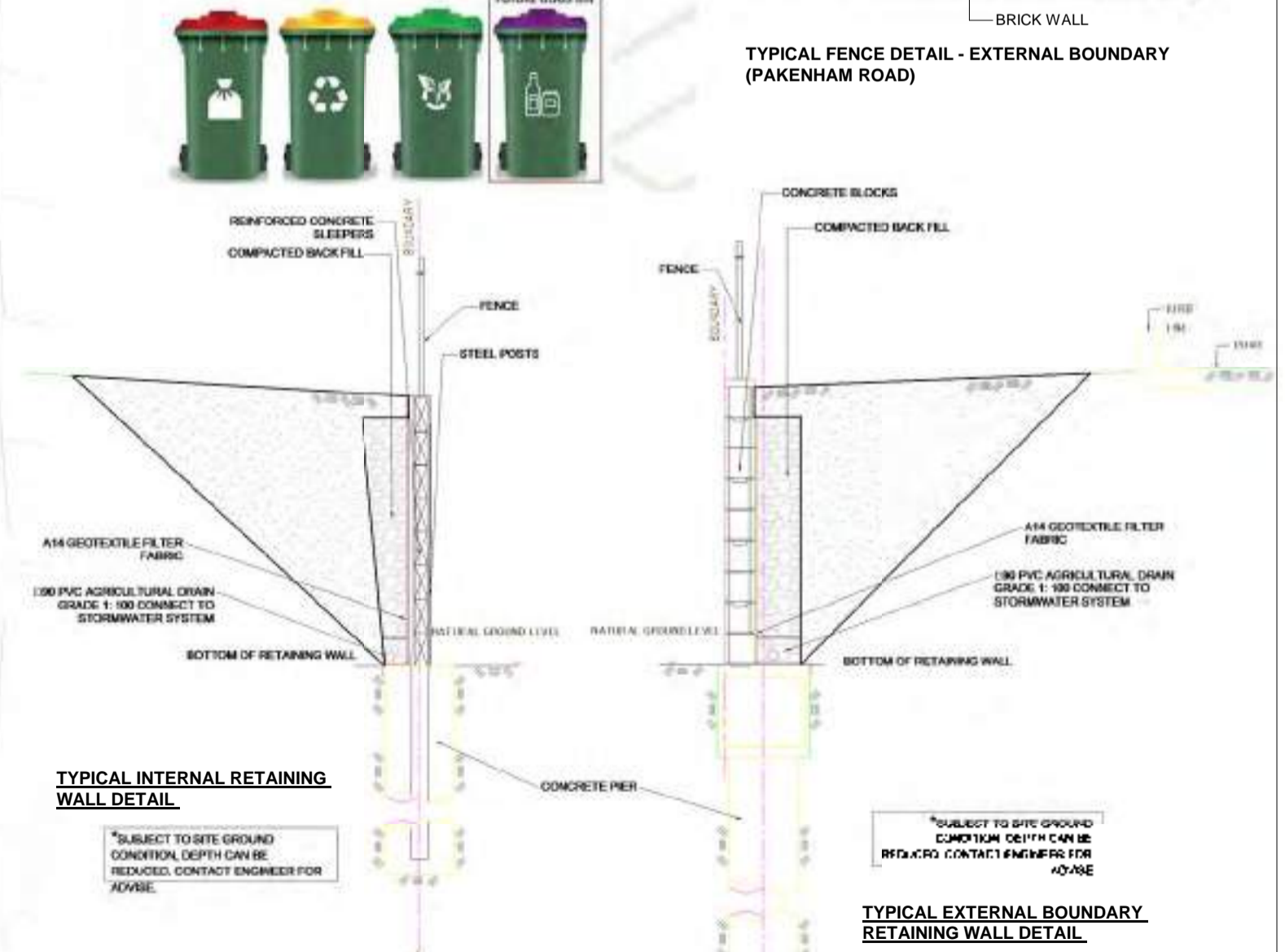
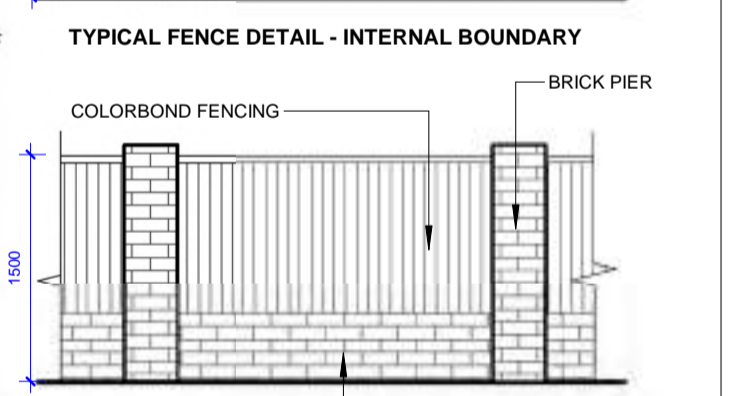
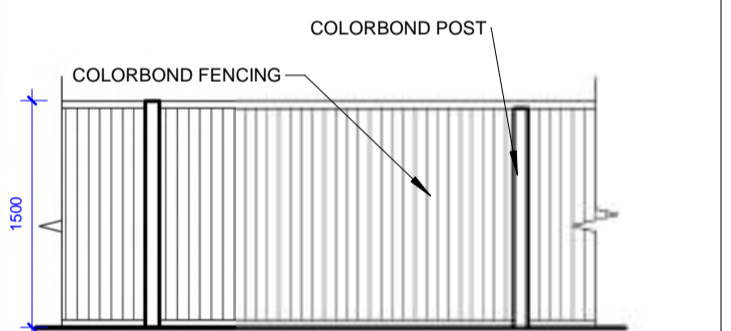
A waste management plan will be developed to all on-site staff at a site orientation session to ensure that the waste generated on-site is minimized and disposed of correctly. A minimum of 90% of all construction waste generated on-site will be reused or recycled.

Construction Environmental Management

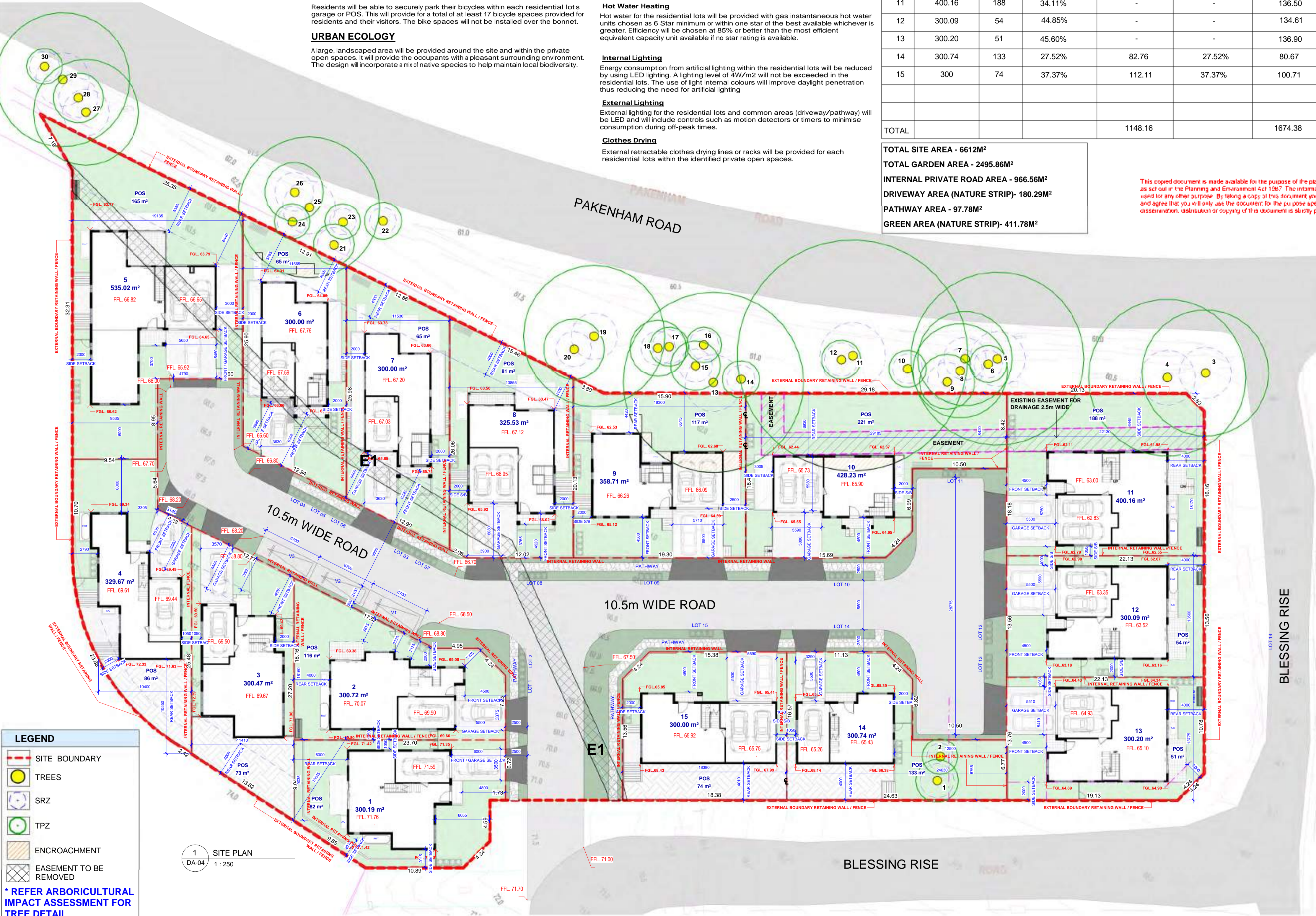
The builder will identify environmental risks related to construction and include management strategies such as maintaining effective erosion and sediment control measures during construction and operation and ensure that appropriate staging of earthworks (e.g. avoid bare earthworks in high-risk areas of the site during dominant rainfall periods).

Operational Waste

Each townhouse will be provided with bins for general recycling waste and garden/organic waste and provision for future glass waste bins.



NOTE: DOUBLE GLAZING ON ALL HABITABLE ROOMS



LEGEND

- SITE BOUNDARY
- TREES
- SRZ
- TPZ
- ENCROACHMENT
- EASEMENT TO BE REMOVED

*** REFER ARBORICULTURAL IMPACT ASSESSMENT FOR TREE DETAIL**

1 SITE PLAN
DA-04 1:250

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PROJECT:
166 PAKENHAM ROAD
PAKENHAM

DRAWING TITLE:
SITE PLAN

DA ISSUE

DATE: 11.01.2024
SCALE: As indicated
DRAWING NO: DA-04

DRAWN BY: JM
CHECKED BY: VV
REV: 3



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LEGEND

- SITE BOUNDARY
- TREES
- SRZ
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- ENCROACHMENT
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* REFER ARBORICULTURAL IMPACT ASSESSMENT FOR TREE DETAIL

1 00_LOWER GROUND FLOOR PLAN
DA-05 1:200

NOTE: DOUBLE GLAZING ON ALL HABITABLE ROOMS **DA ISSUE**

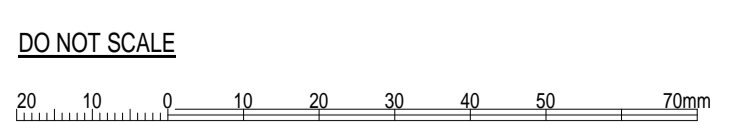
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3	24.04.2024	UPDATED AS PER COUNCIL RFI DATED 22.02.2024	VR / PS
2	11.01.2024	UPDATED AS PER COUNCIL COMMENTS	HR
1	31.07.2023	ISSUED FOR TOWN PLANNER SUBMISSION	HR

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PROJECT:
166 PAKENHAM ROAD
PAKENHAM

DRAWING TITLE:
LOWER GROUND FLOOR PLAN

NORTH:	DATE:	SCALE:	DRAWING No:
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LEGEND

- SITE BOUNDARY
- TREES
- SRZ
- TPZ
- ENCROACHMENT
- EASEMENT TO BE REMOVED

* REFER ARBORICULTURAL IMPACT ASSESSMENT FOR TREE DETAIL



1 01_GROUND FLOOR PLAN
DA-06 1:200

NOTE: DOUBLE GLAZING ON ALL HABITABLE ROOMS

DA ISSUE

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PROJECT:
166 PAKENHAM ROAD
PAKEMHAM

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GROUND FLOOR PLAN

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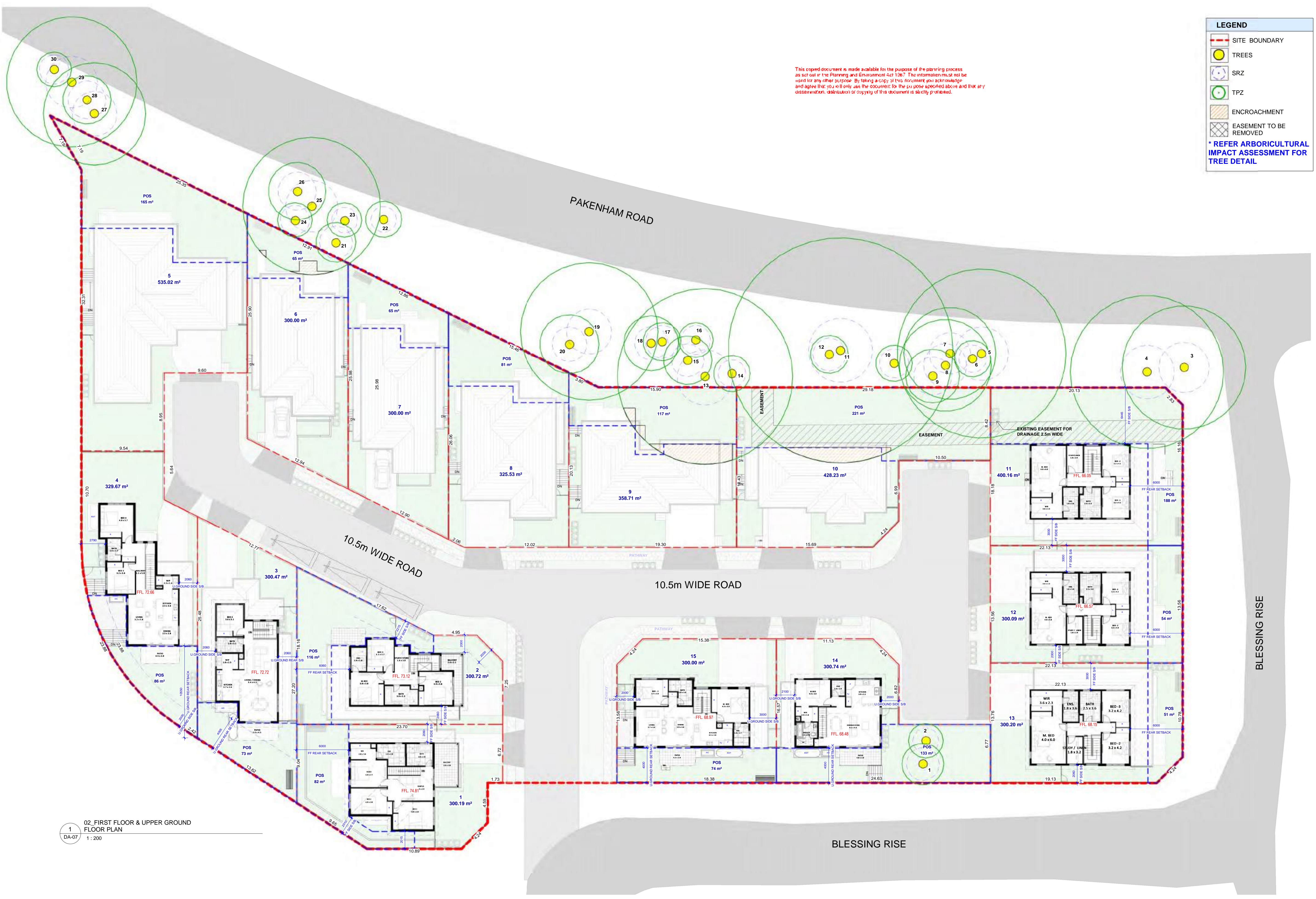
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LEGEND

- SITE BOUNDARY
- TREES
- SRZ
- TPZ
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1 02. FIRST FLOOR & UPPER GROUND FLOOR PLAN
DA-07
1:200

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DO NOT SCALE

PROJECT:
166 PAKENHAM ROAD
PAKENHAM

DRAWING TITLE:
FIRST FLOOR & UPPER GROUND FLOOR PLAN

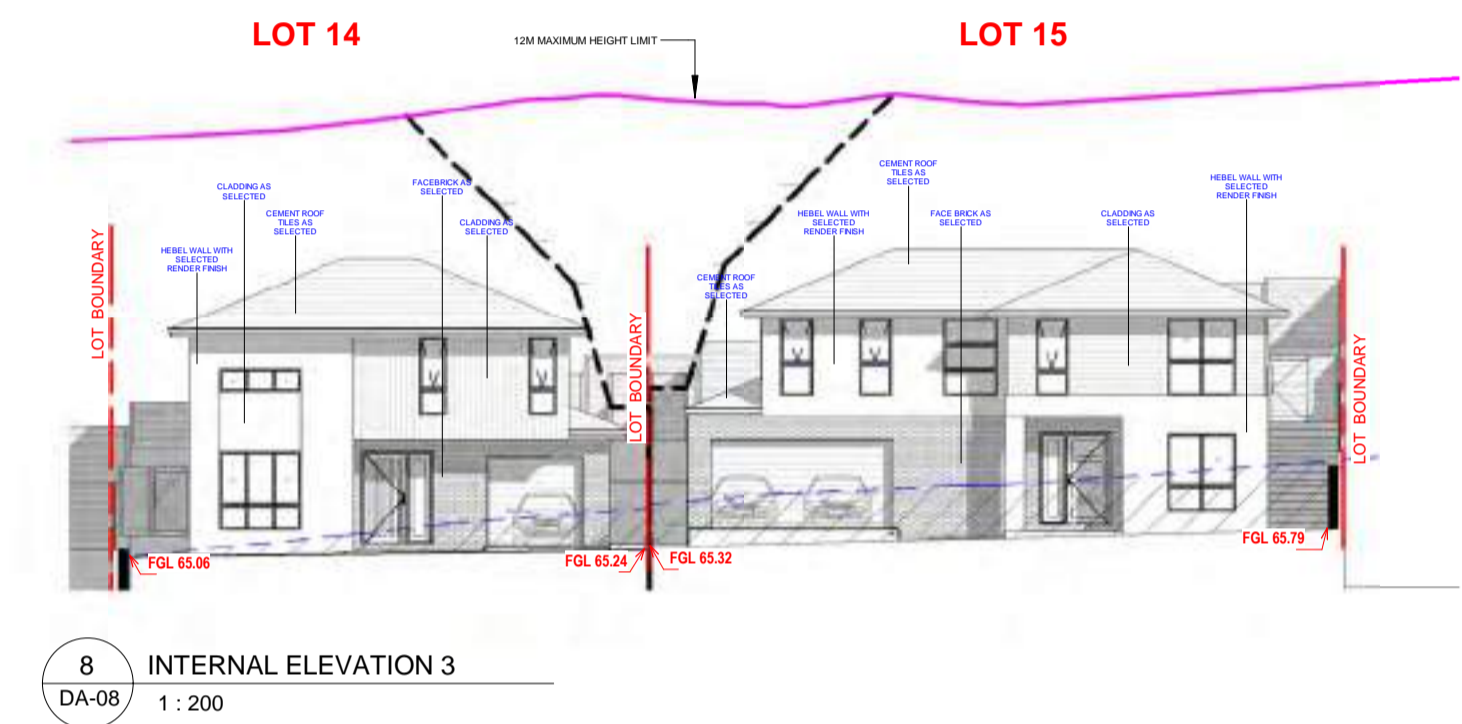
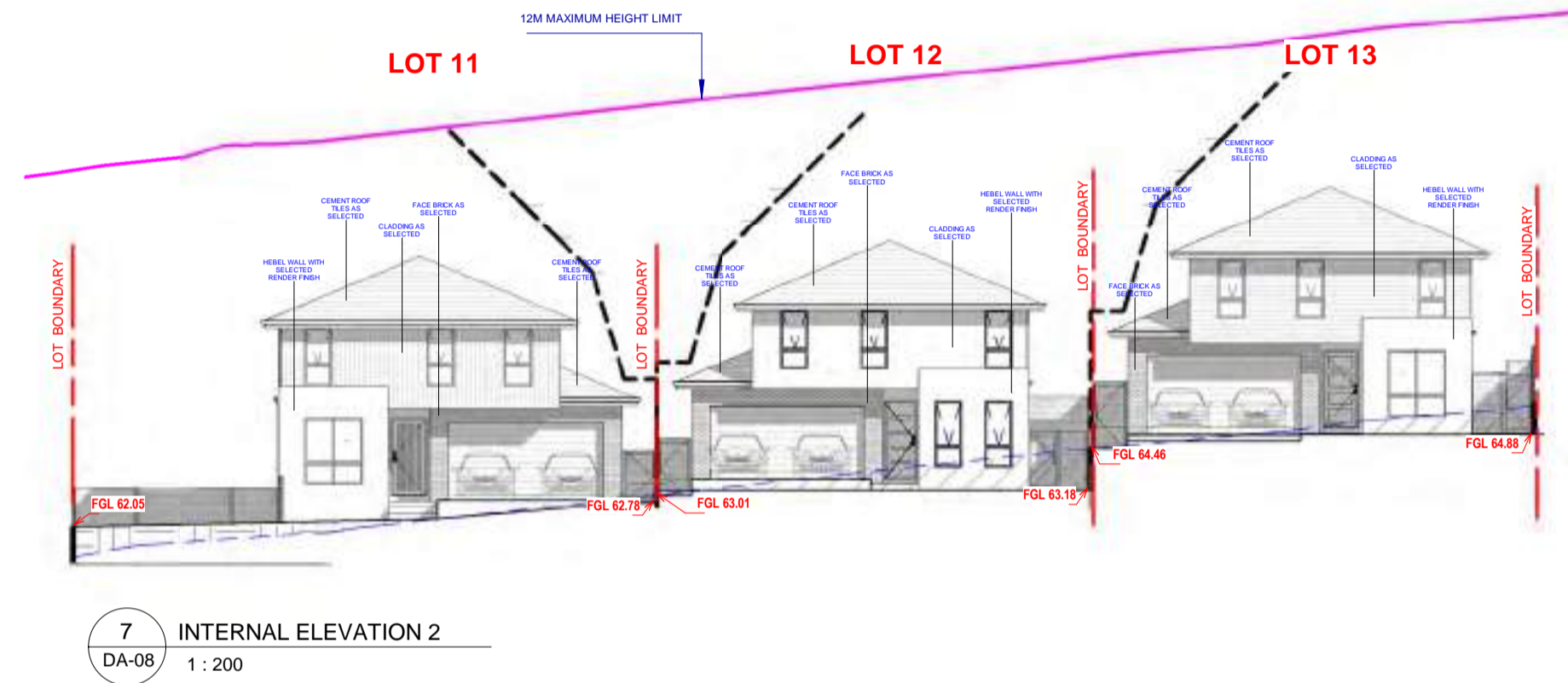
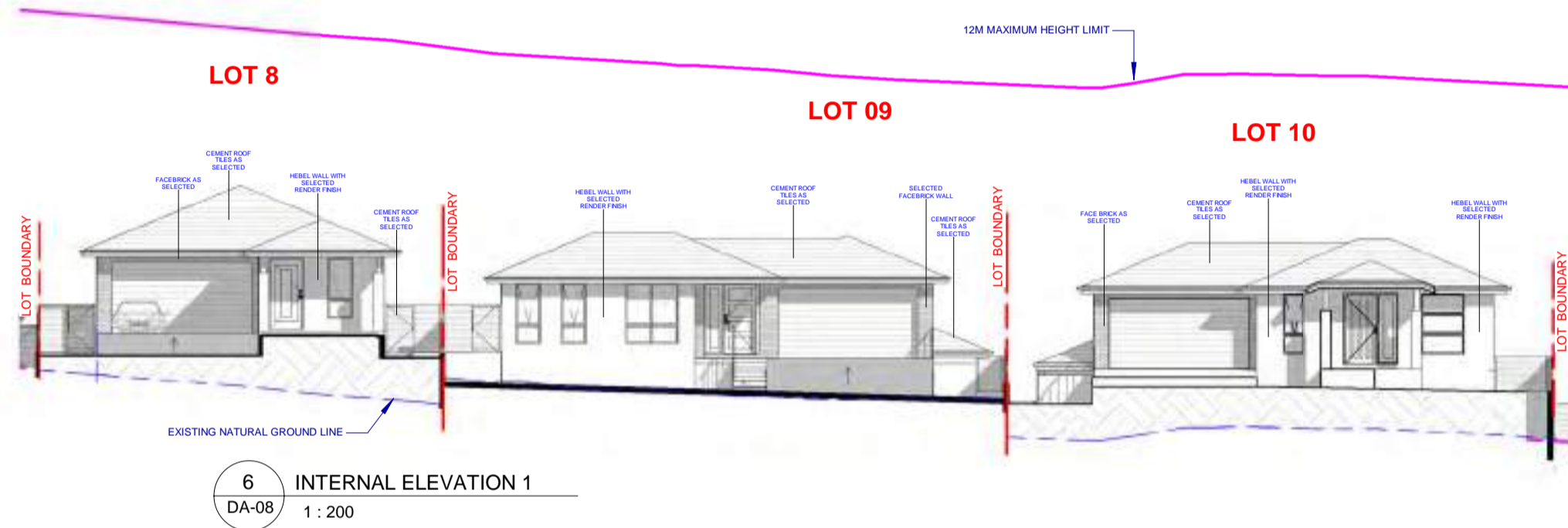
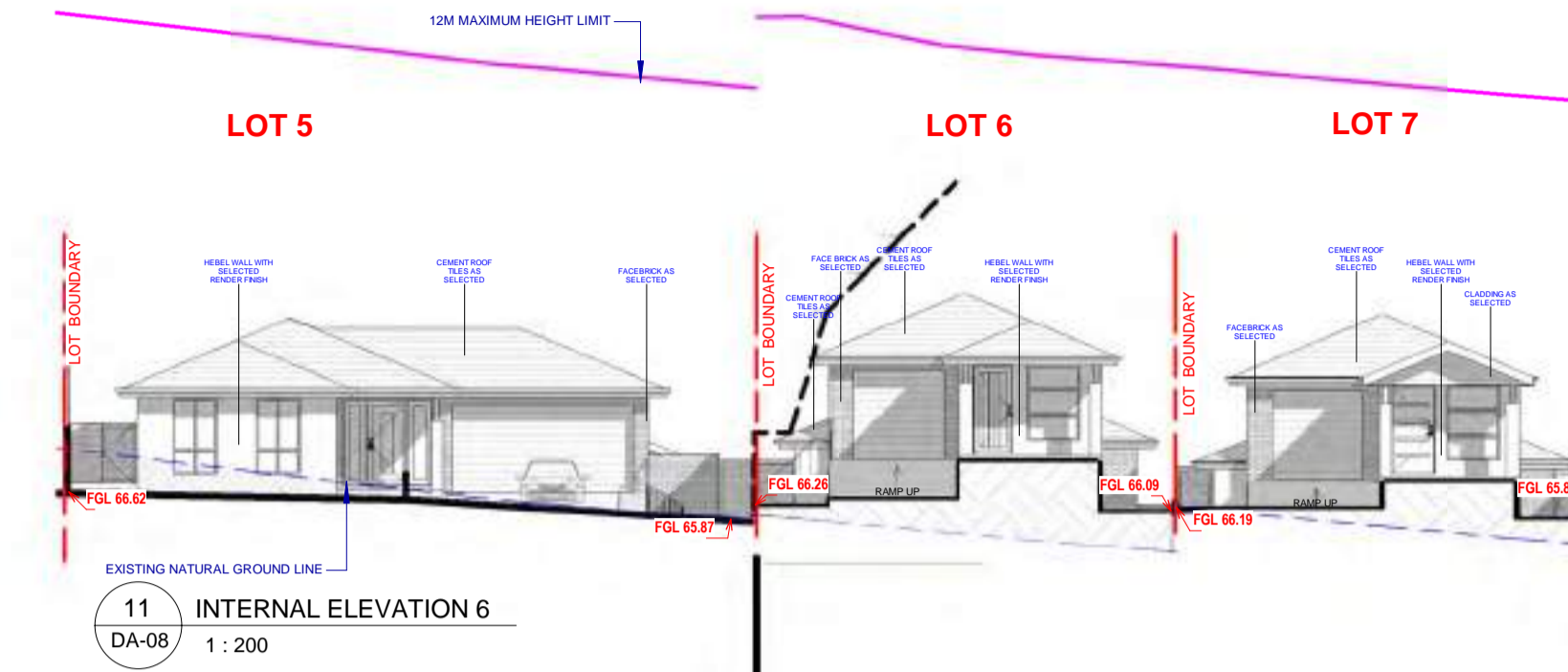
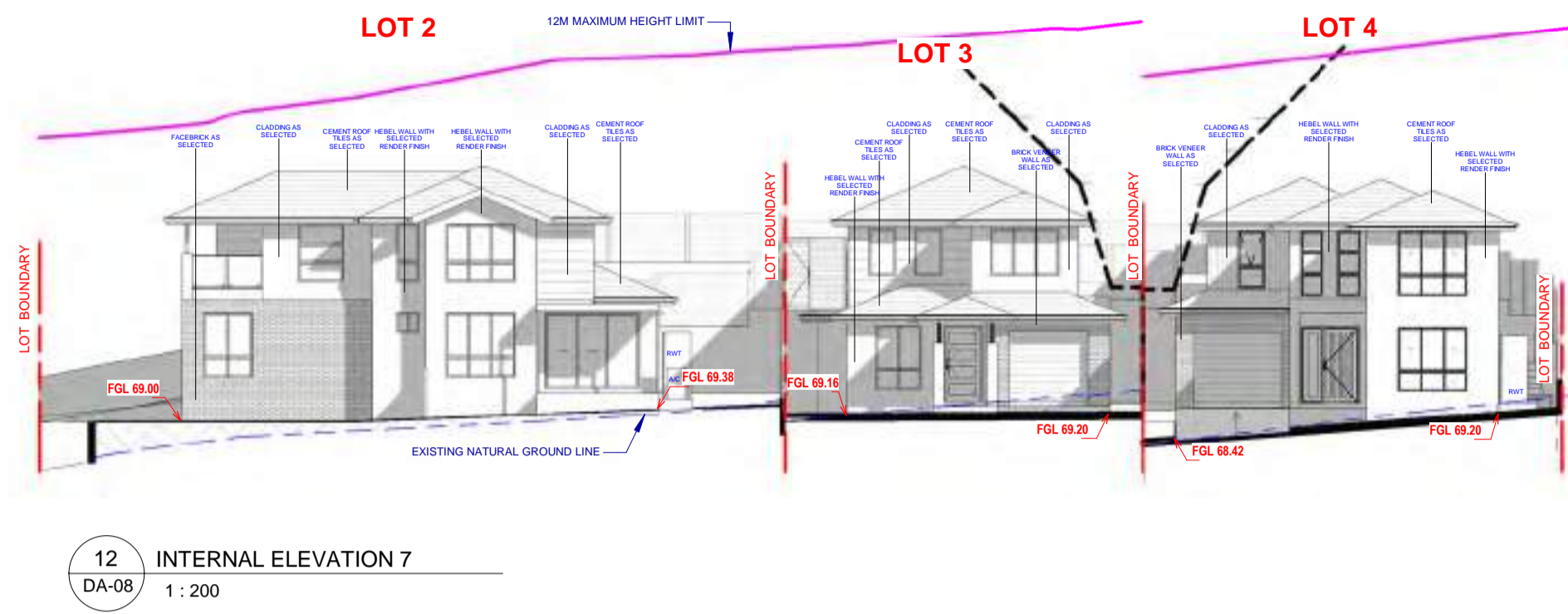
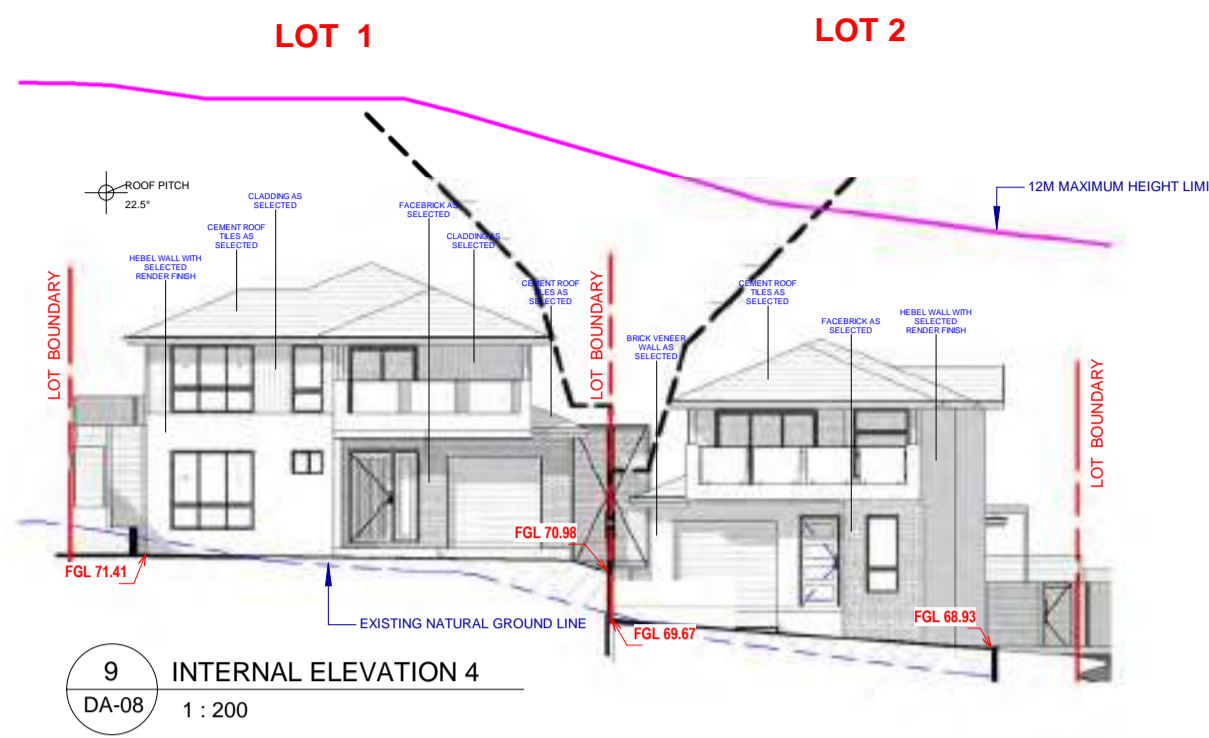
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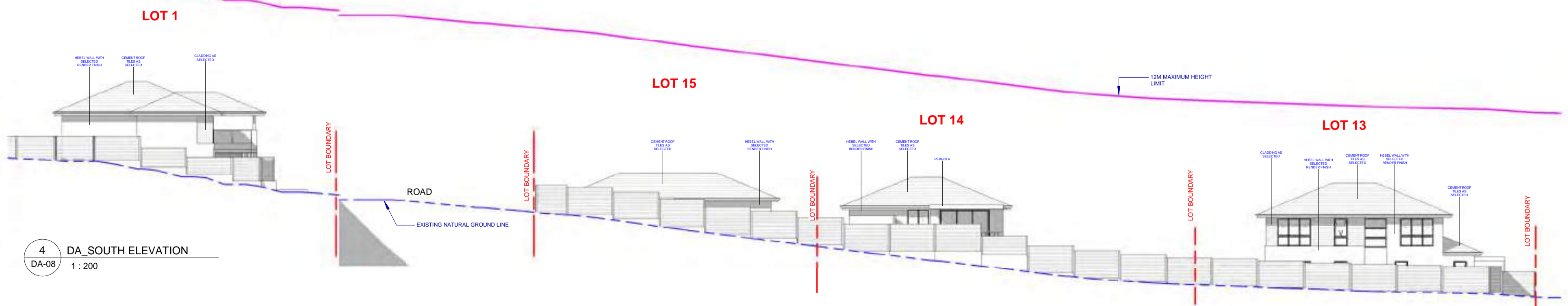
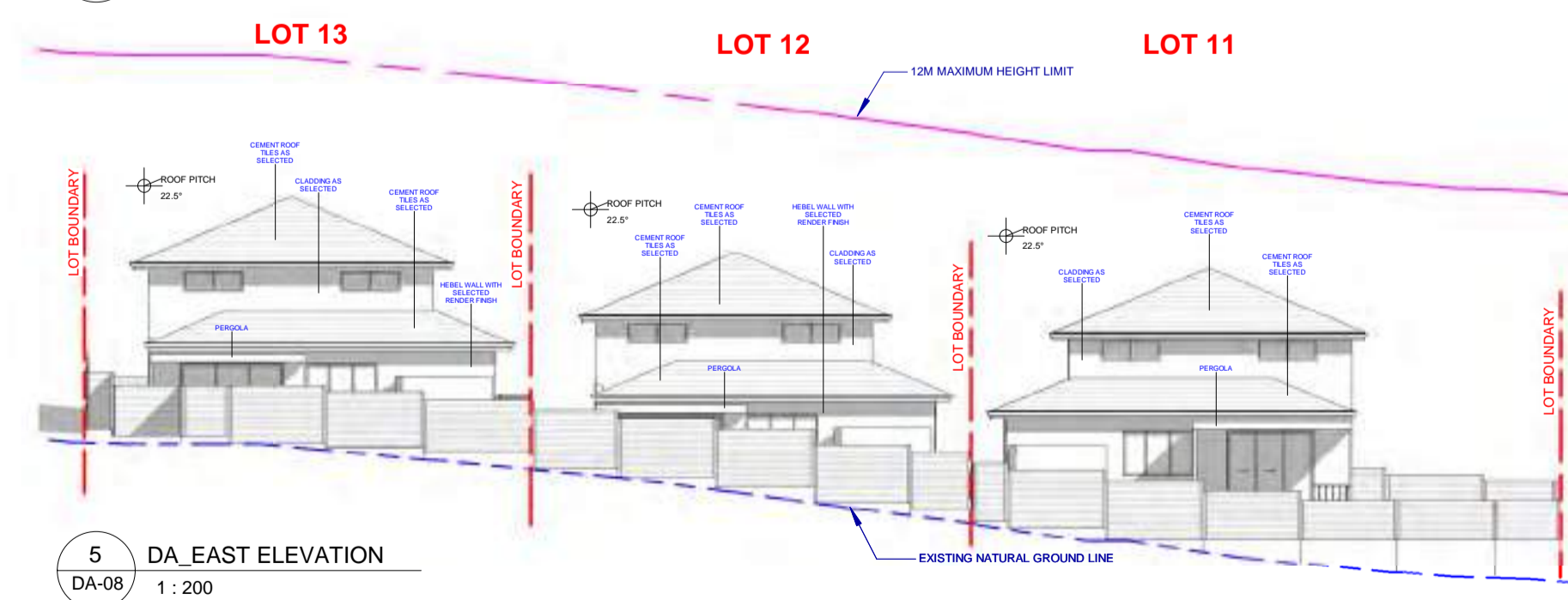
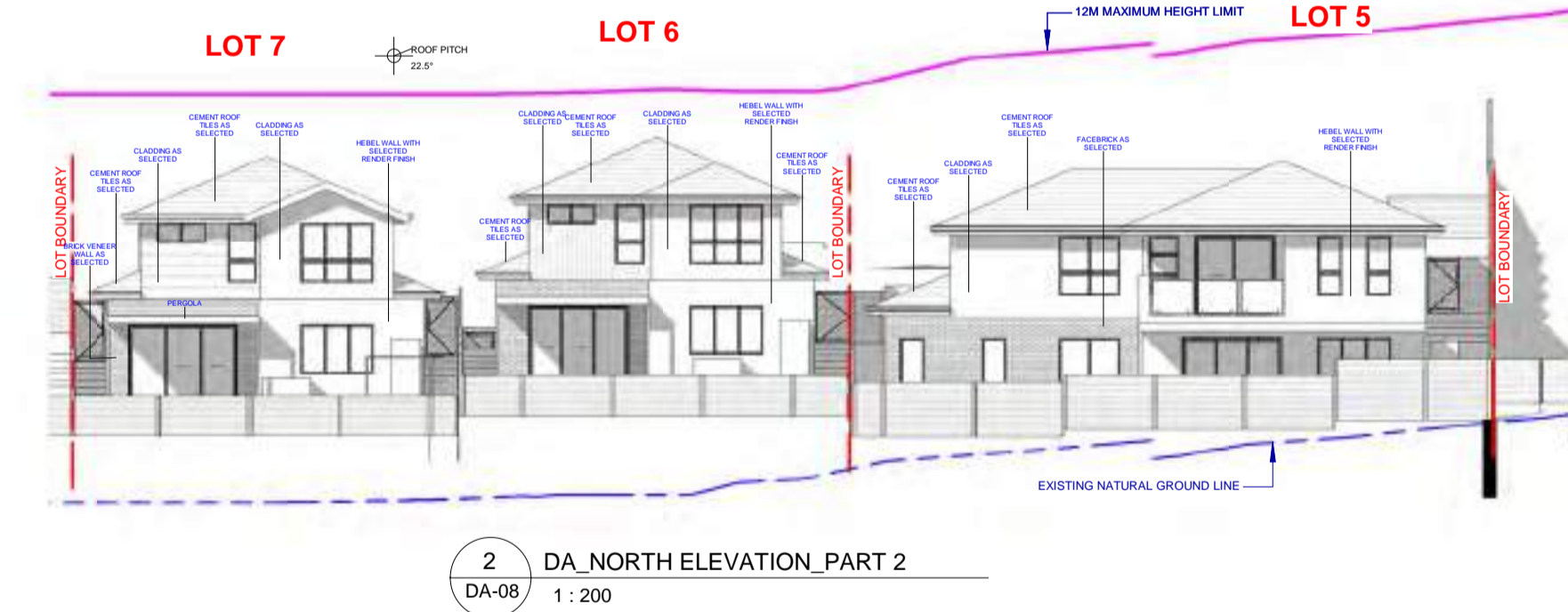
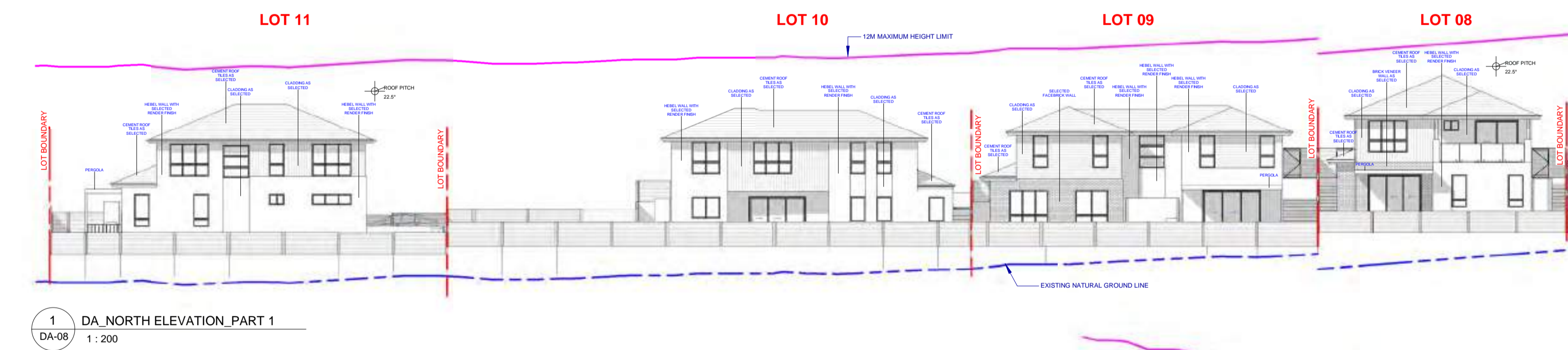
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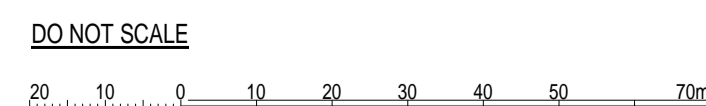
NOTE: DOUBLE GLAZING ON ALL HABITABLE ROOMS

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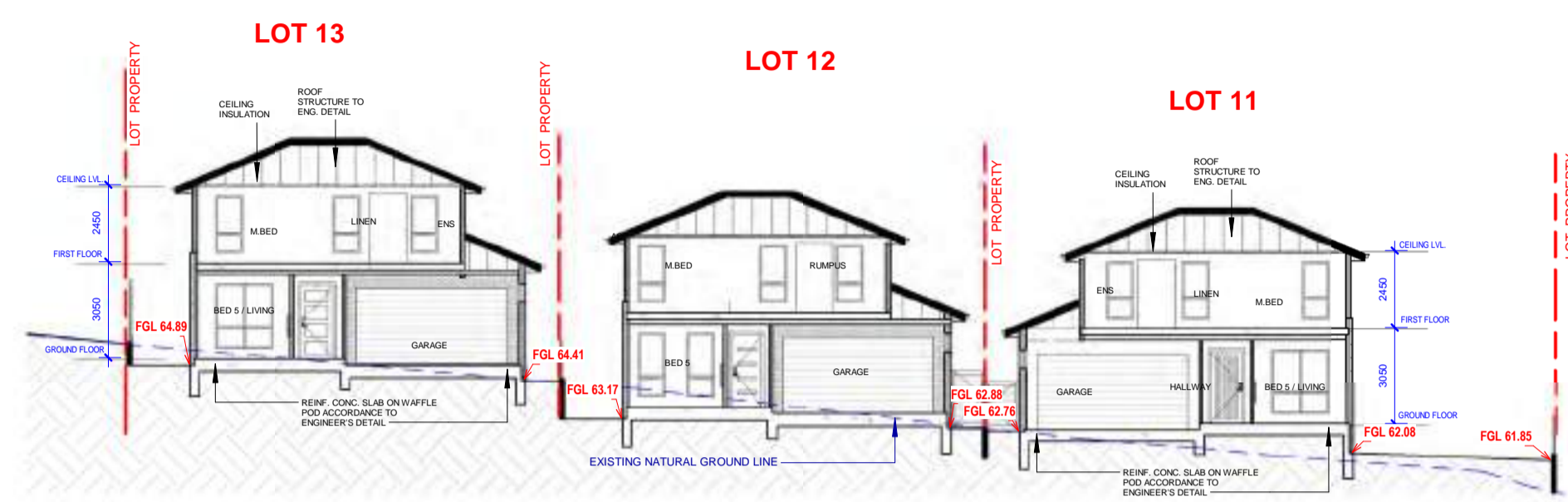


PROJECT:
166 PAKENHAM ROAD
PAKENHAM

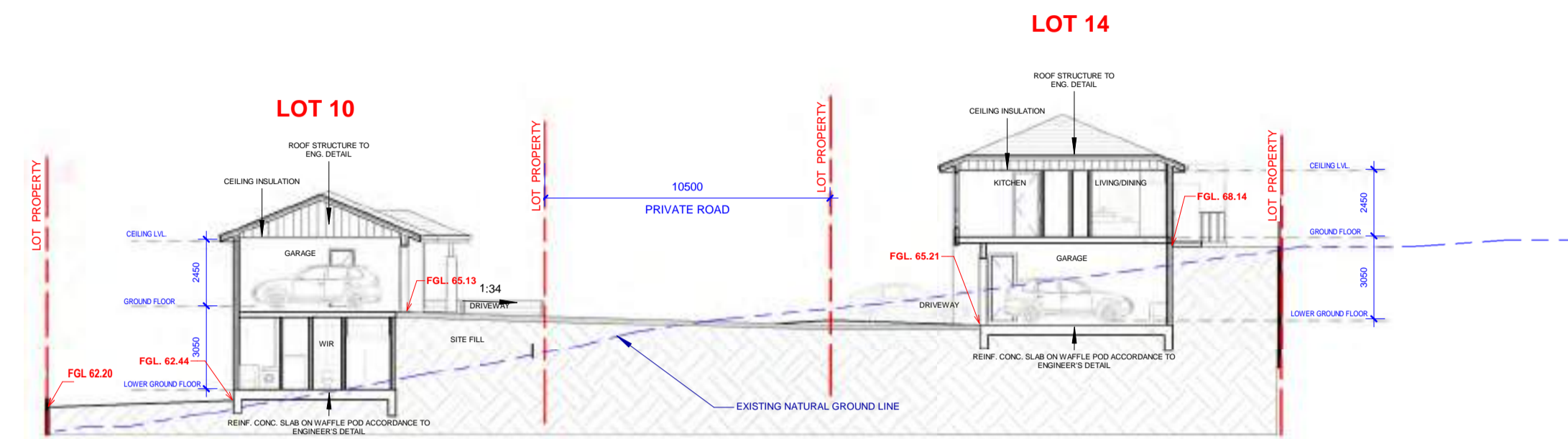
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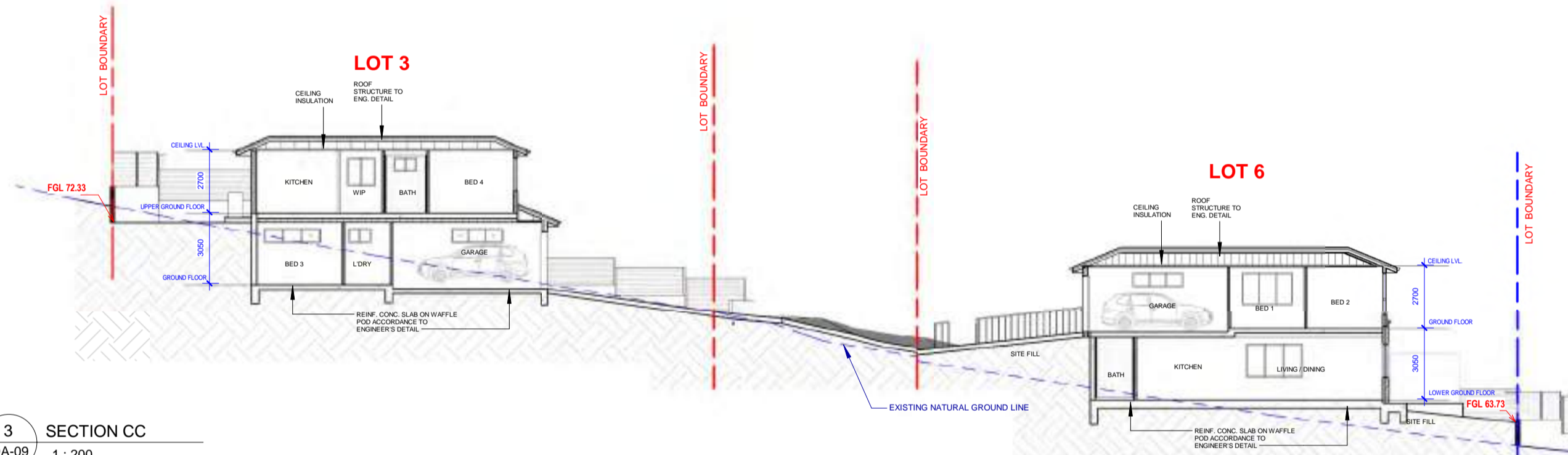
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1 SECTION AA
DA-09 1:200



2 SECTION BB
DA-09 1:200



3 SECTION CC
DA-09 1:200



4 SECTION DD
DA-09 1:200

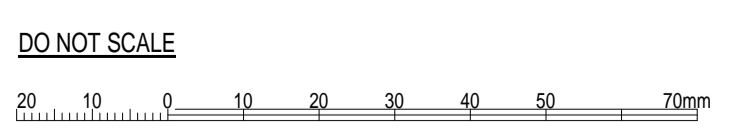
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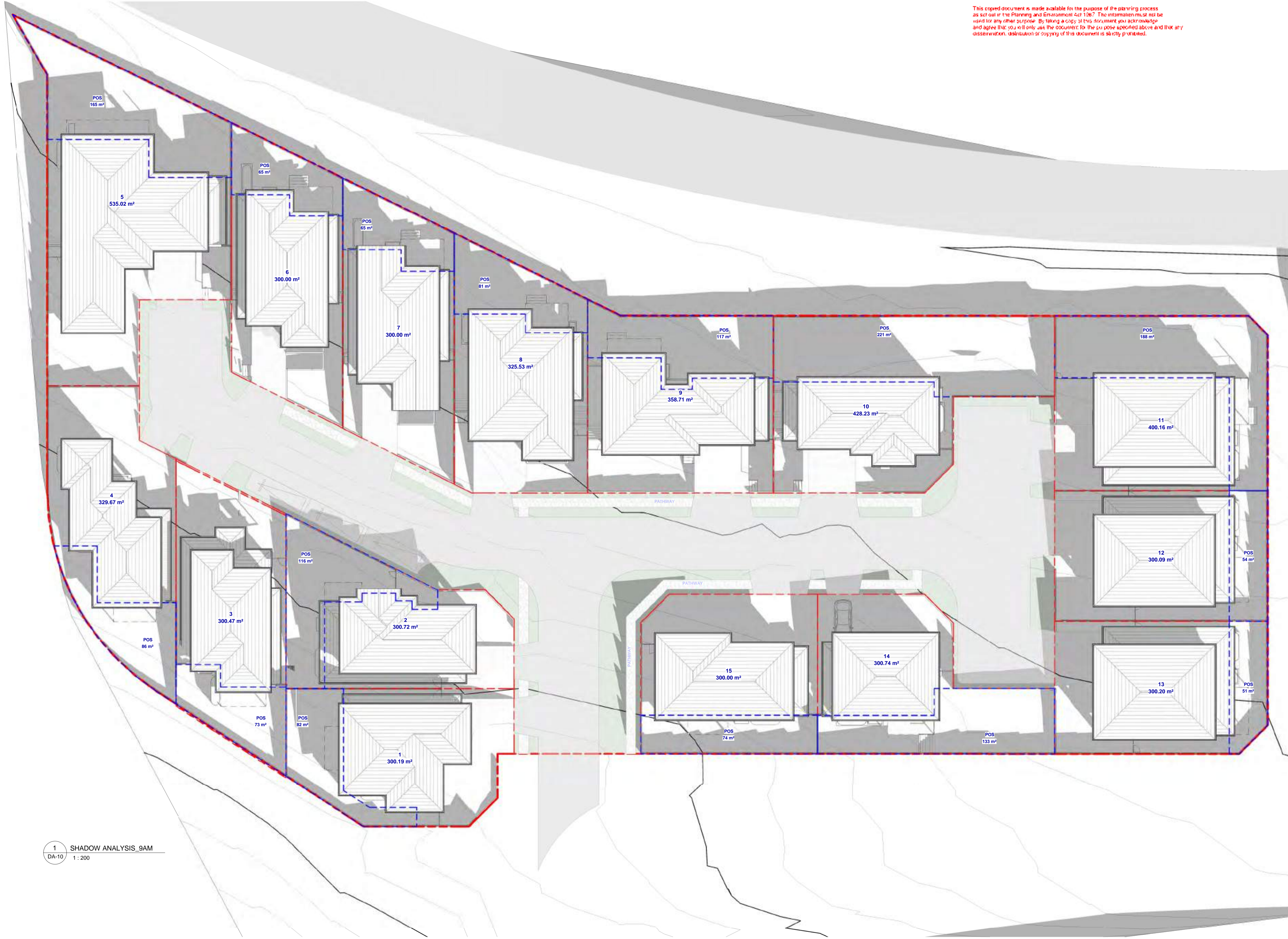
PROJECT:
166 PAKENHAM ROAD
PAKENHAM

DRAWING TITLE:
SECTIONS

DATE:		SCALE:	DRAWING No:
11.01.2024		1:200	DA-09
DRAWN BY:	CHECKED BY:	REV:	
VR/PS	Checker	3	

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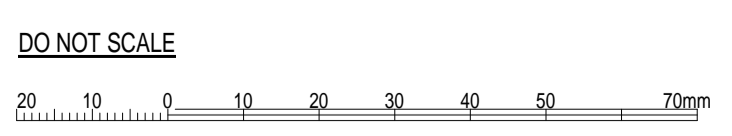


1 SHADOW ANALYSIS_9AM
DA-10 1:200

REV	DATE	DESCRIPTION	BY
3	24.04.2024	UPDATED AS PER COUNCIL RFI DATED 22.02.2024	VR / PS
2	11.01.2024	UPADATED AS PER COUNCIL COMMENTS	HR
1	31.07.2023	ISSUED FOR TOWN PLANNER SUBMISSION	HR

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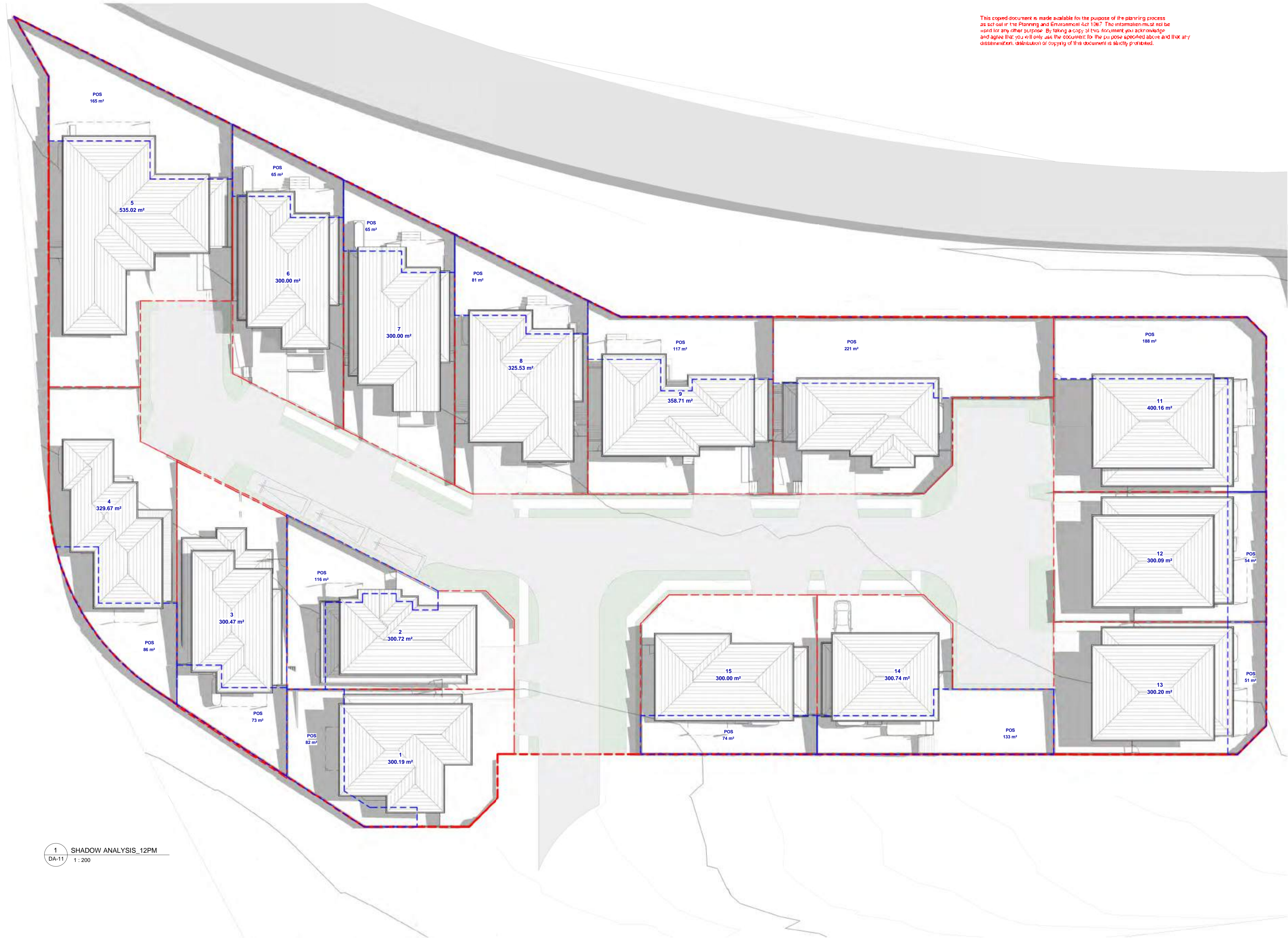
PROJECT:
166 PAKENHAM ROAD
PAKENHAM

DRAWING TITLE:
SHADOW ANALYSIS - 9AM

DA ISSUE			
DATE:	SCALE:	DRAWING No:	
11.01.2024	1:200	DA-10	
DRAWN BY:	CHECKED BY:	REV:	
HR	Checker	3	

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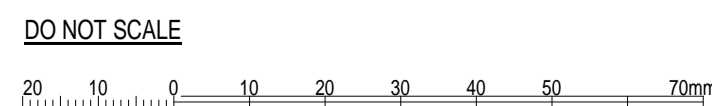


1 SHADOW ANALYSIS - 12PM
DA-11 1 : 200

REV	DATE	DESCRIPTION	VR / PS BY
1	24.04.2024	UPDATED AS PER COUNCIL RFI DATED 22.02.2024	VR / PS

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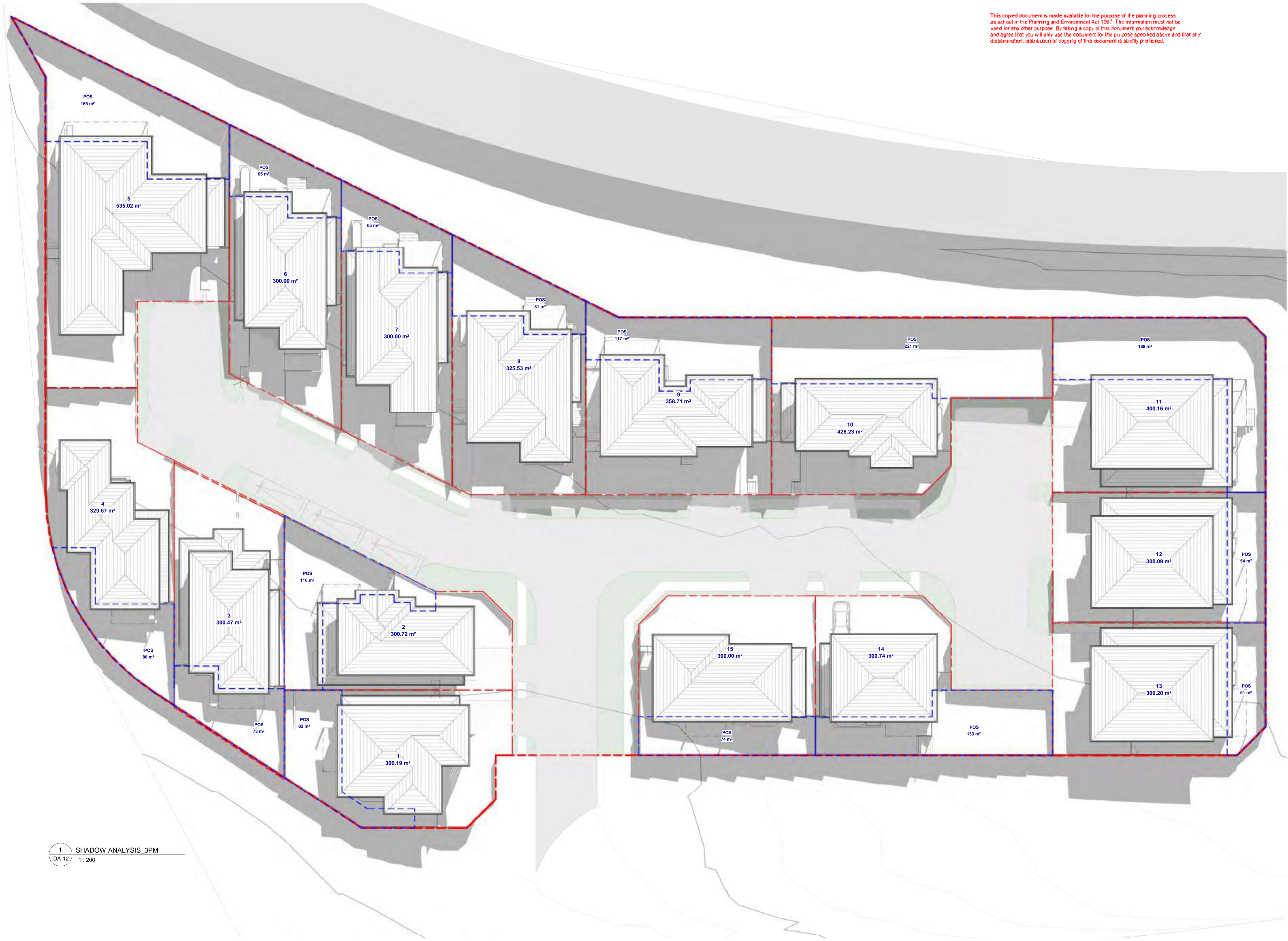
PROJECT:
166 PAKENHAM ROAD
PAKENHAM

DRAWING TITLE:
SHADOW ANALYSIS - 12 NOON

DA ISSUE			
DATE:	SCALE:	DRAWING No:	
04/18/24	1 : 200	DA-11	
DRAWN BY:	CHECKED BY:	REV:	
HR	Checker	1	

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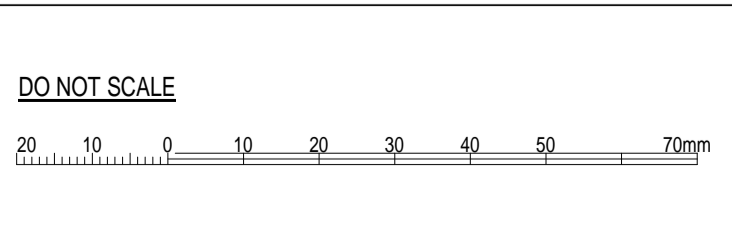


1 SHADOW ANALYSIS_3PM
DA-12 1:200

REV	DATE	DESCRIPTION	BY
1	24.04.2024	UPDATED AS PER COUNCIL RFI DATED 22.02.2024	VR / PS

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PROJECT:
166 PAKENHAM ROAD
PAKENHAM

DRAWING TITLE:
SHADOW ANALYSIS - 3PM

DATE:	SCALE:	DRAWING No:
04/18/24	1 : 200	DA-12
DRAWN BY:	CHECKED BY:	REV:
HR	Checker	1

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Garden Area

Overall Area Schedule		
Type	Type	%
Total Site Area	6612	
Total Garden Area	2495.86	38%

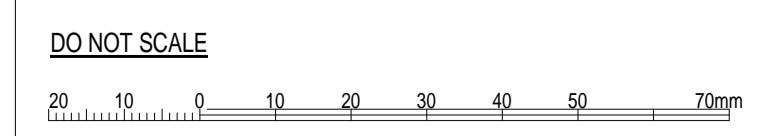


1 GARDEN PLAN
DA-13 1:200

REV	DATE	DESCRIPTION	VR / PS BY
1	24.04.2024	UPDATED AS PER COUNCIL RFI DATED 22.02.2024	VR / PS

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137 Gilba Road Girraween Sydney NSW 2145
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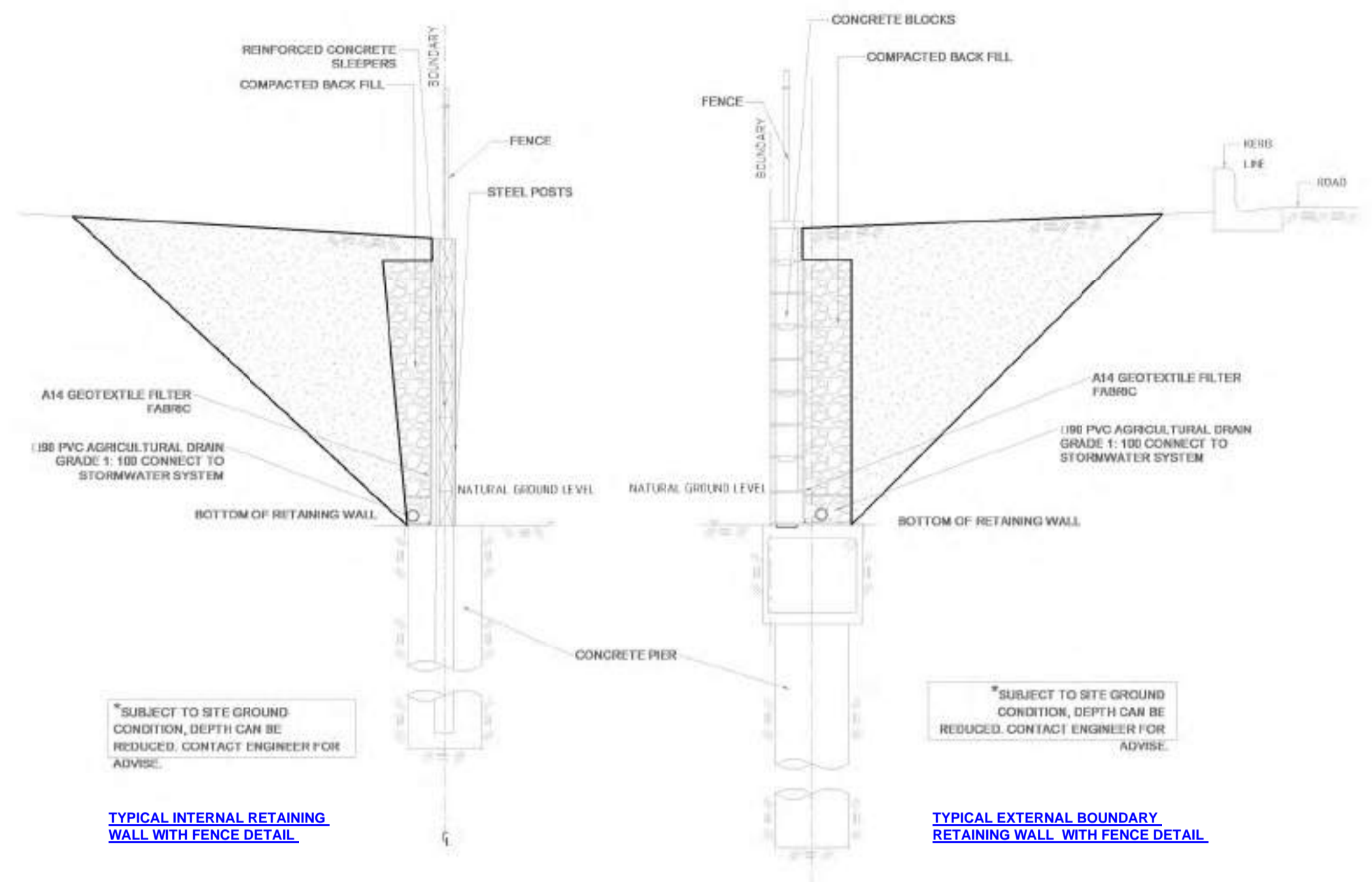
PROJECT:
166 PAKENHAM ROAD
PAKENHAM

DRAWING TITLE:
GARDEN PLAN

DA ISSUE			
NORTH:	DATE:	SCALE:	DRAWING No:
	19.12.2023	As indicated	DA-13
	DRAWN BY:	CHECKED BY:	REV:
	VR/PS	Checker	1

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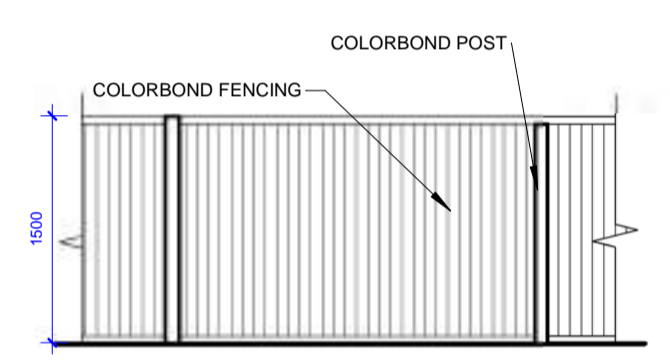


*SUBJECT TO SITE GROUND CONDITION, DEPTH CAN BE REDUCED. CONTACT ENGINEER FOR ADVICE.

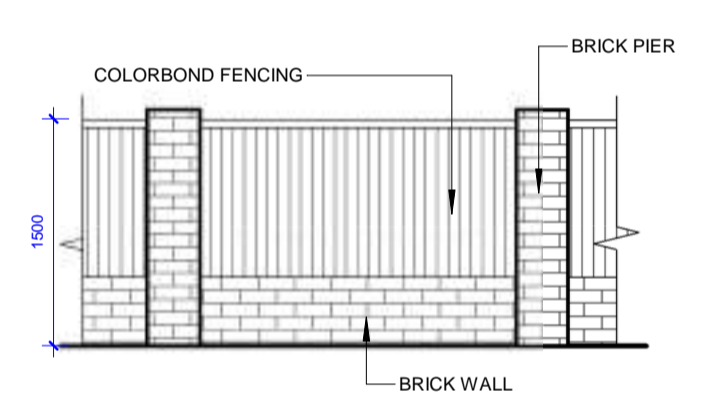
TYPICAL INTERNAL RETAINING WALL WITH FENCE DETAIL

*SUBJECT TO SITE GROUND CONDITION, DEPTH CAN BE REDUCED. CONTACT ENGINEER FOR ADVICE.

TYPICAL EXTERNAL BOUNDARY RETAINING WALL WITH FENCE DETAIL



TYPICAL FENCE DETAIL - INTERNAL BOUNDARY



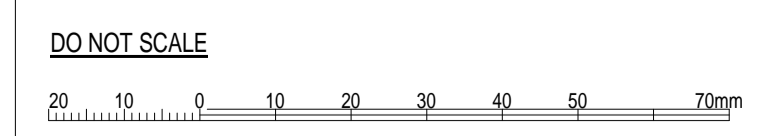
TYPICAL FENCE DETAIL - EXTERNAL BOUNDARY (PAKENHAM ROAD)



1 FENCE & RETAINING WALL PLAN
DA-14 1 : 250

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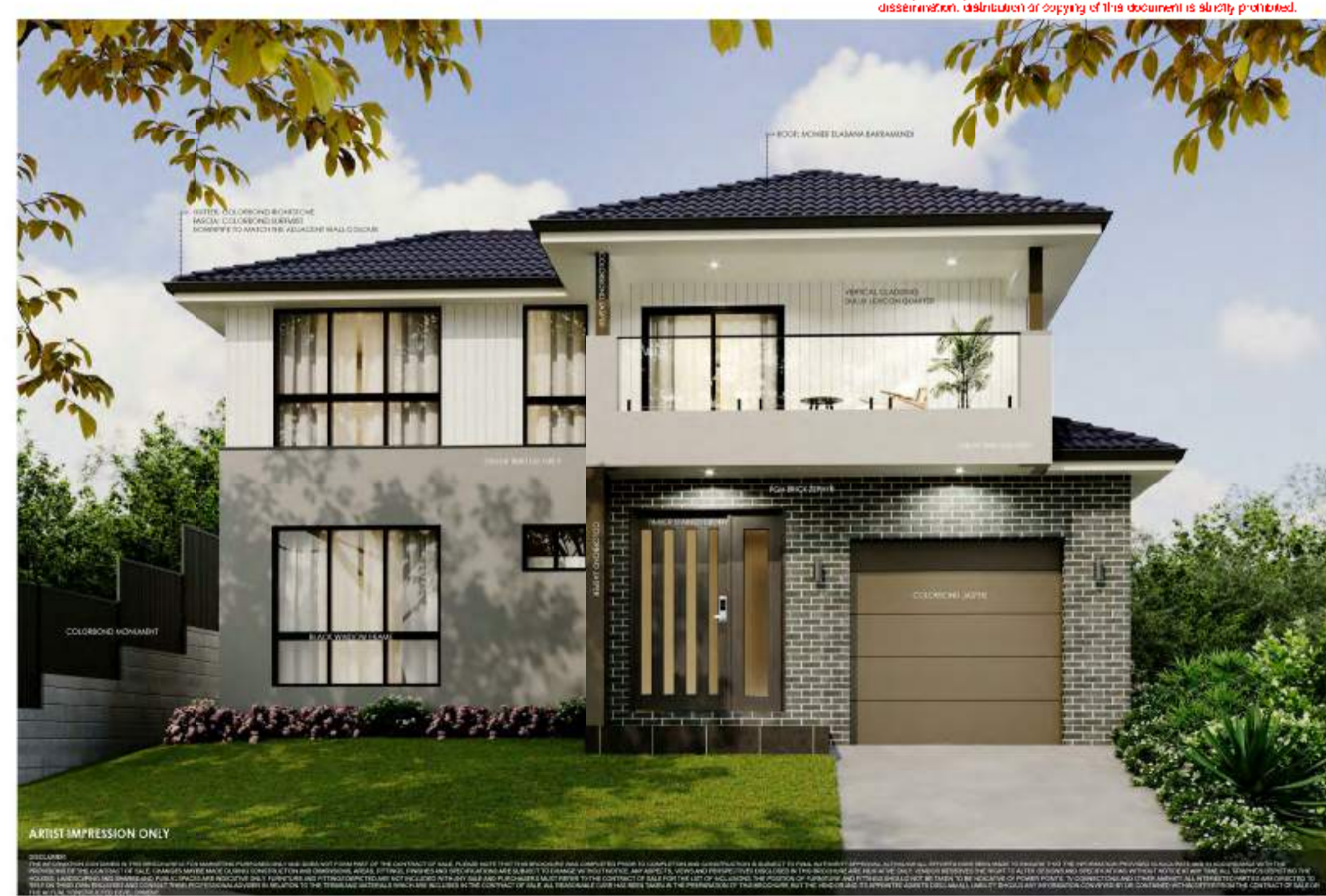
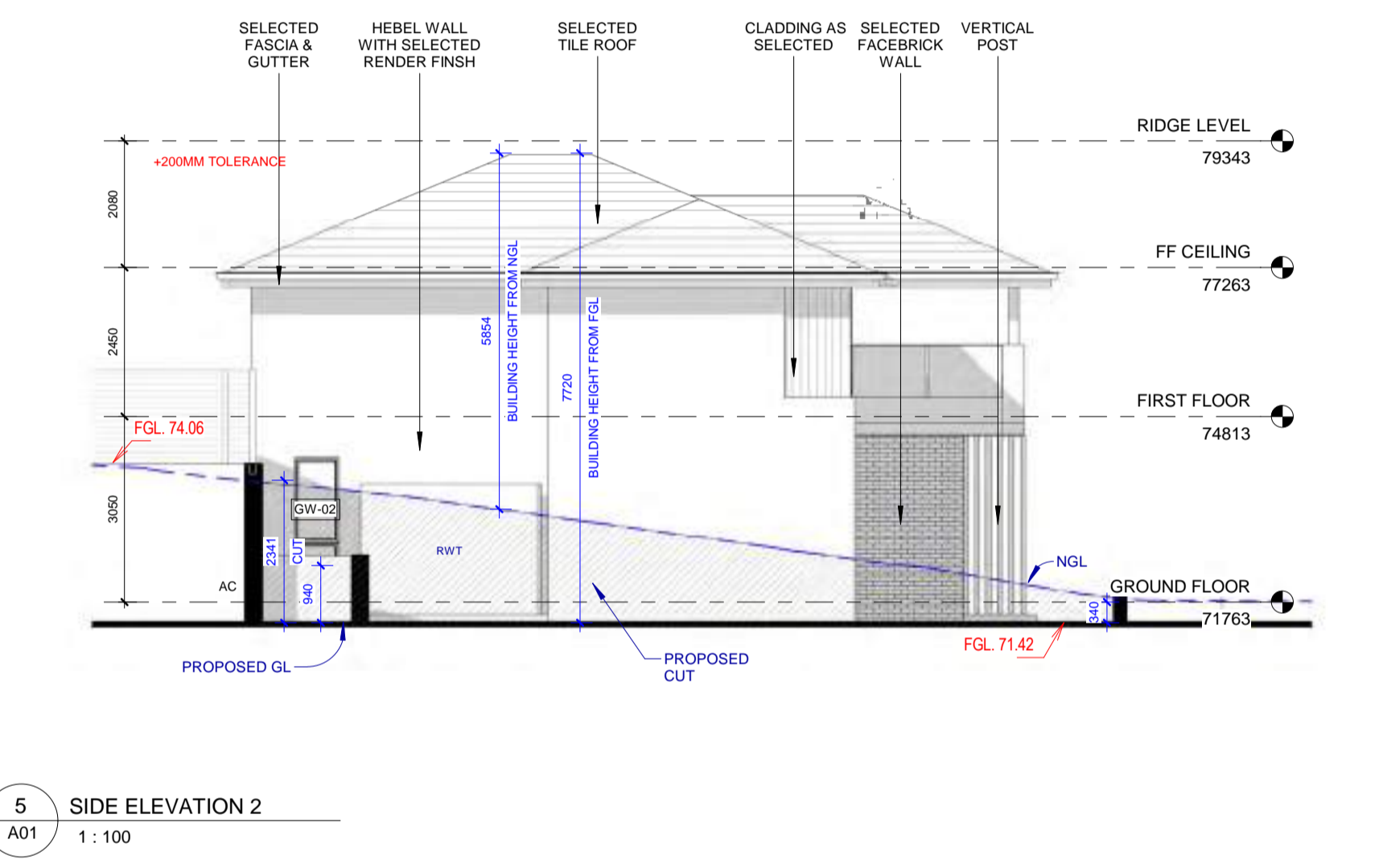
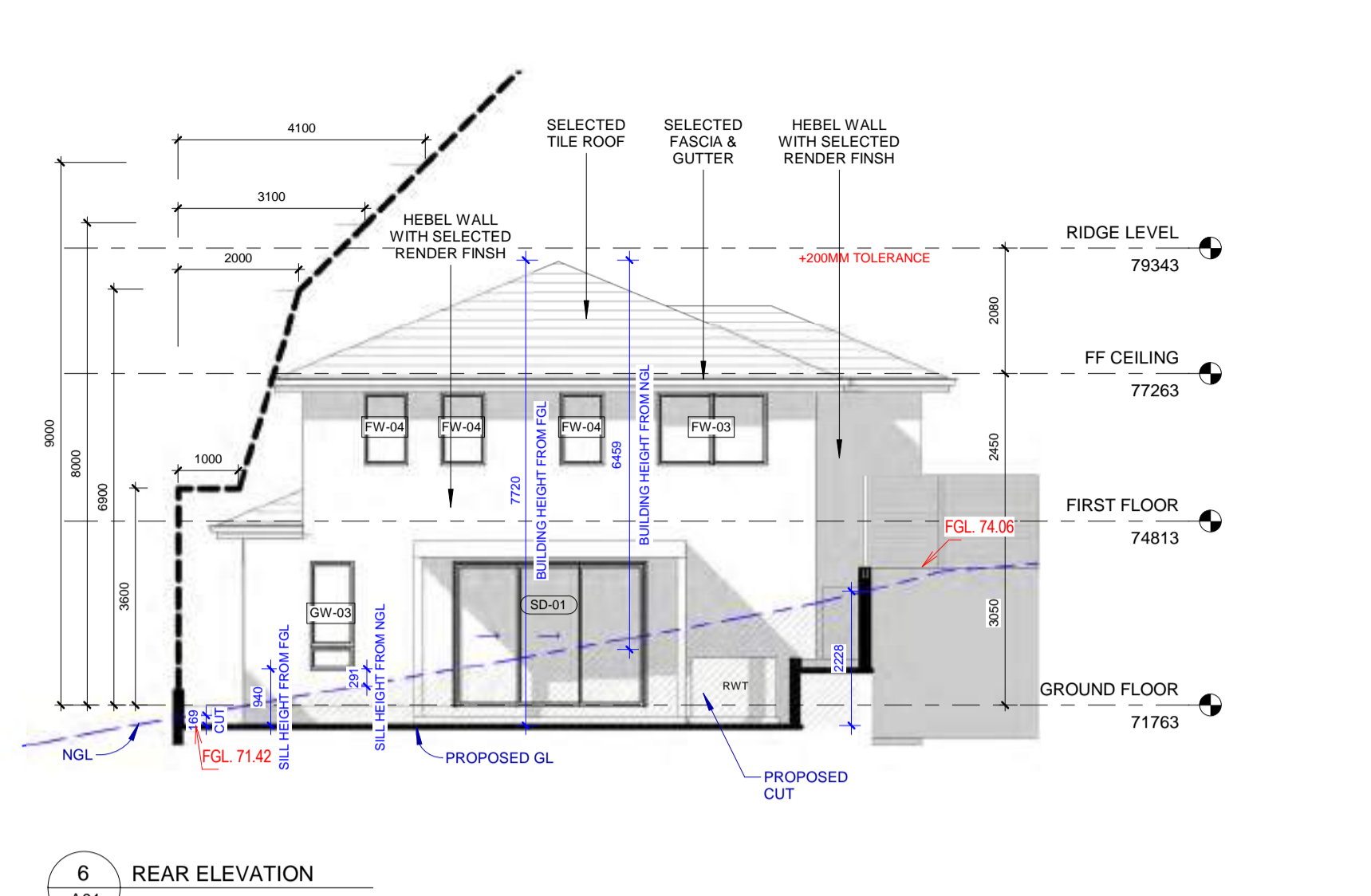
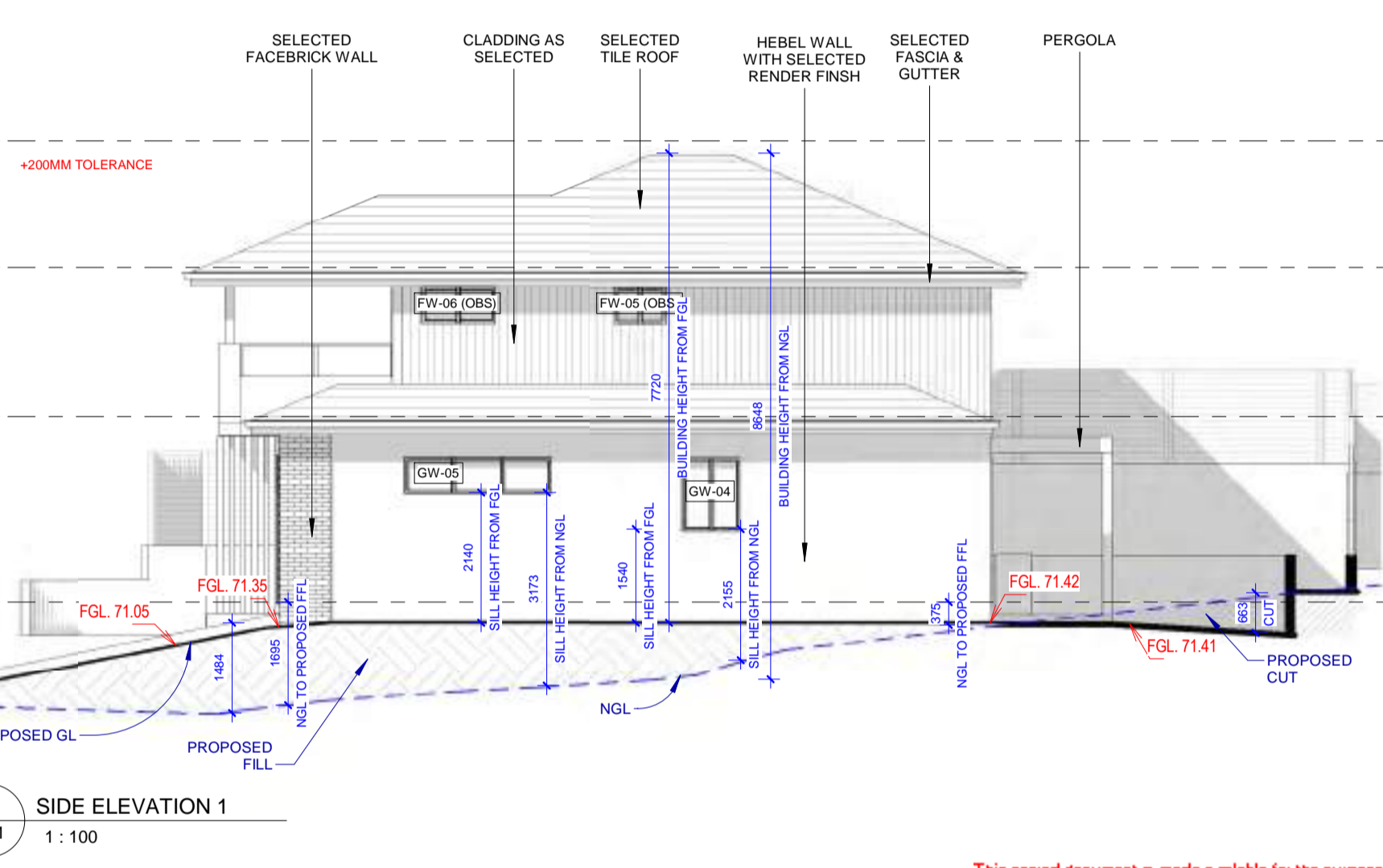
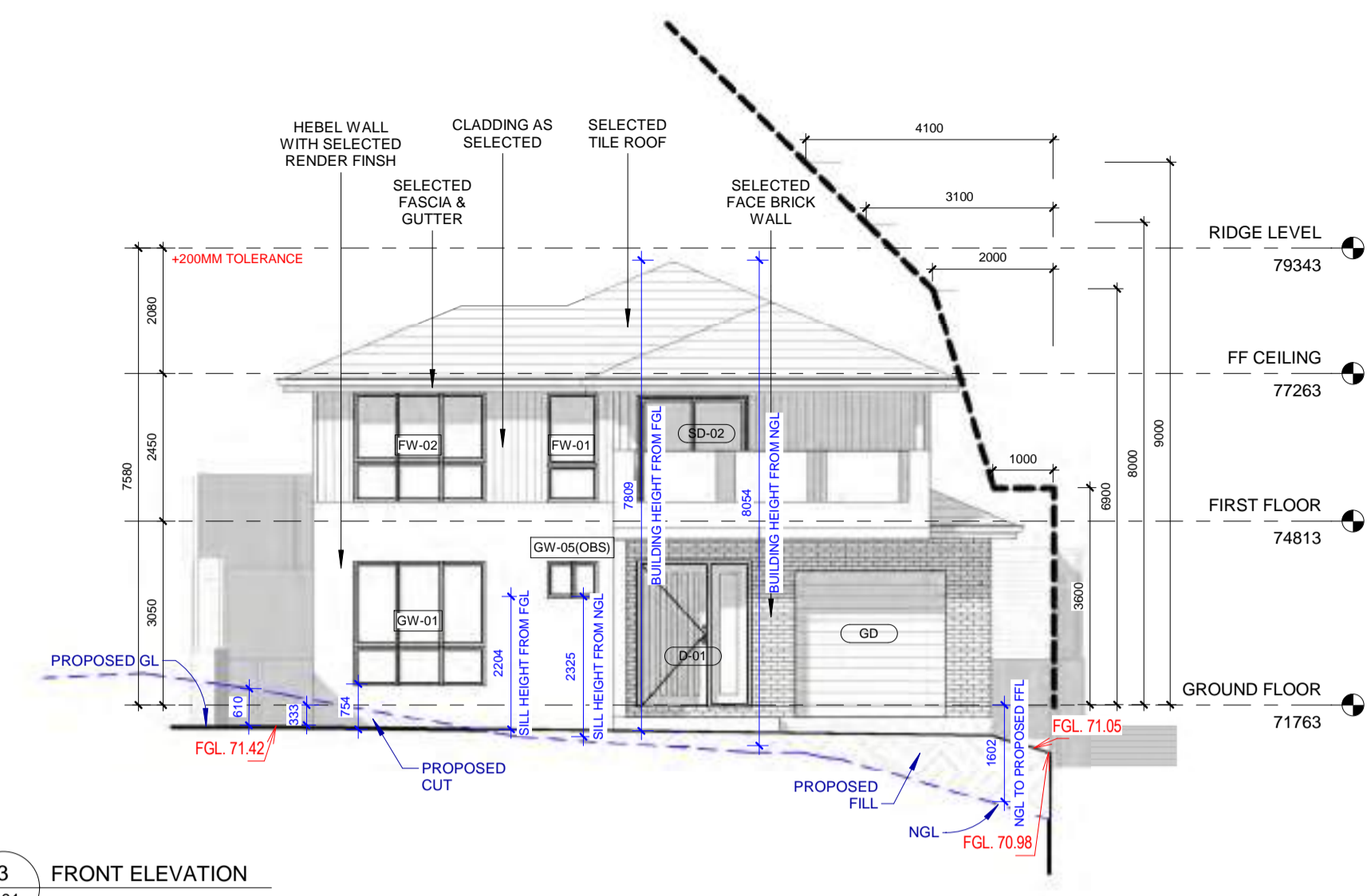
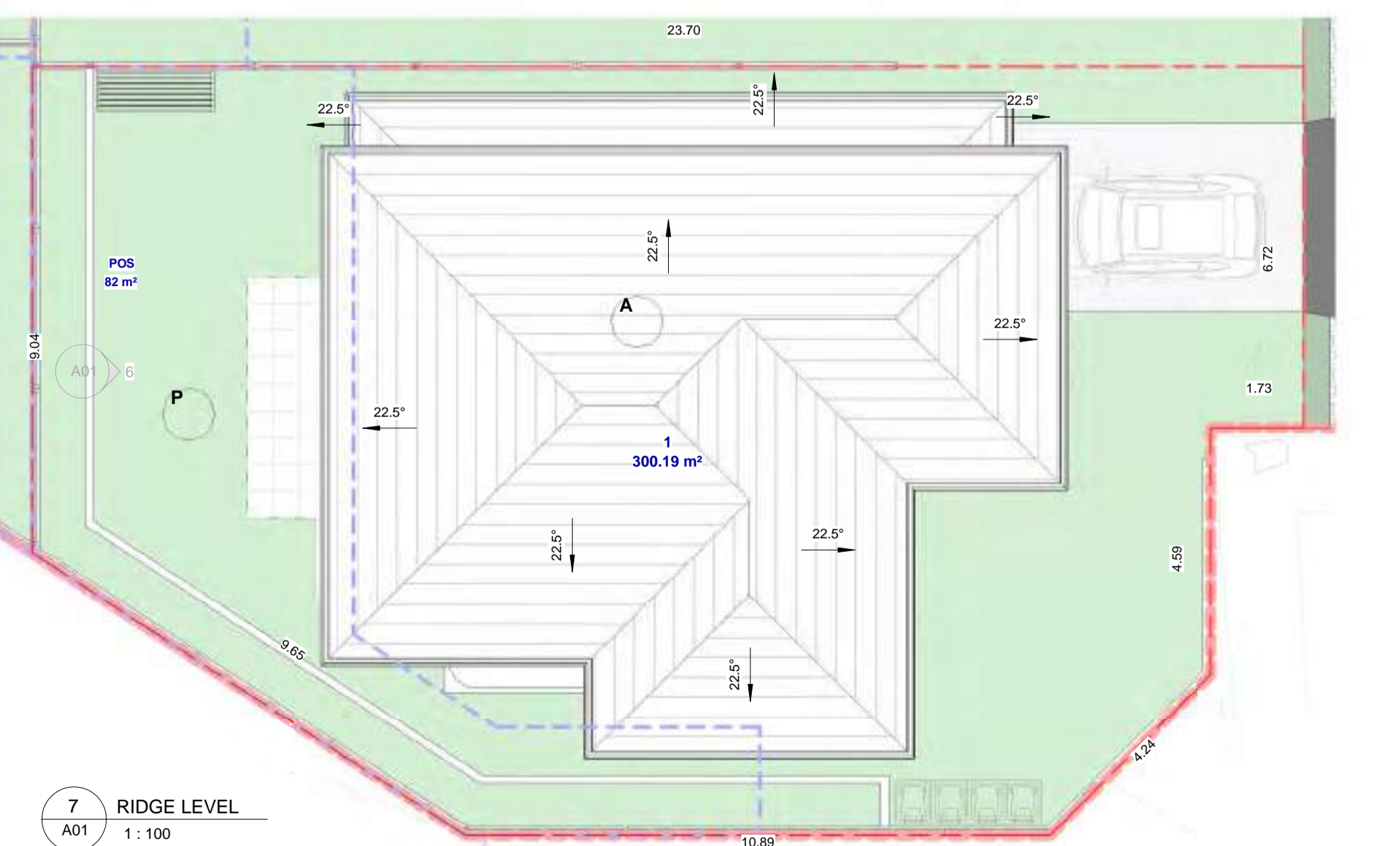
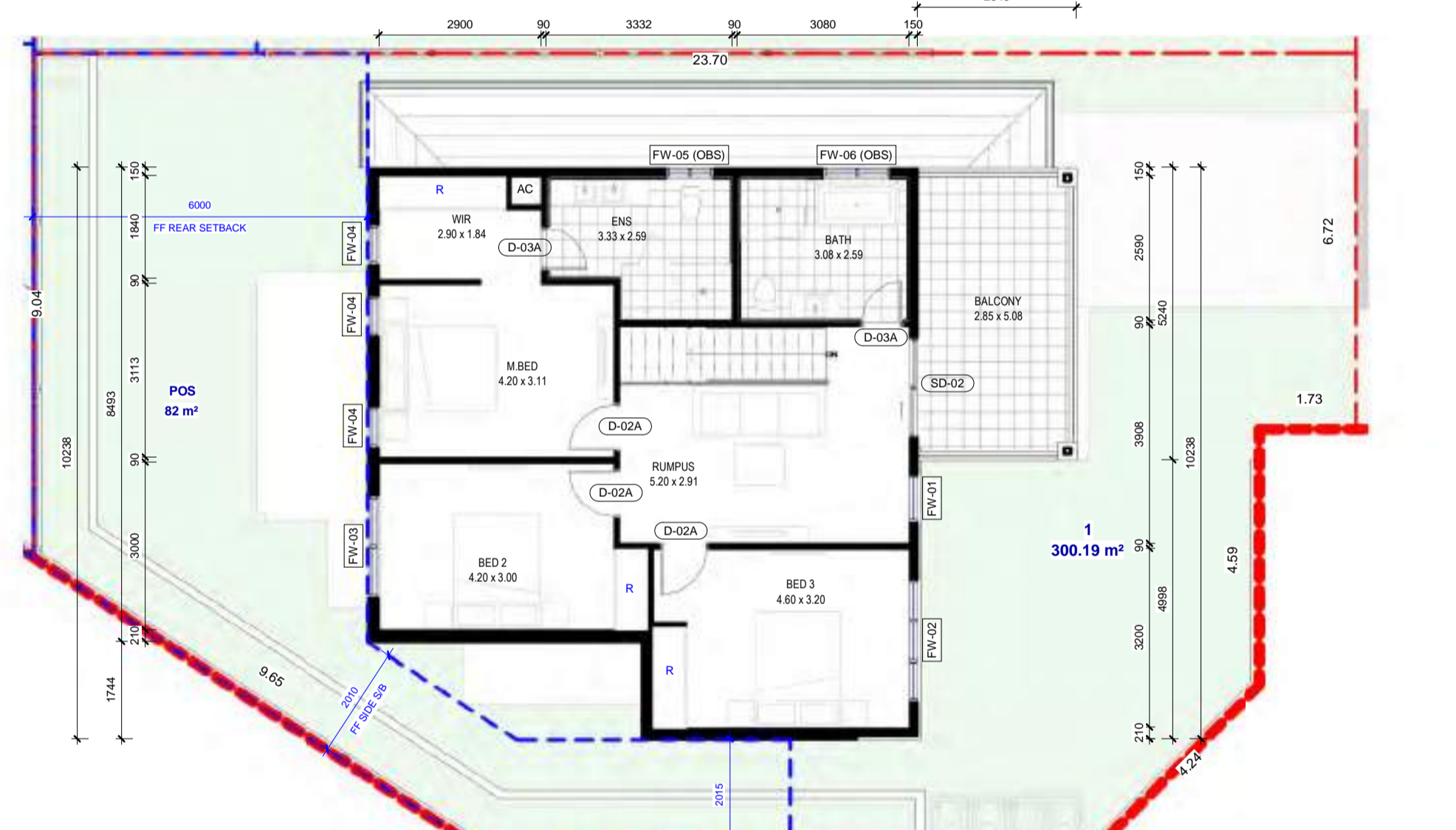
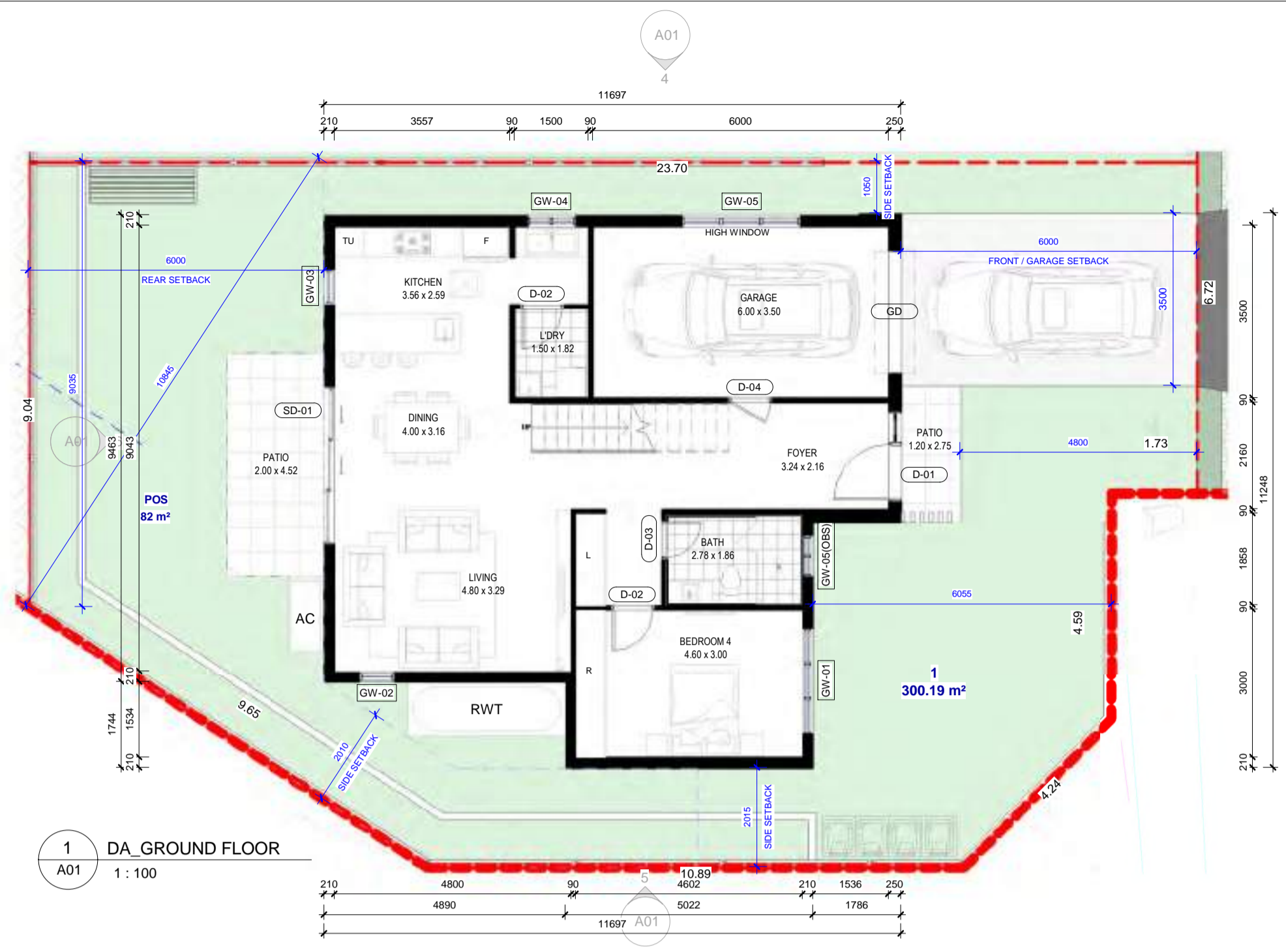
PROJECT:
166 PAKENHAM ROAD
PAKENHAM

DRAWING TITLE:
FENCE AND RETAINING WALL

NORTH 	DATE:	SCALE:	DRAWING No:
	05/20/24	As indicated	DA-14
	DRAWN BY:	CHECKED BY:	REV:
	VR / PS	JAYANTI	1

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REV	DATE	DESCRIPTION	BY
1	24.04.2024	UPDATED AS PER COUNCIL RFI DATED 22.02.2024	VR / PS



DA_WINDOW SCHEDULE						
WINDOW NO.	HEIGHT	WIDTH	COUNT	SILL HEIGHT	HEAD HEIGHT	DESCRIPTION
GROUND FLOOR:						
GW-01	2050	2170	1	350	2400	SLIDING WINDOW WITH FIXED BOTTOM PANELS
GW-02	1800	724	1	600	2400	AWNING WINDOW WITH FIXED BOTTOM PANELS
GW-03	1800	724	1	600	2400	AWNING WINDOW WITH FIXED BOTTOM PANELS
GW-04	1200	970	1	1200	2400	SLIDING WINDOW
GW-05	600	2410	1	1800	2400	SLIDING WINDOW
GW-05(OBS)	600	850	1	1800	2400	SLIDING WINDOW
FIRST FLOOR:						
FW-01	1800	850	1	340	2140	AWNING WINDOW WITH FIXED BOTTOM PANELS
FW-02	1800	2170	1	340	2140	SLIDING WINDOW WITH FIXED BOTTOM PANELS
FW-03	1200	1810	1	940	2140	SLIDING WINDOW
FW-04	1200	724	3	940	2140	AWNING WINDOW
FW-05(OBS)	600	850	1	1540	2140	SLIDING WINDOW
FW-06(OBS)	600	1210	1	1540	2140	SLIDING WINDOW
Grand total: 14						

DA_DOOR SCHEDULE					
DOOR NO.	HEIGHT	WIDTH	DOOR LEAF	COUNT	DESCRIPTION
GROUND FLOOR:					
D-01	2400	1200	1120	1	EXTERNAL FLUSH DOOR WITH SIDELIGHT
D-02	2400	900	820	2	INTERNAL FLUSH DOOR
D-03	2400	800	720	1	INTERNAL FLUSH DOOR
D-04	2400	900	800	1	INTERNAL FLUSH DOOR
GD	2430	2500	2500	1	GARAGE DOOR
SD-01	2400	3215	3215	1	SLIDING STACKER DOOR
FIRST FLOOR:					
D-02A	2100	900	820	3	INTERNAL FLUSH DOOR
D-03A	2100	800	720	2	INTERNAL FLUSH DOOR
SD-02	2100	1810	1810	1	GLASS SLIDING DOOR
Grand total: 13					

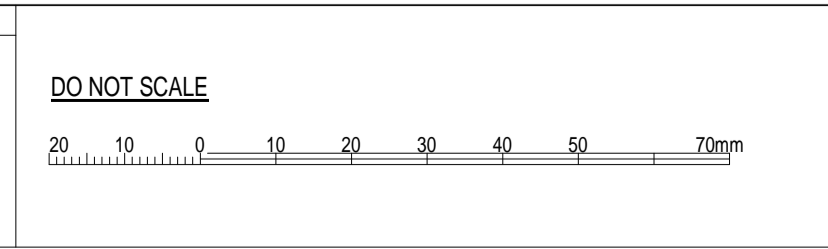
	CRT	GUT	FAS	BR	CR1	CR2	CD1	AL	ED	GD
MATERIAL	CONCRETE ROOF TILES	GUTTER	FASCIA	FACEBRICK	WALL	VERTICAL POST	CLADDING	WINDOW FRAMES & HANDRAIL	MAIN DOOR	GARAGE DOOR
FINISH	MONER ELABANA	COLORBOND	COLORBOND	PGH BRICKS	CEMENT RENDER	CEMENT RENDER	JAMES HARDIE ACON VERTICAL CLADDING	ALUMINIUM	TIMBER	COLORBOND
COLOUR	BARRAMUNDI	IRONSTONE	SURFMIST	ZEPHYR	DULLX TIMELESS GREY	COLORBOND JASPER	DULLX LEXICON QUARTER	POWDERCOATED BLACK	STAINED EBONY	JASPER

NOTE: ALL COLOURS SPECIFIED ARE INDICATIVE ONLY AND ARE SUBJECT TO VARIATION AND TO AVAILABILITY. IN CASE OF ANY DISCREPANCY, PLEASE FOLLOW AS PER RENDERED IMAGE.

REV	DATE	ISSUED AS PER RFT DT. 22.02.2024	DESCRIPTION	PS BY
1	23.04.2024	ISSUED AS PER RFT DT. 22.02.2024		PS

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137 Gibbo Road Girraween Sydney NSW 2145
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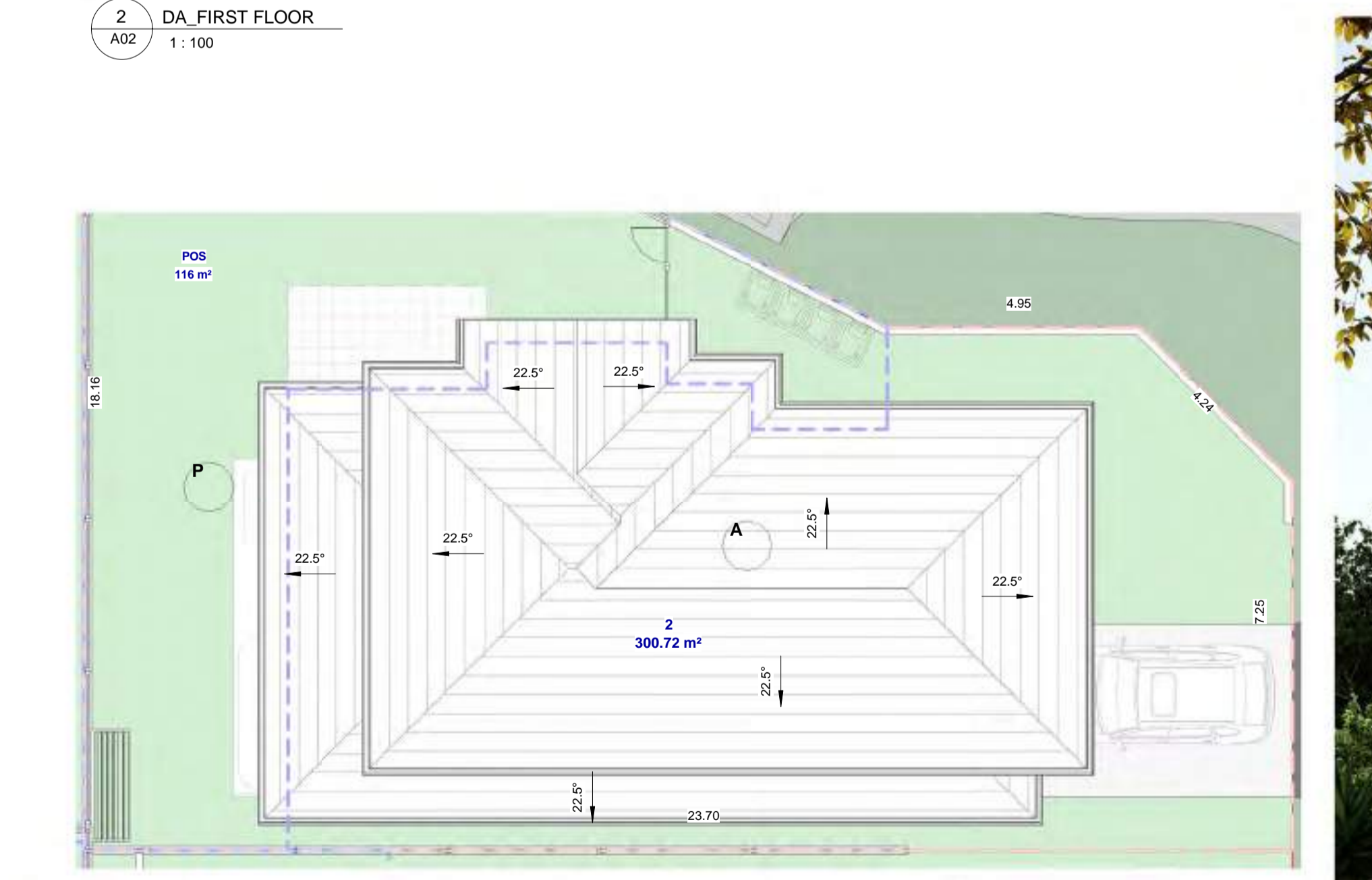
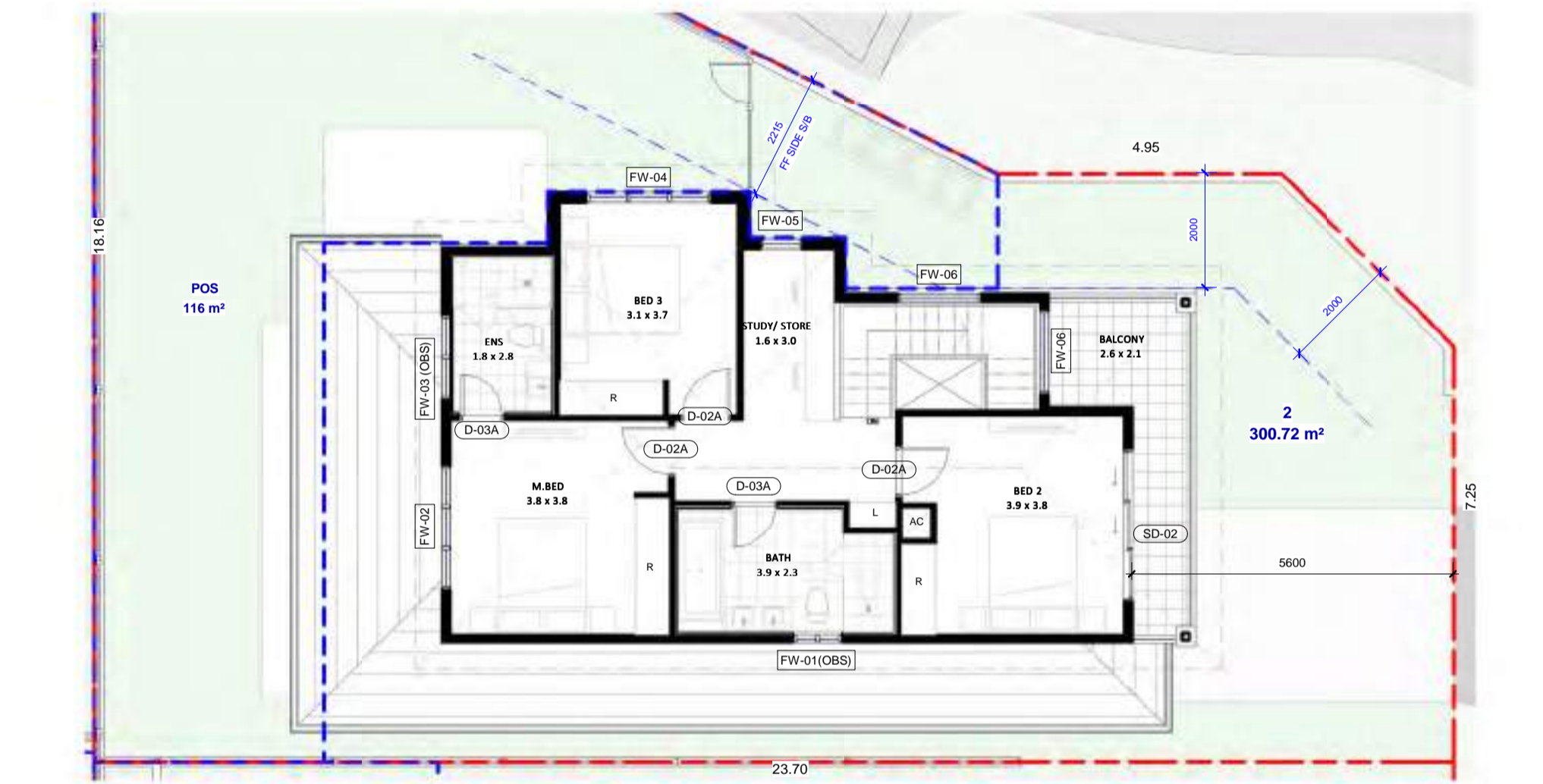
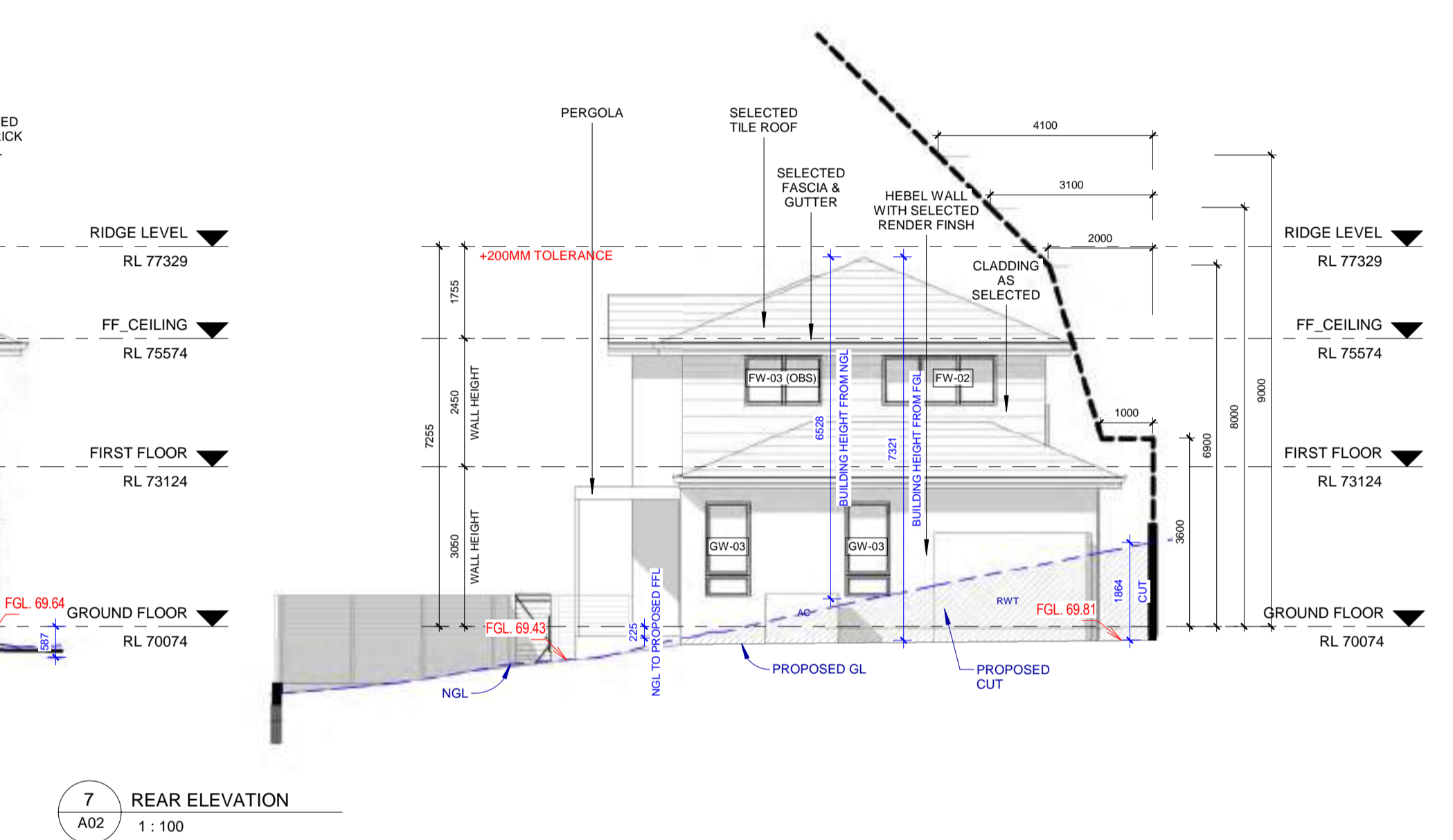
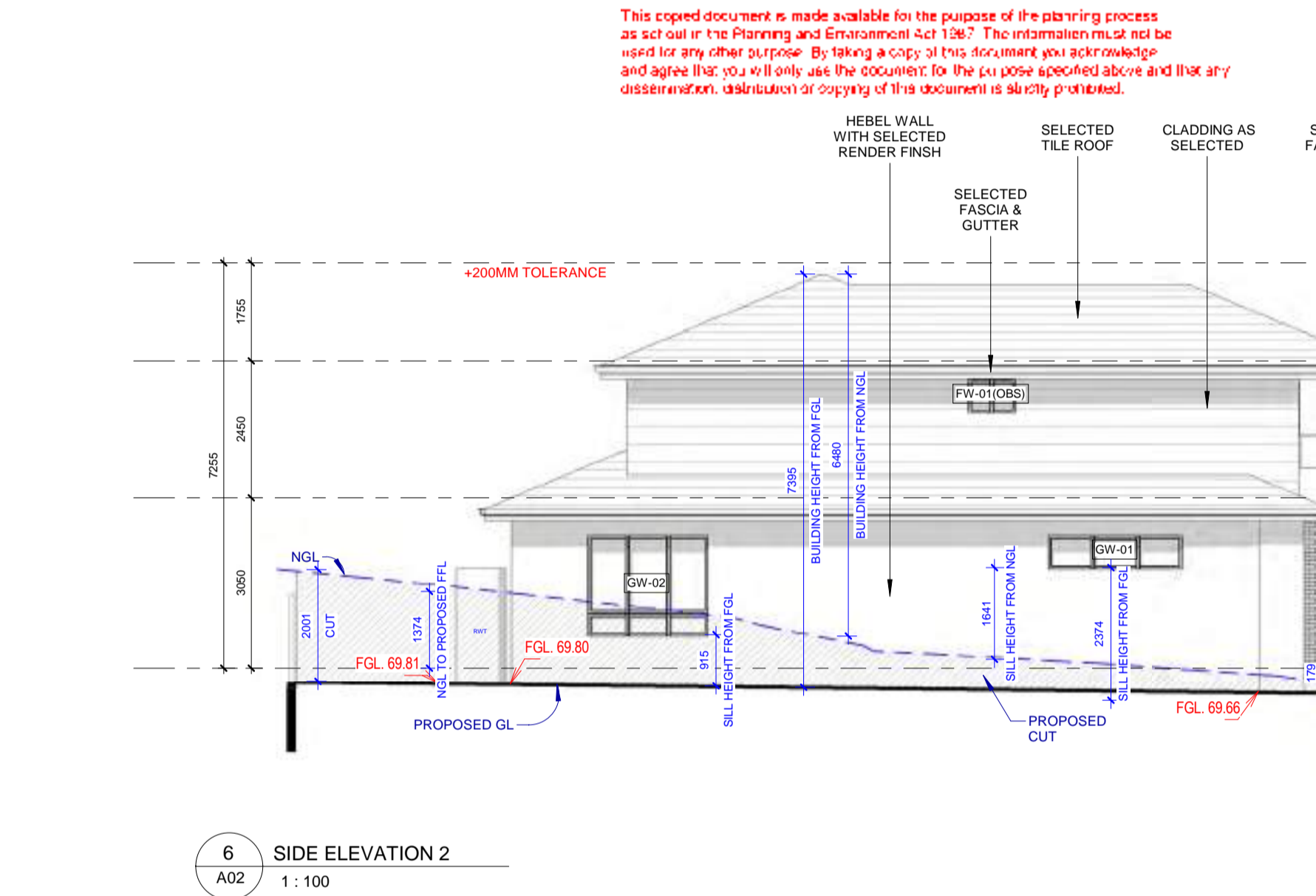
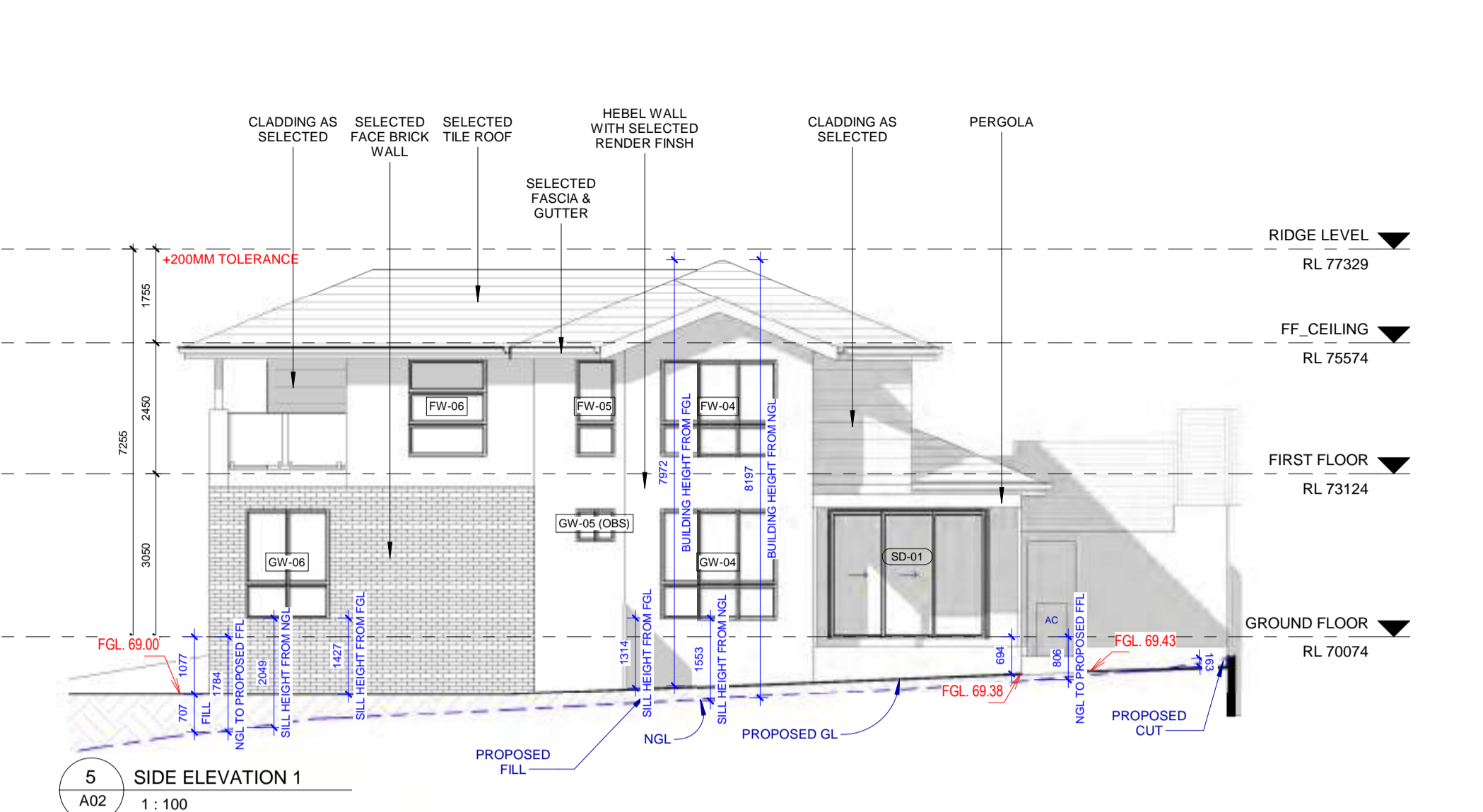
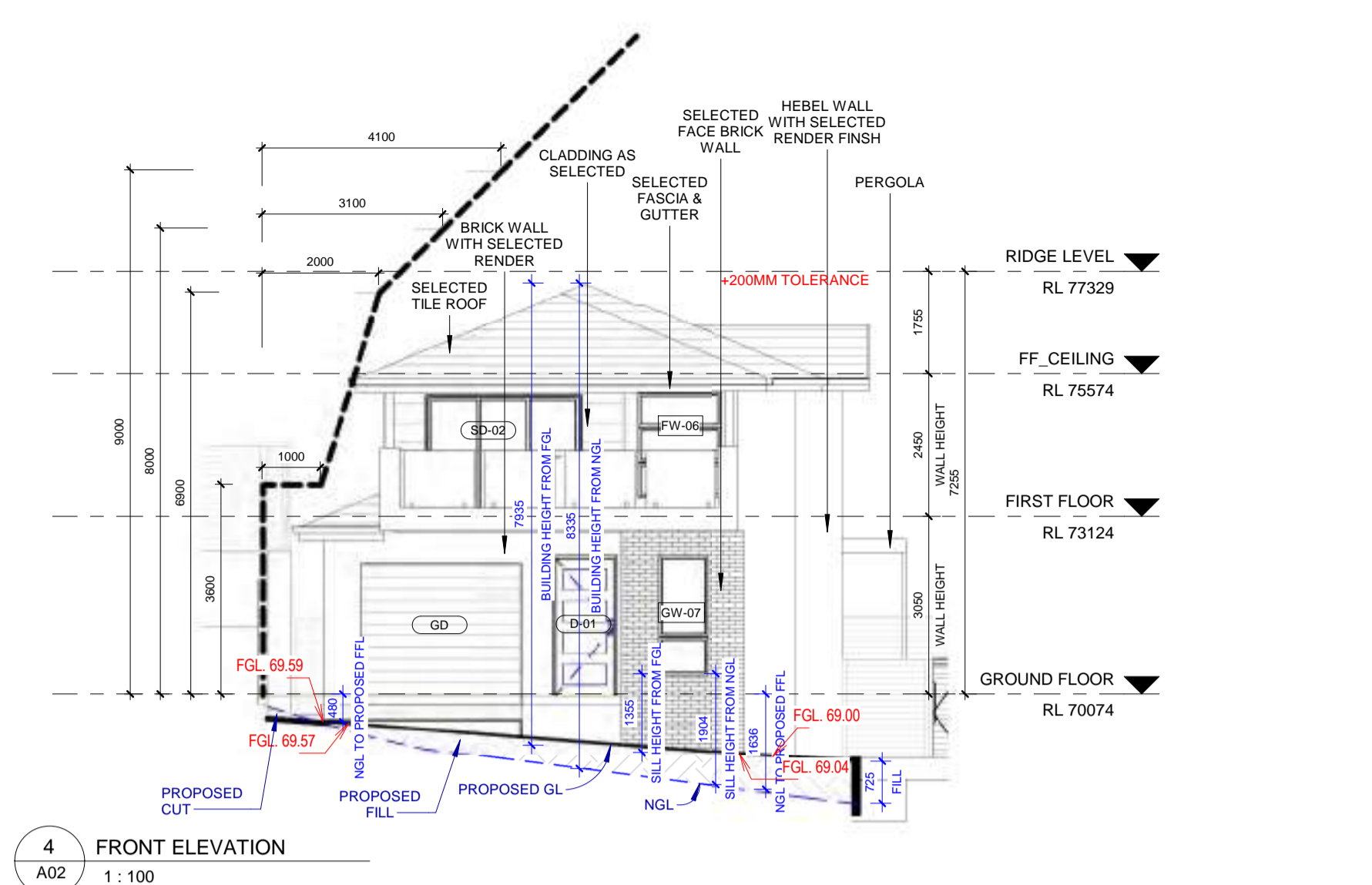
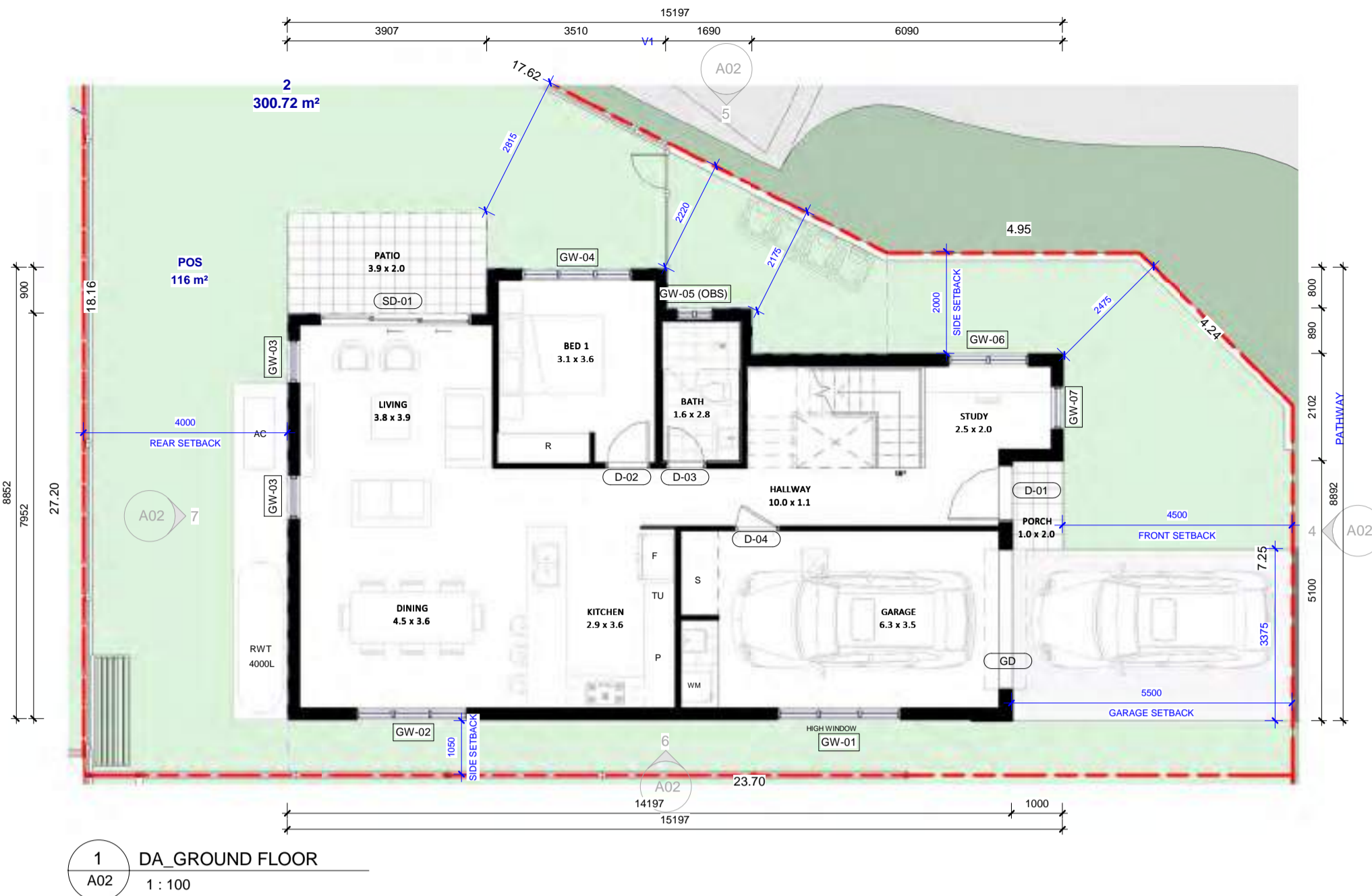


PROJECT:
166 Pakenham Road
PAKENHAM, VIC

DRAWING TITLE:
LOT 1

DATE:	SCALE:	DRAWING No:
08/04/22	1:100	A01
DRAWN BY:	CHECKED BY:	REV:
PRİYANKA	JOSE	1

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DA WINDOW SCHEDULE						
WINDOW NO.	HEIGHT	WIDTH	COUNT	SILL HEIGHT	HEAD HEIGHT	DESCRIPTION
GROUND FLOOR						
GW-01	600	2410	1	1800	2400	SLIDING WINDOW
GW-02	1800	2170	1	600	2400	SLIDING WINDOW WITH FIXED BOTTOM PANELS
GW-03	1800	850	2	600	2400	AWNING WINDOW WITH FIXED BOTTOM PANELS
GW-04	2050	2170	1	350	2400	SLIDING WINDOW WITH FIXED BOTTOM PANELS
GW-05 (OBS)	600	724	1	1800	2400	SLIDING WINDOW
GW-06	2050	1570	1	350	2400	SLIDING WINDOW WITH FIXED BOTTOM PANELS
GW-07	2050	850	1	350	2400	FIXED WINDOW WITH FIXED BOTTOM PANELS
GROUND FLOOR: 6						
FIRST FLOOR						
FW-01 (OBS)	600	850	1	1540	2140	SLIDING WINDOW
FW-02	940	2170	1	1200	2140	SLIDING WINDOW
FW-03 (OBS)	940	1450	1	1200	2140	SLIDING WINDOW
FW-04	1800	2170	1	340	2140	SLIDING WINDOW WITH FIXED BOTTOM PANELS
FW-05	1800	724	1	340	2140	AWNING WINDOW WITH FIXED BOTTOM PANELS
FW-06	1800	1450	2	340	2140	6-PANEL FIXED WINDOW
FIRST FLOOR: 7						
Grand total: 15						

DA DOOR SCHEDULE					
DOOR NO.	HEIGHT	WIDTH	DOOR LEAF	COUNT	DESCRIPTION
GROUND FLOOR					
D-01	2400	1100	1000	1	ENTRY DOOR
D-02	2400	900	820	1	INTERNAL FLUSH DOOR
D-03	2400	800	720	1	INTERNAL FLUSH DOOR
D-04	2400	900	820	1	INTERNAL FLUSH DOOR
GD	2430	2750	2750	1	GARAGE DOOR
SD-01	2400	2975	2975	1	SLIDING STACKER DOOR
GROUND FLOOR: 6					
FIRST FLOOR					
D-02A	2100	900	820	3	INTERNAL FLUSH DOOR
D-03A	2100	800	720	2	INTERNAL FLUSH DOOR
SD-02	2100	2675	2675	1	SLIDING STACKER DOOR
FIRST FLOOR: 6					
Grand total: 12					

	CRT	GUT	FAS	BR	CR1	CR2	CD1	CD2	PST	AL	ED	GD
MATERIAL	CONCRETE ROOF TILES	GUTTER	FASCIA	FACEBRICK	WALL	WALL	CLADDING	CLADDING	VERTICAL POST	WINDOW FRAMES & HANDRAIL	MAIN DOOR	GARAGE DOOR
	MONIER ELABANA	COLORBOND	COLORBOND	PGH BRICKS	CEMENT RENDER	CEMENT RENDER	JAMES HARDIE STRIA HORIZONTAL CLADDING	JAMES HARDIE STRIA HORIZONTAL CLADDING	COLORBOND	ALUMINIUM	TIMBER	COLORBOND
FINISH	BABYLON	BASALT	SURFMIST	SCULPTED GREY	DULUX NATURAL WHITE	DULUX TAPESTRY BEIGE	DULUX NATURAL WHITE	DULUX NATURAL WHITE	BASALT	PEARL WHITE	DULUX WHITE OUNE HALF	SURFMIST
COLOR												

REV	DATE	ISSUED AS PER RFT DT. 22.02.2024	DESCRIPTION	PS	BY
1	23.04.2024	ISSUED AS PER RFT DT. 22.02.2024		PS	BY

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PROJECT:
 166 Pakenham Road
 PAKENHAM, VIC

DRAWING TITLE:
 LOT 2

SCALE:
 1 : 100

DRAWING No.:
 A02

DRAWN BY:
 PRIYANKA

CHECKED BY:
 JOSE

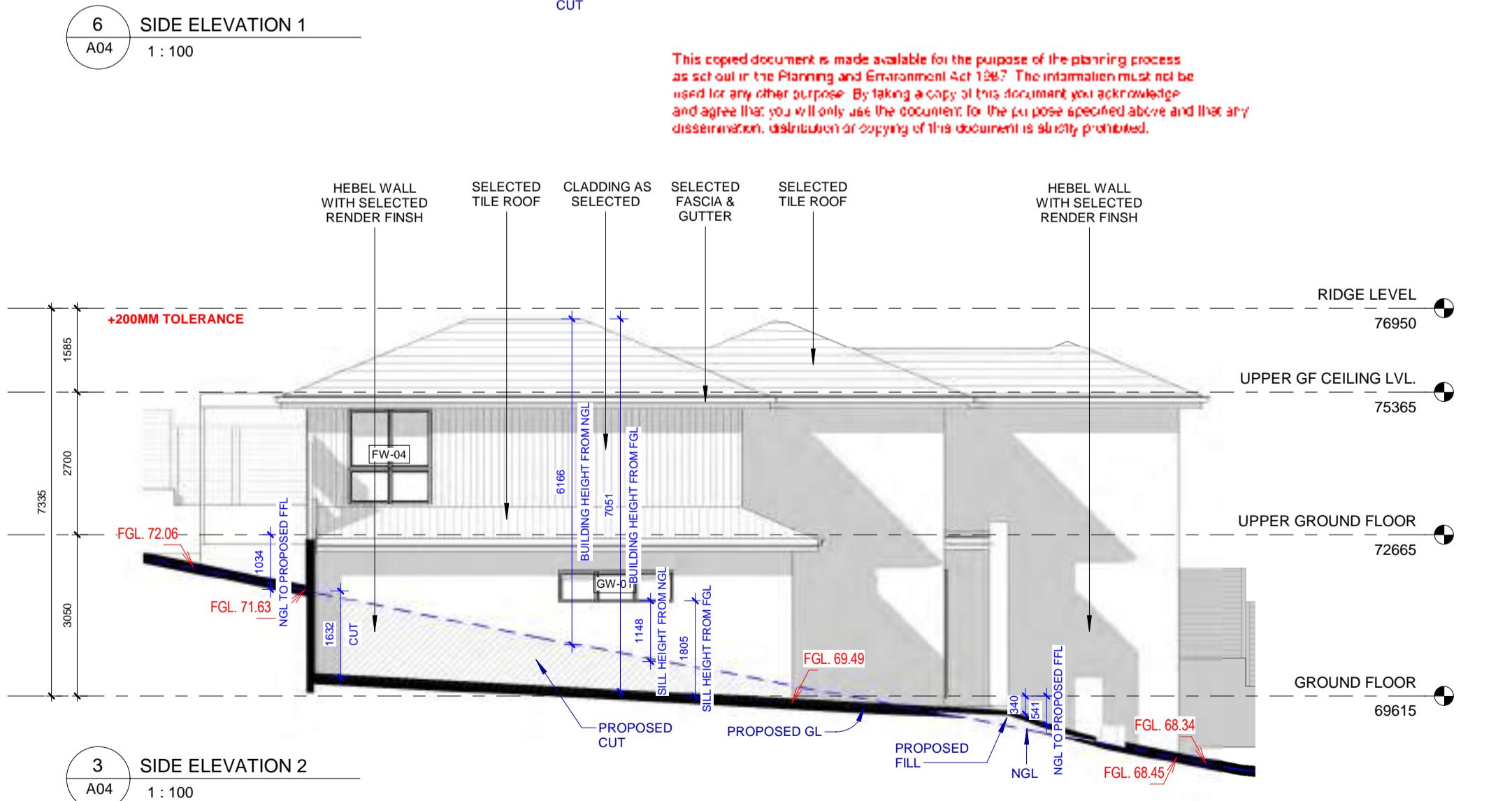
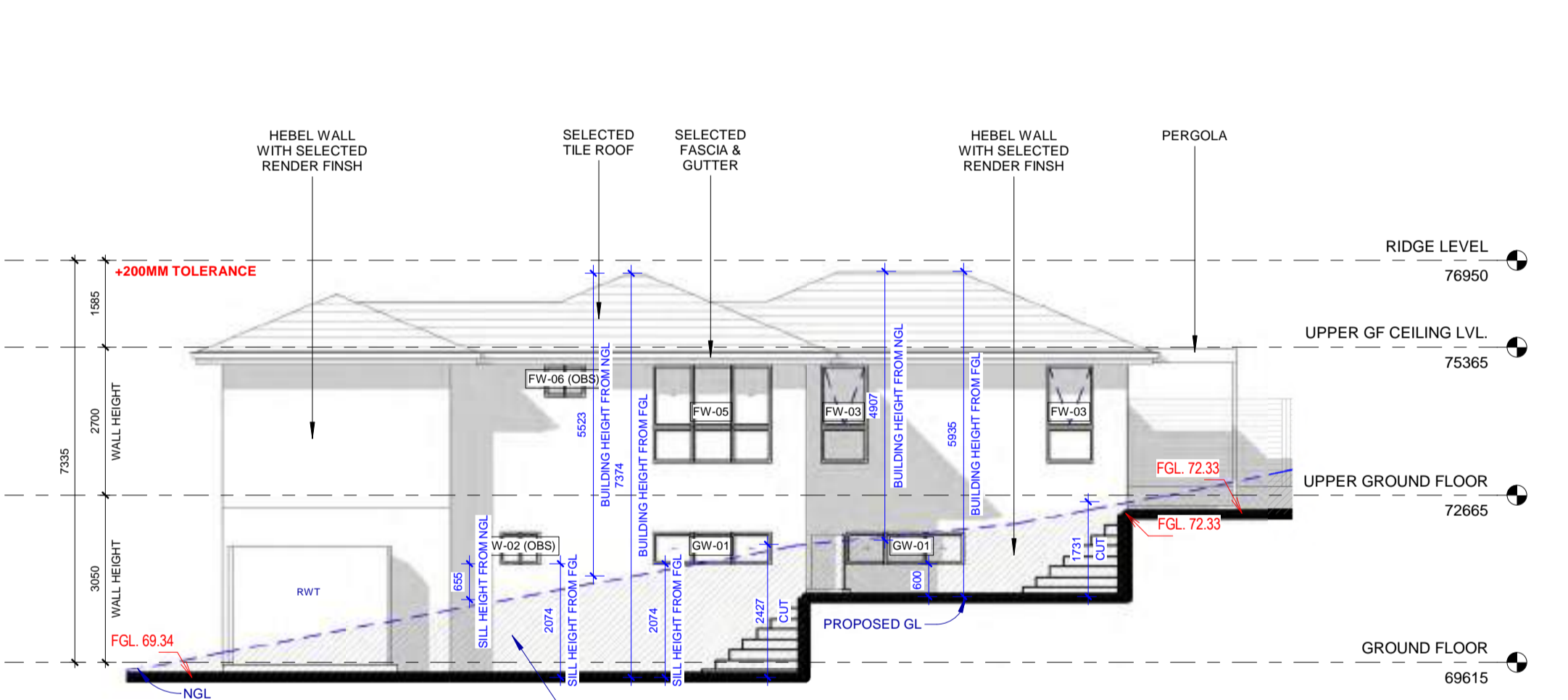
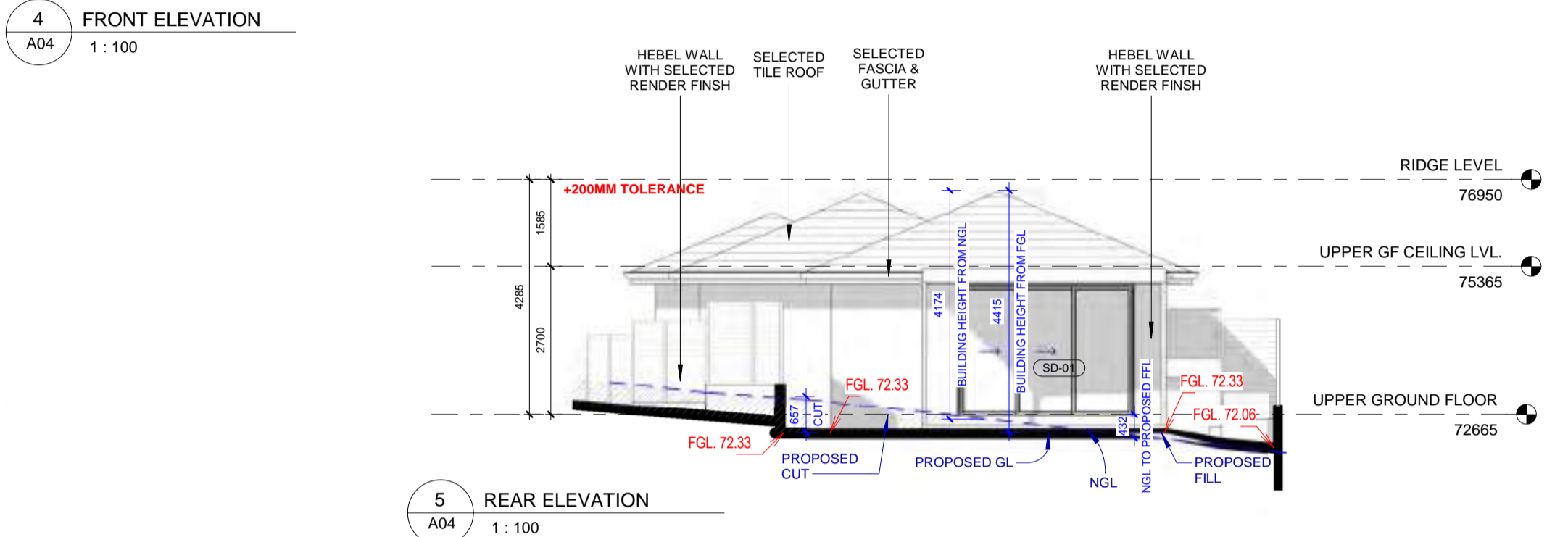
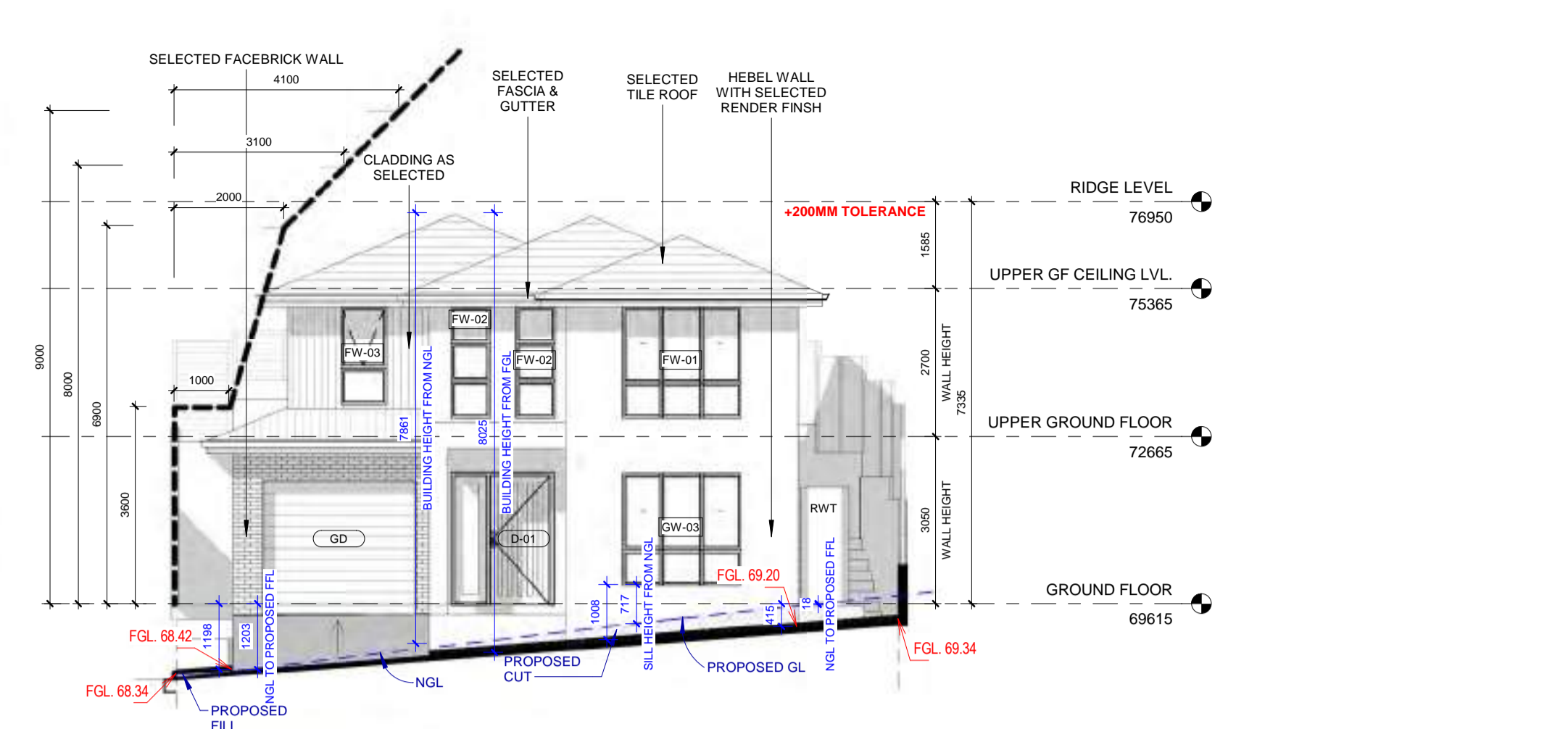
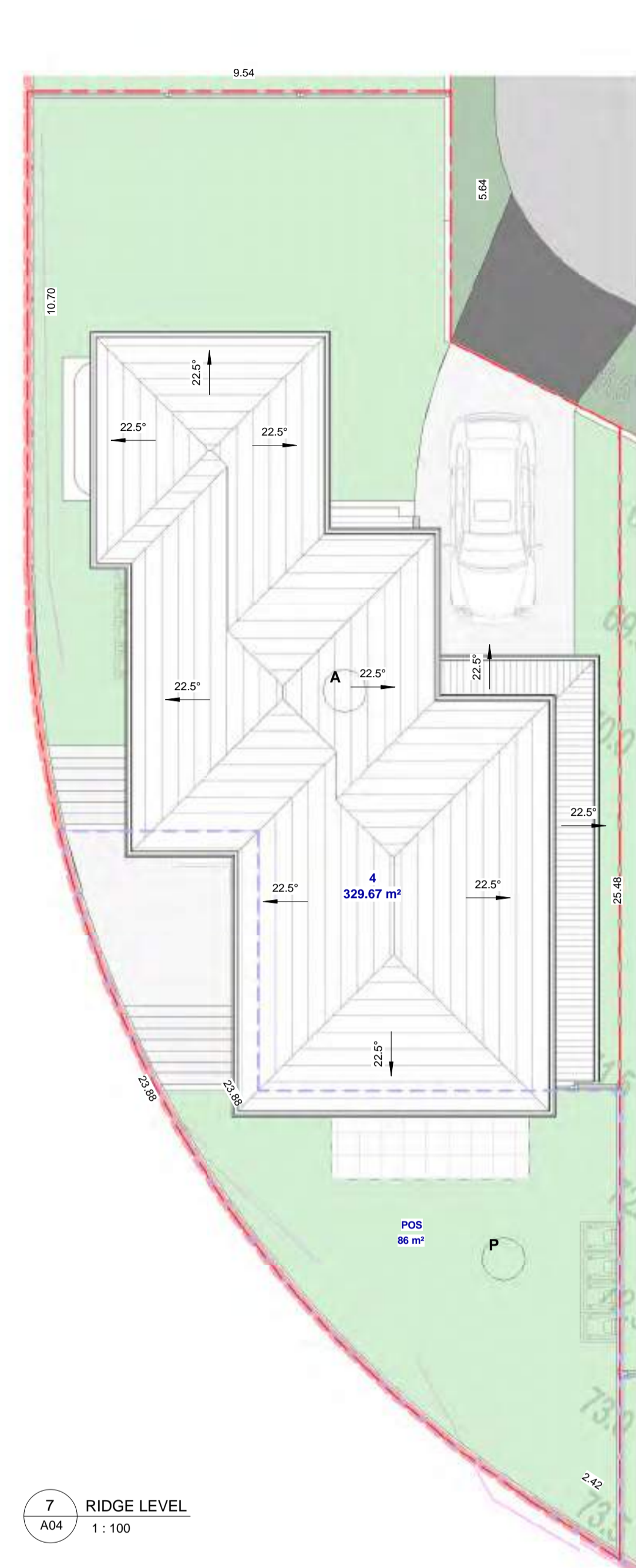
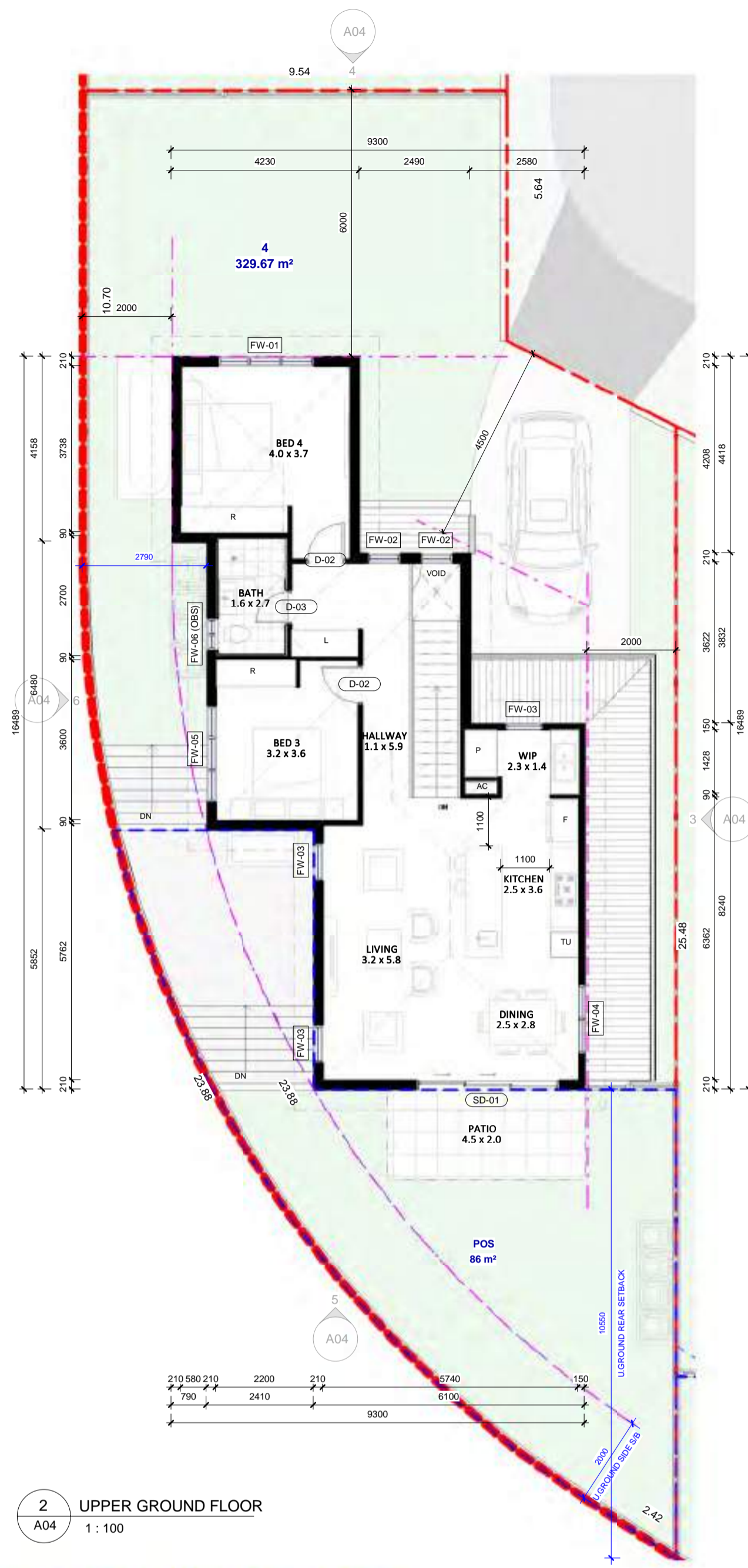
REV:
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DA ISSUE

DATE: 15.04.2024 SCALE: 1 : 100 DRAWING No. A02

DRAWN BY: PRIYANKA CHECKED BY: JOSE REV: 1

V:\Projects-Current\Pakenham - 166 Pakenham Road\3 DA\ARCHITECTURAL\REVIT\PROJECT\Revision C\LINKS\LOT 02.rvt



1 GROUND FLOOR_100
A04 1:100

2 UPPER GROUND FLOOR
A04 1:100

7 RIDGE LEVEL
A04 1:100

4 FRONT ELEVATION
A04 1:100

5 REAR ELEVATION
A04 1:100

6 SIDE ELEVATION 1
A04 1:100

3 SIDE ELEVATION 2
A04 1:100



CRT	GUT	FAS	BR	CR1	CR2	CD1	AL	ED	GD
CONCRETE ROOF TILES	GUTTER	FASCIA	FACEBRICK	WALL	WALL	CLADDING	WINDOW FRAMES & HANDRAIL	MAIN DOOR	GARAGE DOOR
MONIER ELISABETHA	COLORBOND	COLORBOND	PGH BRICKS	CEMENT RENDER	CEMENT RENDER	JAMES HARDIE AXON VERTICAL CLADDING	ALUMINIUM	TIMBER	COLORBOND
FINISH	ANSEED	JASPER	SURFMIST	TRUFFLE	DULUX CASPER WHITE QUARTER	DULUX CASPER WHITE FINGERS	POWDERCOATED BLACK	STAINED EBONY	BASALT
COLOUR									

NOTE: ALL COLOURS SPECIFIED ARE INDICATIVE ONLY AND ARE SUBJECT TO VARIATION AND TO AVAILABILITY. IN CASE OF ANY DISCREPANCY, PLEASE FOLLOW AS PER RENDERED IMAGE.

DA WINDOW SCHEDULE						
WINDOW NO.	HEIGHT	WIDTH	COUNT	SILL HEIGHT	HEAD HEIGHT	DESCRIPTION
GROUND FLOOR						
GW-01	600	2170	3	1800	2400	SLIDING WINDOW WITH SIDELIGHT (OBS)
GW-02	600	724	1	1800	2400	SLIDING WINDOW (OBS)
GW-03	2050	2170	1	350	2400	SLIDING WINDOW WITH FIXED BOTTOM PANELS
GROUND FLOOR: 5						
FW-01	2050	2170	1	350	2400	SLIDING WINDOW WITH FIXED BOTTOM PANELS
FW-02	2050	724	2	350	2400	3-PANEL VERTICAL FIXED WINDOW
FW-03	1800	850	3	600	2400	AWNING WINDOW WITH FIXED BOTTOM PANELS
FW-04	1800	1570	1	600	2400	SLIDING WINDOW WITH FIXED BOTTOM PANELS
FW-05	1800	2170	1	600	2400	SLIDING WINDOW WITH FIXED BOTTOM PANELS
FW-06 (OBS)	600	724	1	1800	2400	SLIDING WINDOW
UPPER GROUND FLOOR: 9						
Grand total: 14						

DA DOOR SCHEDULE					
DOOR NO.	HEIGHT	WIDTH	DOOR LEAF	COUNT	DESCRIPTION
GROUND FLOOR					
D-01	2400	1200	1120	1	EXTERNAL FLUSH DOOR WITH SIDELIGHT
D-02	2400	900	820	2	INTERNAL FLUSH DOOR
D-03	2400	800	720	3	INTERNAL FLUSH DOOR
D-04	2400	900	820	1	INTERNAL FLUSH DOOR
GD	2430	2800	2800	1	GARAGE DOOR
GROUND FLOOR: 8					
D-02	2400	900	820	2	INTERNAL FLUSH DOOR
D-03	2400	800	720	1	INTERNAL FLUSH DOOR
SD-01	2400	3215	3215	1	SLIDING STACKER DOOR
UPPER GROUND FLOOR: 4					
Grand total: 12					

REV	DATE	ISSUED AS PER RFT DT. 22.02.2024	DESCRIPTION	PS	BY
1	22.04.2024	ISSUED AS PER RFT DT. 22.02.2024		PS	BY

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DO NOT SCALE
20 10 0 10 20 30 40 50 70mm

PROJECT:
166 Pakenham Road
PAKENHAM, VIC

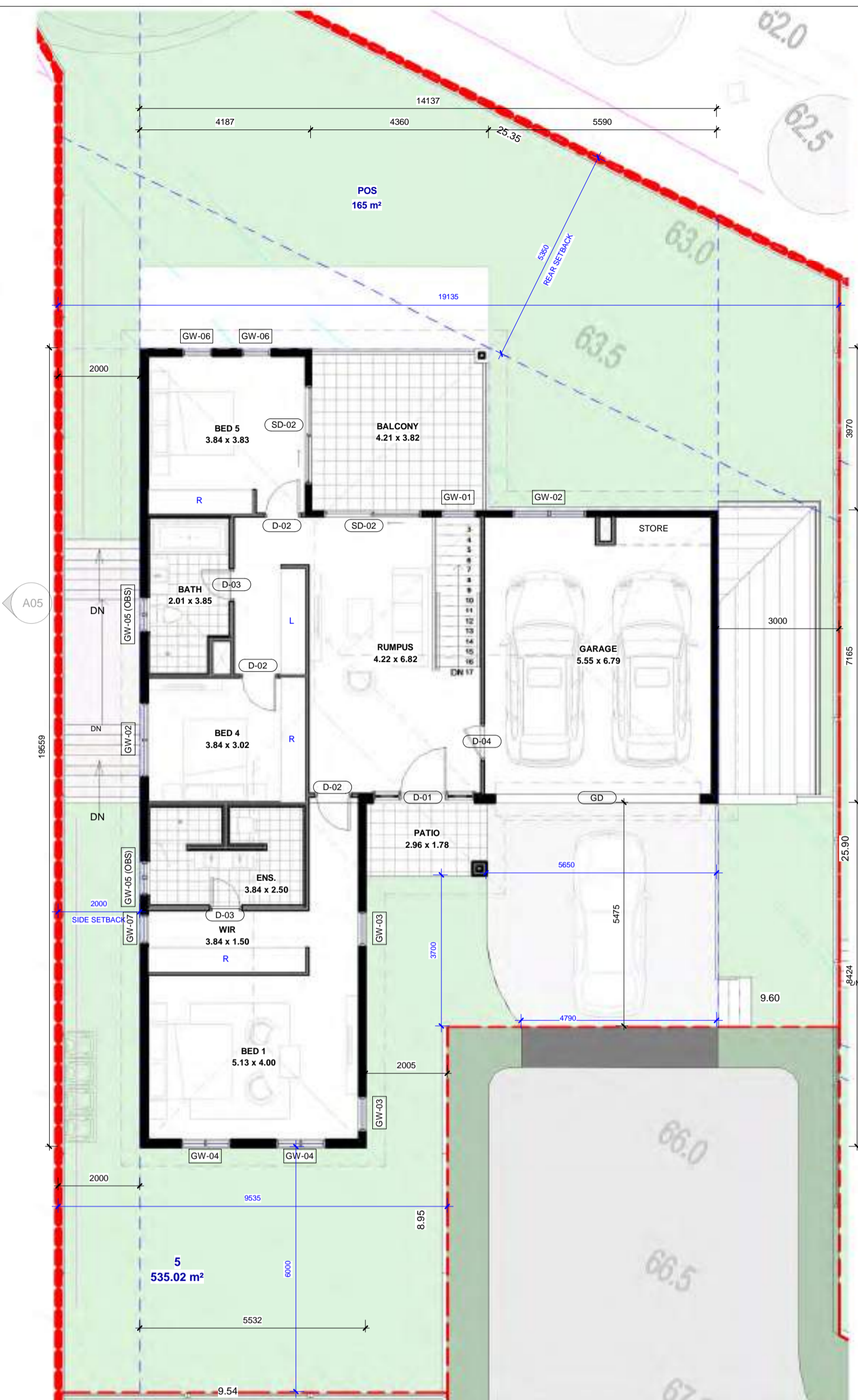
DRAWING TITLE:
LOT 4

DATE:	SCALE:	DRAWING No:
15.04.2024	1:100	A04
DRAWN BY:	CHECKED BY:	REV:
PS	JOSE	1

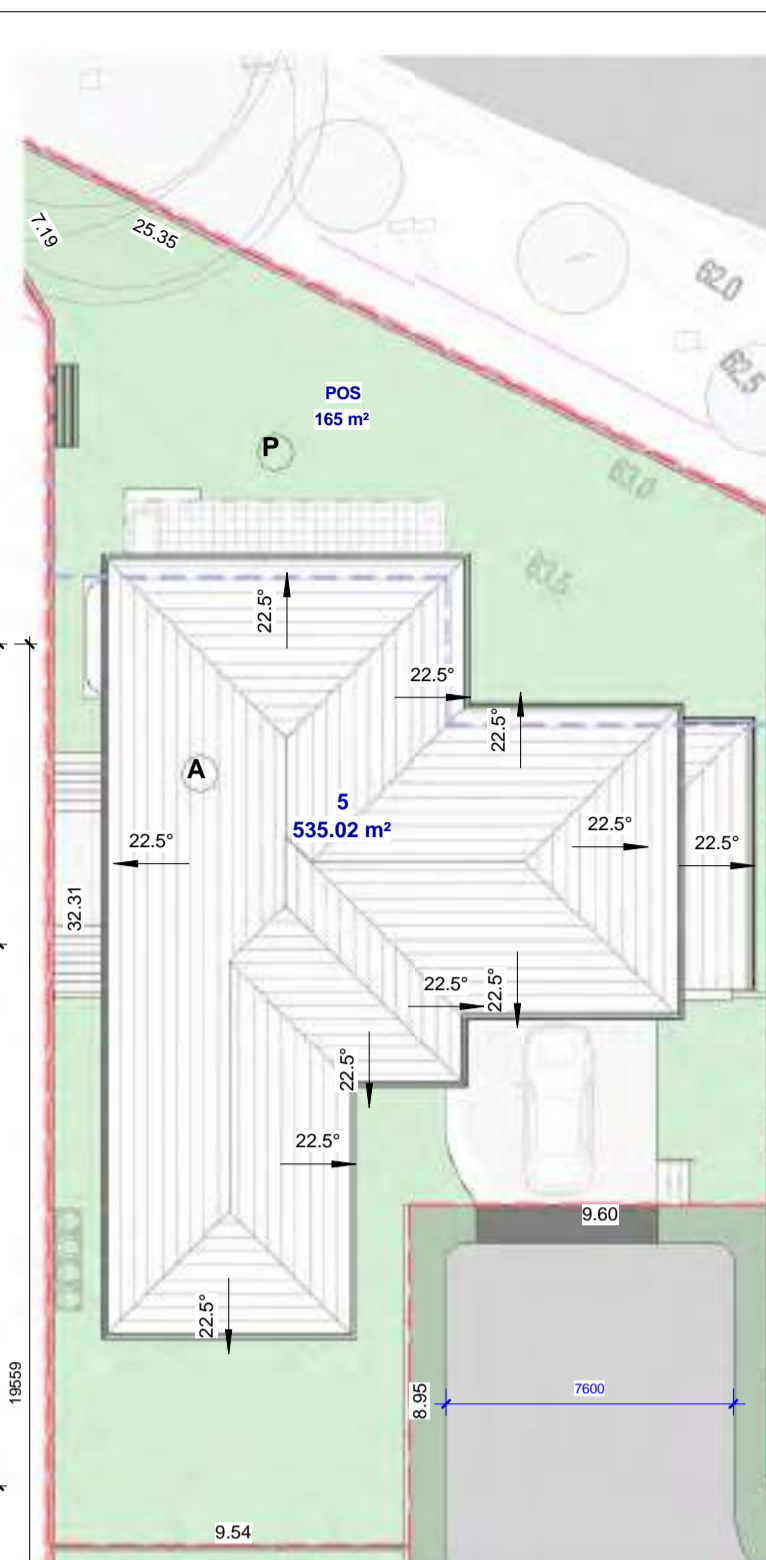
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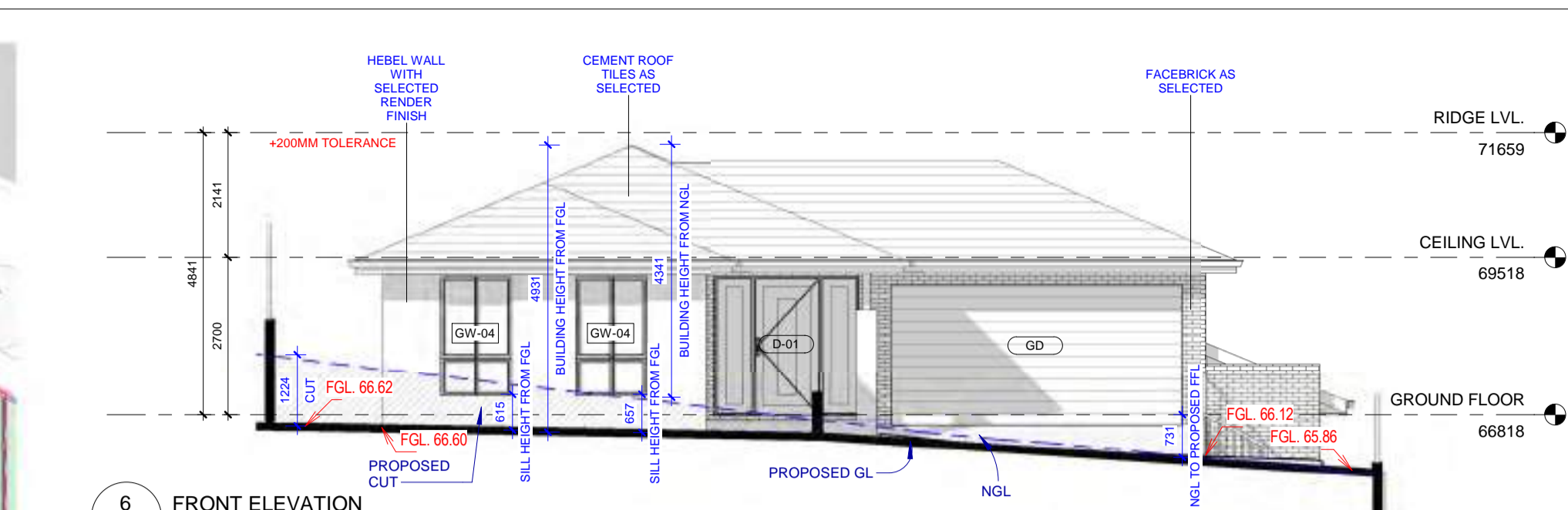
1 LOWER GROUND FLOOR
A05 1:100



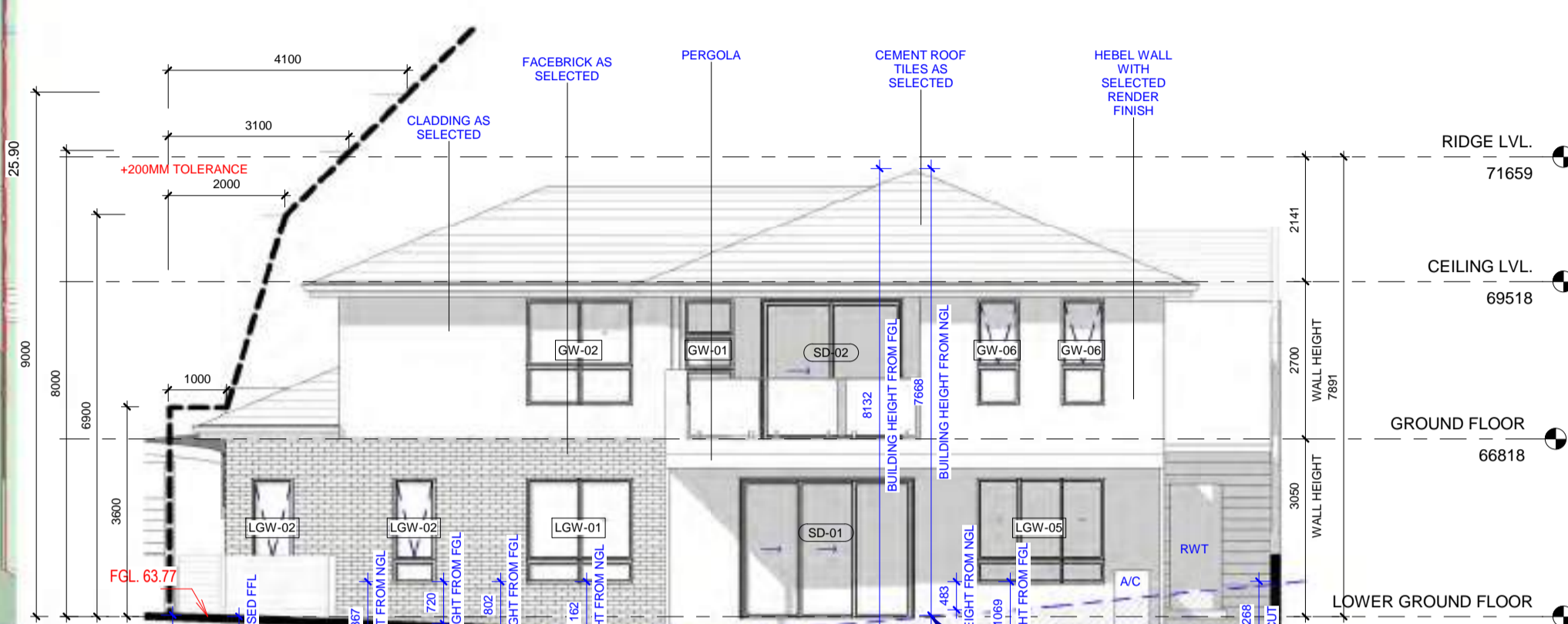
2 DA_GROUND FLOOR
A05 1:100



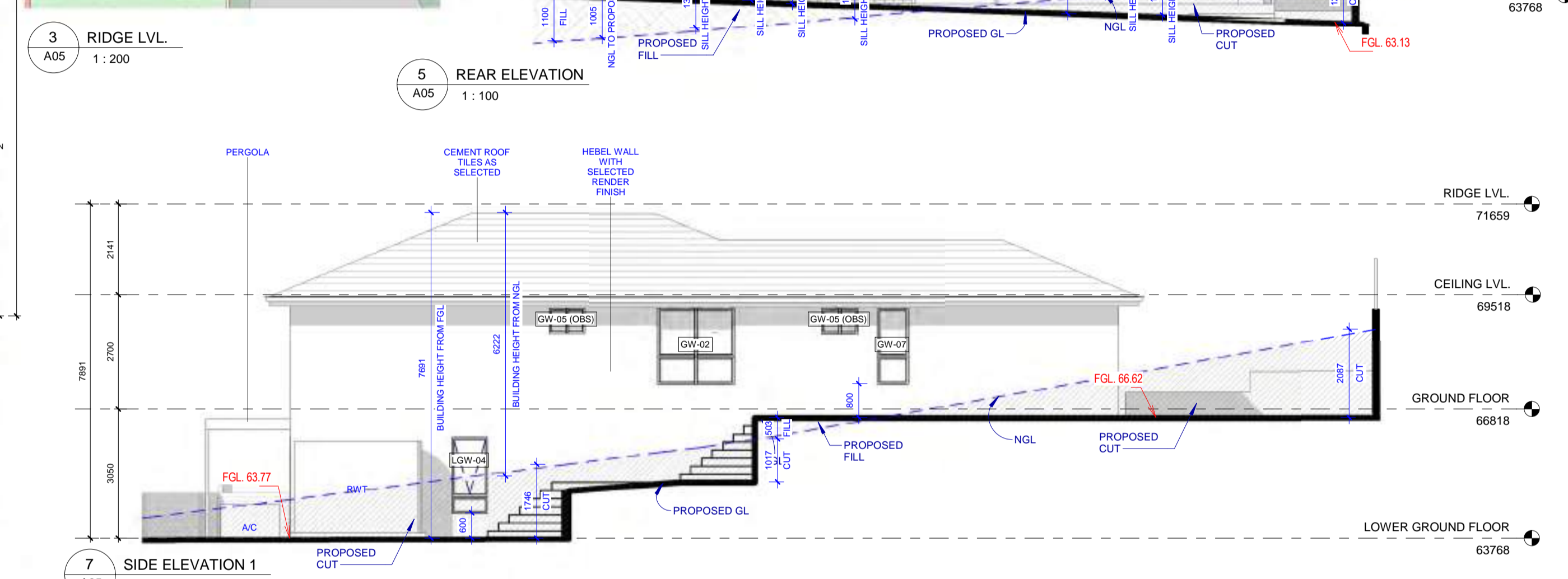
3 RIDGE LVL.
A05 1:200



6 FRONT ELEVATION
A05 1:100



5 REAR ELEVATION
A05 1:100



7 SIDE ELEVATION 1
A05 1:100



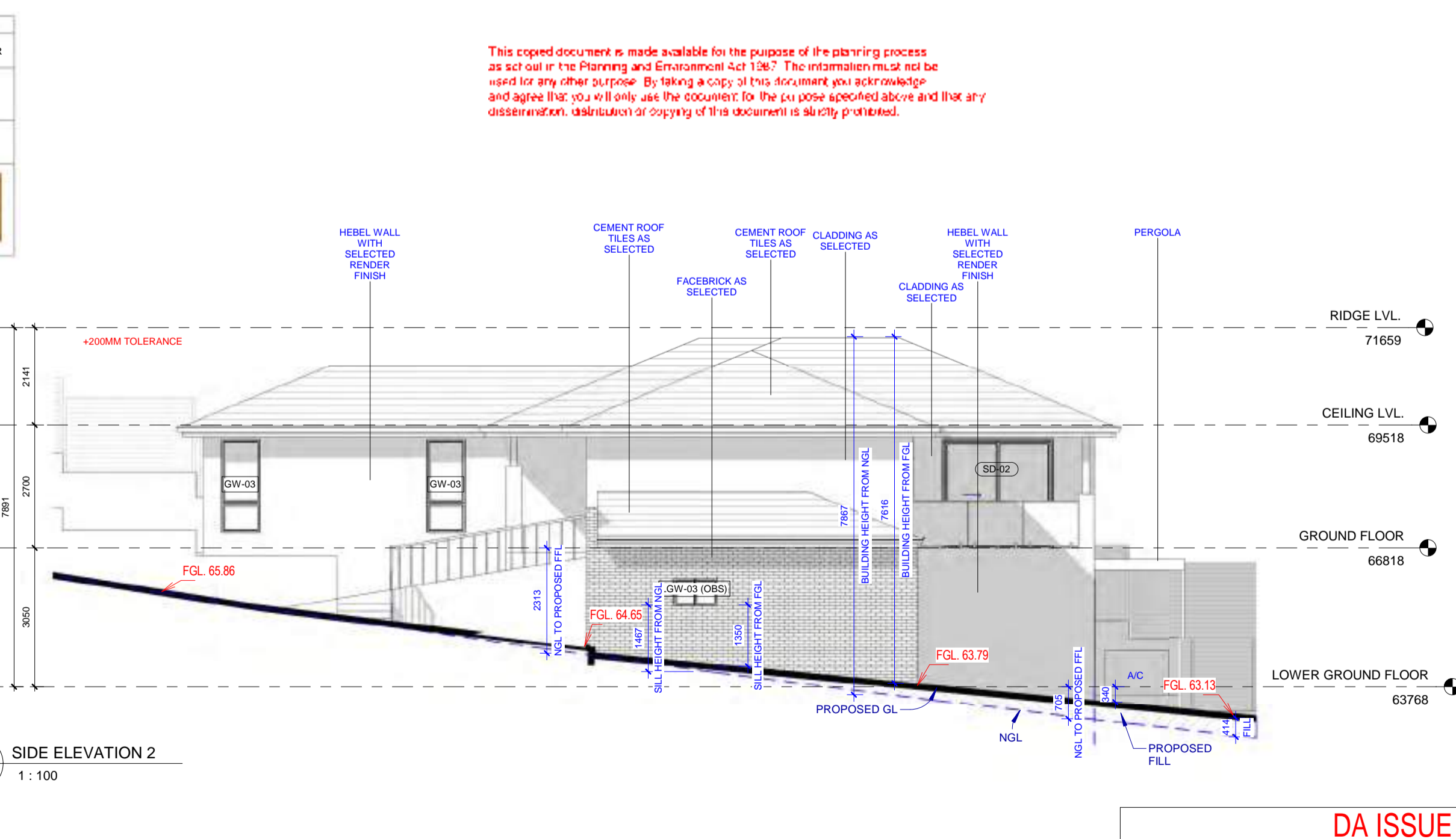
REV	DATE	ISSUED AS PER RFT DT. 22.02.2024	DESCRIPTION	PS	BY
1	22/04/2024	ISSUED AS PER RFT DT. 22.02.2024		PS	BY

CRT	GUT	FAS	BR	CR1	CR2	CD2	AL	ED	GD
CONCRETE ROOF TILES	GUTTER	FASCIA	FACEBRICK	WALL	ACCENT WALL	CLADDING	WINDOW FRAMES & HANDRAIL	MAIN DOOR	GARAGE DOOR
MOMBER ELABANA	COLORBOND	COLORBOND	POH BRICKS	CEMENT RENDER	CEMENT RENDER	JAMES HARDIE FINE TEXTURE	ALUMINIUM	TIMBER	COLORBOND
BARRAMUNDI	IRONSTONE	SURFMIST	OLYMPUS	DULUX STEPNEY	DULUX SNOWY MOUNTAINS QUARTER	DULUX SNOWY MOUNTAINS QUARTER	POWDERCOATED BLACK	STAINED TEAK	CLASSIC CEDAR

NOTE: ALL COLOURS SPECIFIED ARE INDICATIVE ONLY AND ARE SUBJECT TO VARIATION AND TO AVAILABILITY. IN CASE OF ANY DISCREPANCY, PLEASE FOLLOW AS PER RENDERED IMAGE.

DA WINDOW SCHEDULE					
WINDOW NO.	HEIGHT	WIDTH	SILL HEIGHT	HEAD HEIGHT	DESCRIPTION
LOWER GROUND FLOOR					
LGW-01	1800	1810	600	2400	SLIDING WINDOW WITH FIXED BOTTOM PANELS
LGW-02	1800	724	600	2400	AWNING WINDOW WITH FIXED BOTTOM PANELS
LGW-03 (OBS)	600	970	1800	2400	SLIDING WINDOW
LGW-04	1800	850	600	2400	AWNING WINDOW WITH FIXED BOTTOM PANELS
LGW-05	1800	2170	600	2400	SLIDING WINDOW WITH FIXED BOTTOM PANELS
LOWER GROUND FLOOR: 6					
GW-01	1800	850	600	2400	3-PANEL VERTICAL FIXED WINDOW
GW-02	1800	1810	600	2400	SLIDING WINDOW WITH FIXED BOTTOM PANELS
GW-03	2050	850	350	2400	AWNING WINDOW WITH FIXED BOTTOM PANELS
GW-04	2050	1210	350	2400	SLIDING WINDOW WITH FIXED BOTTOM PANELS
GW-05 (OBS)	600	850	1800	2400	SLIDING WINDOW
GW-06	1800	724	600	2400	AWNING WINDOW WITH FIXED BOTTOM PANELS
GW-07	1800	724	600	2400	AWNING WINDOW WITH FIXED BOTTOM PANELS
GROUND FLOOR: 12					
Grand total: 18					

DA DOOR SCHEDULE					
DOOR NO.	HEIGHT	WIDTH	DOOR LEAF	COUNT	DESCRIPTION
LOWER GROUND FLOOR					
D-02	2400	900	820	4	INTERNAL FLUSH DOOR
D-03	2400	800	720	2	INTERNAL FLUSH DOOR
SD-01	2400	2975	2975	1	SLIDING STACKER DOOR
LOWER GROUND FLOOR: 7					
D-01	2400	1200	1120	1	EXTERNAL FLUSH DOOR WITH SIDELIGHT
D-02		900	820	3	INTERNAL FLUSH DOOR
D-03	2400	800	720	2	INTERNAL FLUSH DOOR
D-04	2400	900	820	1	INTERNAL FLUSH DOOR
GD	2430	5000	5000	1	GARAGE DOOR
SD-02	2400	2410	2410	2	GLASS SLIDING DOOR
GROUND FLOOR: 10					
Grand total: 17					



4 SIDE ELEVATION 2
A05 1:100

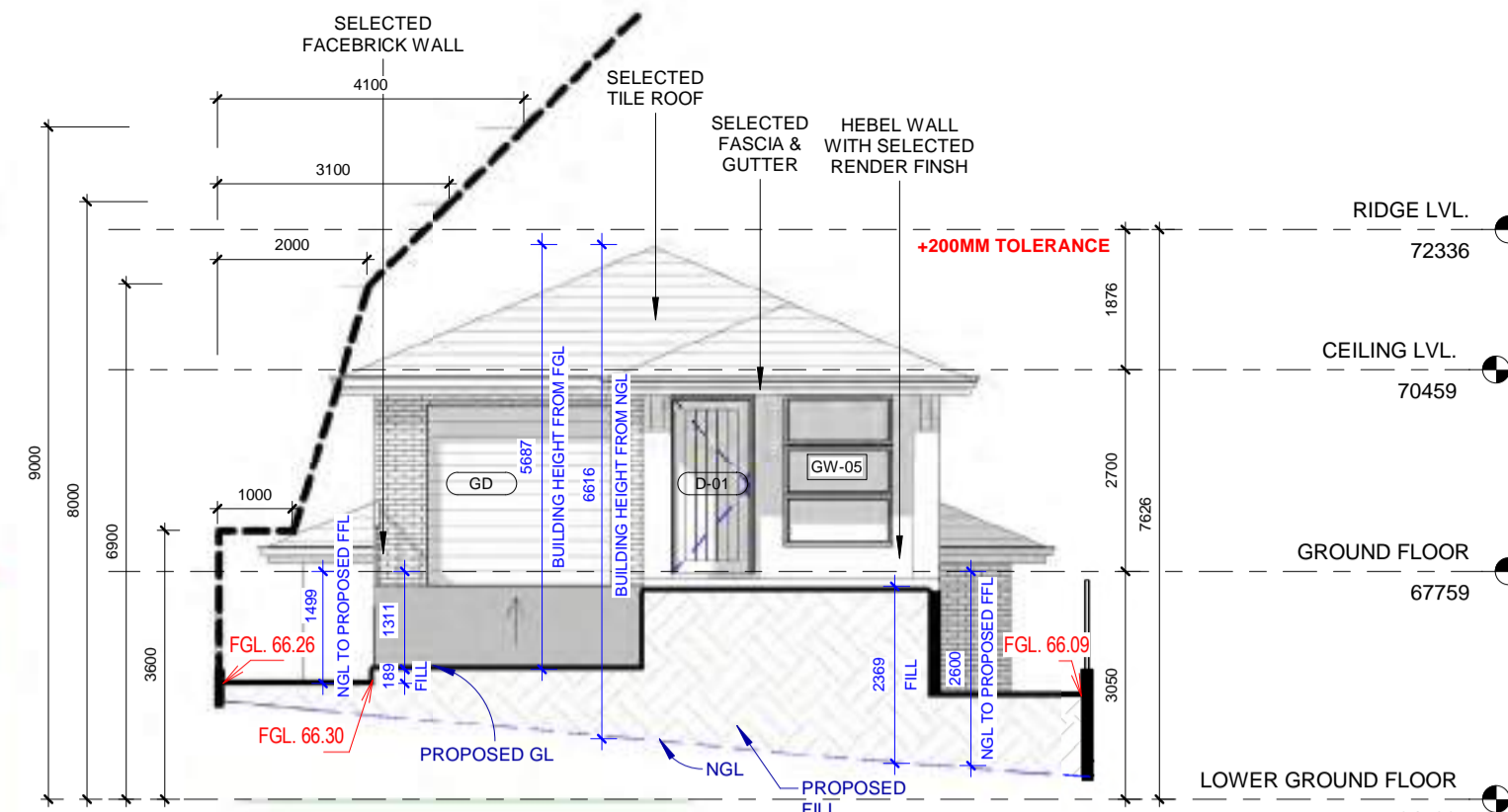
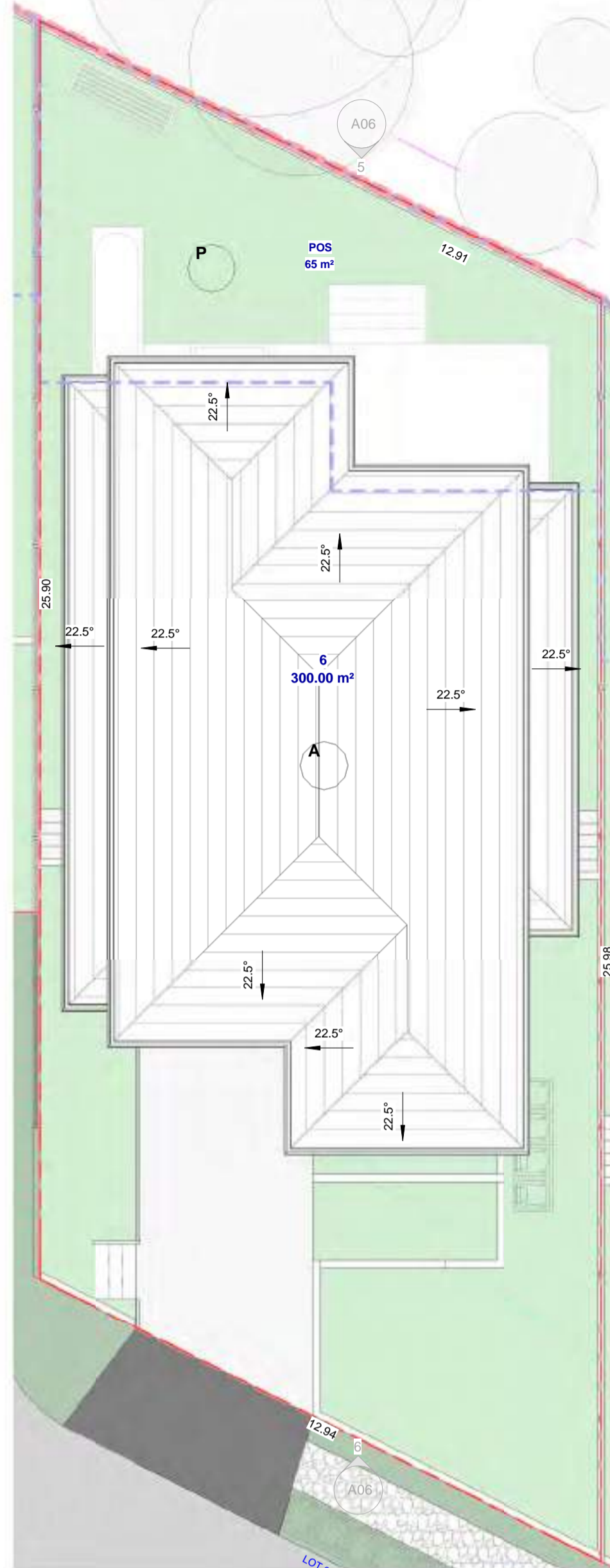
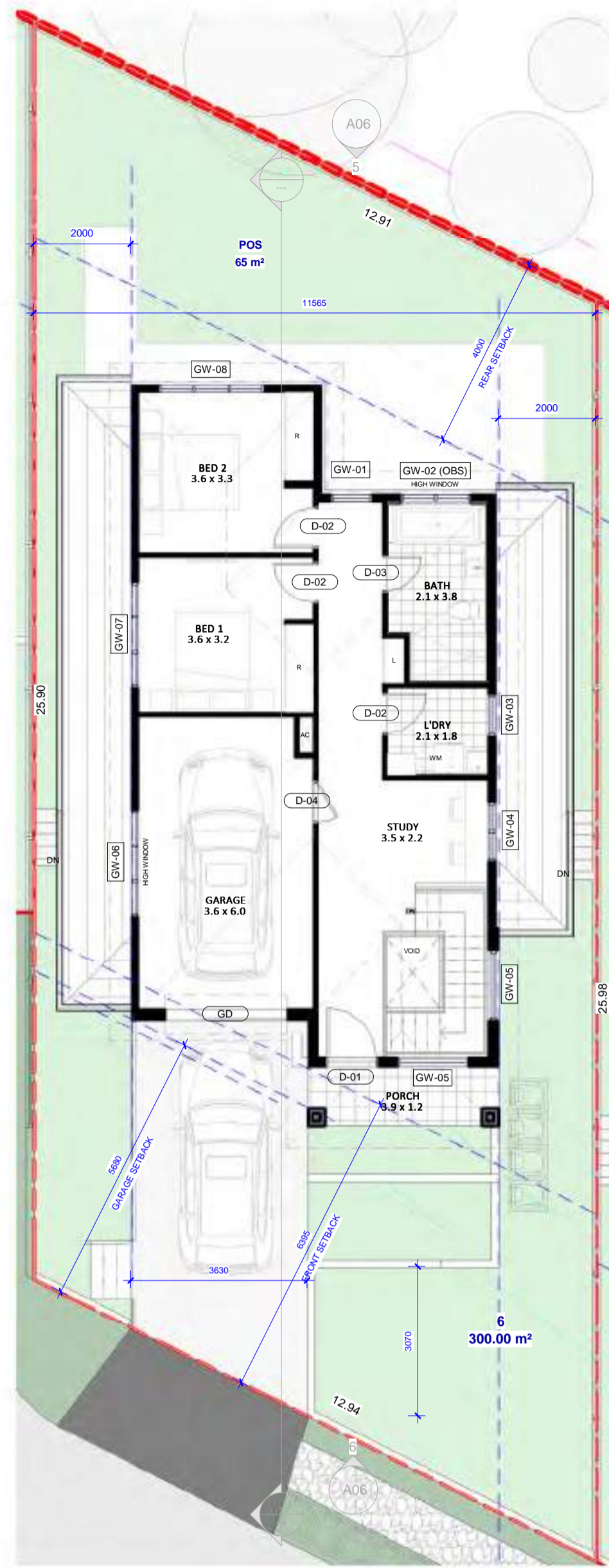
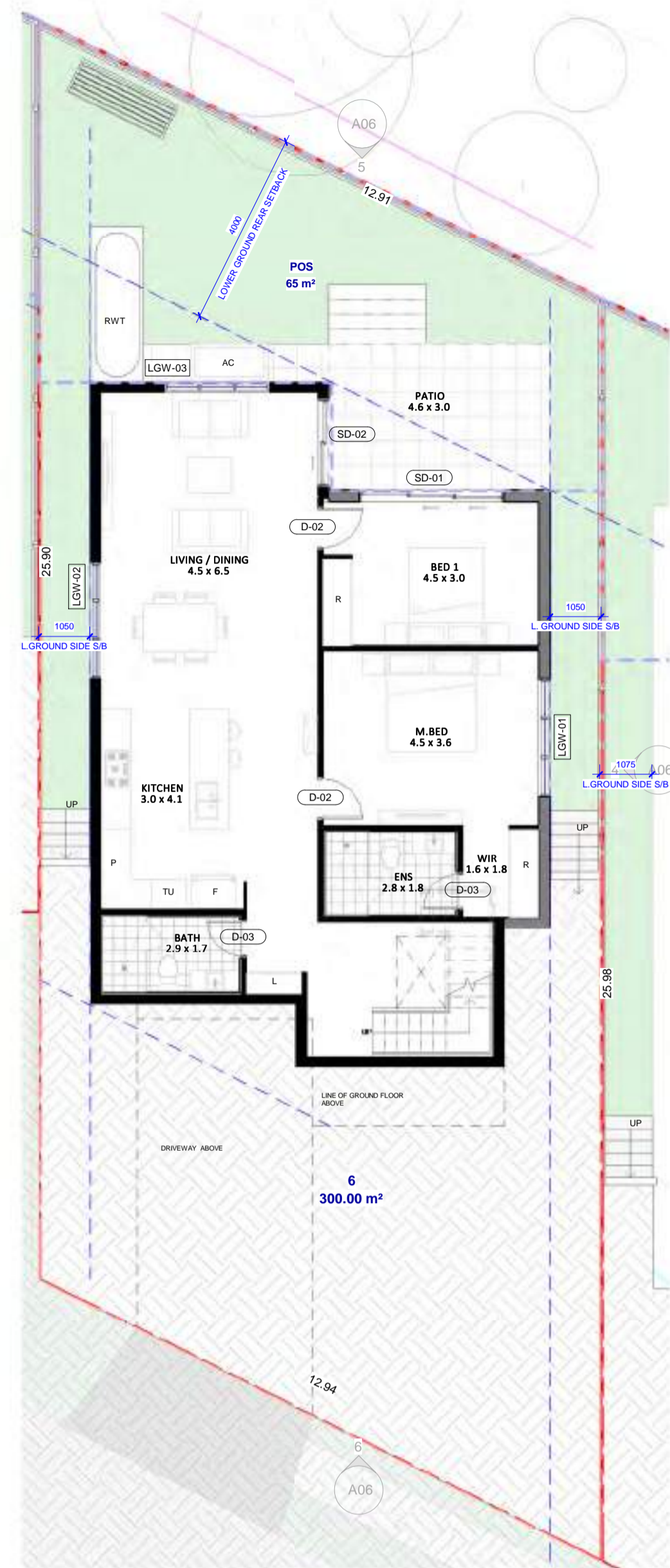
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PROJECT:
166 Pakenham Road
PAKENHAM, VIC

DRAWING TITLE:
LOT 05

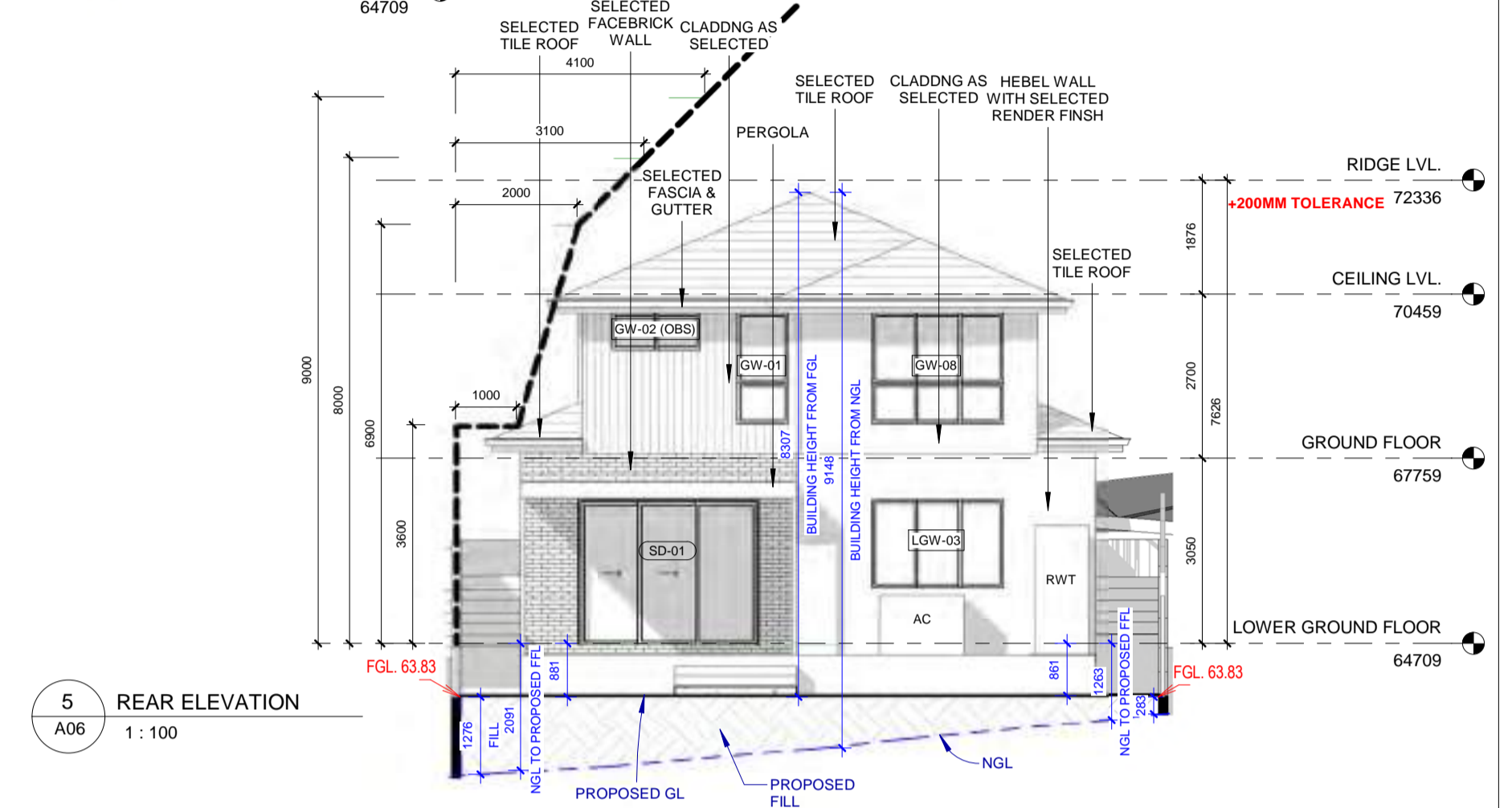
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20.03.2024	As indicated	A05
DRAWN BY:	CHECKED BY:	REV:
PS	JOSE	1

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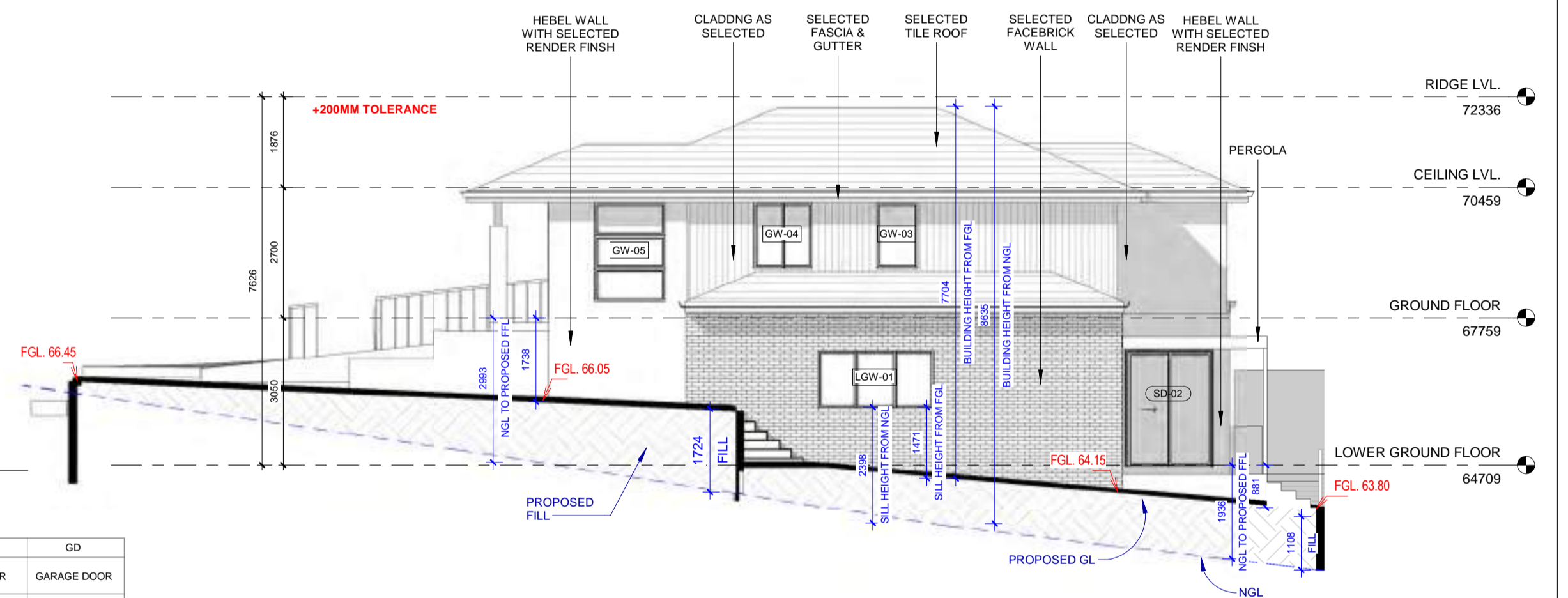


6 FRONT ELEVATION
A06 1:100

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5 REAR ELEVATION
A06 1:100



7 SIDE ELEVATION 2
A06 1:100



CRT	GUT	FAS	BR	CR1	CR2	CD1	CD2	PST	AL	ED	GD
CONCRETE ROOF TILES	GUTTER	FASCIA	FACEBRICK	MAIN WALL	ACCENT WALL	CLADDING	CLADDING	VERTICAL POST	WINDOW FRAMES & HANDRAIL	MAIN DOOR	GARAGE DOOR
MONIER ELABANA	COLORBOND	COLORBOND	PGH BRICKS	CEMENT RENDER	CEMENT RENDER	JAMES HARDIE AXON	JAMES HARDIE FINE TEXTURE CLADDING	COLORBOND	ALUMINIUM	TIMBER	COLORBOND
SAMBUCA	MONUMENT	SURFIMIST	SMOOTH BLACK & TAN	DULUX SNOWY MOUNTAIN QUARTERS	TEAHOUSE	DULUX SNOWY MOUNTAIN QUARTERS	TEAHOUSE	MONUMENT	POWDERCOATED BLACK	DULUX DOMINO	MONUMENT

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WINDO W NO.	HEIGHT	WIDTH	COUNT	SILL HEIGHT	HEAD HEIGHT	DESCRIPTION
LOWER GROUND FLOOR						
LGW-01	1200	2410	1	1200	2400	SLIDING WINDOW
LGW-02	1450	2410	1	950	2400	SLIDING WINDOW
LGW-03	1450	2170	1	950	2400	SLIDING WINDOW
LOWER GROUND FLOOR: 3						
GW-01	1800	850	1	600	2400	AWNING WINDOW WITH FIXED BOTTOM PANELS (OBS)
GW-02	600	1450	1	1800	2400	SLIDING WINDOW
GW-03	1370	850	1	1030	2400	AWNING WINDOW
GW-04	1370	1210	1	1030	2400	SLIDING WINDOW
GW-05	2050	1450	2	350	2400	3-PANEL VERTICAL FIXED WINDOW
GW-06	600	2170	1	1800	2400	SLIDING WINDOW
GW-07	1370	2170	1	1030	2400	SLIDING WINDOW
GW-08	1800	2170	1	600	2400	SLIDING WINDOW WITH FIXED BOTTOM PANELS
GROUND FLOOR: 9						
Grand total: 12						

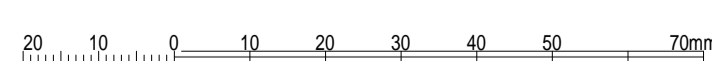
DOOR NO.	HEIGHT	WIDTH	DOOR LEAF	COUNT	DESCRIPTION
LOWER GROUND FLOOR					
D-02	2400	900	820	2	INTERNAL FLUSH DOOR
D-03	2400	800	720	2	INTERNAL FLUSH DOOR
SD-01	2400	2975	2975	1	SLIDING STACKER DOOR
SD-02	2400	1810	1810	1	GLASS SLIDING DOOR
LOWER GROUND FLOOR: 6					
D-01	2400	1100	1020	1	ENTRY DOOR
D-02	2400	900	820	3	INTERNAL FLUSH DOOR
D-03	2400	800	720	2	INTERNAL FLUSH DOOR
D-04	2400	900	820	1	INTERNAL FLUSH DOOR
GD	2430	2500	2500	1	GARAGE DOOR
GROUND FLOOR: 7					
Grand total: 13					

REV	DATE	AMENDED AS PER RFI DT.	DESCRIPTION	PS	BY
1	18/04/2024	AMENDED AS PER RFI DT.	22.02.2024	PS	BY

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DO NOT SCALE

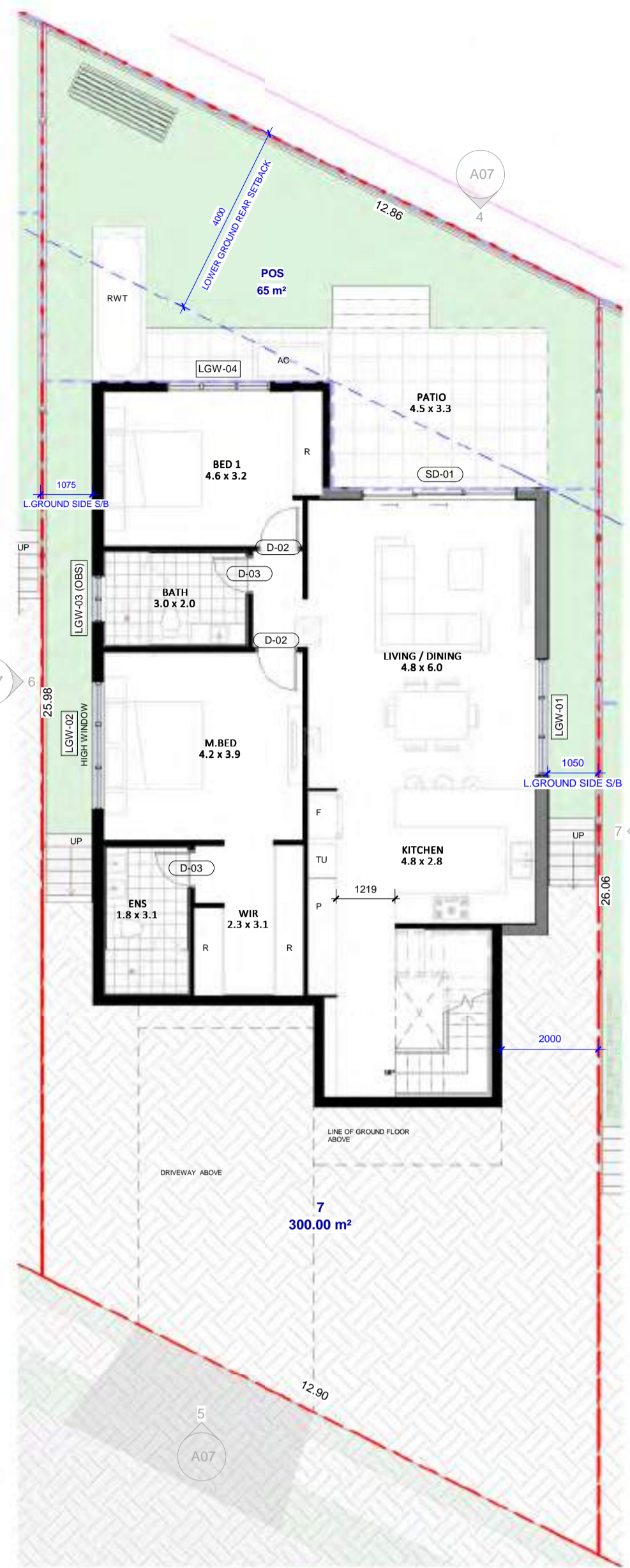


PROJECT:
166 Pakenham Road
PAKENHAM, VIC

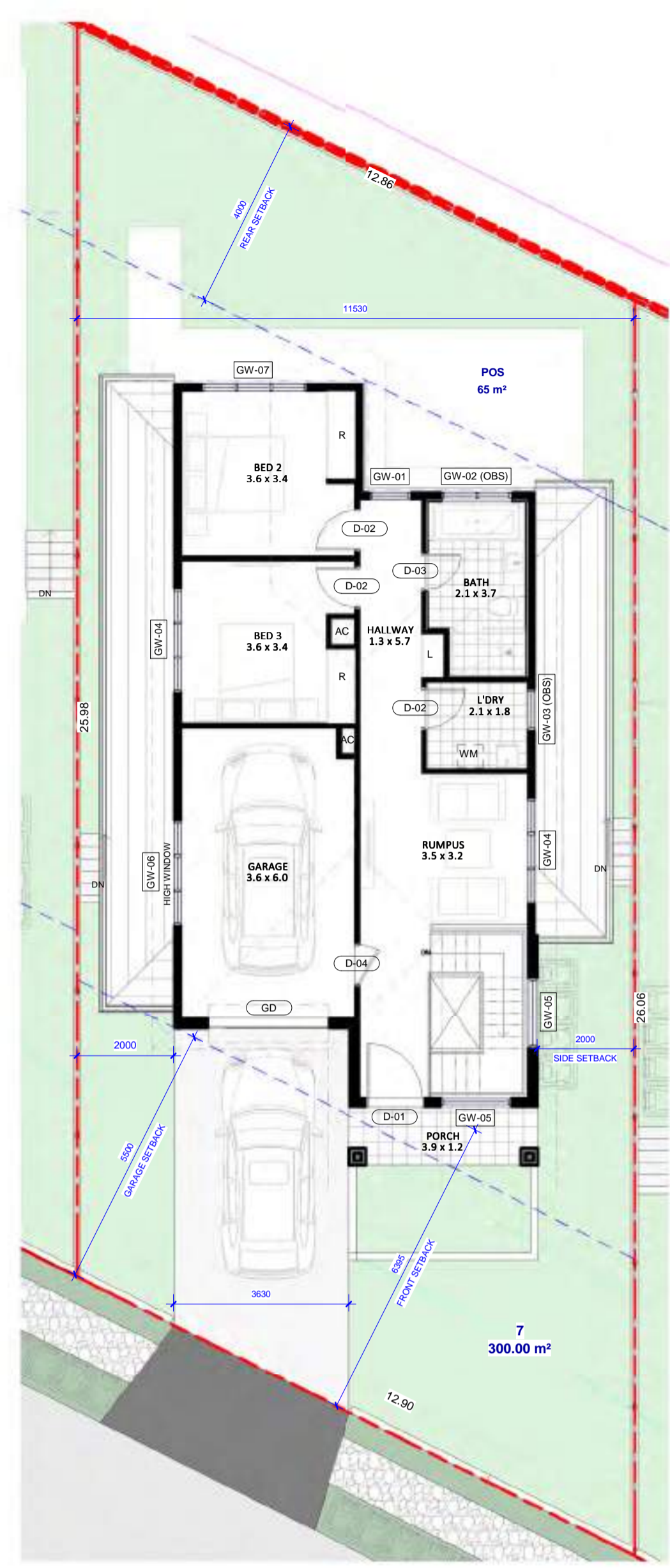
DRAWING TITLE:
LOT 06

DATE:	SCALE:	DRAWING No:
08/04/22	1:100	A06
DRAWN BY:	CHECKED BY:	REV:
PS	JOSE	1

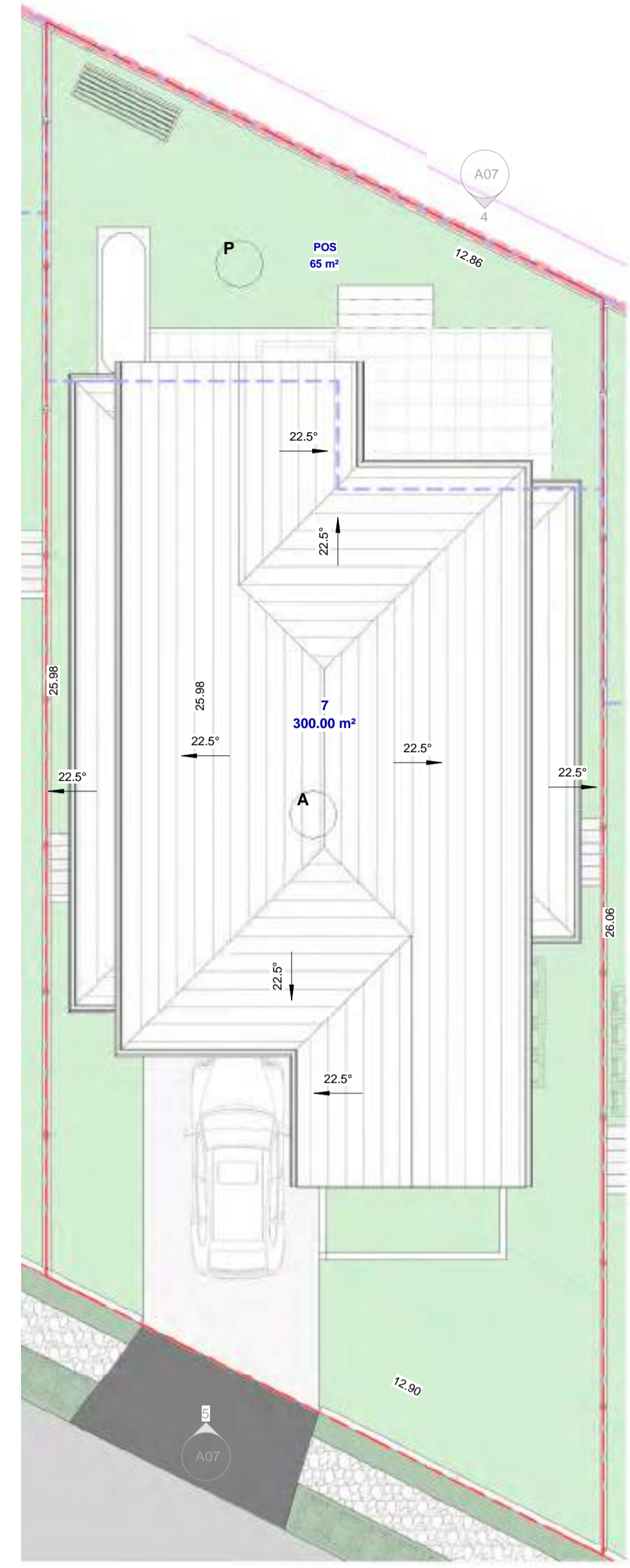
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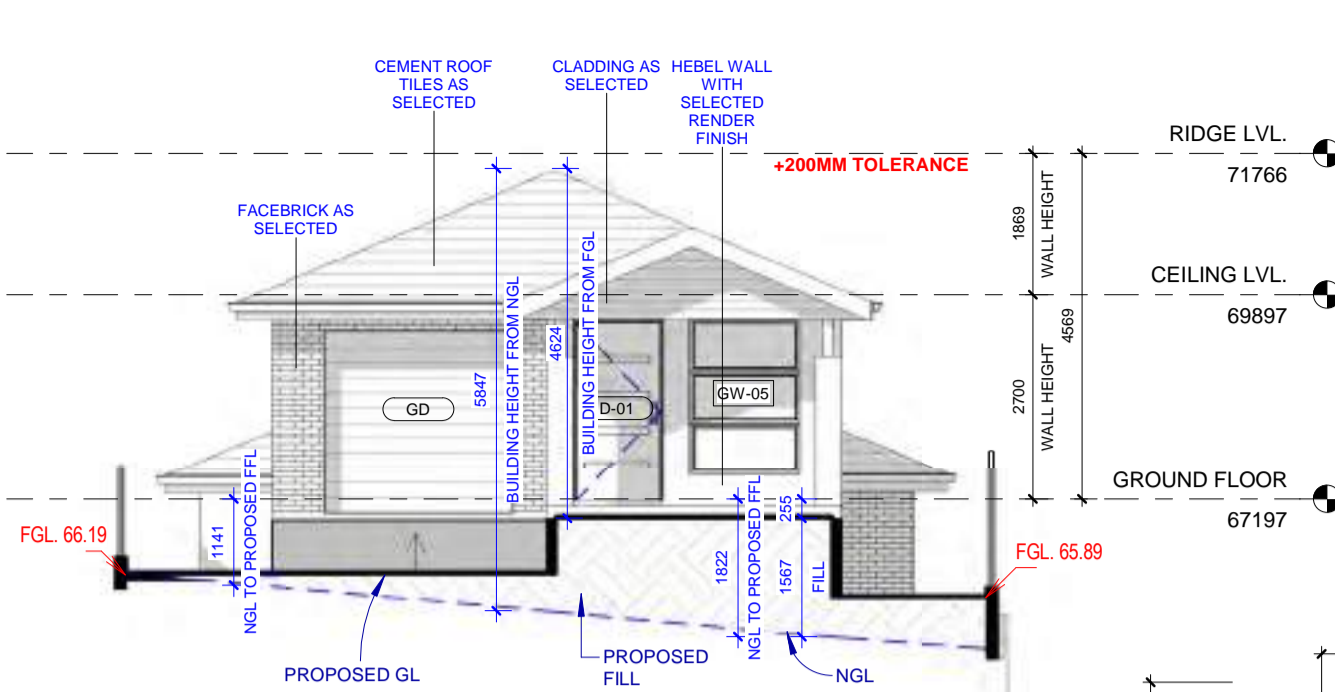
1 LOWER GROUND FLOOR
A07 1:100



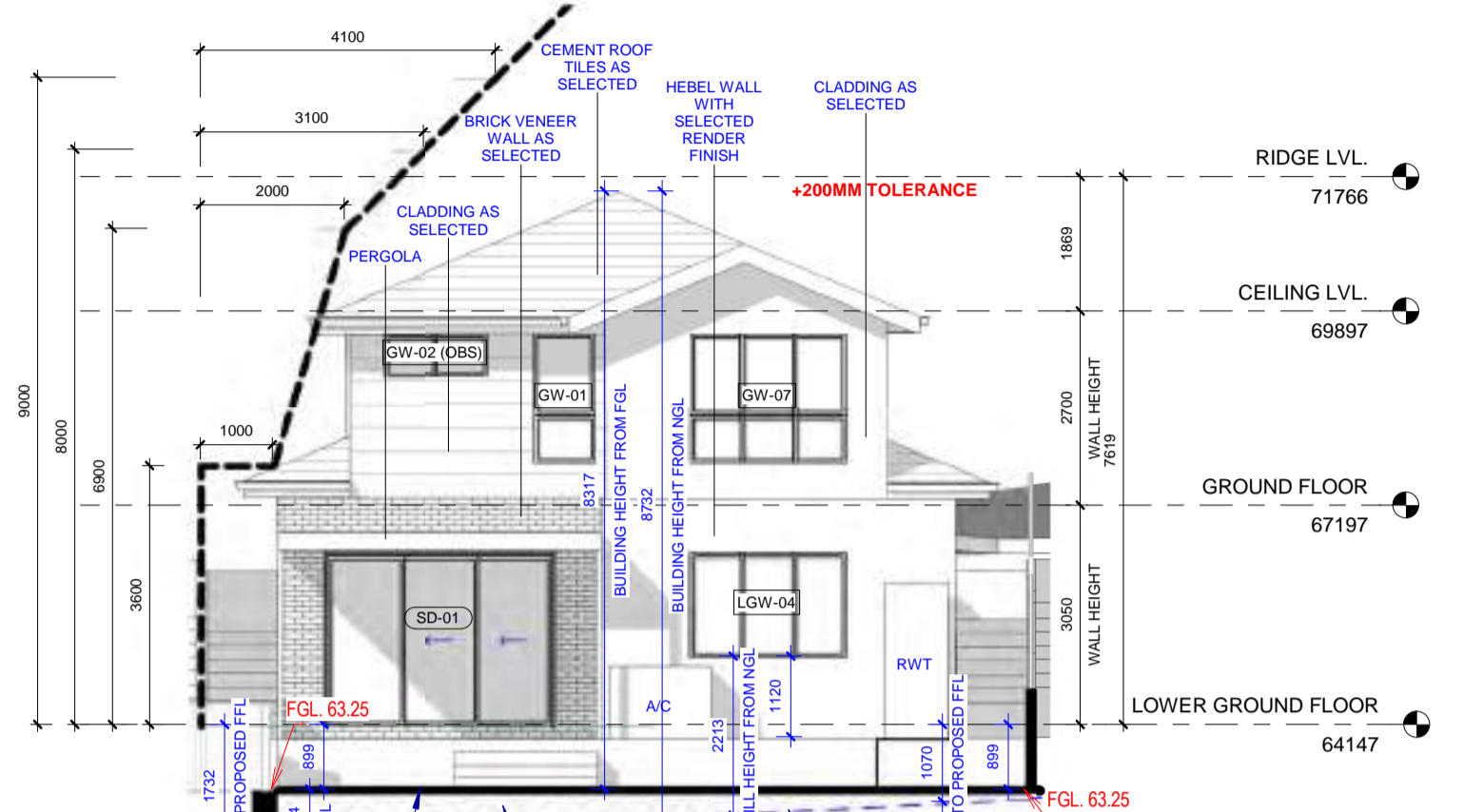
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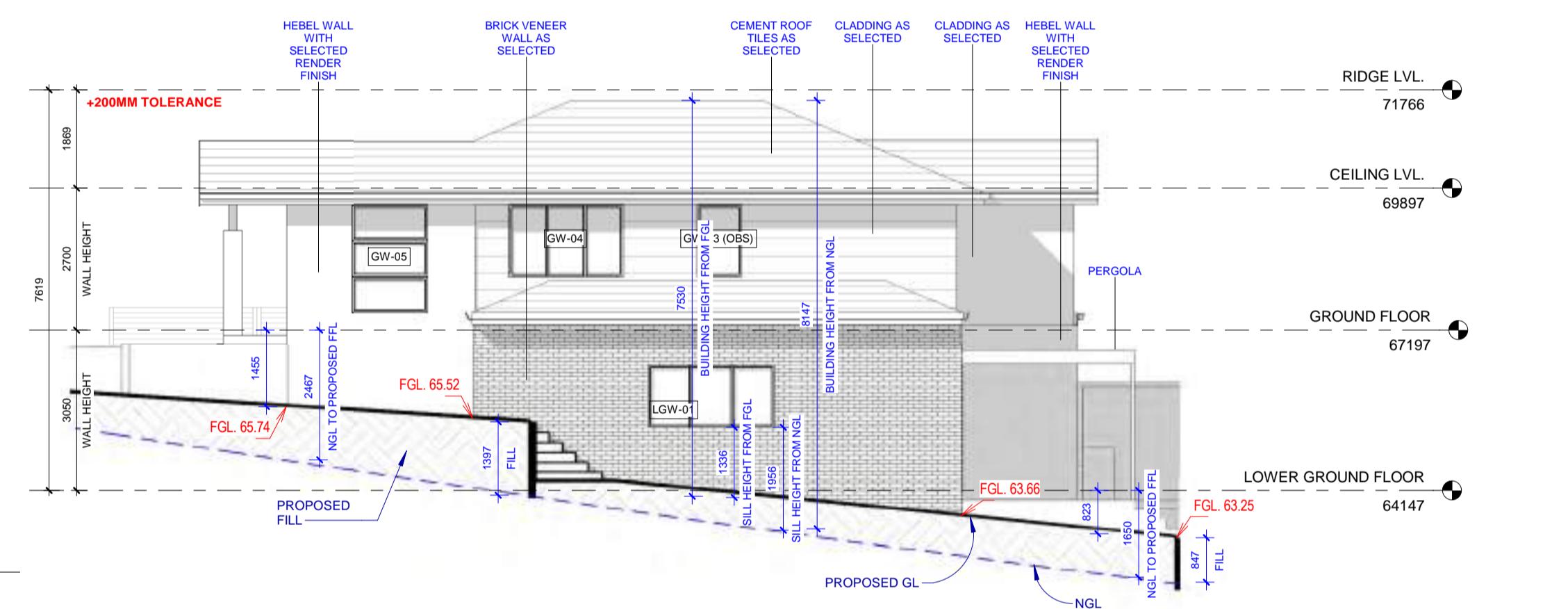
3 RIDGE LVL.
A07 1:100



5 FRONT ELEVATION
A07 1:100



4 REAR ELEVATION
A07 1:100



7 SIDE ELEVATION 1
A07 1:100

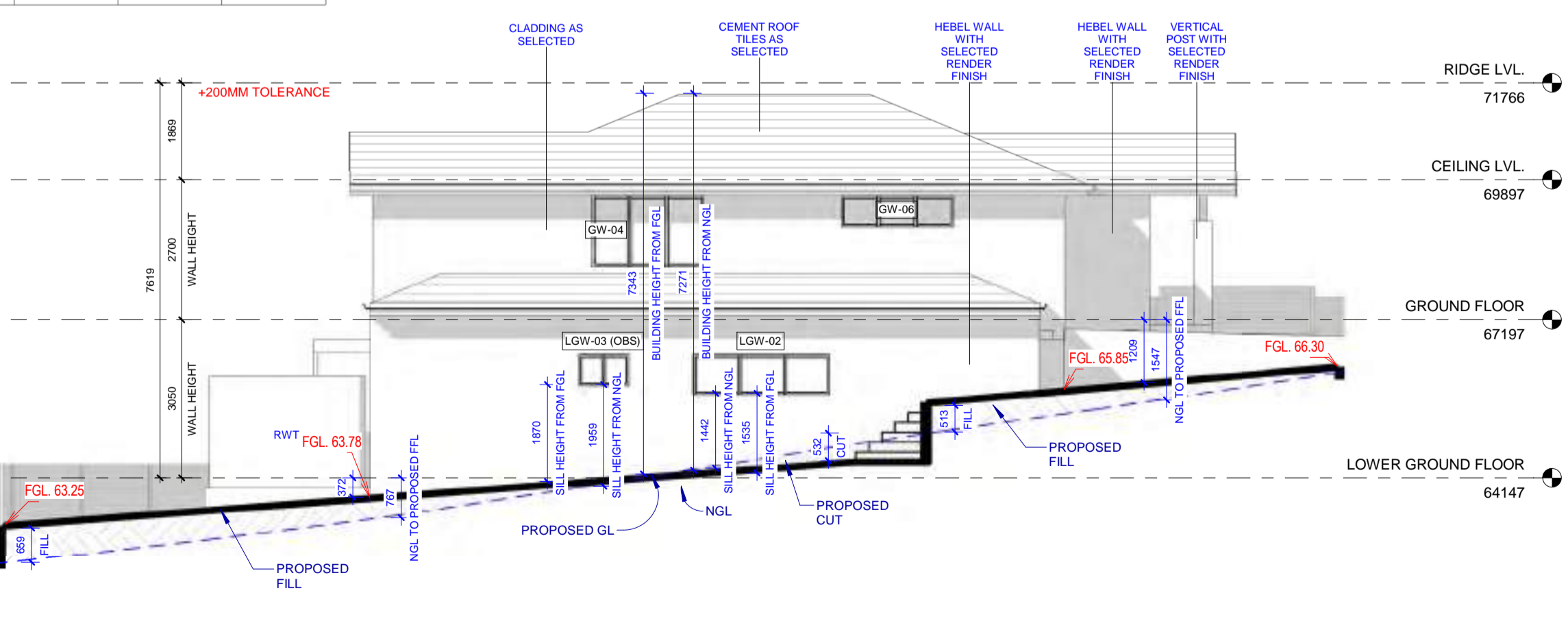


CRT	GUT	FAS	BR	CR1	CR2	CD1	CD2	CD3	PST	AL	ED	GD
CONCRETE ROOF TILES	GUTTER	FASCIA	FACEBRICK	MAIN WALL	ACCENT WALL	CLADDING	CLADDING	CLADDING	VERTICAL POST	WINDOW FRAMES & HANDRAIL	MAIN DOOR	GARAGE DOOR
MONIER ELABANA	COLORBOND	COLORBOND	POH BRICKS	CEMENT RENDER	CEMENT RENDER	JAMES HARDIE LINEA WEATHERBOARD	JAMES HARDIE STRIA 325 GAP	JAMES HARDIE FINE TEXTURE	COLORBOND	ALUMINIUM	TIMBER	COLORBOND
BARRAMUNDI	IRONSTONE	SURFMIST	MINERAL	DULUX TAPESTRY BEIGE	DULUX SNOWY MOUNTAINS QUARTER	DULUX SNOWY MOUNTAINS QUARTER	DULUX SNOWY MOUNTAINS QUARTER	DULUX TAPESTRY BEIGE	IRONSTONE	POWDERCOATED WHITE	DULUX WHITE DUNE HALF	SURFMIST

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WINDO W NO.	HEIGHT	WIDTH	COUNT	SILL HEIGHT	HEAD HEIGHT	DESCRIPTION
LOWER GROUND FLOOR						
LGW-01	1200	2410	1	1200	2400	SLIDING WINDOW
LGW-02	770	2650	1	1630	2400	SLIDING WINDOW
LGW-03 (OBS)	600	970	1	1800	2400	SLIDING WINDOW
LGW-04	1450	2170	1	950	2400	SLIDING WINDOW
LOWER GROUND FLOOR: 4						
GW-01	1800	850	1	600	2400	AWNING WINDOW WITH FIXED BOTTOM PANELS
GW-02 (OBS)	600	1450	1	1800	2400	AWNING WINDOW
GW-03 (OBS)	1370	850	1	1030	2400	AWNING WINDOW
GW-04	1370	2170	2	1030	2400	SLIDING WINDOW
GW-05	2050	1450	2	350	2400	3-PANEL VERTICAL FIXED WINDOW
GW-06	600	2170	1	1800	2400	SLIDING WINDOW
GW-07	1800	2170	1	600	2400	SLIDING WINDOW WITH FIXED BOTTOM PANELS
GROUND FLOOR: 9						
Grand total: 13						

DOOR NO.	HEIGHT	WIDTH	DOOR LEAF	COUNT	DESCRIPTION
LOWER GROUND FLOOR					
D-02	2400	900	820	2	INTERNAL FLUSH DOOR
D-03	2400	800	720	2	INTERNAL FLUSH DOOR
SD-01	2400	3215	1	1	SLIDING STACKER DOOR
LOWER GROUND FLOOR: 5					
D-01	2400	1200	1120	1	ENTRY DOOR
D-02	2400	900	820	3	INTERNAL FLUSH DOOR
D-03	2400	800	720	1	INTERNAL FLUSH DOOR
D-04	2400	900	820	1	INTERNAL FLUSH DOOR
GD	2430	2500	2500	1	GARAGE DOOR
GROUND FLOOR: 7					
Grand total: 12					

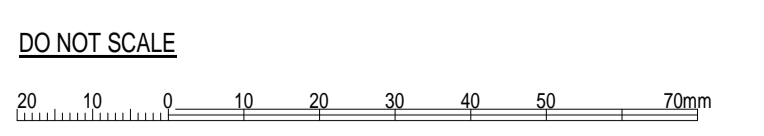


6 SIDE ELEVATION 2
A07 1:100

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PROJECT:
166 Pakenham Road
PAKENHAM, VIC

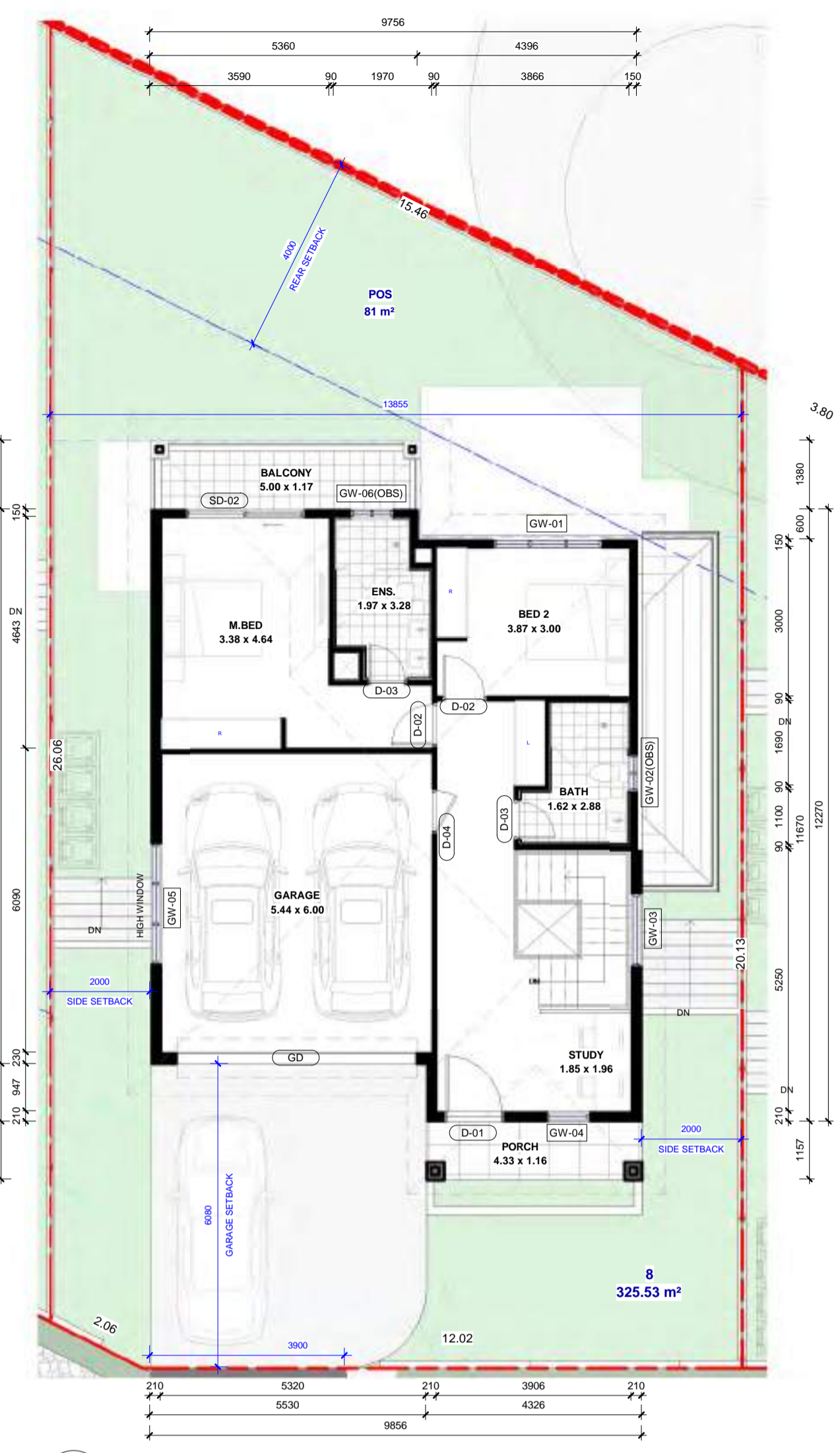
DRAWING TITLE:
LOT 07

DATE:	SCALE:	DRAWING No:
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DRAWN BY:	CHECKED BY:	REV:
PS	JOSE	1

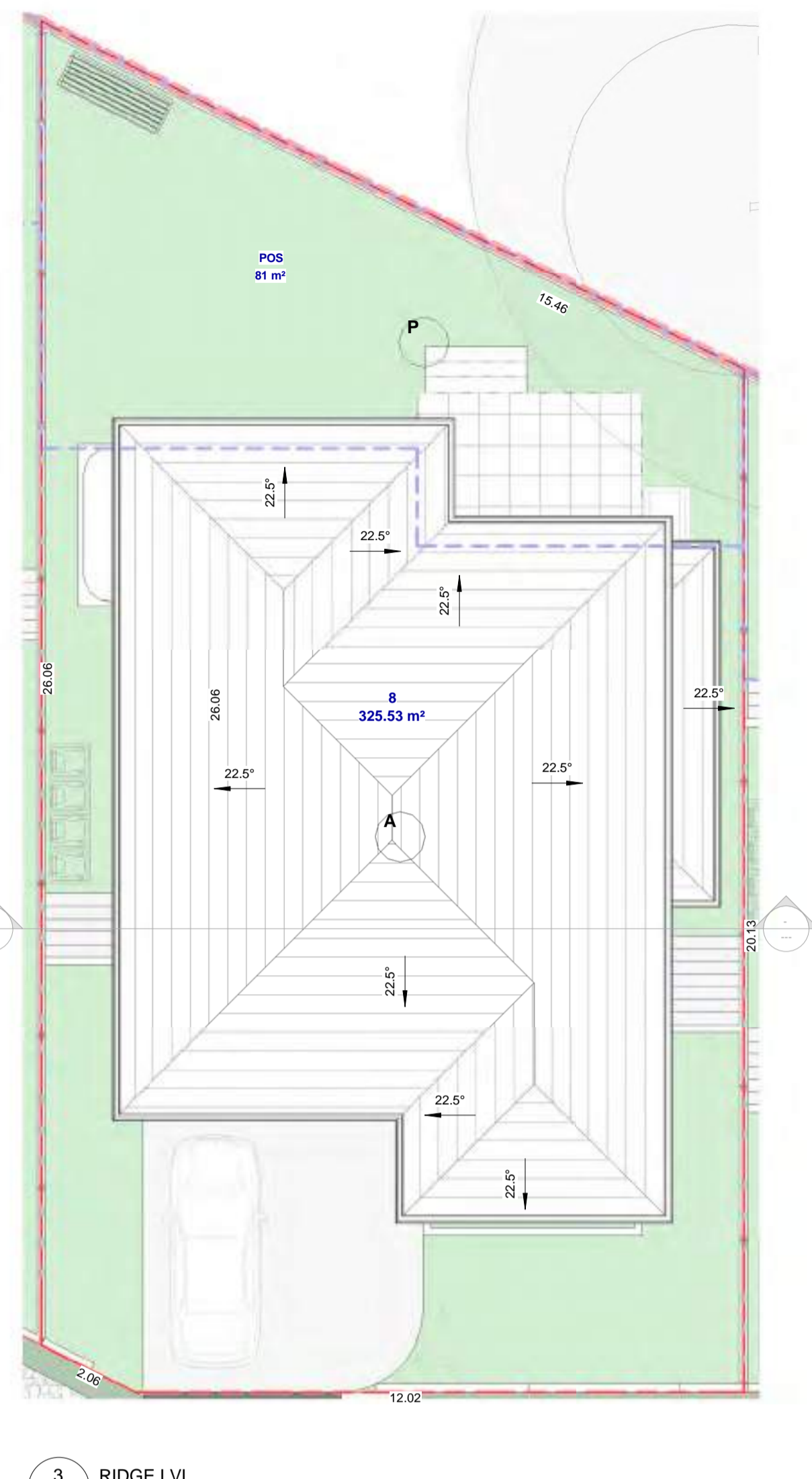
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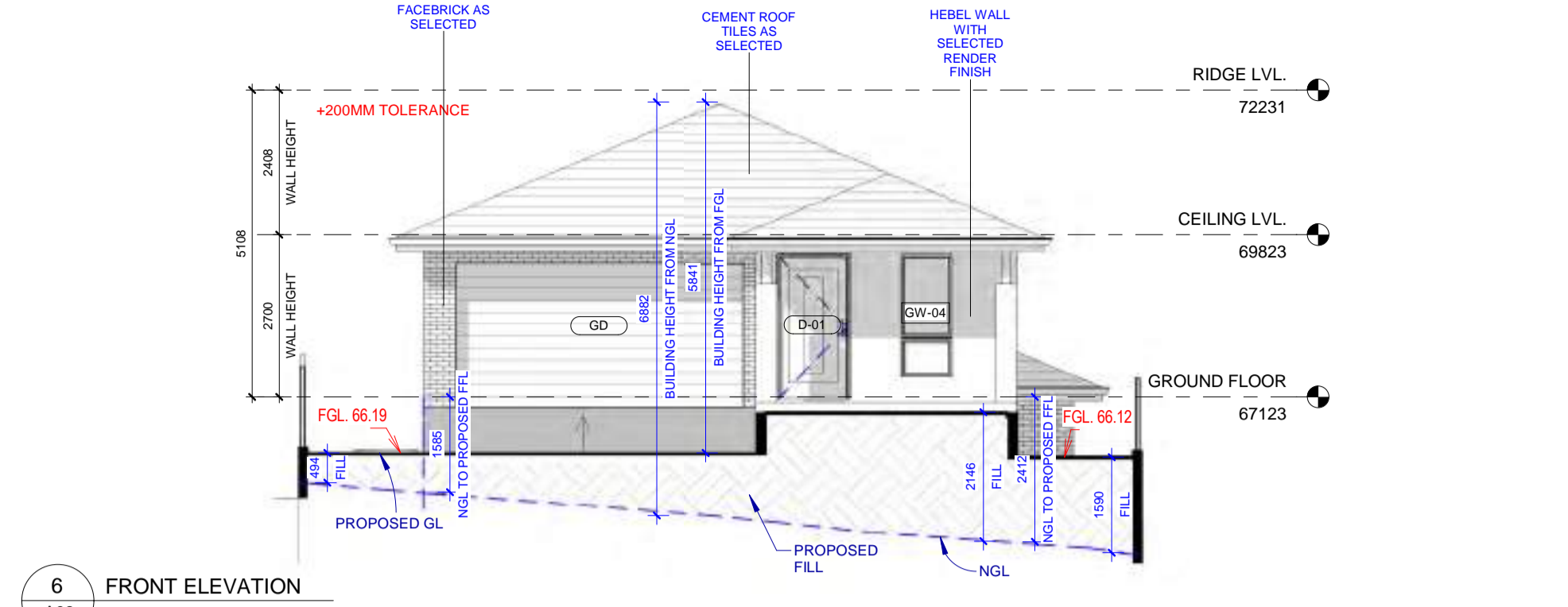
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A08 1:100



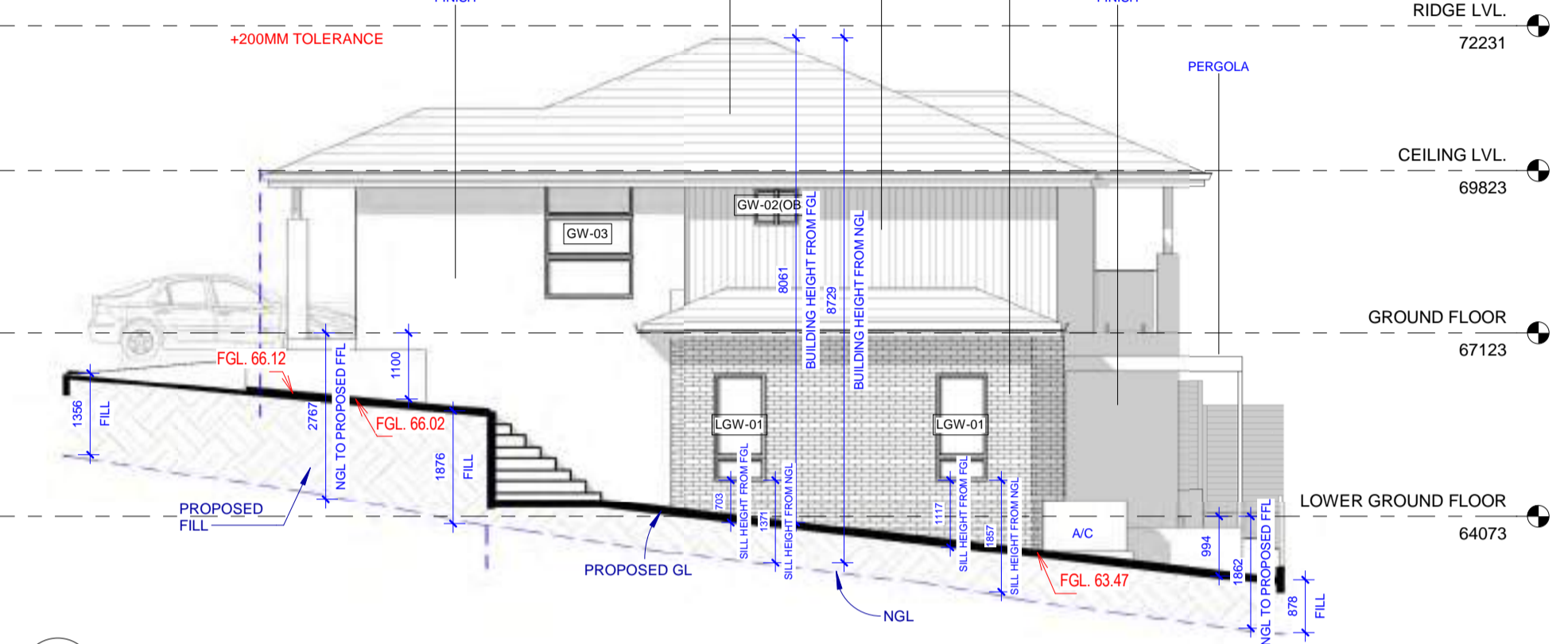
2 DA_GROUND FLOOR
A08 1:100



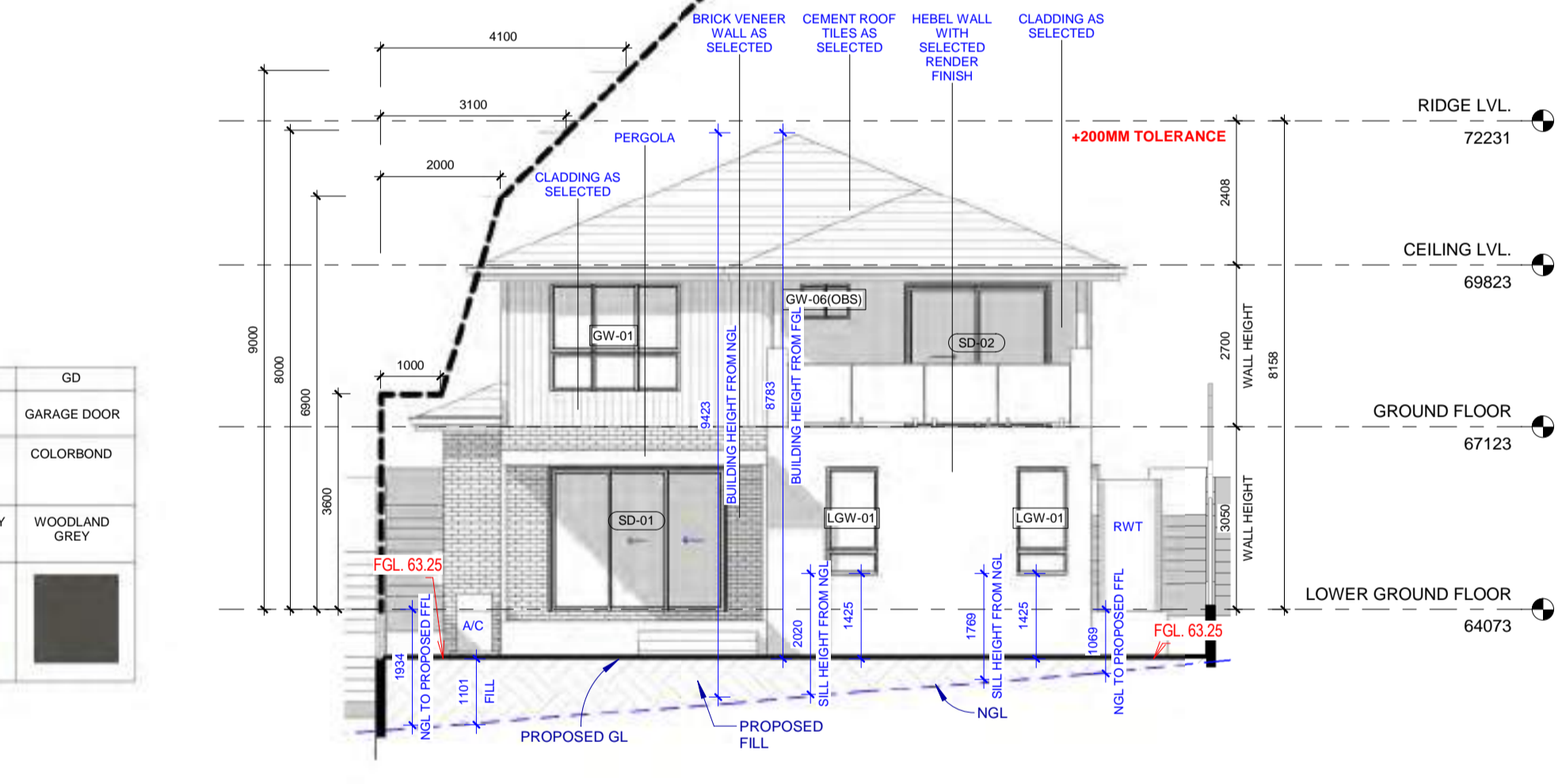
3 RIDGE LVL.
A08 1:100



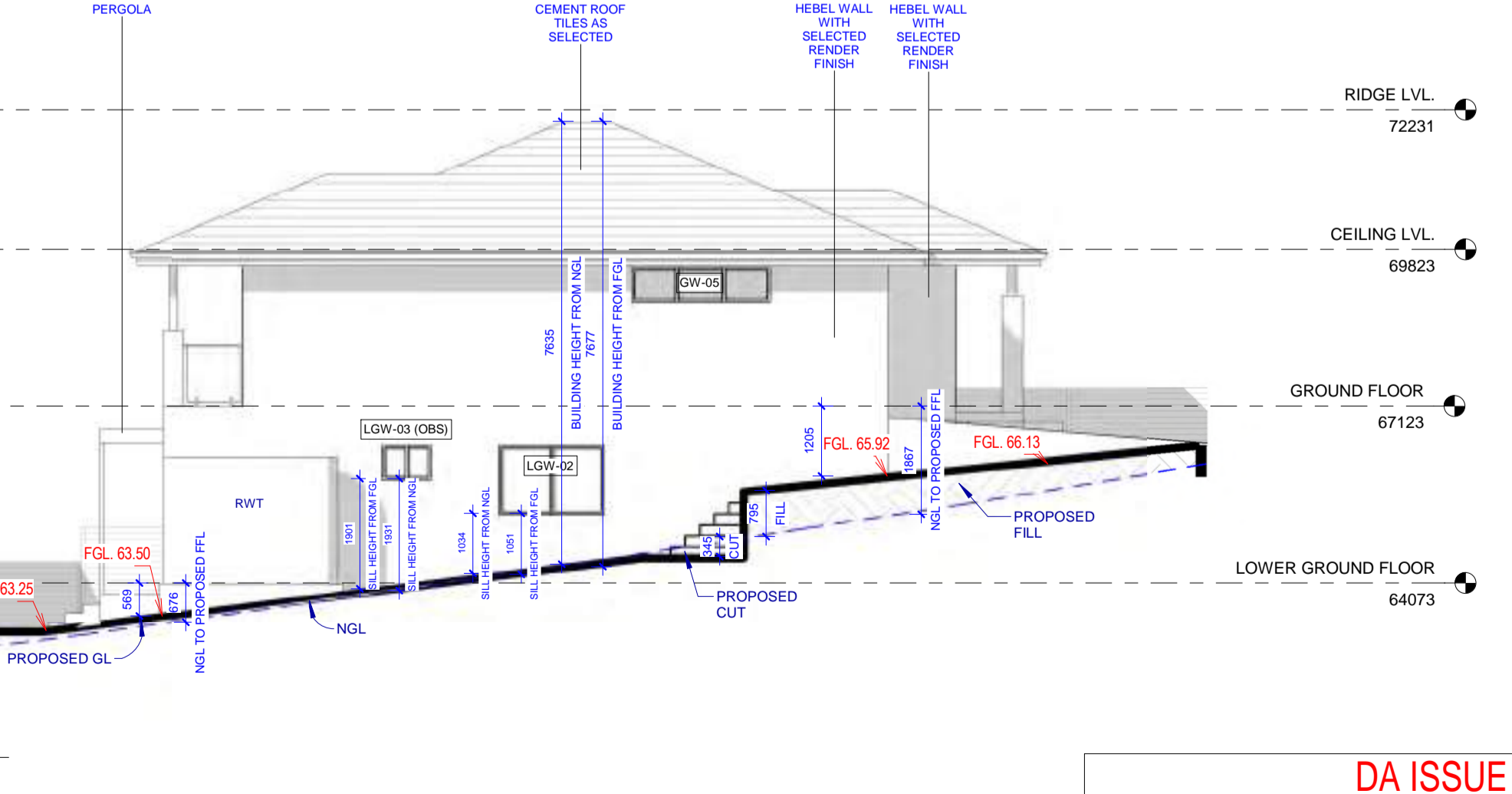
6 FRONT ELEVATION
A08 1:100



4 SIDE ELEVATION 1
A08 1:100



5 REAR ELEVATION
A08 1:100



7 SIDE ELEVATION 2
A08 1:100



ARTIST IMPRESSION ONLY

CRT	GUT	FAS	BR	CR1	CR2	CD1	CD2	PST	AL	ED	GD
CONCRETE ROOF TILES	GUTTER	FASCIA	FACEBRICK	MAIN WALL	ACCENT WALL	CLADDING	CLADDING	VERTICAL POST	WINDOW FRAMES & HANDRAIL	MAIN DOOR	GARAGE DOOR
MONIER ELUBANA	COLORBOND	COLORBOND	POH BRICKS	CEMENT RENDER	CEMENT RENDER	JAMES HARDIE AXON VERTICAL CLADDING	JAMES HARDIE FINE TEXTURE	COLORBOND	ALUMINIUM	TIMBER	COLORBOND
ANISED	JASPER	SURFMIST	TRUFFLE	WARM NEUTRAL	DULUX SNOWY MOUNTAINS QUARTER	DULUX SNOWY MOUNTAINS QUARTER	WARM NEUTRAL	JASPER	POWDERCOATED BLACK	STAINED EBONY	WOOLAND GREY

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DA DOOR SCHEDULE					
DOOR NO.	HEIGHT	WIDTH	DOOR LEAF	COUNT	DESCRIPTION
LOWER GROUND FLOOR					
D-02	2400	900	820	3	INTERNAL FLUSH DOOR
D-03	2400	800	720	1	INTERNAL FLUSH DOOR
SD-01	2400	2975	2975	1	SLIDING STACKER DOOR
LOWER GROUND FLOOR: 5					
D-01	2400	1200	1120	1	ENTRY DOOR
D-02	2400	900	820	2	INTERNAL FLUSH DOOR
D-03	2400	800	720	2	INTERNAL FLUSH DOOR
D-04	2400	900	820	1	INTERNAL FLUSH DOOR
GD	2430	4800	4800	1	GARAGE DOOR
SD-02	2400	2410	2410	1	GLASS SLIDING DOOR
GROUND FLOOR: 6					
Grand total: 13					

DA WINDOW SCHEDULE						
WINDOW NO.	HEIGHT	WIDTH	COUNT	SILL HEIGHT	HEAD HEIGHT	DESCRIPTION
LOWER GROUND FLOOR						
LGW-01	1800	850	4	600	2400	AWNING WINDOW WITH FIXED BOTTOM PANELS
LGW-02	1200	1810	1	1200	2400	SLIDING WINDOW
LGW-03 (OBS)	600	850	1	1800	2400	SLIDING WINDOW
LOWER GROUND FLOOR: 6						
GROUND FLOOR						
GW-01	1800	2170	1	600	2400	SLIDING WINDOW WITH FIXED BOTTOM PANELS
GW-02(OBS)	600	724	1	1800	2400	SLIDING WINDOW
GW-03	2050	1450	1	600	2650	3-PANEL VERTICAL FIXED WINDOW
GW-04	2050	850	1	350	2400	AWNING WINDOW WITH FIXED BOTTOM PANELS
GW-05	600	2410	1	1800	2400	SLIDING WINDOW
GW-06(OBS)	600	850	1	1800	2400	SLIDING WINDOW
GROUND FLOOR: 6						
Grand total: 12						

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REV	DATE	AMENDED AS PER RFI DT.	DESCRIPTION	BY
1	19/04/2024	AMENDED AS PER RFI DT.	22.02.2024	PS

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DO NOT SCALE
20 10 0 10 20 30 40 50 60 70mm

PROJECT:
166 Pakenham Road
PAKENHAM, VIC

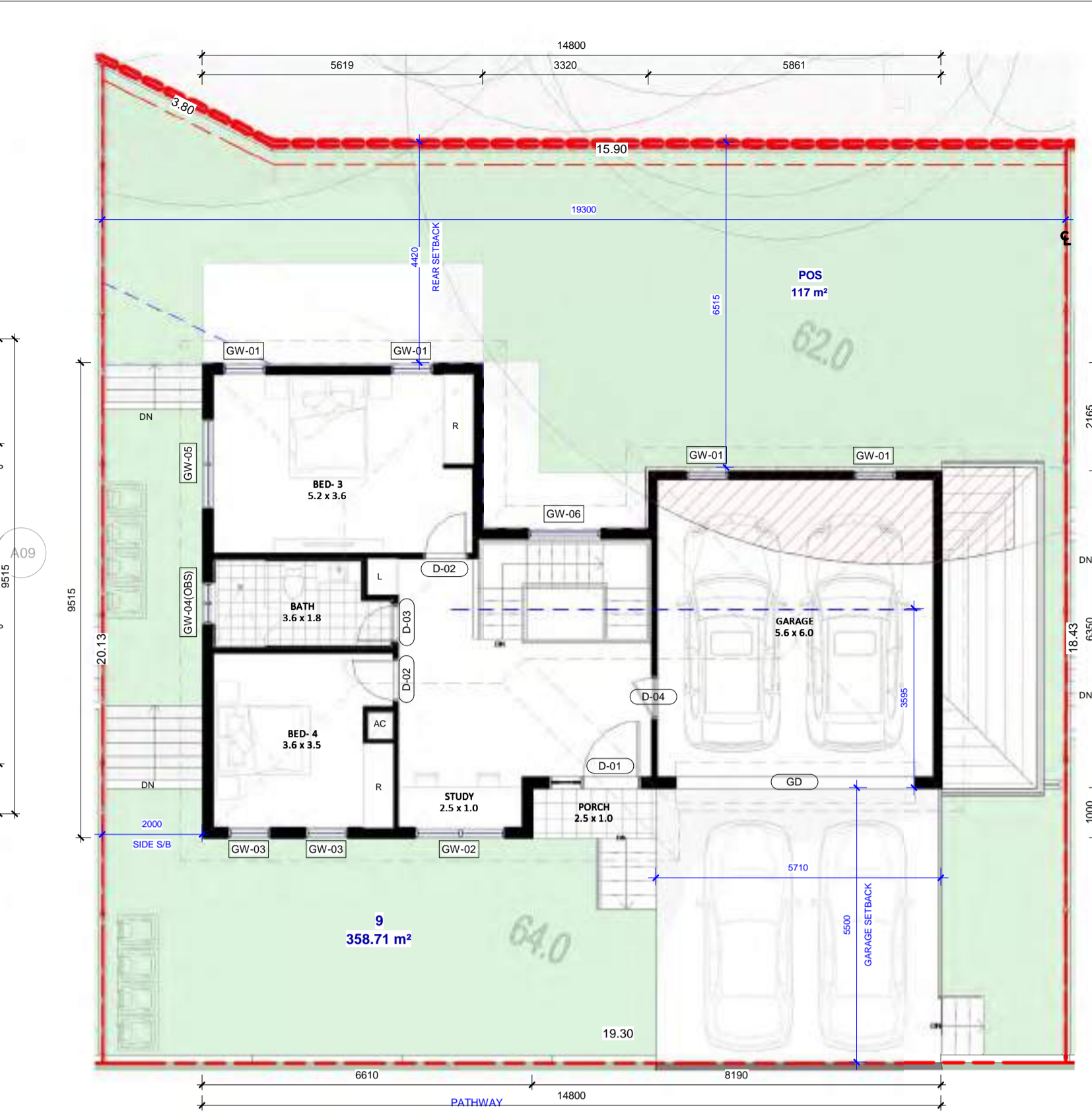
DRAWING TITLE:
LOT 08

DATE:	SCALE:	DRAWING No:
19.04.2024	1:100	A08
DRAWN BY:	CHECKED BY:	REV:
PS	JOSE	1

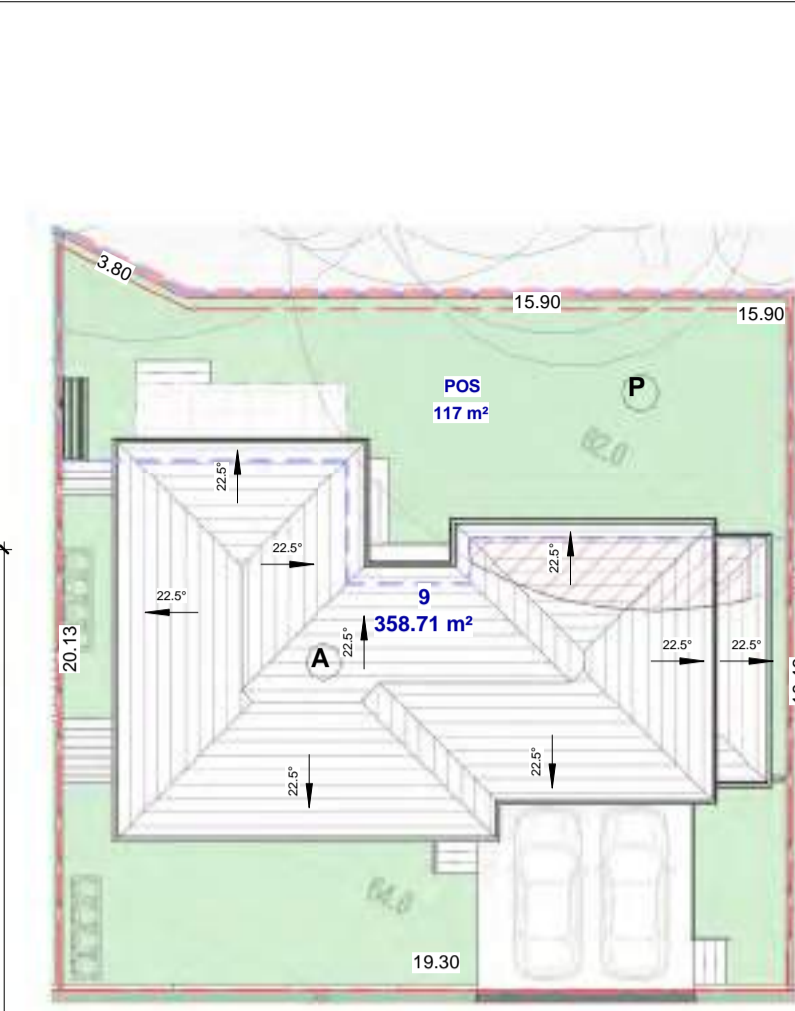
DA ISSUE
V:\Projects-Current\Pakenham - 166 Pakenham Road\03 DA\ARCHITECTURAL\REVIT\PROJECT\Revision CLINKS\LOT 08.rvt



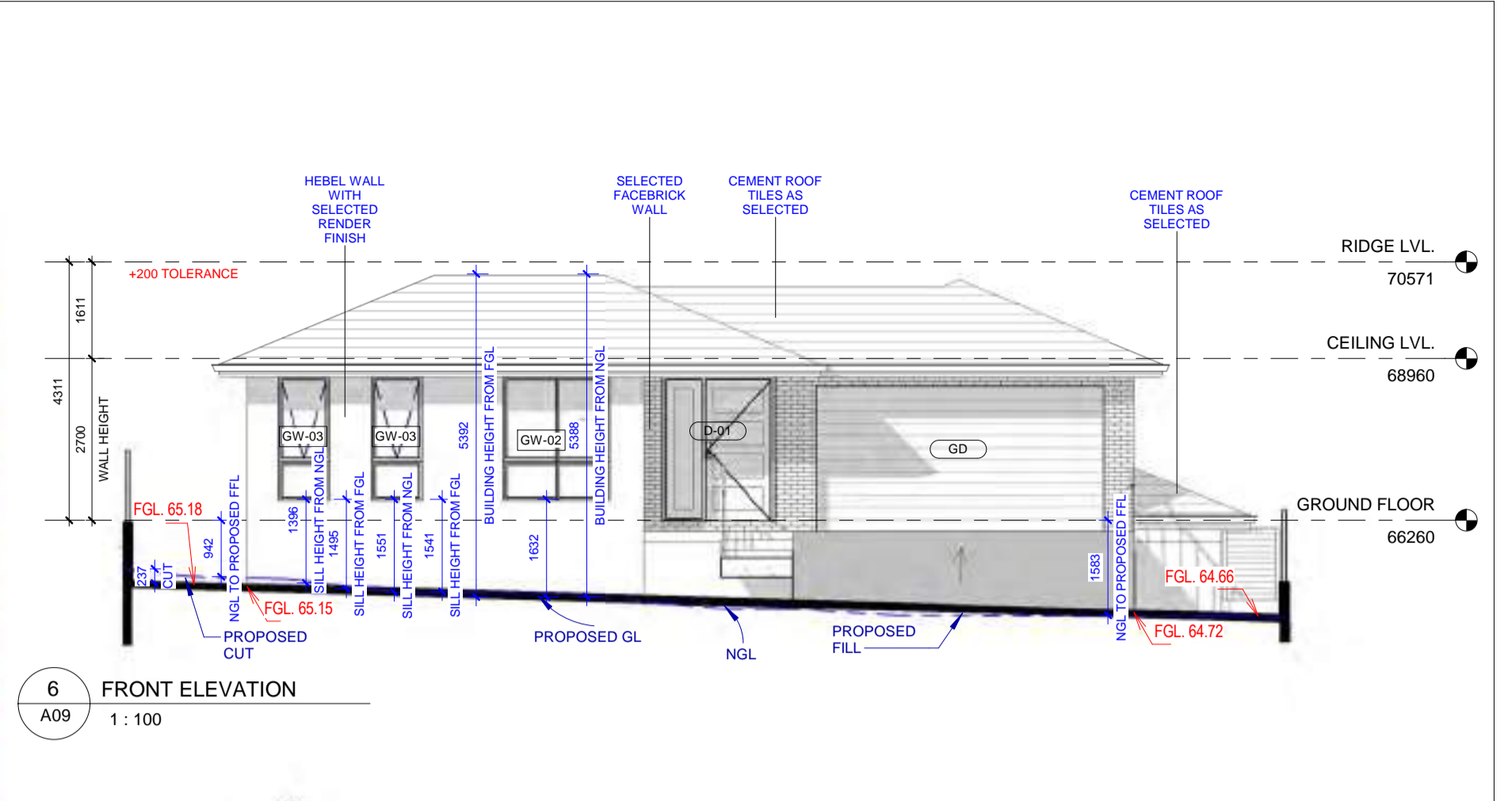
1 LOWER GROUND FLOOR
A09 1:100



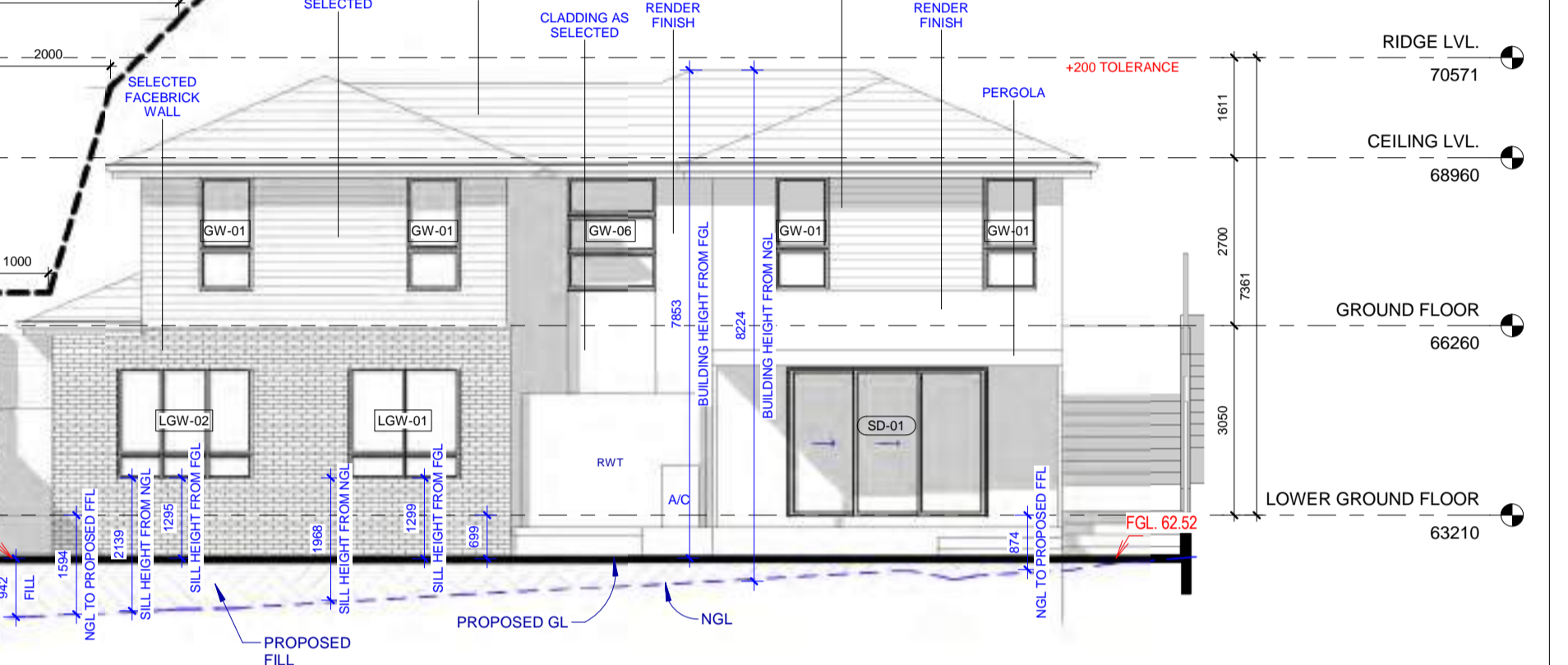
2 DA_GROUND FLOOR
A09 1:100



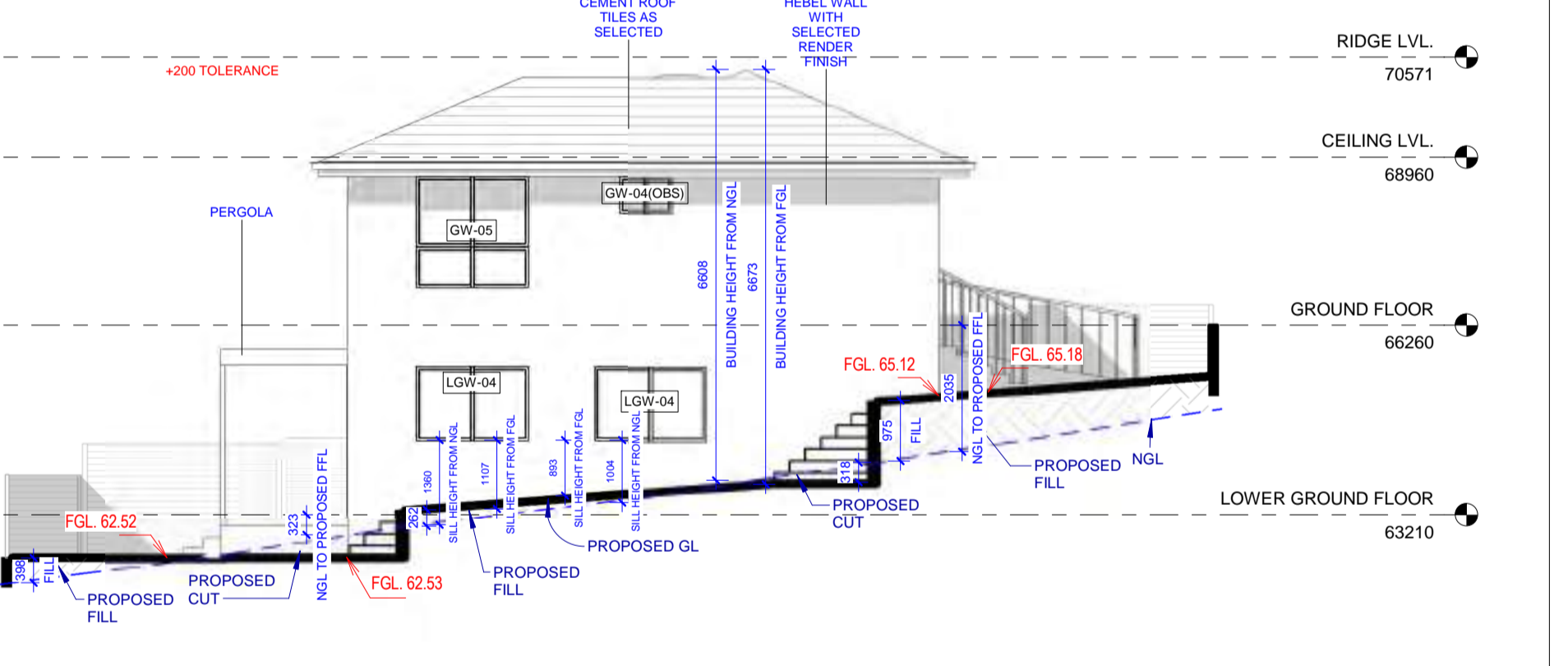
3 RIDGE LVL.
A09 1:200



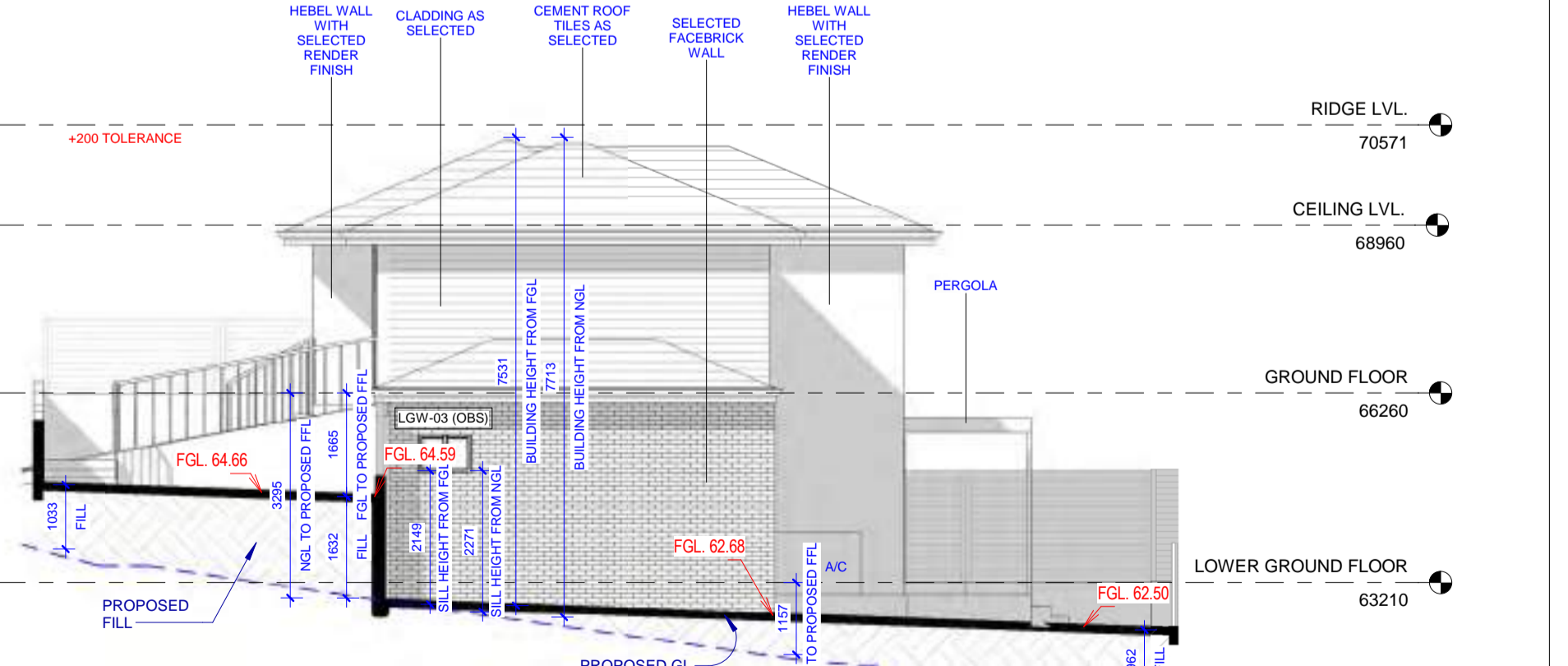
6 FRONT ELEVATION
A09 1:100



5 REAR ELEVATION
A09 1:100



7 SIDE ELEVATION 1
A09 1:100



4 SIDE ELEVATION 2
A09 1:100



DA_WINDOW SCHEDULE					
WINDOW NO.	HEIGHT	WIDTH	SILL HEIGHT	HEAD HEIGHT	DESCRIPTION
LOWER GROUND FLOOR					
LGW-01	1800	1810	600	2400	SLIDING WINDOW WITH FIXED BOTTOM PANELS
LGW-02	1800	2170	600	2400	SLIDING WINDOW WITH FIXED BOTTOM PANELS
LGW-03 (OBS)	600	850	1800	2400	SLIDING WINDOW
LGW-04	1200	1810	1200	2400	SLIDING WINDOW
LOWER GROUND FLOOR: 5					
GW-01	1800	850	600	2400	AWNING WINDOW WITH FIXED BOTTOM PANELS
GW-02	2050	1810	350	2400	SLIDING WINDOW WITH FIXED BOTTOM PANELS
GW-03	2050	850	350	2400	AWNING WINDOW WITH FIXED BOTTOM PANELS
GW-04 (OBS)	600	850	1800	2400	SLIDING WINDOW
GW-05	1800	1810	600	2400	SLIDING WINDOW WITH FIXED BOTTOM PANELS
GW-06	1800	1450	600	2400	3-PANEL VERTICAL FIXED WINDOW
GROUND FLOOR: 10					
Grand total: 15					

DA_DOOR SCHEDULE					
DOOR NO.	HEIGHT	WIDTH	DOOR LEAF	COUNT	DESCRIPTION
LOWER GROUND FLOOR					
D-02	2400	900	820	2	INTERNAL FLUSH DOOR WITH SIDELIGHT
D-03	2400	800	720	2	INTERNAL FLUSH DOOR
SD-01	2400	3215	3215	1	SLIDING STACKER DOOR
LOWER GROUND FLOOR: 5					
D-01	2400	1200	1120	1	EXTERNAL FLUSH DOOR WITH SIDELIGHT
D-02	2400	900	820	2	INTERNAL FLUSH DOOR
D-03	2400	800	720	1	INTERNAL FLUSH DOOR
D-04	2400	900	820	1	INTERNAL FLUSH DOOR
GD	2430	4800	4800	1	GARAGE DOOR
GROUND FLOOR: 6					
Grand total: 11					

	CR1	CD1	CD2	AL	ED	GD	DP
MATERIAL	CONCRETE ROOF TILES	GUTTER	FAS	BR	CR1	CD1 <td>CD2 </td>	CD2
	MONIER ELABANA	COLORBOND	COLORBOND	PGH BRICKS	CEMENT RENDER	JAMES HARDIE LINEA WEATHERBOARD	FINE TEXTURE
FINISH	BABYLON	BASALT	SURFIMIST	VOLCANIC	DULUX SNOWY MOUNTAINS QUARTER	DULUX SNOWY MOUNTAINS QUARTER	DULUX TIMELESS GREY
COLOR							TO MATCH ADJACENT WALL COLOR

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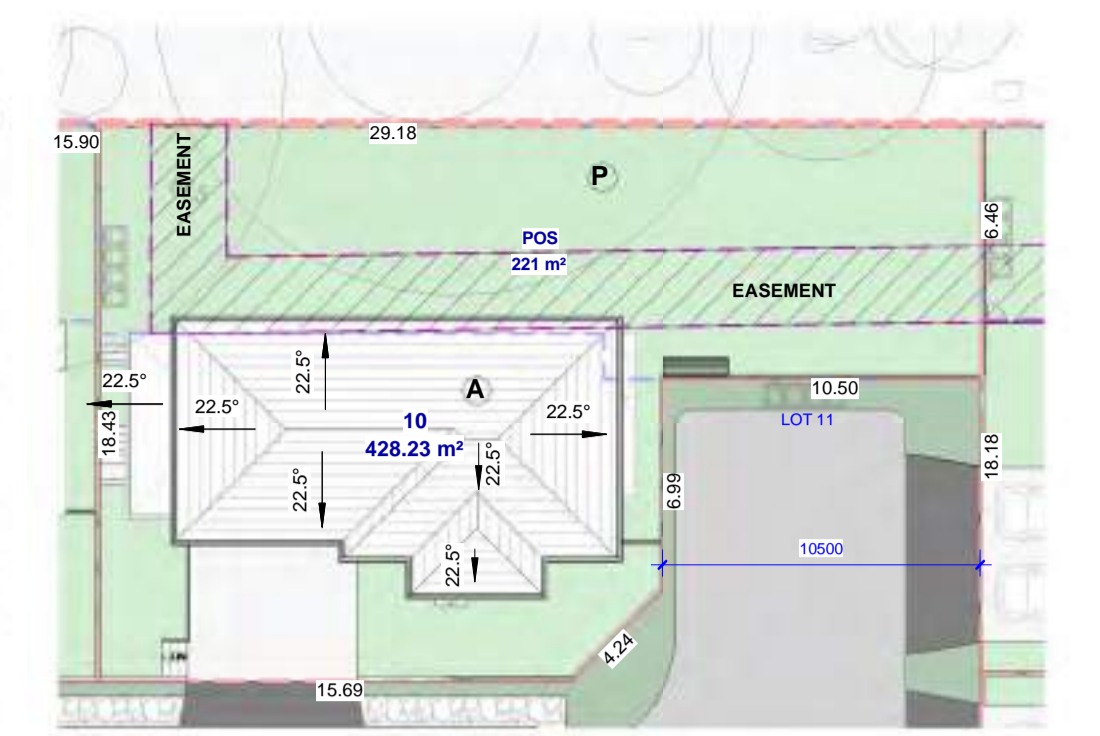
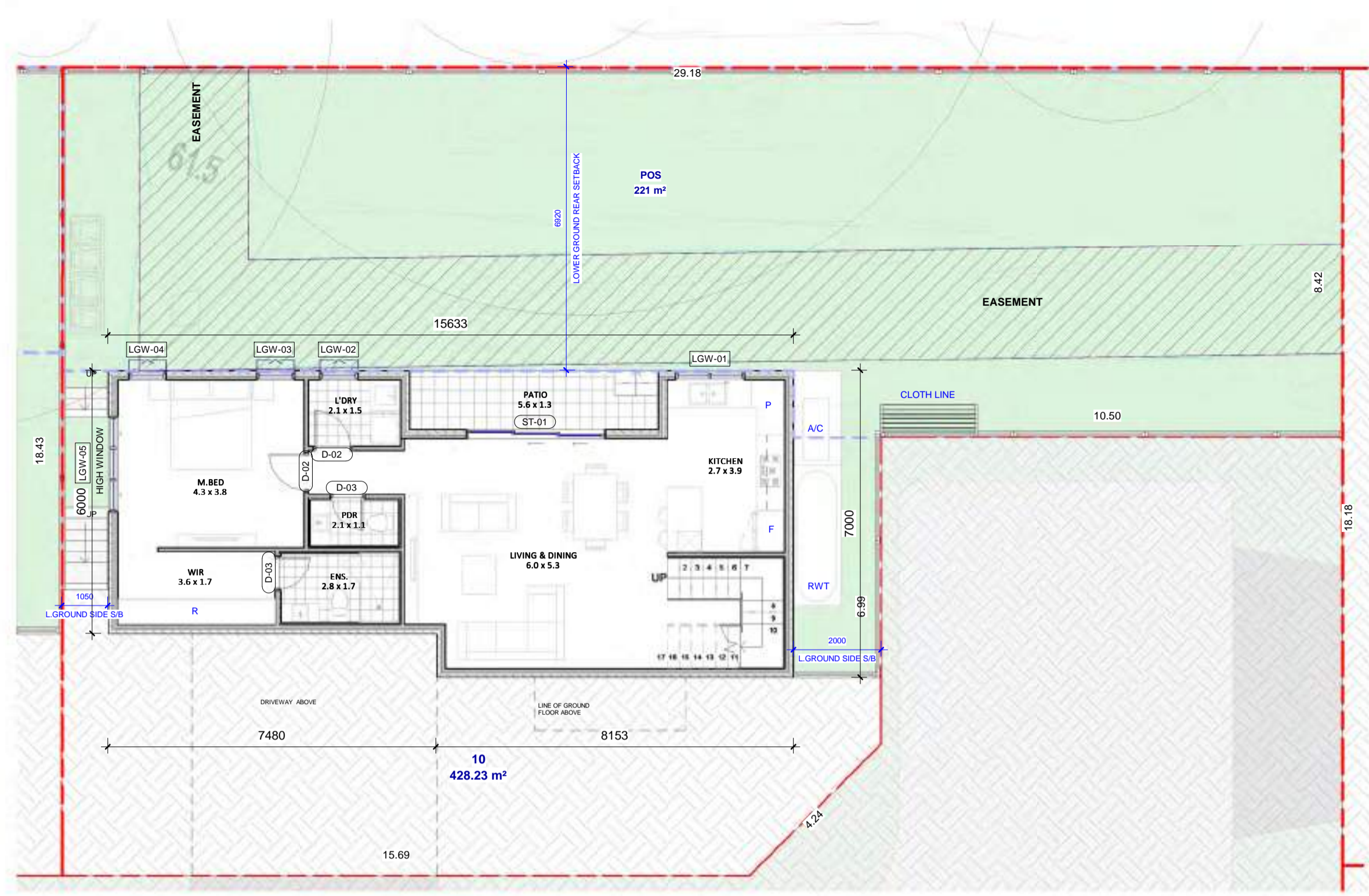
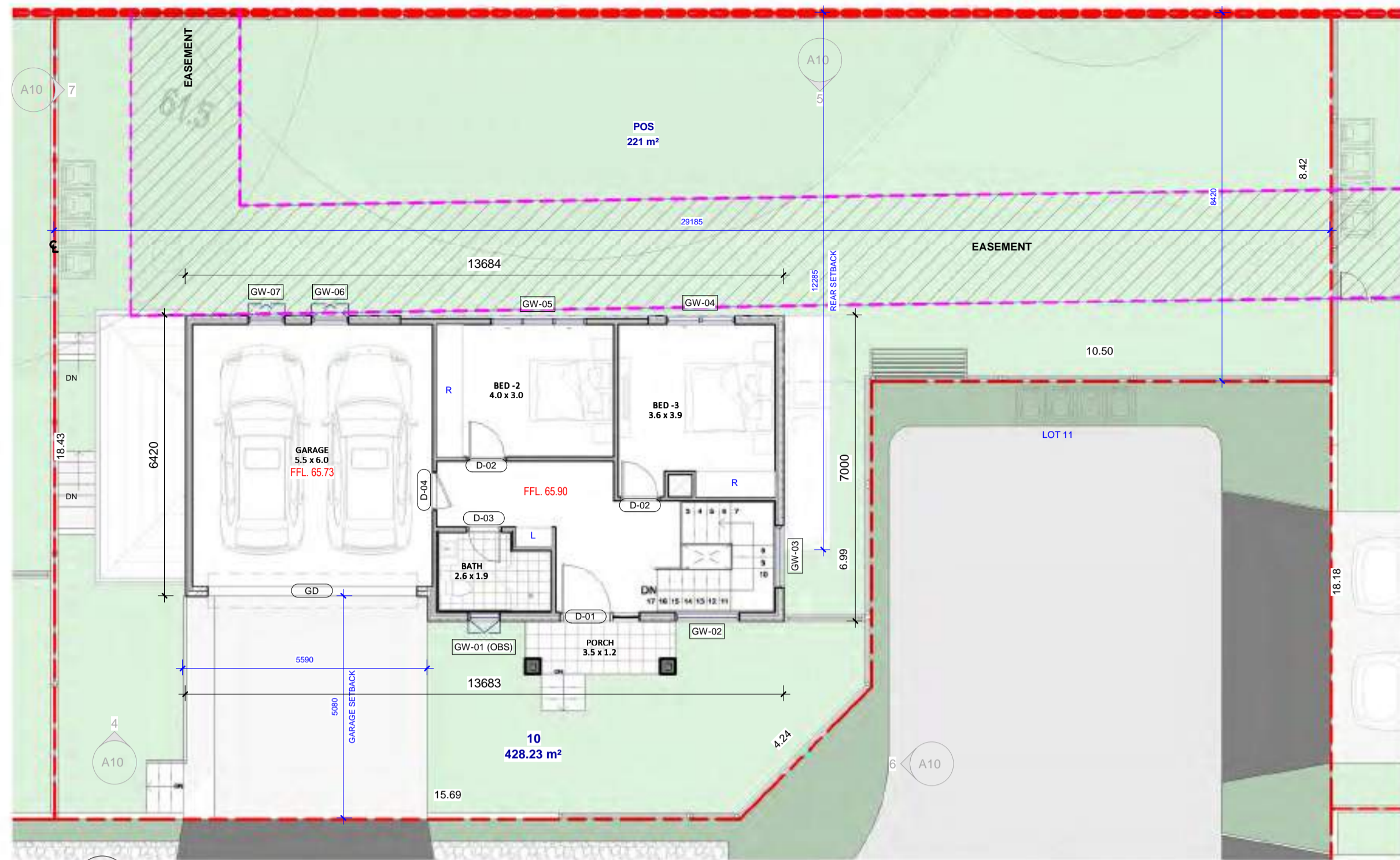
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PROJECT:
166 Pakenham Road
PAKENHAM, VIC

DRAWING TITLE:
LOT 09

DATE: 19.03.2024
SCALE: As indicated
DRAWING No: A09
DRAWN BY: PS
CHECKED BY: JOSE
REV: 1

REV	DATE	ISSUED AS PER RFT DT.	DESCRIPTION	PS	BY
1	22/04/2024	ISSUED AS PER RFT DT.	22.02.2024	PS	

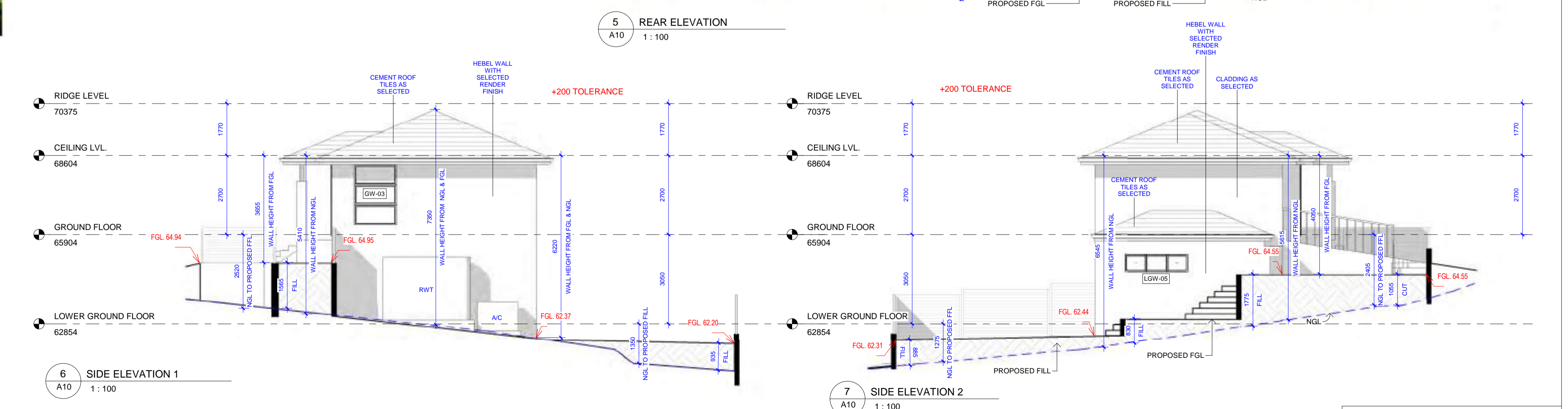
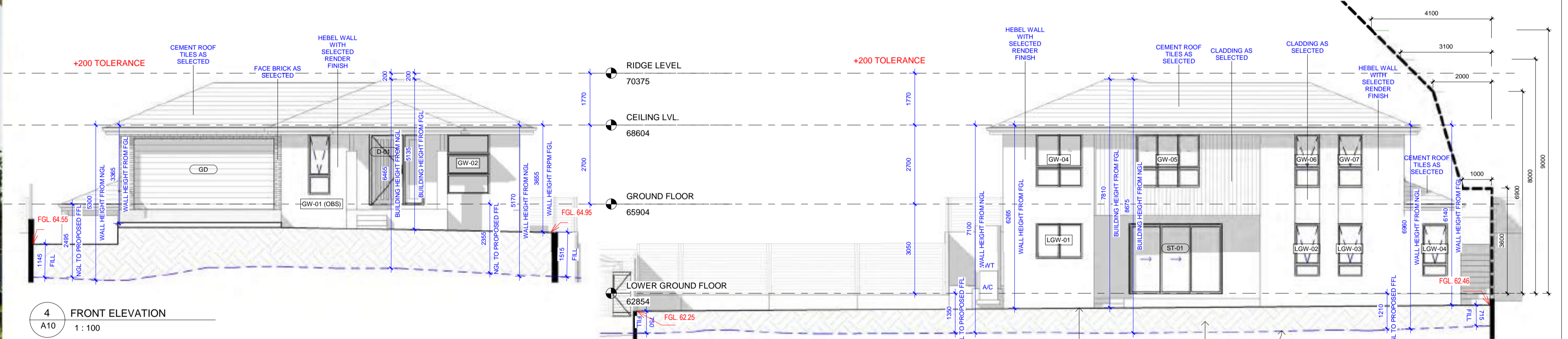


WINDOW SCHEDULE					
WINDOW NO.	HEIGHT	WIDTH	HEAD HEIGHT	DESCRIPTION	
LOWER GROUND FLOOR					
LGW-01	1200	1570	1200	2400	SLIDING WINDOW
LGW-02	1800	850	600	2400	AWNING WINDOW
LGW-03	1800	850	600	2400	AWNING WINDOW
LGW-04	1800	850	600	2400	AWNING WINDOW
LGW-05	600	2170	1800	2400	SLIDING WINDOW
LOWER GROUND FLOOR: 5					
GW-01 (OBS)	2050	724	350	2400	AWNING WINDOW
GW-02	2050	1450	350	2400	3-PANEL VERTICAL FIXED WINDOW
GW-03	2050	1450	350	2400	3-PANEL VERTICAL FIXED WINDOW
GW-04	1800	1570	600	2400	SLIDING WINDOW
GW-05	1800	2170	600	2400	SLIDING WINDOW WITH FIXED BOTTOM PANELS
GW-06	1800	850	600	2400	AWNING WINDOW
GW-07	1800	850	600	2400	AWNING WINDOW
GROUND FLOOR: 7					
Grand total: 12					

DA DOOR SCHEDULE					
DOOR NO.	HEIGHT	WIDTH	DOOR LEAF COUNT	DESCRIPTION	
LOWER GROUND FLOOR					
D-02	2400	900	820	2	INTERNAL FLUSH DOOR
D-03	2400	800	720	2	INTERNAL FLUSH DOOR
ST-01	2400	3180	3180	1	SLIDING STACKER DOOR
LOWER GROUND FLOOR: 5					
GROUND FLOOR					
D-01	2400	1200	1120	1	EXTERNAL FLUSH DOOR WITH SIDELIGHT
D-02	2400	900	820	2	INTERNAL FLUSH DOOR
D-03	2400	800	720	1	INTERNAL FLUSH DOOR
D-04	2100	900	820	1	INTERNAL FLUSH DOOR
GD	2430	4800	4800	1	GARAGE DOOR
GROUND FLOOR: 6					
Grand total: 11					



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	CRT	GUT	FAS	BR	CR1	CR2	PST	AL	ED	GD	DP
MATERIAL	CEMENT ROOF TILE	GUTTER / CAPPING	FASCIA	BRICK	MAIN WALL	ACCENT 1	POST	WINDOW FRAMES & HANDRAIL	MAIN DOOR	GARAGE DOOR	DOWNPIPE
	MONIER ELABANA	COLORBOND	COLORBOND	PQH BRICKS	CEMENT RENDER	CEMENT RENDER	COLORBOND	ALUMINIUM	TIMBER	COLORBOND	PVC
FINISH	BARRAMUNDI	MONUMENT	SURFIMIST	PEWTER	DULUX TIMELESS GREY	DULUX LEXICON HALF	MONUMENT	POWDERCOATED PEARL WHITE	STAINED TEAK	CLASSIC CEDAR	DULUX PAINT
COLOR											TO MATCH ADJACENT WALL COLOR

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REV	DATE	RESPONSE TO COUNCIL RFI DATED 22.02.04	DESCRIPTION	VR	BY
1	22.04.2024				

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DO NOT SCALE

PROJECT:
166 Pakenham Road
PAKENHAM, VIC

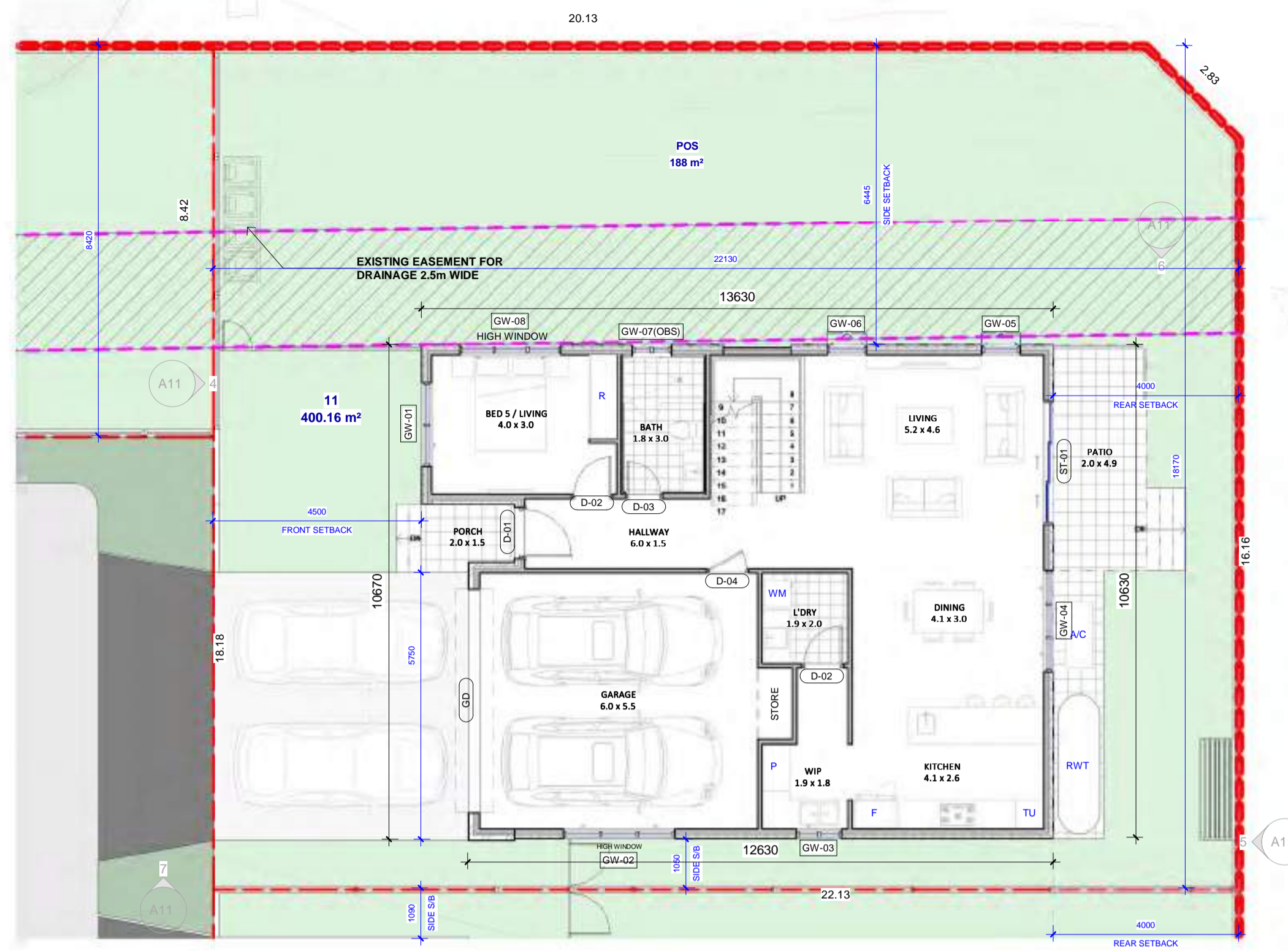
DRAWING TITLE:
LOT 10

DA ISSUE

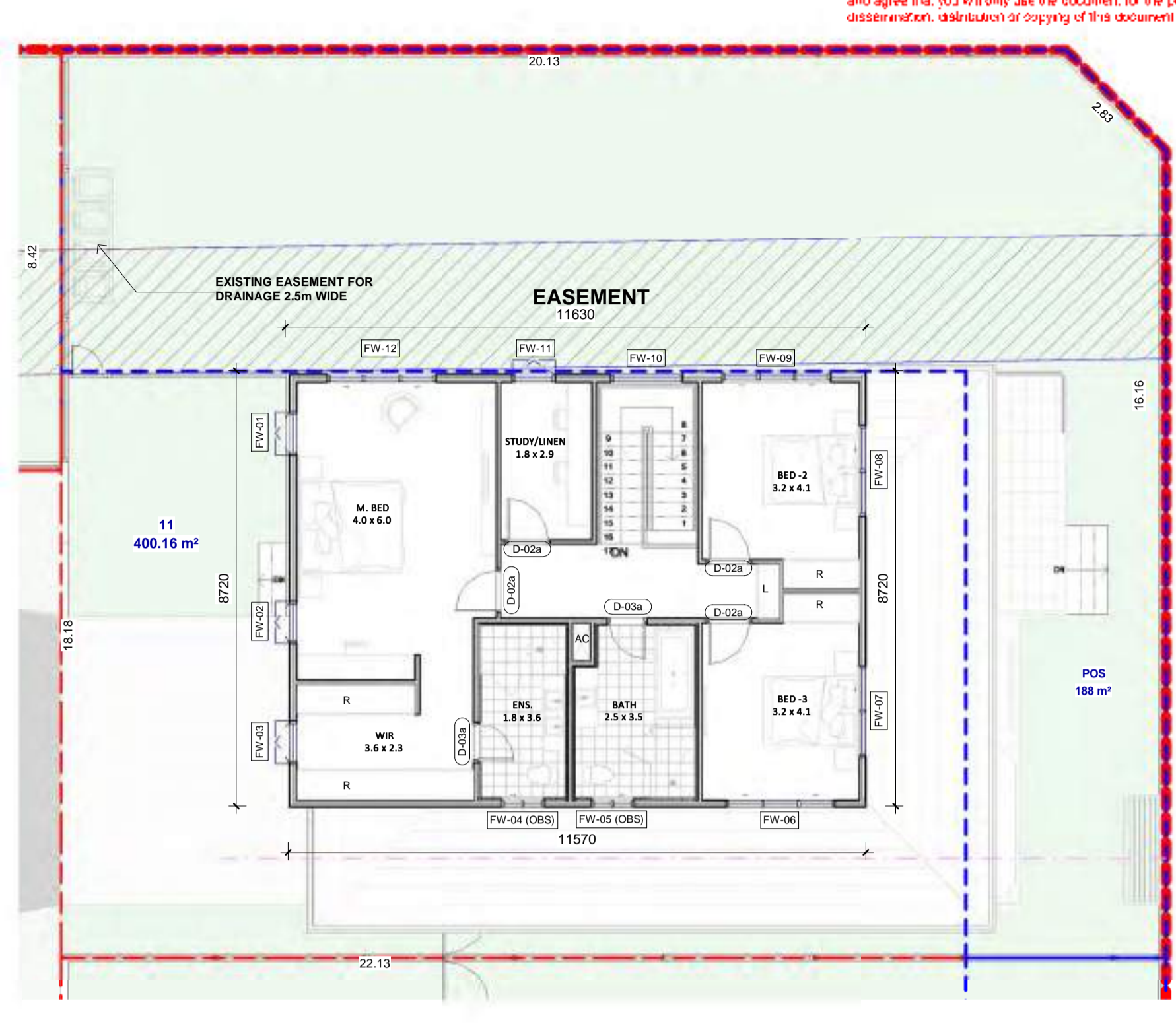
DATE:	SCALE:	DRAWING No:
22.04.2024	As indicated	A10
DRAWN BY:	CHECKED BY:	REV:
VR	JOSE	1

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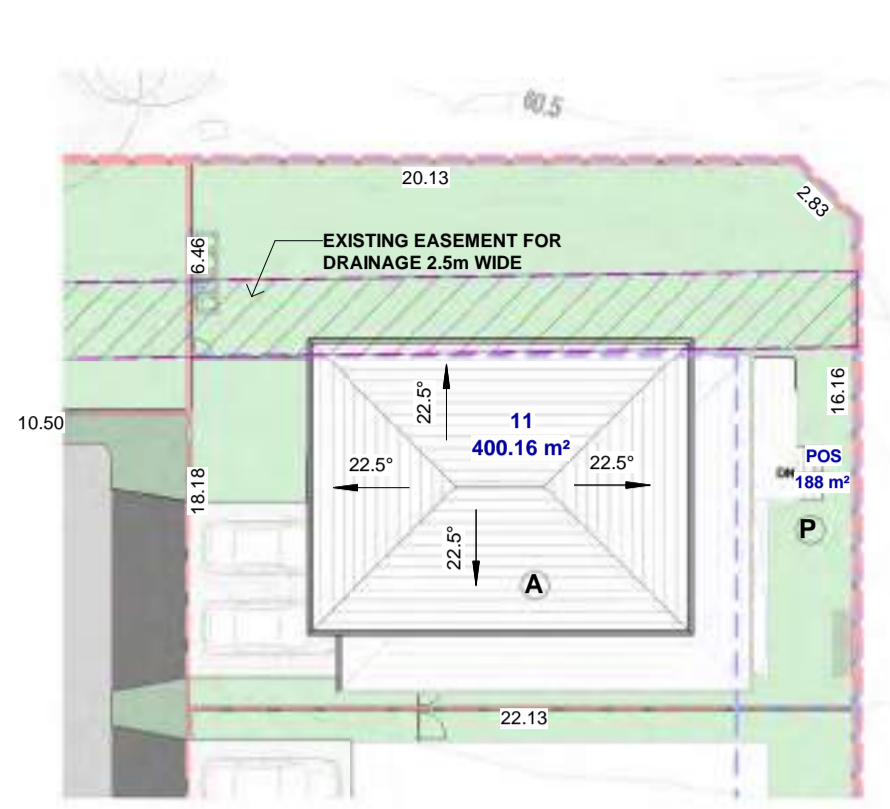
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1 DA_GROUND FLOOR
A11
1:100



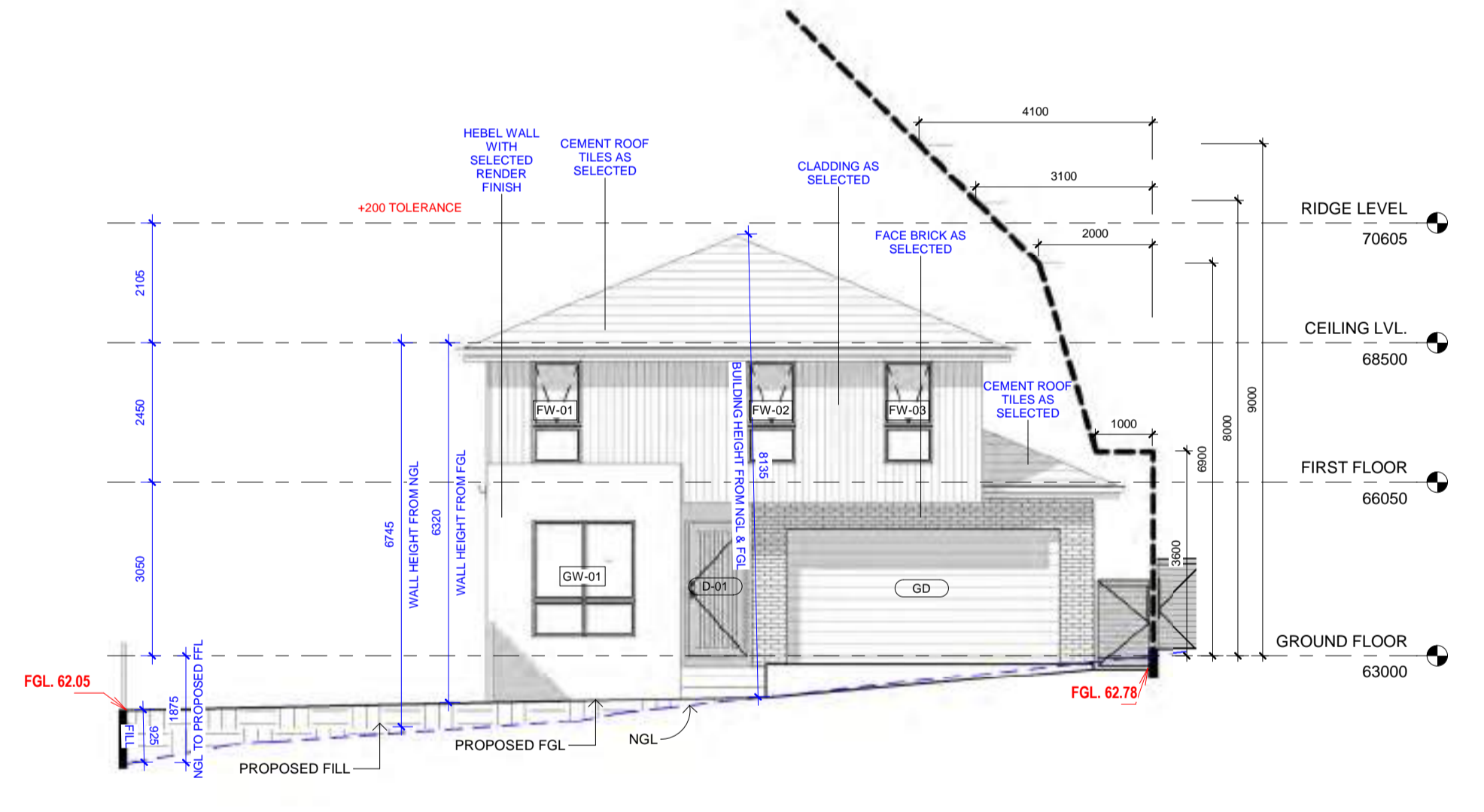
2 DA_FIRST FLOOR
A11
1:100



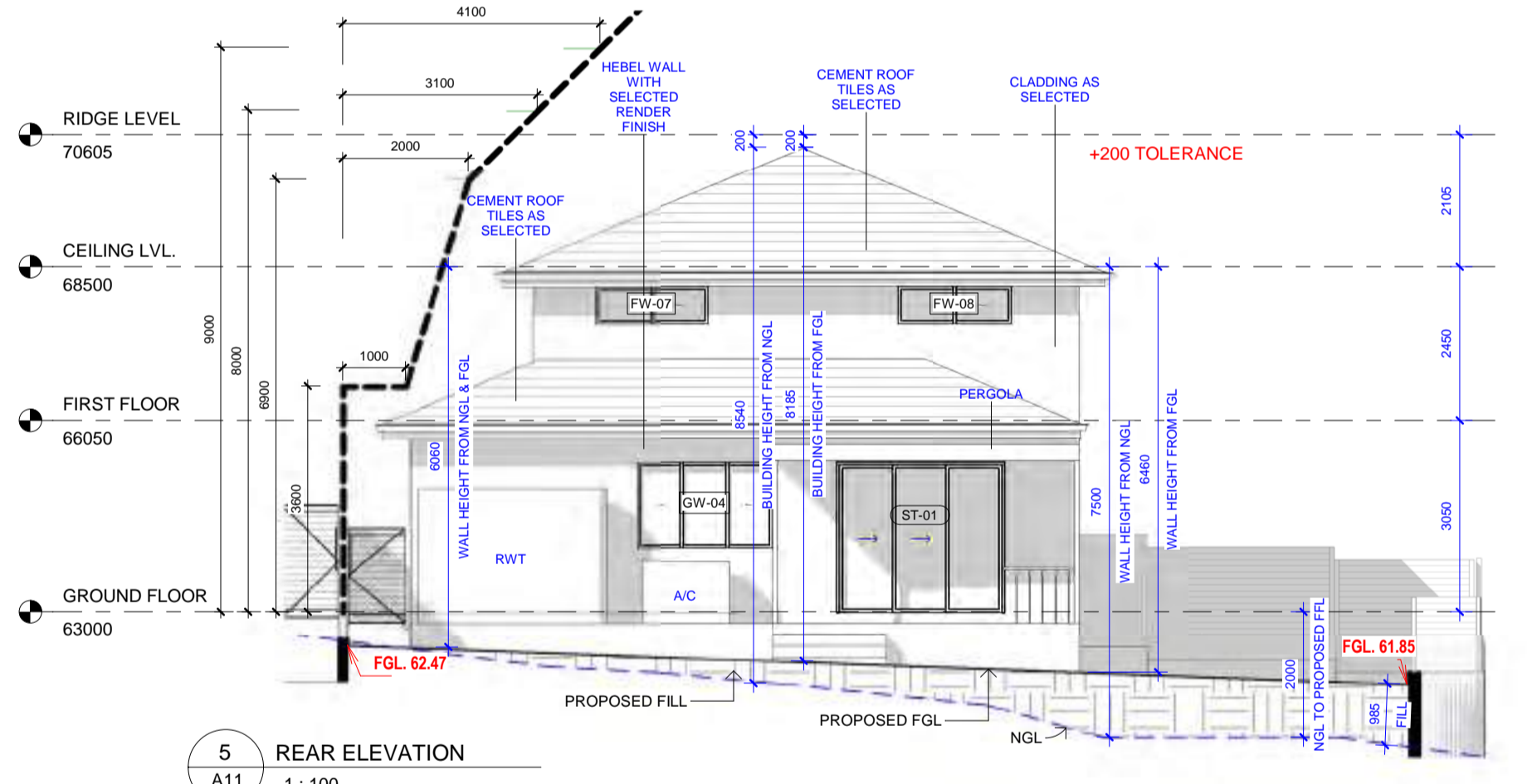
3 DA ROOF PLAN
A11
1:250

WINDOW NO.	HEIGHT	WIDTH	SILL HEIGHT	HEAD HEIGHT	DESCRIPTION
GROUND FLOOR:					
GW-01	2050	1810	350	2400	SLIDING WINDOW
GW-02	600	2410	1800	2400	SLIDING WINDOW
GW-03	1200	970	1200	2400	SLIDING WINDOW
GW-04	1370	2170	1030	2400	SLIDING WINDOW
GW-05	1800	850	600	2400	AWNING WINDOW
GW-06	1800	850	600	2400	AWNING WINDOW
GW-07(OBS)	600	850	1800	2400	SLIDING WINDOW
GW-08	600	2170	1800	2400	SLIDING WINDOW
GROUND FLOOR: 8					
FIRST FLOOR:					
FW-01	1800	850	340	2140	AWNING WINDOW
FW-02	1800	850	340	2140	AWNING WINDOW
FW-03	1800	850	340	2140	AWNING WINDOW
FW-04 (OBS)	600	850	1540	2140	SLIDING WINDOW
FW-05 (OBS)	600	850	1540	2140	SLIDING WINDOW
FW-06	840	2170	1200	2140	SLIDING WINDOW
FW-07	600	1810	1540	2140	SLIDING WINDOW
FW-08	600	1810	1540	2140	SLIDING WINDOW
FW-09	1800	2170	340	2140	SLIDING WINDOW
FW-10	1800	1450	255	2055	S-PANEL VERTICAL FIXED WINDOW
FW-11	1800	850	340	2140	AWNING WINDOW
FW-12	1800	2170	340	2140	SLIDING WINDOW
FIRST FLOOR: 12					
Grand total: 20					

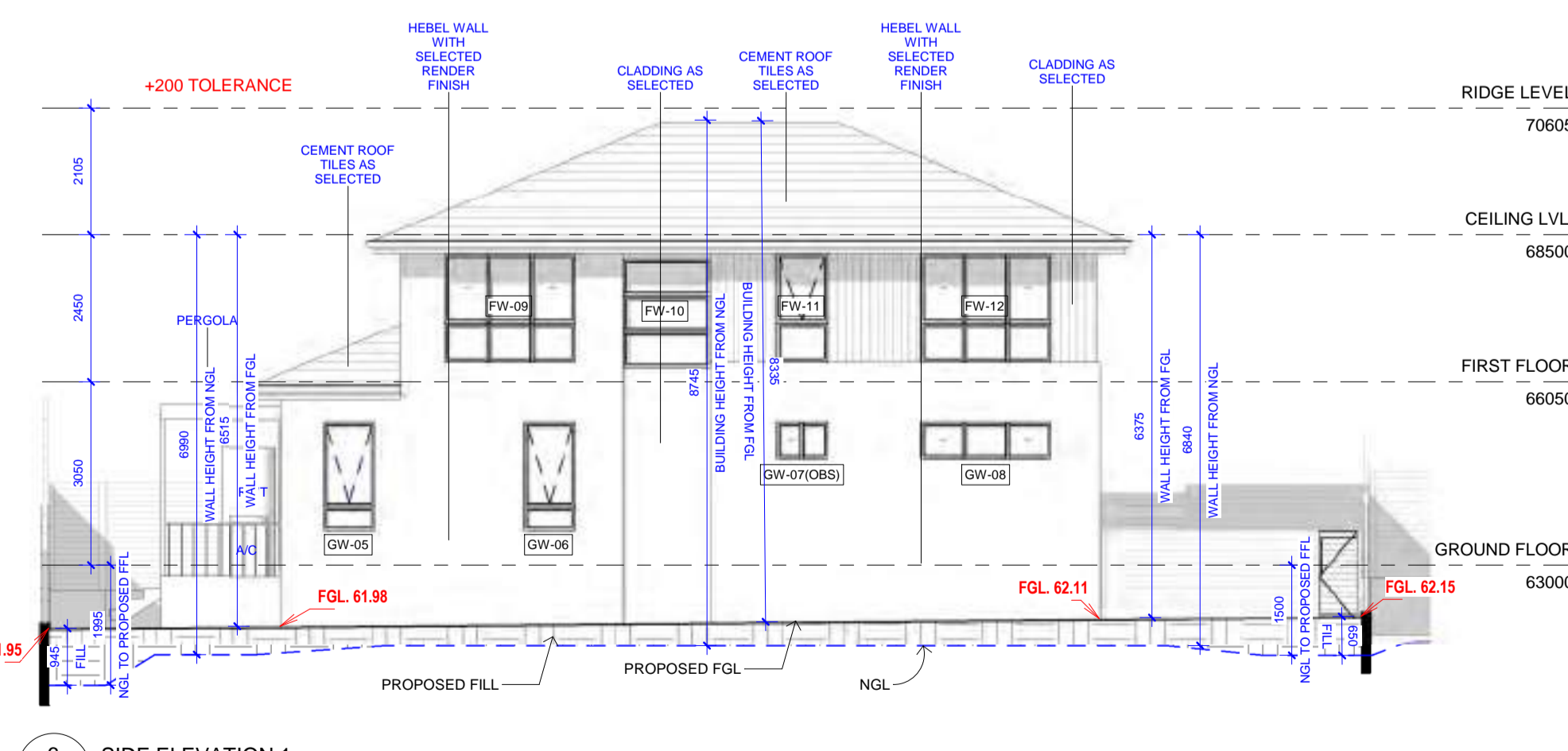
DOOR NO.	HEIGHT	WIDTH	DOOR LEAF	COUNT	DESCRIPTION
GROUND FLOOR:					
D-01	2400	1100	1020	1	EXTERNAL FLUSH DOOR WITH SIDELIGHT
D-02	2400	900	820	2	INTERNAL FLUSH DOOR
D-03	2400	800	720	1	INTERNAL FLUSH DOOR
D-04	2400	900	820	1	INTERNAL FLUSH DOOR
GD	2430	4800	4800	1	GARAGE DOOR
ST-01	2400	2675	2675	1	SLIDING STACKER DOOR
GROUND FLOOR: 7					
FIRST FLOOR:					
D-02a	2100	900	820	4	INTERNAL FLUSH DOOR
D-03a	2100	800	720	2	INTERNAL FLUSH DOOR
FIRST FLOOR: 6					
Grand total: 13					



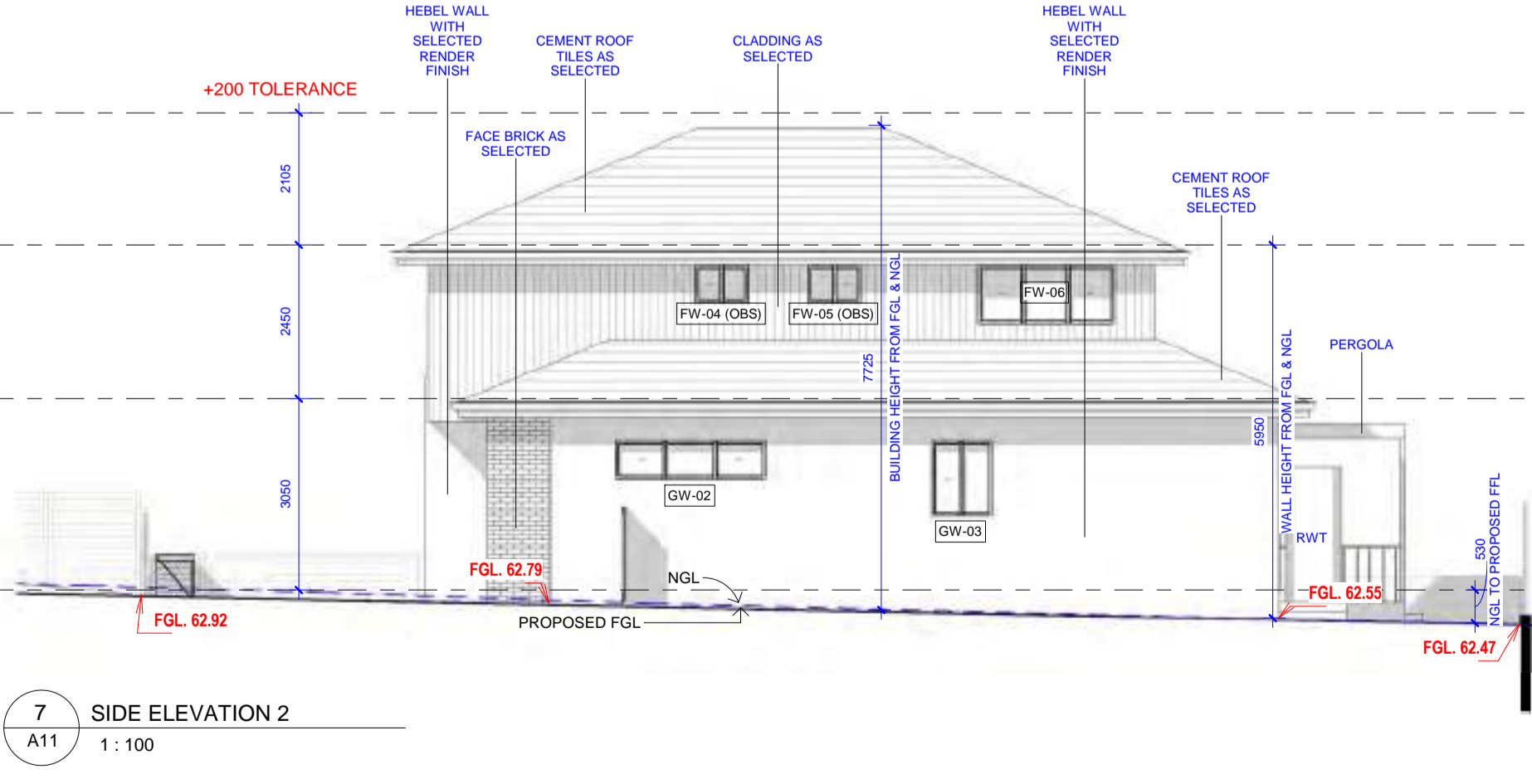
4 FRONT ELEVATION
A11
1:100



5 REAR ELEVATION
A11
1:100



6 SIDE ELEVATION 1
A11
1:100



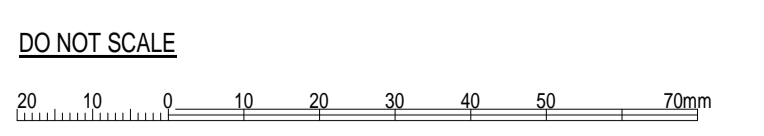
7 SIDE ELEVATION 2
A11
1:100

	CRT	GUT	FAS	BR	CR1	CD1	AL	ED	GD	DP
MATERIAL	CEMENT ROOF TILE	GUTTER / CAPPING	FASCIA	BRICK WALL	MAIN WALL	CLADDING	WINDOW FRAMES & HANDRAIL	MAIN DOOR	GARAGE DOOR	DOWNPIPE
FINISH	MONIER ELABANA	COLORBOND	COLORBOND	PGH BRICKS	CEMENT RENDER	JAMES HARDIE VERTICAL ANOK	ALUMINIUM	TIMBER	COLORBOND	PVC
COLOR	BARRAMUNDI	IRONSTONE	SURFMIST	TRUFFLE	DULUX CHAMPIGNON	DULUX TERRACE WHITE	POWDERCOATED BLACK SATIN	STAINED EBONY	WOODLAND GREY	DULUX PAINT
										TO MATCH ADJACENT WALL COLOR

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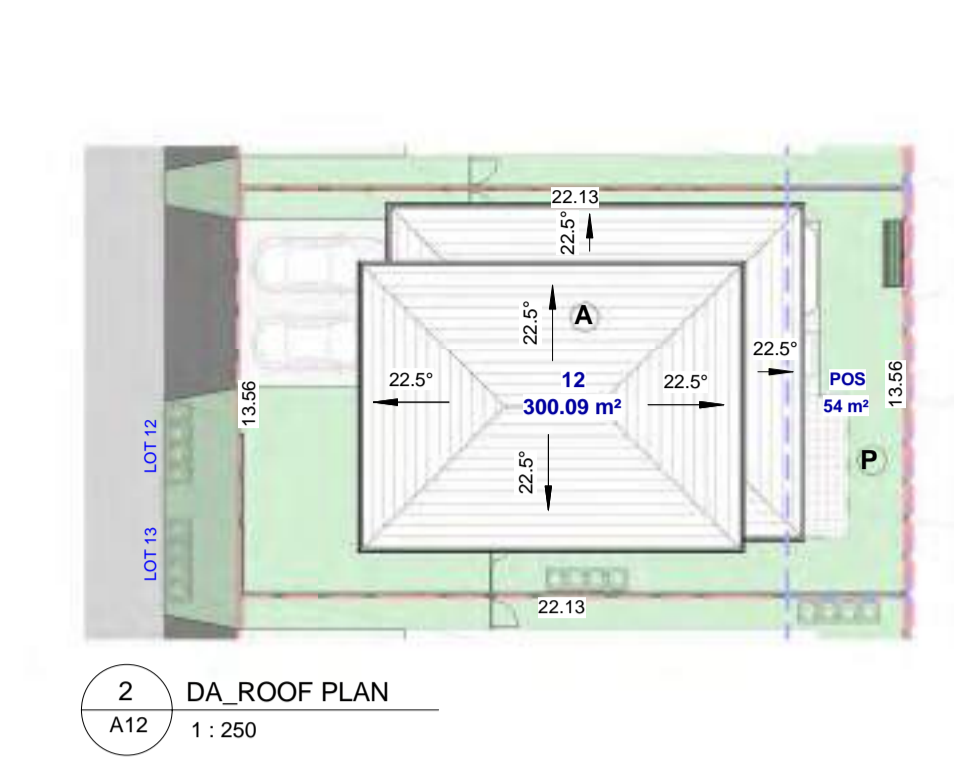
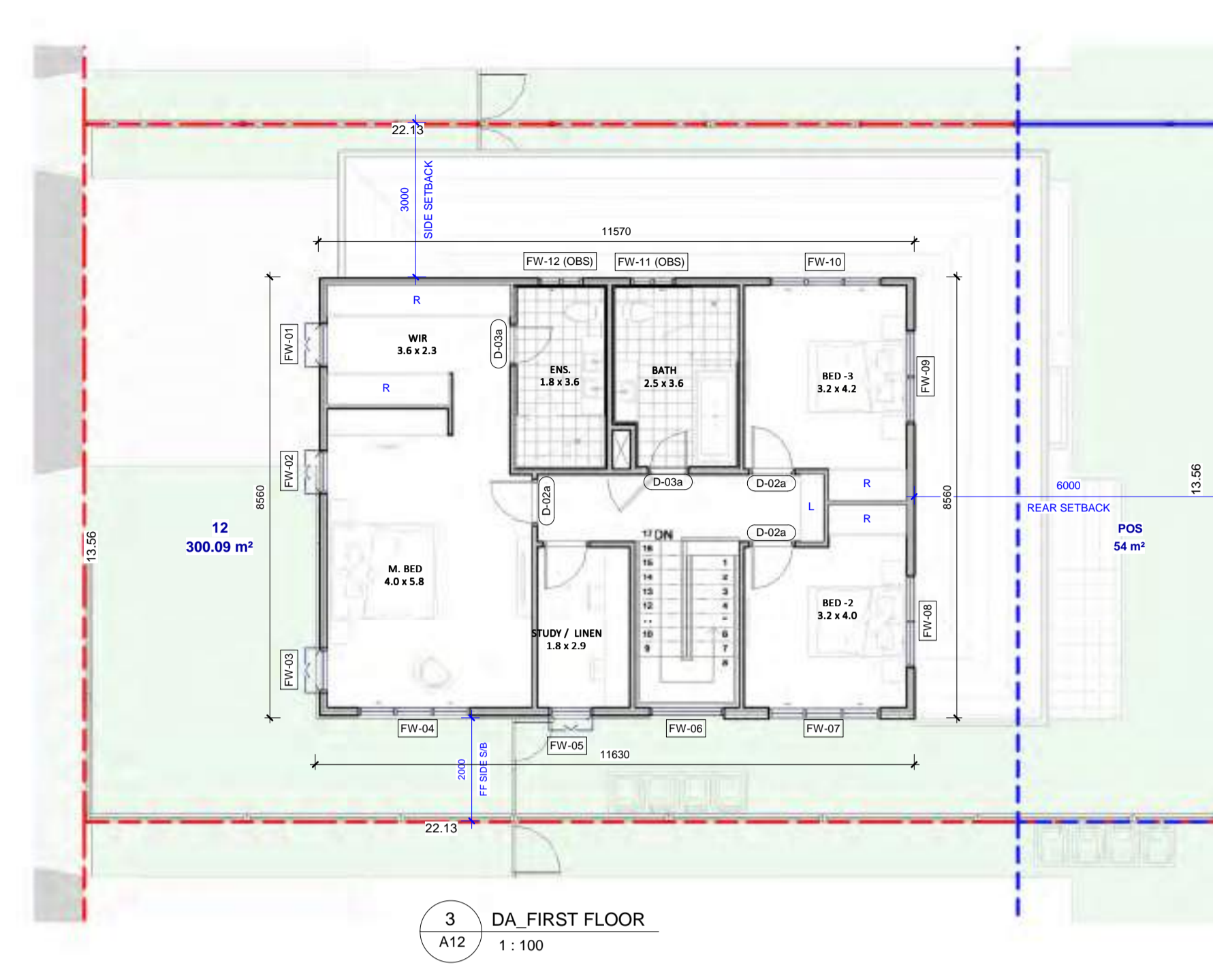
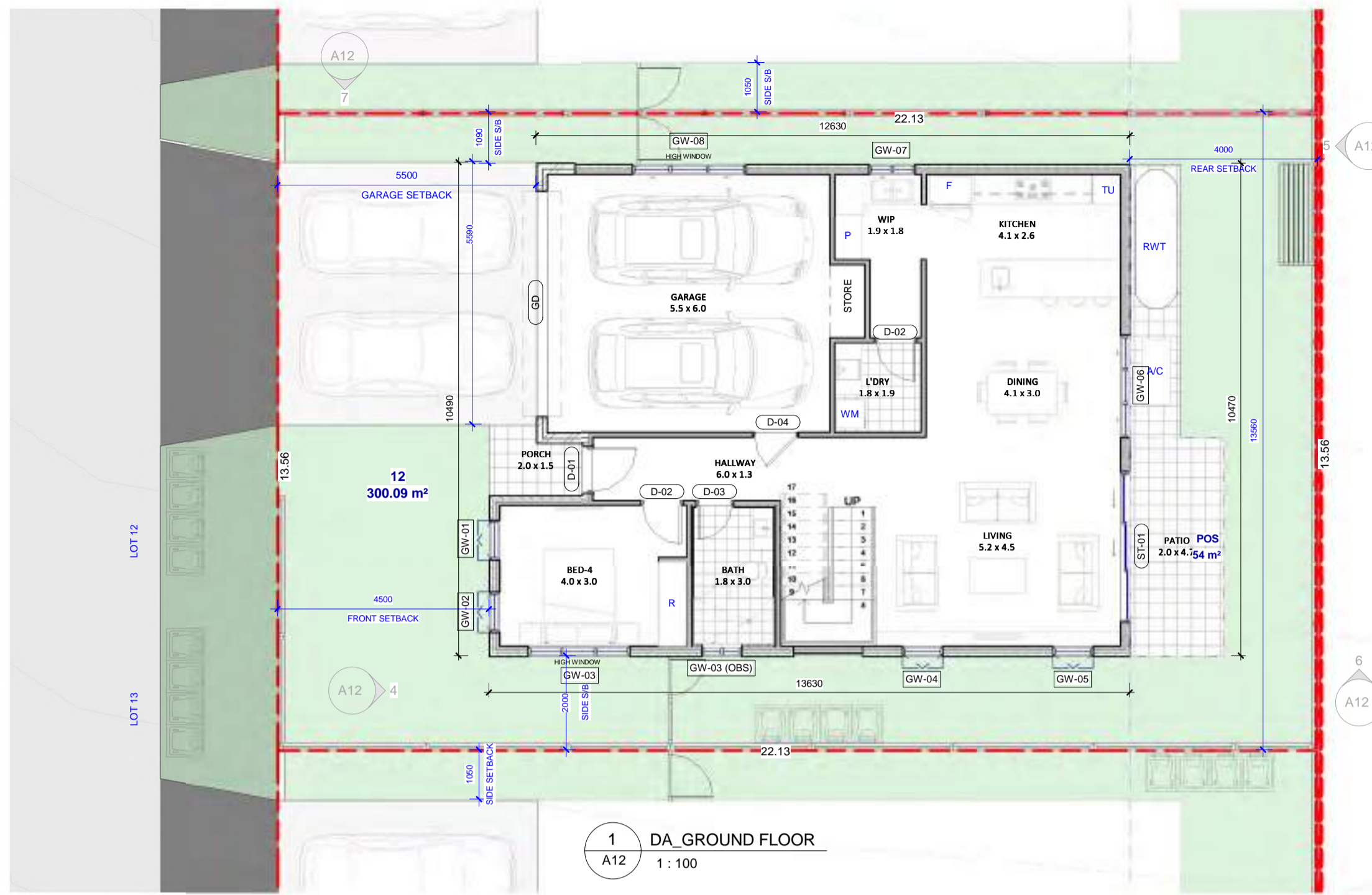


PROJECT:
166 Pakenham Road
PAKENHAM, VIC

DRAWING TITLE:
LOT 11

DA ISSUE			
DATE:	22.04.2024	SCALE:	As indicated
DRAWN BY:	VR	CHECKED BY:	JOSE
REVISION:	1	REV:	1

REV	DATE	DESCRIPTION	BY
1	22.04.2024	RESPONSE TO COUNCIL RFI DATED 22.02.2024	VR



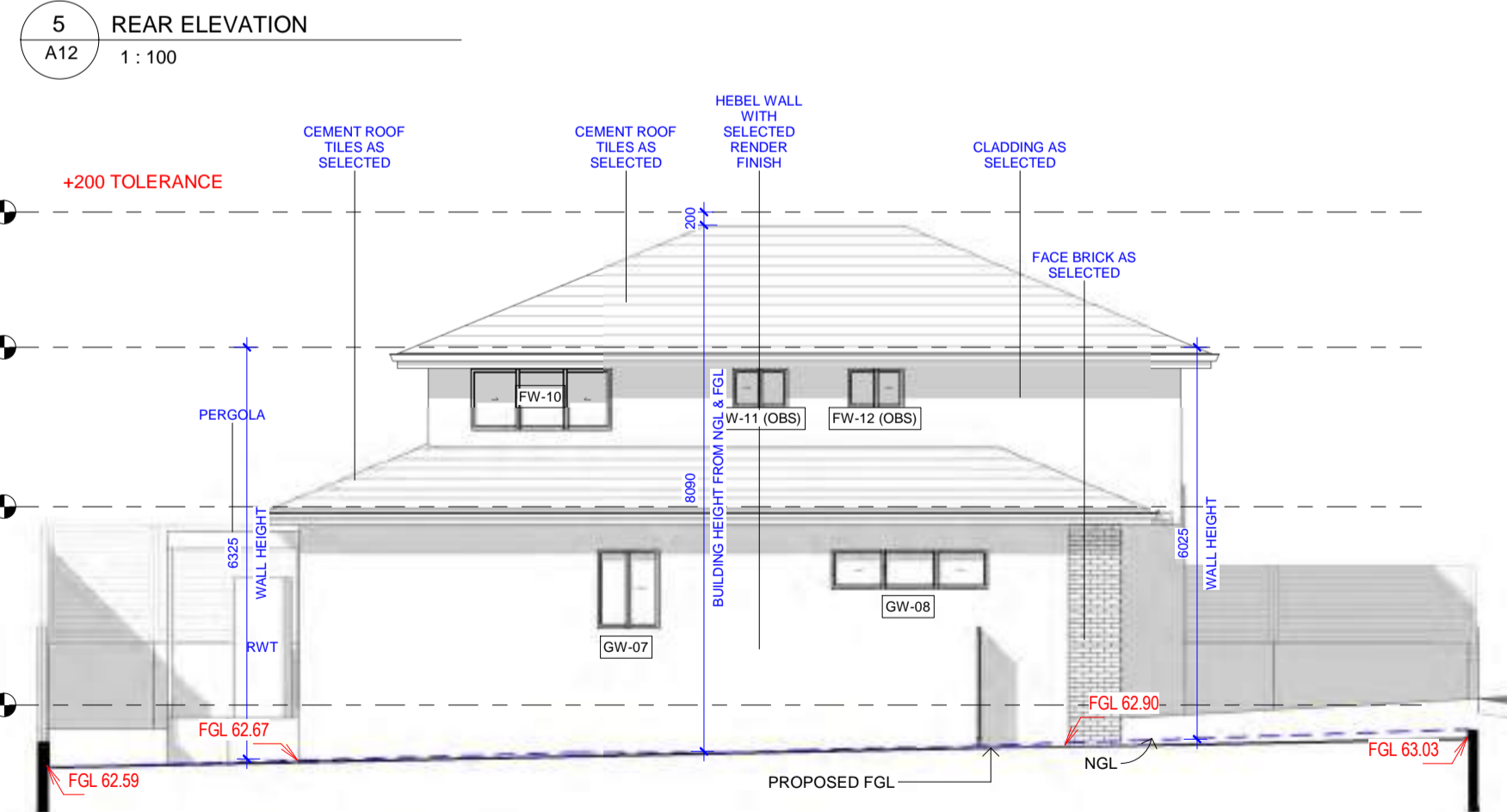
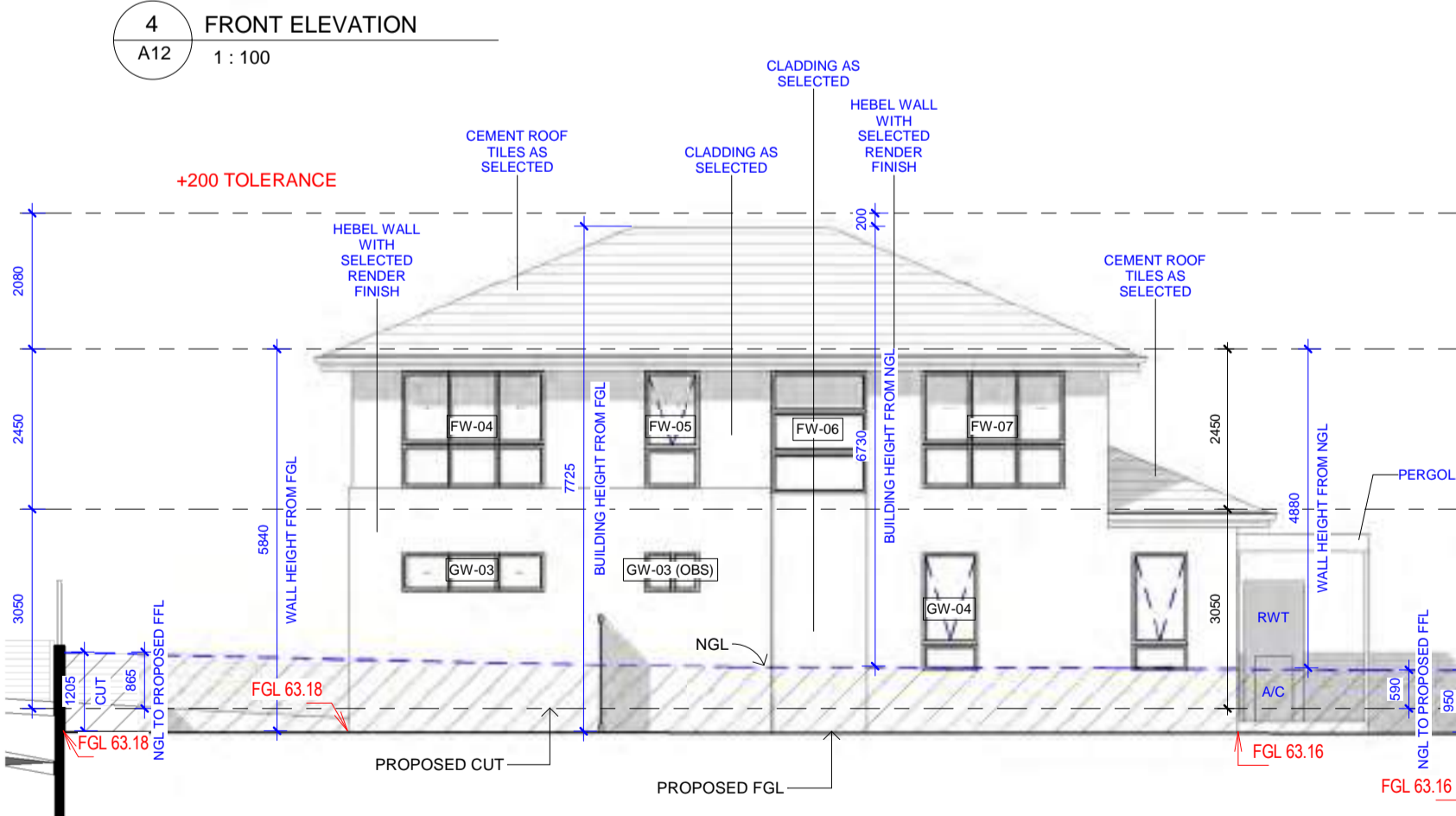
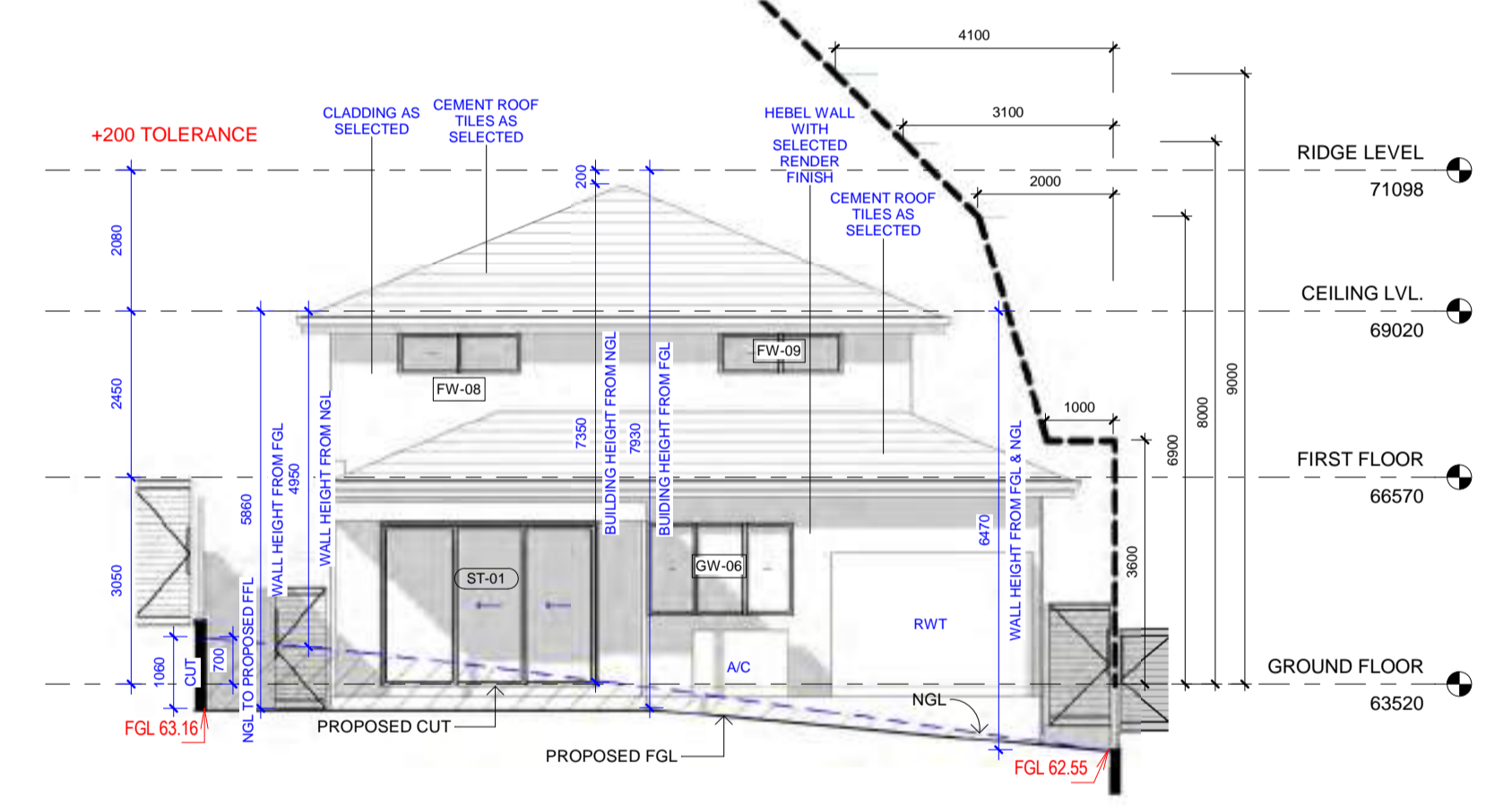
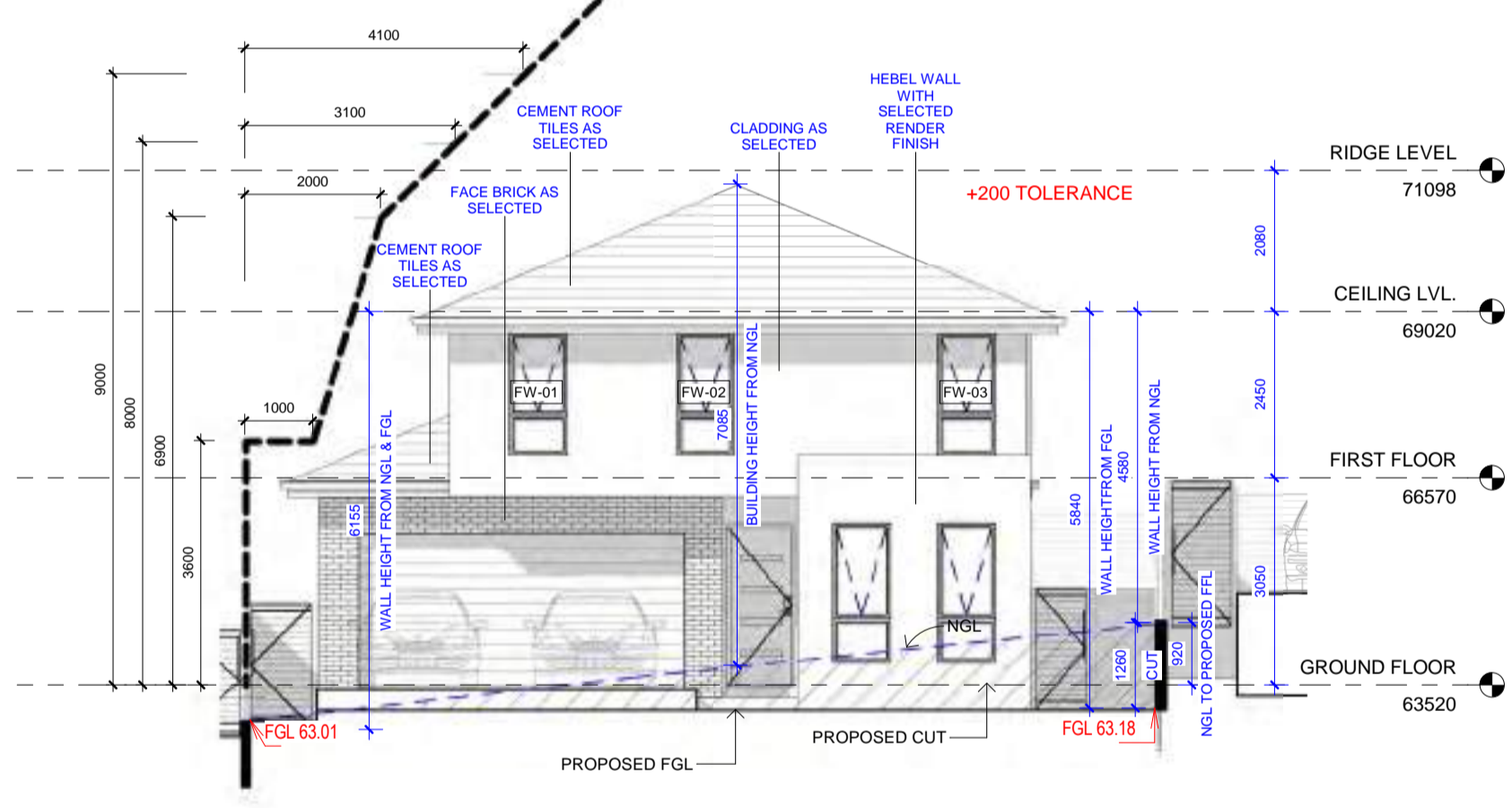
WINDOW SCHEDULE

WINDOW NO.	HEIGHT	WIDTH	SILL HEIGHT	HEAD HEIGHT	DESCRIPTION
GROUND FLOOR:					
GW-01	2050	850	350	2400	AWNING WINDOW
GW-02	2050	850	350	2400	AWNING WINDOW
GW-03	600	2170	1800	2400	SLIDING WINDOW
GW-03 (OBS)	600	850	1800	2400	SLIDING WINDOW
GW-04	1800	850	600	2400	AWNING WINDOW
GW-05	1800	850	600	2400	AWNING WINDOW
GW-06	1370	2170	1030	2400	SLIDING WINDOW
GW-07	1200	970	1200	2400	SLIDING WINDOW
GW-08	600	2410	1800	2400	SLIDING WINDOW
FIRST FLOOR:					
FW-01	1800	850	340	2140	AWNING WINDOW
FW-02	1800	850	340	2140	AWNING WINDOW
FW-03	1800	850	340	2140	AWNING WINDOW
FW-04	1800	2170	340	2140	SLIDING WINDOW
FW-05	1800	850	340	2140	AWNING WINDOW
FW-06	1885	1450	255	2140	3-PANEL VERTICAL FIXED WINDOW
FW-07	1800	2170	340	2140	SLIDING WINDOW
FW-08	600	1810	1540	2140	SLIDING WINDOW
FW-09	600	1810	1540	2140	SLIDING WINDOW
FW-10	940	2170	1200	2140	SLIDING WINDOW
FW-11 (OBS)	600	850	1540	2140	SLIDING WINDOW
FW-12 (OBS)	600	850	1540	2140	SLIDING WINDOW
FIRST FLOOR: 12					
Grand total: 21					

DA DOOR SCHEDULE

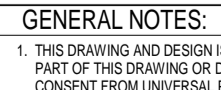
DOOR NO.	HEIGHT	WIDTH	DOOR LEAF	COUNT	DESCRIPTION
GROUND FLOOR:					
D-01	2400	1000	920	1	EXTERNAL FLUSH DOOR WITH SIDELIGHT
D-02	2400	900	820	2	INTERNAL FLUSH DOOR
D-03	2400	800	720	1	INTERNAL FLUSH DOOR
D-04	2400	750	900	1	INTERNAL FLUSH DOOR
GD	2430	4800	4800	1	GARAGE DOOR
ST-01	2400	3215	3215	1	SLIDING STACKER DOOR
FIRST FLOOR: 7					
D-02a	2100	900	820	4	INTERNAL FLUSH DOOR
D-03a	2100	800	720	2	INTERNAL FLUSH DOOR
FIRST FLOOR: 6					
Grand total: 13					

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CRT	GUT	FAS	BR	CD1	CR1	AL	ED	GD	DP
CEMENT ROOF TILE	GUTTER / CAPPING	FASCIA	BRICK WALLS	CLADDING	MAIN WALL	WINDOW FRAMES & HANDRAIL	MAIN DOOR	GARAGE DOOR	DOWNPIPE
MONIER ELABANA	COLORBOND	COLORBOND	POH BRICKS	JAMES HARDI FINE TEXTURE	CEMENT RENDER	ALUMINIUM	TIMBER	COLORBOND	PVC
BARRAMUNDI	IRONSTONE	SURFMIST	URBAN BLUE	DULUX KLUTE	DULUX BLUE STEEL	POWDER COATED WHITE	DULUX LEXICAN QUARTER	SURFMIST	DULUX PAINT
COLOR	FINISH	MATERIAL	MATERIAL	MATERIAL	MATERIAL	MATERIAL	MATERIAL	MATERIAL	MATERIAL

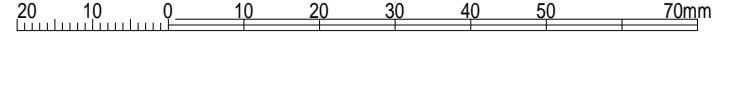
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DO NOT SCALE



PROJECT:
166 Pakenham Road
PAKENHAM, VIC

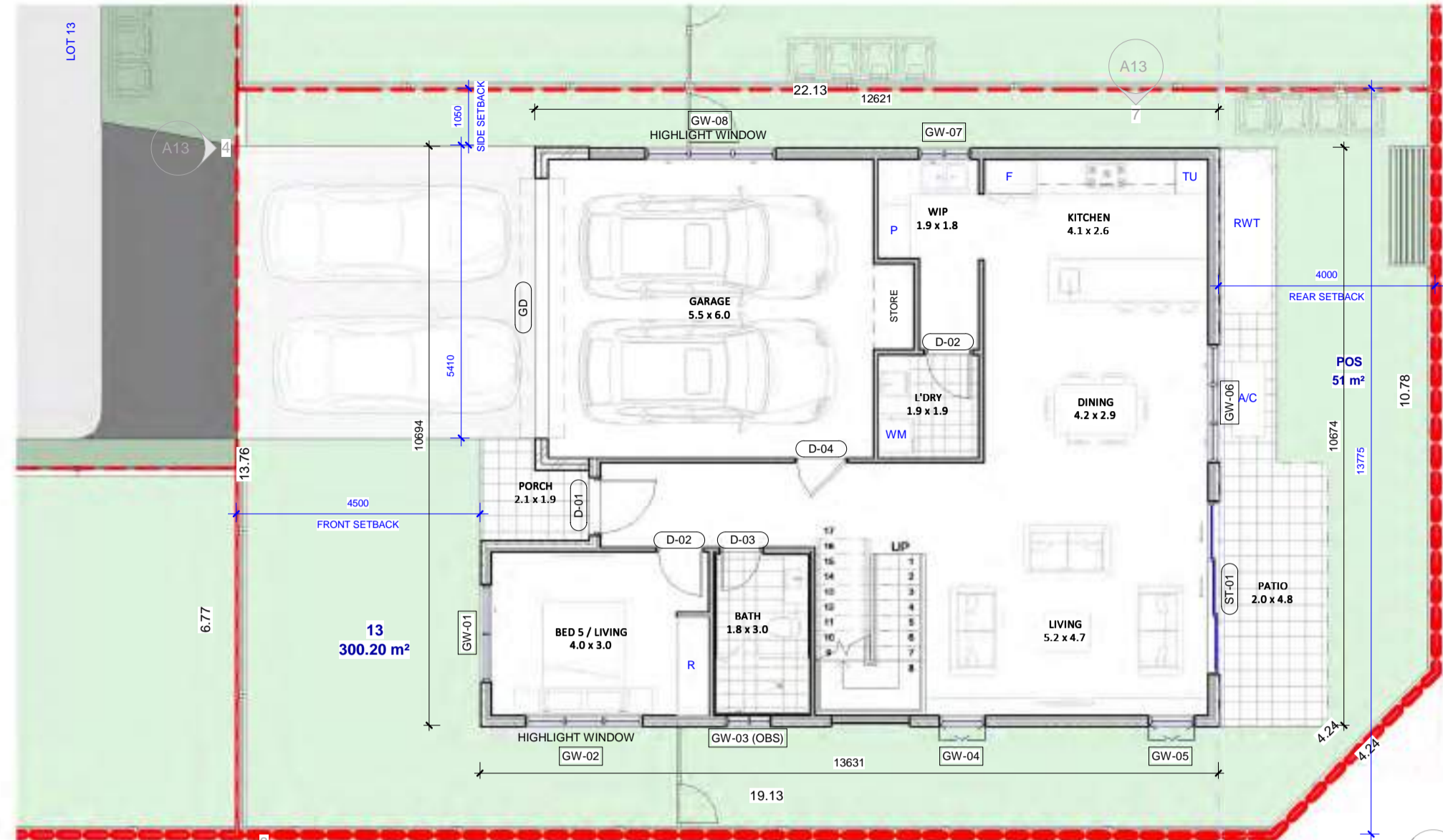
DRAWING TITLE:
LOT 12

DA ISSUE

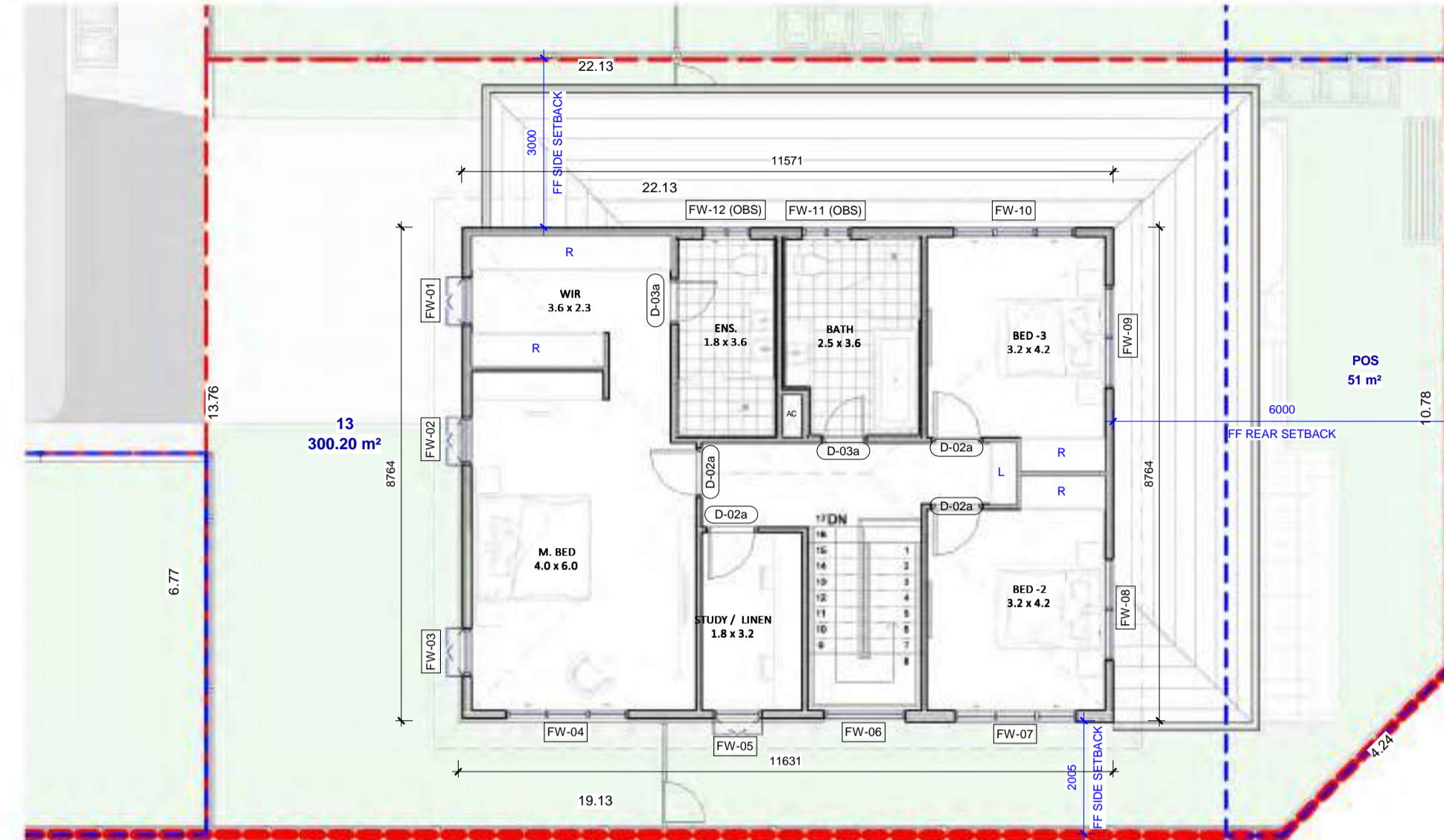
DATE:	SCALE:	DRAWING No.:
22.04.2024	As indicated	A12
DRAWN BY:	CHECKED BY:	REV:
VR	JOSE	1

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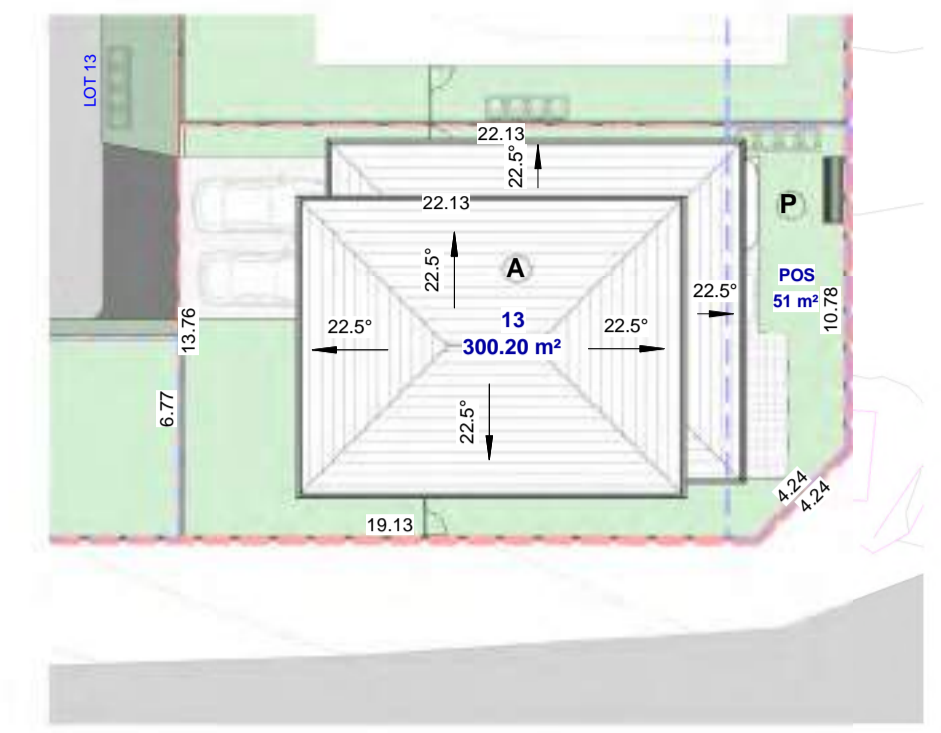
REV	DATE	RESPONSE TO COUNCIL RFI DATED 22.02.2024	DESCRIPTION	VR	BY
1	22.04.2024				



1 DA_GROUND FLOOR
A13 1:100



2 DA_FIRST FLOOR
A13 1:100

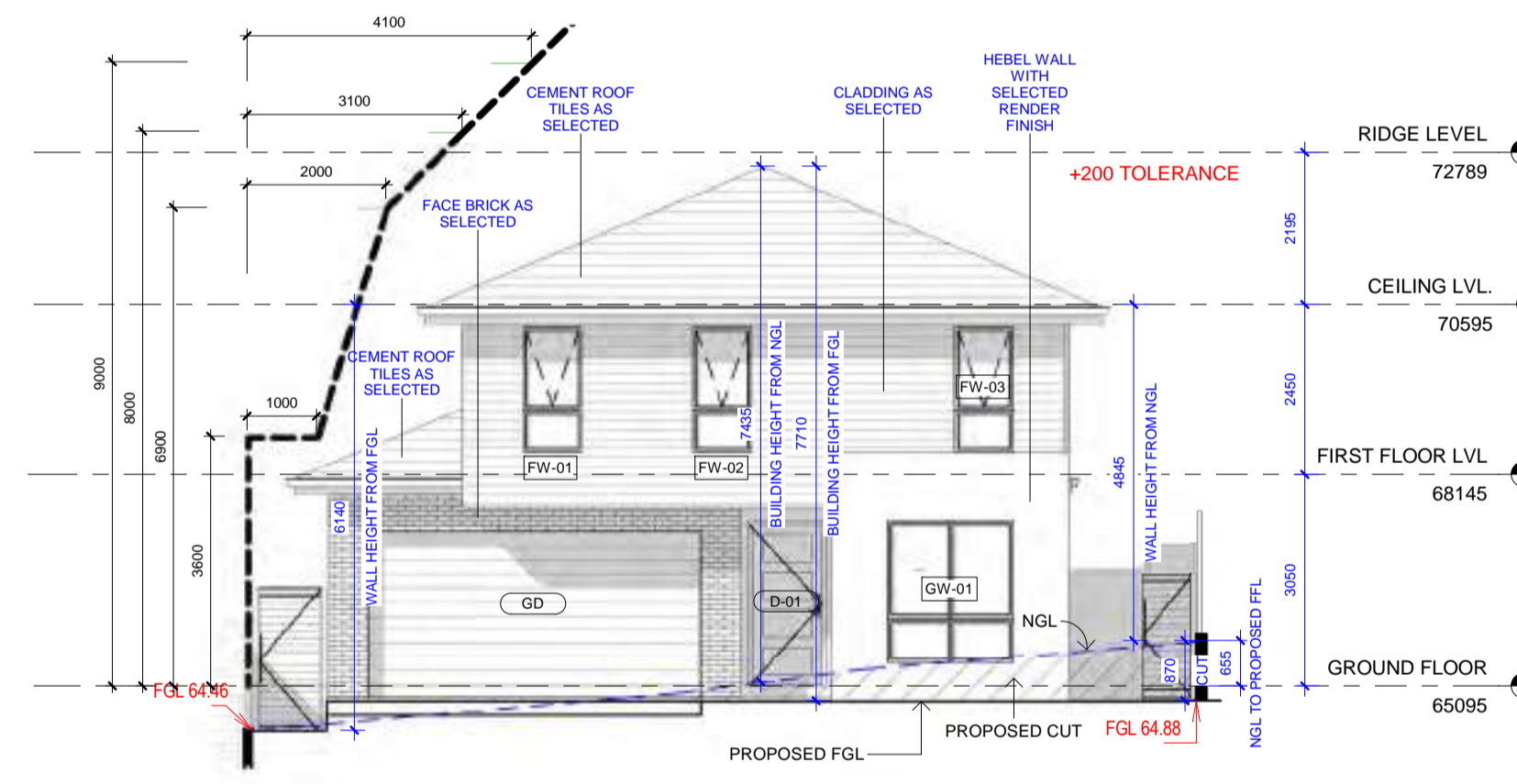


3 DA_ROOF PLAN
A13 1:250

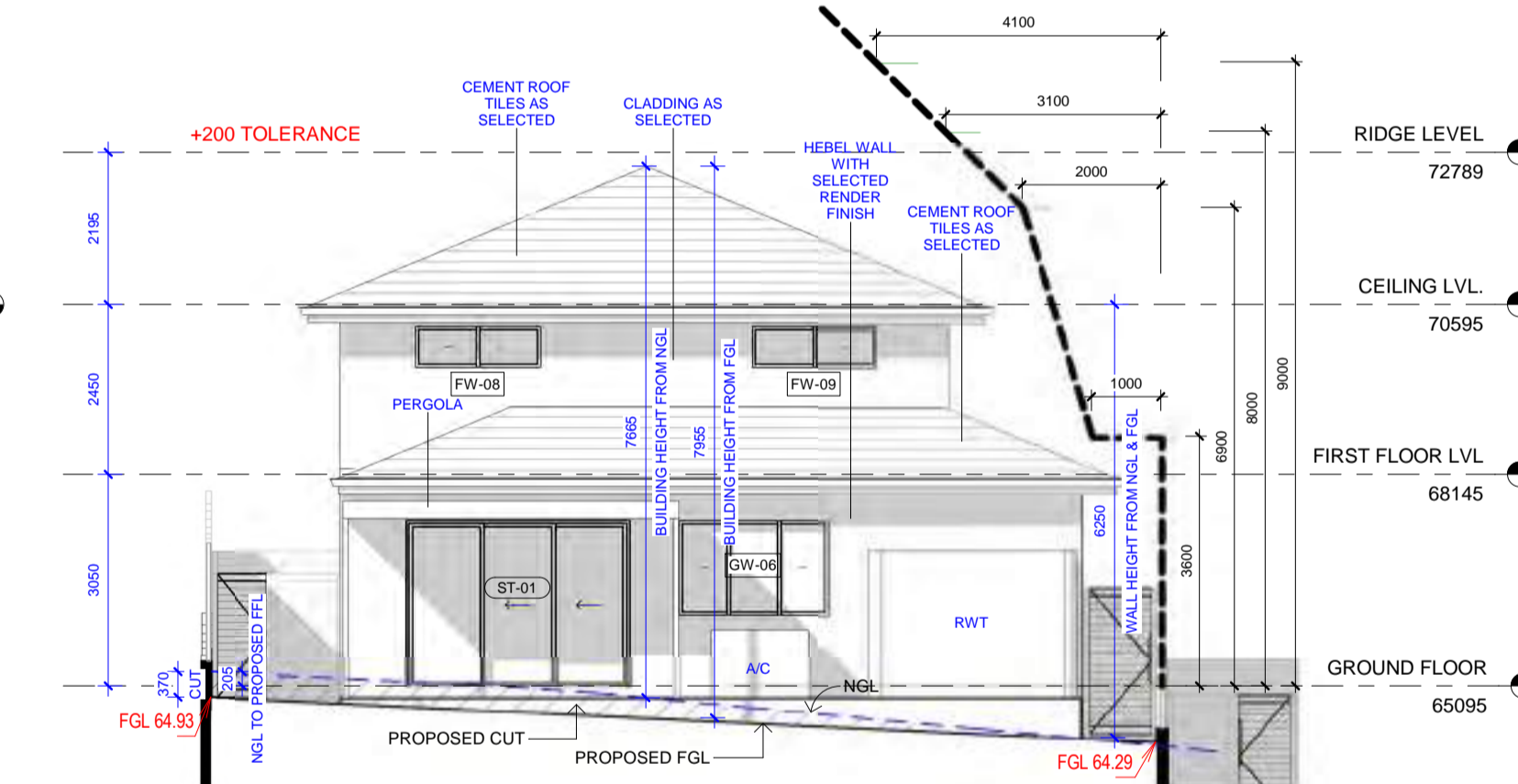
WINDOW NO.	HEIGHT	WIDTH	SILL HEIGHT	HEAD HEIGHT	DESCRIPTION
GROUND FLOOR					
GW-01	2050	1810	350	2400	SLIDING WINDOW
GW-02	600	2170	1800	2400	SLIDING WINDOW
GW-03 (OBS)	600	850	1800	2400	SLIDING WINDOW
GW-04	1800	850	600	2400	AWNING WINDOW
GW-05	1800	850	600	2400	AWNING WINDOW
GW-06	1370	2170	1030	2400	SLIDING WINDOW
GW-07	1200	970	1200	2400	SLIDING WINDOW
GW-08	600	2410	1800	2400	SLIDING WINDOW
FIRST FLOOR: 8					
FW-01	1800	850	340	2140	AWNING WINDOW
FW-02	1800	850	340	2140	AWNING WINDOW
FW-03	1800	850	340	2140	AWNING WINDOW
FW-04	1800	2170	340	2140	SLIDING WINDOW
FW-05	1800	850	340	2140	AWNING WINDOW
FW-06	1885	1450	255	2140	3-PANEL VERTICAL FIXED WINDOW
FIRST FLOOR: 7					
FW-07	1800	2170	340	2140	SLIDING WINDOW
FW-08	600	1810	1540	2140	SLIDING WINDOW
FW-09	600	1810	1540	2140	SLIDING WINDOW
FW-10	940	2170	1200	2140	SLIDING WINDOW
FW-11 (OBS)	600	850	1540	2140	SLIDING WINDOW
FW-12 (OBS)	600	850	1540	2140	SLIDING WINDOW
FIRST FLOOR: 12					
Grand total: 20					

DOOR NO.	HEIGHT	WIDTH	DOOR LEAF	COUNT	DESCRIPTION
GROUND FLOOR					
D-01	2400	1100	1020	1	EXTERNAL FLUSH DOOR WITH SIDELIGHT
D-02	2400	900	820	2	INTERNAL FLUSH DOOR
D-03	2400	800	720	1	INTERNAL FLUSH DOOR
D-04	2400	750	900	1	INTERNAL FLUSH DOOR
GD	2430	4800	4800	1	GARAGE DOOR
ST-01	2400	3215	3215	1	SLIDING STACKER DOOR
GROUND FLOOR: 7					
D-02a	2100	900	820	4	INTERNAL FLUSH DOOR
D-03a	2100	800	720	2	INTERNAL FLUSH DOOR
FIRST FLOOR: 6					
Grand total: 13					

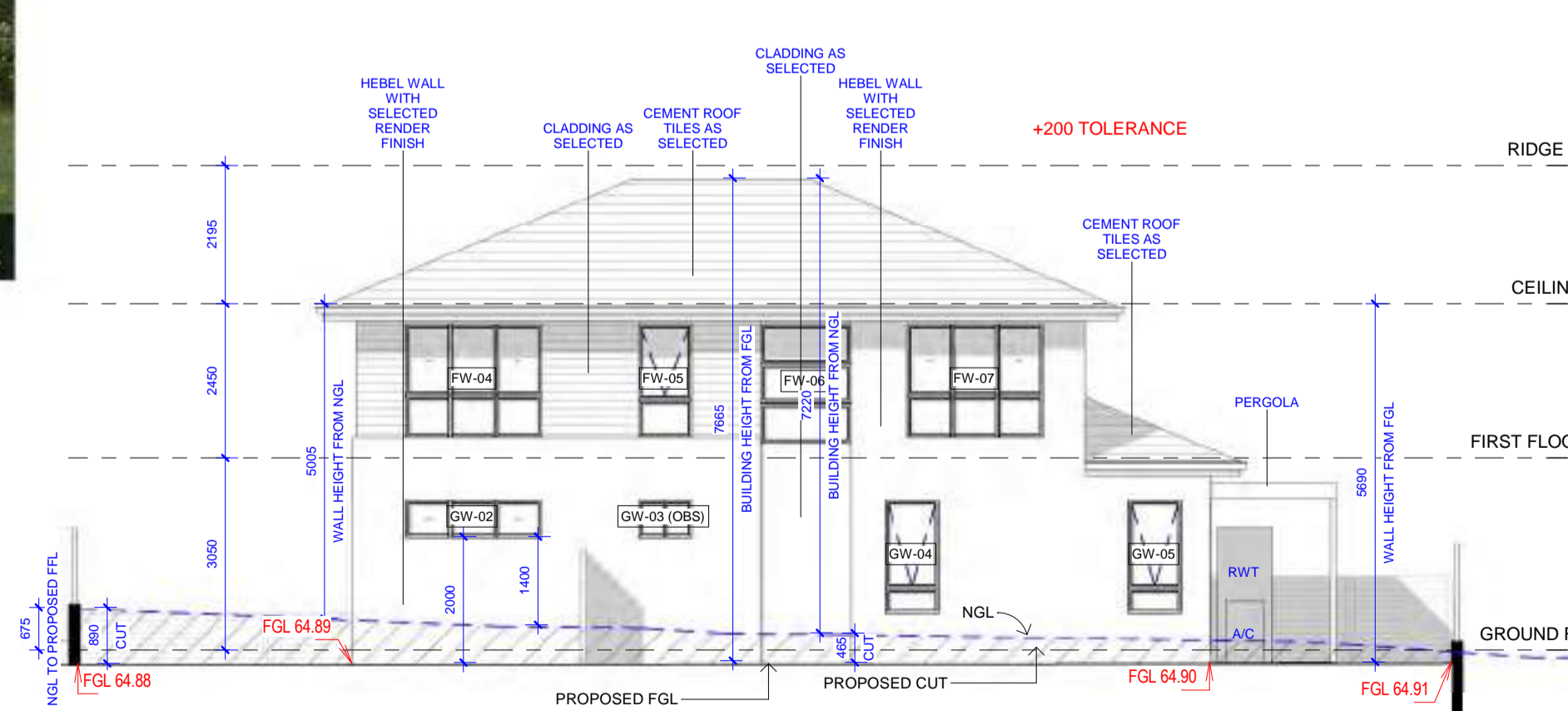
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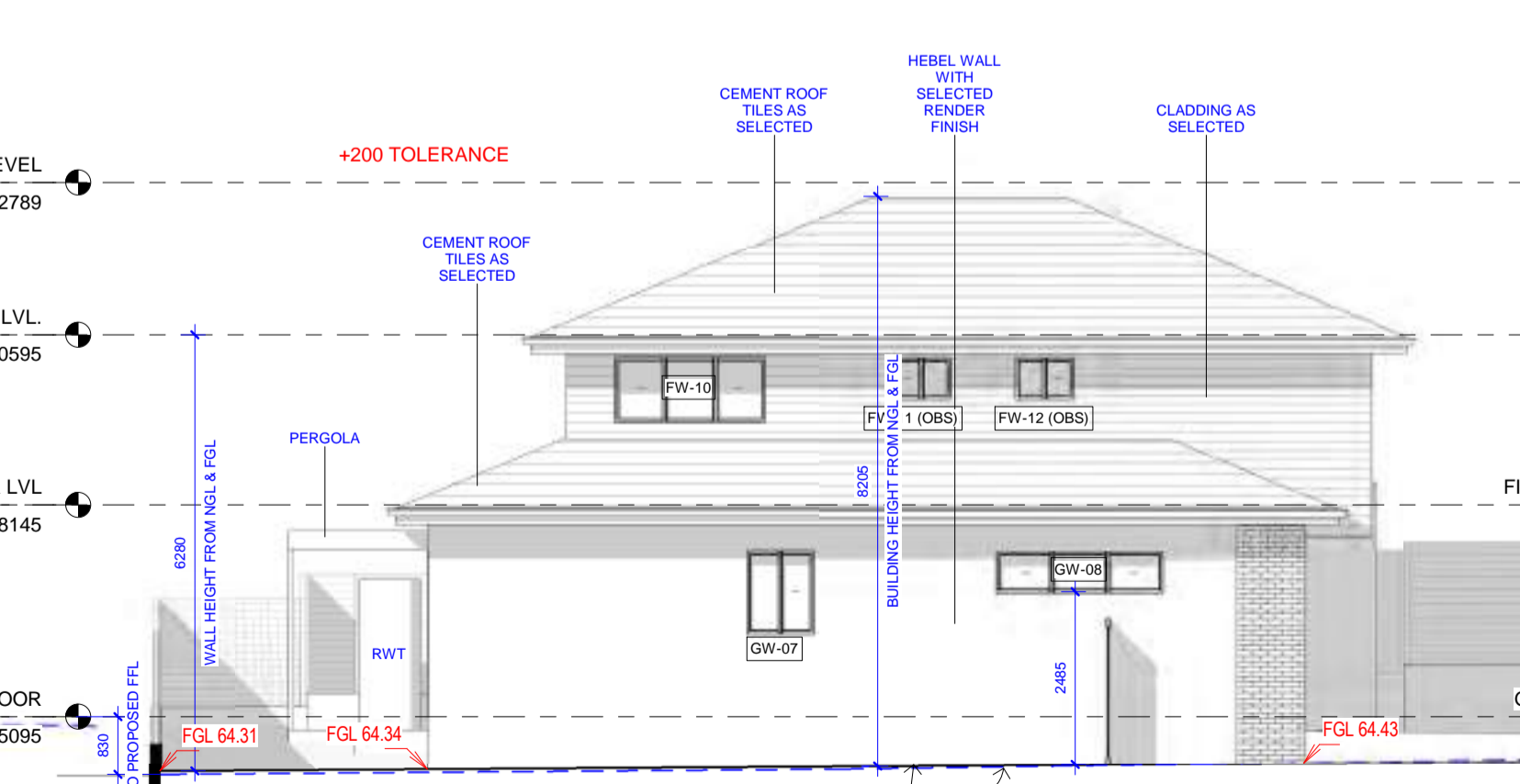
4 FRONT ELEVATION
A13 1:100



5 REAR ELEVATION
A13 1:100



6 SIDE ELEVATION 1
A13 1:100



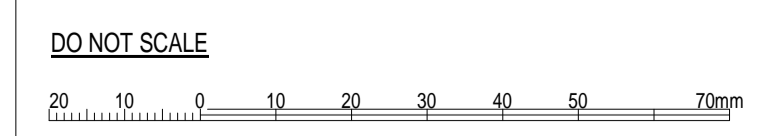
7 SIDE ELEVATION 2
A13 1:100

	CRT	GUT	FAS	BR	CR1	CD1	AL	ED	GD	DP
MATERIAL	CEMENT ROOF TILE	GLITTER / CAPRING	FASCIA	BRICK WALL	MAIN WALL	CLADDING	WINDOW FRAMES & HANDRAIL	MAIN DOOR	GARAGE DOOR	DOWNPIPE
	MONIER ELABANA	COLORBOND	COLORBOND	PGH BRICKS	CEMENT RENDER	JAMES HARDIE LINEA WEATHERBOARD HORIZONTAL	ALUMINIUM	TIMBER	COLORBOND	PVC
FINISH	BABYLON	BASALT	BASALT	CHOCTAN	DULUX TOFFEE FINGERS	DULUX LEXICACON QUARTER	POWDERCOATED PEARL WHITE	STAINED EBONY	MONUMENT	DULUX PAINT
COLOR										TO MATCH ADJACENT WALL COLOR

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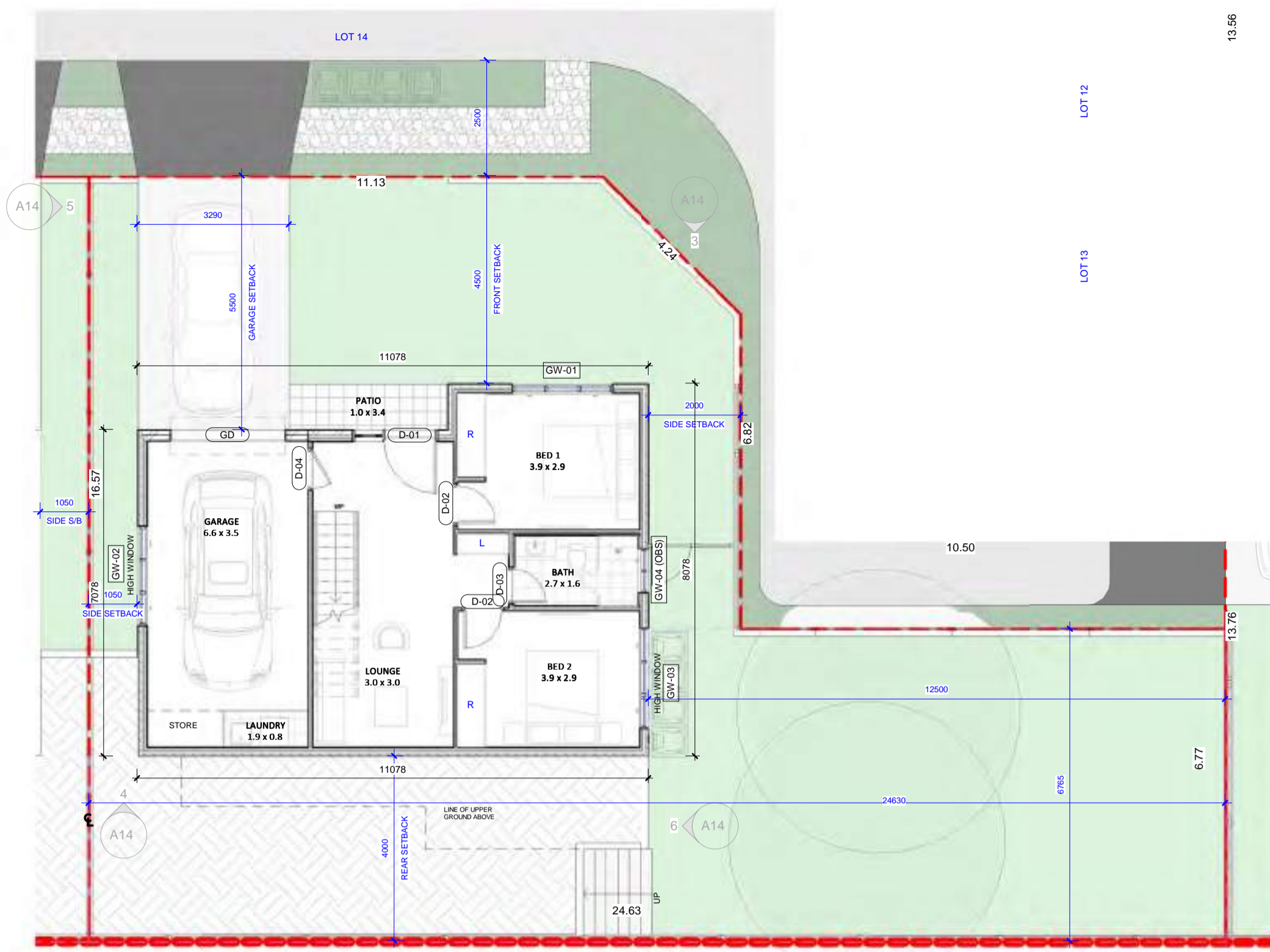
PROJECT:
166 Pakenham Road
PAKENHAM, VIC

DRAWING TITLE:
LOT 13

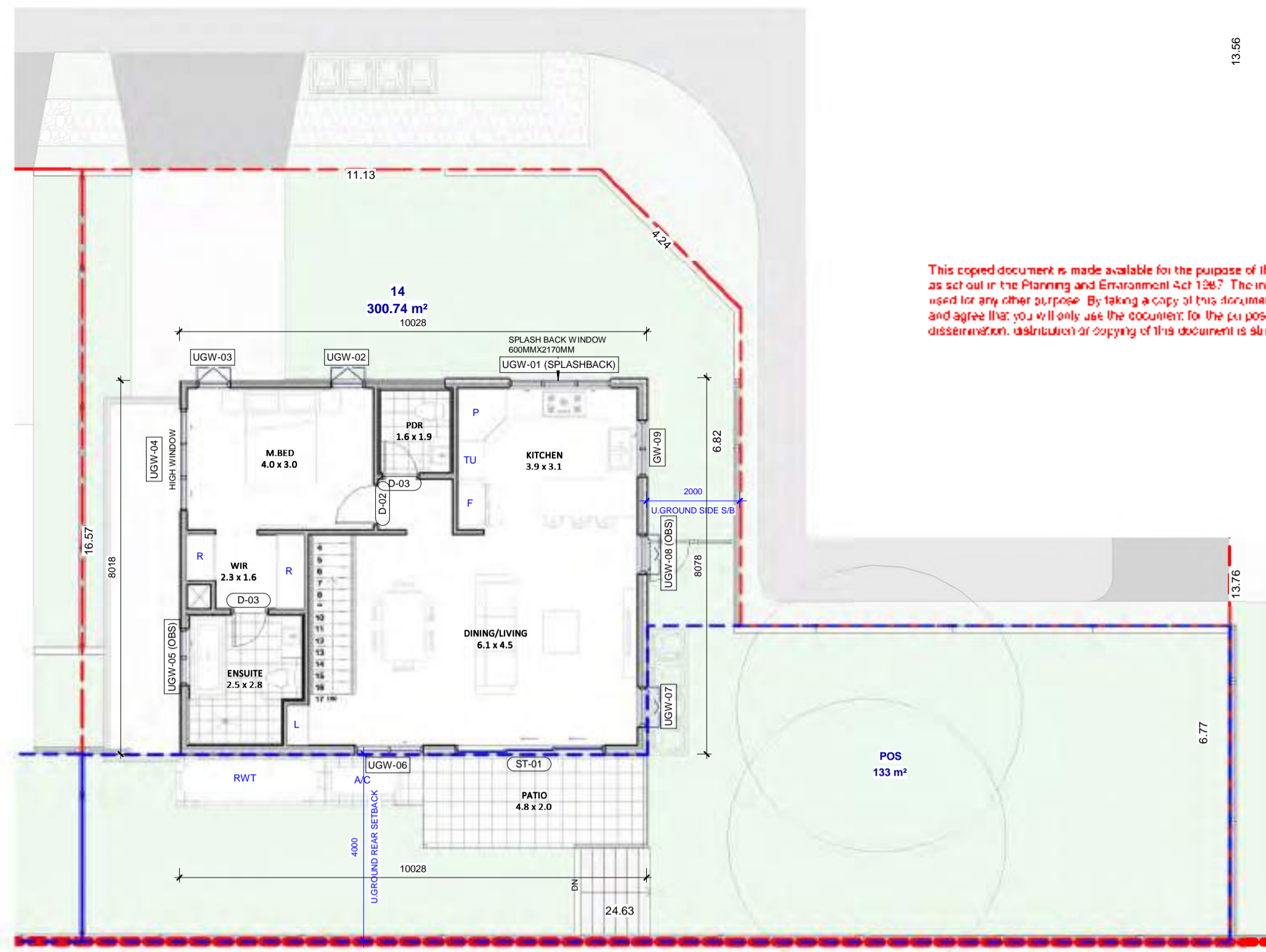
DA ISSUE		
DATE: 22.04.2024	SCALE: As indicated	DRAWING No: A13
DRAWN BY: VR	CHECKED BY: JOSE	REV: 1

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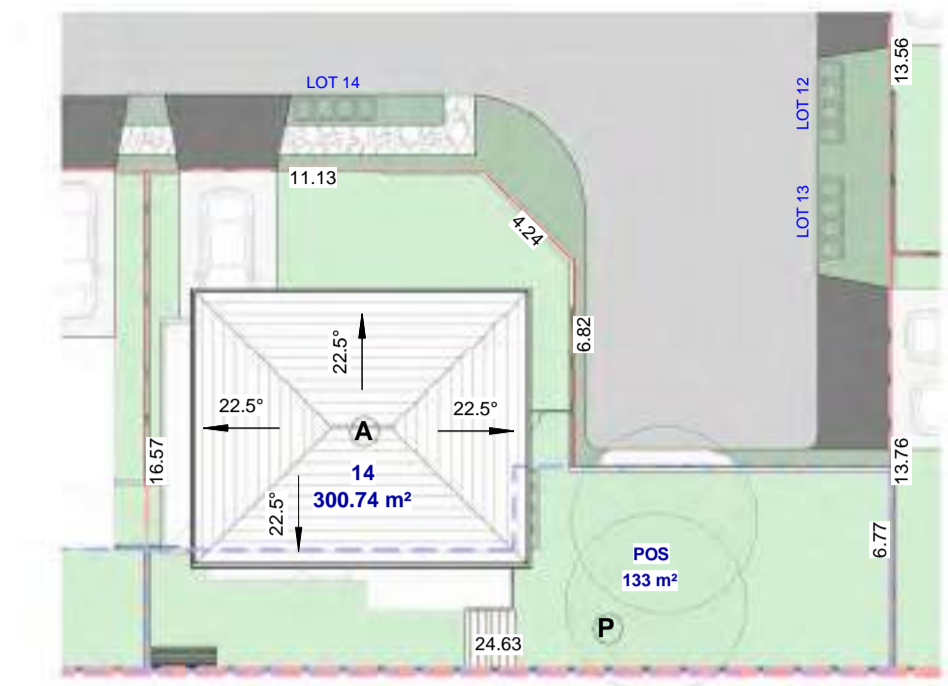
REV	DATE	DESCRIPTION	BY
1	22.04.2024	RESPONSE TO COUNCIL RFI DATED 22.02.2024	VR



1 DA_GROUND FLOOR
A14 1:100



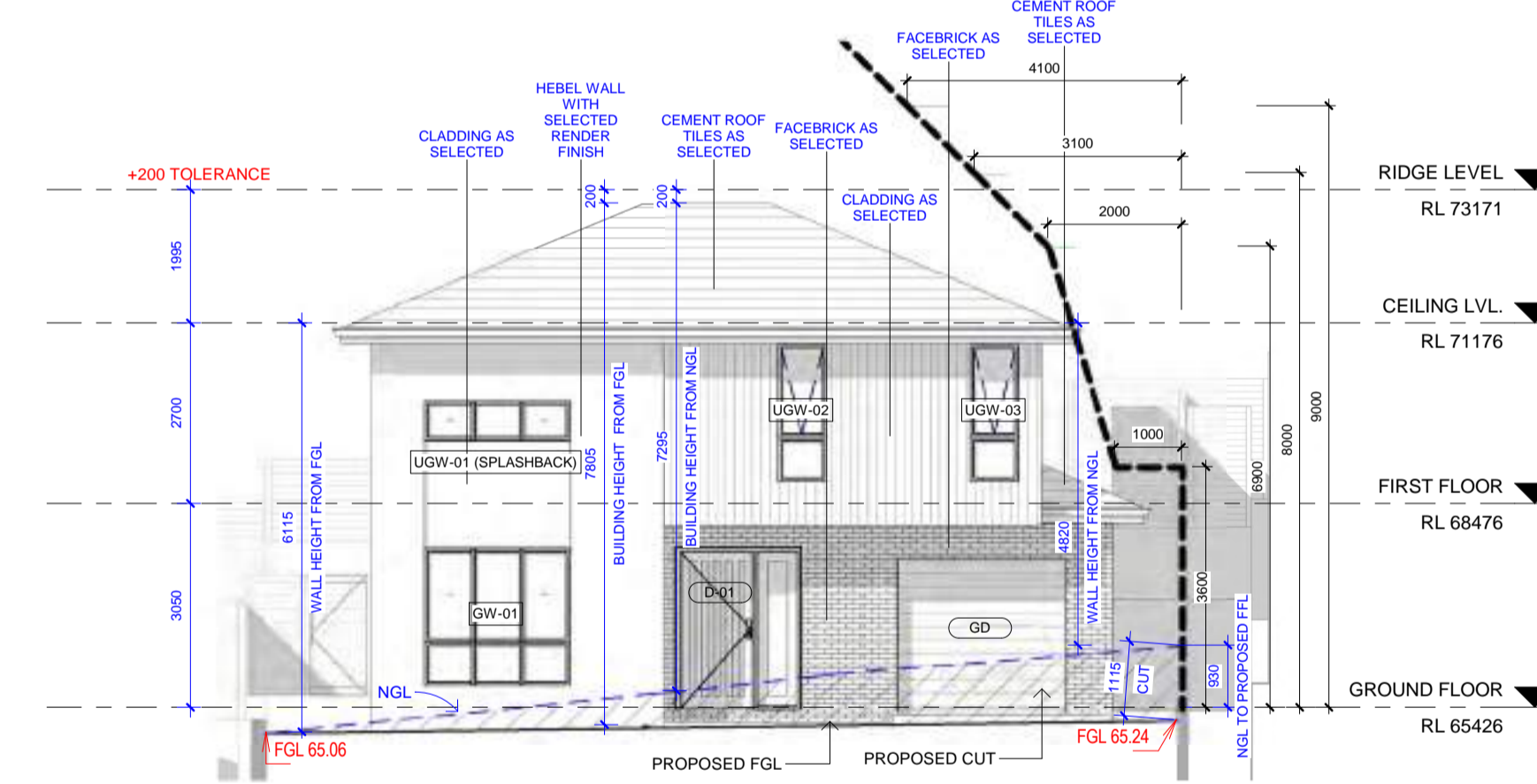
2 DA_UPPER GROUND FLOOR
A14 1:100



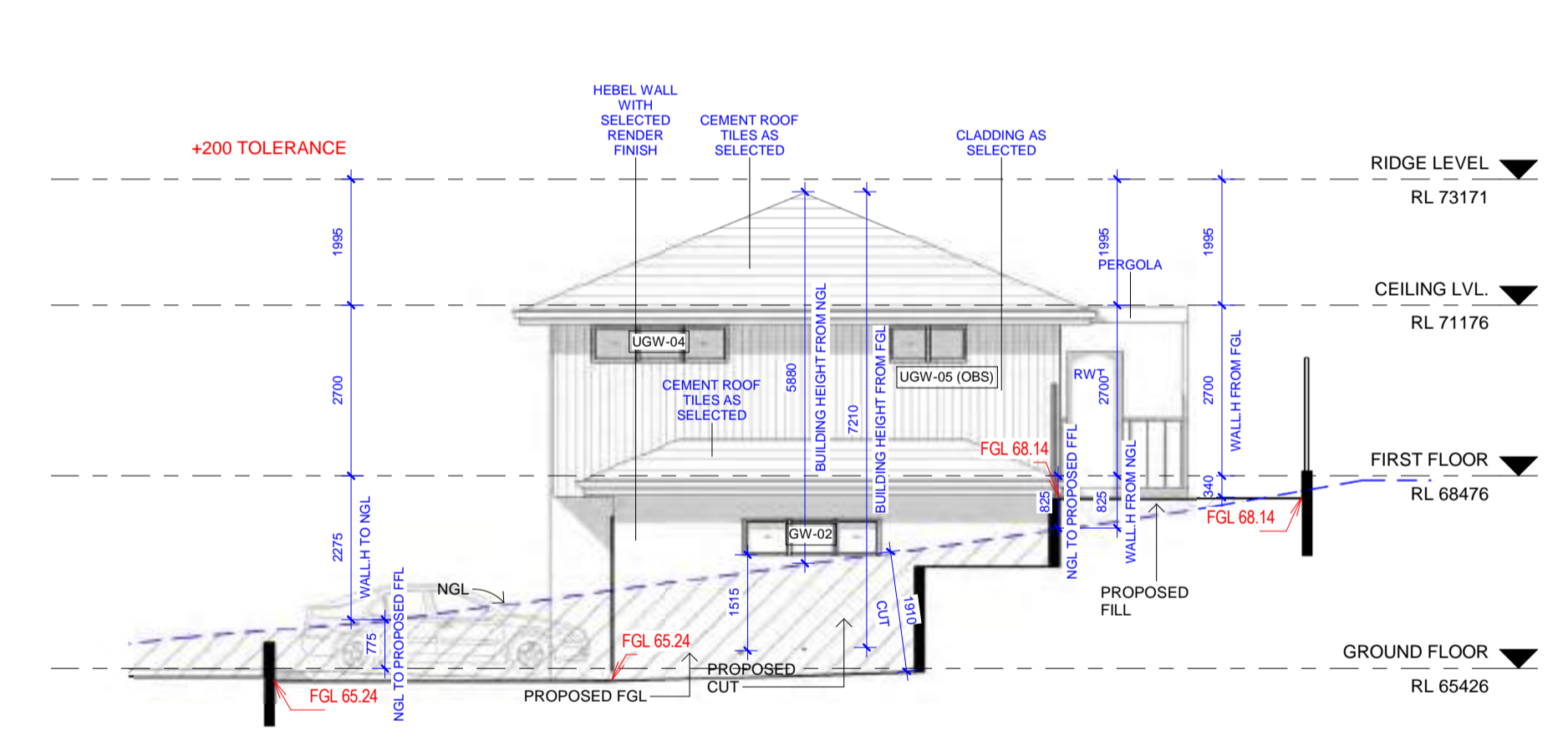
7 DA_ROOF PLAN
A14 1:250

WINDOW NO.	HEIGHT	WIDTH	SILL HEIGHT	HEAD HEIGHT	DESCRIPTION
GROUND FLOOR					
GW-01	2050	2170	350	2400	SLIDING WINDOW WITH FIXED BOTTOM PANELS
GW-02	600	2170	1800	2400	SLIDING WINDOW
GW-03	600	2170	1800	2400	SLIDING WINDOW
GW-04 (OBS)	600	970	1800	2400	SLIDING WINDOW
FIRST FLOOR					
GW-09	1200	1210	1200	2400	SLIDING WINDOW
UGW-01 (SPASHBACK)	600	2170	950	1550	SLIDING WINDOW
UGW-02	2050	724	350	2400	AWNING WINDOW WITH FIXED BOTTOM PANELS
UGW-03	2050	724	350	2400	AWNING WINDOW WITH FIXED BOTTOM PANELS
UGW-04	600	2170	1800	2400	SLIDING WINDOW
UGW-05 (OBS)	600	1210	1800	2400	SLIDING WINDOW
UGW-06	1450	1450	950	2400	SLIDING WINDOW
UGW-07	1800	850	600	2400	AWNING WINDOW WITH FIXED BOTTOM PANELS
UGW-08 (OBS)	1800	850	600	2400	AWNING WINDOW WITH FIXED BOTTOM PANELS
FIRST FLOOR: 9 Grand total: 13					

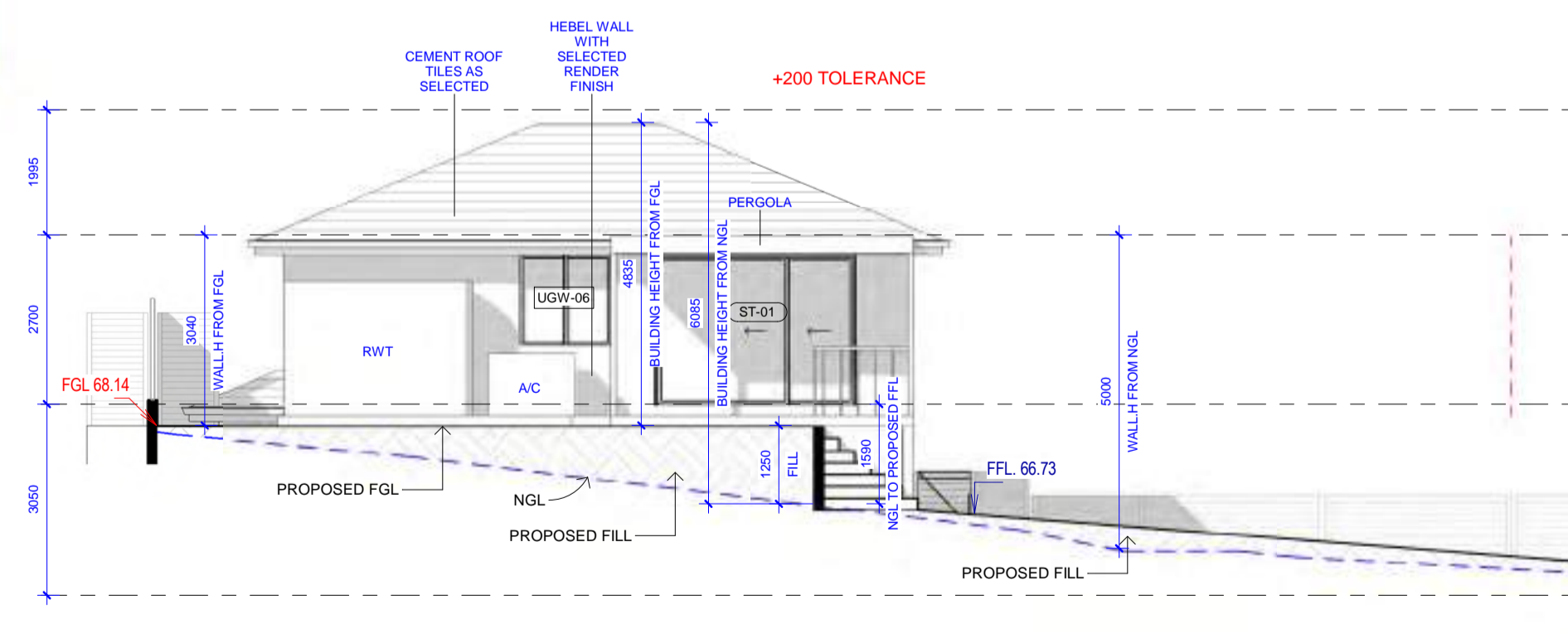
DA_DOOR SCHEDULE					
DOOR NO.	HEIGHT	WIDTH	DOOR LEAF	COUNT	DESCRIPTION
GROUND FLOOR					
D-01	2400	1200	1120	1	EXTERNAL FLUSH DOOR WITH SIDELIGHT
D-02	2400	900	820	2	INTERNAL FLUSH DOOR
D-03	2400	800	720	1	INTERNAL FLUSH DOOR
D-04	2400	900	820	1	INTERNAL FLUSH DOOR
GD	2430	2500	2500	1	GARAGE DOOR
FIRST FLOOR: 6					
D-02	2400	900	820	1	INTERNAL FLUSH DOOR
D-03	2400	800	720	2	INTERNAL FLUSH DOOR
ST-01	2400	3215	3215	1	SLIDING STACKER DOOR
FIRST FLOOR: 4 Grand total: 10					



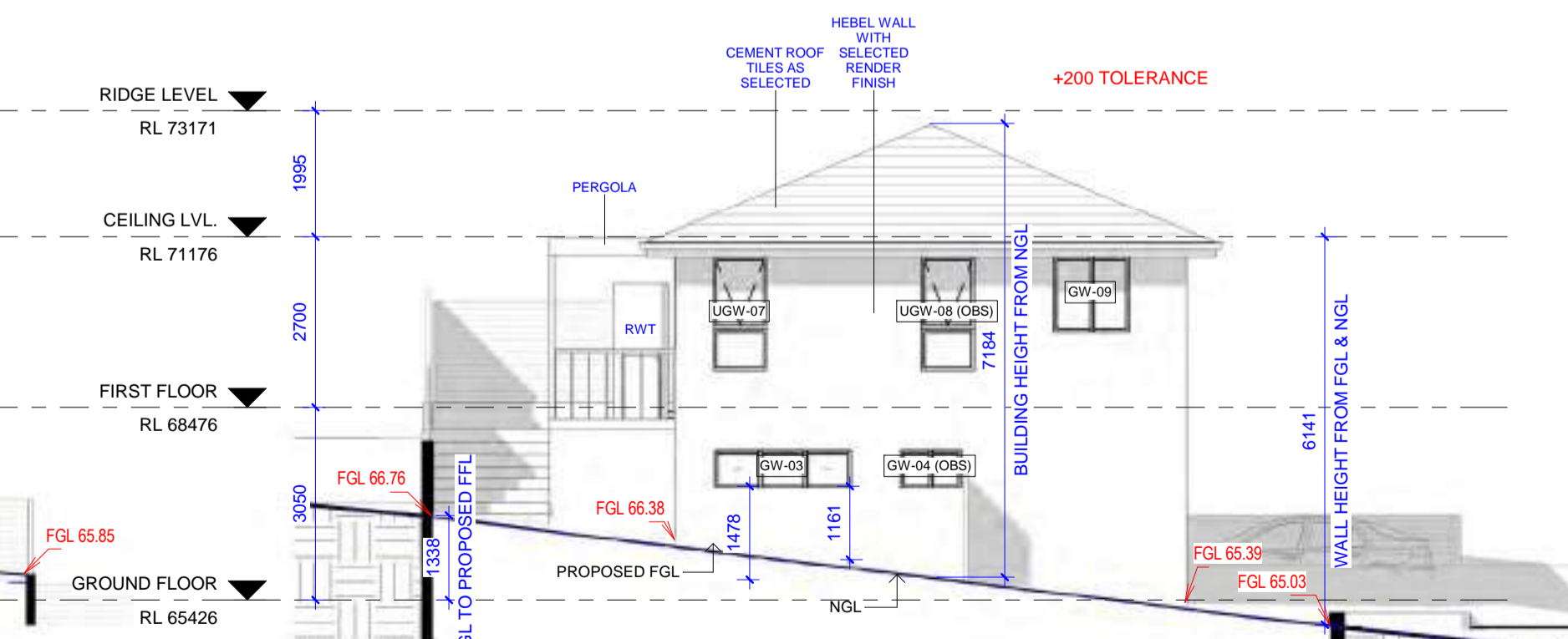
3 FRONT ELEVATION
A14 1:100



5 SIDE ELEVATION 1
A14 1:100



4 REAR ELEVATION
A14 1:100



6 SIDE ELEVATION 2
A14 1:100

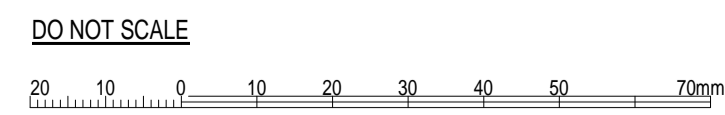
	CRT	GUT	FAS	BR	CR1	CD1	CD2	AL	ED	GD	DP
MATERIAL	CEMENT ROOF TILE	GUTTER / CAPPING	FASCIA	BRICK WALLS	MAIN WALL	CLADDING	CLADDING	WINDOW FRAMES & HANDRAIL	MAIN DOOR	GARAGE DOOR	DOWNPIPE
	MOHIER ELABANA	COLORBOND	COLORBOND	PGH BRICKS	CEMENT RENDER	JAMES HARDIE VERTICAL AXON	JAMES HARDIE FINE TEXTURE	ALUMINIUM	TIMBER	COLORBOND	PVC
FINISH	SAMBUCA	MONUMENT	MONUMENT	EXPRESSO	DULUX LEXICON QUARTER	DULUX SILKWOOT	DULUX DOMINO	POWDERCOATED BLACK	DULUX DOMINO	MONUMENT	DULUX PAINT
COLOR											TO MATCH ADJACENT WALL COLOR

NOTE: ALL COLOURS SPECIFIED ARE INDICATIVE ONLY AND ARE SUBJECT TO VARIATION AND TO AVAILABILITY. IN CASE OF ANY DISCREPANCY, PLEASE FOLLOW AS PER RENDERED IMAGE.

REV	DATE	DESCRIPTION	BY
1	19.04.2024	RESPONSE TO COUNCIL RFI DATED 22.02.24	

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P O Box 270 Westmeath NSW 2145
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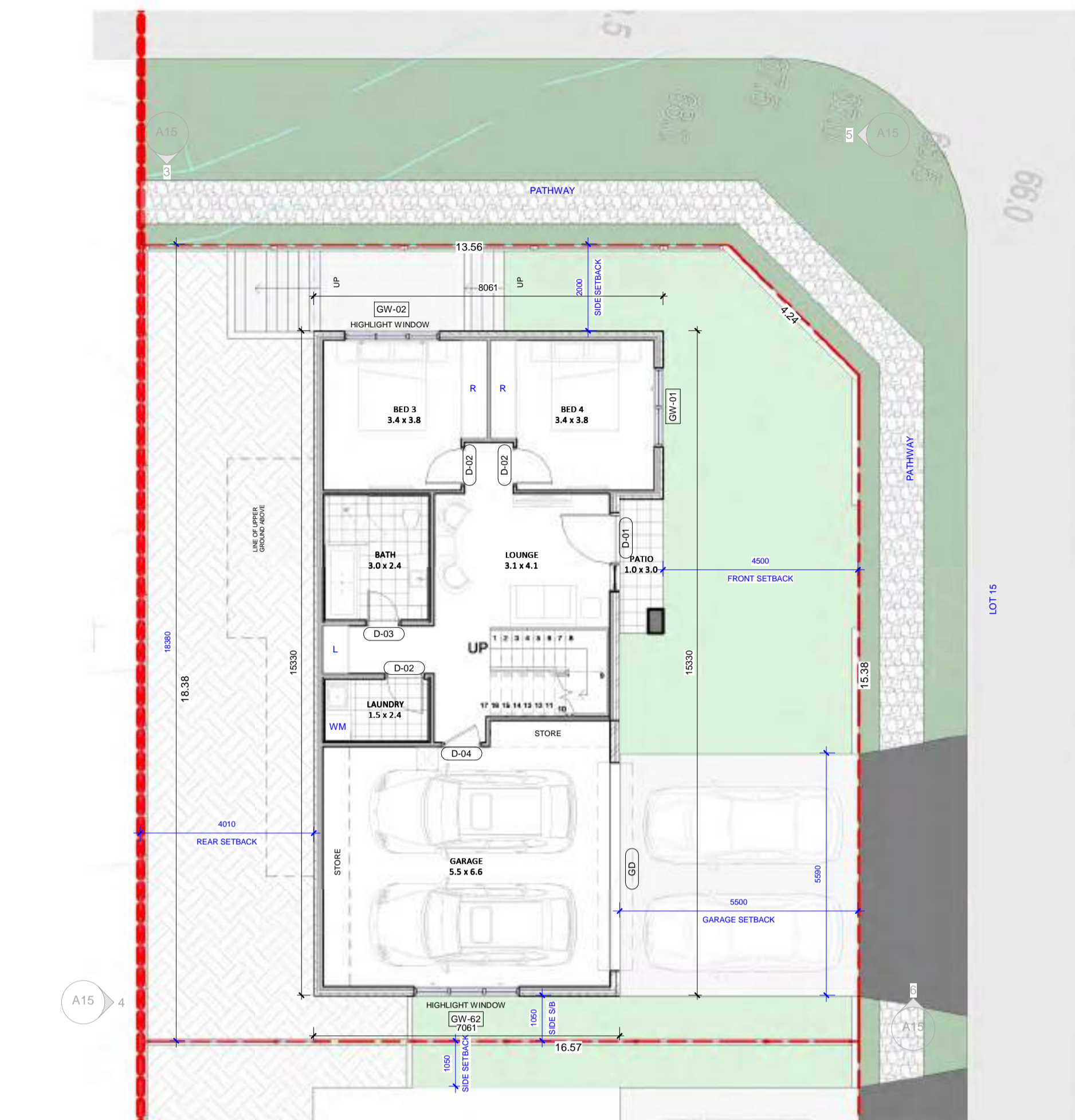


PROJECT:
166 Pakenham Road
PAKENHAM, VIC

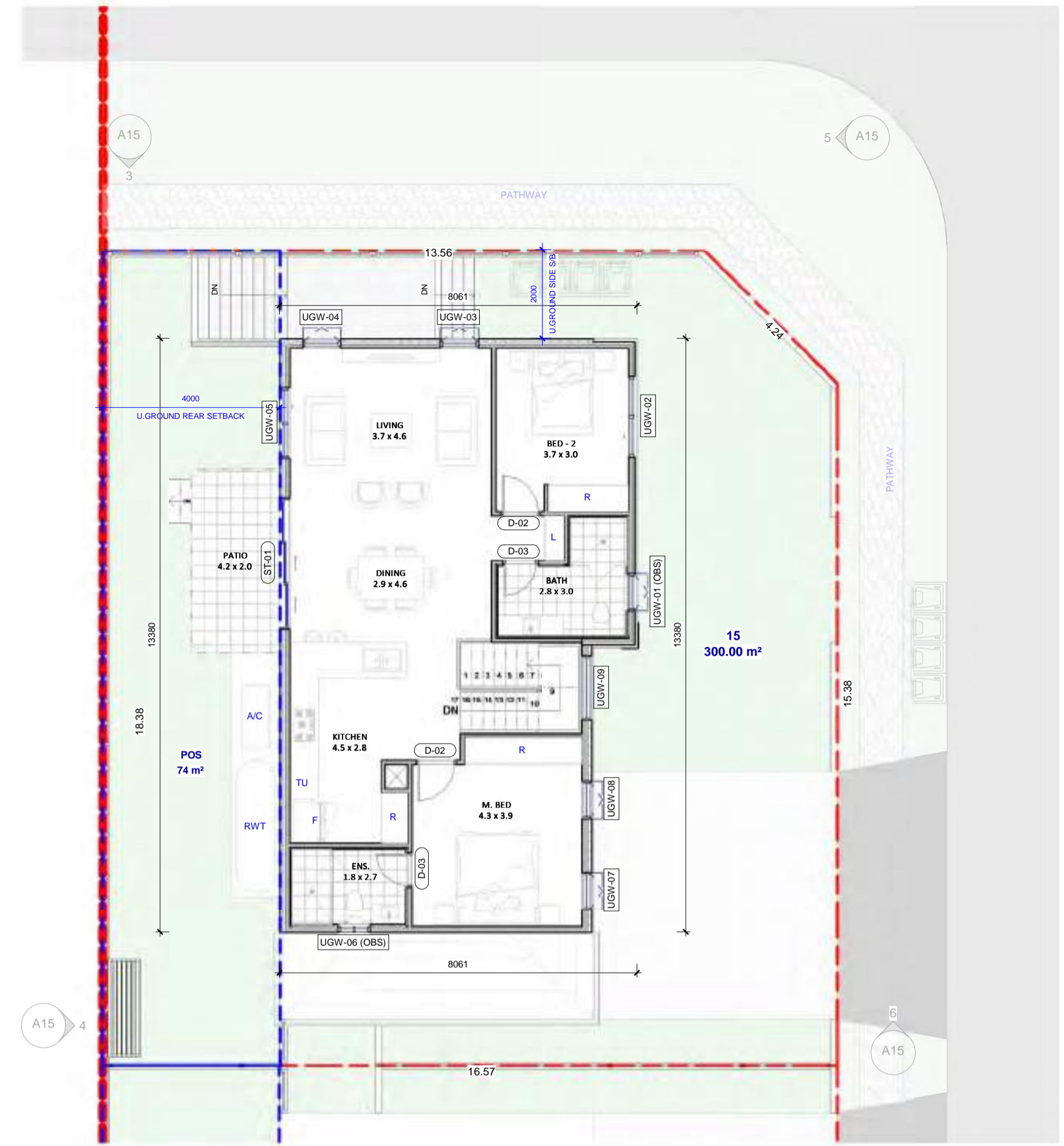
DRAWING TITLE:
LOT 14

DA ISSUE			
DATE:	SCALE:	DRAWING No:	
19.04.2024	As indicated	A14	
DRAWN BY:	CHECKED BY:	REV:	
VR	JOSE	1	

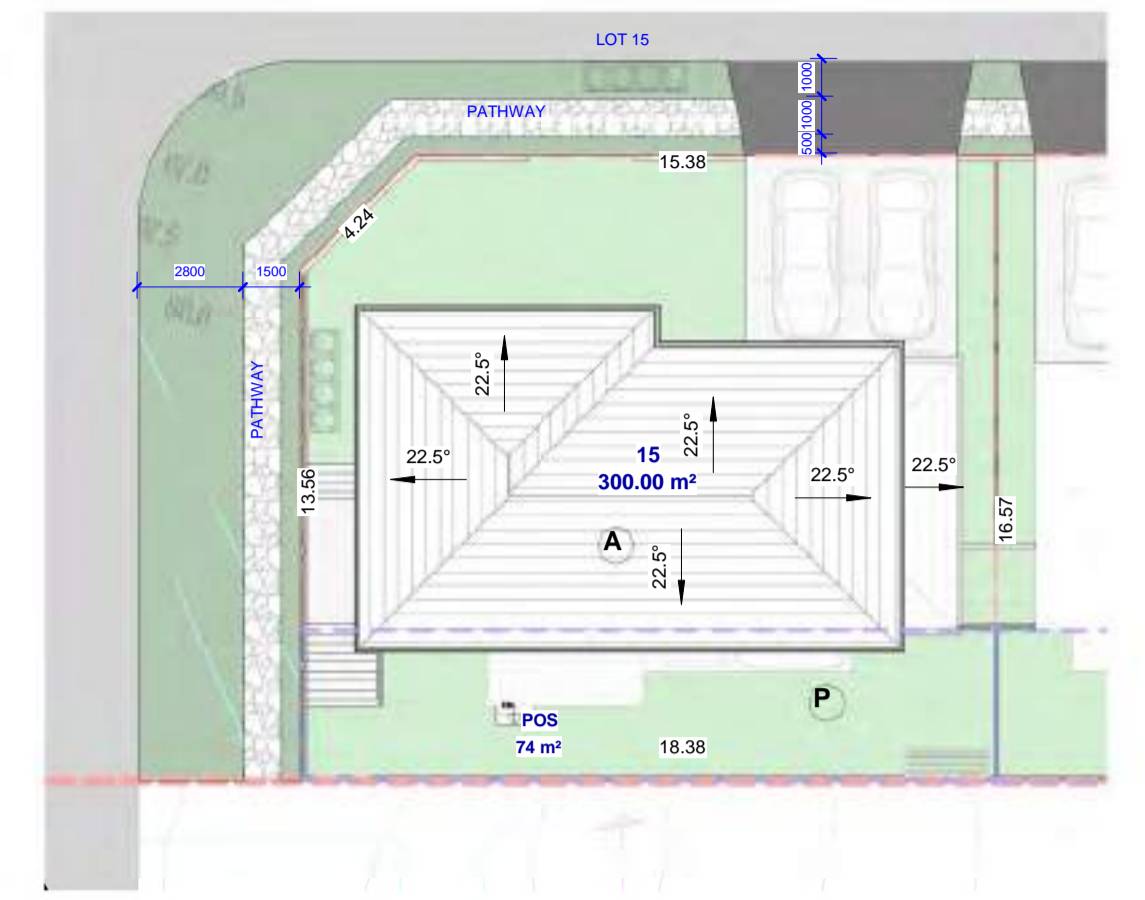
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1 DA_GROUND FLOOR
A15 1:100



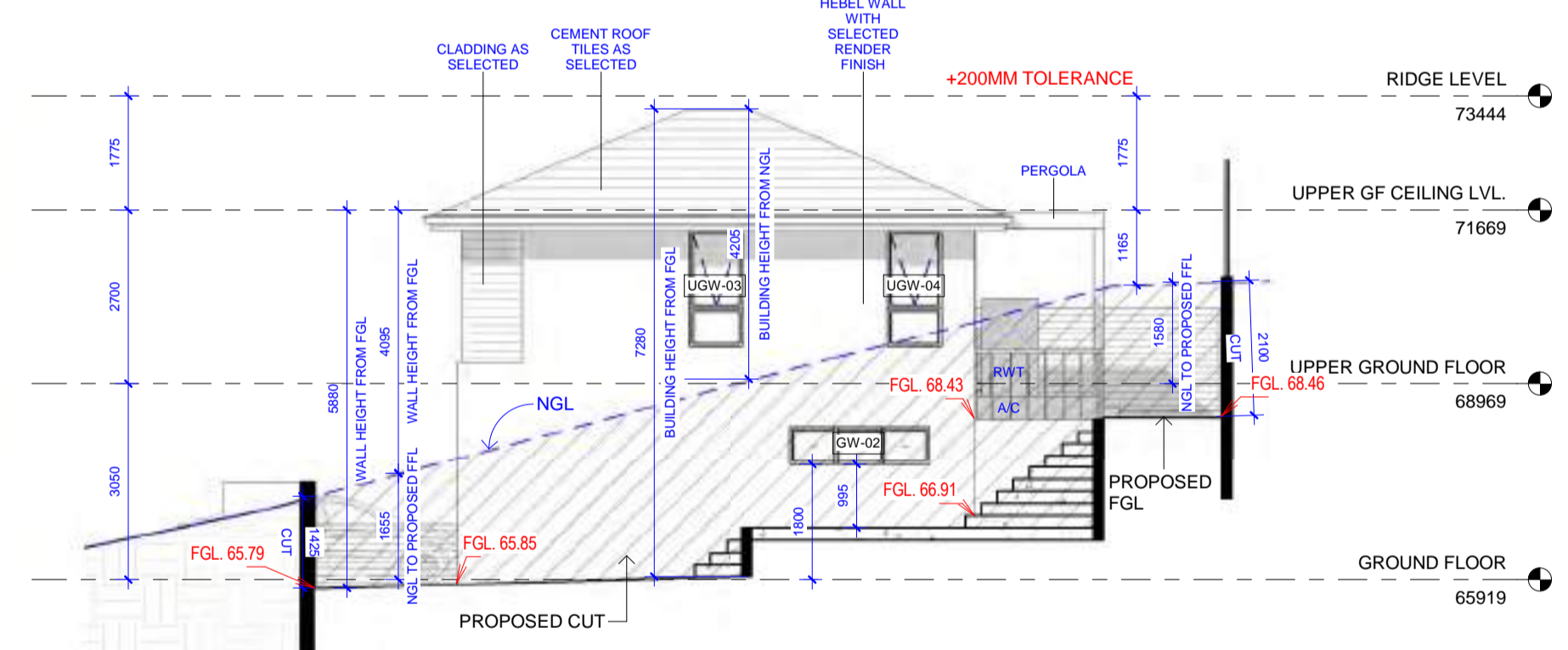
2 DA_UPPER GROUND FLOOR
A15 1:100



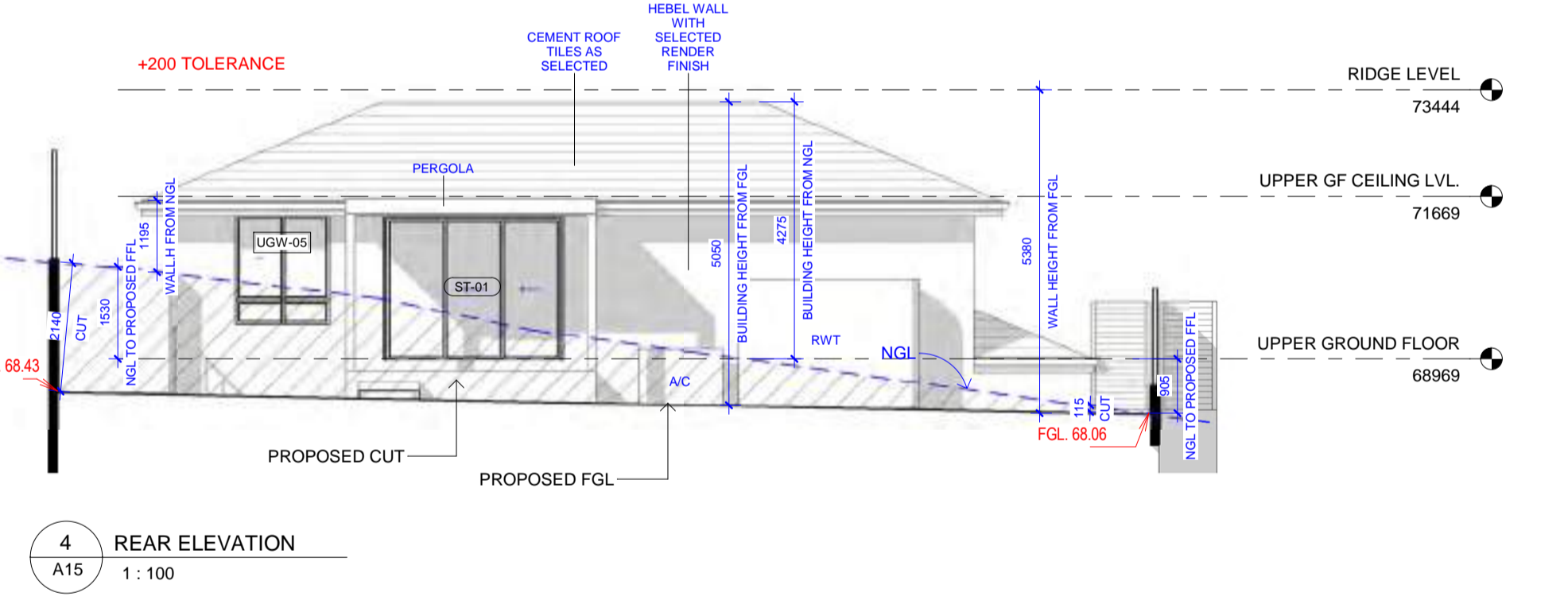
7 DA_ROOF PLAN
A15 1:200

WINDOW SCHEDULE					
WINDOW NO.	HEIGHT	WIDTH	SILL HEIGHT	HEAD HEIGHT	DESCRIPTION
GROUND FLOOR					
GW-01	2050	1810	350	2400	SLIDING WINDOW WITH FIXED BOTTOM PANELS
GW-02	600	2170	1800	2400	SLIDING WINDOW
GW-03	600	2410	1800	2400	SLIDING WINDOW
UPPER GROUND FLOOR					
UGW-01 (OBS)	850	350	2400		AWNING WINDOW WITH FIXED BOTTOM PANELS
UGW-02	2050	1810	350	2400	SLIDING WINDOW WITH FIXED BOTTOM PANELS
UGW-03	1800	850	600	2400	AWNING WINDOW WITH FIXED BOTTOM PANELS
UGW-04	1800	850	600	2400	AWNING WINDOW WITH FIXED BOTTOM PANELS
UGW-05	1800	1570	600	2400	SLIDING WINDOW WITH FIXED BOTTOM PANELS
UGW-06 (OBS)	600	724	1800	2400	SLIDING WINDOW
UGW-07	2050	850	350	2400	AWNING WINDOW WITH FIXED BOTTOM PANELS
UGW-08	2050	850	350	2400	AWNING WINDOW WITH FIXED BOTTOM PANELS
UGW-09	2050	1450	350	2400	5-PANEL VERTICAL FIXED WINDOW
UPPER GROUND FLOOR: 9 Grand total: 12					

DA DOOR SCHEDULE					
DOOR NO.	HEIGHT	WIDTH	DOOR LEAF	COUNT	DESCRIPTION
GROUND FLOOR					
D-01	2400	1200	1120	1	EXTERNAL FLUSH DOOR WITH SIDELIGHT
D-02	2400	900	820	3	INTERNAL FLUSH DOOR
D-03	2400	800	720	1	INTERNAL FLUSH DOOR
D-04	2400	900	820	1	INTERNAL FLUSH DOOR
GD	2430	4800	4800	1	GARAGE DOOR
UPPER GROUND FLOOR: 7					
D-02	2400	900	820	2	INTERNAL FLUSH DOOR
D-03	2400	800	720	2	INTERNAL FLUSH DOOR
ST-01	2400	2975	2975	1	SLIDING STACKER DOOR
UPPER GROUND FLOOR: 5 Grand total: 12					

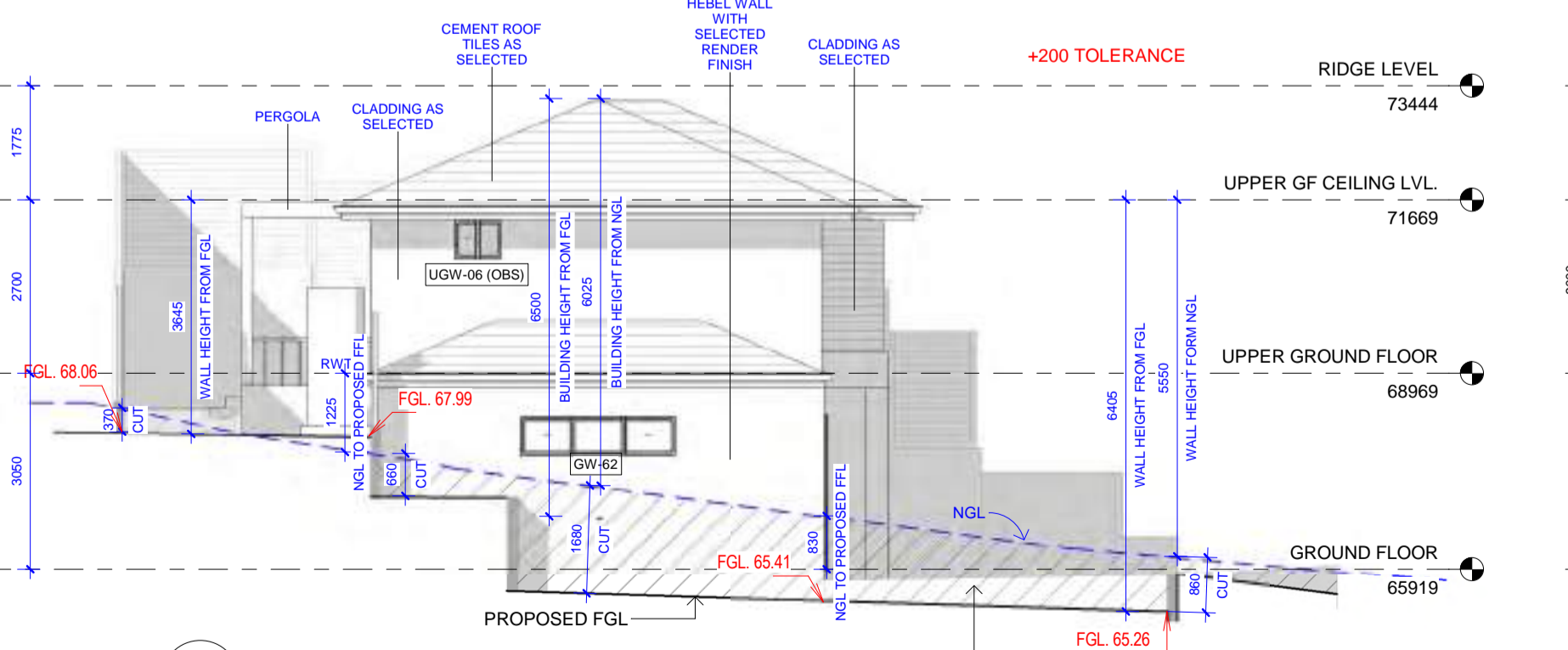


3 SIDE ELEVATION 2
A15 1:100

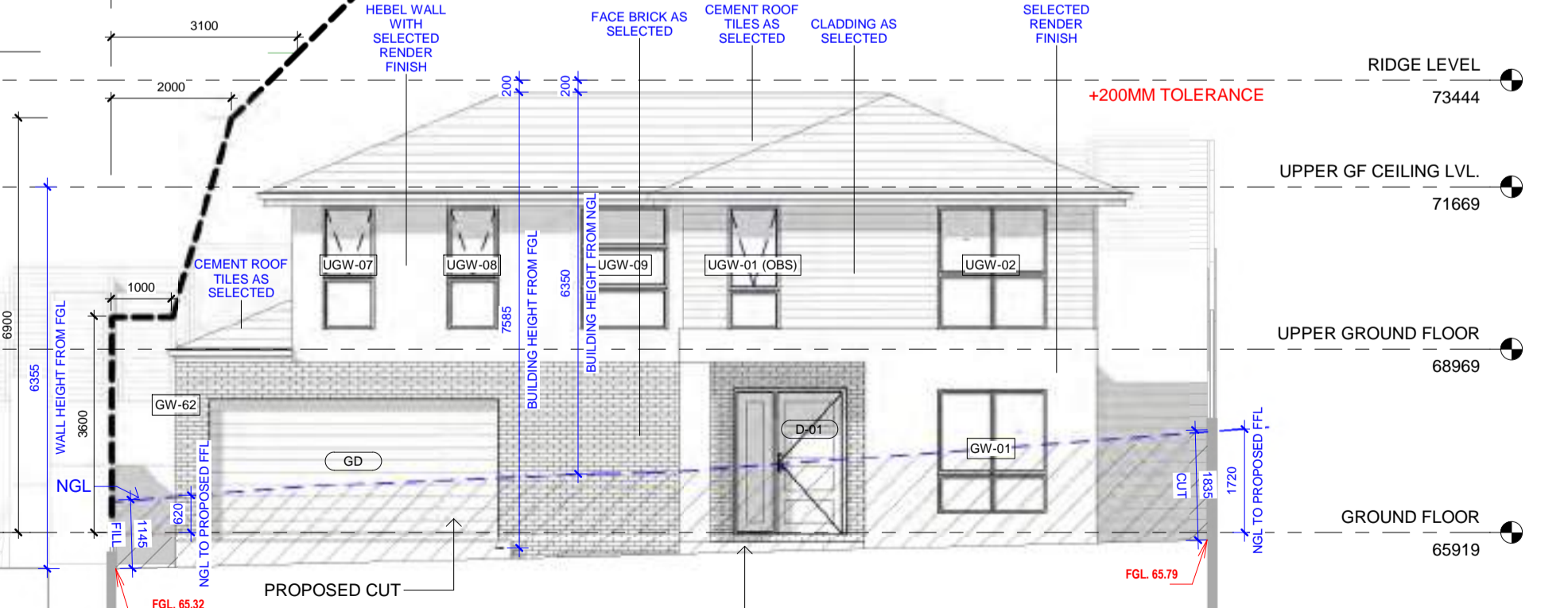


4 REAR ELEVATION
A15 1:100

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6 SIDE ELEVATION 1
A15 1:100



5 FRONT ELEVATION
A15 1:100

	CRT	GUT	FAS	BR	CR1	CD1	CD2	AL	ED	GD	DP
MATERIAL	CEMENT ROOF TILE	GUTTER / CAPPING	FASCIA	BRICK	MAIN WALL	CLADDING	CLADDING	WINDOW FRAMES & HANDRAIL	MAIN DOOR	GARAGE DOOR	DOWNPIPE
FINISH	MONIER ELABANA	COLORBOND	COLORBOND	PGH BRICKS	CEMENT RENDER	JAMES HARDIE LINEA WEATHERBOARD HORIZONTAL	JAMES HARDIE FINE TEXTURE	ALUMINIUM	TIMBER	COLORBOND	PVC
COLOR	BARRAMUNDI	IRONSTONE	SURFMIST	OLYMPUS	DULUX STEPNY	DULUX TERRACE WHITE	DULUX STEPNY	POWDERCOATED PEARL WHITE	DULUX TERRACE WHITE	DUNE	DULUX PAINT
											TO MATCH ADJACENT WALL COLOR

NOTE: ALL COLOURS SPECIFIED ARE INDICATIVE ONLY AND ARE SUBJECT TO VARIATION AND TO AVAILABILITY. IN CASE OF ANY DISCREPANCY, PLEASE FOLLOW AS PER RENDERED IMAGE.

REV	DATE	DESCRIPTION	BY
1	19.04.2024	RESPONSE TO COUNCIL RFI DATED 22.2.24	

Bathla
137 Giblin Road Girraween Sydney NSW 2145
P O Box 270 Westmeath NSW 2145
T: 02 9636 2465 | F: 02 9688 4762
info@bathla.com.au | www.bathla.com.au

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3. CONTRACTOR TO VERIFY ALL DIMENSIONS ON SITE BEFORE COMMENCING WORK. RESOLVE ALL DISCREPANCIES WITH THE ARCHITECT BEFORE PROCEEDING. FIGURED DIMENSIONS TO BE TAKEN IN PREFERENCE TO SIZED DRAWINGS.

DO NOT SCALE
20 10 0 10 20 30 40 50 70mm

PROJECT:
166 Pakenham Road
PAKENHAM, VIC

DRAWING TITLE:
LOT 15

DATE:	SCALE:	DRAWING No:
19.04.2024	As indicated	A15
DRAWN BY:	CHECKED BY:	REV:
VR	JOSE	1

V:\Projects-Current\Pakenham - 166 Pakenham Road\03 DAVARCHITECTURAL\REVIT\PROJECT\Revision C\LINKS\LOT 15.rvt



166 PAKENHAM ROAD, PAKENHAM

Attachment 6 Amended Landscape Plans

PREPARED FOR UNIVERSAL PROPERTY GROUP PTY LTD

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SPOT Planning Pty Ltd

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ACN: 636 882 383

E. info@spotplanning.com.au

M. 0409 962 001

SPOT
PLANNING

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1 LOWER GROUND FLOOR PLAN LANDSCAPE
LP-01 1:200

Bathla
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P O Box 270 Wentworthville NSW 2145
T: 02 9636 2465 | F: 02 9688 4762
info@bathla.com.au | www.bathla.com.au

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PROJECT:
166 PAKENHAM ROAD
PAKENHAM

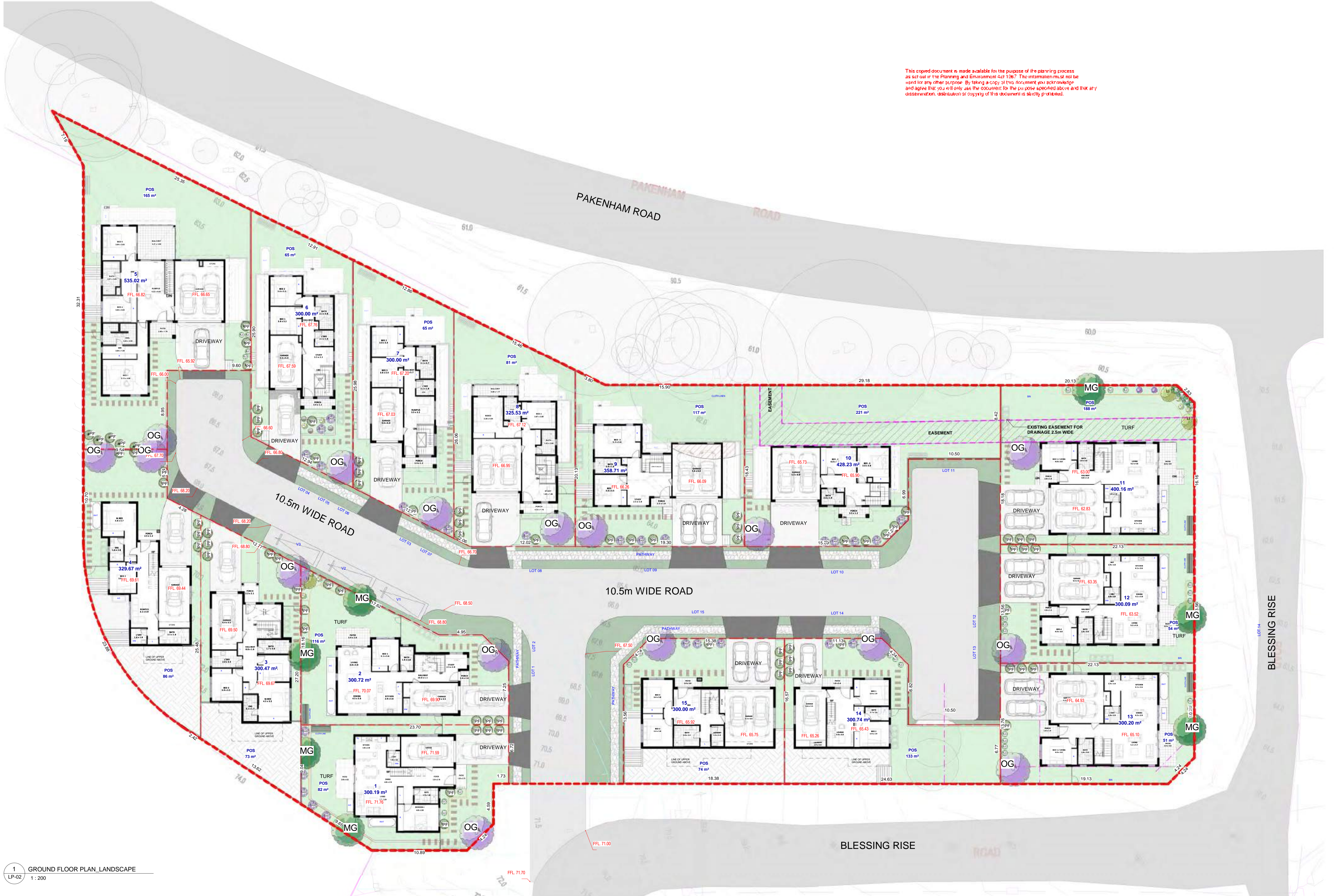
DRAWING TITLE:
LOWER GROUND FLOOR LANDSCAPE PLAN

NORTH	DATE:	SCALE:	DRAWING NO.:
	04/18/24	1 : 200	LP-01
VR/PS	DRAWN BY:	CHECKED BY:	REV:
	VR/PS	Checker	1

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DA ISSUE

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1 GROUND FLOOR PLAN_LANDSCAPE
LP-02 1:200

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137 Gibbs Road Girraween Sydney NSW 2145
P O Box 270, Wentworthville NSW 2145
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PROJECT:
166 PAKENHAM ROAD
PAKENHAM

DRAWING TITLE:
GROUND FLOOR LANDSCAPE PLAN

NORTH	DATE:	SCALE:	DRAWING No:
	04/18/24	1:200	LP-02
VR/PS	DRAWN BY:	CHECKED BY:	REV:
	VR/PS	Checker	2

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1 FIRST FLOOR & UPPER GROUND FLOOR
PLAN_LANDSCAPE
1 : 200

REV	DATE	DESCRIPTION	BY
1	20.12.2023	ISSUED FOR BUILDING PERMIT	RS
2	24.04.2024	UPDATED AS PER COUNCIL RFI DATED 22.02.2024	VR / PS

Bathla
137 Gilba Road Girraween Sydney NSW 2145
P O Box 970, Wentworthville NSW 2145
T: 02 9636 2465 | F: 02 9688 4762
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DO NOT SCALE
20 10 0 10 20 30 40 50 70mm

PROJECT:
**166 PAKENHAM ROAD
PAKENHAM**

DRAWING TITLE:
**FIRST FLOOR & UPPER GROUND FLOOR
LANDSCAPE PLAN**

NORTH: 	DATE: 04/18/24	SCALE: 1 : 200	DRAWING No: LP-03
	DRAWN BY: VR/PS	CHECKED BY: Checker	REV: 2

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DA ISSUE

TREES:



Acer Rubrum 'October Glory'

Lagerstoemia Indica

Magnolia Grandiflora

HEDGING/SCREEN PLANTING:



Acmena Smithi

Ligustrum Undulatum

Photinia x fraseri

SHRUBS & GRASSES:



Dianella Revoluta

Lomandra Confertifolia

Patersonia Occidentalis

Poa Labillardieri

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LANDSCAPE WORK SPECIFICATION

PRELIMINARIES
1.01 GENERAL
 The following general conditions should be considered prior to the commencement of landscape works:
 • The landscape plans should be read in conjunction with the architectural plans, project architect's assessment, hydraulic plans, service plans and survey prepared for the proposed development.
 • All services including existing drainage should be accurately located prior to the commencement of landscape installation. Any proposed new planting which falls close to services will be relocated on site under the instruction of the landscape architect.
 • Installation of conduit for required irrigation, electrical and other services shall be completed prior to the commencement of landscape works and hardstand pour.
 • All outdoor lighting specified by architect or client to be installed by qualified electrician.
 • Anomalies that occur in these plans should be brought to our immediate attention.
 • Where an Australian Standard applies for any landscape material testing or installation technique, that standard shall be followed.

1.02 PROTECTION OF ADJACENT FINISHES
 The Contractor shall take all precautions to prevent damage to all or any adjacent finishes by providing adequate protection to these areas / surfaces prior to the commencement of the Works.

1.03 PROTECTION OF EXISTING TREES
 Existing trees identified to be retained shall be done in accordance with (AS) 4970-Protection of trees on development sites as well as in accordance with the tree protection measures prepared by project architect. Where general works are occurring around such trees, or pruning is required. A qualified Arborist shall be engaged to oversee such works and manage tree health.
 Existing trees designated on the drawing for retention shall be protected at all times during the construction period. Any soil within the drip-line of existing trees shall be excavated and removed by hand only. No stockpiling shall occur within the root zone of existing trees to be retained.
 Any roots larger in diameter than 50mm shall only be severed under instruction by a qualified arborist. Roots smaller than 50mm diameter shall be cut cleanly with a saw.
 Temporary fencing shall be installed around the base of all trees to be retained prior to the commencement of landscape works. Where possible this fencing will be located around the drip line of these trees, or a minimum of 3m from the trunk. The fencing shall be maintained for the full construction period.

SOIL WORKS
2.01 MATERIALS
Specified Soil Conditioner (Generally to improve site soil)
 The specified soil conditioner for site topsoil improvement shall be an organic mix, equal to "Botany Humus", as supplied by ANL. Note that for sites where soil testing indicates toxins or extremes in pH, or soils that are extremely poor, allow to excavate and supply 300mm of imported soil mix.
New gardens & proposed Planting
 New garden and planting areas shall consist of a 30/50 mix of clean site soil (refer to below) and imported "Organic Garden Mix" as supplied by ANL or approved equal. All mixes are to comply with AS 4419 Soil for landscaping & garden use, & AS 4454 Composts, Soil conditioners & mulches.
Specified Soil Mix - Turf
 The specified soil mix for all turf areas shall be a min 75mm layer of imported soil mix consisting of 80% washed river sand (reasonably coarse), and 20% composted organic matter equivalent to mushroom compost or soil conditioner, or other approved lawn top dress.

Site Topsoil
 Site topsoil is to be clean and free of unwanted matter such as gravel, clay lumps, grass, weeds, tree roots, sticks, rubbish and plastics, and any deleterious materials and materials toxic to plants. The topsoil must have a pH of between 5.5 and 7. Use 100% imported soil mix when site when site topsoil runs out.

2.02 INSTALLATION (TO GARDEN OUTSIDE OF TREE PROTECTION ZONES OF TREES RECOMMENDED TO BE RETAINED)
 Note: No level changes (Cut or Fill), soil ripping within the Tree Protection Zones of trees to be retained

a) Testing
 All testing is to be conducted in accordance with AS 1289 Methods for testing soils for engineering purposes. Site soil shall be given a pH test prior to modifying to ensure conditions are appropriate for planting as stated above. Tests shall be taken in several areas where planting is proposed, and the pH shall be adjusted accordingly with sulphur or lime to suit. Note that a soil test conducted by the "Sydney Soil Lab" or approved equal shall be prepared for all commercial, industrial and multi-unit residential sites. The successful landscape contractor shall implement the recommendations of this test.

b) Set Out of Individual Trees & Mass Planting Areas
 All individual tree planting positions and areas designated for mass planting shall be set out with stakes or another form of marking, ready for inspection and approval. Locate all services.

c) Establishing Subgrade Levels outside of tree protection zones of trees to be retained
 Subgrade levels are defined as the finished base levels. Prior to the placement of the specified material (i.e. soil conditioner), the following subgrade levels shall apply:
 • Mass Planting Beds - 300mm below existing levels with specified imported soil mix.
 • Turf areas - 100mm below finished surface level.
 Note that all subgrades shall consist of a relatively free draining natural material, consisting of site topsoil placed previously by the Civil Contractor. No builder's waste material shall be acceptable.

d) Subgrade Cultivation
 Cultivate all subgrades to a minimum depth of 100mm in all planting beds and all turf areas, ensuring a thorough breakup of the subgrade into a reasonably coarse fill. Grade subgrades to provide falls to surface and subsurface drains, prior to the placement of the final specified soil mix.

e) Drainage Works
 Install surface and subsurface drainage where required and as detailed on the drawing. Drain subsurface drains to outlets provided, with a minimum fall of 1:100 to outlets and / or service pits.

f) Placement and Preparation of Specified Soil Conditioner & Mixes
 • Trees in turf & beds - Holes shall be twice as wide as root ball and minimum 100mm deeper - backfill hole with 50/50 mix of clean site soil and imported "Organic Garden Mix" as supplied by ANL or approved equal.
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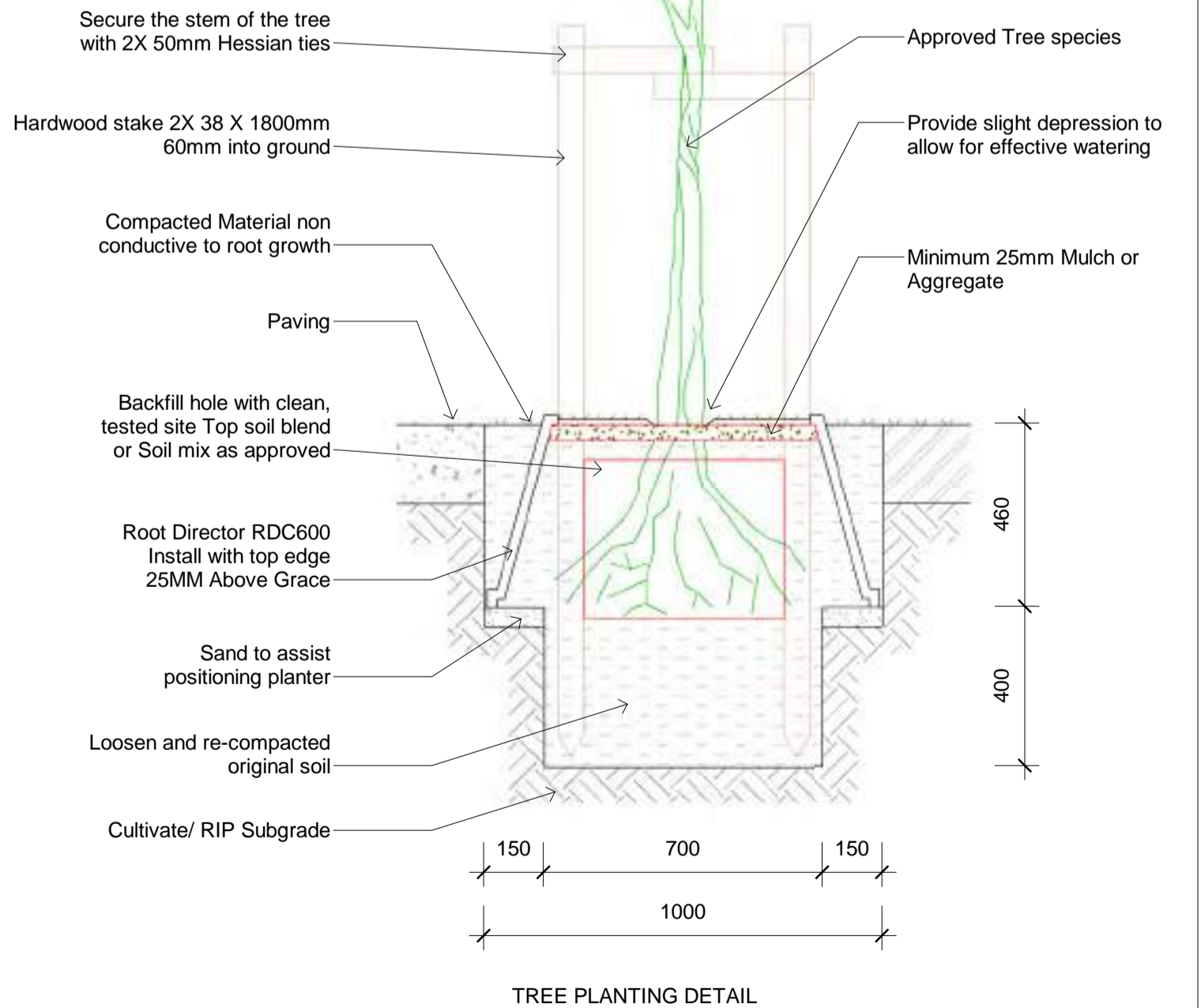
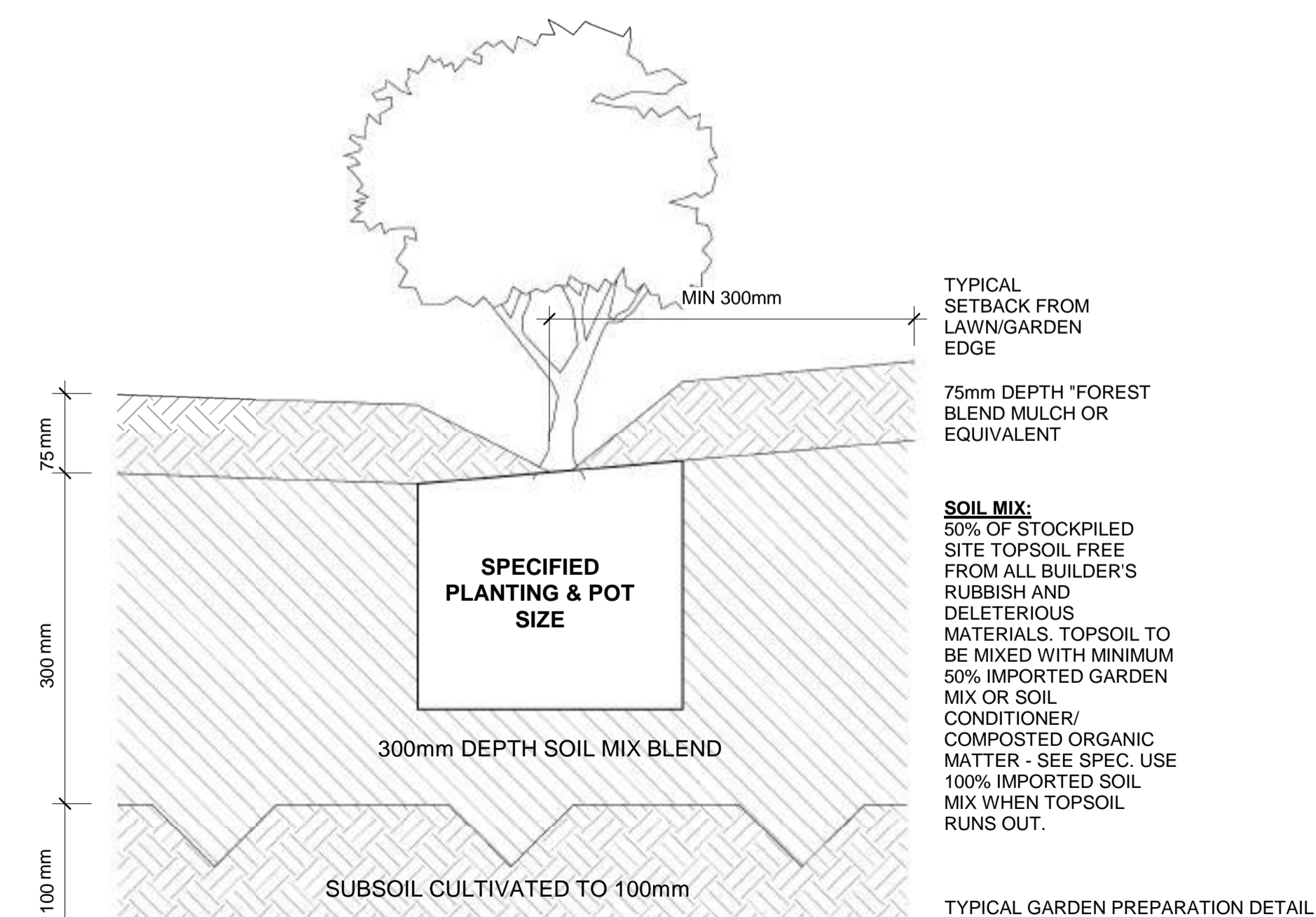
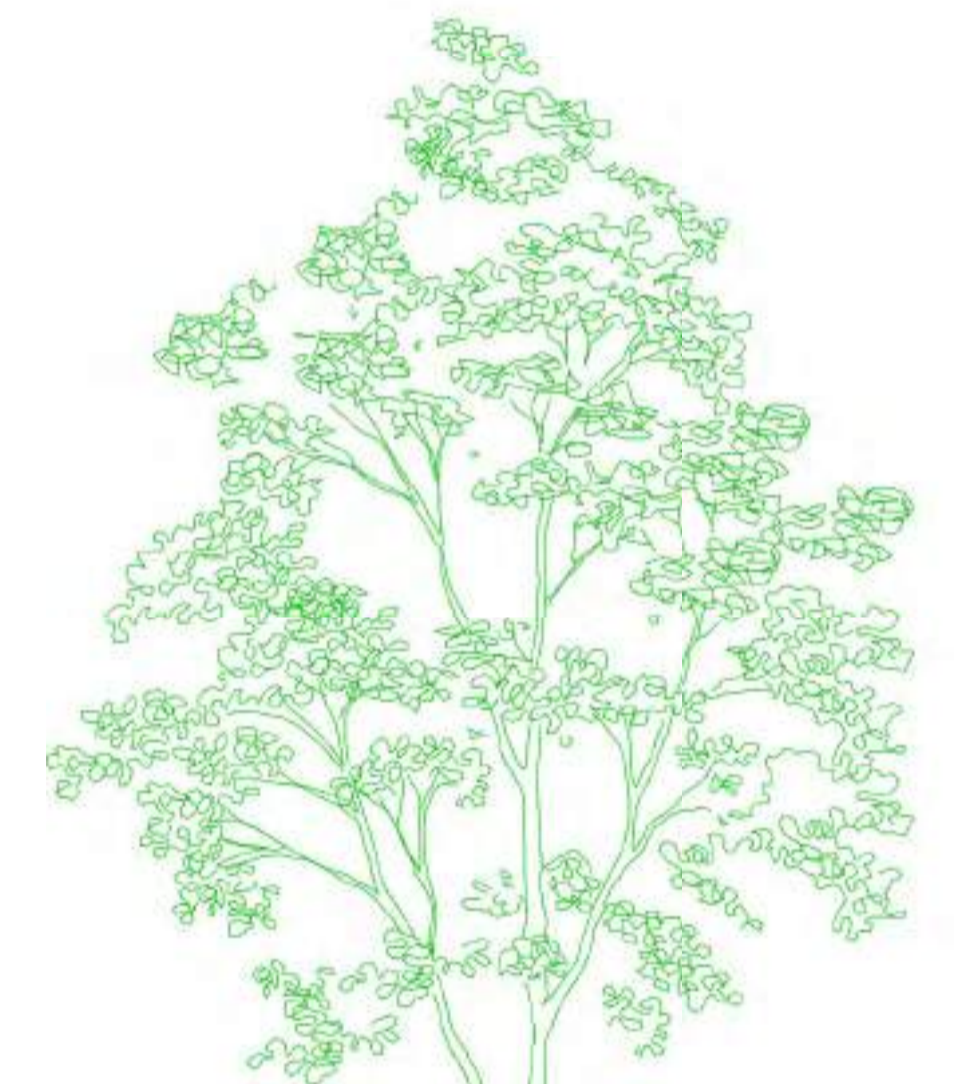
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 • Mass Planting Beds - Install specified soil conditioner to a compacted depth of 100mm

- COMMENTS:**
- SIR WALTER BUFFALO TURF IS BEEN PROPOSED FOR LAWN.
 - FENCING ALONG CORNER LOTS ARE SET BACK OF 1.2m TO ALLOW FOR HEDGE PLANTING FORWARD OF THE FENCE.

- NOTES:**
- ALL FINAL PLANT QUANTITIES INDICATED ON PLANS SHALL BE CHECKED AND VERIFIED BY SUCCESSFUL LANDSCAPE CONTRACTOR.
 - ANY PLANT SUBSTITUTES REQUIRED DUE TO UNAVAILABILITY SHALL BE RECOMMENDED BY THE LANDSCAPE CONTRACTOR TO BEST MATCH SUBSTITUTED PLANTS AND APPROVED PRIOR TO PURCHASING BY THE LANDSCAPE ARCHITECT.
 - WORKS CERTIFIED FOR FINAL OCCUPANCY CERTIFICATE ARE TO MATCH APPROVED LANDSCAPE PLANS.
 - LANDSCAPE CONTRACTOR SHALL LOCATE AND AVOID SITE STORM WATER & DRAINAGE SERVICES. LOCATE TREES A MINIMUM 1.25M FROM PITS.
 - ALL PLANTING AROUND EXISTING TREES SHALL BE ADJUSTED TO AVOID DAMAGE AND CLASHING WITH SURFACE ROOTS.
 - THE NATURE STRIP (STREET FRONTAGE) FOR THE SITE IS PUBLIC LAND, AND ONLY AUTHORIZED WORKS MAY OCCUR HERE. EXISTING CONDITIONS SUCH AS STREET TREES, COUNCIL PLANTING ETC SHALL BE RETAINED AND PROTECTED DURING CONSTRUCTION, UNLESS SPECIFIC APPROVAL HAS BEEN GRANTED FOR NEW WORK IN THIS AREA.

NOTE: ALL TREES SHOWN ON THE PLAN ARE AT ITS MATURITY.



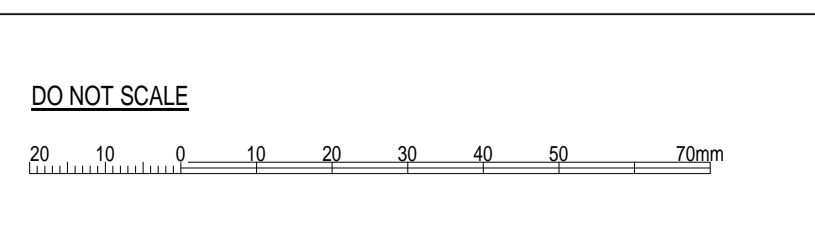
PLANTING SCHEDULE

SYMBOL	KEY	BOTANICAL NAME	COMMON NAME	HT. x W	POT SIZE	NOS.
TREES						
OG		Acer Rubrum "October Glory"	Lipstick Maple	12m x 9m	75 L	16
LI		Lagerstoemia Indica	Crepe Myrtle	3m x 3m	45L	06
MG		Magnolia Grandiflora	Southern Magnolia	3m x 3m	45L	14
HEDGING/SCREEN PLANTS						
AS		Acmena Smithi	Lilly Pilly	5m x 3m	5L	37
LU		Ligustrum Undulatum	Box Leaved Privot	4m x 2m	5L	13
PF		Photinia x fraseri	Thin Red Photinia	5m x 5m	5L	43
GROUND COVERS						
DR		Dianella Revoluta	Native Flax	1.0 x 2.5m	140mm	31
LC		Lomandra Confertifolia	Mat Rush	0.4 x 0.7m	80mm	29
PO		Patersonia Occidentalis	Native Iris	0.6 x 0.5m	50mm	08
POA		Poa Labillardieri	Tussock Grass	1.2 x 0.5m	80mm	18
TE- TIMBER EDGE	CL- CLOTH LINE	MAIL BOX				

Bathla		137 Gilba Road Girraween Sydney NSW 2145 P O Box 270, Wentworthville NSW 2145 T: 02 9636 2465 F: 02 9688 4762 info@bathla.com.au www.bathla.com.au	
2	24.04.2024	UPDATED AS PER COUNCIL RFI DATED 22.02.2024	VR / PS
1	20.12.2023	ISSUED FOR BUILDING PERMIT	RS
REV	DATE	DESCRIPTION	BY

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PROJECT:
166 PAKENHAM ROAD
 PAKENHAM

DRAWING TITLE:
LANDSCAPE DETAIL

NORTH	DATE:	SCALE:	DRAWING NO.:
	04/18/24	As indicated	LP-04
	DRAWN BY:	CHECKED BY:	REV:
	SH	Checker	2

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