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Acid Sulfate Soil Management Plan

10 Young Street, West Gosford, NSW

Stevens Group Suite 6, 257-259 Central Coast Highway Erina, NSW, 2250

5 August 2022

Our Ref: EP2775.001

LIMITATIONS

This Acid Sulfate Soil Management Plan was conducted on the behalf of Stevens Group for the purpose/s stated in **Section 1**.

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It is not possible in a Acid Sulfate Soil Management Plan to present all data, which could be of interest to all readers of this report. Readers are referred to any referenced investigation reports for further data.

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Figure 1 Site Location

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Appendix A Proposed Development Drawing



1 Introduction

EP Risk Management Pty Ltd (EP Risk) was engaged by Stevens Group (Stevens) to prepare an Acid Sulfate Soil Management Plan (ASSMP) for 10 Young Street, West Gosford, New South Wales (the Site). The Site is known as Lot 1 in Deposited Plan (DP) 1194024 and is shown in **Figure 1**.

1.1 Objective and Scope

The objective of the ASSMP is outline management protocols to ensure that water quality, soil run-off, site wastewater contamination associated with acid sulfate soil (ASS) are considered and effectively managed during the proposed development. The scope of work to satisfy the objective includes:

- Conduct a review of previous investigation data.
- Summarise potential impacts on the environment associated with ASS and the Proposed Development.
- Document environmental procedures that must be followed to control potential environmental impacts associated with ASS by preparing a ASSMP.

1.2 Site Identification

Pertinent Site identification details are presented in Table 1.

| Table 1 - Site Identification | | |
|-------------------------------|---|--|
| Item | Description | |
| Site Address | 10 Young Street, West Gosford, NSW (Figure 1) | |
| Legal Description | Lot 1 in 1194024 | |
| Approximate Site Area | 3,320 m ² | |
| Site Owner | Stevens Group | |
| Municipality | Central Coast Council (Council) | |
| Site Zoning | State Environmental Planning Policy (SEPP) (Gosford City Centre) 2018 Land Application Map identifies the land as B6 Enterprise Corridor | |

1.3 Legal and Other Requirements

The following statutory provisions and guidelines are applicable to the Proposed Works, with regards to the ASSMP:

- SEPP (Gosford City Centre) 2018 Land Application Map.
- National Acid Sulfate Soils Guidance "National Acid Sulfate Soils Sampling and Identification Methods Manual" 2018 (National ASS Guidance 2018).
- Stone, Y, Ahern CR, and Blunden N (1998). Acid Sulfate Soil Manual 1998. Acid Sulfate Soil Management Advisory Committee, Wollongbar, NSW, Australia (NSW ASS Manual 1998).



- Dear, S-E, Ahern, C R, O'Brien, L E, Dobos, S K, McElnea, A E, Moore, N G and Watling, K M (2014) Queensland Acid Sulfate Soil Technical Manual: Soil Management Guidelines (QLD ASS Technical Manual 2014).
- Contaminated Land Management Act 1997 (CLM Act).
- Protection of the Environment Operations Act 1997 (POEO Act).



2 Site Condition and Surrounding Environment

The Site is located at 10 Young Street, West Gosford, NSW, and consists of a gravel carpark. The topography of the Site is relatively flat with a gentle slope down to the west.

According to The Gosford / Lake Macquarie 1:100,000 Geological Sheet 9131, the Site is underlain by Cenozoic Quaternary gravels and sand.

A search of the WaterNSW groundwater map indicated that there were no registered groundwater bores located at the Site, however there are five registered groundwater bores within a 500 m radius of the Site. These include GW100229, GW100174, GW200838, GW200839, and GW200840. The bores were predominantly installed for exploration with one well classified as 'other'. The wells were drilled to depths ranging from 7.5 to 60 metres below ground surface (m BGS).

The SEPP (Gosford City Centre) 2018 Land Application Map has mapped the location of the Site as a Class 2 and Class 5 ASS zone.



3 Previous Investigations

The Site has historically been used for many purposes including a fuel depot, vehicle repair and maintenance workshop, vehicle wash facility and former rail line. Site decommissioning and remediation works were completed in 2012 which included off-site disposal of unsuitable soil and importation of backfill material.

The following environmental reports relevant to this letter had been prepared for the Proposed Development:

- Coffey Environments Pty Ltd (Coffey) (2013) Statutory Site Audit, Site Audit Report and Site Audit Statement, Auditor Ref No. NSW107 (ENVIRHOD01059AA) Corner of Pacific (Central Coast) Highway & Racecourse Road, West Gosford, NSW (ref: ENVIRHOD1059AA-R01, dated 3 December 2013).
- Environmental Strategies Pty Ltd (2013) *Environmental Management Plan, Corner of Central Coast Highway & Racecourse Road, West Gosford, NSW* (ref: 11057, Rev 4, dated November 2013).
- Environmental Strategies Pty Ltd (2014) Site Suitability for proposed Mixed Use Development within Lot 1, 1 Racecourse Road, West Gosford, NSW (ref: LR01 18022014, dated 24 March 2014).

Coffey (2013) Site Audit Statement

The Site audit was undertaken by Tony Scott, who is a Site Auditor accredited under the Contaminated Land Management Act, 1997. The Site Auditor issued a Section A Site Audit Statement (SAS) certifying that the site is suitable for commercial / industrial land use, subject to notification on title and compliance with an Environmental Management Plan (EMP) prepared by Environmental Strategies (Environmental Strategies, 2013)).

The Site Auditor identified the following permitted land uses under the current B6 Enterprise Corridor zoning that are not consistent with commercial / industrial land use:

- Community facilities.
- Educational establishments.
- Multi dwelling housing.
- Residential flat buildings.

The Site Auditor also noted that natural ground and groundwater conditions may be aggressive towards building structures, including concrete, and specialist advice should be sought regarding appropriate management strategies during construction.

Environmental Strategies (2013) Environmental Management Plan

Environmental Strategies prepared an EMP (Environmental Strategies, 2013) that identified the following environmental issues that require management during construction and post construction as follows: subsurface confined space excavations; potential asbestos in soil; odourous soil; potential acid sulfate soil; groundwater dewatering management to manage potential off-site sources of contamination; unexpected finds during construction; groundwater access and use restriction. The EMP (Environmental Strategies, 2013) outlined management strategies to address the identified environmental issues relating to subsurface excavations, asbestos in soil, potential acid sulfate soil, odourous soil, groundwater dewatering management, groundwater access restrictions and unexpected finds.



Environmental Strategies (2014) Review of Site Suitability

Environmental Strategies provided a letter of advice relating to the suitability of a proposed mixed use development with commercial ground floor land use including parking and hotel accommodation and residential apartments above. As the proposed development included landscaped areas at ground level, the review included a comparison of all the validation data against ecological-based criteria for open space land use. Exceedances of the open space ecological criteria were identified, but were not considered to be a risk to ecological receptors based upon limitations in application of the ecological criteria, including proposed building footprints and hardstand and the proposed importation of at least 1.2m of suitable material into all landscaped areas. Environmental Strategies considered that the Site was suitable for the proposed mixed-use development under a commercial land use setting (proposed ground floor use) subject to compliance with the SAS and implementation of the EMP (Environmental Strategies, 2013).



4 Proposed Disturbance Activity

Stevens is proposing to redevelop the Site into a mixed-use multilevel retail / hotel / residential development (Proposed Development), which will be subject to Development Application. The following updated development plans have been prepared for the Site.

 Marchese Partners (2022) Development Application, 10 Young Street, West Gosford, NSW, 2250 (Project Number 19062, dwg no. DA0.01, rev. H, dated 04.03.2022).

With reference to the Marchese Partners (2022) Development Application plans, the proposed Development consists of the following:

- Ground level Car showroom, car parking, landscaped areas, loading dock and services, coffee shop, hotel lobby and lounge and residential lobby.
- Level 1 to 2 carparking and storage.
- Level 3 to 4 hotel rooms.
- Level 5 to 12 residential units.
- Level 13 Rooftop and communal space.

Stevens have advised that construction of the landscaped areas on the ground level will involve the importation of a growing medium that meets the criteria of virgin excavated natural material (VENM) or excavated natural material (ENM) which will be placed to a depth of 1.2m below design levels in these areas.

The proposed disturbance activity associated with the Proposed Development includes excavation and construction of a multi-storey building with no basement. The construction is likely to include, but not limited to, the following:

- Earthworks, including topsoil stripping, excavation to design depth.
- Temporary stockpiling of surplus soil material and subsequent off-site disposal or reuse on-site.
- Excavation and / or piling for footings and foundations.

This ASSMP relates to the proposed earthworks for the construction of the Proposed Development and the anticipated volume of disturbed soil will be greater than 1,000 tonnes of material.

A copy of the preliminary concept plans for the Proposed Development is provided in Appendix A.



5 Acid Sulfate Soil Indicators and Assessment Criteria

The following ASS indicators and assessment criteria are based on the National ASS Guidance 2018 and with consideration to the NSW Acid Sulfate Soil Manual.

5.1 Field Screening

Acid sulfate soils generally consist of clays and sands containing pyritic material and are usually found in estuarine areas. The field indicators of ASS include:

- pH readings measured in the field of less than 4;
- Iron staining on any drain surfaces;
- Unusually clear or milky green water discharge;
- Iron mottling of soil in the subsurface; and
- Corrosion of concrete or steel structures.

Undisturbed soil which contains iron sulfides or sulfidic material, which have not been exposed to air and oxidised, generally waterlogged, and have a pH of 4 or more and may be neutral or slightly alkaline are known as PASS. The following may also be indicators of PASS:

- Presence of any sulfurous odours;
- pH following oxidation with 30% hydrogen peroxide (H2O2) is less than 3;
- Strength of the oxidation reaction; and
- Lowering of the pH by at least 1 unit.

5.2 Soil Analytical Testing

The above field screening observations are used to guide selection of samples for laboratory analysis. Soil samples submitted for laboratory analysis are tested using chromium reducible sulfur (CRS) method and the results assessed against the criteria shown in **Table 2** for the disturbance of <1,000 or >1,000 tonnes (National ASS Guidance 2018).



| Table 2 - Soil Asses | Table 2 - Soil Assessment Criteria | | | | | |
|---------------------------------------|------------------------------------|----------------------------------|--|---------------------------------|---------------------------|--|
| | Approximate | 1-1,000 tonne Material Disturbed | | >1,000 tonne Material Disturbed | | |
| Taytura Danga | • • | Net Acidity | | Net Acidity | | |
| Texture Range | Clay Content | % S oxidisable ¹ | Mol H ⁺ /tonne ² | % S oxidisable ¹ | Mol H+/tonne ² | |
| | (%) | (oven-dry basis) | (oven-dry basis) | (oven-dry basis) | (oven-dry basis) | |
| Coarse and Peats Sands to loamy sands | < 5 | ≥ 0.03 | ≥ 18 | | | |
| Medium Clayey sand to light clays | 5-40 | ≥ 0.06 | ≥ 36 | ≥ 0.03 | ≥ 18 | |
| Fine Light medium to heavy clays | > 40 | ≥ 0.1 | ≥ 62 | | | |

¹ % S – measure of reduced inorganic sulfur (using the Scr or peroxide oxidisable sulfur (SPOS) methods) expressed as a percentage of the weight of dry soil analysed. Can also be used as an 'equivalent sulfur unit' when comparing the results of tests expressed in other units eg peroxide oxidisable sulfur (SPOS) or total oxidisable sulfur (STOS).

5.3 Leachate Criteria

The treatment and management of surface water flows from areas containing ASS to prevent leaching of acidic waters and metal contaminants into the environment should maintain the present surface water quality. The discharge of surface water should be done so in accordance with NSW EPA, WaterNSW and Council requirements. In the absence of site-specific criteria, the minimum requirements are presented in **Table 3**.

| Table 3 - Adopted Leachate Criteria | | | |
|--------------------------------------|---|------------------------------|--|
| Indicator | Fresh Water | Marine Water | |
| рН | 6.5-8.0 | 8.0-8.4 and <0.2 unit charge | |
| Suspended Solids | Not Defined | | |
| Turbidity (NTU) | 1-20 | 0.5-10 | |
| Dissolved Oxygen (field measured, %) | 110 | | |
| Oil and Grease | None visible or detected | | |
| Iron Floc and Scum | None visible or detected in discharge water | | |

² mol H+/tonne – measure of acidity, expressed as the number of moles of hydrogen cations per tonne of oven-dry soil material. A mole is 6.022x1023 atoms of a given substance.



6 Results

To assess site conditions and whether ASS exist on the Site, soil analytical results are required to be compared to published investigation and screening criteria. The adopted framework against which the soil analytical results are compared, is detailed in **Table 2**.

As no data is currently available for review, it is recommended that assessment of the Site is undertaken prior to any soil disturbance works to enable characterisation of ASS and development of liming rates. The proposed soil sampling methodology is provided below.

6.1 Soil Sampling Methodology

A minimum of four sampling locations are required within the Proposed Development footprint to assess the presence of ASS, in accordance with the recommended sampling density in the National ASS Guidance 2018.

Soil sampling should be conducted as follows:

- Boreholes are to be advanced to a minimum depth of 1.0 m below the maximum depth of the proposed excavations.
- Soil to be logged in accordance with AS1726.
- Soil samples are to be collected from four borehole locations across the Site, with samples collected at 1 m increments, or at horizon changes, to the maximum investigation depth 1 m below the depth of excavation.
- Soil samples to be collected using dedicated, disposable nitrile gloves and assessed for visual and olfactory signs of ASS (incl. grey staining, iron oxide and hydrogen sulphide odour).
- Samples to be collected into sealable bags, double bagged with the sample details and an individual
 identification added to the label. The samples must be frozen at the laboratory in accordance with
 laboratory protocol.
- The sample containers to be preserved on ice immediately after sampling and during shipment to a National Association of Testing Authorities (NATA) accredited laboratory under appropriate chain-ofcustody documentation.

6.2 Analytical Testing

A NATA accredited laboratory is required for the analysis of representative samples from all four boreholes. The laboratory analysis should be undertaken in accordance with **Table 4**.

| Table 4 - Analytical Testing | Table 4 - Analytical Testing | | |
|----------------------------------|--|--|--|
| Sample Location | Analytical Testing | | |
| Borehole Sample locations (four) | pH_F/pH_{FOX} – (four locations, representative depths) Chromium Reducible Sulfur Suite – (four locations, representative depths) | | |



7 Acid Sulfate Soil Management Plan

7.1 Assigning Roles and Responsibilities

The key stakeholders responsible for the implementation of the control measures outlined in the ASSMP are presented in **Table 5**.

| Table 5 - Roles and Responsibilities | | |
|--------------------------------------|-------|---|
| Role | Party | Responsibilities |
| Principal Stevens | | To engage the consultants and contractors and undertake all stakeholder management and to conduct ASS Assessment and verification sampling. |
| Contractor | ТВА | To carry out the civil works associated with the Proposed Works and ensure compliance with the ASSMP any work health and safety controls and construction environment management plan (CEMP). The Contractor must maintain written records of activities undertaken each day and manage any unexpected finds. |
| Sub-contractors TBA | | Toolbox meetings will be conducted with all subcontractors which will include an ASS component outlining the adopted management measures to address ASS. |
| Environmental Consultant | ТВА | Conduct ASS Assessment to determine liming rates. To validate all stockpiles and managed soils by sampling and analytical testing to prepare a validation report. |

7.2 Environmental Impacts

The potential impacts of ASS from the Proposed construction include:

- Exposing ASS to air in the vicinity of surface drains, basins or sensitive receptors causing oxidation and a release of acid into the environment.
- Leaching of acid into the environment at treatment sites.
- Excavations and bulk earthworks to design subgrade level.
- Installation of piles for the developments foundations through the ASS impacted soil layers.
- Any activities that have potential to lower the water table may enhance the oxidation of sediments.
 Where excavation is below the water table and into ASS material, drawdown of the water table may expose ASS material. This can result in the oxidation of ASS and acid generation.

Elements of the Proposed Development will be designed to minimise excavations where practicable, however, excavations will be required and do have potential to intercept ASS.

7.3 Minimisation of Disturbance

Where disturbance of ASS cannot be avoided, there are a number of strategies that can be implemented to minimise disturbance to ASS. These strategies include:

• Designing earthworks to consider areas containing low or negligible levels of existing and potential acidity.



- Keeping earthworks shallow (viable when ASS is located within deeper soil profiles).
- Minimising groundwater fluctuations by avoiding the following:
 - o deep drains/canals/artificial water bodies that may change the water table;
 - installation of groundwater extraction bores or continuing the use of existing groundwater bores;
 - dewatering for installation of infrastructure such as road, water and sewerage mains and underground cabling;
 - o changing vegetation from pasture to deep rooted large trees; and
- Filling (under the supervision of a geotechnical consultant) to compress and dewater saturated ASS material before construction but keeping the soil in anoxic conditions.
- When practicable, excavation works in ASS areas and soil treatment should be conducted during dry
 periods to minimise risk of overflow from heavy or sudden rain events.

7.4 Neutralisation and Treatment

Neutralisation involves the application and mixing of a sufficient amount of alkaline materials into the soil to neutralise all existing acidity that may be present, and all potential acidity that could be generated from complete oxidation. Usually, neutralisation involves the excavation of ASS which must be stored and treated in a contained area. There can be significant risks to the environment if neutralisation is poorly managed.

There are a several different methods for carrying out neutralisation of ASS, including:

- Batch processing where the excavated ASS is spread out in a thin layer and the neutralising material is spread on top. The two materials are then mechanically mixed together.
- Continuous processing where a mixing machine (such as a pug mill) is used, and the soil and neutralising
 agent is fed into the machine.

The preferred neutralising agent is fine agricultural lime (aglime) with not less than 95% fine grained calcium carbonate. Other common neutralising agents include hydrated lime, quick lime, and sodium bicarbonate. Sandy soil can be mixed with neutralising agents with ease, but high plasticity clay soil requires significant areas and additional time to allow adequate mixing and reaction.

As there is insufficient data on ASS conditions an ASS Assessment is required to determine liming rates as per **Table 4.**

7.4.1 Construction of the Soil Treatment Area

Prior to commencing the neutralisation works, a soil treatment area will be constructed in the vicinity of the earthworks. The soil treatment area should be:

- Constructed as far as practicable from any drainage channels.
- Designed and sized to accommodate the anticipated volumes of spoil produced from the excavation works.
- Barricaded and appropriate signage erected.
- Bunded to a height of approximately 0.3 m and appropriate sediment controls installed to prevent runoff and sediment migration.



- Designed such that overland flow is diverted.
- Constructed with a guard layer comprising of a neutralising agent as described in the QLD ASS Technical Manual (2014).

The minimum guard layer rate will be 5 kg aglime/m² per vertical meter of fill material. If the highest detected sum of existing and potential acidity is greater than 1% S-equivalent, the guard layer rate will be a minimum of 10 kg aglime/m² per vertical metre of fill.

7.4.2 Stockpiling Soils

It is recommended that on-site monitoring is carried out during any deeper excavation earthworks carried out on Site so that disturbance of ASS can be identified, and ASS soils can be segregated, stockpiled and treated. The management of stockpiled soils within the soil treatment area will be required as follows:

- All excavated soils containing ASS should be segregated from the spoil and stockpiled separately.
- The residence time for short term stockpiling of soils within the soil treatment area should not exceed recommended periods detailed in the QLD ASS Technical Manual (2014) as presented in **Table 6**.
- If ASS is required to be stockpiled for longer time frames than those presented in **Table 6**, then it must be fully treated.

| Table 6 - Indicative Residence Time for Soil in Soil Treatment Area | | | | |
|---|------------------------------|---------------------------------|--|--|
| Texture | Approximate Clay Content (%) | Duration of Stockpiling (hours) | | |
| Coarse and Peats Sands to loamy sands | < 5 | 18 | | |
| Medium Clayey sand to light clays | 5-40 | 42 | | |
| Fine Light medium to heavy clays | > 40 | 66 | | |

Additional measures to minimise short term effects of oxidation of stockpiles during the Proposed Development works include:

- Spreading aglime over the surface of the stockpile to limit the generation of acidity from the surface of
 the stockpile where it is considered likely the stockpile will contain ASS. The results of previous
 validation testing can be used as a guide to the likely presence of existing or potential ASS within the
 stockpile.
- Soils within the soil treatment area should be kept moist, but not saturated to minimise oxidation prior to treatment
- All soils should be covered with tarpaulins or geomembrane to mitigate generation of leachate within the soil treatment area.

7.4.3 Monitoring

If disturbance of ASS is suspected to have occurred, parameters may need to be monitored daily. More frequent monitoring may also be required to assess the impact of events such as heavy rainfall. The monitoring program should be developed by the Environmental Consultant in conjunction with the Project Contractor. Measurement and testing equipment should be operated by personnel experienced in water and soil sampling using



appropriately maintained and calibrated test equipment. The action criteria for treatment are summarised in **Table 7**.

| Table 7 - Monit | coring Program Action Criteria | | |
|-----------------|---|---|--|
| Media | Indicator | Action | |
| Water | 6.5 < pH < 8.5 or +/- 0.2 units of adjacent surface water bodies. | pH outside this range is not suitable for discharge to the surrounding environment and requires treatment prior to discharge. | |
| Soil | pH < 4 | Indicates the excavated material is oxidising and would require treatment with lime to neutralise the acidity. | |

7.4.4 Soil Treatment

The treatment option for soil is neutralisation as follows:

- Stockpile the excavated spoil on the central portion of the guard layer.
- Mechanically break up any clods, add aglime and mix. The aglime should be thoroughly mixed with the soil using an appropriate mechanical device such as an excavator (or other alternatives as appropriate).
- Dosing rates of aglime to be in accordance with the results of chromium reducible sulfur testing.
- It is recommended progressive neutralisation of stockpiled soil is undertaken to minimise the size of the soil treatment area.
- Additional liming may be required should the results indicate the neutralisation has not been achieved.

7.4.5 Water treatment

Surface water (i.e., water pooled within bunded/treatment areas) with the potential to become acidic as a result of interaction with the treatment area or excavations will be treated and monitored as follows:

- Surface water accumulated in excavations or the treatment area will be tested for pH. If the pH is outside the range of 6.5 8.5 then the water will be neutralised with the addition of agricultural lime or hydrated lime.
- Records of water discharged from Site shall be maintained.
- Backfilling excavations, completion of footings as soon as possible to minimise the oxidation of in-situ soils exposed within the excavations.
- Minimise the drainage of soils by limiting any groundwater drawdown within excavations to the
 absolute minimum required to complete the excavation safely. Seepage entering the excavation should
 be minimised through the use of physical barriers. Treatment of water from dewatering activities may
 be required subject to further testing.
- Where material is to be transported to the treatment area via public roads, wheel cleaning facilities will be established at site exits to prevent off-site contamination during transport.
- Material will be transported within trucks with secure tailgates.



- Records of transport including individual truck details and quantity transport will be retained at the Project Office.
- At the end of each transport shift an inspection of the transport route will be undertaken by the Supervisor to determine if material has been spilt. Where material has been spilt on public roads it will be removed immediately.

When run-off accumulates, water quality will be monitored regularly during the construction period, particularly following substantial rainfall events. Retained water will be sampled, tested, and treated to the parameters in **Table 3** and **Table 7** prior to discharge.

7.5 Sampling and Testing

It is recommended the following inspections and testing should be undertaken:

- Inspections and testing of stockpile spoil within the treatment area at least every 1-2 days (depending
 upon the soil type and with reference to Table 6 to determine whether the addition of aglime is
 required.
- If it is determined aglime application is required, it is to be done so as per the dosing rates determined from proposed testing. Mixing the treated soil is to be undertaken in accordance with the timelines provided in **Table 6**.
- Inspections of stockpiles for visual signs of seepage impacted by ASS including milky waters, iron staining and sulfur odour should be undertaken daily.
- Collection of verification soil samples per the following sampling density in accordance with the National ASS Guidance 2018:
 - o volume of stockpile < 250 m³ 2 samples;
 - o volume of stockpile 251 500 m³ 3 samples;
 - o volume of stockpile 1,000 m³ 4 samples; and
 - o volume of stockpile > 1,000 m³ 4 samples plus one per additional 500 m³.
- Verification testing for the success of the soil neutralisation is to be carried out in accordance with the National ASS Guidance 2018, including testing of each sample for the CRS suite by a NATA accredited laboratory.

7.6 Performance Criteria

The assessment criteria outlined in **Table 2** must be adopted for performance assessment for the successful neutralisation of treated ASS. ASS that has been treated by neutralisation techniques and has not met these criteria must be re-treated and re-tested until the above performance criteria are met. These performance criteria equate to there being no positive calculated net acidity in the soil above the adopted criteria following treatment. The neutralisation management strategy is most effective when soil and neutralising agents are completely homogenised, which may not be fully achievable for large volumes of soil, especially when moist and/or clayey.



7.7 Reporting

The following details should be recorded during the soil treatment process and reported in a final Acid Sulfate Soil Validation Report:

- Total final volumes and dimensions of disturbed ASS.
- Where dewatering was involved, final location, extent and duration of dewatering and details of testing and groundwater management strategies applied.
- Details of soil management strategies undertaken at the site (including evidence of specific management measures such as waste tracking, photographic evidence of neutralisation and of bunded treatment pads).
- Details of surface water management strategies undertaken at the Site.
- Location of any off-site disposal of ASS and evidence of treatment on-site and waste classification prior to lawful disposal.
- Summary of verification testing results for material treated.
- Location and maps of areas used for strategic burial of treated ASS, with depth below finished surface and details of safety margin below the permanent water table.
- Summary of monitoring results for surface water and groundwater (with an emphasis on trends in water quality).
- In appendices, full results of monitoring and verification testing regimes.
- A discussion of the effectiveness of management strategies employed at the Site.
- Details of any incidence of nonconformity with the Environment Management Plan and corrective actions taken.
- A discussion of any potential risks to the environment or human health.
- Proposed future monitoring and/or reporting programs.
- Proposed remediation measures if needed.

A record of these observations, calculations and soil monitoring results should be provided to the client for each day an inspection is undertaken. At the completion of works a final closure report will be prepared detailing the above information.



8 Contingency Plan

A number of contingency measures for the soil treatment works have been provided in **Table 8**.

| Table 8 - Contingency Plan | | |
|--|---|---|
| Scenario | Consequence | Contingency Measures |
| Under liming of ASS | Potential for acid generation and impact to sensitive receptors | Addition of more aglime with additional chromium reducible sulfur testing to determine additional liming rate (if required) |
| Over liming of ASS | High pH may cause environmental impact | Mix over limed soil with ASS to reduce pH levels to within adopted criteria |
| Volume of ASS exceeds treatment area | Delays to earthworks | Increase size of soil treatment area |
| Observations of ASS leachate production in soil treatment area | Loss of containment of leachate | Conduct aglime treatment and apply leachate back to stockpile |
| Heavy rain causing ponding of water within treatment area | Damage to bunding and sediment controls | Testing of water for adopted action criteria and treatment if exceedance of relevant criteria. Irrigation of validated water to adjacent areas. |
| pH values increase in surrounding water bodies | Potential for acid generation and impact to sensitive receptors | Increase monitoring frequency and submit samples to laboratory for analysis. If continues, notify relevant statutory authority. |



9 Conclusion

EP Risk was engaged by Stevens to prepare an Acid Sulfate Soil Management Plan (ASSMP) for 10 Young Street, West Gosford, NSW (the Site). It is understood that the Site is proposed to be redeveloped into a mixed-use multilevel retail / hotel / residential development.

The Site is located in a Class 2 and Class 5 ASS zone and further soil sampling and analytical testing is required prior to excavation and construction works to characterise the nature and extent of acid sulfate soil impact at the Site.

The ASSMP recommended a liming rate will need to be determined and analytical results assessed against the National ASS Guidance 2018 action criteria. ASS treatment monitoring and verification should be conducted as per the ASSMP, following assessment to determine liming rates, and liming adjusted as required based on screening and testing results during treatment and testing.



Figures





ACID SULFATE SOIL MANAGEMENT PLAN 10 YOUNG STREET, WEST GOSFORD, NSW

Job No: EP2775.001 Date: 5/08/2022

Drawing Ref: EP2775.001 Fig1_Site Location Version No: v1



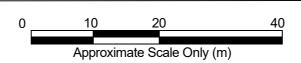


Figure 1 – Site Location









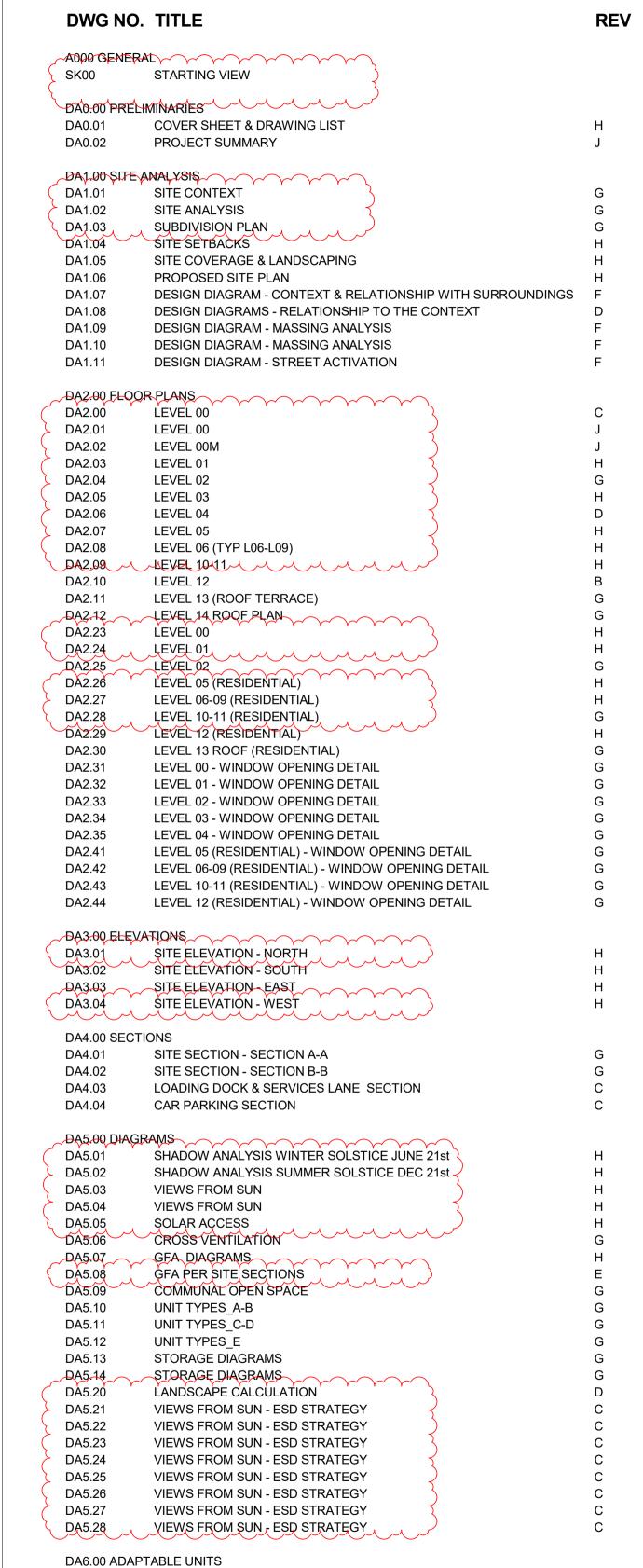


Appendix A PROPOSED DEVELOPMENT DRAWING

DEVELOPMENT APPLICATION

WEST GOSFORD

10 YOUNG STREET, WEST GOSFORD, NSW 2250



| DWG NO. | TITLE | REV |
|--|--|------------------|
| DA6.01 | ADAPTABLE UNIT_TYPE A | G |
| DA7.00 VIEWS DA7.01 DA7.02 DA7.03 DA7.04 DA7.05 | S AND MATERIAL BOARD SEMI AERIAL VIEW VIEW FROM SOUTH WEST VIEW FROM SOUTH VIEW FROM NORTH WEST MATERIAL BOARD | F F F F |
| DA8.00 RFI DA8.01 DA8.02 | RFI_HEIGHT COMPLIANCE RFI_FAÇADE TREATMENT TO THE WESTERN BUILDING SEPARATION | B B |



FOR APPROVAL

NOT FOR CONSTRUCTION

IMPORTANT NOTES:

Do not scale from drawings. All dimensions to be checked on site before commencement of work. All discrepancies to be brought to the attention of the Architect. Larger scale drawings and written dimensions take preference. This drawing is copyright and the property of the author, and must not be retained, copied or used without the express authority of MARCHESE + PARTNERS INTERNATIONAL PTY. LTD.

REVISION DATE

DESCRIPTION

Revision 1

Revision 1

Revision 3

FOR SUBMISSION

POR COORDINATION

POUNCIL RFI

POUNCIL R

marchesepartners

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| JAPRICO DEVELOPMENTS PTY LTD | COVER SH | OVER SHEET & DRAWING LIST | | |
|---|----------------------|---------------------------|-------------|---------------|
| PROJECT WEST GOSFORD | SCALE NTS | DATE 2022.03.04 | DRAWN KG | CHECKED PS |
| 10 YOUNG STREET, WEST GOSFORD, NSW 2250 | _{ЈОВ} 19062 | DRAWING DA0.01 | | REVISION H |

Class 2 summary

Address

West Gosford,

NSW, 2250

star rating

HOUSE

4YM6YGXYMK 27/04/2022

Accreditation No. DMN/21/2042

PROJECT SUMMARY

| | | PROPOSED | REQUIRED |
|-------------------------|----------------------|---|-------------------------|
| LAND ZONING | | | B6: ENTERPRISE CORRIDOR |
| SITE AREA | | 3,750 m ² | 3,750 m ² |
| NEW FULL SITE AREA | | 8,226 m ² | |
| SITE AREA WITH FSR 2.5: | 1 | | 938 m² |
| RELATED GFA | | 1,989 m² | 2,345 m ² |
| SITE AREA WITH FSR 4.0: | 1 | | 2,317 m ² |
| RELATED GFA | | 8,116 m ² | 9,268 m ² |
| SITE AREA WITH FSR 0.0: | 1 | | 496 m ² |
| RELATED GFA | | 0 m ² | 0 m^2 |
| TOTAL GFA | | 10,105 m ² | 11,613 m ² |
| HOB FOR SITE WITH FSR | 2.5:1 | 46.01 m | 24 m |
| HOB FOR SITE WITH FSR | 4.0:1 | 46.01 m | 36 m |
| HOB FOR SITE WITH FSR | 0.0:1 | 0 m | 12 m |
| SITE COVERAGE | | 41.74% (1565.36m ²) | 50% (DCP) |
| COMMUNAL OPEN SPACE | | 37.55% (1408 m²) | 25% (ADG) |
| DEEP SOIL | 289.4 m ² | 7.72% INCLUDING RIGHT OF WAY 10.10% EXCLUDING RIGHT OF WAY | 7% (ADG) |
| LANDSCAPE AREA | 1115 m² | 29.73% INCLUDING RIGHT OF WAY | |
| | | 38,89% EXCLUDING RIGHT OF WAY | ~ ~ ~ ~ ~ ~ ~ ~ ~ |

YIELD ANALYSIS

USAGE

| HOTEL | 3326 m² | |
|------------------------|------------------|--|
| RESIDENTIAL | 6200 m² | |
| RETAIL | 579 m² | |
| TOTAL: | 10105 m² | |
| RESIDENTIAL APARTMENTS | PROPOSED | REQUIRED |
| 2 BED | 52 | |
| 3 BED | 6 | |
| TOTAL | 58 (9 adaptable) | 9 adaptable (15% of total apartments to be adaptable |
| HOTEL APARTMENTS | 60 Apartments | |

GFA (m²)

| RESIDENTIAL APARTMENTS (58) | 58 (6 accessible) | 58 (shop Top: 1 space/apartment inclusive 10 accessible carparking i.e 6) |
|-----------------------------|------------------------------|---|
| HOTEL APARTMENTS (60) | 60 (1 accessible) | 60 |
| HOTEL STAFF (8) | 4 | 4 (1 Space every 2 staff) |
| SHOWROOM STAFF (2) | 1 | 1 (1 Space every 2 staff) |
| SHOWROOM VISITORS | 4 (4 on street) | 4 (3.8 for 517m ² (1.5 spaces/200m ² GFA)) |
| CAFE | 2 (2 on street) | 2 (3.1 for 60m ² (1 spaces/30m ² GFA)) |
| PUBLIC SPACE | 1 (accesible) | 129 |
| TOTAL | 130 (inclusive 8 accessible) | 129 |

| MOTORCYCLE PARKING | | RECOMMENDED |
|--------------------|---|----------------------------|
| RESIDENTIAL | 4 | 4 (1 space/15 apartments) |
| HOTEL | 3 | 2 (1 space/25 hotel rooms) |
| TOTAL | 7 | 6 |
| | | |

BICYCLE PARKING

| SIDENTIAL | : |
|-----------|---|
| | |

| | STORAGE SCHEDULE BY LEVEL | | | | |
|----------|---------------------------|--------------------------|-----------------------|--|--|
| Level | INTERNAL STORAGE (m³) | EXTERNAL STORAGE (m³) | TOTAL STORAGE (m³) | | |
| LEVEL 01 | 0.0 m³ | 95.6 m³ | 95.6 m³ | | |
| LEVEL 02 | 0.0 m³ | 145.0 m³ | 145.0 m³ | | |
| LEVEL 05 | 38.1 m³ | 0.0 m³ | 38.1 m³ | | |
| LEVEL 06 | 38.1 m³ | 0.0 m³ | 38.1 m³ | | |
| LEVEL 07 | 38.1 m³ | 0.0 m³ | 38.1 m³ | | |
| LEVEL 08 | 38.1 m³ | 0.0 m³ | 38.1 m³ | | |
| LEVEL 09 | 38.1 m³ | 0.0 m³ | 38.1 m³ | | |
| LEVEL 10 | 48.6 m³ | 0.0 m³ | 48.6 m³ | | |
| LEVEL 11 | 48.6 m³ | 0.0 m³ | 48.6 m³ | | |
| LEVEL 12 | 48.6 m³ | 0.0 m³ | 48.6 m³ | | |

TOTAL STORAGE: \$26.8 m³ (REQUIRE 244.66m³) 576.8 m³

NOT FOR CONSTRUCTION

TOTAL SITE AREA 3,750sqm TOTAL PERMISSIBLE GFA 11,613sqm SITE WITH FSR 2.5:1 SITE WITH FSR 4.0:1 SITE AREA 2,317sqm SITE WITH FSR 0.0:1 SITE AREA 938sq PERMISSIBLE FSR 2.5:1 SITE AREA 2,317sc PERMISSIBLE FSR 4.0:1 SITE AREA PREMISSIBLE GFA 2,345sqm PREMISSIBLE GFA 9,268sqm PREMISSIBLE GFA Osqm PROPOSED GFA 8,116sqm PROPOSED GFA 0sqm PROPOSED GFA 1.989sam PROPOSED GFA 1,230sqm (Hotel only) PROPOSED GFA 2,096sqm (Hotel only) PROPOSED GFA 241sqm (Residential only)
PROPOSED GFA 518sqm (Retail only) PROPOSED GFA 5,959sqm (Residential only)
PROPOSED GFA 61sqm (Retail only)

RESIDENTIAL ADADTMENTS

| Level | APARTMENT No. | TYPE | BALCONY (m²) | NSA (m²) |
|--------------------|--------------------|----------|-------------------|---|
| EVEL 05 | AT ATTIVILINT INU. | 1116 | DALOONI (III) | INOM (III) |
| EVEL 05 | 5.01 | 2B | 49 m² | 84 m² |
| EVEL 05 | 5.02 | 2B | 47 m² | 85 m² |
| EVEL 05 | 5.03 | 2B | 24 m² | 91 m² |
| EVEL 05 | 5.04 | 2B | 12 m² | 80 m² |
| EVEL 05 EVEL 05 | 5.05 5.06 | 2B 2B | 12 m² 18 m² | 80 m² 80 m² |
| EVEL 05 EVEL 05 | 5.07 | 2B | 47 m ² | 86 m² |
| EVEL 05 | 5.08 | 2B | 49 m² | 84 m² |
| EVEL 06 | 0.00 | | | • |
| EVEL 06 | 6.01 | 2B | 12 m² | 84 m² |
| EVEL 06 | 6.02 | 2B | 21 m² | 86 m² |
| EVEL 06 | 6.03 | 2B | 23 m² | 91 m² |
| EVEL 06 | 6.04 | 2B | 12 m² | 80 m² |
| EVEL 06 | 6.05 | 2B | 12 m² | 80 m² |
| EVEL 06 | 6.06 | 2B | 17 m² | 80 m² |
| EVEL 06 | 6.07 | 2B | 21 m² | 86 m² |
| EVEL 06 | 6.08 | 2B | 12 m² | 84 m² |
| EVEL 07 EVEL 07 | 7.01 | 2B | 12 m² | 84 m² |
| EVEL 07 | 7.02 | 2B | 21 m² | 86 m ² |
| EVEL 07 | 7.03 | 2B | 23 m² | 91 m² |
| EVEL 07 | 7.04 | 2B | 12 m² | 80 m² |
| EVEL 07 | 7.05 | 2B | 12 m² | 80 m² |
| EVEL 07 | 7.06 | 2B | 17 m² | 80 m² |
| EVEL 07 | 7.07 | 2B | 21 m² | 86 m² |
| EVEL 07 | 7.08 | 2B | 12 m² | 84 m² |
| EVEL 08 | | | | |
| EVEL 08 | 8.01 | 2B | 12 m² | 84 m² |
| EVEL 08 | 8.02 | 2B | 21 m² | 86 m² |
| EVEL 08 | 8.03 | 2B | 23 m² | 91 m² |
| EVEL 08 | 8.04 | 2B | 12 m² | 80 m² |
| EVEL 08 EVEL 08 | 8.05 8.06 | 2B 2B | 12 m² 17 m² | 80 m² 80 m² |
| EVEL 08 | 8.07 | 2B | 21 m² | 86 m² |
| EVEL 08 | 8.08 | 2B | 12 m² | 84 m² |
| EVEL 09 | 0.00 | | | <u> </u> |
| EVEL 09 | 9.01 | 2B | 12 m² | 84 m² |
| EVEL 09 | 9.02 | 2B | 21 m² | 86 m² |
| EVEL 09 | 9.03 | 2B | 23 m² | 91 m² |
| EVEL 09 | 9.04 | 2B | 12 m² | 80 m² |
| EVEL 09 | 9.05 | 2B | 12 m² | 80 m² |
| EVEL 09 | 9.06 | 2B | 17 m² | 80 m² |
| EVEL 09 | 9.07 | 2B | 21 m² | 86 m ² |
| EVEL 09 | 9.08 | 2B | 12 m² | 84 m² |
| EVEL 10 EVEL 10 | 10.01 | 2B | 12 m² | 84 m² |
| EVEL 10 EVEL 10 | 10.01 | 2B | 21 m ² | 86 m² |
| EVEL 10 | 10.02 | 3B | 43 m ² | 166 m² |
| EVEL 10 | 10.04 | 3B | 46 m² | 147 m² |
| EVEL 10 | 10.05 | 2B | 21 m² | 86 m² |
| EVEL 10 | 10.06 | 2B | 12 m² | 84 m² |
| EVEL 11 | | | | |
| EVEL 11 | 11.01 | 2B | 12 m² | 84 m² |
| EVEL 11 | 11.02 | 2B | 21 m² | 86 m² |
| EVEL 11 | 11.03 | 3B | 43 m² | 166 m² |
| EVEL 11 | 11.04 | 3B | 46 m² | 147 m² |
| EVEL 11 | 11.05 | 2B | 21 m² | 86 m ² |
| EVEL 11 | 11.06 | 2B | 12 m² | 84 m² |
| EVEL 12 | 12.01 | 20 | 12 m² | Q1 m2 |
| EVEL 12 EVEL 12 | 12.01 | 2B 2B | 12 m² 21 m² | 84 m² 86 m² |
| EVEL 12 EVEL 12 | 12.03 | 3B | 43 m ² | 166 m² |
| EVEL 12 EVEL 12 | 12.04 | 3B | 46 m² | 146 m² |
| EVEL 12 | 12.05 | 2B | 21 m² | 85 m ² |
| EVEL 12 | 12.06 | 2B | 12 m² | 84 m² |
| | | | 1243 m² | |

BASIX Compliant Design Specification Summary – Refer to BASIX Certificate for all details

External Walls:

A minimum of R2.5 insulation added to all External Walls to achieve a minimum Total R-Value of R2.8.

Design Specification – Residential Apartment Units BUILDING FABRIC

Walls to Internal Corridors and Non-Conditioned Zones:

A minimum of R1.5 insulation added to partition walls between apartment unit and non-conditioned corridor to achieve a minimum Total R-Value of R1.8.

There is no minimum thermal insulation requirement for partition walls between apartment unit and lift core / stairwell /

Internal Walls to Adjoining Apartment:

As the adjoining apartment unit is considered a conditioned space there is no minimum thermal insulation requirement for these specific walls. Therefore, the insulation to this wall shall be as per acoustic or other design requirements.

Ceilings:

waste room.

We have assumed floor to ceiling heights as indicated on the architectural drawings received.

Roof Type:

A minimum of R2.85 roof insulation to be added to all Residential Apartment Units with an exposed roof (Minimum Total R-value R3.2 to be achieved). Roof colour for solar absorptance assumed to be 'medium'.

Floor Coverings

The following design specifications have been included within the NatHERS Assessments:

Carpet to all bedrooms

Floating Timber to all living spaces

Tiles to bathrooms/toilets/laundry/kitchen areas

Windows and Glazed Doors (Fixed and/or Operable):

The façade glazing thermal performance specification of Total System U-Value of 4.3 W/m2.K and Total System SHGC of 0.53 is required for fixed and sliding windows/doors for all apartment units except for 1203,1204,1205.

The façade glazing thermal performance specification of Total System U-Value of 4.3 W/m2.K and Total System SHGC of 0.47 is required for awning windows for all apartment units except for 1203,1204,1205.

The façade glazing thermal performance specification of Total System U-Value of 3.5 W/m2.K and Total System SHGC of 0.64 is required for fixed and sliding windows/doors for apartment units 1203,1204.

The facade glazing thermal performance specification of Total System U-Value of 3.5 W/m2.K and Total System SHGC of 0.47 is required for awning windows for apartment unit 1203.

The façade glazing thermal performance specification of Total System U-Value of 4.8 W/m2.K and Total System SHGC of 0.34 is required for apartment unit 1205.

No roof lights assumed to be present.

All windows/glazed doors etc. must be specified with weather-strips to prevent air infiltration when closed. This is standard compliance with AS2047.

Note: The thermal performance values for all windows/roof lights/glazed doors etc. detailed above are 'Total System' values for glass and framing system combined.

In-slab heating or cooling system:

None. It is assumed that there are no in-slab heating or cooling systems present

Design Specification – WATER for Residential Apartment Units & Related Areas (refer BASIX Certificate)

Alternative Water Supply:

A minimum 30,000L rainwater storage/re-use tank system is mandatorily required for exclusive use of the residential apartment component only. Rainwater for the 30,000L residential rainwater tank shall be collected from non-trafficable roof spaces with a total catchment area of not less than 516m².

The rainwater collected shall be re-used for the Level 05 to Level 07 apartments' toilet flushing.

The above requirements do not account for any non-residential building component rainwater demands.

For all other hydraulic/stormwater requirements, please refer to the Hydraulic/Civil Engineer's detailed specifications.

Fixtures & Fittings:

We note that fixtures and appliances with the following minimum WELS performance ratings have been included in the BASIX Assessment:

Residential Common Areas (as applicable)

No Common Facility

Residential Apartment Units - All

3 Star WELS minimum rated Showerheads (>6.0 but <= 7.5 L/min)

4 Star WELS minimum rated Toilets

6 Star WELS minimum rated Kitchen and Bathroom Taps

6 Star WELS minimum rated Dishwashers

We note a reduction in the water efficiency quality of these appliances/fixtures will affect the water aspect of the BASIX

Design Specification – ENERGY for Residential Apartment Units & Related Areas (refer BASIX Certificate)

Alternative Energy Supply:

A minimum 15kW peak Photovoltaic System (PV) is mandatorily required for exclusive use of the residential apartment component only.

The above requirements do not account for any non-residential building component energy demands.

All apartment kitchen, bathroom and laundry exhaust shall be via individual fan ducted to Façade/Roof. Refer to BASIX certificate and Mechanical Ventilation System section below for operation control.

Back-draft dampers must be installed to prevent air infiltration.

Ceiling Downlights (if used) must be the 'sealed' type

Hot Water System:

A centralised domestic hot water system (gas-fired boiler with manifolded storage) has been specified within the BASIX

Domestic Hot Water pipework is required to have a minimum of R 0.6 insulation for all external piping and R 0.6 for all internal piping.

It should be noted that a less efficient hot water system will affect the rating of the BASIX Energy Target.

Lift 1 (gearless traction with VVVF motor): 13 Levels Served

Lift 2 (gearless traction with VVVF motor): 13 Levels Served

Mechanical Ventilation Systems:

Common Areas:

Level 01 and Level 02 Car park areas / Level 00 to Level 13 Fire Stairs / Level 00 Lobby / Level 00 Store / Level 00 and Level 00 Mezzanine corridors / Level 05 to Level 13 Corridors - natural ventilation only, no mechanical ventilation

Level 00 Loading Dock - Ventilation Exhaust Only (VSD controlled and CO monitoring)

Level 00 Electric Room – Ventilation Supply Only (Continuous)

Level 00 Comms Room – Air-conditioning system (Thermostatically controlled)

Level 00 Residential Waste Room / Level 06 to 09 Waste Room - Ventilation exhaust Only (Continuous) Level 00 Service Room / Level 00 Mezzanine Service Rooms - Ventilation Supply Only (Thermostatically controlled)

Level 00 Fire Pump Room and Fire Control Room – Ventilation Supply and Exhaust (Continuous)

Level 00 AC Toilet, Level 13 ACC Toilet - Ventilation Exhaust only (Time clock or BMS controlled)

Residential Apartment Units - All

Bathrooms – Ducted Ventilation exhaust only (interlocked to light)

Laundry - Ducted Ventilation exhaust only (Manual switch on/off)

Kitchen - Ducted Ventilation exhaust only (Manual switch on/off)

Residential Apartment Units Air-Conditioning Systems:

Cooling (bedroom + living):

Individual 3-phase air-conditioning with EER 2.5-3.0

Heating (bedroom + living):

Individual 3-phase air-conditioning with EER 2.5-3.0

Day-night zoning between living room and bedrooms is not required.

Common Areas Lighting:

Level 01 and Level 02 carpark areas - LED Lighting with zoned switching and motion sensor control

Level 00 Fire Pump Room and Fire Control Room / Level 00 Store - LED Lighting with manual on/off control

Level 00 Loading Dock / Level 00 Electric Room / Level 00 Comms Room / Level 00 Residential Waste Room / Level 06 to Level 09 Waste Room / Level 00 Service Rooms / Level 00 Mezzanine Service Rooms / Level 00 to Level 13 Fire Stairs / Level 00 and Level 00 Mezzanine Corridors / Level 05 to Level 13 Corridors / Level 00 and 13 ACC Toilets -

Level 00 Lobby - LED Lighting with zoned switching controlled

Residential Apartment Units Lighting - All

LED Lighting with motion sensors controlled

Dedicated LED Lighting for all rooms

Lifts Lighting – serving the Residential Apartment Units

LED lighting connected to lift call button

Residential Apartment Units Appliance Specifications (for each unit):

The following minimum energy performance specifications have been included within the BASIX assessment and shall be supplied for each unit:

Gas cooktop and electric ovens to all dwellings.

Dishwasher – 2.5 Star minimum Energy rating

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Clothes Dryer - 1.5 Star minimum Energy rating

Compliance Note: A reduction in the energy efficiency quality of any of these appliances will affect the energy aspect

Class 2 summary 4YM6YGXYMK 27/04/2022 Stantec Australia Accreditation No. DMN/21/2042 star rating HOUSE 10 Young St. West Gosford, NSW, 2250 https://www.fr5.com.au/QRCodeLanding?PublicId=4YM 6YGXYMK&GrpCert=1

marchesepartners

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JAPRICO DEVELOPMENTS PTY LTD PROJECT SUMMARY PROJECT SCALE DATE DRAWN CHECKED WEST GOSFORD 2022.03.04 KG PS NTS 10 YOUNG STREET, WEST GOSFORD, JOB DRAWING REVISION DA0.02 **NSW 2250** 19062

REVISION DATE DESCRIPTION BY **IMPORTANT NOTES:** 2020.07.16 Revision 1 Do not scale from drawings. All dimensions to be checked 2020.07.21 Revision 1 on site before commencement of work. All discrepancies to 2020.07.24 Revision 3 be brought to the attention of the Architect. Larger scale 2020.07.30 FOR SUBMISSION drawings and written dimensions take preference. This 2020.08.28 FOR SUBMISSION drawing is copyright and the property of the author, and must | E 2021.02.18 FOR COORDINATION not be retained, copied or used without the express authority |F of MARCHESE + PARTNERS INTERNATIONAL PTY. LTD. | G 2021.03.16 COUNCIL RFI

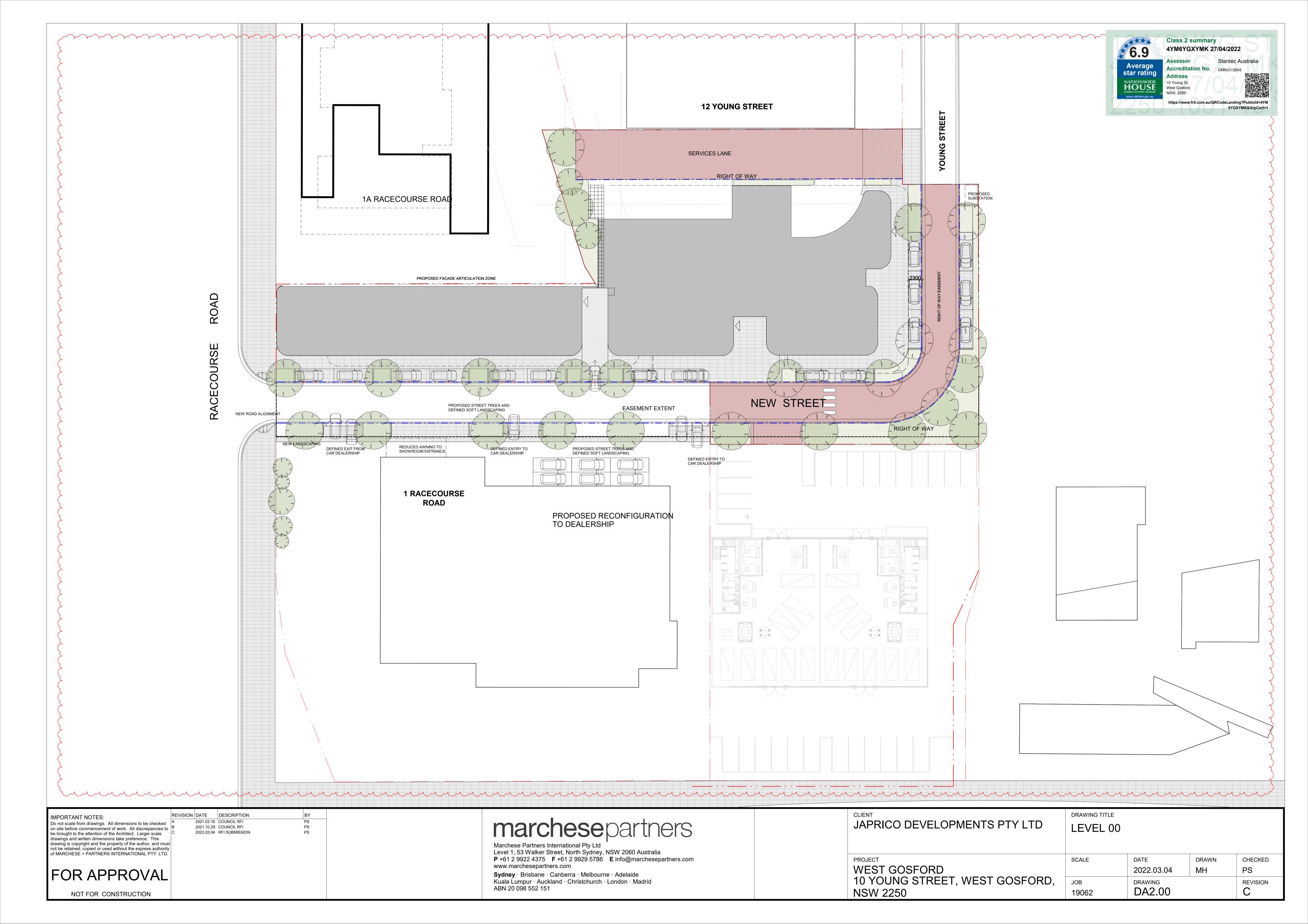
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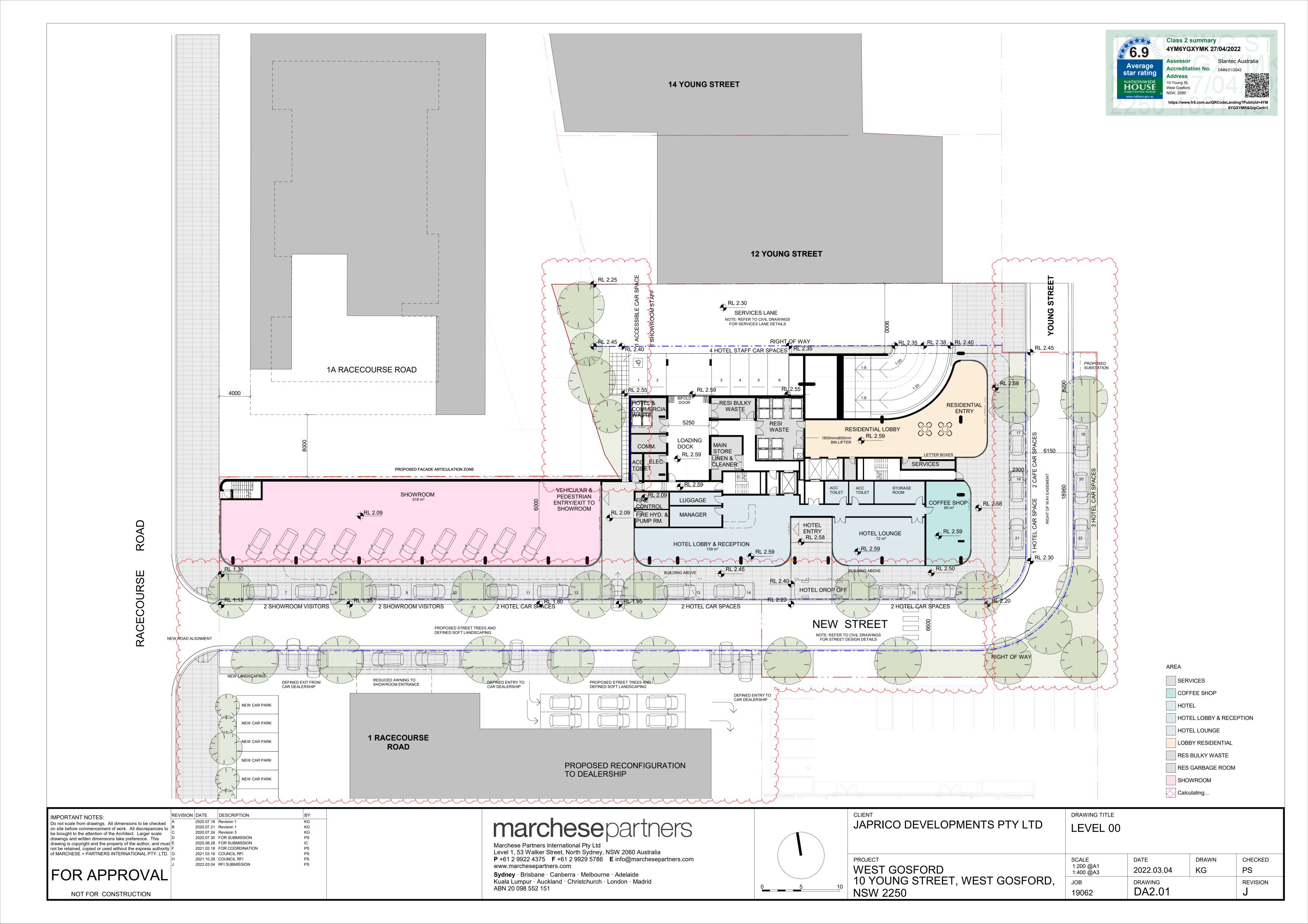
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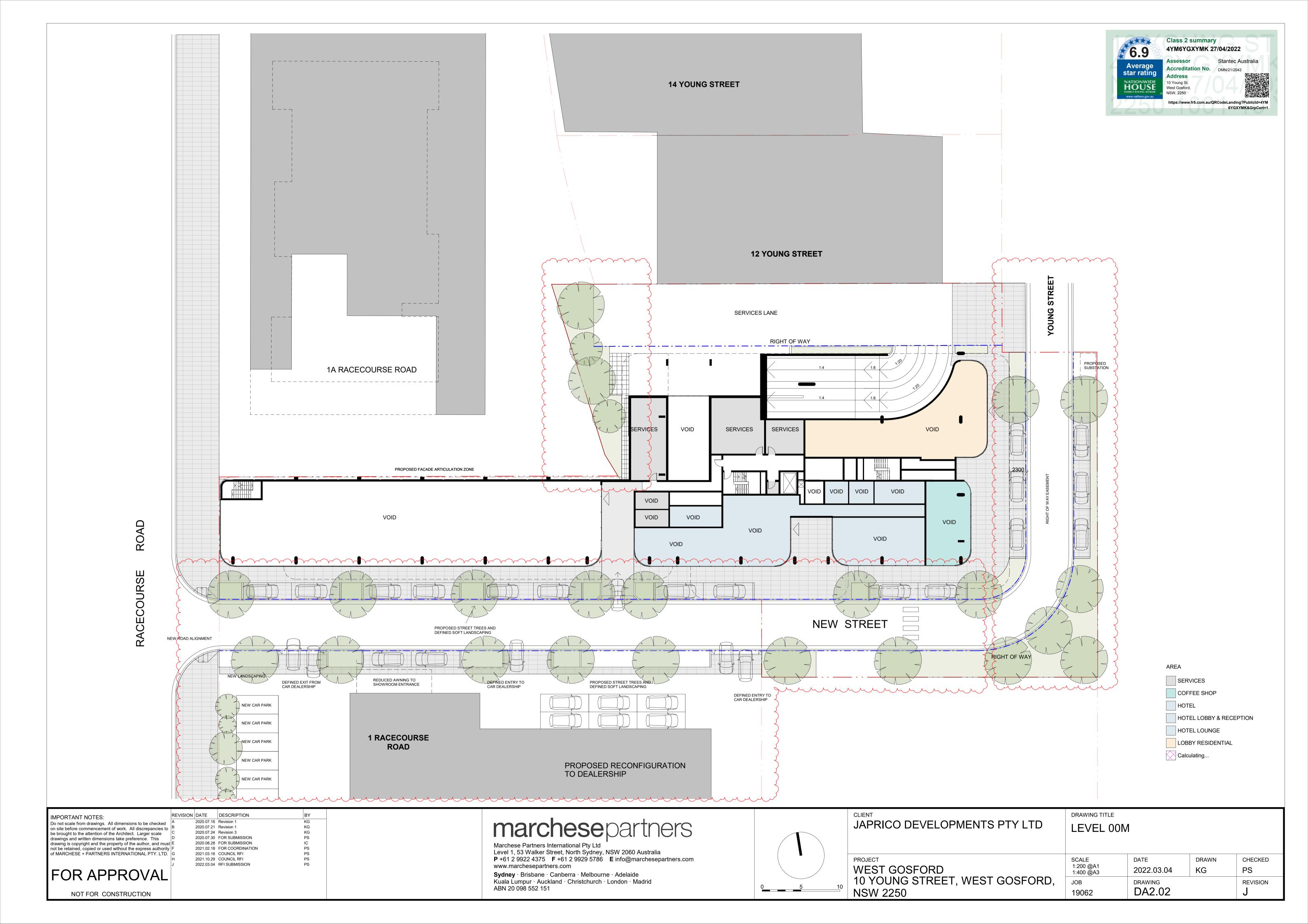
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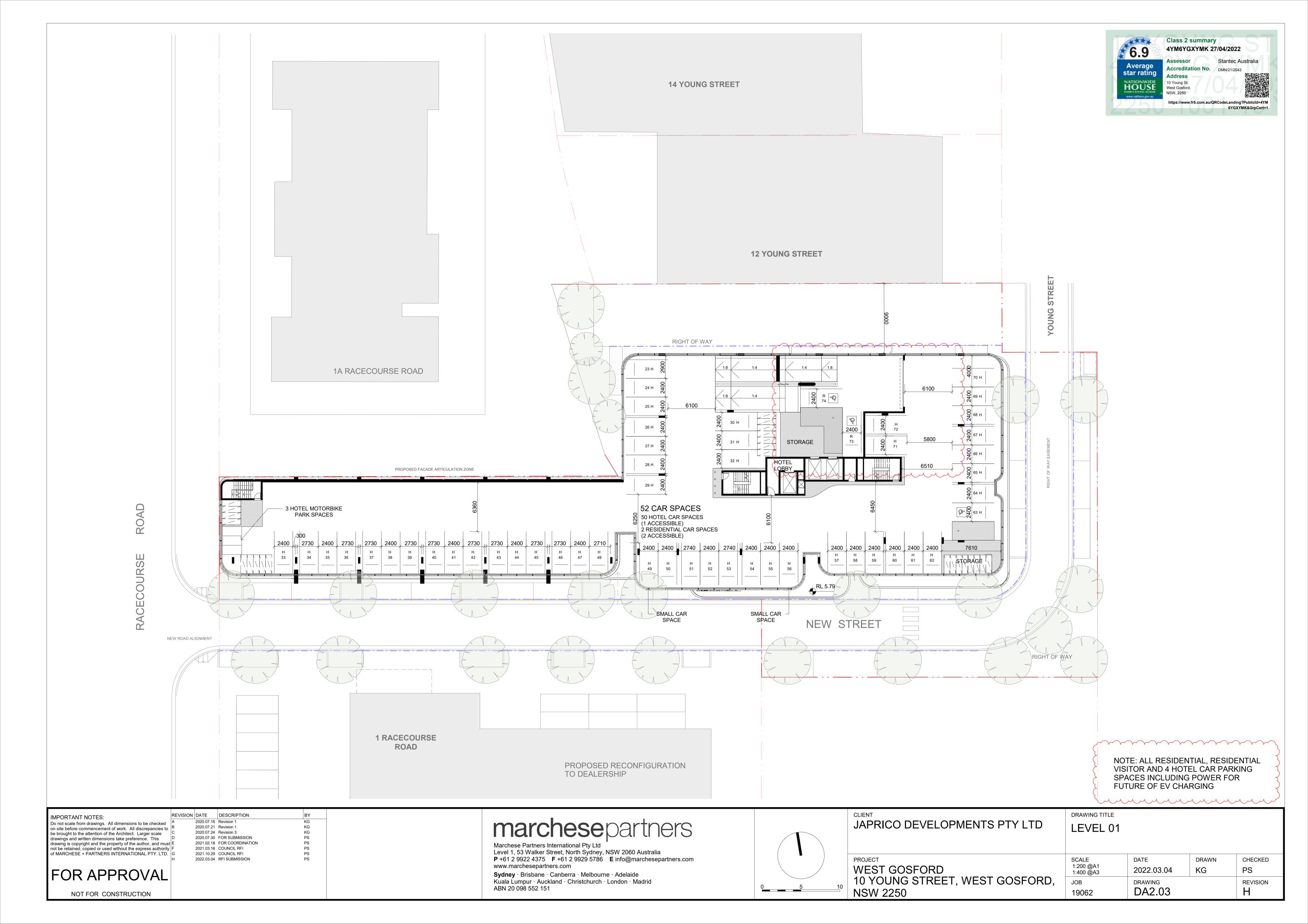
25 (1 space/12 apartments)

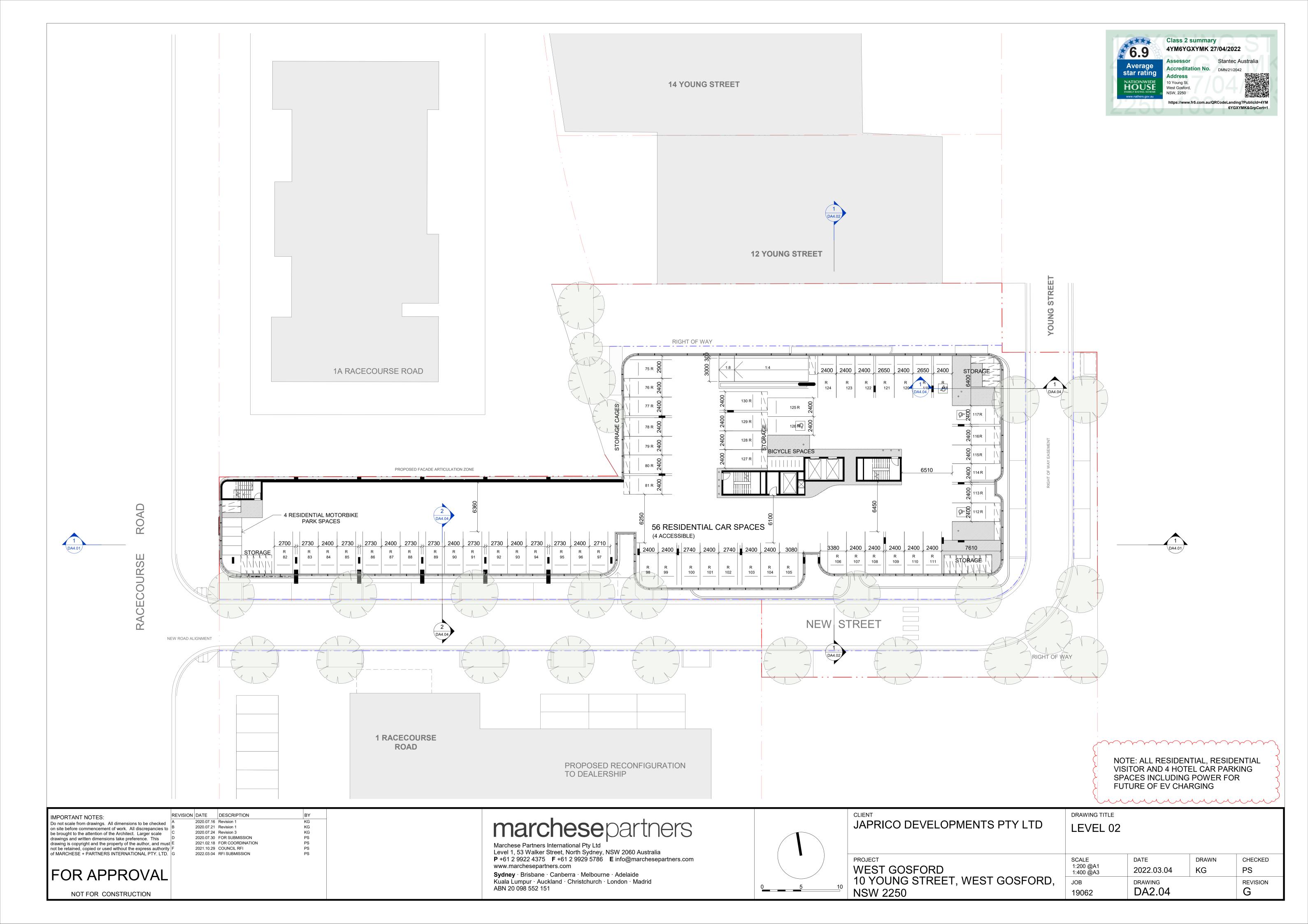
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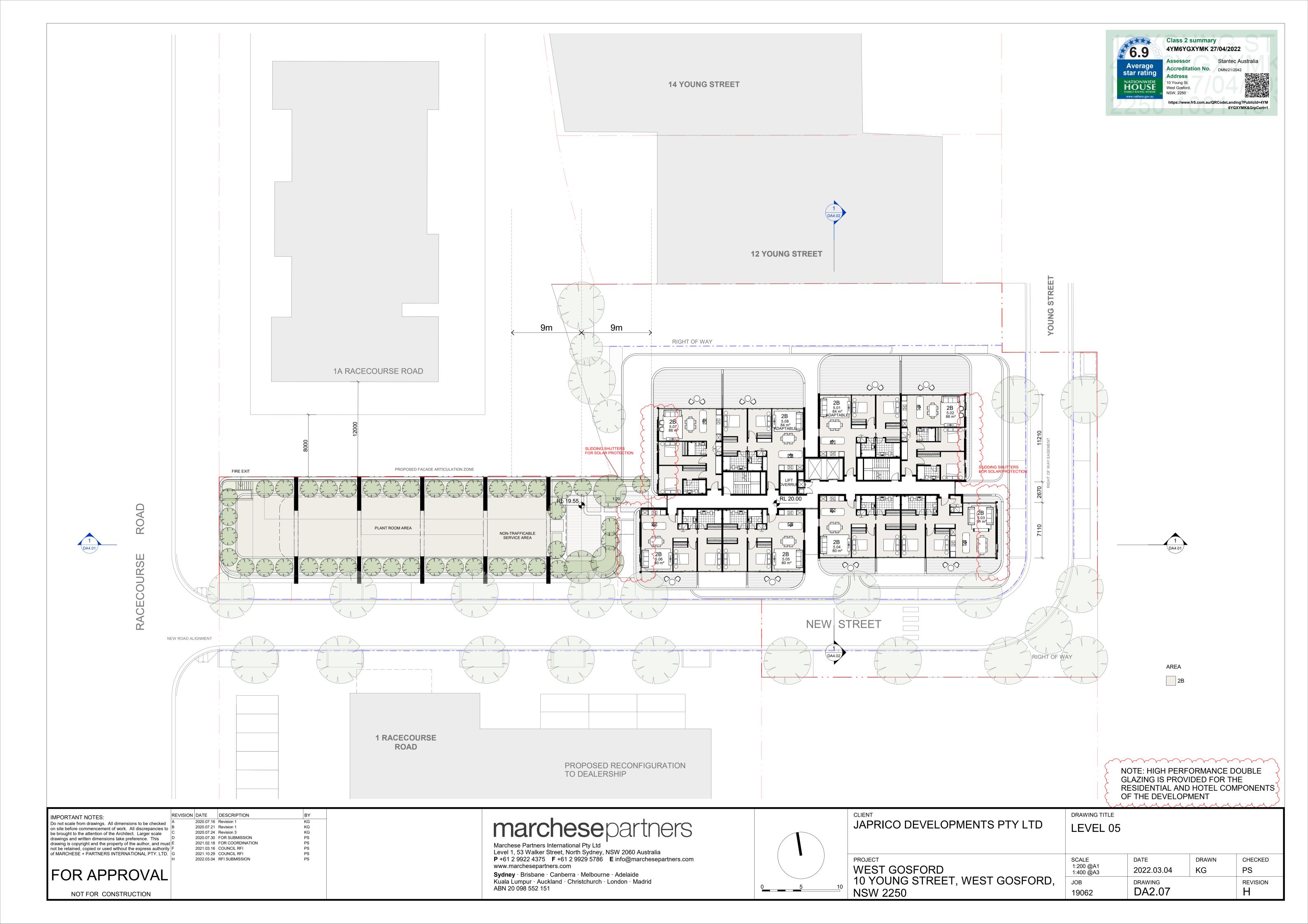


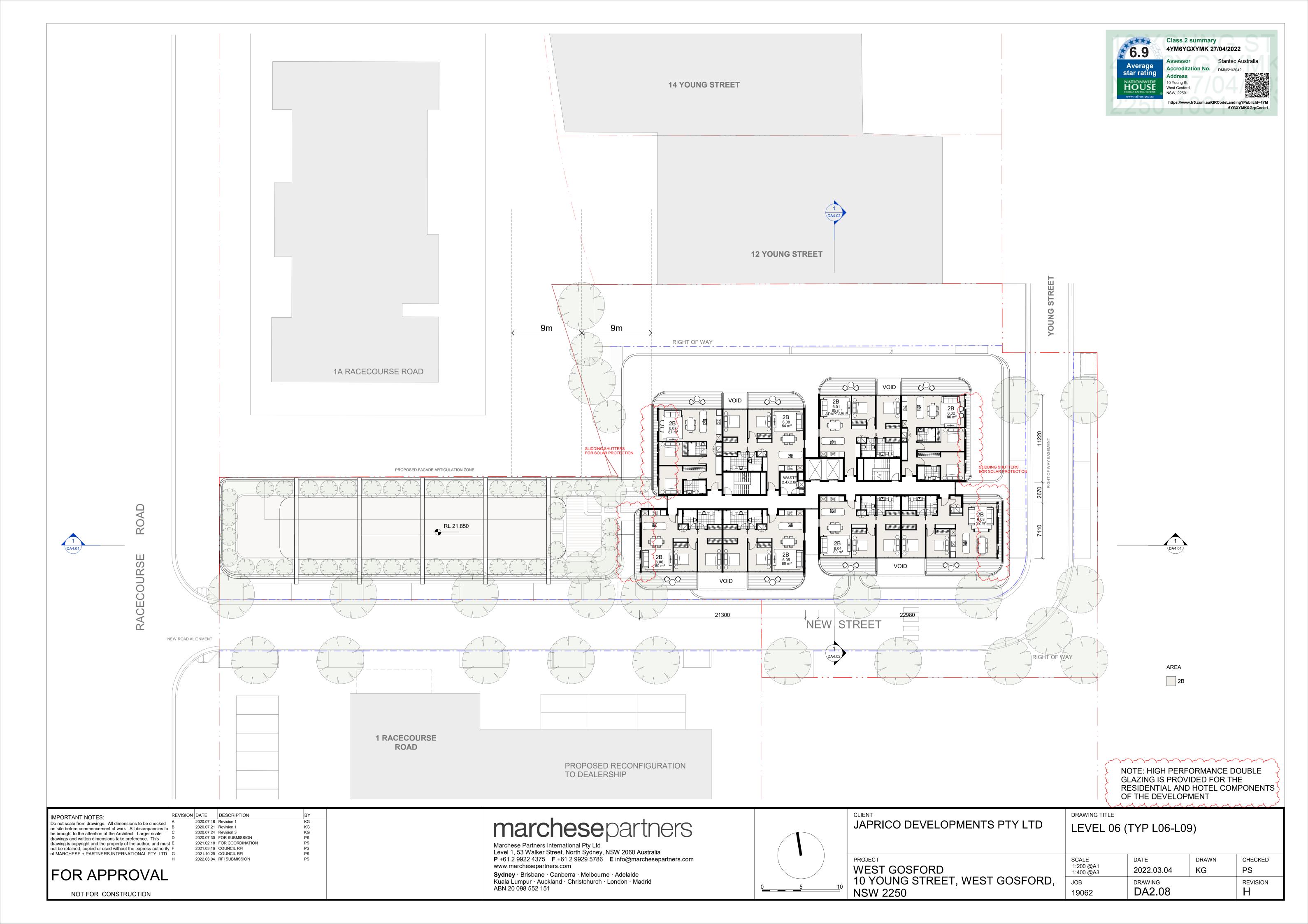


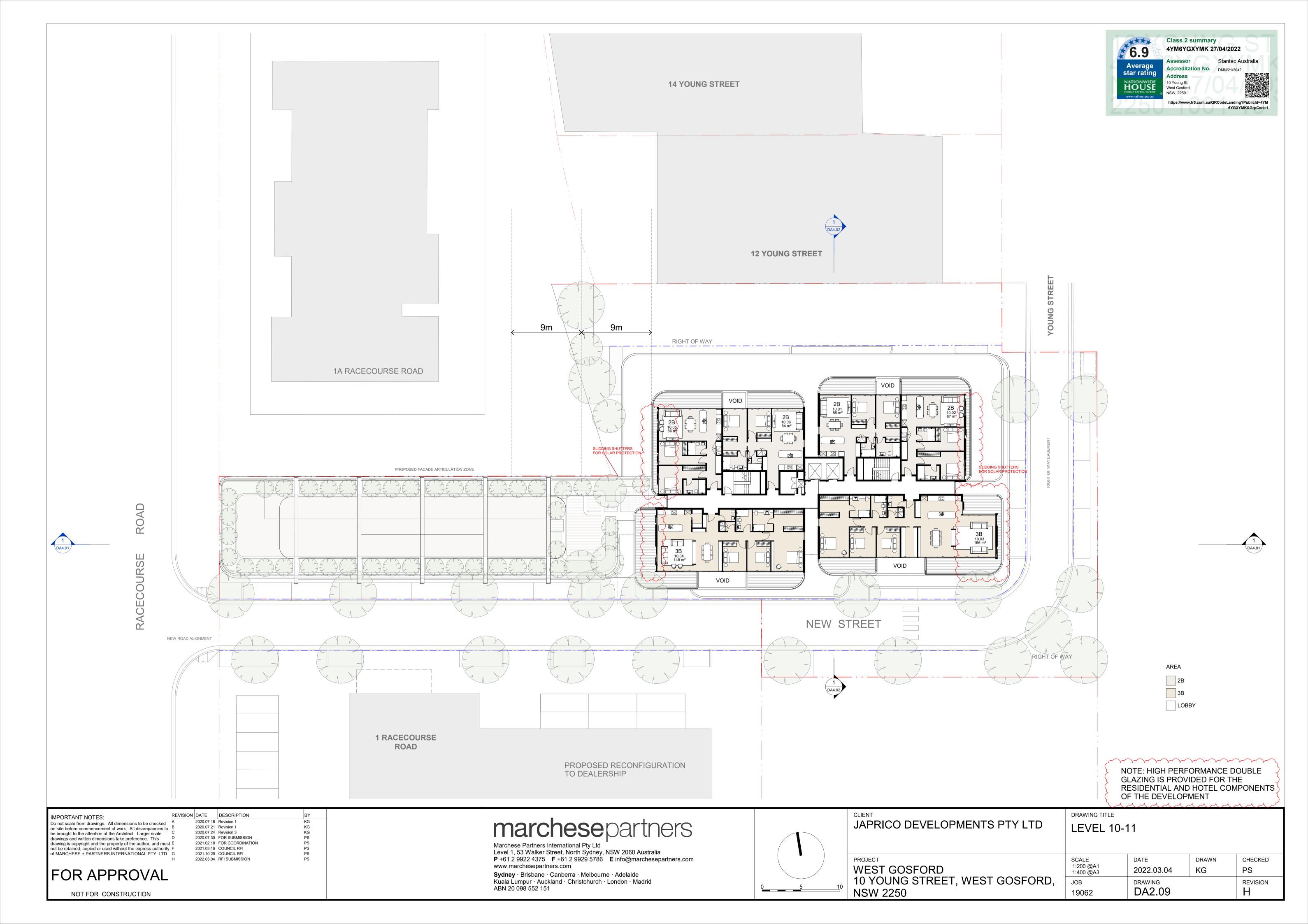


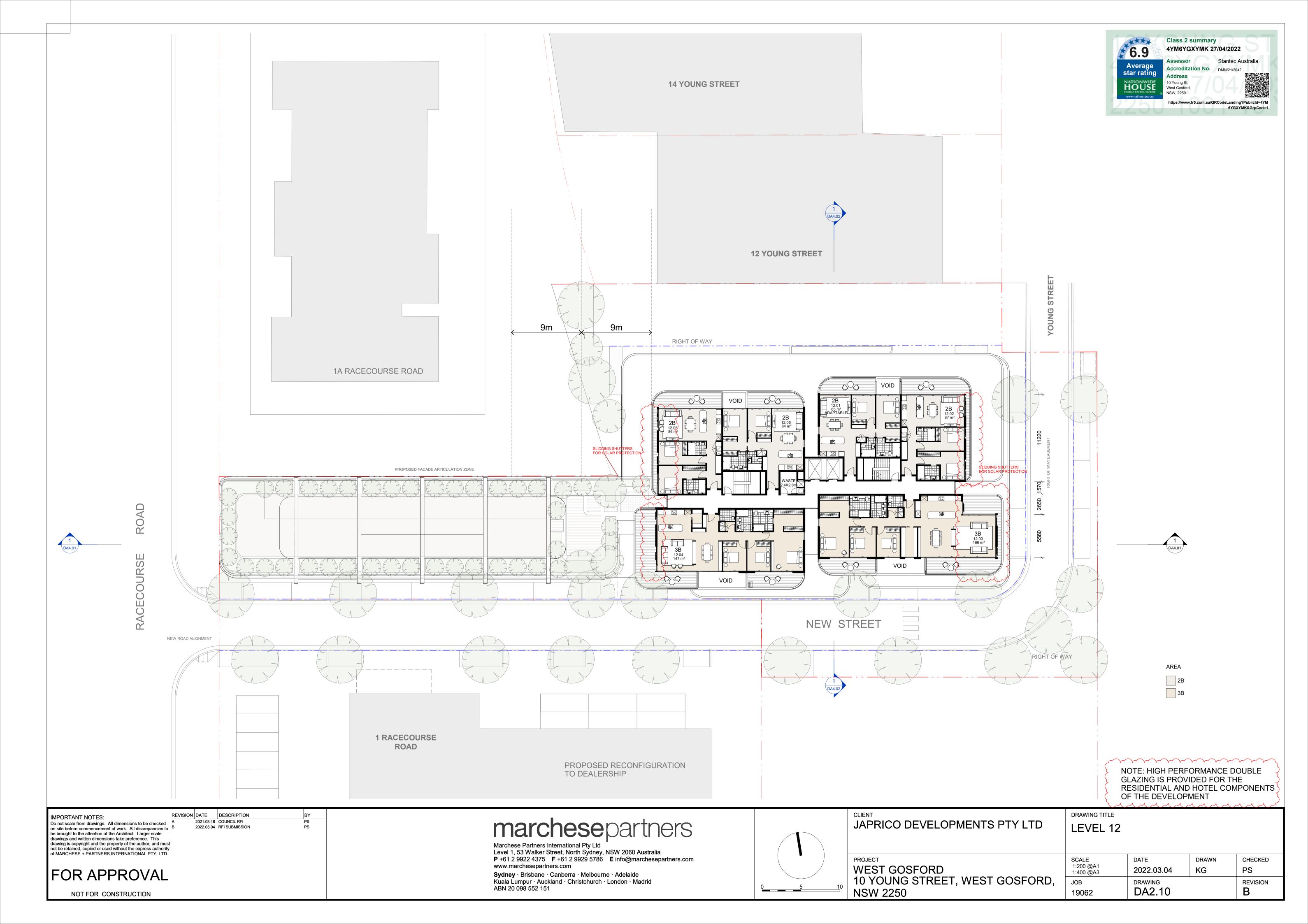


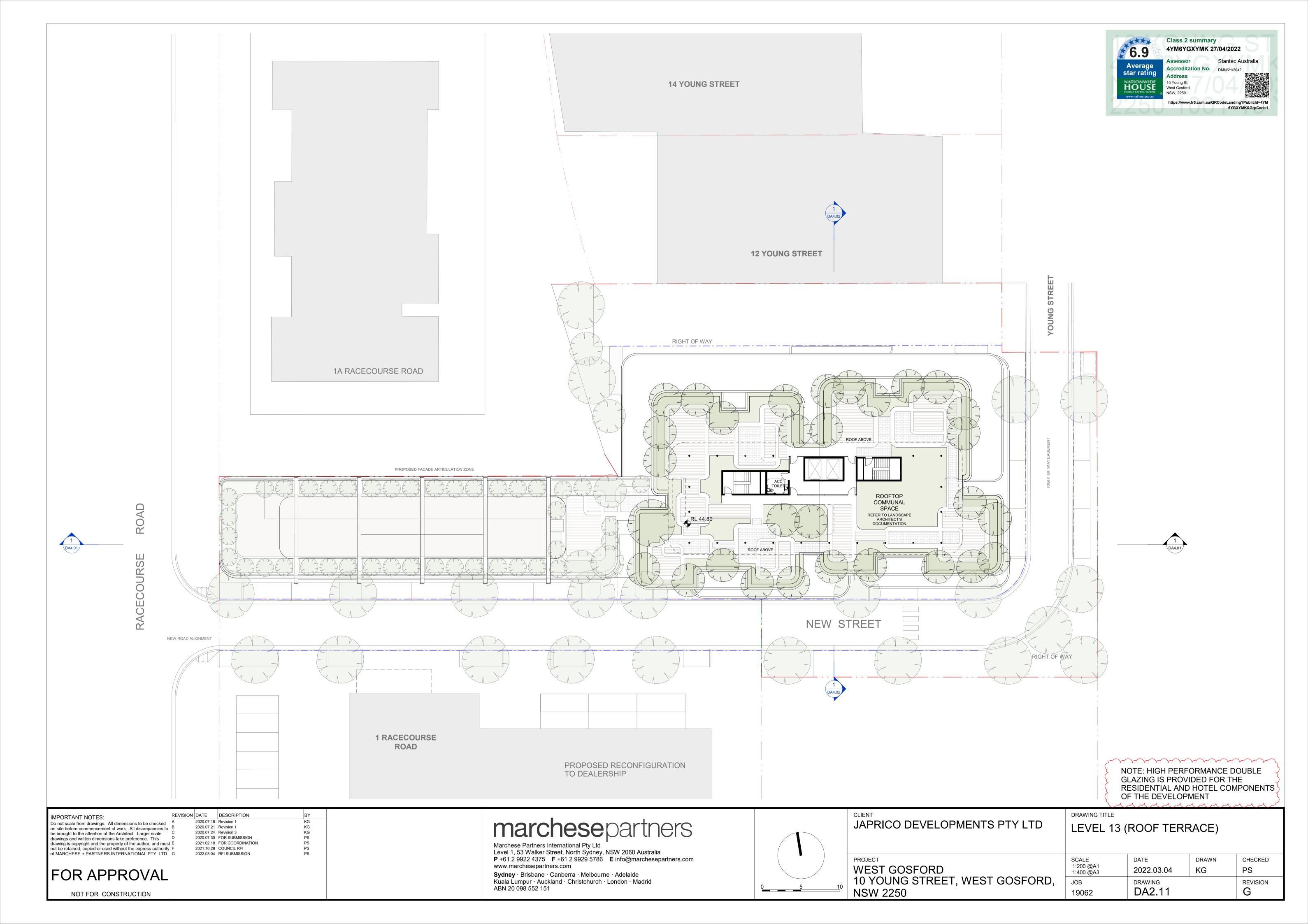


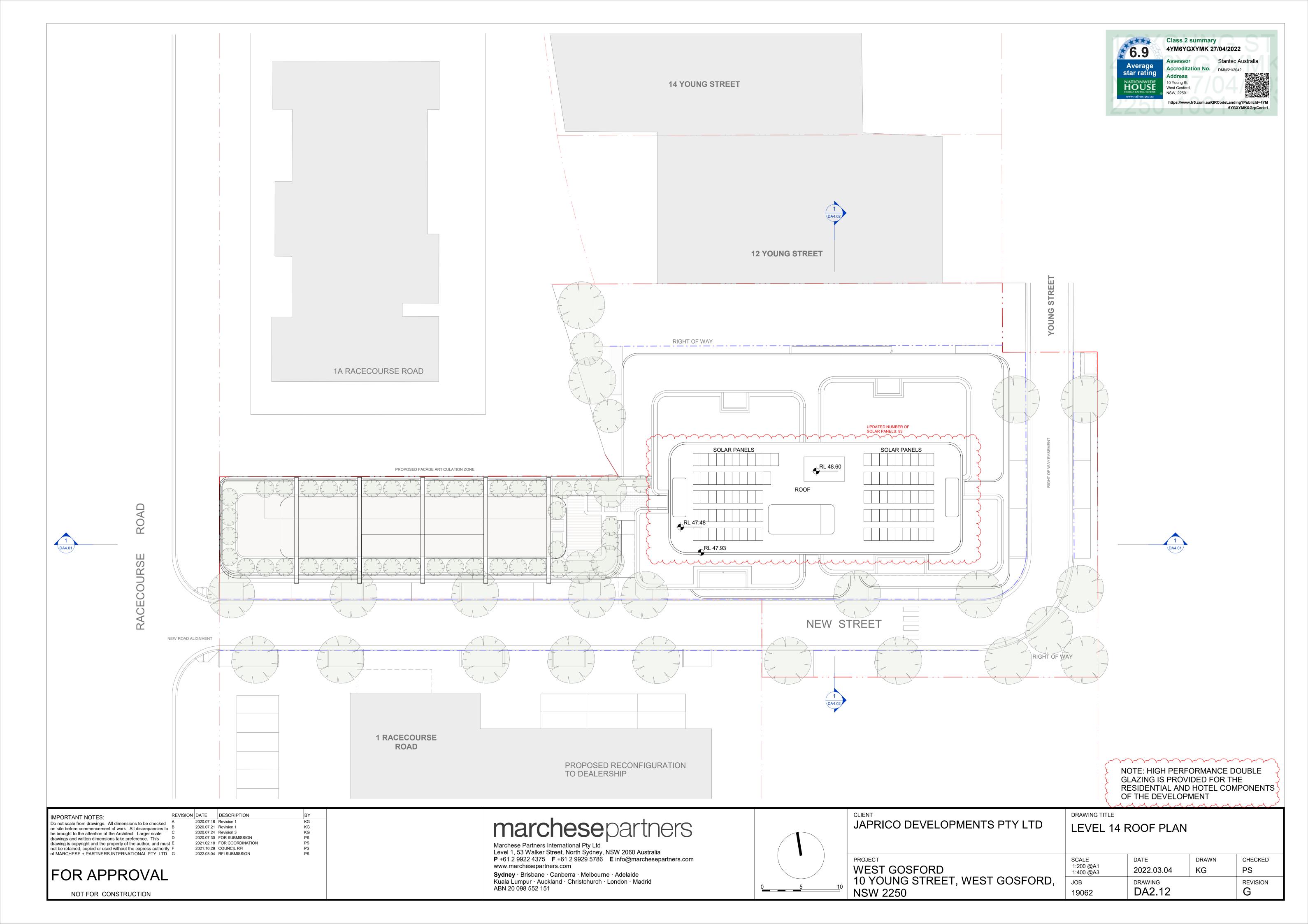


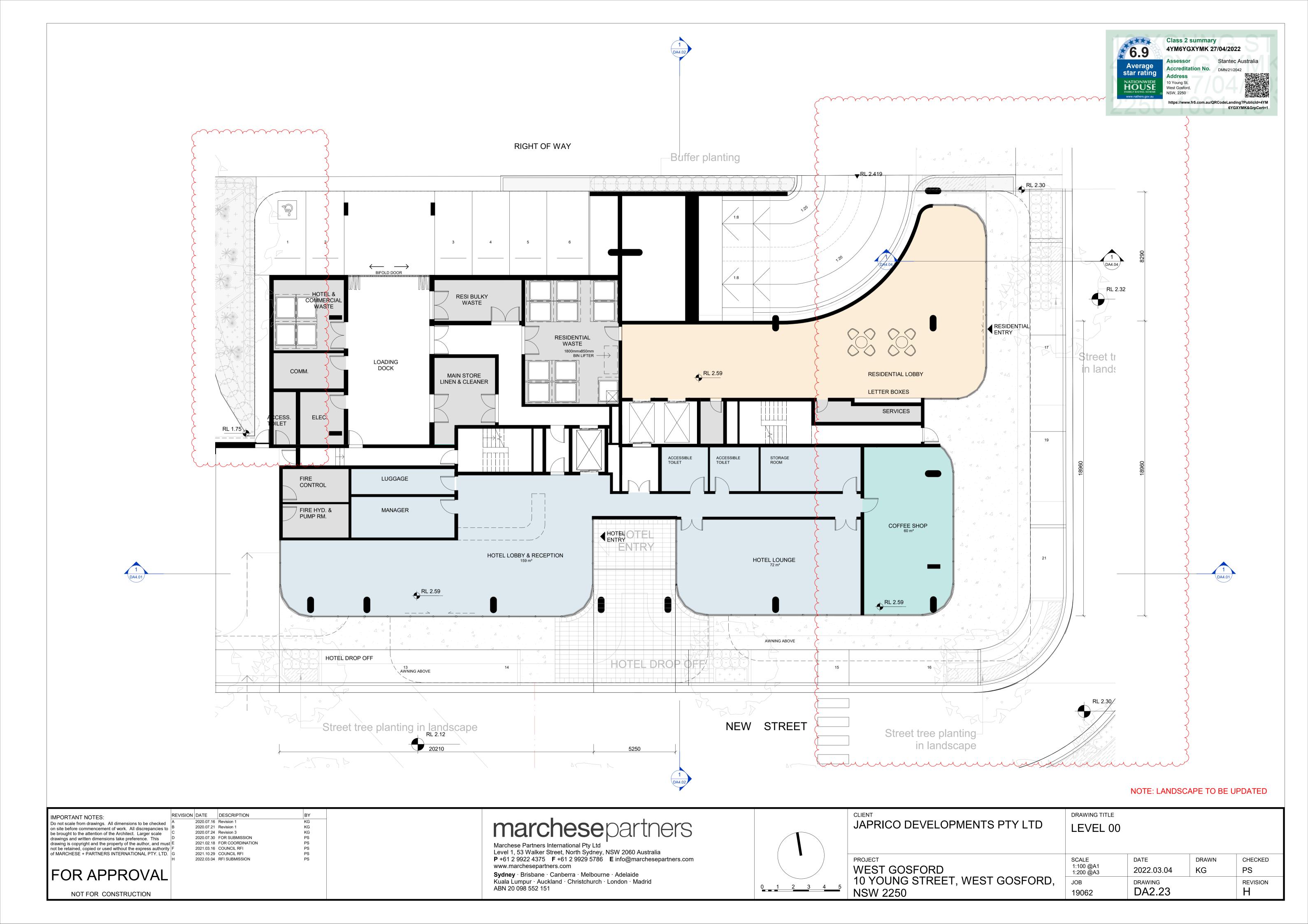


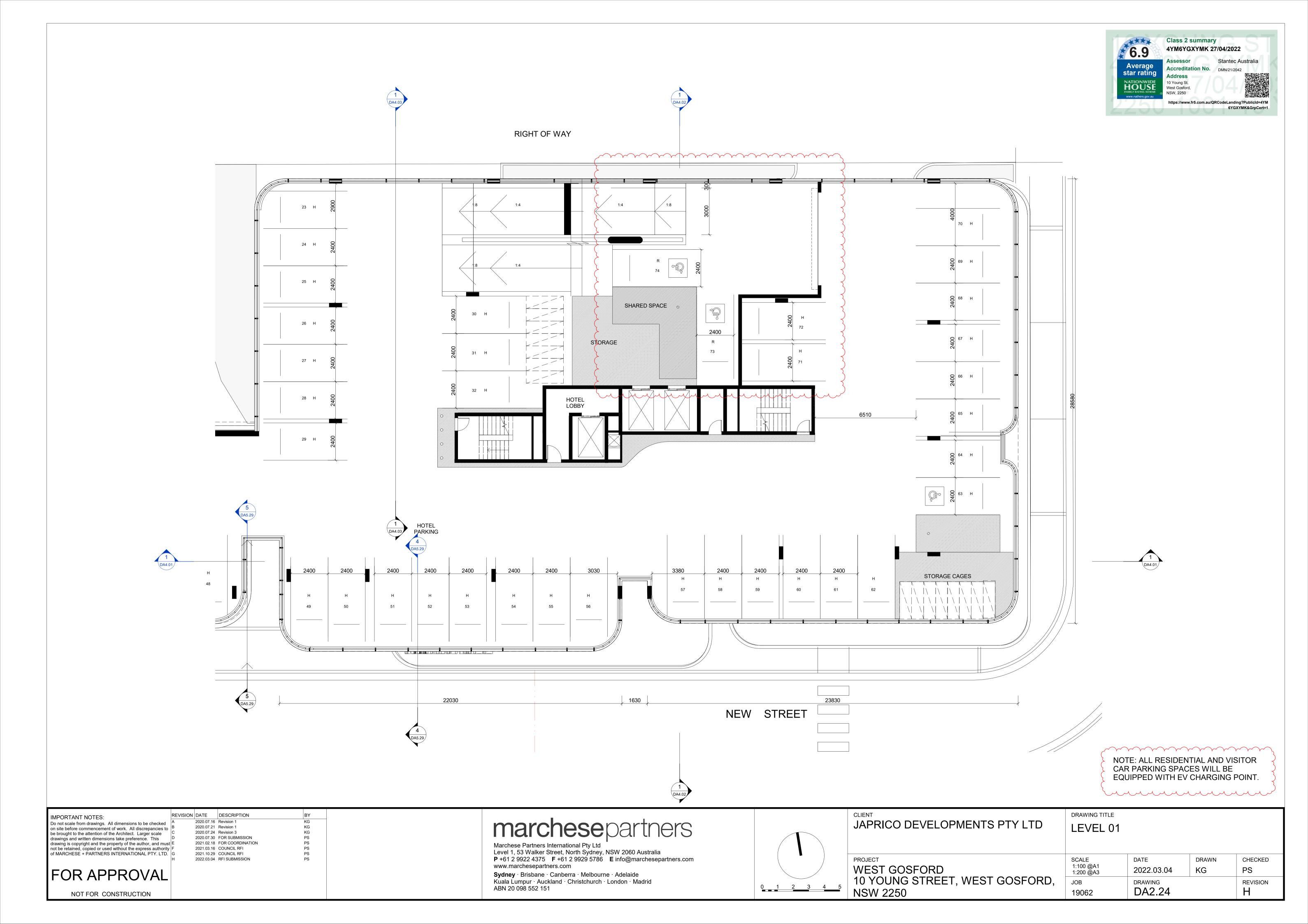


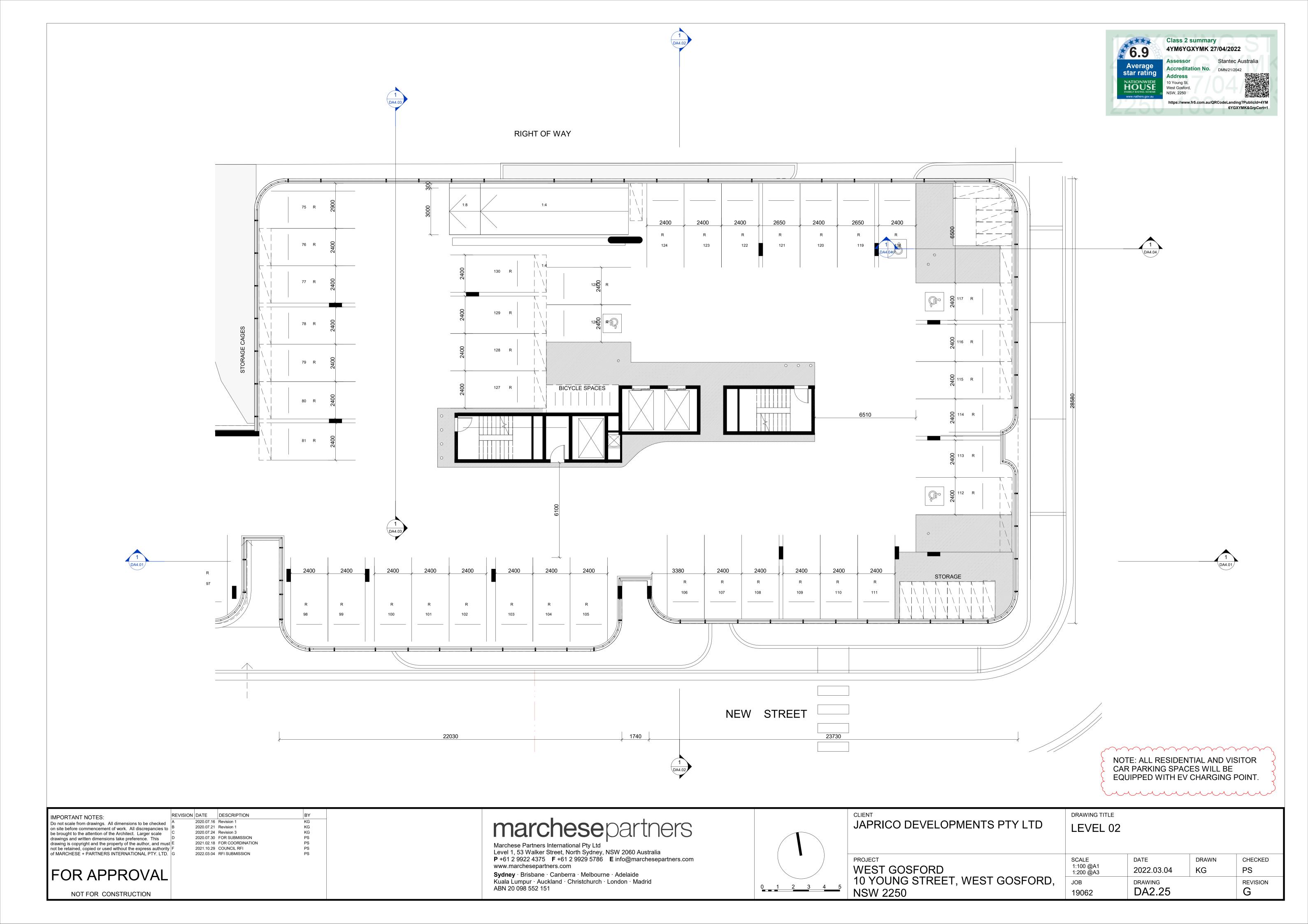




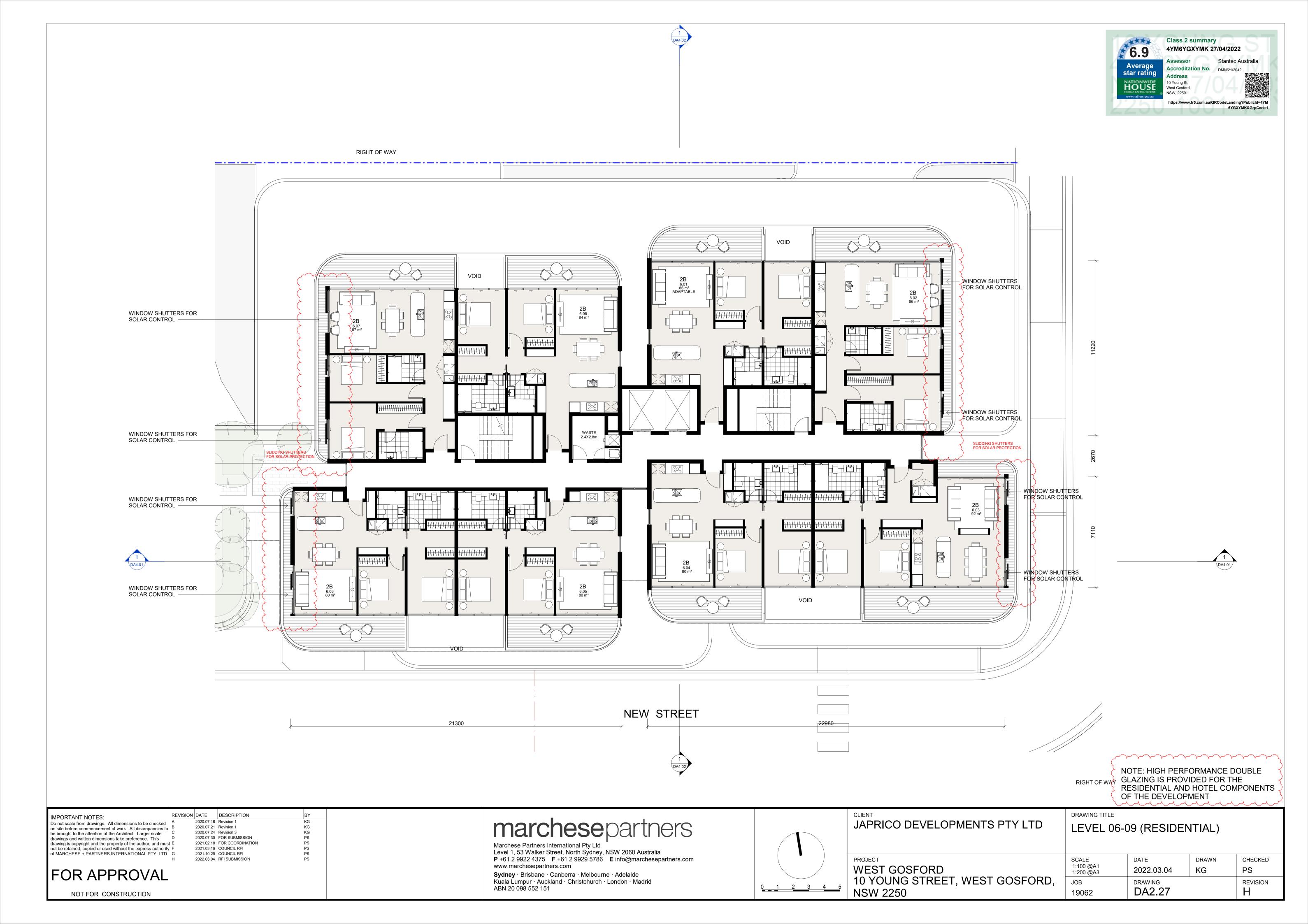


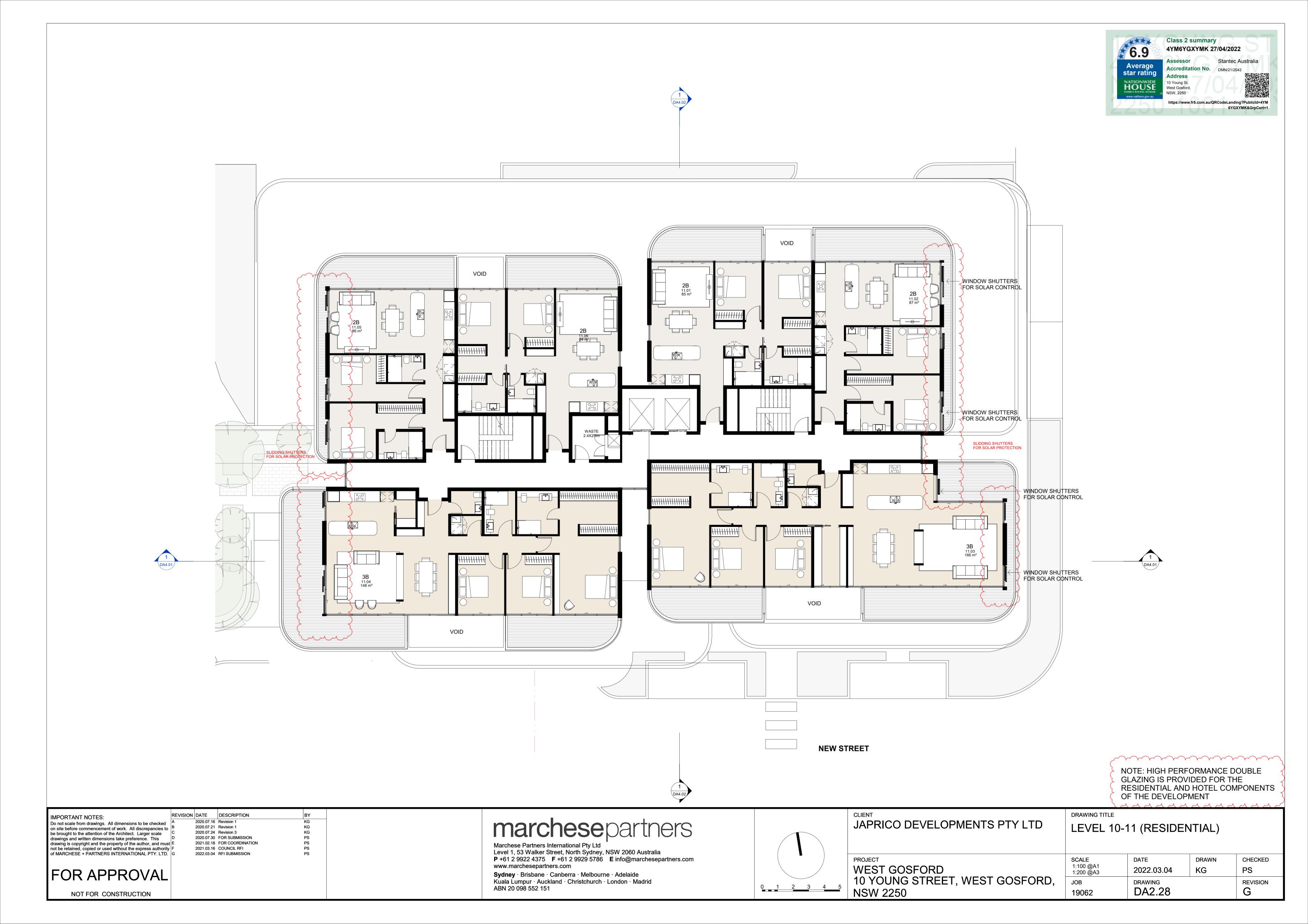


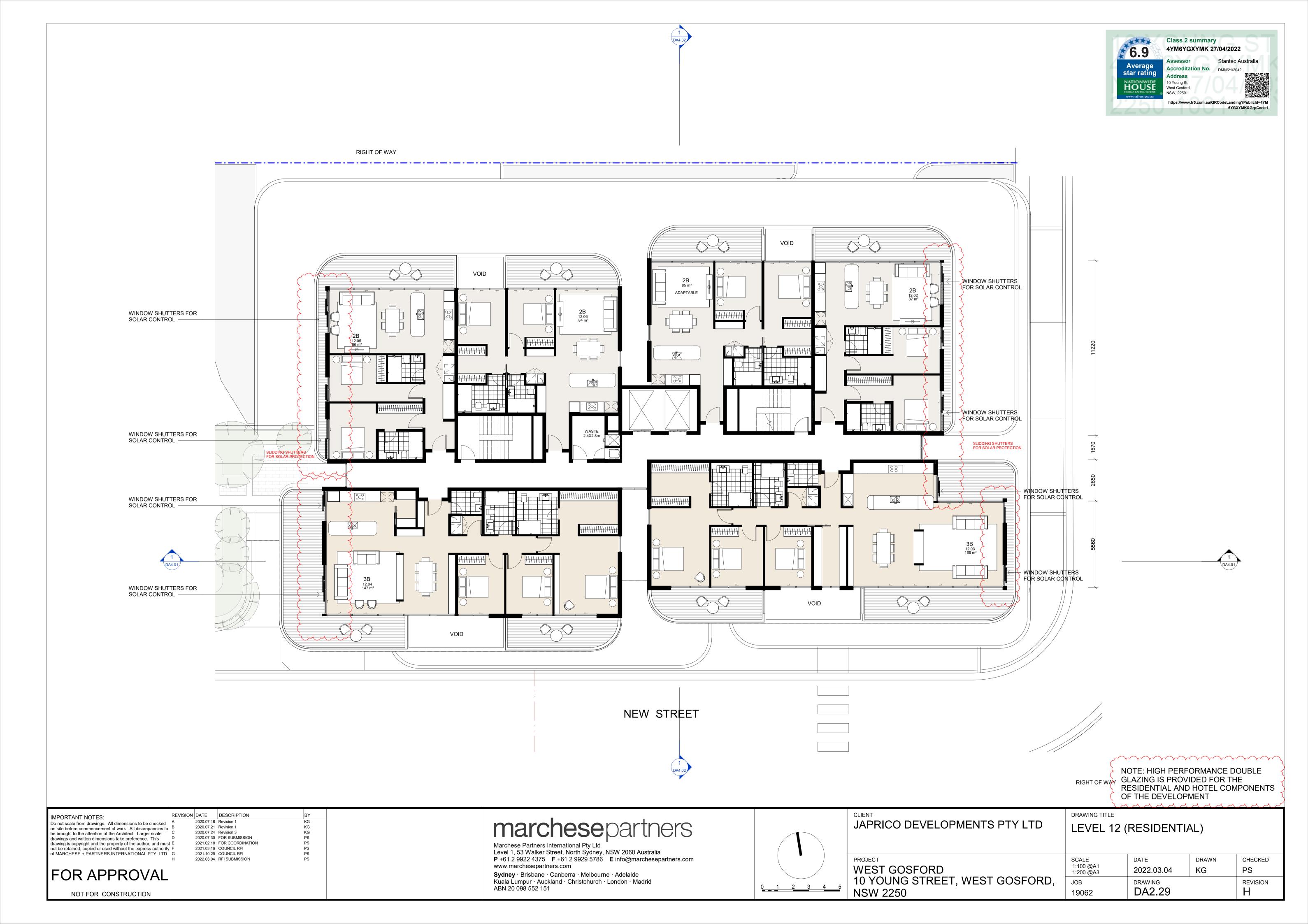


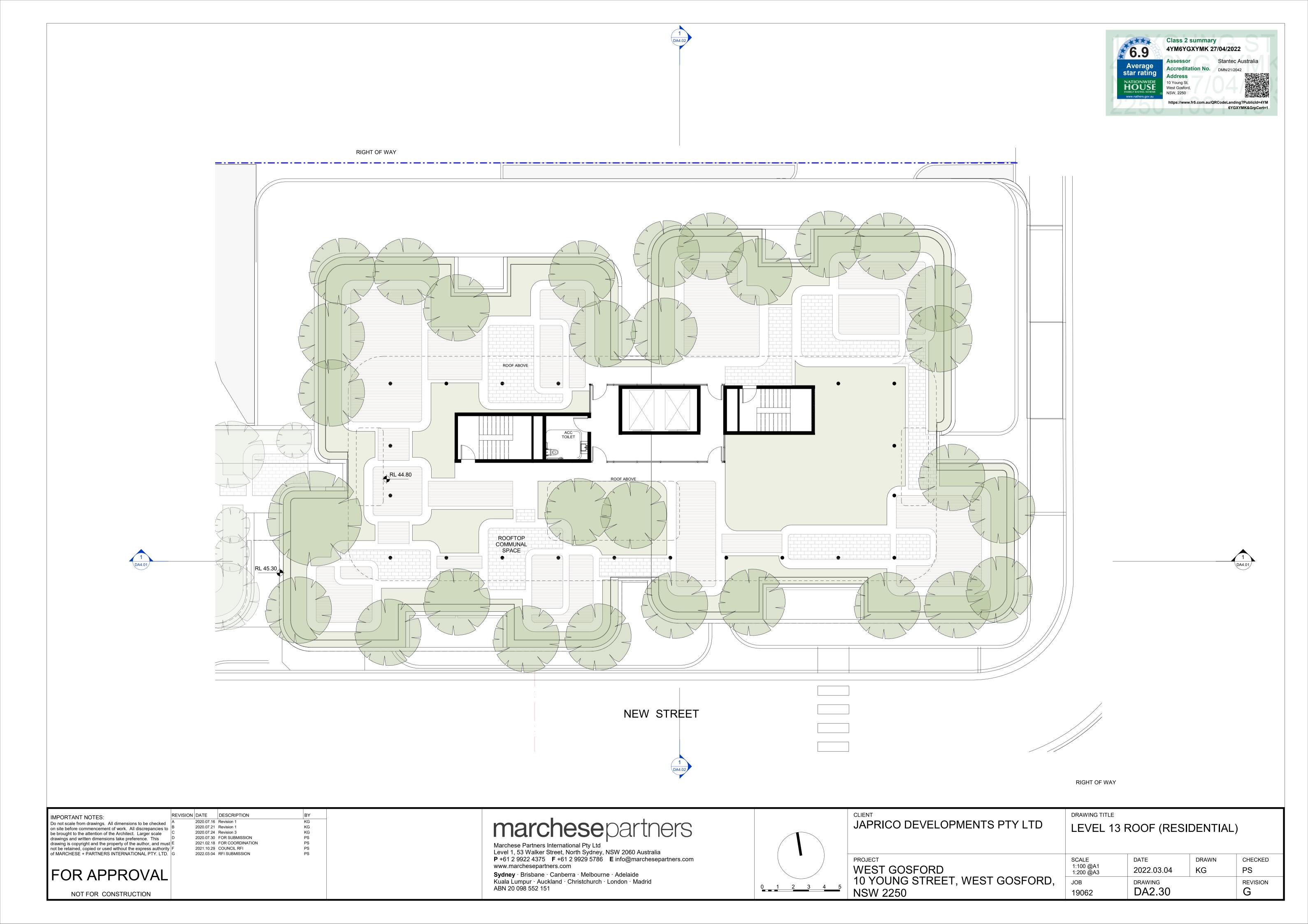


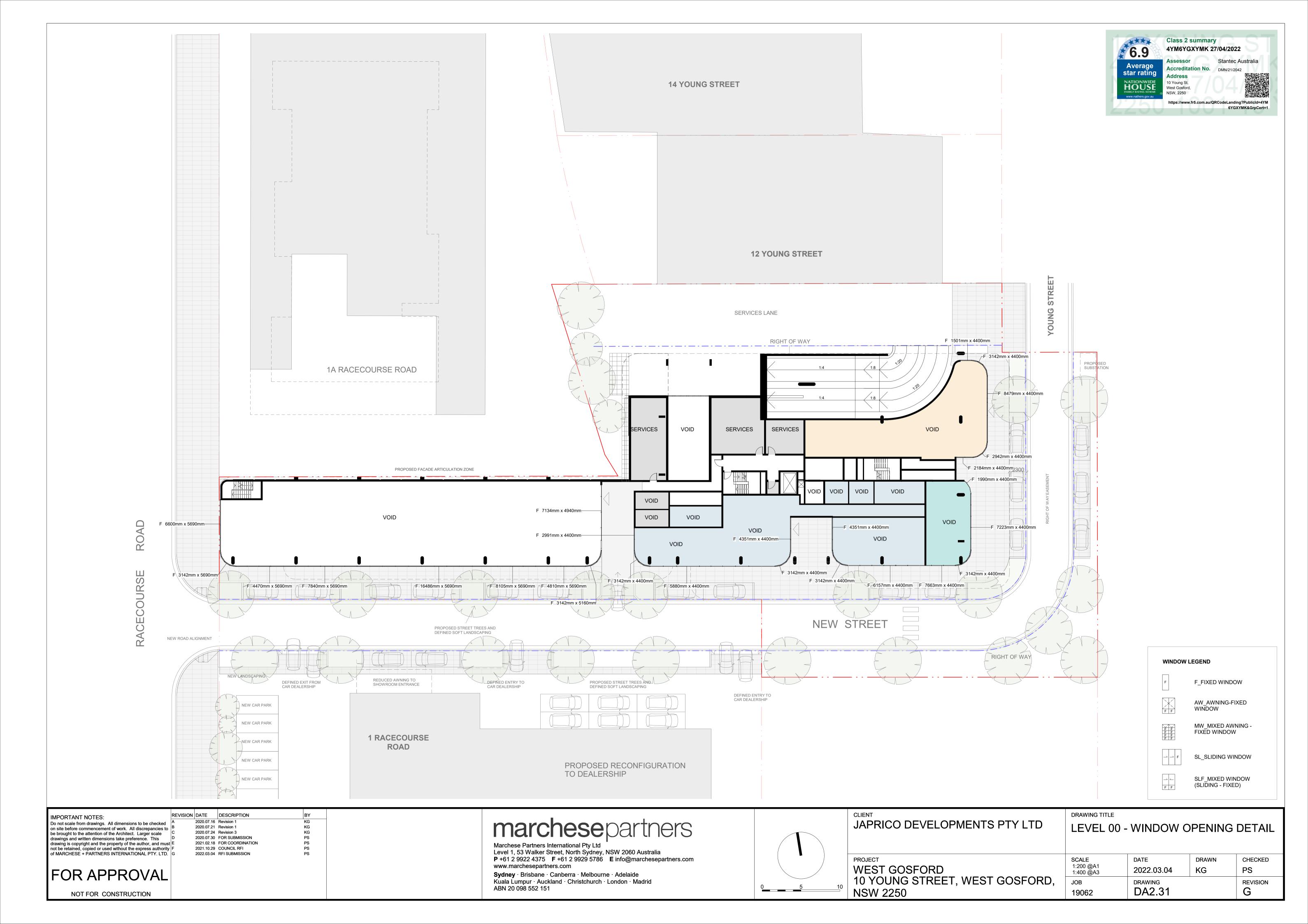


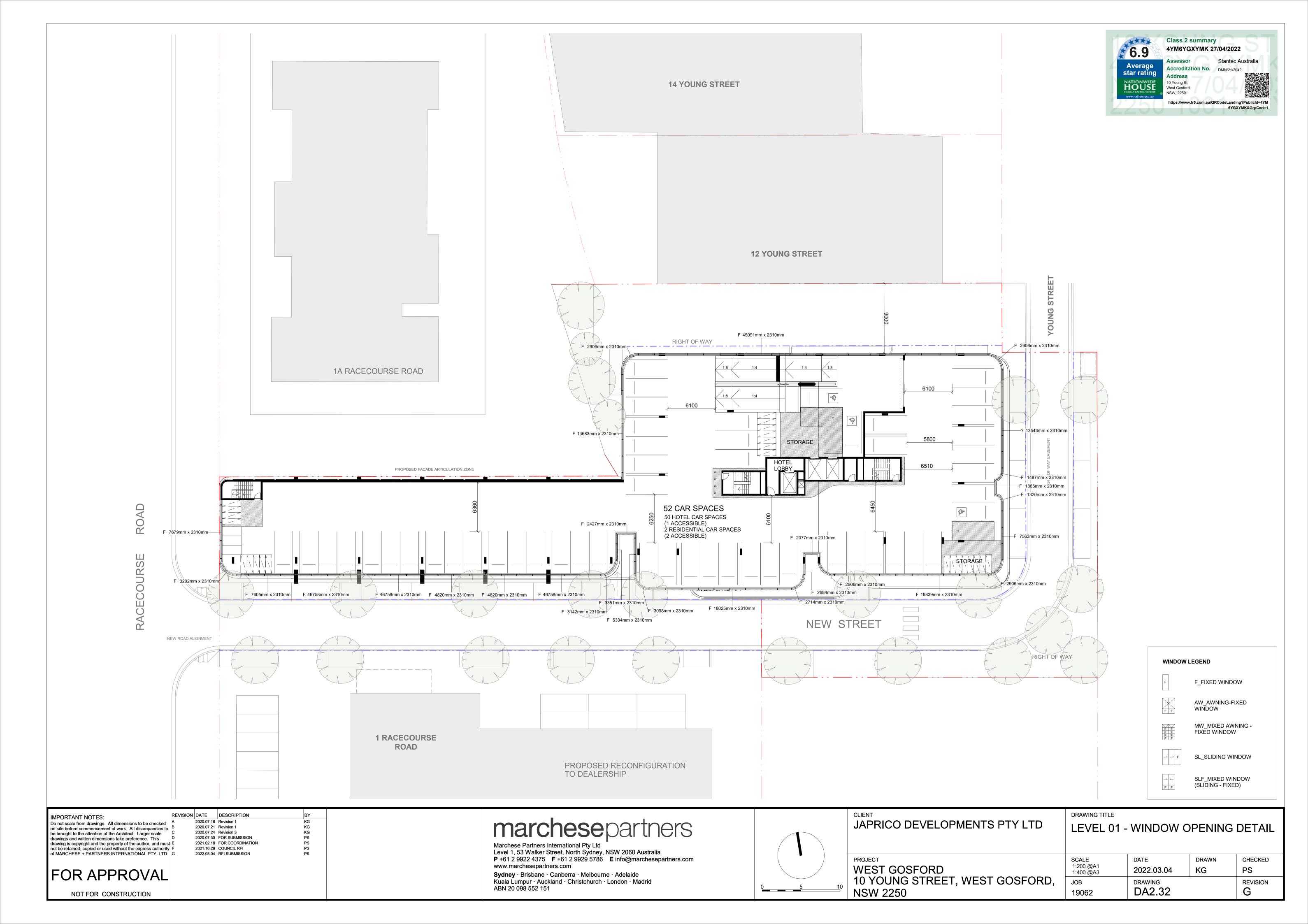


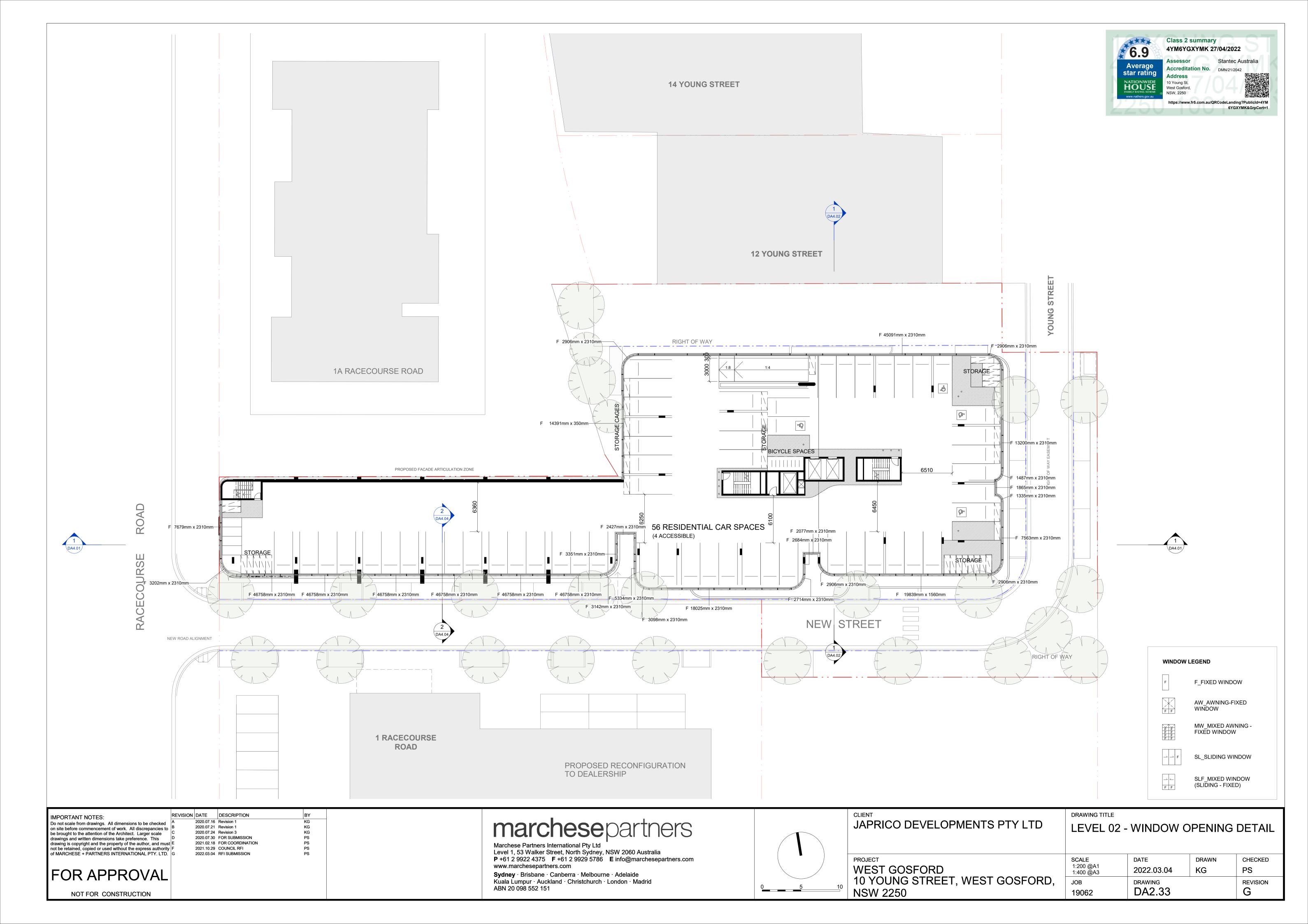


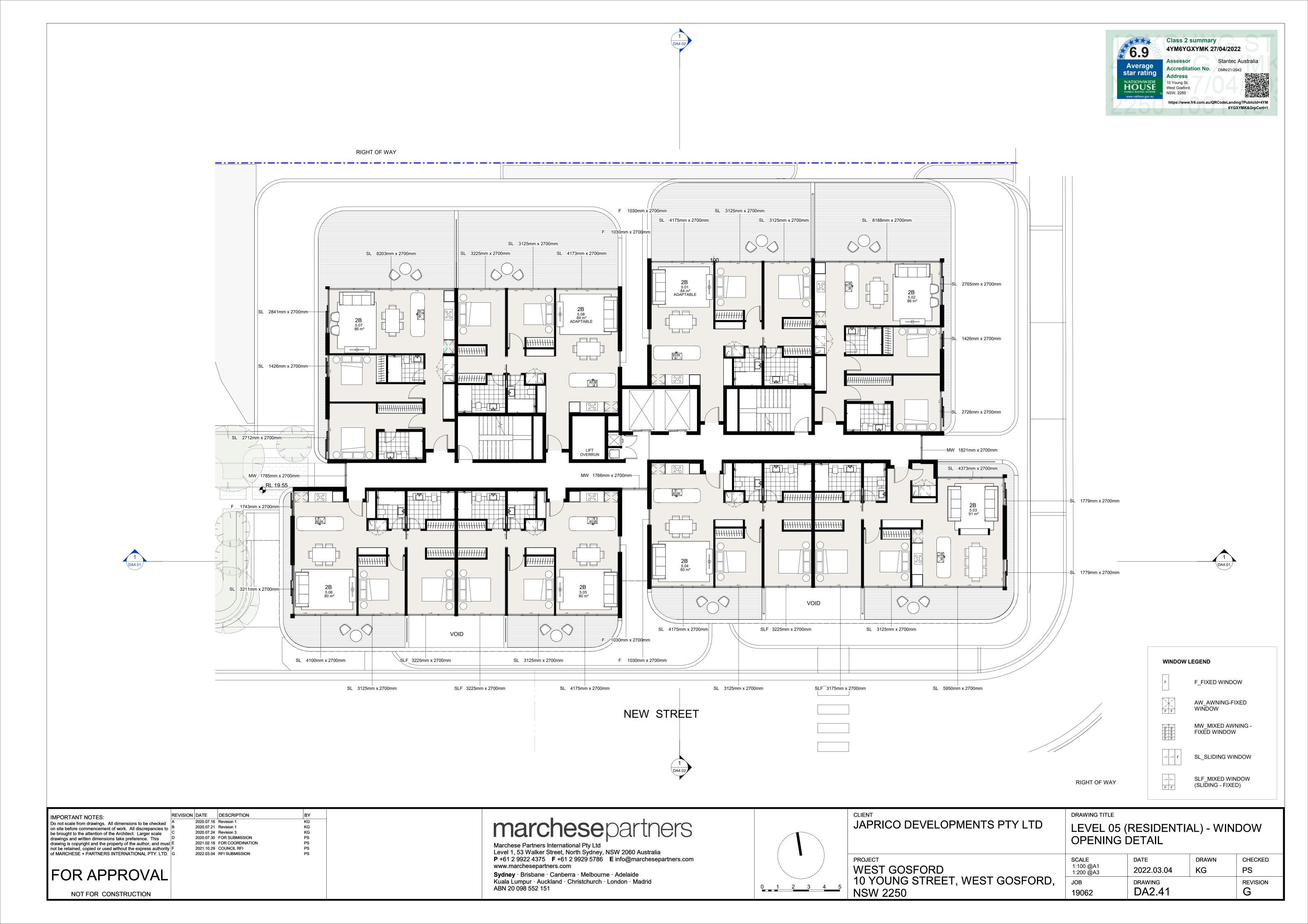


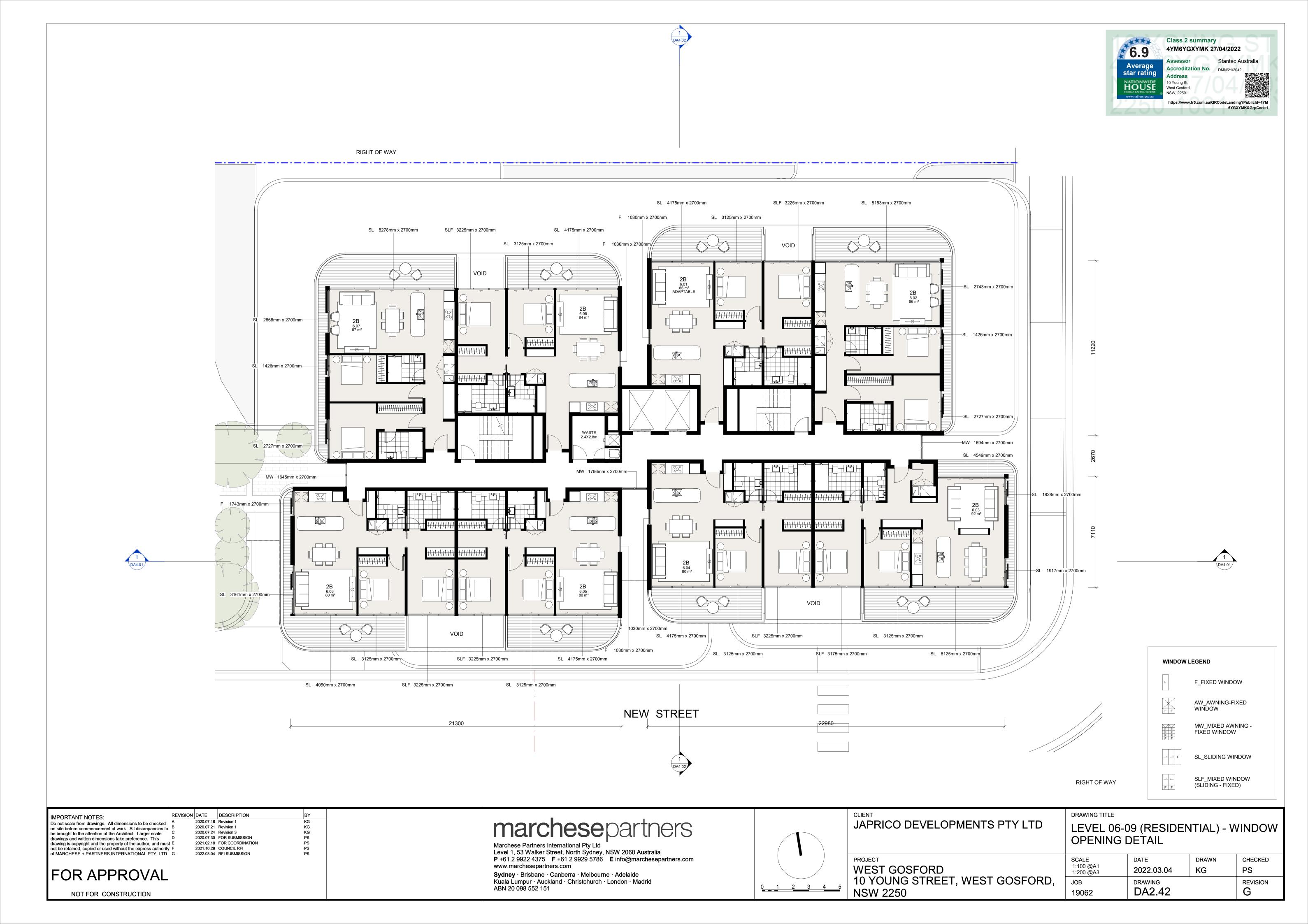




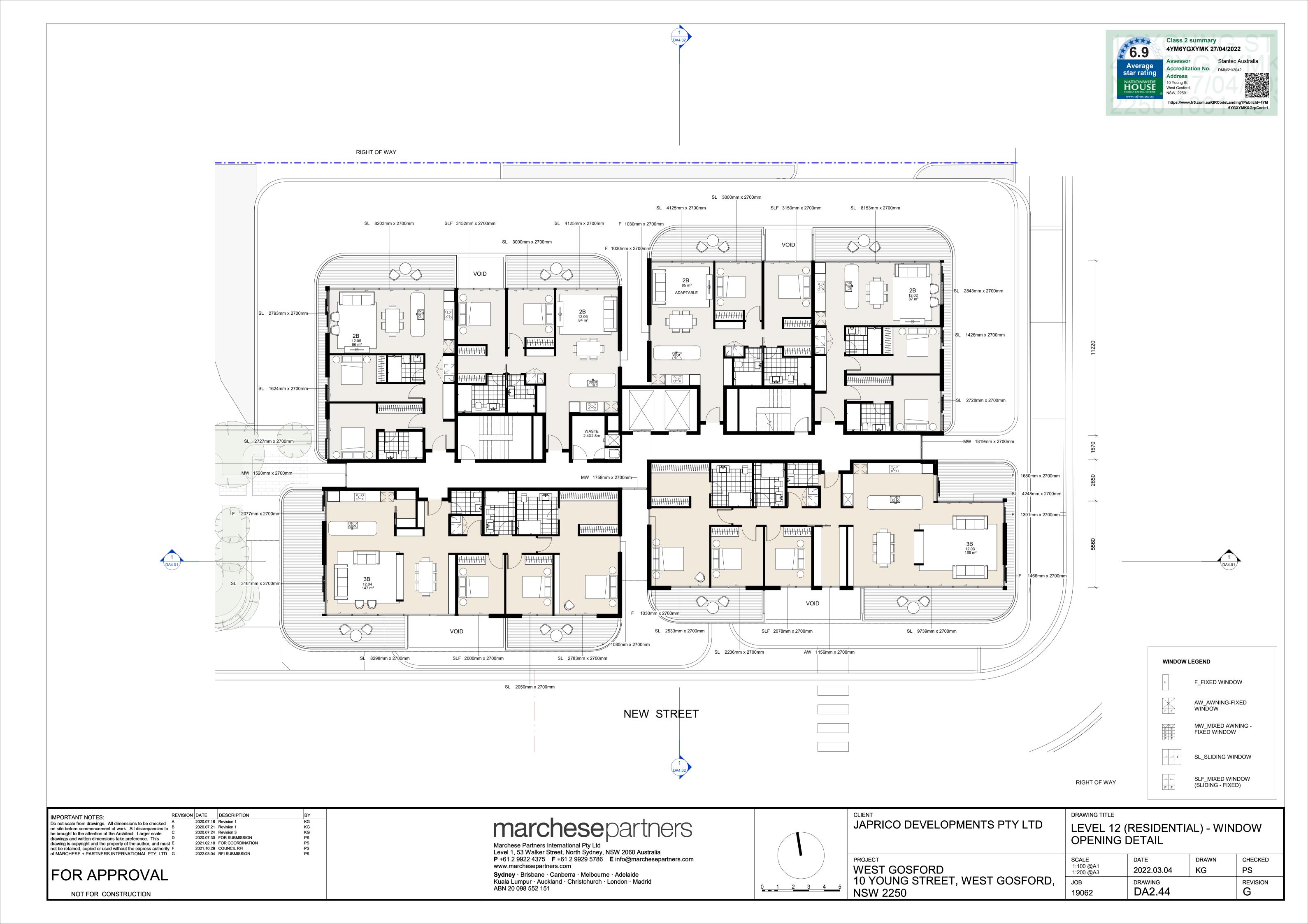


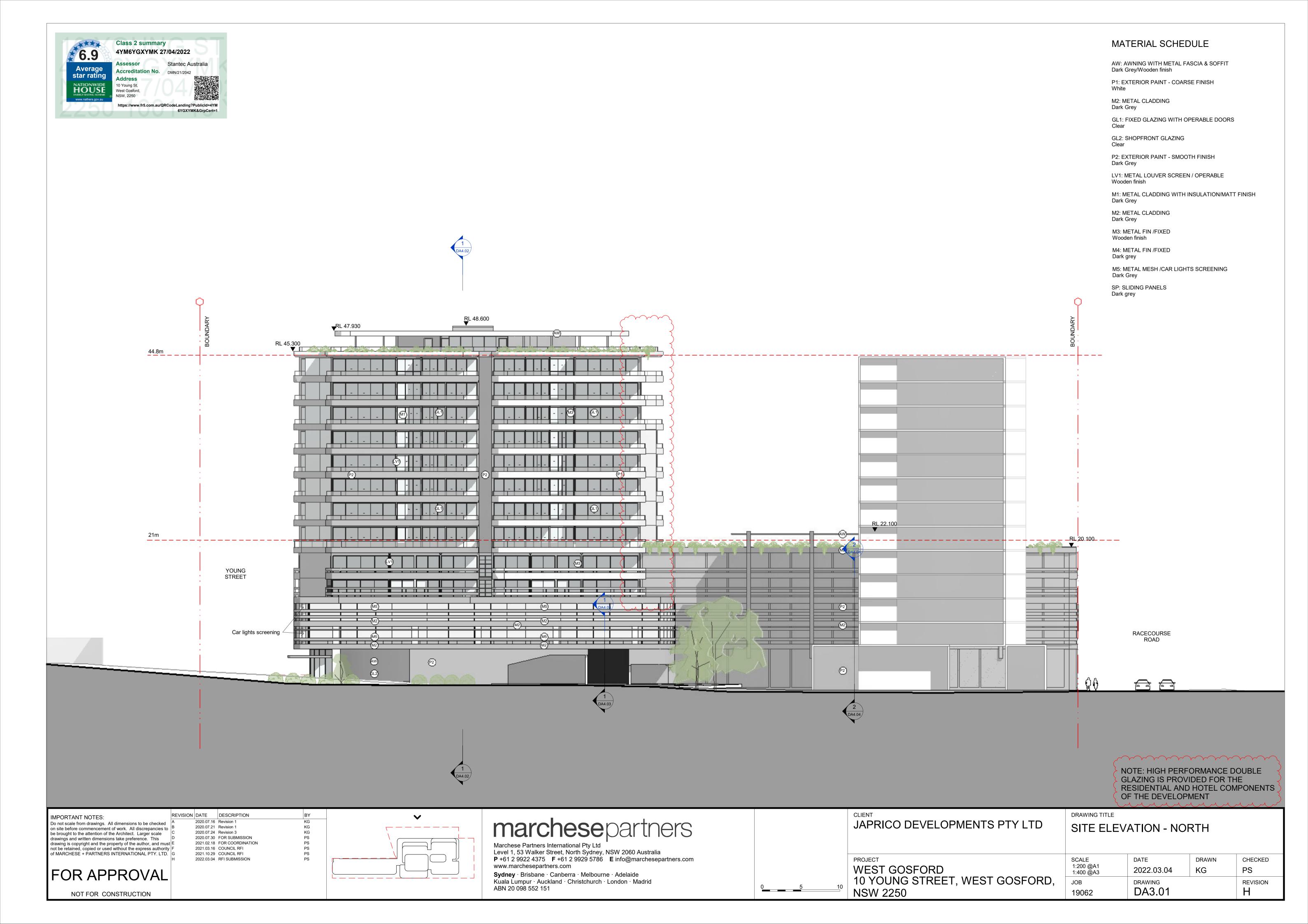


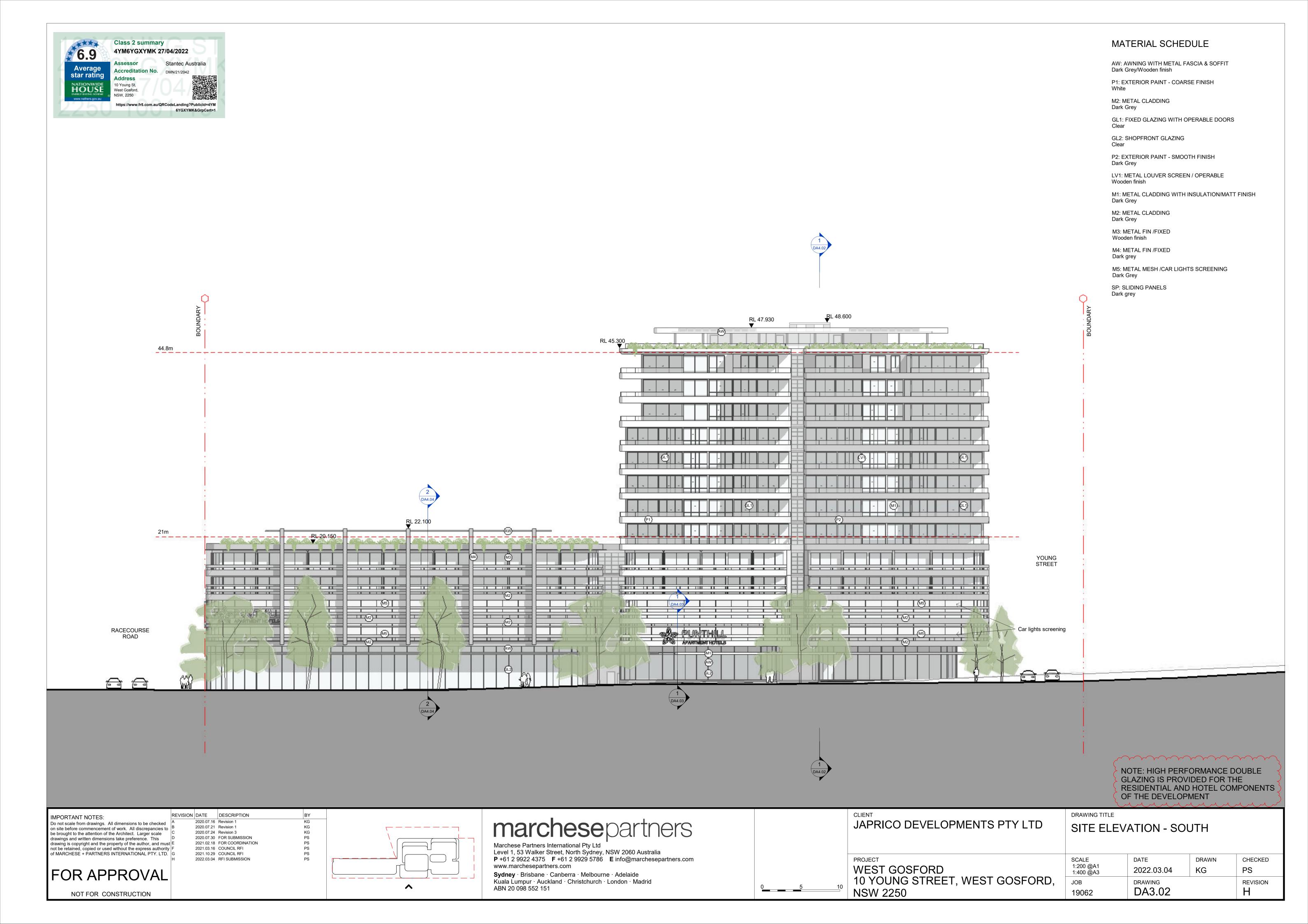


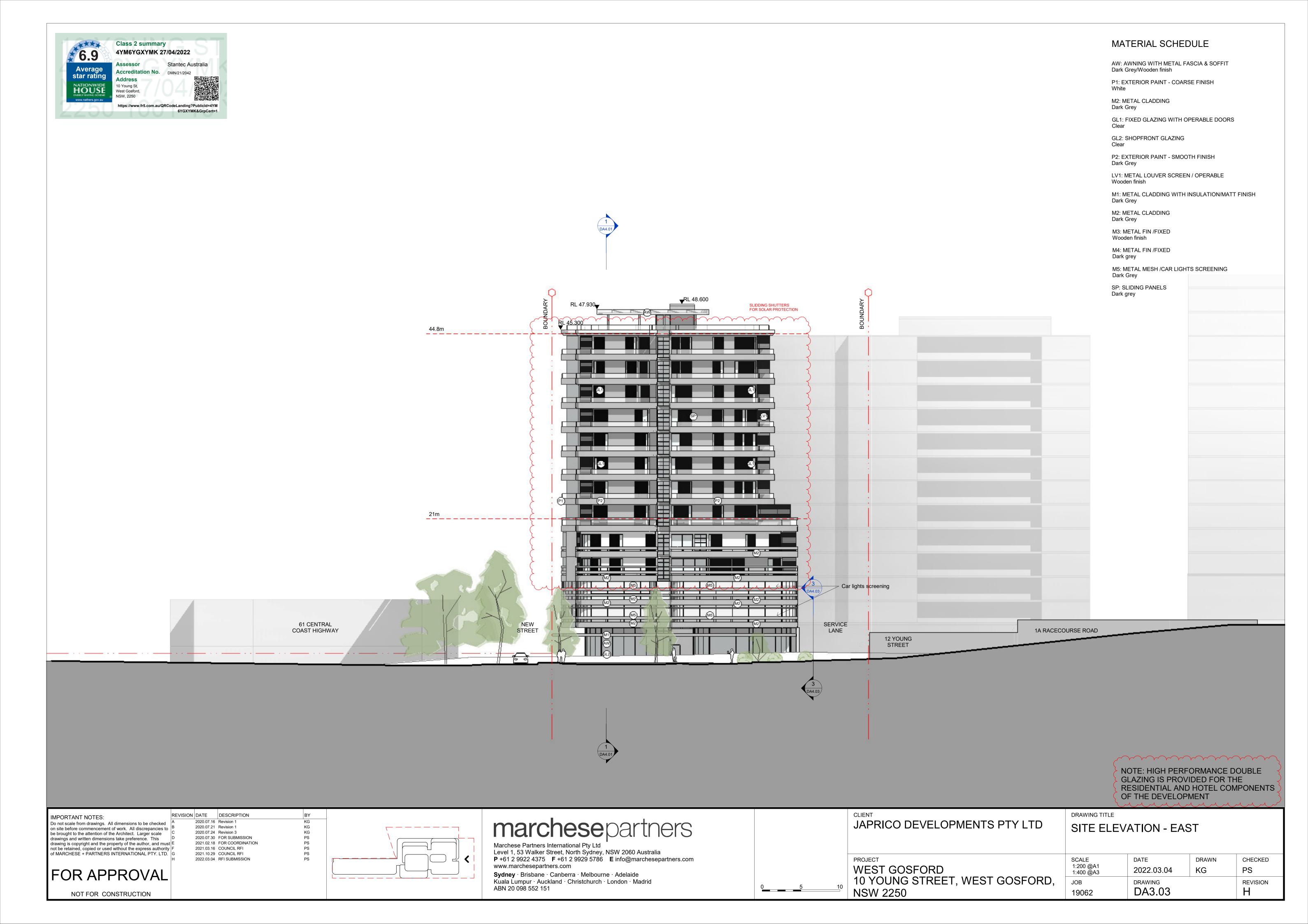


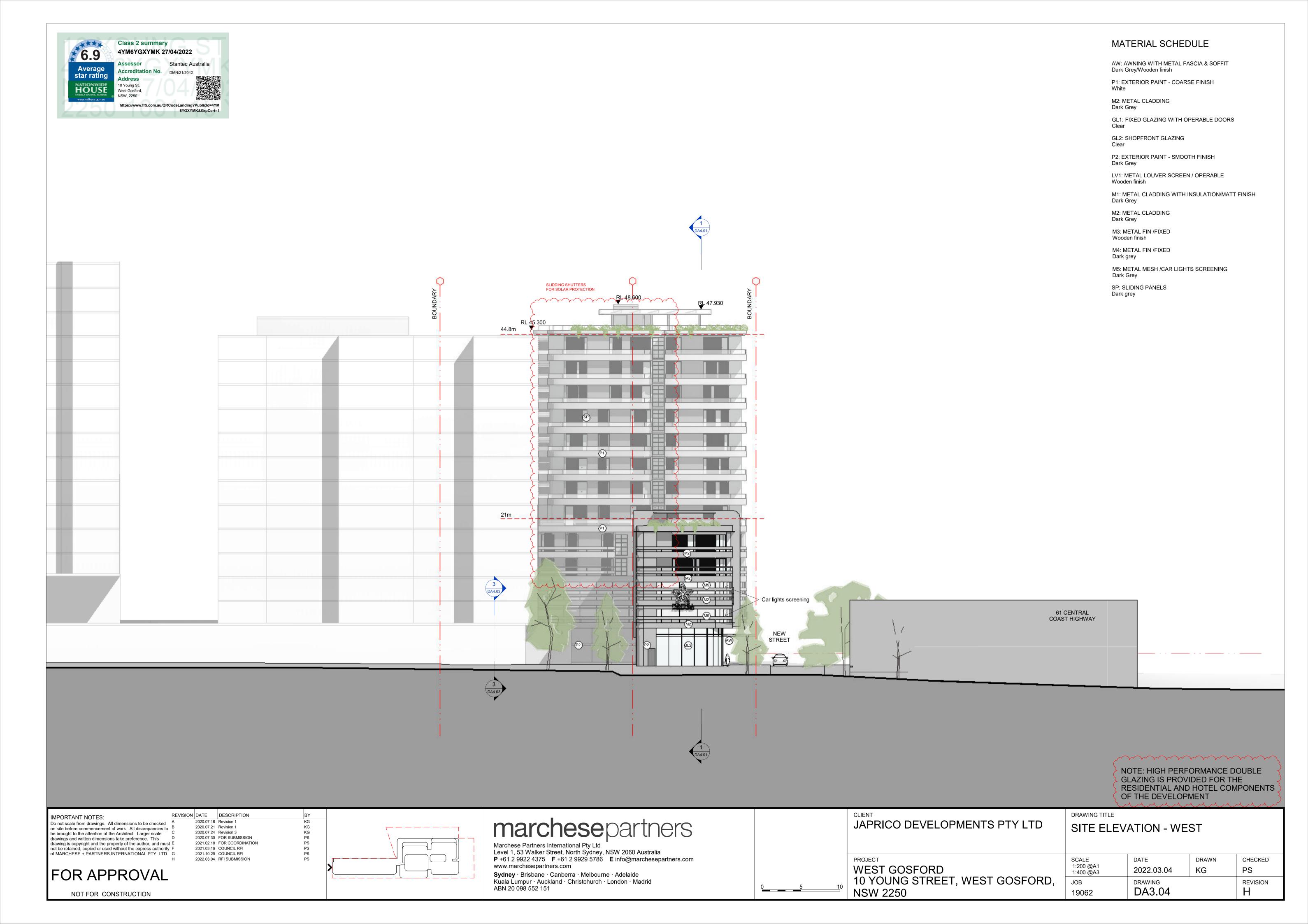




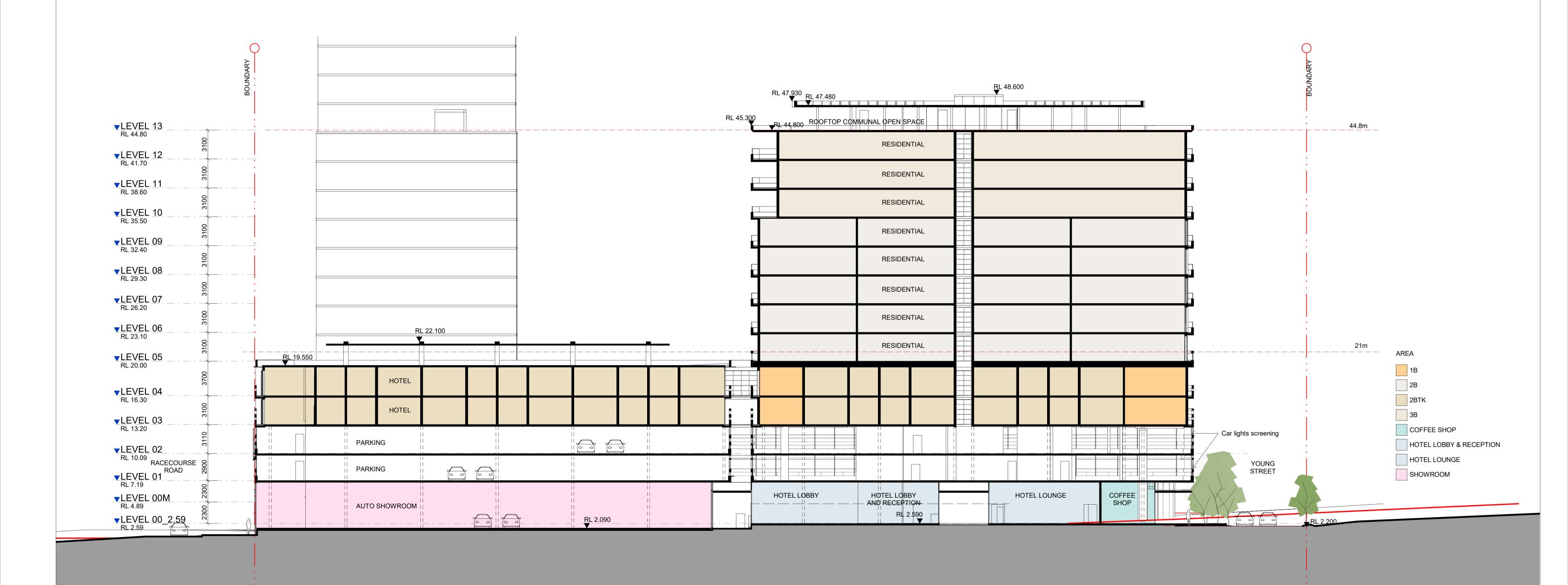


















DRAWING TITLE REVISION DATE DESCRIPTION IMPORTANT NOTES: marchesepartners JAPRICO DEVELOPMENTS PTY LTD Do not scale from drawings. All dimensions to be checked on site before commencement of work. All discrepancies to be brought to the attention of the Architect. Larger scale 2020.07.16 Revision 1 SITE SECTION - SECTION B-B 2020.07.21 Revision 1 2020.07.24 Revision 3 2020.07.30 FOR SUBMISSION drawings and written dimensions take preference. This 2021.02.18 FOR COORDINATION drawing is copyright and the property of the author, and must E Marchese Partners International Pty Ltd not be retained, copied or used without the express authority of MARCHESE + PARTNERS INTERNATIONAL PTY. LTD. G 2021.10.29 COUNCIL RFI Level 1, 53 Walker Street, North Sydney, NSW 2060 Australia 2022.03.04 RFI SUBMISSION **P** +61 2 9922 4375 **F** +61 2 9929 5786 **E** info@marchesepartners.com SCALE 1:200 @A1 1:400 @A3 PROJECT DATE DRAWN CHECKED WEST GOSFORD 10 YOUNG STREET, WEST GOSFORD, NSW 2250 www.marchesepartners.com 2022.03.04 KG PS FOR APPROVAL **Sydney** · Brisbane · Canberra · Melbourne · Adelaide Kuala Lumpur · Auckland · Christchurch · London · Madrid JOB DRAWING REVISION ABN 20 098 552 151 DA4.02 19062 G NOT FOR CONSTRUCTION

