Reference: 14.288l01v01

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30 October 2014

Urbis
Tower 2, Level 23, Darling Park
201 Sussex Street
Sydney NSW 2000

Attention: Mr Ian Cady

Re: Section 75W Application - 5 Whiteside Street, 14 & 16 David Avenue, North Ryde
Traffic Impact Statement

Dear Ian,

This Traffic Impact Statement (TIS) has been prepared to accompany a Section 75W application to modify the Concept Plan Approval (MP10_0165) granted in September 2013 for four residential buildings at 5 Whiteside Street, 14 and 16 David Avenue, North Ryde.

This report should be read in conjunction with our previous Transport Management and Accessibility (TMAP) Study which accompanied the original application, dated May 2011 (Ref: 10.183 report v2 May 2011), as well as the supplementary reports prepared and lodged with the authorities subsequent to this.

The following sections provide a summary of the approved development (including responses to various traffic-related conditions of consent, and a description of the current (modified) proposal.

This TIS documents the findings of our investigations in relation to the modified proposal, and should be read in the context of the Planning Report prepared by Urbis.

Concept Plan Approval

A Concept Plan Approval (MP10_0165) was granted in September 2013 for the following:

- Use of the site for four residential flat buildings, with a maximum yield of 135 units, comprising:
    - 37 one-bedroom / one-bedroom plus study units;
    - 89 two-bedroom / two-bedroom plus study units;
    - 9 three-bedroom units.

- Two basement levels of car parking and
- Road works to support the development.

The approved plans are included for reference as **Attachment 1**.

The Concept Plan Approval stipulates that the on-site parking be in accordance with the lower limit requirements of the Ryde DCP 2010, which are as follows:

- 0.6 spaces / one bedroom dwelling
- 0.9 spaces / two bedroom dwelling
- 1.4 spaces / three bedroom dwelling
- 1 visitor space / 5 dwellings

The application of these parking rates to the unit mix outlined above results in a total 'approved' parking provision of 142 parking spaces (115 spaces for residents, and 27 spaces for visitors).

Current Proposal

This Section 75W application seeks to modify the Concept Plan Approval to reflect a revised apartment mix (and to make consequential modifications), and changes to the Building B envelope as a result of further detailed design development. The key modifications proposed which are of relevance from a traffic perspective, can be summarised as follows:

- An increase in the maximum development yield from 135 units to 164 units, providing an increased proportion of smaller apartments;
- Amendments to the basement car park access and circulation arrangements, to facilitate more direct and efficient vehicular access and egress;
- Modifications to the access arrangements and at-grade circulation roadway, to reflect the conditions of the Concept Plan Approval.

The proposed unit mix is as follows:

- 70 one-bedroom / one-bedroom plus study units;
- 83 two-bedroom / two-bedroom plus study units;
- 11 three-bedroom units.

The on-site parking provision has been increased to 164 spaces (154 car spaces and 10 motorcycle spaces). Of the 154 car parking spaces proposed, 142 are in the basement car parks, with the remaining 12 at-grade on the circulation roadway (parallel spaces) and at the rear of the apartments fronting David Avenue.

Concept plans of the current proposal are included for reference as **Attachment 2**.

Comparison of Approved Scheme and Modified Scheme

Table 1 below provides a summary of the key attributes of the currently proposed (modified) scheme, compared with the approved scheme.

Table 1: Comparison of Approved Scheme and Modified Scheme

	Approved Scheme	Modified Scheme	Difference
One-bedroom Units	37	70	+33
Two-bedroom Units	89	83	-6
Three-bedroom Units	9	11	+2
Total Units	135	164	+29
Total Car Parking Spaces	142	154	+12

The traffic and parking related implications of the proposal, compared with the scheme as approved under the Concept Plan Approval, are discussed in the following sections.

Parking

The Concept Plan Approval stipulates that the on-site parking be in accordance with the lower limit requirements of the Ryde DCP 2010, which are as follows:

- 0.6 spaces / one bedroom dwelling
- 0.9 spaces / two bedroom dwelling
- 1.4 spaces / three bedroom dwelling
- 1 visitor space / 5 dwellings

These rates are consistent with the recommendations made in the RMS Guide to Traffic Generating Developments (Version 2.2, October 2002) for high density residential flat buildings in metropolitan sub-regional centres.

The application of these parking rates to the unit mix outlined above results in a parking requirement of 165 parking spaces as outlined in **Table 2** below.

Table 2: Parking Requirements

Apartment Type	Yield	Approved Parking Rate	Parking Requirement (spaces)
One-bedroom Units	70	0.6 spaces / dwelling	42
Two-bedroom Units	83	0.9 spaces / dwelling	75
Three-bedroom Units	11	1.4 spaces / dwelling	15
Visitors	164	1 visitor space / 5 dwellings	33
TOTAL			**165**

As shown in **Attachment 2**, the proposed scheme provides a total of 164 spaces (154 car spaces and 10 motorcycle spaces). Of the 154 car parking spaces proposed, 142 are in the basement car parks, with the remaining 12 at-grade on the circulation roadway (parallel spaces) and at the rear of the apartments fronting David Avenue.

Whilst the number of car parking spaces proposed (154 spaces) is lower than that calculated through the application of the approved parking rates to the revised unit yield and mix (165 spaces), the overall level of parking provision is considered to be acceptable given the following:

- Council, the DoPI, and the PACs desire to encourage or enforce the suppression of car parking within residential developments in proximity to convenient public transport services, to reduce car dependency, assist in achieving outcomes for modal shift, and to help manage projected long term traffic growth in the area.

- The required number of parking spaces (165 spaces) is almost achieved if the 10 motorcycle parking spaces are included in the parking count (164 spaces total). This encourages a more sustainable mode of transport than the private car.

- A car share scheme will be implemented as conditioned in the Concept Plan Approval, to further reduce resident car dependency. This would cater for the needs of residents who may not require their own vehicle, relying on non-car travel modes for the journey to work, but may still require the use of a car for certain trips (e.g. shopping), or during the evenings and on weekends when car usage is often a more viable or convenient option than alternative transport modes.

Finally, the level of parking proposed responds to the requirement of the DGR's for the Concept Plan Approval, which require consideration of:

- 'identification of measures to manage travel demand and increase the use of public and non-car transport modes....' and

- 'appropriate on-site parking provision having regard to the Council and the RTA guidelines and the availability of public transport (Note: the Department support reduced car parking in areas well-served by public transport).'

In light of the above, the proposed level of on-site parking is considered to be appropriate given the nature and location of the development, generally consistent with Council, DoPI, and RMS' requirements, and adequate to cater for the demand typically generated without parking overspill into the surrounding road network. In our view, it strikes an appropriate balance between encouraging more sustainable modes of travel, and minimising impact upon the amenity of local residents.

Traffic Generation and Impacts

The original Transport Management and Accessibility (TMAP) Study undertaken by TRAFFIX prior to the Concept Plan Approval was prepared on the basis of a development yield of 213 units.

A Paramics micro simulation model was used to assess the impacts of the development on the surrounding road network. The generation of the proposed development was estimated using a rate of 0.4 trips / unit / hr during the peak hours, which was higher than that stipulated in the RTA Guide to Traffic Generating Developments for a high density residential flat building in a metropolitan sub-regional centre (0.29 trips / unit / hr). This was therefore a conservative assessment.

Application of this rate to the 213 units proposed at that time resulted in a generation of 85 trips in the peak hours. The conclusion of this assessment was that the development (213 units) would

have a negligible impact on the operation of critical intersections within the local road network during either the AM or PM peak period.

In response to issues raised by local residents, the Department commissioned an independent traffic assessment (undertaken by Parsons Brinkerhoff) which concluded that the development (as originally submitted) would generate a low volume of additional traffic onto the surrounding road network.

Notwithstanding the above, the yield was progressively reduced, and ultimately, a maximum yield of 135 units was approved on the subject site.

The current proposal involves a higher yield than that approved under the Concept Plan Approval, however it is noted that since the completion of the original TMAP assessment, the RMS has released updated traffic generation data which suggests a lower traffic rate is appropriate for high density residential developments which are close to public transport.

RMS Technical Direction TDT 2013/04a provides the following trip generation rates:

- AM peak hour: 0.19 trips / unit
- PM peak hour: 0.15 trips / unit

These trip rates have been adopted on other sites within the area to take account of the excellent public transport services that are available within a close walking distance, as well as Council's objective to suppress the provision of on-site car parking (by enforcing the lower end of the parking range in Council's DCP), to encourage alternative transport modes.

The application of the above rates to the proposed yield of 164 units provides the following estimated trip generation:

- AM peak hour: 31 trips (approximately 25 departures and 6 arrivals)
- PM peak hour: 25 trips (approximately 5 departures and 20 arrivals)

These volumes are clearly very low (in the order of one vehicle trip per two minutes, on average), and would be diluted as distance from the site increases.

Importantly, these volumes are substantially lower than (i.e. less than half of) those modelled as part of the original TMAP assessment which was undertaken.

Table 3 below provides a summary of the forecast traffic generation of the approved scheme, as well as the currently proposed (modified) scheme.

Table 3: Comparison of Traffic Generation (Approved vs Proposed Scheme)

Scheme	Yield	Assumed Traffic Generation Rate	AM Peak Traffic Generation	PM Peak Traffic Generation
Scheme assessed under TMAP	213 units	0.40 trips / unit / hour[1]	85 vph	85 vph
Approved Scheme	135 units	0.40 trips / unit / hour[1]	54 vph	54 vph
Approved Scheme	135 units	0.29 trips / unit / hour[2]	39 vph	39 vph
Currently Proposed Scheme	164 units	0.19 trips / unit / hour (AM)[3] 0.15 trips / unit / hour (PM)[3]	31 vph	25 vph

[1] Rate for Medium density residential flat buildings, RTA Guide to Traffic Generating Developments Version 2.2, Oct 2002
[2] Rate for High density residential flat buildings in Metropolitan Sub-Regional Centres, RTA Guide to Traffic Generating Developments Version 2.2, Oct 2002
[3] Rate for High density residential flat dwellings, RMS Technical Direction TDT 2013/04a

On the basis of the forecast traffic volumes summarised in **Table 3** above, it is considered that the development is effectively consistent with the Concept Plan Approval (in terms of the expected level of traffic generation).

Also, whilst the scheme analysed as part of the original TMAP assessment involved modifications to the Epping Road / Whiteside Street intersection (the provision of a left-out access from Whiteside Street onto Epping Road), it is noted that the approved concept involved maintaining the current arrangement at this intersection (left-in only from Epping Road into Whiteside Street). In effect, this access arrangement would address many of the issues raised which we understand prompted the requirement for the Local Area Traffic Management (LATM) study (e.g. vehicles rat-running past the site to access Epping Road from Whiteside Street). The current scheme proposes left-in access from Epping Road to Whiteside Street only, consistent with existing arrangement and the requirements of the Concept Plan Approval.

Furthermore, it should be noted that the M2 interchange at Talavera Road / Christie Road was completed in early 2013. These ramps provide an additional direct and convenient route to the city, which we expect may have reduced infiltration within the residential precinct.

In our view, consideration of the above factors, combined with the fact that the predicted traffic generation of the proposed development has reduced substantially as a result of the release of updated traffic generation data by RMS, suggests that an LATM study may well be unnecessary. Notwithstanding this, the applicant is willing to undertake a study, in consultation Council and RMS as conditioned, prior to the lodgement of the development application. This is discussed further in the following sections of this report.

Modified Access Arrangements

As previously discussed, under the Concept Plan Approval, the Commission determined that the existing arrangements at the Epping Road / Whiteside Street intersection should be retained. That is, all traffic will be required to exit the site via Whiteside Street / Parklands Road, or via David Avenue.

Figure 1 below shows the main routes it is envisaged would be used to exit the site, under the access arrangements conditioned in the Concept Plan Approval (i.e. assuming no exit from Whiteside Street to Epping Road).

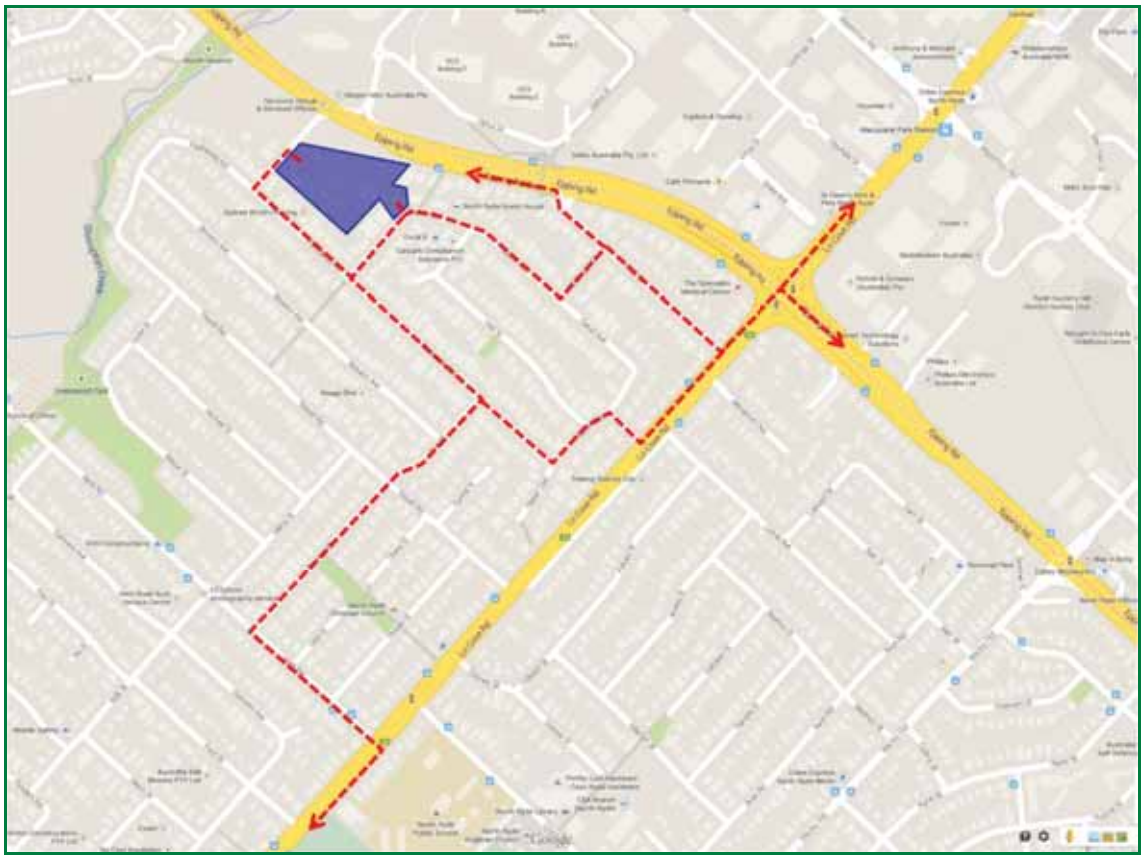


Figure 1: Main Egress Routes (No Egress from Whiteside St onto Epping Rd)

The critical period for this assessment is the AM peak hour, when the majority of traffic generated by the development will be exiting traffic.

Assuming an 80% / 20% departure / arrival profile during the AM peak hour, and based upon the forecast traffic generation as outlined in the previous section, the volume of traffic expected to exit the development is 25 vehicles (i.e. less than one vehicle every two minutes during the AM peak hour).

These 25 vehicles would be distributed across the two access points (Whiteside Street and David Avenue), and various routes as shown in **Figure 1** above to access the surrounding road network, depending upon their destination.

The likely distribution of traffic onto the surrounding road network has been determined using the Ministry of Transport 2006 Journey to Work Data for Travel Zone 2487, in which the development site is located. Based upon this data, the following directional distributions are assumed:

- 11% to the north
- 17% to the south
- 67% to the east
- 4% to the west

The application of the above directional distributions leads to the predicted exiting traffic volumes as shown in **Figure 2** below.

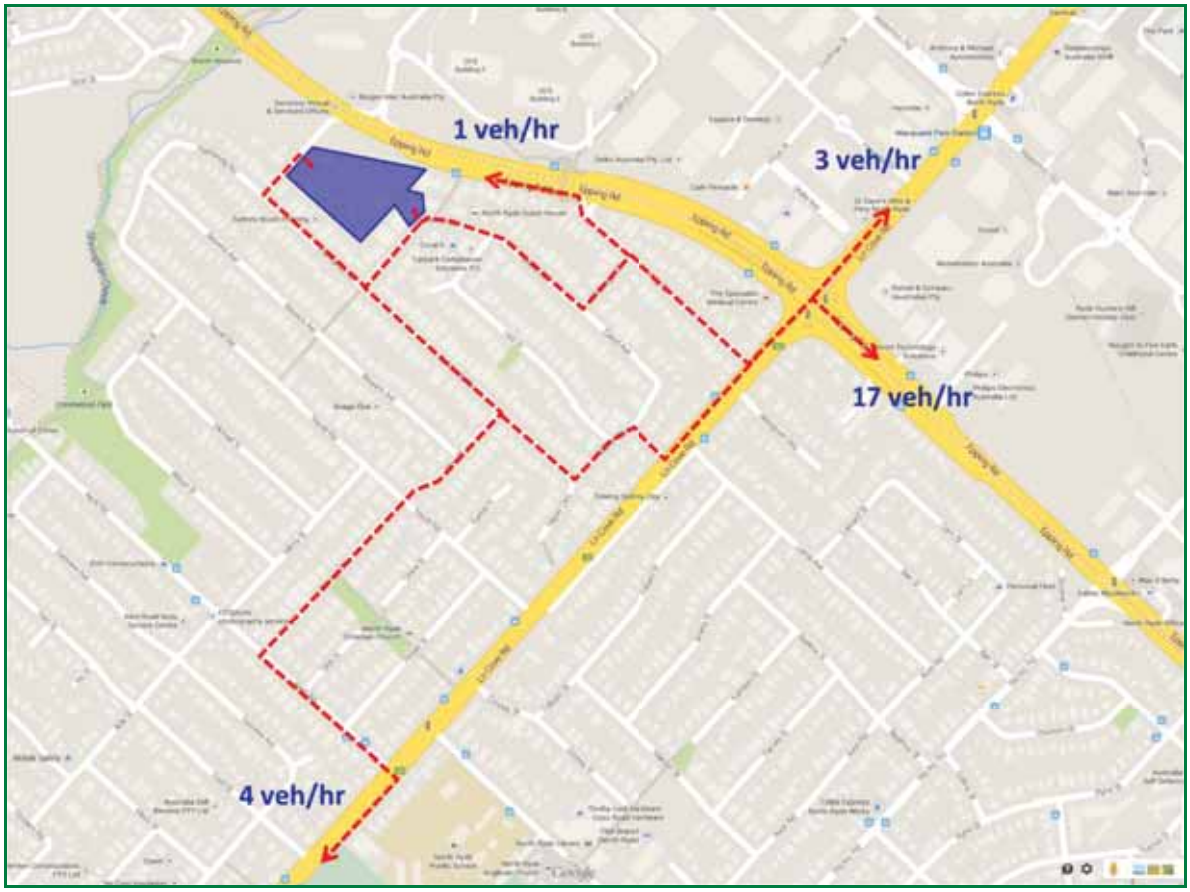


Figure 2: Predicted Exiting Volumes, AM Peak Hour (No Egress from Whiteside St onto Epping Rd)

This level of traffic generation is clearly very low, and well within the range of typical traffic volume fluctuations. In our opinion, the traffic generated by the proposed development, when distributed across several routes, would be effectively unnoticeable, and have a negligible impact upon the surrounding road network.

Notwithstanding the above, the applicant has committed to undertaking a Local Area Traffic Management (LATM) study, to assess the impact of the traffic generated by the development upon the local area, and investigate mitigation measures if necessary. This is discussed further in the following sections.

Internal Traffic Design and Modifications

The internal design will be assessed in more detail at the Project Application stage, however in general the principles of AS2890.1 have been reflected in the concept plans provided in **Attachment 2**. In particular, the following aspects considered noteworthy:

- The internal driveway between David Avenue and Whiteside Street has been modified to reflect condition B4 in the Concept Plan Approval, which states that 'the internal driveway between the townhouses fronting David Avenue shall be design to accommodate two-way traffic.'

- Access to the basement car parks has been modified, to provide separate two-way driveways to the northern and southern car parks, allowing the vehicular connection between these two car parks shown in the Concept Plan Approval to be removed. This is considered to be a significant improvement over the approved scheme, allowing residents and visitors to access and egress their respective parking spaces without having to circulate through the entire car park (from the northern to the southern module). This provides much more convenient and legible access for motorists.

- Basement parking modules are generally designed with a minimum width of 2.4 metre wide bays and 5.8 metre wide aisles, which complies with the requirements of AS2890.1 for User Class 1A parking (low turnover resident parking).

- Parking spaces located adjacent to obstructions have been provided with an additional 300mm clearance, if vertical obstructions are outside the clearance envelope specified in AS2890.1 Figure 5.2.

- Accessible parking spaces are located within close proximity to lifts and designed in accordance with the requirements of AS2890.6 (Off Street Parking for People with Disabilities), with 2.4m wide parking spaces and 2.4m wide adjacent shared zones. A total of 17 accessible parking spaces are proposed, to cater for the 10% (i.e. 17) accessible / adaptable units.

Whilst a number of design elements (e.g. ramp grades and circulation roadway geometry) will need to be confirmed and refined at Project Application stage, the scheme now proposed under this Section 75W application is considered to be generally consistent with that previously approved from a traffic perspective, with the exception of some key improvements and modifications to reflect the conditions of the Concept Plan Approval.

Service Vehicle Manoeuvring

The servicing area has been designed to accommodate up to a refuse collection vehicle with the dimensions as advised by Council's Waste Section Manager.

A 9.4m long, 3.4m high vehicle with a 10m turning radius has been used to assess manoeuvring requirements into the loading bay. The results of this assessment are included as **Attachment 3**, and demonstrate that a vehicle of this size is able to manoeuvre into this area.

It is understood that the height clearance in this area is currently proposed to be in the order of 3.6m. This would accommodate all smaller service vehicles (e.g. courier vans and trade vehicles), as well as most removalist trucks.

In the event that a larger vehicle seeks to access the site, the kerbside parallel parking spaces on the internal circulation roadway could be used for this purpose.

Suggested Scope of LATM Study

As previously discussed, the applicant has committed to undertaking a Local Area Traffic Management (LATM) study to assess the impact of the traffic generated by the development upon the local area, and investigate mitigation measures if necessary.

It is envisaged that the outcomes of this study and associated recommendations would be presented to Council in a report which accompanies the Project Application for the development.

Given the requirement to undertake the study in consultation with Council and RMS, we have outlined following a suggested study scope, for Council and RMS' consideration.

- Undertake a site inspection to observe the current parking demand in the surrounding streets during the relevant period, as well as local travel behaviour;
- Undertake traffic counts at the following intersections during the AM and PM peak periods (7 – 9am and 4 – 6pm):
    - Epping Road / Paul Street
    - Lane Cove Road / Paul Street
    - Lane Cove Road / Napier Crescent
    - Lane Cove Road / Kent Road
- Compare historic traffic volumes at these intersections with the recorded traffic volumes, to determine whether there has been any notable recent change in traffic behaviour (i.e. 'rat-running') in the area (e.g. as a result of the completion of the M2 interchange at Talavera Road / Christie Road in early 2013).
- Estimate the increase in traffic generation at the intersections above as a result of the proposed development.
- Model the above intersections using SIDRA (without and with the proposed development), to quantify the expected impact of the development traffic upon the performance of these intersections.
- Consider and identify potential road / intersection treatments and improvements which may address existing traffic issues in proximity to the site. Such treatments would necessarily consider existing constraints (e.g. current road reserve widths), but may include:
    - Modifications to on-street parking arrangements;
    - Minor treatments to improve intersection capacity;
    - Pedestrian / cyclist facilities including paths and crossings; and
    - LATM treatments such as vertical and horizontal deflection devices, to control vehicle speeds.

The results of the above tasks would be a concise report which suggests a series of treatments and improvements for Council and RMS' consideration.

We request feedback on the scope outlined above, to guide the direction of this LATM study.

Conclusion

In summary, the development which is proposed under this Section 75W application is largely consistent with the approved scheme from a traffic perspective, with the exception of some key improvements, and modifications to reflect the conditions of the Concept Plan Approval.

In view of the information provided in this report, the Section 75W application is supportable on traffic planning grounds, noting that various internal design elements would be confirmed and refined at Project Application stage,

Please contact the undersigned should you have any queries or require any further information or assistance.

Yours faithfully

traffix

Anne Coutts
Senior Traffic Engineer

Attachments: 1) Approved Plans and Conditions of Consent
2) Reduced Plans – Section 57W Application
3) Vehicle Swept Path Analyses

Attachment 1

Approved Plans and Conditions of Consent

Concept Approval

Section 75O and 75P of the *Environmental Planning & Assessment Act 1979*

As delegates of the Minister for Planning and Infrastructure under delegation executed on 14 September 2011, pursuant to Part 3A of the Environmental Planning and Assessment Act 1979 (the Act), the NSW Planning Assessment Commission determines:

(a) to approve the concept plan referred to in Schedule 1, subject to the terms of approval and modifications in Schedule 2,
(b) under section 75P(1)(b) of the Act, development the subject of the Concept Plan is subject to Part 4 or Part 5 or the Act whichever is applicable,
(c) under section 75P(2)(c) of the EP&A Act, where development is subject to Part 4 of the Act (other than complying development), that development is subject to the further environmental assessment requirements specified in Schedule 3 of this approval.

The modification and further assessment requirements are required to:

- Encourage the orderly future development of the site; and
- Ensure adequate mitigation of environmental impacts of future development.

Garry West
Member of the Commission

Donna Campbell
Member of the Commission

Richard Thorp
Member of the Commission

Sydney 10 September 2013

SCHEDULE 1

Application No.:	MP10_0165
Proponent:	EGC Custodian Services Pty Ltd
Approval Authority:	Minister for Planning and Infrastructure
Land:	Lot 6 DP 260000, Lot 3 DP 25688 & Lot 4 DP DP25688 5 Whiteside Street and 14 & 16 David Avenue, North Ryde
Project as approved:	Residential flat development concept, including: • use of the site for residential flat buildings; • indicative building envelopes for 4 buildings to a maximum height of RL 78.6; • Limiting the maximum yield to 135 units; • Two split basement levels of car parking; • Road works and site access arrangements to support the development; and • Landscaping and associated works.

DEFINITIONS

Act	means the *Environmental Planning and Assessment Act 1979* (as amended).
Advisory Notes	means advisory information in relation to the approved development.
BCA	means the *Building Code of Australia*.
Certifying Authority	has the same meaning as Part 4A of the Act.
Council	means City of Ryde Council.
Department	means the Department of Planning and Infrastructure or its successors.
Director-General	means the Director-General of the Department or his nominee.
Environmental Assessment (EA)	means the Environmental Assessment prepared by Urbis Pty Ltd dated 6 June 2011.
Minister	means the Minister for Planning & Infrastructure.
MP10_0165	means the Major Project described in the Proponent's Environmental Assessment as amended by the Preferred Project Report.
Preferred Project Report (PPR)	means the Preferred Project Report prepared by Urbis Pty Ltd dated 4 April 2012 as amended by submission from Urbis dated 25 February 2013 (including Attachments 1-4) and as amended specification prepared by SJB Architects dated 22.02.2013.
Proponent	means EGC Custodian Services Pty Ltd or any party acting upon this approval.
Regulation	means the *Environmental Planning and Assessment Regulation, 2000* (as amended).

SCHEDULE 2

PART A - TERMS OF APPROVAL

A1 DEVELOPMENT DESCRIPTION

Concept Plan approval is granted to the development as described below:

a) Use of the site for residential flat buildings;

b) Indicative building envelopes for 4 building with a maximum height to RL78.6, as follows:
   a. Building A: RL 78.6 (excluding building plant, lift overruns and similar which shall not exceed RL 79.8)
   b. Building B: RL 71.60
   c. Building C&D: RL 71.97

c) Two basement levels of car parking;

d) Road works to support the development; and

e) Landscaping and associated works

subject to compliance with the modifications in **Part B** of this approval.

A2 DEVELOPMENT IN ACCORDANCE WITH THE PLANS AND DOCUMENTATION

The approval shall be generally in accordance with MP10_165 and the Environmental Assessment prepared by Urbis Pty Ltd, dated June 2011, except where amended by the Preferred Project Report, the Statement of Commitments dated 17 July 2011 and the following drawings:

Architectural Drawings prepared by SJB Architects			
Drawing No.	**Revision**	**Name of Plan**	**Date**
DA-01	06	Cover Sheet	22.02.2013
DA-02	06	Locality Plan	22.02.2013
DA-04	06	Envelope Plan (includes RL's)	22.02.2013
DA-05	06	Basement Levels	22.02.2013
DA-06	06	Ground Floor	22.02.2013
DA-07	06	First Floor	22.02.2013
DA-08	06	Second Floor	22.02.2013
DA-09	06	Third Floor	22.02.2013
DA-10	06	Fourth & Fifth Floor	22.02.2013
DA-11	06	Typical Apartment Plans	22.02.2013
DA-12	06	Section A + B	22.02.2013
DA-13	06	Elevations N/E/S/W (includes RL's)	22.02.2013
DA-19	06	Shadow Analysis 01- June 22nd	22.02.2013
DA-20	06	Shadow Analysis 02- June 22nd	22.02.2013
DA- 22	06	Materials Palette	22.02.2013

except for as modified by the following pursuant to Section 75O(4) of the Act.

A3 BUILDING ENVELOPES AND SEPARATION

Building footprints and setbacks are to be generally consistent with the Concept Envelope Plan DA-04 referred to in Condition A2, except where amended by the Modifications in Part B.

A4 PRIVATE OPEN SPACE

All apartments must be provided with private open space with a minimum depth of 2 metres. Private open space at ground level shall not be less than $25m^2$, with a minimum dimension of 4 metres.

A5 ROOFTOP PLANT

All rooftop plant on Building A shall be generally restricted to the area identified as the 'services zone' shown on the building envelope plan DA-04 referred to in Condition A2.

A6 ADAPTABLE UNITS

At least 10% of all dwellings provided across the site must be adaptable apartments.

A7 BUS BAY- EPPING ROAD

No approval is issued or implied in respect to the provision of a bus bay on Epping Road on the RMS owned crown road reserve.

A8 ACCESS TO COUNTY ROAD RESERVATION

No approval is issued or implied in respect to the provision of access to the crown road reservation.

A9 LAPSING OF APPROVAL

Approval of the Concept Plan shall lapse 5 years after the determination date, unless a development application has been approved and the development has commenced.

A10 INCONSISTENCY BETWEEN DOCUMENTATION

In the event of any inconsistency between modifications of the Concept Plan approval identified in this approval and the drawings/documents referred to above, the modifications of the Concept Plan shall prevail.

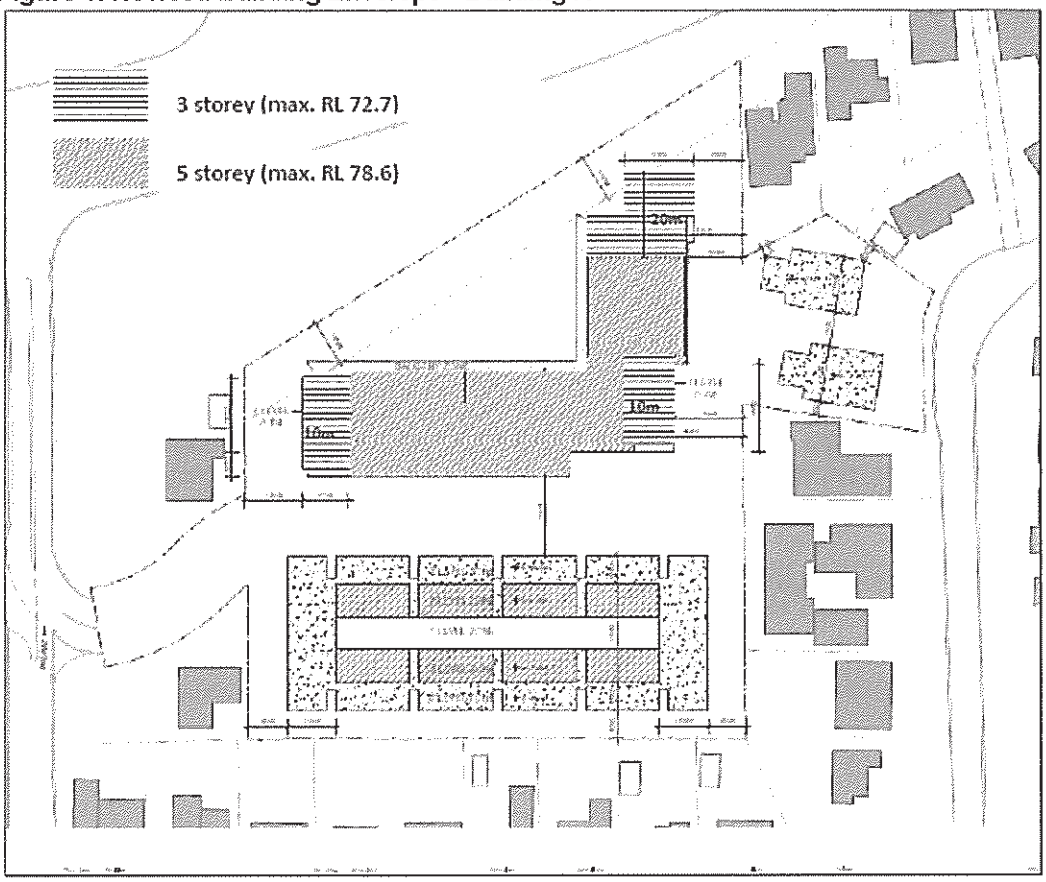
PART B – MODIFICATIONS

B1 BUILDING ENVELOPE HEIGHT MODIFICATIONS

The building heights shown on 'Envelope Plan' DA-04 prepared by SJB Architects and referred to in condition A2 shall be modified as follows:

a) the building envelope for Building A (fronting Epping Road) shall be reduced to 3 and 5 storeys (maximum RLs 72.2 and 78.6, respectively) as illustrated in **Figure 1** below, excluding any plant, lift overruns, or similar projections). Drawings indicating heights to AHD shall be provided with the future application/s.

Figure 1: Revised Building Envelope - Building A



B2 BUILDING ARTICULATION- Building A

Building A shall include strong elements of vertical and horizontal articulation to assist in reducing the visual mass of the development when viewed from Epping Road and from within the site. The vertical articulation shall not exceed 3 storeys in height when measured from the ground floor. To further assist in breaking down the scale and physical length of the building, the three-storey height of Building A is to be modulated into elements of no greater than 20 metres.

Levels 4 and 5 shall be designed to be recessive and setback from the Level 1-3 building line. The use of varied materials and finishes shall be used to accentuate these level changes.

Note: the design shall ensure that the building reads from Epping Road as a series of integrated smaller elements rather than one continuous façade.

B3 DEVELOPMENT YIELD

A maximum of 135 units is permitted.

Note: Section 94 Contributions shall be payable based on the ultimate unit mix included in future development applications in accordance with Council's DCP.

B4 ROADWAYS

The internal driveway between the townhouses fronting David Avenue shall be designed to accommodate two-way traffic.

Note: this modification is imposed to ensure full access to both Whiteside Street and David Avenue to share the traffic load on the surrounding road network.

B5 CAR PARKING RATE

The provision of on-site parking shall be in accordance with the lower limit requirements of Ryde DCP 2010.

B6 BALCONIES- LEVEL 2, BUILDING B

No south facing balconies or terraces are to be provided on the first floor of Building B.

Note: this modification is imposed to preserve the amenity of existing residential properties to the south by minimising opportunities for overlooking.

B7 FINAL CONCEPT PLAN

A final Concept Plan including a Statement of Commitments reflecting the modifications in B1, B2, B3, B5 and B6 above shall be submitted for the Director General's approval within 3 months of this approval.

Note: this is in order to provide certainty as to the final form of the approved Concept Plan, to guide Council's future assessment of a development application.

SCHEDULE 3

FUTURE ENVIRONMENTAL ASSESSMENT REQUIREMENTS

1. BUILDING DESIGN

a) The future development application/s shall demonstrate compliance with the provisions of the *State Environmental Planning Policy 65 – Design Quality of Residential Flat Development* (SEPP 65) and the accompanying *Residential Flat Design Code 2002*, except where modified by this Concept Plan approval.

b) The future development application/s shall achieve design excellence in accordance with the Director General's Design Excellence Guidelines.

c) The future development application/s shall demonstrate sufficient building modulation and articulation to provide an acceptable built form, and varied horizontal building planes to provide visual interest, quality and definition to street walls and shall be no less than that illustrated on the concept plans DA-060 to DA-010 referenced in Condition A2.

d) The detailed design shall incorporate durable materials to mitigate road traffic noise from Epping Road in accordance with *The Environmental Criteria for Road Traffic Noise* (EPA, May 1999), the *Environmental Noise Management Manual* (RTA, 2001) and *Development Near Rail Corridors and Busy Roads – Interim Guideline* (Department of Planning, 2008).

e) The future development application/s shall include an acoustic assessment that demonstrates how the proposed development will comply with *Development Near Rail Corridors and Busy Roads – Interim Guideline* (Department of Planning, 2008).

2. PRIVACY

The future development application/s shall demonstrate that adequate privacy screening and treatment will be provided to minimise privacy impacts between buildings located on the site and adjoining properties. Particular regard should be given to minimising opportunities for direct overlooking from balconies and living room areas along the southern elevation of Building B.

3. LANDSCAPING

The future development application/s shall include detailed landscape plans demonstrating consistency with Council's requirements.

The landscaping plan shall include deep soil planting zones along all boundaries incorporating mature screen planting and shall incorporate a schedule of landscaping that includes local endemic species.

4. CONTAMINATION

Prior to the lodgement of the first development application, the proponent is to undertake a detailed assessment of any potential contamination on the site and implement the recommendations in section 9.0 of the report titled "Report to EG Fund Management on Phase 1 Preliminary Environmental Site Assessment for Proposed Medium Density Residential Development at 166A Epping Road, 14 and 16 David Avenue, North Ryde" prepared by Environmental Investigation Services dated April 2008.

If a Remediation Action Plan is required, it is to be submitted with the development application.

5. CONSTRUCTION AND OPERATIONAL IMPACTS

The future development application/s shall include:

a) A Construction Management Plan;

Note: A construction zone for demolition and construction vehicles in not permitted on Epping Road

b) Dilapidation surveys of residential properties adjoining the site, Council infrastructure adjoining the site and the adjoining RMS County Road reserve;

c) A stormwater management plan which addresses the stormwater treatment train recommendations in the report titled "Whiteside Street, North Ryde- Stormwater Management and Flood Assessment- Revised Part 3A Concept plan Application" prepared by Worley Parsons and dated 31 May 2011.

d) Details of acoustic treatments to be implemented to address the recommendations in section 6.0 of the report titled "Noise Impact Assessment, Proposed Residential Development,

Whiteside Street, North Ryde (Revision 4) prepared by Heggies Pty Ltd/ SLR dated 1 June 2011.

The treatment proposed for the acoustic wall along the Epping Road frontage of the site is to be appropriately integrated with the landscaping treatment. The use of earthworks (ie mounding) is to be considered to reduce the prominence of any fencing.

e) The results of the further geotechnical investigations to address the recommendations in sections 4.0 and 5.0 of the report titled "Report to EGC Custodian Services Pty Ltd on Geotechnical Investigations for proposed residential development at Whiteside Street site, David Avenue & Epping Road, North Ryde, NSW" prepared by Jeffery and Katauskas Pty Ltd dated 11 April 2008 including with respect to potential groundwater intercept as a result of the basement construction.

6. ESD

The future development application/s shall demonstrate that the development will incorporate ESD principles in the design, construction, and ongoing operation phases, including water sensitive urban design measures, energy efficiency, recycling and water disposal.

7. BASIX CERTIFICATE- DETAILS TO BE LODGED WITH A DEVELOPMENT APPLICATION

A copy of a completed BASIX certificate must be lodged with the future development application/s and the items nominated as part of the subject BASIX certificate must be specified on the plans submitted with the application.

8. PUBLIC DOMAIN

The future development application/s shall address the following:

a) The provision by the proponent at no cost to Roads and Maritime Services (RMS) or Council of all necessary street works, including:
   - the upgrade of the footpath surrounding the site to the satisfaction of Council.
   - the removal of all redundant driveways and replacement with kerb and gutter to match existing to the satisfaction of RMS and Council, as appropriate.

b) The landscape embellishment of RMS owned land fronting Epping Road. The design shall be prepared in consultation with RMS. Any proposal shall not compromise the site's access or be a maintenance issue for the RMS.

9. CAR PARKING

The future development application/s shall address the following:

a) provision for building maintenance vehicles and removalists shall be provided on-site;

b) the layout of the proposed car parking areas associated with the development, including driveways, grades, turn paths, sight distance requirements, aisle widths and lengths and parking bay dimensions should be in accordance with Australian Standards AS2890.1-2004 and AS2890.2-2002 for heavy vehicle usage; and

c) the design of parking facilities so that all vehicles, including service vehicles, enter and exit the site in a forward direction.

10. SUSTAINABLE TRAVEL PLAN

Prior to the lodgment of the first development application a Sustainable Travel Plan shall be prepared, including investigation of car sharing schemes and the on-site provision of a car share parking spaces, and any other actions designed to encourage safe, healthy and sustainable travel options and reduce car dependency. The Plan shall include a commitment to implement its recommendations as part of any future development applications on the site

The Plan is to give consideration to the provision of a community bus service between the development and the train stations within the Macquarie Park Corridor.

The Plan is to be developed in consultation with Council.

11. SITE ACCESS

The future development application/s shall comply with the following requirements:

a) All vehicles shall enter and leave the site in a forward direction.

b) All vehicles shall be wholly contained within the site before being required to stop.

12. VEHICULAR ACCESS

Future development application/s shall be accompanied by plans detailing left-in access only from Epping Road via Whiteside Street and left-in, left-out and right-in access only to Whiteside Street/site access. The plans shall be prepared in consultation with, and the final design approved by, Council and the RMS and shall address the following:

a) The design for the treatment on Whiteside Street/site access to:
    a. minimise the potential for vehicles to rat-run past this site to access Epping Road (noting that egress onto Epping Road is prohibited); and
    b. better manage the conflict points between No.2A and 3 Whiteside Street and to clearly define which traffic stream has the right-of-way.
b) The design details to address and minimise safety issues arising from the existing merge lane across Whiteside Street on Epping Road.
c) The design for the two-way section of Whiteside Street south of the site including to allow vehicles to make a safe U-turn manoeuvre in the northern end of the two-way section of Whiteside Street.

Note: the design shall not preclude any current vehicle movements on Whiteside Street including access to existing properties and garbage vehicle manoeuvrability. The applicant shall investigate whether garbage vehicles currently utilise the turn around facility on Whiteside Street and allow (if necessary) for these vehicles to be accommodated in the proposed design via the provision of an appropriate turn around facility

13. The future development application shall be accompanied by plans detailing the two-way design of the access driveway onto David Avenue.

14. LOCAL AREA TRAFFIC MANAGEMENT STUDY (LATM Study)

Prior to the lodgement of the first development application a LATM Study for the local road network shall be prepared in consultation with Council and the RMS in order to determine necessary measures to improve the local traffic flow, reduce traffic speeds, improve safety, reduce potential for accidents, and provide for pedestrian and cyclists (also see **15** below).

The LATM Study is to assist in determining the percentage of traffic related to the development over the existing traffic volume situation and therefore, the likely impact on the local road network.

The LATM Study is to include a recommendation of the measures and infrastructure required to mitigate traffic impacts resulting from the development. The applicant is to fund the LATM Study and those mitigation and infrastructure works required to mitigate traffic impacts as a result of the development.

In addition to the above, the LATM Study shall detail the outcome of a local road network investigation including the following:

a. suggest improvements to minimise traffic flow distribution from Kent Road into Milroy Street, Trevitt Street and Napier Crescent;
b. investigations into the additional traffic loading to the Kent Street/Lane Cove Road intersection with the view of potential capacity improvements for the side road; and
c. a road safety audit.

The applicant shall consult with Council and the RMS regarding the preparation of the Study.

The completed LATM Study is to be submitted to Council and the RMS for review. Any recommendations made by Council and the RMS to mitigate traffic impacts from the development are to be implemented in addition to the recommendations identified in the Study. Recommendations of Council or the RMS which are identified as mitigation measures arising from the development are to be paid for by the proponent.

15. IMPROVEMENTS TO PEDESTRIAN AND BICYCLE NETWORK AND FACILITIES

Prior to the lodgement of the first development application a report reviewing the existing pedestrian and bicycle network provided between the proposed development and the Macquarie Park and Macquarie University Railway Stations, bus stops and nearby services (including business centre and shopping centre) is to be prepared. The report is to make practical and feasible recommendations

regarding improvements to be implemented to existing infrastructure to enhance pedestrian and cyclist amenity, safety and security (particularly during the evening and at night) and facilities and connections with the existing network in order to promote walking and cycling and reduced car dependency.

The report is to be prepared in consultation with Council and is to be supported by a Crime Prevention Through Environmental Design assessment (CPTED).

16. STORMWATER AND DRAINAGE

The design of the stormwater drainage facilities are to be generally in accordance with Council's requirements.

If the final stormwater solution requires the Sydney Water easement on the western section of the site to be traversed, evidence of consultation with Sydney Water regarding the design of the stormwater outlet is to be submitted with the future application/s.

17. SYDNEY WATER REQUIREMENTS

Prior to the lodgement of the future application/s, the proponent is to liaise with Sydney Water regarding their servicing requirements for water and wastewater. Evidence of this consultation is to be submitted with the future application. Sydney Water's requirements are to be accommodated in the design, as appropriate.

18. SERVICES PROVISIONS

The future development application/s is to be supported by evidence of consultation with all relevant service providers (including Energy Australia, AGL and Telstra) in order to demonstrate that infrastructure and/or upgrades are available to service the development.

19. GROUNDWATER

The future development application/s is to demonstrate that the development does not impact upon the health of groundwater dependent ecosystems; and where basements intercept groundwater, they are to be tanked.

Monitoring of ground water levels is to commence prior to basement design and continued through to construction.

20. WASTE SERVICING

The future development application/s shall provide details of suitably located and landscaped on-site storage areas for waste bins.

21. STAGING OF DEVELOPMENT

Details of the intended staging of the development are to be submitted with the first development application to ensure the orderly and coordinated development of the site.

ADVISORY NOTES

Nil

SJB Architects

4694 - EGC Custodian Services
Whiteside Street, North Ryde

Preferred Project Report

SJB Architects
Level 2, 490 Crown Street
Surry Hills NSW
2010 Australia
T 02 9380 9911
F 02 9380 9922

Project Number: 4694
Date: 27.10.2013
Client: EGC Custodian Services

Contents

DA-01 Cover Sheet
DA-04 Envelope Plan

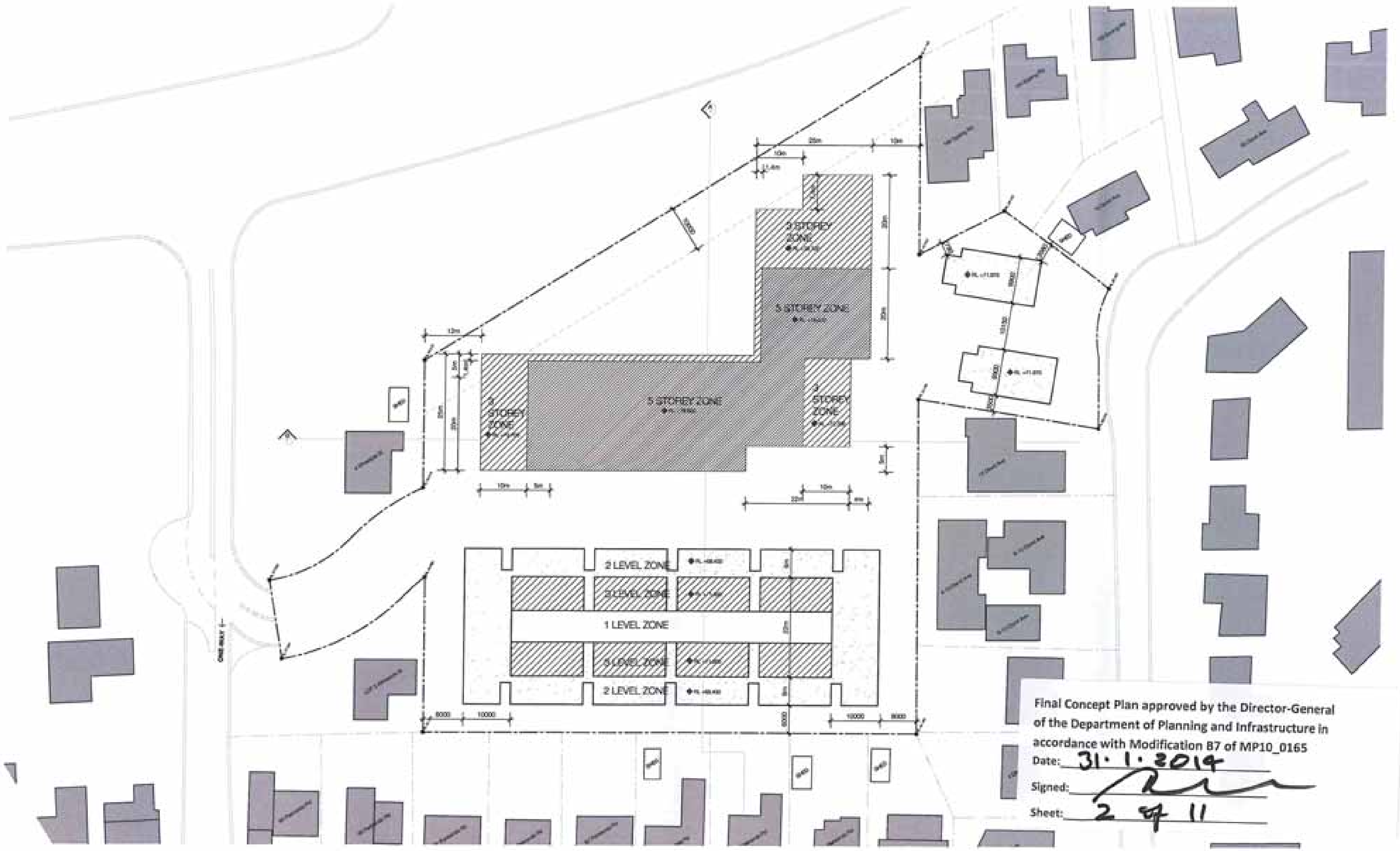
DA-05 Basement Plans
DA-06 Ground Level
DA-07 Level 01
DA-08 Level 02
DA-09 Level 03+04

DA-12 Site Sections
DA-13 Elevations

DA-19 Shadow Analysis 01
DA-20 Shadow Analysis 02

Final Concept Plan approved by the Director-General of the Department of Planning and Infrastructure in accordance with Modification B7 of MP10_0165
Date: 31 · 1 · 2014
Signed:
Sheet: 1 of 11

NOTE:
ALL MAXIMUM RL'S **DO NOT** INCLUDE
BALUSTRADES AND ROOF PLANT



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Date: 31·1·2014

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Sheet: 2 of 11

FOR APPROVAL

Rev	Date	Revision
06		
07		
08		
09		
10		

Civil Engineering
WorleyParsons

Planning
urbis

Landscape design

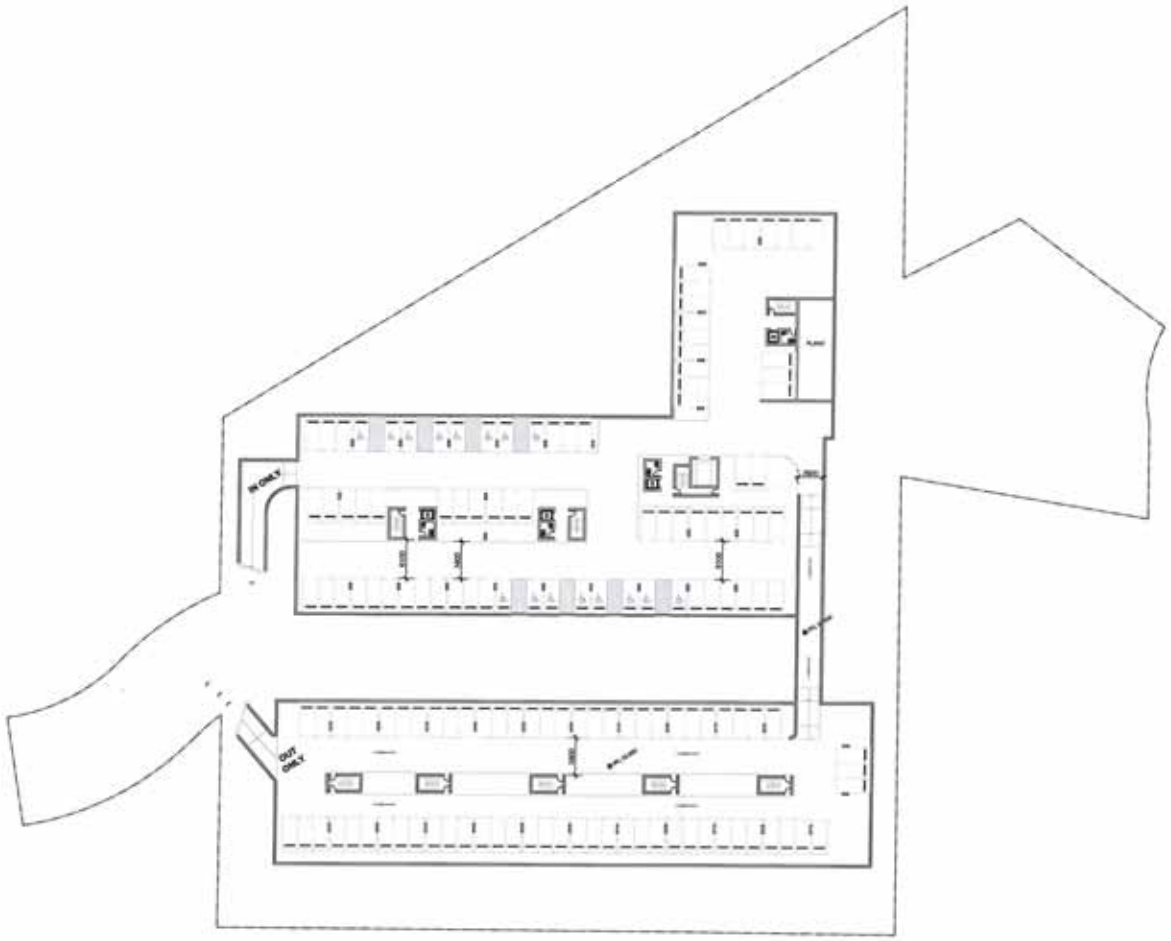
On behalf of
EGC Custodian Services

Whiteside Street,
North Ryde
EGC Custodian Services

Plans
Envelope Plan

Date	Scale	Sheet Size
20.11.2013	1:400	@ A1
	ML	AH
4694	**DA-04**	10

SJB



Final Concept Plan approved by the Director-General of the Department of Planning and Infrastructure in accordance with Modification B7 of MP10_0165

Date: 31. 1. 2014

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Sheet: 3 of 11

FOR APPROVAL

No.	Date	Revision	By
05	01.05.13	Issue for Revised DA	SH
06	23.05.13	Issue for Revised DA	SH
07	03.06.13	Issue for Revised DA	SH
08	31.10.13	Issue for Revised DA	ML
09	27.10.13	Issue for Revised DA	ML

Consultant: Civil Engineering — WorleyParsons

Consultant: Planning — urbis

Consultant: Landscape design

Client: On behalf of — EGC Custodian Services

Project: Whiteside Street, North Ryde
EGC Custodian Services

Drawing Name: Plan
Basement 01

Date	Scale	Sheet Size
27.10.2013	1:400	@ A1

Drawn	Chk.
ML	AH

Job No.	Drawing No.	Revision
4694	DA-05	09

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Date: 31.1.2014

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Sheet: 4 of 11

FOR APPROVAL

No.	Date	Revision	By	Chk
05	01.02.13	Issue for Revised EA	SH	AH
06	03.02.13	Issue for Revised EA	SH	AH
07	05.06.13	Issue for Revised EA	SH	AH
08	01.10.13	Issue for Revised EA	ML	AH
09	27.10.13	Issue for Revised EA	ML	AH

Consultant: Civil Engineering — WorleyParsons
Consultant: Planning — urbis
Consultant: Landscape design
Client: On behalf of — EGC Custodian Services
Project: Whiteside Street, North Ryde
EGC Custodian Services
Drawing Name: Plan Ground Floor

Date	Scale	Sheet Size
27.10.2013	NTS	@ A1
Reg No.	Drawn	Chk.
	ML	AH
Job No.	Drawing No.	Revision
4694	DA-06	09

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Date: 31.1.2014

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Sheet: 5 of 11

FOR APPROVAL

No.	Date	Revision	By	Chk.
05	01.08.13	Issue for Revised DA	SH	AH
06	22.08.13	Issue for Revised DA	SH	AH
07	02.09.13	Issue for Revised DA	SH	AH
08	04.10.13	Issue for Revised DA	ML	AH
09	27.10.13	Issue for Revised DA	ML	AH

Consultant: Civil Engineering — WorleyParsons

Consultant: Planning — urbis

Consultant: Landscape design

Client: On behalf of — EGC Custodian Services

Project: Whiteside Street, North Ryde
EGC Custodian Services

Drawing Name: Plan
First Floor

Date	Scale	Sheet Size
27.10.2013	NTS	@ A1
Project No.	Drawn	Chk.
	ML	AH
Job No.	Drawing No.	Revision
4694	DA-07	09

SJB Architects

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Date: 31.1.2014

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Sheet: 6 of 11

FOR APPROVAL

No.	Date	Revision	By	Chk
05	01.05.13	Issue for Revised DA	SH	AH
06	22.05.13	Issue for Revised DA	SH	AH
07	03.06.13	Issue for Revised DA	SH	AH
08	04.10.13	Issue for Revised DA	ML	AH
09	27.10.13	Issue for Revised DA	ML	AH

Consultant: Civil Engineering — WorleyParsons

Consultant: Planning — urbis

Consultant: Landscape design

Client: On behalf of

Project: Whiteside Street, North Ryde
EGC Custodian Services

Drawing Name: Plan
Second Floor

Date	Scale	Sheet Size
27.10.2013	NTS	@ A1
Tag No.	Drawn	Chk.
	ML	AH
Job No.	Drawing No.	Revision
4694	DA-08	09

SJB Architects

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Date: 31.1.2014

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Sheet: 7 of 11

FOR APPROVAL

Rev	Description	
06	22.02.13 Issue for Revised EA	
07	06.09.13 Issue for Revised EA	
08	01.10.13 Issue for Revised EA	
09	01.10.13 Issue for Revised EA	
10	20.11.13 Issue for Revised EA	

Civil Engineering: WorleyParsons

Planning: urbis

Landscape design: Aspect

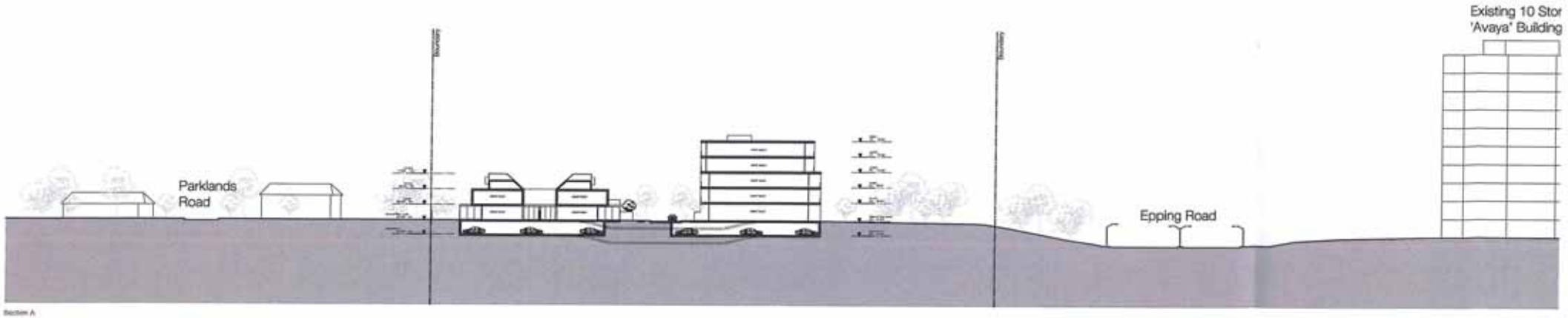
On behalf of: EGC Custodian Services

Whiteside Street, North Ryde
EGC Custodian Services

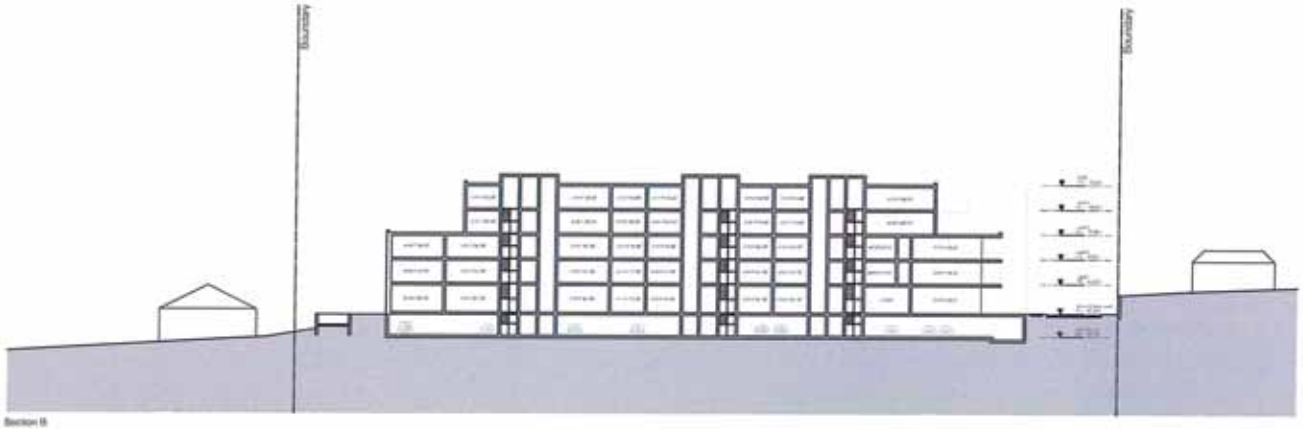
Plan
Third + Fourth Floor

20.11.2013	NTS	@ A1
	ML	AH
4694	DA-09	10

SJB Architects



Section A



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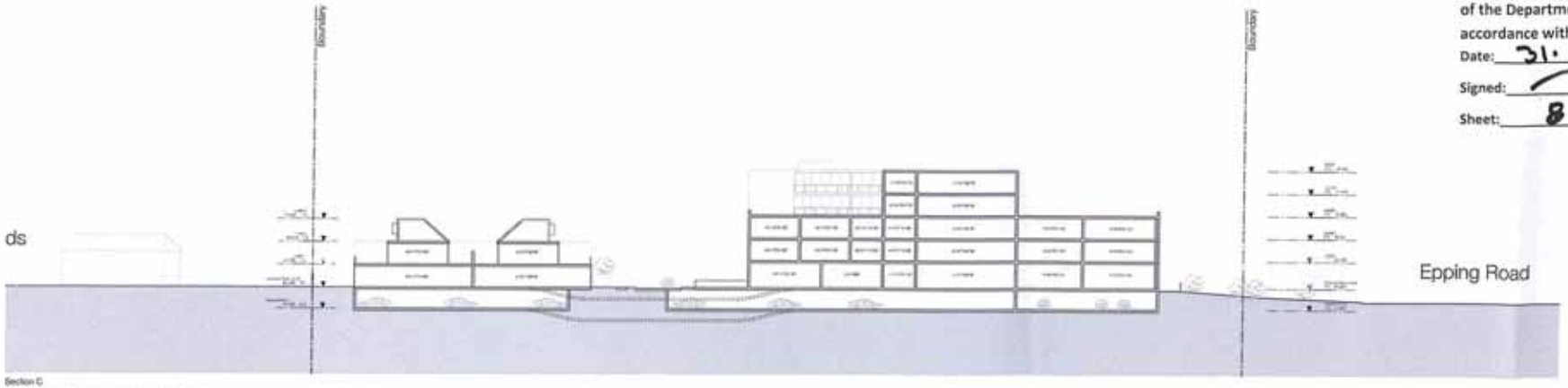

Section C

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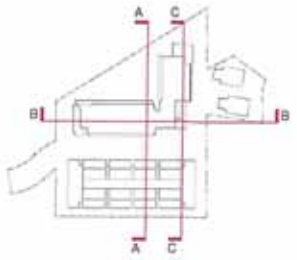
Date: 31·1·2014

Signed:

Sheet: 8 of 11



FOR APPROVAL

No.	Date	Amendment	No. Dwg
05			
07			
08			
09			
10			

Consultant: Civil Engineering — WorleyParsons

Consultant: Planning — urbis

Consultant: Landscape design — ASPECT

Client: On behalf of — EGC Custodian Services

Project: Whiteside Street, North Ryde
EGC Custodian Services

Drawing Name: Site Sections

Date	Scale	Drawn Size
20.11.2013	1:400	@ A1
Drawn	Drawn	Chk
	ML	AV1
Job No.	Drawing No.	Revision
4694	DA-12	08

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10

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Date: 31.1.2014

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Sheet: 9 of 11

FOR APPROVAL

Civil Engineering
WorleyParsons

Planning
urbis

Landscape design

On behalf of

Whiteside Street, North Ryde
EGC Custodian Services

Elevations
N/E/S/W

20.11.2013 | 1:200 | @ A1

4694 | DA-13 | 10

SJB Architects

STATEMENT OF COMMITMENTS FOR CONCEPT PLAN (UPDATED 28.01.14)

The Statement of Commitments includes the following initiatives:

- **Contributions**: Section 94 Contributions to be made for the project will be in accordance with calculations provided in Section 7.10 prior to issue of Construction Certificate.
- **Car share**: Discussions will be undertaken with car share providers and a parking space will be allocated for exclusive use by shared vehicles. Detailed in Project Application.
- **Bicycle facilities**: Bicycle facilities: the project will provide for bicycle facilities and parking in accordance with Council's standards. Detailed in Project Application.
- **RTA reserve**: The upgrade of the adjoining RTA reserve is proposed at the proponent's cost (it is noted that the proponent does not own the reserve and as such this proposal is a commitment only and not a part of the project to which this application formally applies).
- **Community Garden**: A community garden will be provided in accordance with the Landscape Plan and Landscape Report at Appendix I. Detailed in Project Application.
- **WSUD**: WSUD measures will be implemented in accordance within the Stormwater Management and Flood Assessment prepared by Worley Parsons (refer to Appendix L). Detailed in Project Application.
- **Transport management**: A single and one-off yearly rail pass from Macquarie Park to the Sydney CBD will be provided to the purchaser/s of each apartment. Note, one (1) rail pass only will be provided per apartment.
- **ESD**: ESD principles and measures will be implemented for the project in accordance with the ESD Strategy prepared by Built Ecology and located at Appendix J. Detailed in Project Application.

Final Concept Plan approved by the Director-General of the Department of Planning and Infrastructure in accordance with Modification B7 of MP10_0165
Date: 31.1.2014
Signed:
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- **Construction Management Plan**: The proponent agrees to prepare a Construction Management Plan outlining the methods of construction, traffic management, crane height and location details and the like prior to issue of Construction Certificate.
- **Compliance with the Building Code of Australia**: All buildings will be designed in accordance with the Building Code of Australia. This will be detailed at Construction Certificate stage.
- **Augmentation of services**: The approval of all existing utility service providers (e.g. gas, electricity, telephone, water, sewer) will be obtained, and any required augmentation works undertaken prior to commencement of work.
- **Noise mitigation**: Noise mitigation measures will be implemented in accordance with the Noise Impact Assessment prepared by Heggies (refer to Appendix H). Detailed in Project Application.
- **Remediation of Land**: If necessary a Remedial Action Plan will be submitted for approval and audited upon implementation. This will be undertaken at the Project Application stage prior to commencement of works if required.
- **Façade Design**: The final architecture will be consistent with the following principles:
  - Building A will include strong elements of vertical and horizontal articulation to reduce the visual mass of the development when viewed from Epping Road, and from within the site.
  - The three lower storeys of Building A will have vertically emphasised articulation, modulated into elements of no more than 20 metres.
  - The two upper levels of Building A will have a setback, recessive expression, expressed through a different palette of materials and finishes to those used on the lower three levels.
  - Overall, the façade design will present to Epping Road as a series of integrated smaller elements, rather than as a singular object.

Final Concept Plan approved by the Director-General of the Department of Planning and Infrastructure in accordance with Modification B7 of MP10_0165
Date: 31.1.2014
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Sheet: 11 of 11

Attachment 2

Reduced Plans – Section 75W Application

PROPOSED RESIDENTIAL FLAT BUILDINGS

WHITESIDE STREET
NORTH RYDE

SECTION 75W APPLICATION
30/10/2014

DRAWING SCHEDULE

DWG. NO.	REV	TITLE	SCALE
DA-01	A	COVER	AS NOTED
DA-04	A	ENVELOPE PLAN	1:250
DA-05	A	BASEMENT PLAN	1:500
DA-06	A	GROUND LEVEL PLAN	1:500
DA-07	A	LEVEL 01 PLAN	1:500
DA-08	A	LEVEL 02 PLAN	1:500
DA-09-A	A	LEVEL 03 PLAN	1:500
DA-09-B	A	LEVEL 04 PLAN	1:500
DA-12	A	SITE SECTIONS	1:800
DA-13	A	ELEVATIONS	1:250
DA-19	A	SHADOW ANALYSIS 01	1:250
DA-20	A	SHADOW ANALYSIS 02	1:250
DA-21	A	BUILDING ENVELOPE COMPARISON	N.T.S.

CONSULTANTS

ARCHITECT	**MARCHESE PARTNERS** LEVEL 1, 53 WALKER STREET, NORTH SYDNEY 9922 4375 *CONTACT: STEVE ZAPPIA*
PROJECT MANAGER	**NEW GENERATION CORPORATE** LEVEL 39, AUSTRALIA SQUARE, 264 GEORGE STREET, SYDNEY 8041 6622 *CONTACT: GARY ZHOU*
TOWN PLANNER	**URBIS** LEVEL 23, DARLING PARK TOWER 2, 201 SUSSEX STREET, SYDNEY 8233 9900 *CONTACT: IAN CADY*
TRAFFIC	**TRAFFIC & TRANSPORT PLANNERS** SUITE 3.08, LEVEL 3, 46A MACLEAY STREET, POTTS POINT 8324 8700 *CONTACT: GRAHAM PINDAR*
LANDSCAPE	**SITE IMAGE** LEVEL 1, 3-5 BAPTIST STREET, REDFERN 8332 5600 *CONTACT: ROSS SHEPHERD*
STORMWATER & HYDRAULIC	**WORLEY PARSONS** LEVEL 12, 141 WALKER STREET, NORTH SYDNEY 8456 6866 *CONTACT: TIM MICHEL*
GEOTECHNICS & CONTAMINATION	**DOUGLAS PARTNERS** 96 HERMITAGE ROAD, WEST RYDE 9809 0666 *CONTACT: JAMES PITCHER*
ENVIRONMENT	**WSP BUILT ECOLOGY** LEVEL 1, 41 MCLAREN STREET, NORTH SYDNEY 8907 0900 *CONTACT: ALAN DAVIS*
ACOUSTIC	**SLR CONSULTING** 2 LINCOLN STREET, LANE COVE 9428 8100 *CONTACT: TOM COCKINGS*
QUANTITY SURVEYOR	**ENGINE ROOM** LEVEL 10, 387 GEORGE STREET, SYDNEY 8235 4114 *CONTACT: JAMES BROOKS*

DEVELOPMENT DATA

SITE AREA

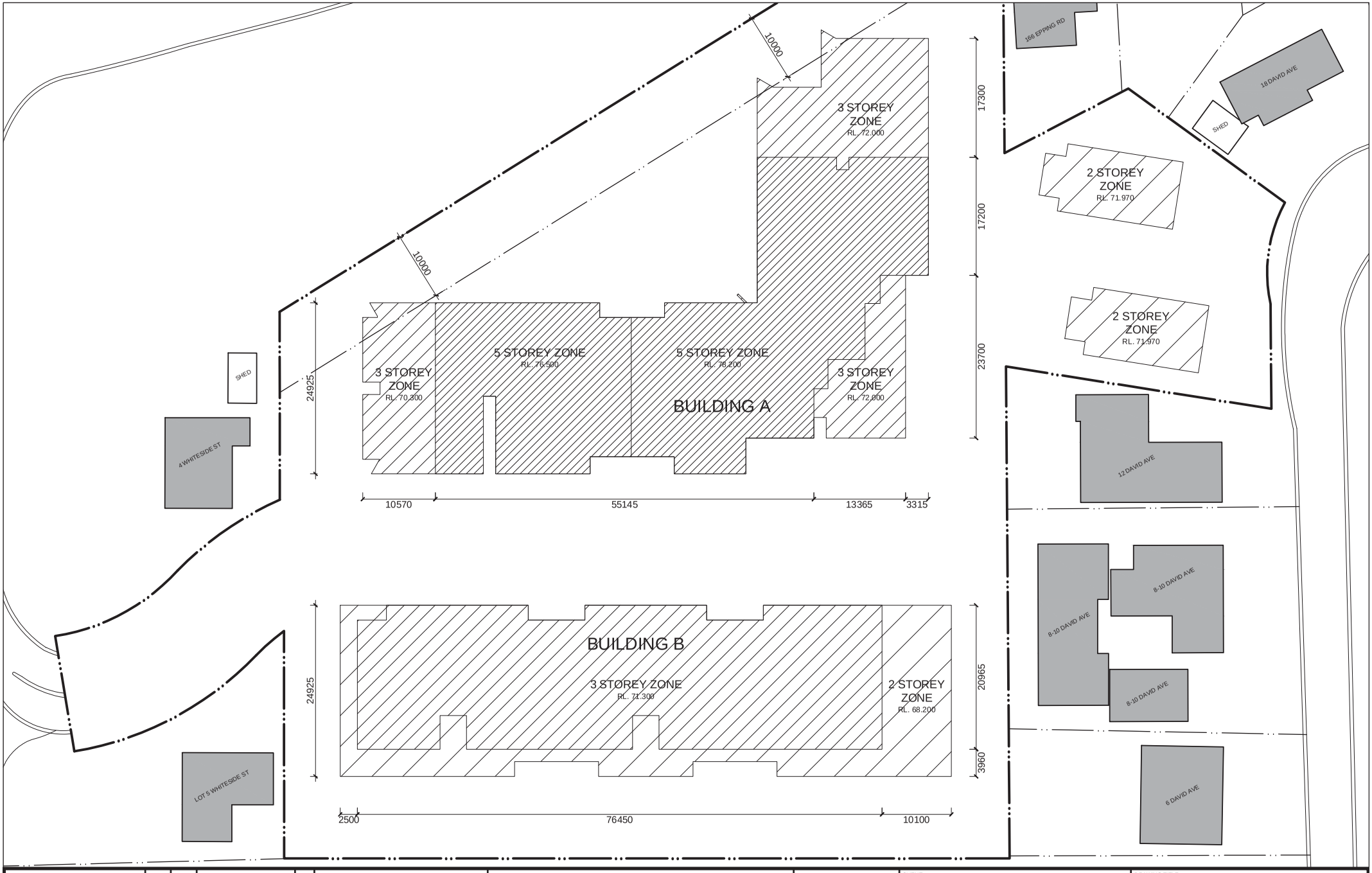
TOTAL SITE AREA: **13955m²**

		APPROVED			PROPOSED		
LEVEL	BUILDING	NSA m²	GFA m²	GBA m²	NSA m²	GFA m²	GBA m²
GROUND	A		1879	2599		1891	2647
	B		2214	3085		1645	2114
	C		134	167		134	167
	D	4012.3	134	167	3544.3	134	167
LEVEL 1	A		2042	2600		2063	2648
	B		1596	2408		1642	2131
	C		147	186		147	186
	D	3983.8	147	186	3272.3	147	186
LEVEL 2	A		2042	2600		2063	2648
	B	1745.0	807	909	2792.7	1102	1505
LEVEL 3	A	1182.9	1385	1737	1317.8	1511	1967
LEVEL 4	A	1182.9	1385	1737	1224.3	1410	1834
TOTAL		12106.9	13912	18381	12151.4	13889	18200

	APPROVED			PROPOSED		
UNIT TYPE	QUANTITY	%		QUANTITY	%	
1 BED	20	15%		7	4%	
1 BED + S	17	13%	27.4%	63	38%	42.7%
2 BED	85	63%		18	11%	
2 BED + S	4	3%	65.9%	65	40%	50.6%
3 BED	9	7%	6.7%	11	7%	6.7%
TOTAL	135			164		

PROPOSED
CROSS VENTILATION: **60.3%**
SOLAR ACCESS: **70.1%**

SITE LOCATION NTS



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.

PRELIMINARY

REVISION	DATE	DESCRIPTION	BY
A	30/10/2014	FIRST ISSUE - SECTION 75W	LP

marchesepartners

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ACN 098 552 151 ABN 20 098 552 151

MN TN

CLIENT
SKYLAKE GROUP PTY. LTD.
LEVEL 39. 264 GEORGE STREET
SYDNEY NSW 2000

PROJECT
WHITESIDE STREET, NORTH RYDE

DRAWING TITLE
ENVELOPE PLAN

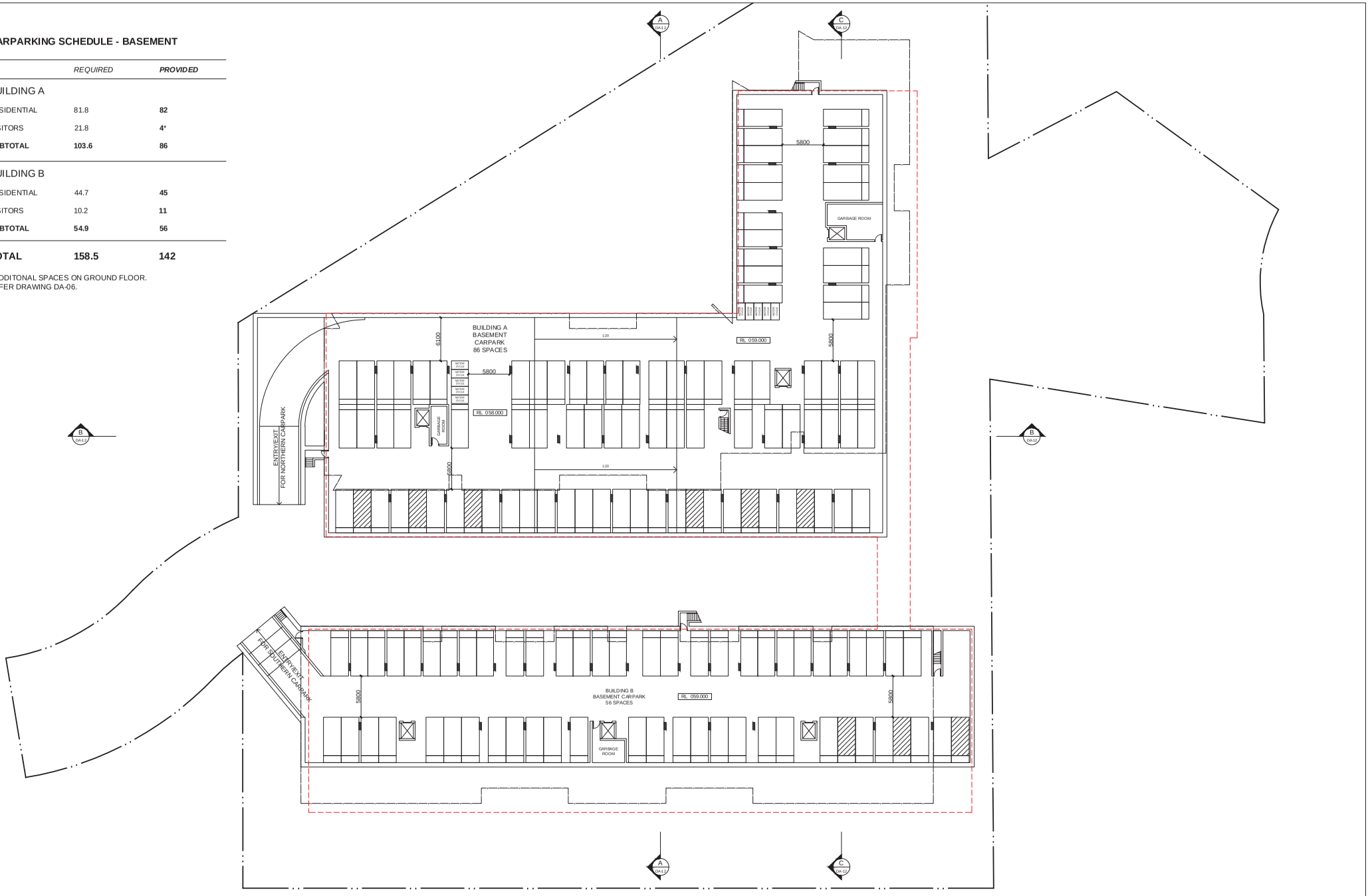
SCALE	DATE	DRAWN	CHECKED
1:250 @ A1 1:500 @ A3	30/10/2014	LP	SZ

JOB	DRAWING	REVISION
14010	DA-04	A

CARPARKING SCHEDULE - BASEMENT

	REQUIRED	***PROVIDED***
BUILDING A		
RESIDENTIAL	81.8	**82**
VISITORS	21.8	**4***
SUBTOTAL	**103.6**	**86**
BUILDING B		
RESIDENTIAL	44.7	**45**
VISITORS	10.2	**11**
SUBTOTAL	**54.9**	**56**
TOTAL	**158.5**	**142**

* ADDITONAL SPACES ON GROUND FLOOR.
REFER DRAWING DA-06.



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REVISION	DATE	DESCRIPTION	BY
A	30/10/2014	FIRST ISSUE - SECTION 75W	LP

LEGEND

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PROJECT
WHITESIDE STREET, NORTH RYDE

DRAWING TITLE
BASEMENT PLAN

SCALE	DATE	DRAWN	CHECKED
1:250 @ A1 1:500 @ A3	30/10/2014	LP	SZ
JOB	DRAWING		REVISION
14010	DA-05		A

CARPARKING SCHEDULE - GROUND FLOOR

	REQUIRED	PROVIDED
BUILDINGS C AND D		
RESIDENTIAL	5.6	4
VISITORS	1	1
SUBTOTAL	**6.6**	**5**

BUILDING A

BUILDING A HAS 7 VISITORS CARPSPACES IN ADDITION TO THE 4 VISITORS SPACES IN THE BASEMENT, GIVING A TOTAL OF 11. A TOTAL OF 21.8 VISITORS SPACES ARE REQUIRED FOR BUILDING A.

ACCESS ONTO WHITESIDE STREET TO BE DESIGNED TO CATER FOR LEFT-IN, RIGHT-IN, LEFT-OUT ONLY. NO RIGHT TURN ONTO WHITESIDE STREET FROM DEVELOPMENT AS SECTION FROM DRIVEWAY TO EPPING ROAD TO REMAIN ONE-WAY (SOUTHBOUND) WITH NO EXIT FROM WHITESIDE STREET ONTO EPPING ROAD

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PROJECT
WHITESIDE STREET, NORTH RYDE

DRAWING TITLE
GROUND FLOOR PLAN

SCALE	DATE	DRAWN	CHECKED
1:250 @ A1 1:500 @ A3	30/10/2014	LP	SZ

JOB	DRAWING	REVISION
14010	DA-06	A

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PROJECT
WHITESIDE STREET, NORTH RYDE

DRAWING TITLE
LEVEL ONE FLOOR PLAN

SCALE	DATE	DRAWN	CHECKED
1:250 @ A1 1:500 @ A3	30/10/2014	LP	SZ
JOB	DRAWING		REVISION
14010	DA-07		A

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PROJECT
WHITESIDE STREET, NORTH RYDE

DRAWING TITLE
LEVEL TWO FLOOR PLAN

SCALE	DATE	DRAWN	CHECKED
1:250 @ A1 1:500 @ A3	30/10/2014	LP	SZ
JOB	DRAWING		REVISION
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PROJECT
WHITESIDE STREET, NORTH RYDE

DRAWING TITLE
LEVEL THREE FLOOR PLAN

SCALE	DATE	DRAWN	CHECKED
1:250 @ A1 1:500 @ A3	30/10/2014	LP	SZ
JOB	DRAWING		REVISION
14010	DA-09-A		A

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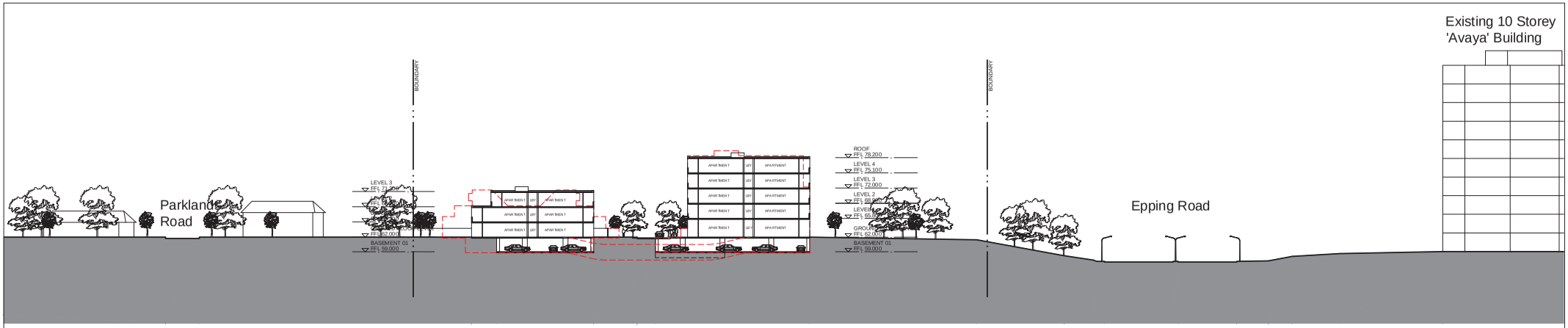
PROJECT
WHITESIDE STREET, NORTH RYDE

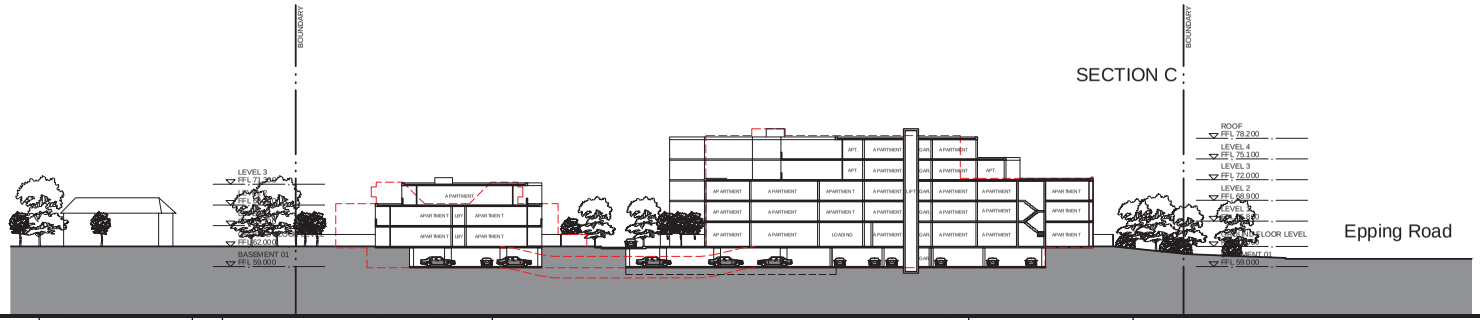
DRAWING TITLE
LEVEL FOUR FLOOR PLAN

SCALE	DATE	DRAWN	CHECKED
1:250 @ A1 1:500 @ A3	30/10/2014	LP	SZ
JOB	DRAWING		REVISION
14010	DA-09-B		A



SECTION A

SECTION B



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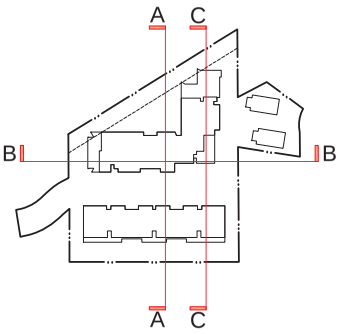

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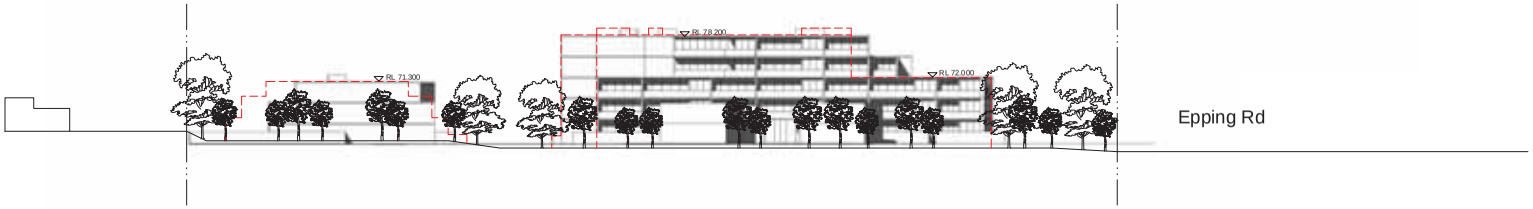
PROJECT
WHITESIDE STREET, NORTH RYDE

DRAWING TITLE
SITE SECTIONS

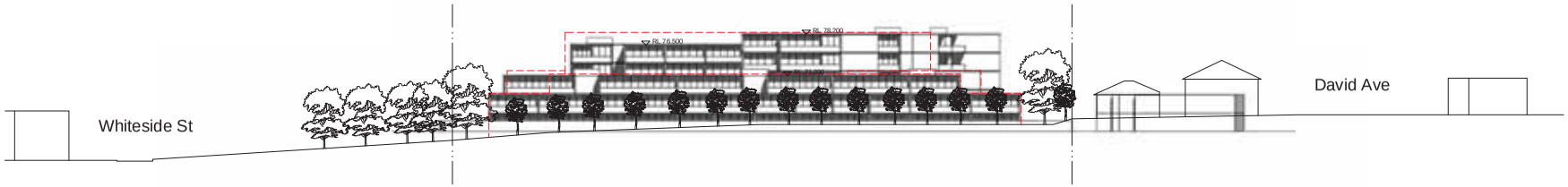
SCALE	DATE	DRAWN	CHECKED
1:400@A1 1:800@A3	30/10/2014	LP	SZ

JOB	DRAWING	REVISION
14010	DA-12	A

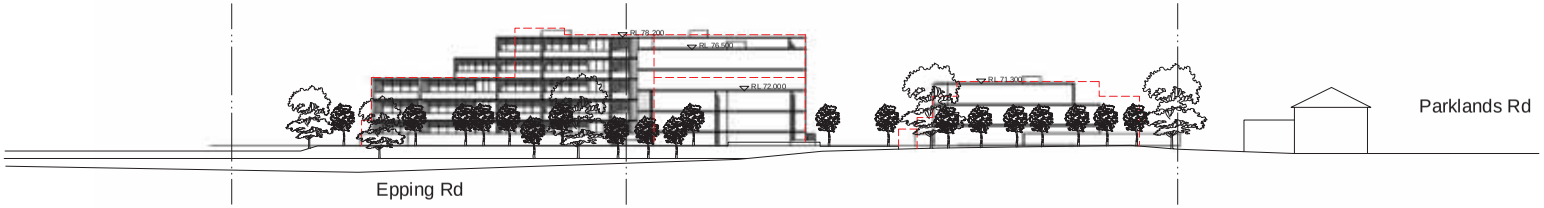
NORTH ELEVATION



EAST ELEVATION



SOUTH ELEVATION



WEST ELEVATION

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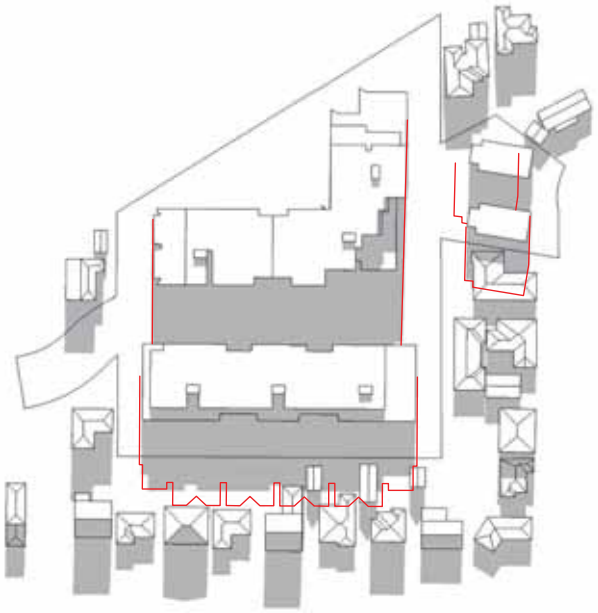
PROJECT
WHITESIDE STREET, NORTH RYDE

DRAWING TITLE
SITE ELEVATIONS

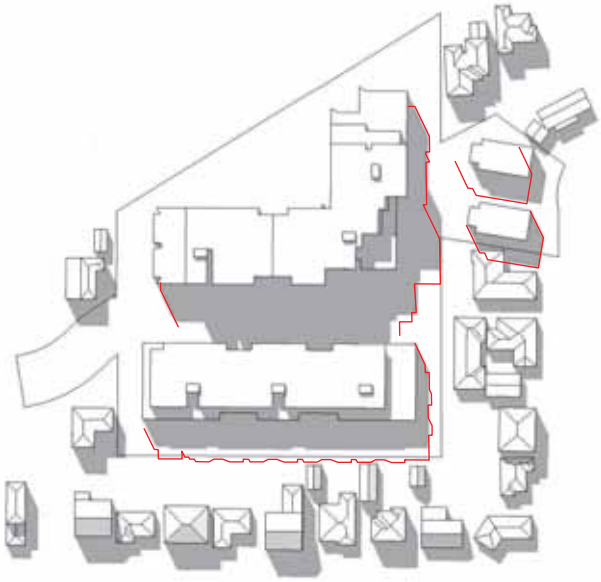
SCALE	DATE	DRAWN	CHECKED
1:400@A1 1:800@A3	30/10/2014	LP	SZ

JOB	DRAWING	REVISION
14010	DA-13	A



9AM

10AM



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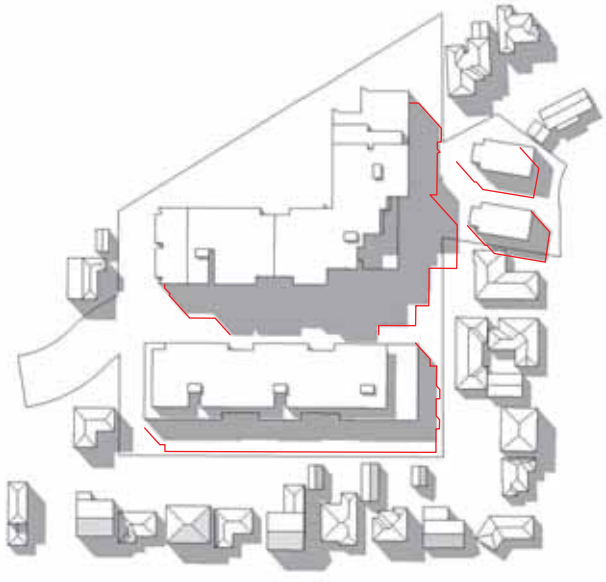

12PM

IMPORTANT NOTES:

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A	30/10/2014	FIRST ISSUE - SECTION 75W	LP

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OUTLINE OF APPROVED PART 3A BUILDING SHADOWS

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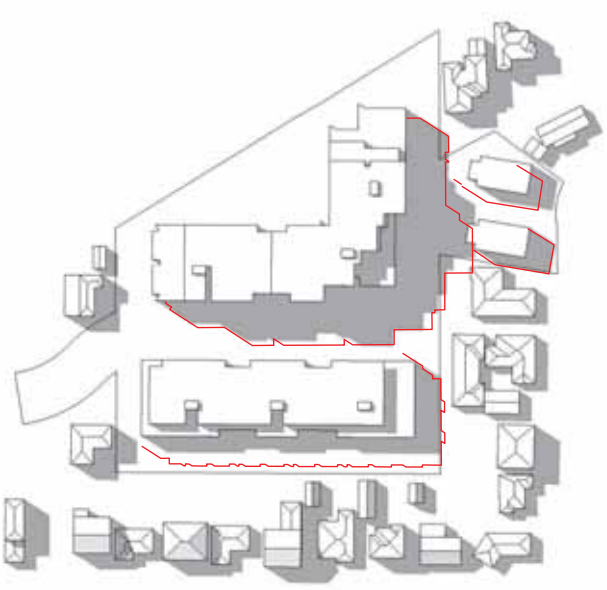
PROJECT
WHITESIDE STREET, NORTH RYDE

DRAWING TITLE
SHADOWS ANALYSIS 01
JUNE 22ND

SCALE	DATE	DRAWN	CHECKED
NTS	30/10/2014	LP	S□

JOB	DRAWING	REVISION
14010	DA-19	A



1PM

2PM

3PM

IMPORTANT NOTES:

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A	30/10/2014	FIRST ISSUE - SECTION 75W	LP

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OUTLINE OF APPROVED PART 3A BUILDING SHADOWS

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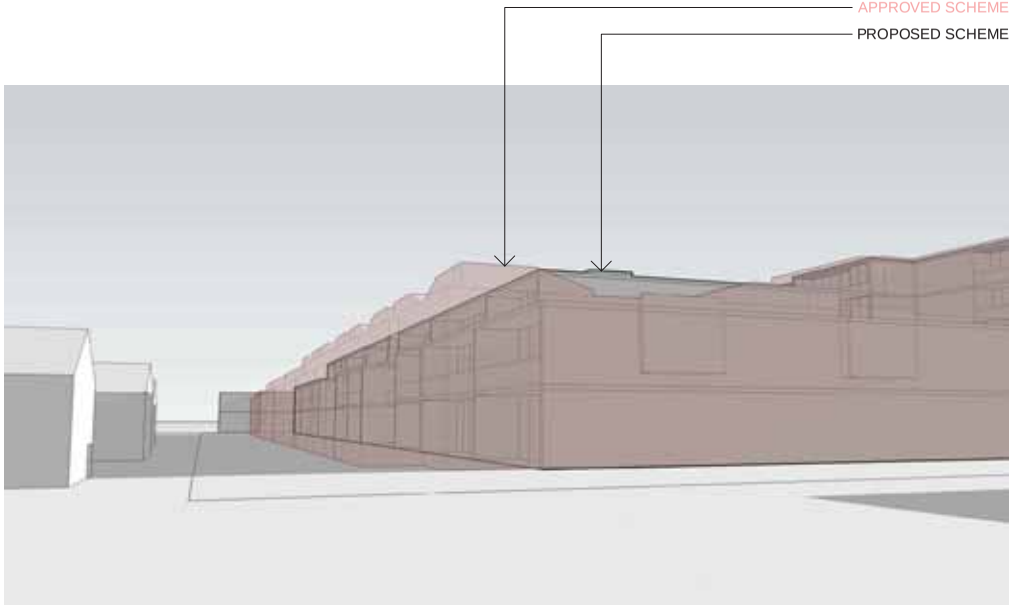
WHITESIDE STREET, NORTH RYDE

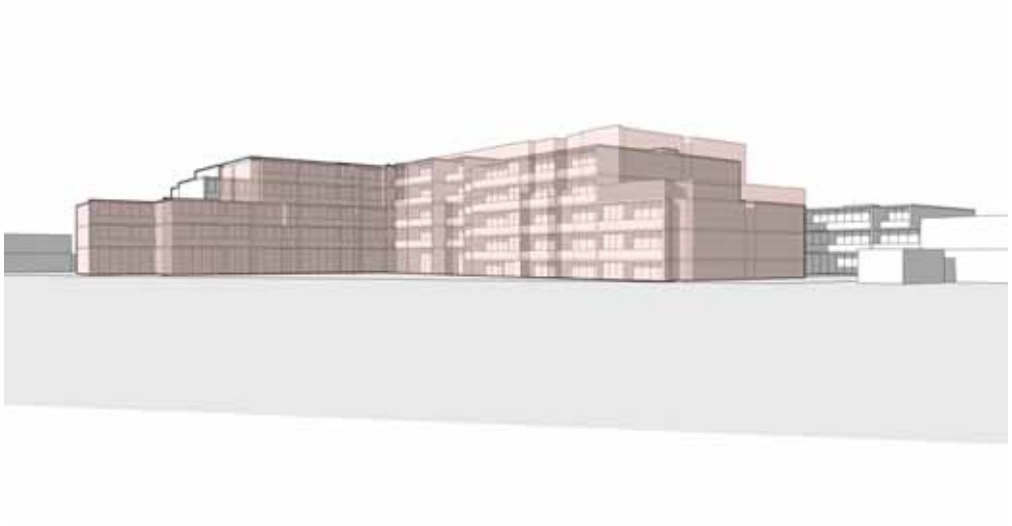
DRAWING TITLE
SHADOWS ANALYSIS 02
JUNE 22ND

SCALE	DATE	DRAWN	CHECKED
NTS	30/10/2014	LP	S□

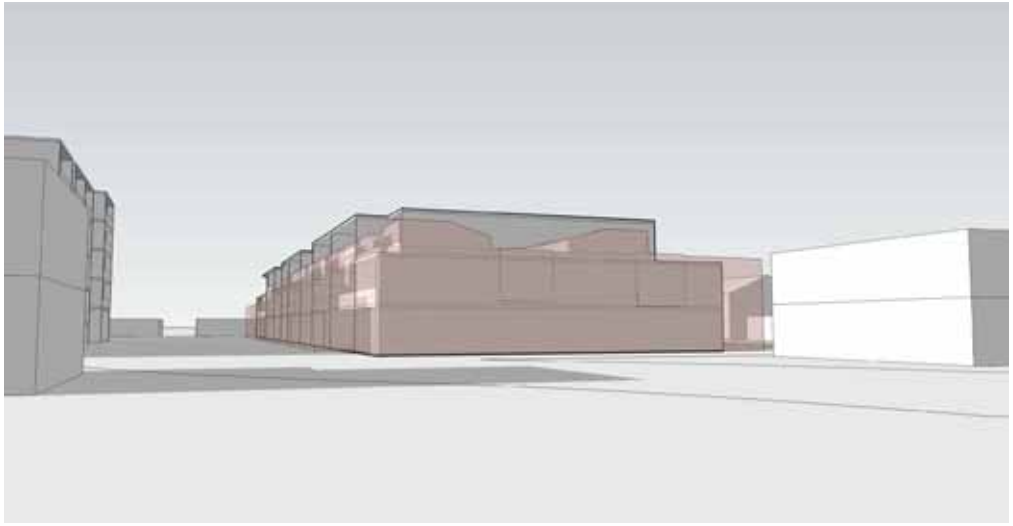
JOB	DRAWING	REVISION
14010	DA-20	A



COMPARISON VIEW 1
FROM 6 DAVID AVENUE



COMPARISON VIEW 2
FROM EPPING ROAD



COMPARISON VIEW 3
FROM SITE ENTRY

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APPROVED SCHEME
PROPOSED SCHEME

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PROJECT
WHITESIDE STREET, NORTH RYDE

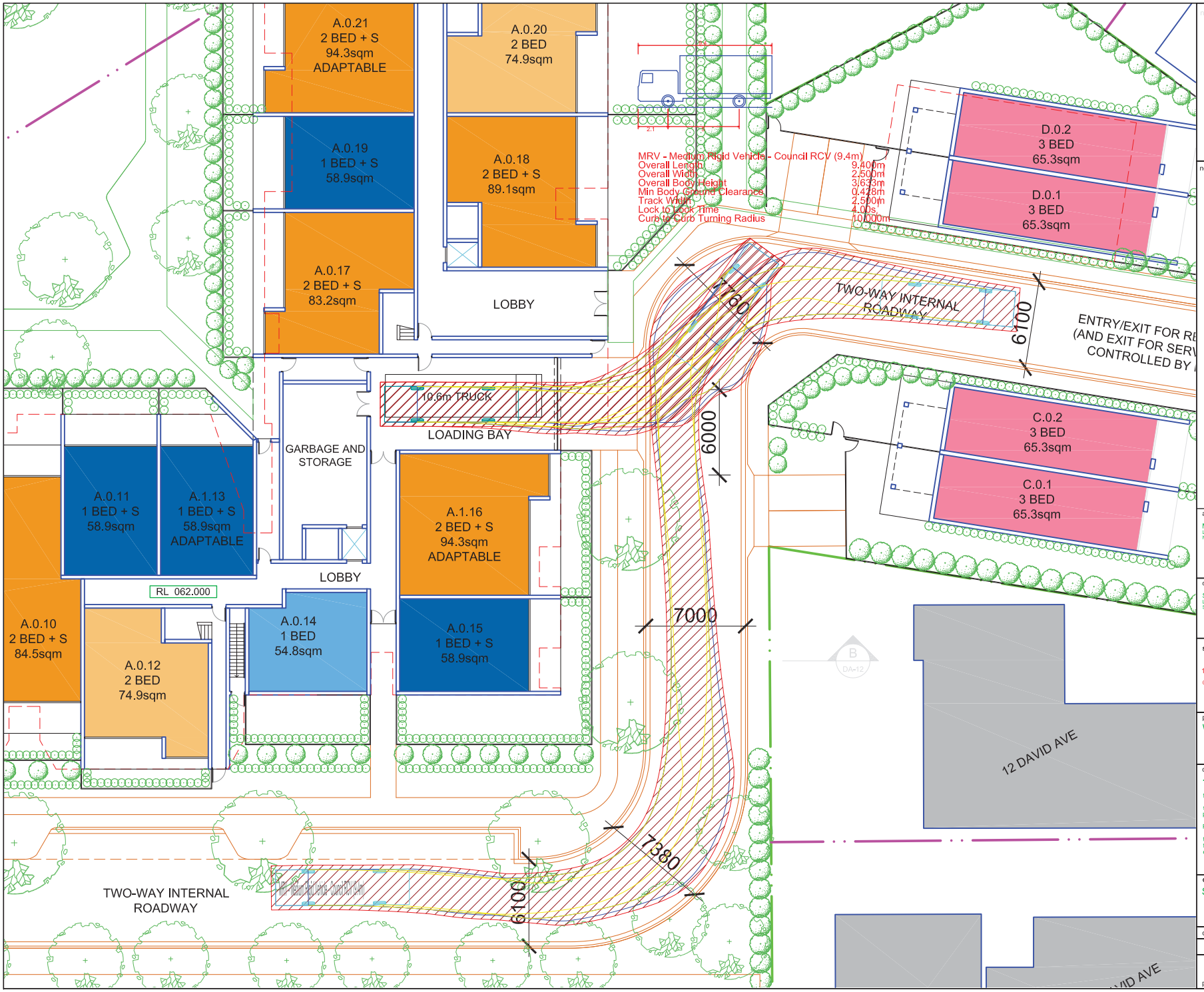
DRAWING TITLE
BUILDING ENVELOPE COMPARISON

SCALE	DATE	DRAWN	CHECKED
NTS	30/10/2014	LP	SZ

JOB	DRAWING	REVISION
14010	DA-21	A

Attachment 3

Vehicle Swept Path Analyses



notes

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Swept path diagram only prepared by TRAFFIX. Base drawing prepared by others.

no.	revision note	by.	date

architect

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client

Skylake Group Pty Ltd
Level 39, 264 George Street
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scale

1:250 @ A3

project

Whiteside Street, North Ryde

drawing prepared by

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drawing title

Swept Path - Council Refuse Collection Vehicle

drawn:	checked:	date:
AC	AC	30 Oct 2014

project no.	drawing phase.	drawing no.	rev
14.288	-	TX.01	-