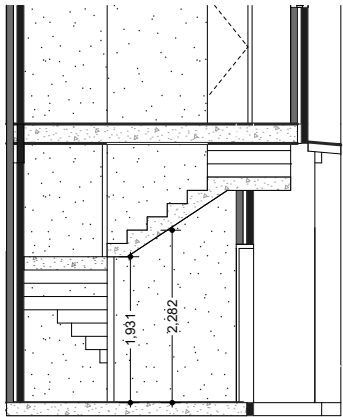


| AREAS                     |          |
|---------------------------|----------|
| APARTMENT 1:              | 74.84m²  |
| COURTYARD:                | 9.60m²   |
| APARTMENT 2:              | 48.37m²  |
| COURTYARD:                | 9.60m²   |
| GF COMMON PROP:           | 43.30m²  |
| APARTMENT 3:              | 74.39m²  |
| BALCONY:                  | 11.38m²  |
| APARTMENT 4:              | 81.27m²  |
| BALCONY:                  | 10.00m²  |
| 1st FL COMMON PROP:       | 32.67m²  |
| APARTMENT 5:              | 74.39m²  |
| BALCONY:                  | 11.38m²  |
| APARTMENT 6:              | 81.27m²  |
| BALCONY:                  | 10.00m²  |
| 2nd FL COMMON PROP:       | 32.67m²  |
| EXISTING TH 1 & 2:        | 123.00m² |
| EXIST. C'PORTS & GARAGES: | 80.00m²  |
| EXISTING TH 3 & 4:        | 180.00m² |
| BLOCK AREA:               | 664.00m² |
| PLOT RATIO:               | 1.109    |
| SITE COVER:               | 58.90%   |



GROUND FLOOR PLAN  
1:100



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| No | DATE | AMENDMENTS | DWG |
|----|------|------------|-----|
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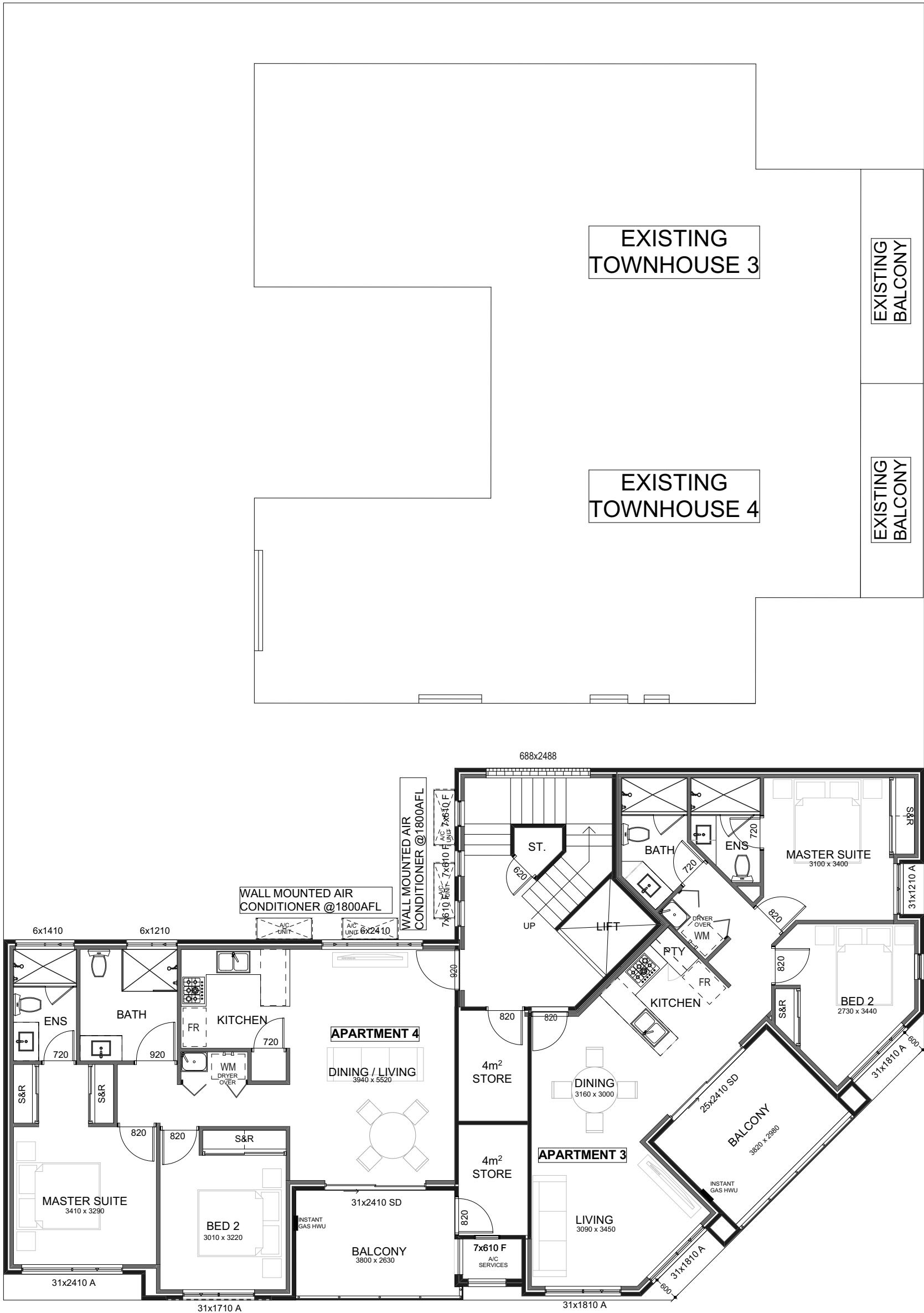
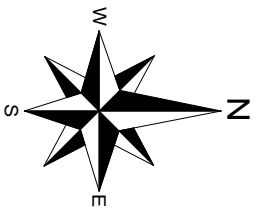
JOB NO: 9623

DATE: 23-Sep-19  
DRAWN: JF  
SCALE: 1:100  
PRINTED DATE:  
SHEET 1 of 11

PROPOSED DEVELOPMENT ON  
LOT 30 CNR REGENTS PARK RD &  
PLAISTOW STREET, JOONDALUP

FOR CLIENT: FINLAYSON

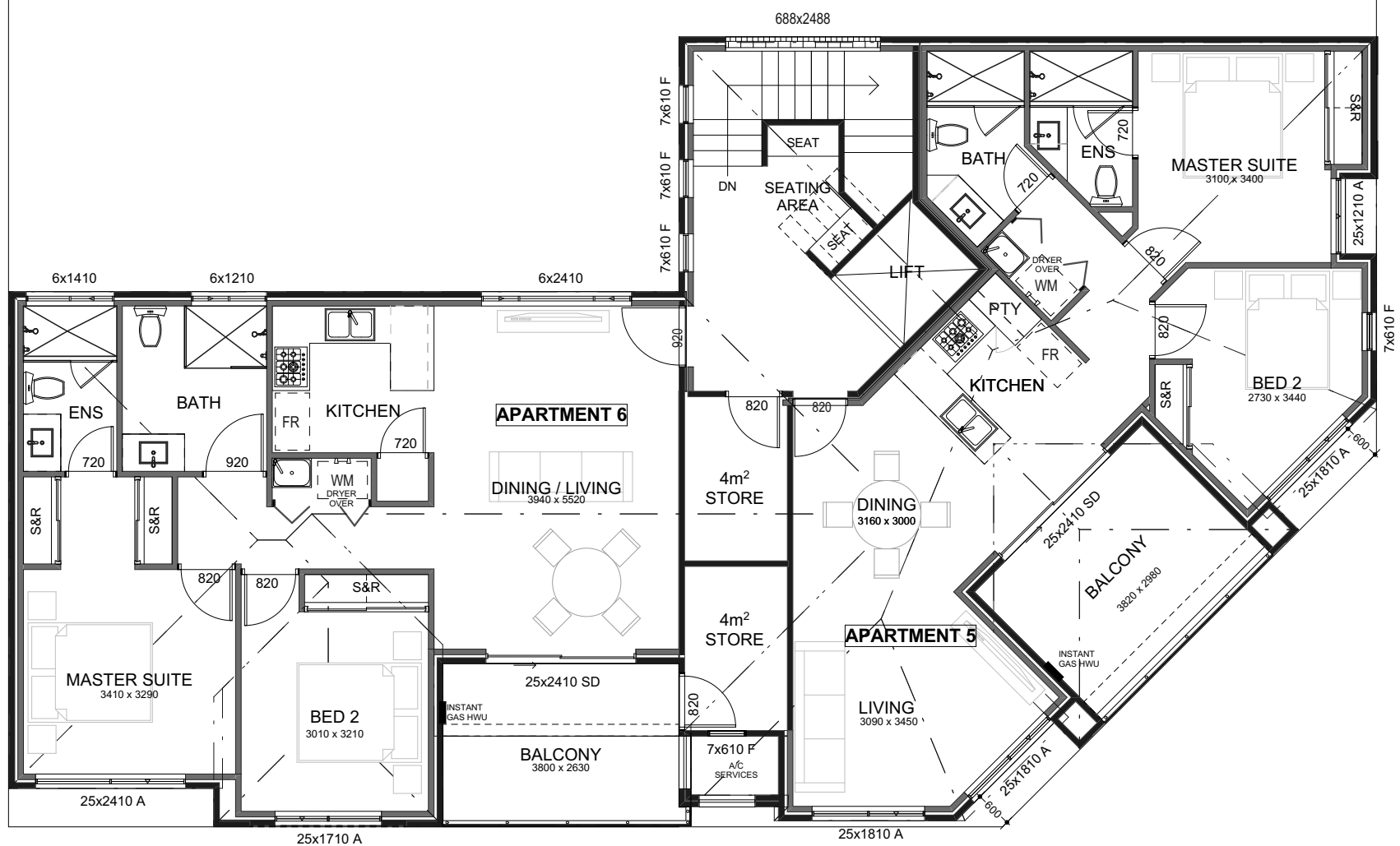
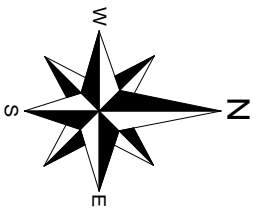




FIRST FLOOR PLAN  
1:100

| No | DATE | AMENDMENTS | DWG |
|----|------|------------|-----|
|    |      |            |     |

|  |  |
|--|--|
| <b>JOB NO: 9623</b>  | PROPOSED DEVELOPMENT ON<br>LOT 30 CNR REGENTS PARK RD &<br>PLAISTOW STREET, JOONDALUP<br><br>FOR CLIENT: FINLAYSON |
| DATE: 23-Sep-19<br>DRAWN: JF<br>SCALE: 1:100<br>PRINTED DATE:<br>SHEET 2 of 11 |  |

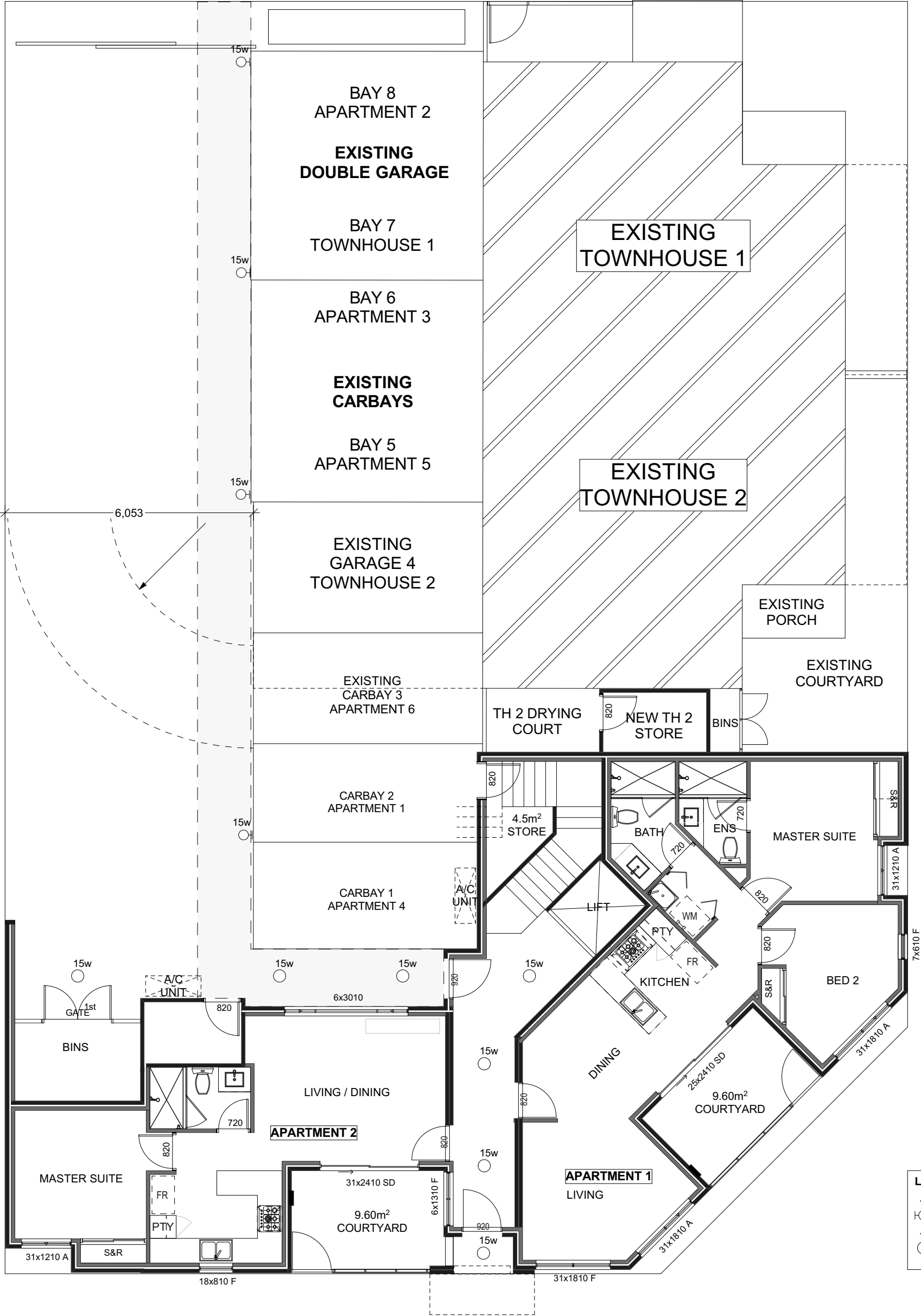


SECOND FLOOR PLAN  
1:100

| No | DATE | AMENDMENTS | DWG |
|----|------|------------|-----|
|    |      |            |     |

| JOB NO: 9623   |
|--|
| DATE: 23-Sep-19<br>DRAWN: JF<br>SCALE: 1:100<br>PRINTED DATE:<br>SHEET 3 of 11 |

|  |
|--|
| PROPOSED DEVELOPMENT ON<br>LOT 30 CNR REGENTS PARK RD &<br>PLAISTOW STREET, JOONDALUP<br><br>FOR CLIENT: FINLAYSON |
|--|



LEGEND

15w

○

WALL SENSOR LIGHTS

15w

○

SENSOR LIGHTS

GROUND FLOOR PLAN - LIGHTS PEDESTRIAN SAFETY

1:100



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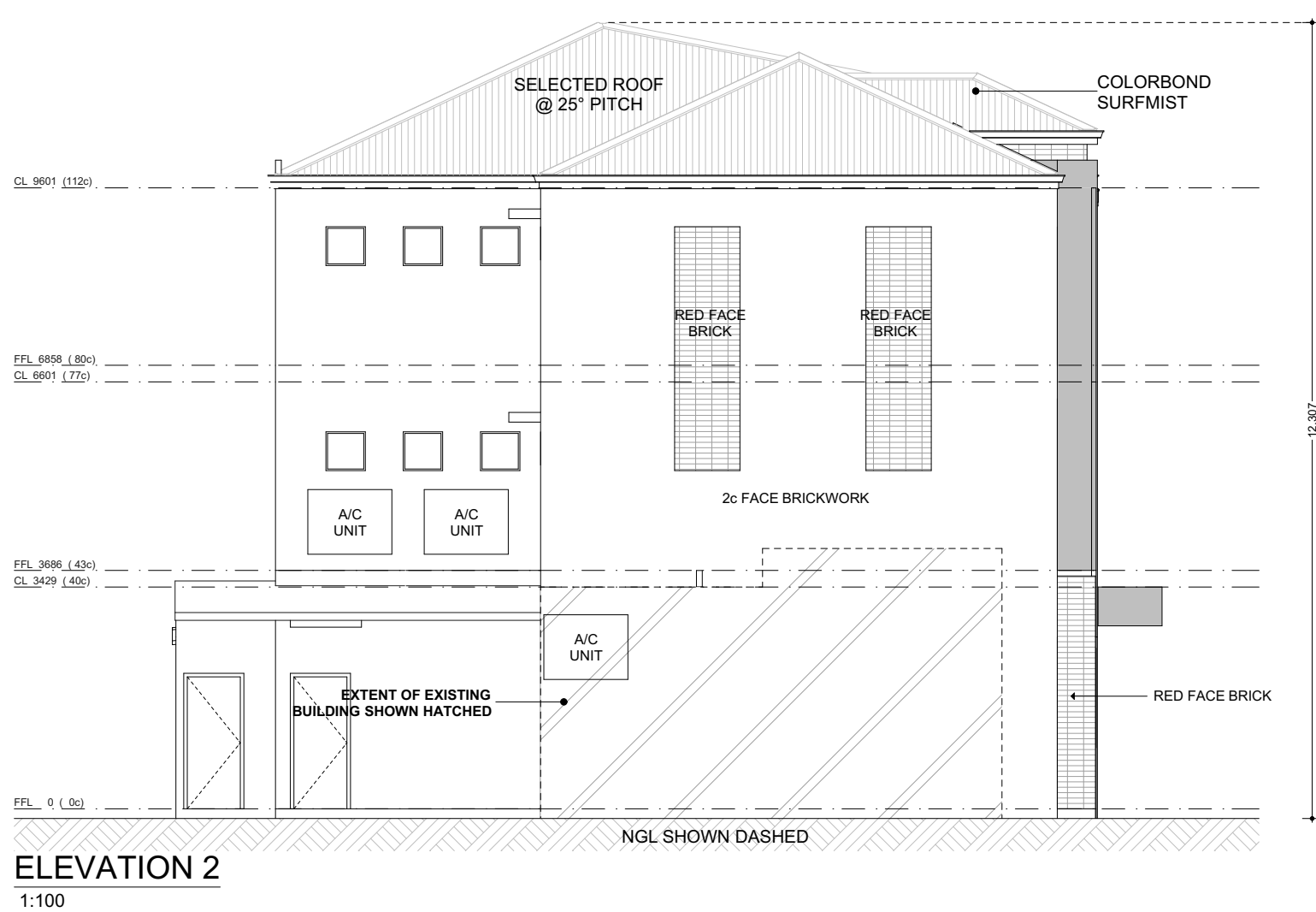
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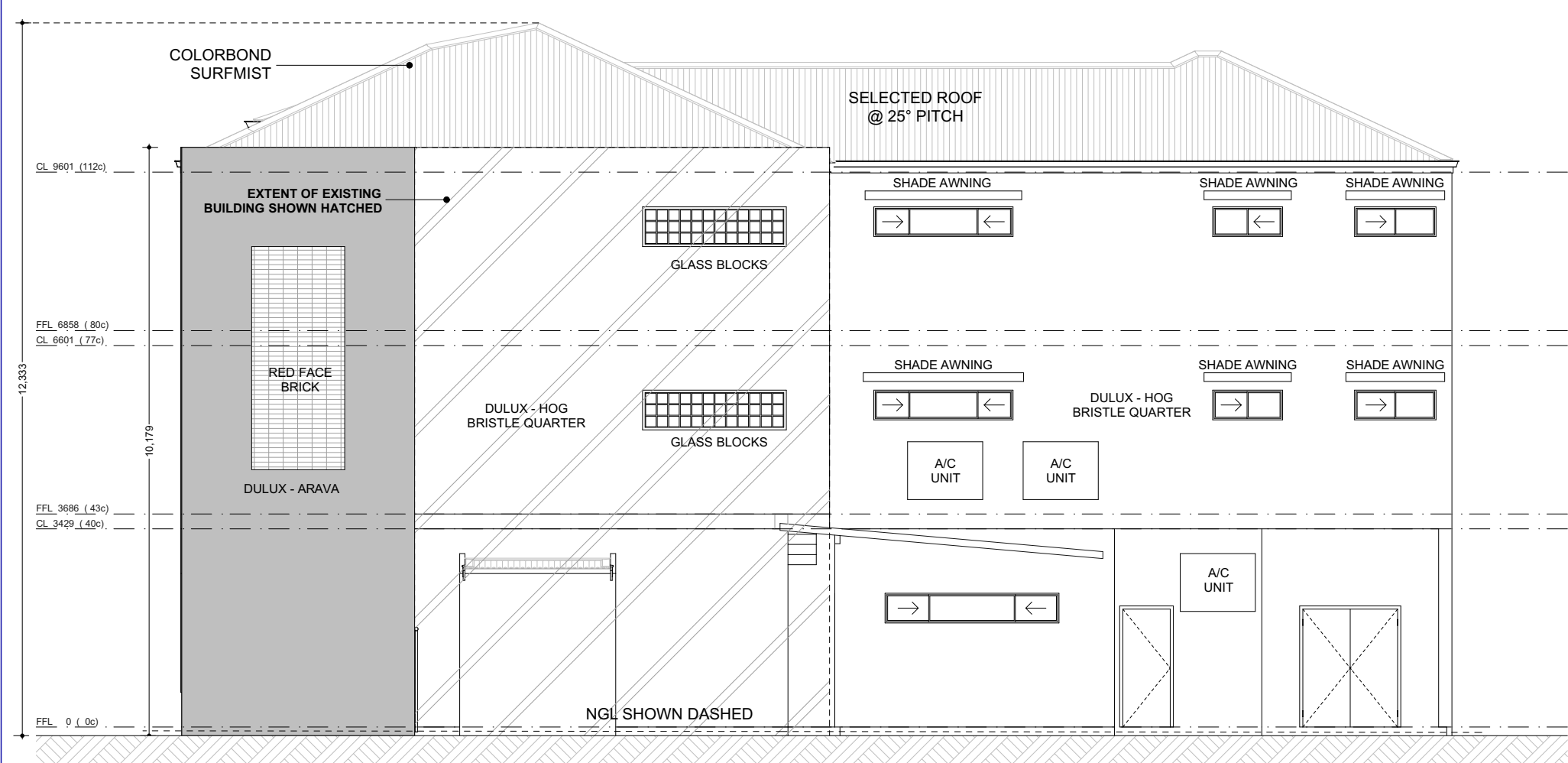
JOB NO: 9623

DATE: 23-Sep-19  
DRAWN: JF  
SCALE: 1:100  
PRINTED DATE:  
SHEET 4 of 11

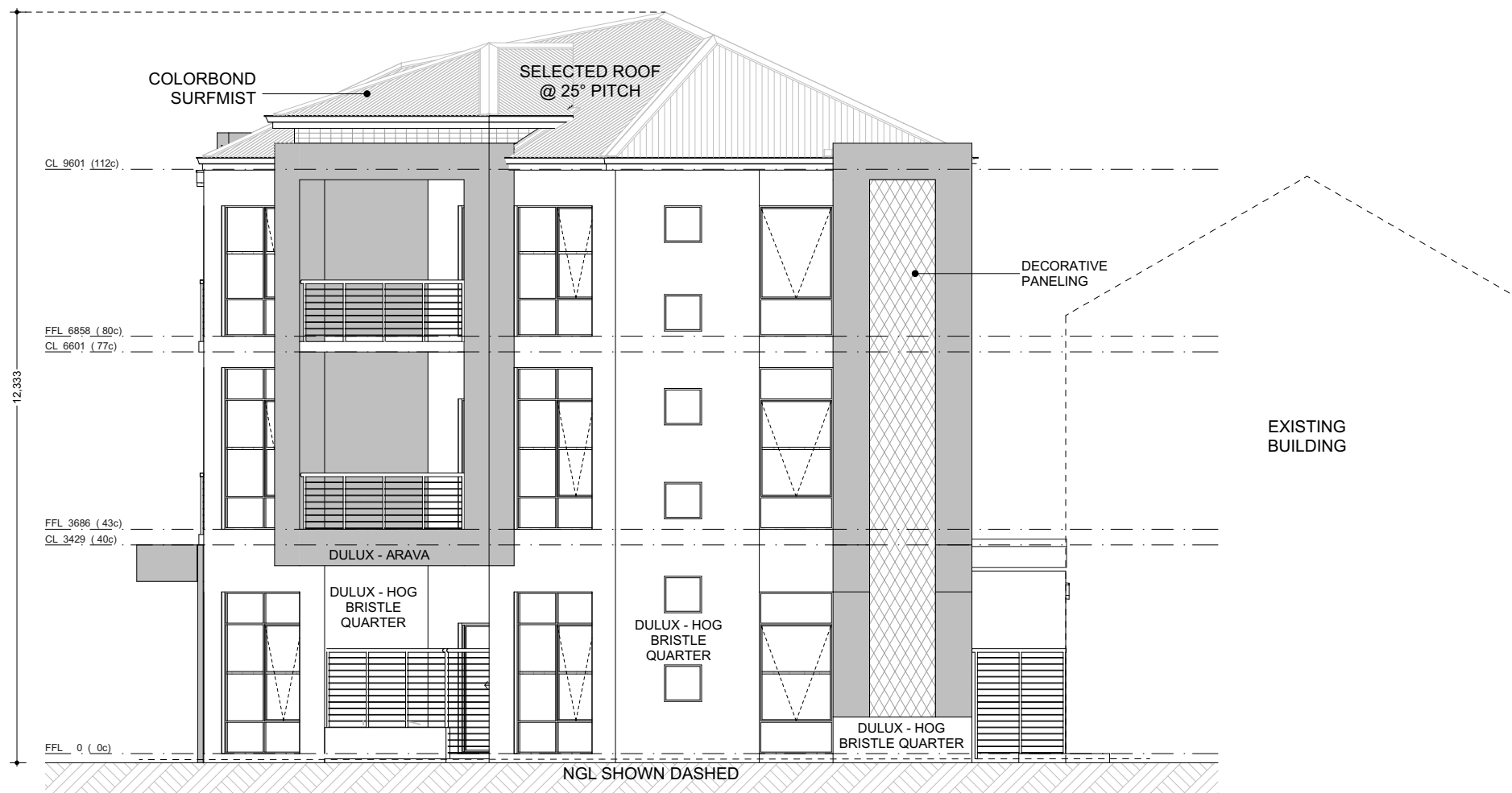
PROPOSED DEVELOPMENT ON  
LOT 30 CNR REGENTS PARK RD &  
PLAISTOW STREET, JOONDALUP

FOR CLIENT: FINLAYSON





ELEVATION 3  
1:100



ELEVATION 4  
1:100



ELEVATION 5  
1:100



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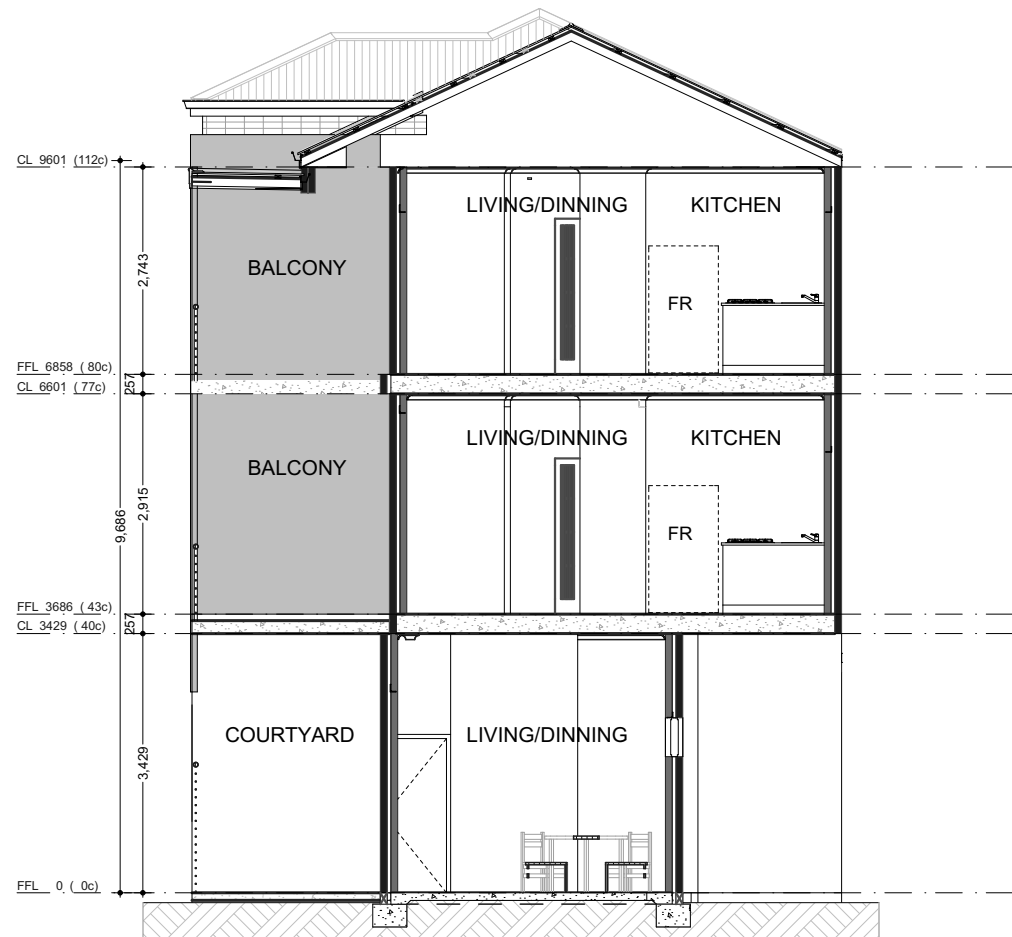
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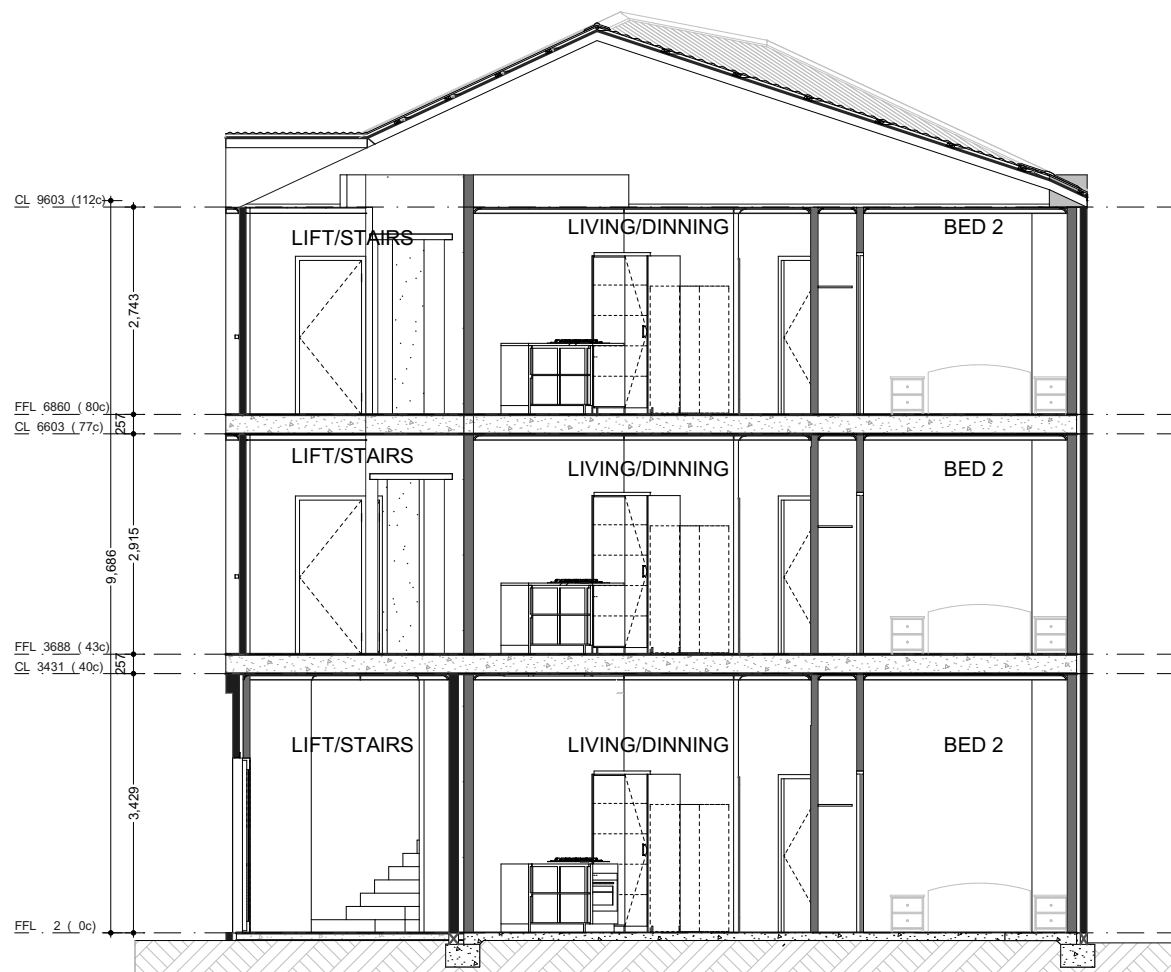
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DRAWN: JF  
SCALE: 1:100  
PRINTED DATE:  
SHEET 6 of 11

PROPOSED DEVELOPMENT ON  
LOT 30 CNR REGENTS PARK RD &  
PLAISTOW STREET, JOONDALUP  
  
FOR CLIENT: FINLAYSON





**SECTION AA**  
1:100



**SECTION BB**  
1:100



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**JOB NO: 9623**

DATE: 23-Sep-19  
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SCALE: 1:100  
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SHEET .9 of 11

PROPOSED DEVELOPMENT ON  
LOT 30 CNR REGENTS PARK RD &  
PLAISTOW STREET, JOONDALUP

FOR CLIENT: FINLAYSON

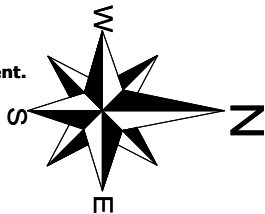
**DISCLAIMER:**  
 Lot boundaries drawn on survey are based on landgate plan only. Survey does not include title search and as such may not show easements or other interests not shown on plan. Title should be checked to verify all lot details and for any easements or other interests which may affect building on the property.

Survey does not include verification of cadastral boundaries. All features and levels shown are based on orientation to existing pegs and fences only which may not be on correct cadastral alignment. Any designs based or dependent on the location of existing features should have those features' location verified in relation to the true boundary.

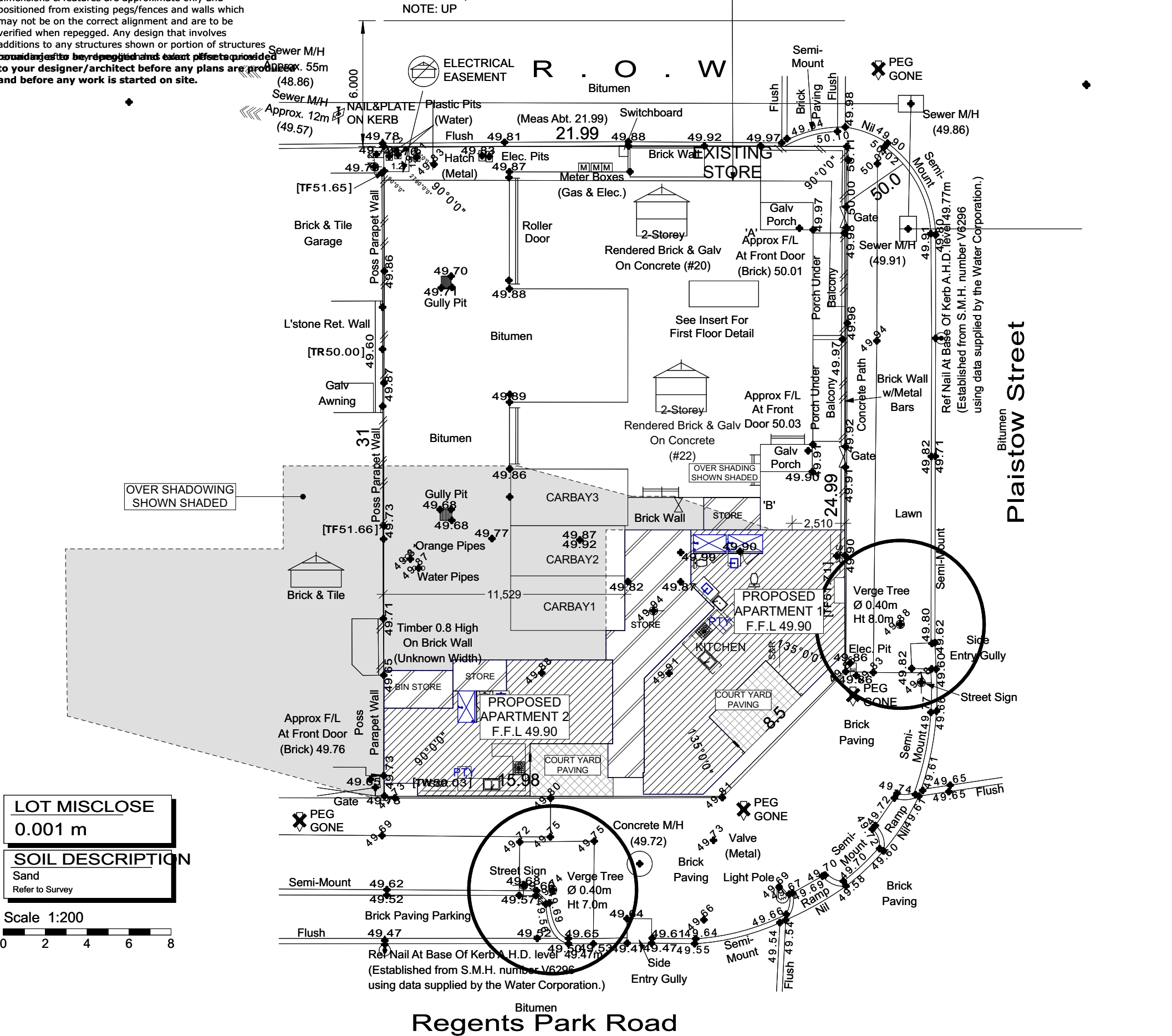
Survey shows visible features only and will not show locations of underground pipes or conduits for internal or mains services. Verification of the location of all internal and mains services should be confirmed prior to finalisation of any design work.

**DISCLAIMER:**  
Cottage & Engineering surveys accept no responsibility for any physical on site changes to the parcel or portion of the parcel of land shown on this survey including any adjoining neighbours levels and features that have occurred after the date on this survey. All Sewer details plotted from information supplied by Water Corporation.

Due to lack of survey marks/pegs, all building offset dimensions & features are approximate only and are positioned from existing pegs/fences and walls which may not be on the correct alignment and are to be verified when repegged. Any design that involves additions to any structures shown or portion of structures ~~is to be repegged and extent offsets prior to your designer/architect before any plans are prepared and before any work is started on site.~~



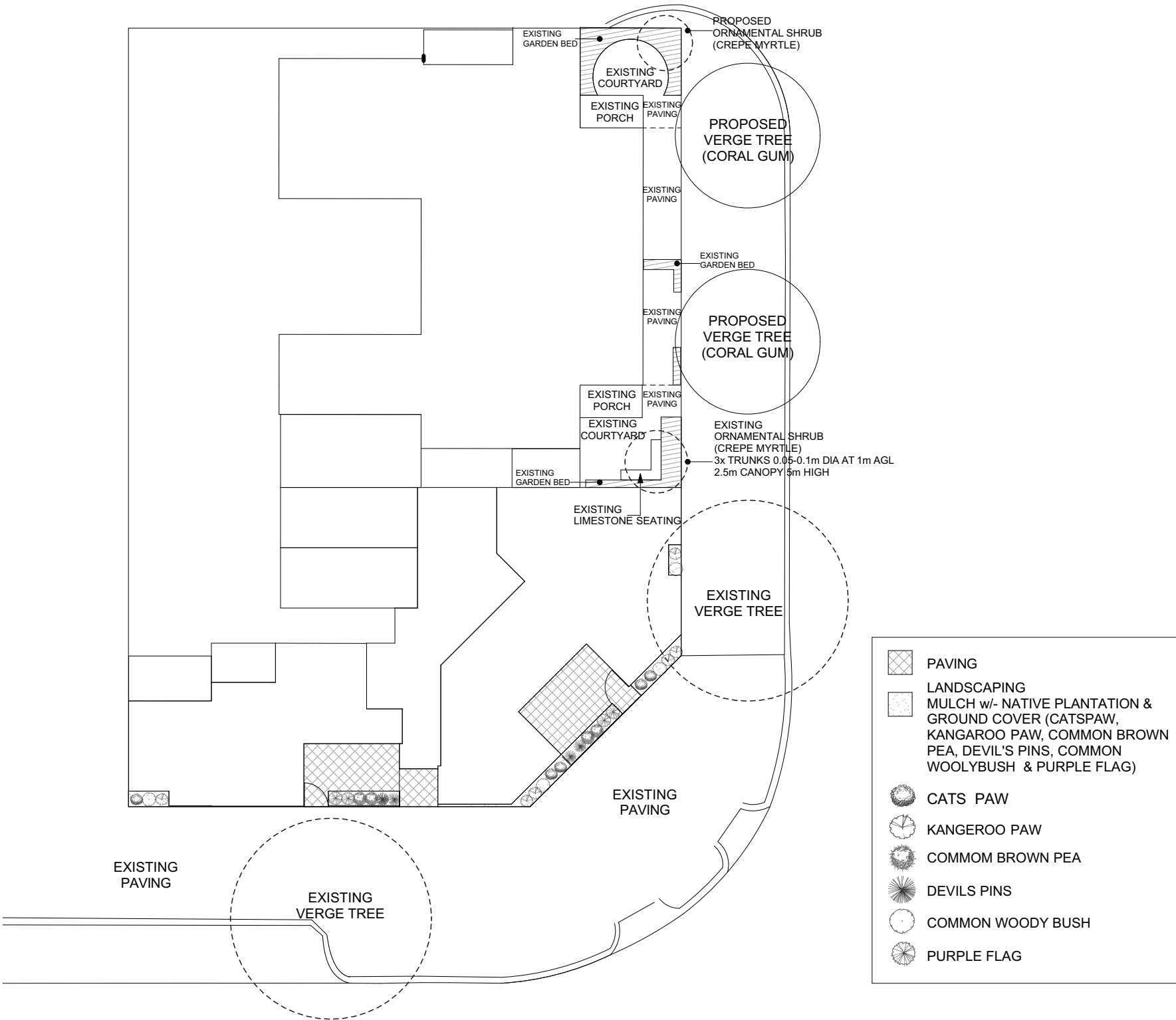
**NOTE:**  
Approx. Sewer Clearance Line  
(This line is NOT an easement)  
**Setbacks MUST be confirmed**  
**by Water Corp. before any**  
**design work is undertaken.**  
**This line is NOT definitive.**











**LANDSCAPING PLAN**  
**SCALE 1:200**





**LEVEL 1 WASTE MANAGEMENT PLAN - DESIGN PHASE**

**Property Address:** Lot 30 Regents Park Road and Plaistow St, Joondalup.

**Proposed Development:** Building extension containing 6 Apartments fronting Regents Park Road.

The following simple Waste Management Plan has been developed to confirm that the main issues essential for waste management implementation have been considered and provide a brief outline as to how they have been incorporated into the design of the development.

| Key issues   | Completed | N/A | Outline of consideration in relation to the development   |
|--|-----------|-----|---|
| <b>Initial planning</b>  |           |     |   |
| Have you consulted with Local Government to find out what waste management services are offered, or if there are any specific requirements, policies etc. that the development will need to incorporate? | Y         |     | <p>The City of Joondalup (City) has advised that waste for the development should be managed in accordance with the <i>WALGA Multiple Dwelling Waste Management Plan Guidelines</i>.</p> <p>From January 2019 the City introduced a three bin service as part of its commitment to meeting the State Government's target of diverting 65% of municipal solid waste from landfill by 2020 – a key aspiration of the <i>City's Waste Management Plan</i>.</p> <p>The City provides weekly collection of general waste bins, and on alternate fortnights the City collects the recycling waste bins and green waste bins.</p> <p>A bulk green waste collection for garden waste only occurs for each suburb once per year. For the suburb of Joondalup bulk green waste collection usually occurs in April.</p> <p>The City's On-request Bulk Hard Waste Collection provides the following three services, per household, per financial year:</p> <ul style="list-style-type: none"> <li>• One collection of up to four white goods</li> </ul> |

|  |                                     |                     | <ul style="list-style-type: none"> <li>One collection of up to six mattresses</li> <li>One three cubic metre skip bin, or one lounge suite collection.</li> </ul>   |               |  |  |  |               |                                     |                     |   |       |    |   |    |        |     |   |     |         |     |   |   |              |  |          |            |
|--|-------------------------------------|---------------------|---|---------------|--|--|--|---------------|-------------------------------------|---------------------|---|-------|----|---|----|--------|-----|---|-----|---------|-----|---|---|--------------|--|----------|------------|
| For mixed-use developments, will residential and commercial waste streams be managed separately?             |                                     | N/A                 |   |               |  |  |  |               |                                     |                     |   |       |    |   |    |        |     |   |     |         |     |   |   |              |  |          |            |
| <b>Waste Generation</b>  |                                     |                     |   |               |  |  |  |               |                                     |                     |   |       |    |   |    |        |     |   |     |         |     |   |   |              |  |          |            |
| Have you identified the volume of waste that is likely to be generated in the operations of the development? | Y                                   |                     | <p>The waste generation rates in <i>Appendix 1 of the WALGA Multiple Dwelling Waste Management Plan Guidelines</i> are applicable to a two bin services and therefore have not been used.</p> <p>The City provided by email on the 25 September 2019 (attached), alternative waste energy generation rates for its 3 bin system (excluding green waste generation rates) that have been used to calculate the total volume of waste generated by the 6 apartments in the tables below:</p> <table border="1"> <thead> <tr> <th colspan="4">General Waste</th></tr> <tr> <th>Dwelling Size</th><th>Waste Generation Rate (litres/week)</th><th>Number of Dwellings</th><th>Total Waste Generation/ Dwelling Size (litres/week)</th></tr> </thead> <tbody> <tr> <td>1 bed</td><td>80</td><td>1</td><td>80</td></tr> <tr> <td>2 beds</td><td>110</td><td>5</td><td>550</td></tr> <tr> <td>3+ beds</td><td>140</td><td>0</td><td>0</td></tr> <tr> <td><b>Total</b></td><td></td><td><b>6</b></td><td><b>630</b></td></tr> </tbody> </table> | General Waste |  |  |  | Dwelling Size | Waste Generation Rate (litres/week) | Number of Dwellings | Total Waste Generation/ Dwelling Size (litres/week) | 1 bed | 80 | 1 | 80 | 2 beds | 110 | 5 | 550 | 3+ beds | 140 | 0 | 0 | <b>Total</b> |  | <b>6</b> | <b>630</b> |
| General Waste  |                                     |                     |   |               |  |  |  |               |                                     |                     |   |       |    |   |    |        |     |   |     |         |     |   |   |              |  |          |            |
| Dwelling Size  | Waste Generation Rate (litres/week) | Number of Dwellings | Total Waste Generation/ Dwelling Size (litres/week)   |               |  |  |  |               |                                     |                     |   |       |    |   |    |        |     |   |     |         |     |   |   |              |  |          |            |
| 1 bed  | 80                                  | 1                   | 80  |               |  |  |  |               |                                     |                     |   |       |    |   |    |        |     |   |     |         |     |   |   |              |  |          |            |
| 2 beds   | 110                                 | 5                   | 550   |               |  |  |  |               |                                     |                     |   |       |    |   |    |        |     |   |     |         |     |   |   |              |  |          |            |
| 3+ beds  | 140                                 | 0                   | 0   |               |  |  |  |               |                                     |                     |   |       |    |   |    |        |     |   |     |         |     |   |   |              |  |          |            |
| <b>Total</b>   |                                     | <b>6</b>            | <b>630</b>  |               |  |  |  |               |                                     |                     |   |       |    |   |    |        |     |   |     |         |     |   |   |              |  |          |            |

|  |   |  |  |   |  |                     |  |
|--|---|--|--|---|--|---------------------|--|
|  |   |  |  | Comingled Recycling   |  |                     |  |
|  |   |  |  | Dwelling Size   | Waste Generation Rate (litres/fortnight) | Number of Dwellings | Total Waste Generation/ Dwelling Size (litres/fortnight) |
|  |   |  |  | 1 bed   | 40                                       | 1                   | 40   |
|  |   |  |  | 2 beds  | 80                                       | 5                   | 400  |
|  |   |  |  | 3+ beds   | 240                                      | 0                   | 0  |
|  |   |  |  | Total   |  | 6                   | 440  |
| Design considerations  |   |  |  |   |  |                     |  |
| Noise – does the development design include better practice measures to minimise noise associated with use of the waste management system? | Y |  |  | <p>The proposed bin store is located in the south-eastern corner of the site at the back of the proposed building extension fronting Regents Park Road to reduce the impact of noise bin use noise on the majority of residents.</p> <p>However, the bin store is adjacent to the Apartment 2 due to ground floor area constraints caused by the existing development. To mitigate potential noise, Apartment 2 has been designed with a double brick wall separating the bin store its master suite, and the bin store will be fitted with soft close gates.</p> <p>The waste will be collected from the existing bin presentation area fronting the laneway (R.O.W.) eliminating the need for waste collection vehicles to reverse and the associated warning noise.</p> <p>The bins will be moved to and from the bin presentation area via a step free route using the smooth bituminized driveway to minimize noise.</p> |  |                     |  |
| Odour – does the development design include better practice measures to minimise odour associated with the use of waste management system? | Y |  |  | <p>The bin store has been designed so that it is not fully enclosed to ensure that it is well ventilated reducing odour problems.</p>   |  |                     |  |



|  |   |  |  |
|--|---|--|--|
| <i>Vermin</i> – has the development been designed to minimise the entry of vermin to the waste storage areas?  | Y |  | The waste will be stored in sealed bins and the bin store area kept free of clutter and dumped waste so as to not to attract vermin.   |
| <i>Hygiene</i> – has the development been designed to allow the waste storage areas to be kept in a good condition?  | Y |  | The bin store area has been designed to be under cover and with a concrete slab floor graded to a waste drain that is connected to sewer. A hose cock will also be included to facilitate washout of bins and bin store. The walls of the bin store will be sealed and painted in a light colour to facilitate washout. The owner/s will arrange regular cleaning the bins and the bin store.  |
| <i>Health, Safety and the Environment (OHSE)</i> – does the development design include better practice measure to minimise the risk to Health, Safety and the Environment? | Y |  | <p>The waste management system and service have been designed to minimize any potential risk of injury or illness of anyone engaged in or affected by waste management including (but not limited) to residents, tenants, cleaners and waste service staff. Potential OHSE risks associated with waste management considered, included:</p> <ul style="list-style-type: none"> <li>• Manual handling injury</li> <li>• Damage to buildings and infrastructure</li> <li>• Cuts and lacerations from sharp materials</li> <li>• Biohazards</li> <li>• Dust</li> <li>• Odours</li> <li>• Vermin</li> <li>• Conflict between building design and collection vehicles.</li> </ul> |
| <i>Safety</i> – does the development design include better practice measures to minimise the chance of illegal activities?   | Y |  | <p>To enhance safety and security of those engaged in waste management activities:</p> <ul style="list-style-type: none"> <li>• Access to the property is restricted by: <ul style="list-style-type: none"> <li>○ an automated sliding security gate to the driveway near its intersection with the rear laneway (R.O.W.); and</li> <li>○ pedestrian access being only via secure entry doors controlled</li> </ul> </li> </ul>  |

|   |                                 |                   | <p>by residents.</p> <ul style="list-style-type: none"> <li>The design incorporates passive surveillance of the bin store by it being: <ul style="list-style-type: none"> <li>located adjacent to the car park and close to the lift foyer;</li> <li>on the pedestrian route from the resident's car park to the rear lift foyer entry of the building extension;</li> <li>directly overlook by the major opening from a habitable room of the existing townhouse 2, known as #22 Plaistow St.</li> </ul> </li> </ul>  |                            |  |  |  |               |                                 |                   |                  |               |     |     |     |                     |     |     |     |
|---|---------------------------------|-------------------|--|----------------------------|--|--|--|---------------|---------------------------------|-------------------|------------------|---------------|-----|-----|-----|---------------------|-----|-----|-----|
| <b>Waste Storage</b>  |                                 |                   |  |                            |  |  |  |               |                                 |                   |                  |               |     |     |     |                     |     |     |     |
| Is there sufficient space within the property boundary to store the volume of waste and recycling (and organics) likely to be generated at the development during the period between collections? | Y                               |                   | <p>Based on the total waste generation calculated above the number of bins required for the building extension is calculated in the table below:</p> <table border="1"> <thead> <tr> <th colspan="4">Waste Storage Requirements</th></tr> <tr> <th>Dwelling Size</th><th>Total Waste Generation (litres)</th><th>Bin Size (litres)</th><th>No Bins Required</th></tr> </thead> <tbody> <tr> <td>General Waste</td><td>630</td><td>240</td><td>2.6</td></tr> <tr> <td>Comingled Recycling</td><td>440</td><td>240</td><td>1.8</td></tr> </tbody> </table> <p>The bin store has been designed to cater for the City's recommendation (see attached emailed 11 September 2019) as following:</p> <ul style="list-style-type: none"> <li>3x 240L General Waste bins</li> <li>2x 360L Recycling bins</li> <li>1 x 240L Green Waste bin. (If required)</li> </ul> <p>The bin store has been designed so that it is located on site, and is of sufficient size to store general waste for 1 week and comingled recycling waste for two weeks.</p> | Waste Storage Requirements |  |  |  | Dwelling Size | Total Waste Generation (litres) | Bin Size (litres) | No Bins Required | General Waste | 630 | 240 | 2.6 | Comingled Recycling | 440 | 240 | 1.8 |
| Waste Storage Requirements  |                                 |                   |  |                            |  |  |  |               |                                 |                   |                  |               |     |     |     |                     |     |     |     |
| Dwelling Size   | Total Waste Generation (litres) | Bin Size (litres) | No Bins Required   |                            |  |  |  |               |                                 |                   |                  |               |     |     |     |                     |     |     |     |
| General Waste   | 630                             | 240               | 2.6  |                            |  |  |  |               |                                 |                   |                  |               |     |     |     |                     |     |     |     |
| Comingled Recycling   | 440                             | 240               | 1.8  |                            |  |  |  |               |                                 |                   |                  |               |     |     |     |                     |     |     |     |
| Is future service flexibility incorporated in the   | Y                               |                   | The design incorporates flexibility, by the store being able to  |                            |  |  |  |               |                                 |                   |                  |               |     |     |     |                     |     |     |     |

|  |   |  |   |
|--|---|--|---|
| design?  |   |  | accommodate larger or additional bins in the future, if necessary.  |
| Have storage areas been designed to accommodate easy access, internal maneuvering of bins and cleaning?            | Y |  | <p>The bin store has been designed to:</p> <ul style="list-style-type: none"> <li>• be of sufficient width and height to enable easy access and bin maneuvering;</li> <li>• have the bins sited next to each other and with sufficient height to open the bin lids;</li> <li>• have a double gate to enable easy ingress and egress when moving bins to/from the bin presentation area;</li> <li>• include a hose cock and floor waste drainage (connected to the sewer system) to facilitate cleaning of the bins and bin store area.</li> </ul> |
| Are storage areas conveniently located for residents and caretakers?   | Y |  | The bin store has been positioned close to the exit at the rear of the building, and is accessible by the same undercover step-free path residents use to accessed the car park.  |
| Are storage areas out of sight or well screened from public areas?   | Y |  | The bin store has been located behind the building structure so it is not visible from the streets, and is also designed to be screened from view from open space and private dwellings.  |
| Are storage areas located an appropriate distance from waste sources to reduce potential amenity and OH&S impacts? | Y |  | <p>The bin store is within 9m of the building extension's rear exit to provide convenient access for residents, but being a sufficient distance to reduce the impact of noise and odour.</p> <p>The bins can be easily transferred from the bin store to the bin presentation area (25m) via the delineated pedestrian access way in 6m wide bituminized driveway.</p>  |
| Are storage areas designed to fit into the overall look of the development?  | Y |  | The waste storage area is integrated into the design of the rear of the building extension.   |

|  |   |  |   |
|--|---|--|---|
|  |   |  |   |
| <b>Waste collection</b>  |   |  |   |
| Does the development design include better practice measures to ensure waste presentation points are easy to access by waste contractors?                        | Y |  | <p>It is planned to utilize the existing bin presentation area at the rear of the property, which consists of a level bituminized pad parallel to the laneway (R.O.W) to facilitate easy collection by waste contractors.</p> <p>This bin presentation area will also be used for hard waste collection such as the City's white goods, mattress and lounge suite on demand collection services.</p>  |
| Has the route from the bin storage area to the presentation point been designed to minimise occupational health and safety risks to those transferring the bins? | Y |  | <p>The bin presentation area is located adjacent to the rear laneway (R.O.W.) so that waste collection vehicles do not need to enter the property, eliminating the risk associated with waste vehicle maneuvering within the property.</p> <p>The bins will be transferred the 25m from the bin store to the bin presentation point via a step free route along the bituminized driveway, which is a low traffic environment as there are only eight dwellings in the entire complex.</p> |
| <b>Education</b>   |   |  |   |
| Has clear signage been included to provide instructions on how to use the waste management system?   | Y |  | <p>Educational signage will be installed in the bin store that outlines appropriate waste management behaviour, and clearly identifies what items are and are not accepted in the general waste and recycling systems.</p>  |
| <b>Ongoing management</b>  |   |  |   |
| Have hand over notes been completed so that a building manager is aware of what waste management systems have been planned in the                                | Y |  | <p>The owner/s will be responsible for the building management, including ensuring all residents are:</p> <ul style="list-style-type: none"> <li>informed of the general waste, recycling, and bulky waste arrangements; and</li> </ul>   |



|              |  |  |  |
|--------------|--|--|--|
| development? |  |  | <ul style="list-style-type: none"> <li>displaying and maintaining educational signage in the bin store area.</li> </ul> <p>The owner/s will also delegate to an appropriate person the responsibility for the ongoing waste management, including:</p> <ul style="list-style-type: none"> <li>transfer of bins to and from the bins storage area to the presentation point;</li> <li>washing bins and maintaining storage areas; and</li> <li>arranging for the prompt removal of dumped waste;</li> </ul> |
|--------------|--|--|--|

**Design WA**

Below is the Applicant's explanation of how the proposed development satisfies the Design Element's Objectives by the relevant acceptable outcome or an alternate performance based solution.

Design Elements not mentioned below have been address through meeting the applicable acceptable outcomes

| Element                 | Applicant Comment   |
|-------------------------|---|
| 3.3.4 - Deep soil areas | <p>A deep soil area in accordance with the minimum area in accordance with SPP7.3 Table 3.3 cannot be achieved due to site constraints and planning requirements including:</p> <ul style="list-style-type: none"> <li>• the existing development covers 62.5% (i.e. 415m<sup>2</sup>) of the 664m<sup>2</sup> site;</li> <li>• in accordance with the previous development approval, there is no communal open space and limited private open space within the existing development;</li> <li>• limited opportunity to provide uncovered open space in the small 249m<sup>2</sup> development area; and</li> <li>• the highly urbanised nature of the development envisaged on Regents Park Road by the Joondalup Activity Centre Plan as demonstrated by the Lakeside Precinct Development Standards R100 including: <ul style="list-style-type: none"> <li>○ maximum street setback of 2m</li> <li>○ nil side boundary setbacks permitted</li> <li>○ semi-active frontage required to the streets</li> <li>○ minimum building height of 13.5m</li> </ul> </li> </ul> <p>The only opportunity to provide deep soil areas on site are in the existing Townhouses 1 &amp; 2 courtyards, however these two deep soil areas are in private open space and represent less than 5% of the total site area.</p> <p>In addition to the providing the deep soil areas in Townhouses 1 &amp; 2 courtyards, it is proposed to address Element 3.3 Objectives through the relevant design guidelines (see number in brackets below) by improving the tree canopy, shade/solar access, and residents outlook as follows:</p> <ul style="list-style-type: none"> <li>• retention of a deciduous ornamental shrub (Crepe Myrtle - <i>Lagerstroemia indica</i>) in the north-east corner of the Townhouse 2 courtyard (<b>DG3.3.1</b>);</li> <li>• planting of a small deciduous ornamental shrub (Crepe Myrtle - <i>Lagerstroemia indica</i>) in the north-west corner of Townhouse 1 courtyard (<b>DG3.3.2 &amp; DG3.3.3</b>) which will provide summer shade to the courtyard and the north facing windows (i.e. ground floor kitchen and first floor ensuite); and</li> </ul> |

|                             |  |
|-----------------------------|--|
|                             | <ul style="list-style-type: none"> <li>greening of the Plaistow Street verge with two additional verge trees (Coral Gums - <i>Eucalyptus torquata</i>) in front of the existing Townhouses 1 &amp; 2 (<b>DG 4.12.4</b>).</li> </ul> <p>Consideration was given to providing planting on the structure (e.g. green roofs, living walls, etc.) to increase the deep soil area to 7% of the site area, however it was determined to be not practicable or commercially viable in such a small scale building extension containing only 6 dwellings.</p>   |
| 3.3.5 – Deep soil areas     | <p>The existing Crepe Myrtle (<i>Lagerstroemia indica</i>) to be retained is a fully mature deciduous ornamental shrub that is 15+ years old with:</p> <ul style="list-style-type: none"> <li>3 x trunks at 1m above ground level with diameters between 0.05 - 0.10m;</li> <li>5m height; and</li> <li>2.5m canopy.</li> </ul>  |
| 3.4.1 - Communal open space | <p>As the proposed development contains less than 10 dwelling, SPP7.3 Table 3.4 species that the only communal open space requirement is to provide informal seating in the proposed deep soil area or other landscaped areas.</p> <p>Drawings show the existing Townhouse 2 courtyard seat, which consists of an ‘L’ shaped bench seat that can accommodate 6 people and is constructed of reconstituted limestone blocks, in a proposed deep soil area. This casual seating promotes casual interaction between residents and the public domain (i.e. Plaistow Street) in accordance with Design Guideline <b>DG 3.6.6</b>.</p> <p>It is not practicable to provide additional informal seating in deep soil areas or other landscaped areas as the:</p> <ul style="list-style-type: none"> <li>other proposed deep soil area is in existing private open space (i.e. Townhouse 1 landscaped courtyard);</li> <li>other landscaped areas are 0.5m front setbacks the streets and therefore too small to accommodate informal seating.</li> <li>modifying the design of the building extension to increase the depth of the street setbacks to accommodate informal seating would have a detrimental effect on the size of bedrooms, living areas and/or court yards of the ground floor apartments fronting the streets.</li> </ul> <p>The good amenity of the locality provide ample opportunity for casual interaction between residents’ and the public including recreational and social facilities within 400m walkable catchment such as:</p> <ul style="list-style-type: none"> <li>Regents Park is within 30m of the primary building extension entry on the opposite street corner and provide high amenity including landscaped open space, gazebo, seating, BBQ, play equipment, and kick-about areas.</li> </ul> |

|                                 |   |
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|                                 | <ul style="list-style-type: none"> <li>• five casual cafe opportunities being: <ul style="list-style-type: none"> <li>○ Japanese Café Café OEC sushi (165m),</li> <li>○ Gipsy Boy (190m),</li> <li>○ Govenders Gourmet (150m),</li> <li>○ Little Jaspi (240m), and</li> <li>○ Pause Café (390m).</li> </ul> </li> </ul> <p>An alternative design solution has been proposed to meet Elements 3.4 Objectives, which is to locate the informal seating in the lift lobby (<b>DG 3.6.6</b>) which provides a universally accessible, safe and comfortable environment to socialize beyond private living areas to met Element Objective <b>03.4.2</b>. Ideally this seating would be in the ground floor level lift lobby, however to achieve this outcome the staircase layout need to be altered which would result in the height of store 1 being less than the minimum 2.1m, therefore it was necessary to locate the informal seating adjacent to the second floor lift lobby.</p> <p>Another alternative solution that could be considered, is adding informal seating in the Apartments 1 &amp; 2 courtyards to promote casual interaction between residents and the public domain in accordance with Design Guideline <b>DG 3.6.6</b>.</p>   |
| 3.6.5 - Public domain interface | <p>The building extension ground floor has been designed to be adaptable to future non-residential uses by:</p> <ul style="list-style-type: none"> <li>• the floor level and courtyards levels being 0.1m above the street level to facilitate direct universal access from the streets, rather than relying on the residential access to the building, and</li> <li>• a ground floor ceiling height of 3.4m, which exceeds recommended ground floor ceiling height of 3.3m in <i>SPP7.3 Figure 4.3b</i>, to cater for future retail and commercial uses.</li> </ul> <p>In addition, it is impractical to rising the ground floor level to 0.5m to 1.0 m above the street level as recommended in Design Guideline <b>DG 3.6.2</b>, as ensuring universal access to the building extension would require either:</p> <ul style="list-style-type: none"> <li>• a 7-14m long ramp, in order to meet the Australian Standard which states an access ramp cannot exceed a gradient of 1 in 14; or</li> <li>• a wheelchair lift at the primary entry to the building.</li> </ul> <p>As achieving a 0.5 to 1.0m level change between the streets and ground floor is impractical, alternative solutions have been designed including the:</p> <ul style="list-style-type: none"> <li>• ground floor apartment bedrooms major opening have been setback from the streets and planting</li> </ul> |



|                                       |   |
|---------------------------------------|---|
|                                       | <p>used to improve privacy and the streetscape, as recommended Design Guideline <b>DG 3.6.8</b>:</p> <ul style="list-style-type: none"> <li>• Apartment 1 living room secondary window, which has a nil setback to Regents Park Road, being a fixed window and double-glazed.</li> <li>• Apartment 2 kitchen window with a nil setback to Regents Park Road being a fixed window.</li> <li>• all windows facing the streets being fitted with shear curtains/binds to provide privacy during daylight whilst still allowing passive surveillance of the street and block-out curtains/blinds to provide residents' privacy at night whilst habitable room lights are turned on.</li> </ul>  |
| 3.7.3 – Pedestrian access and entries | <p>Plan shows sensor lighting to pedestrian entries and residents' car park area.</p> <p>It is noted that laneway vehicle/pedestrian entry is also lit by a streetlight located on the line of the southern site boundary and the western boundary of the laneway (i.e. ROW).</p> <p>Drawings show reduced depth of the entry court to ensure no opportunity for entrapment, and add note that entry door is clear glazed.</p> <p>The Regents Park Road pedestrian entry has been designed provide safety and amenity in accordance with Acceptable Outcome <b>A3.7.3</b> by:</p> <ul style="list-style-type: none"> <li>• lighting at the entry court and entry corridor connected to movement sensors;</li> <li>• entry court being visible from the street; and</li> <li>• enabling casual surveillance of the entry court from within the site via a clear glass entry door.</li> </ul> |
| 3.9.1 – Car and bicycle parking       | <p>Due to space constraints at the ground floor level, caused by the small 249m<sup>2</sup> development area and the existing development on the remainder of the site, an alternative design solution in accordance with <b>DG4.6.3</b> is proposed.</p> <p><b>DG4.6.3</b> states: 'Consider providing wall mounted bicycle mounts in storerooms to retain storage functionality below and to reduce the requirement for common area bicycle racks.'</p> <p>It is planned to reduce the requirement for four (4) bicycle parking spaces in the common area by providing a wall mounted bicycle rack in the storeroom for each dwelling, which will result in the provision of secure and undercover parking for eight (8) bicycles. The proposed lift in the building extension will provide convenient access to the storerooms that are not on the ground floor.</p>                     |
| 3.9.2 – Car and bicycle parking       | <p>All residents' car parking spaces (i.e. 8 bays) have been provided on-site.</p> <p>When the original subdivision was undertaken, the developer constructed car parking embayments on both</p>  |

|                                   | <p>sides of Regents Park Road to cater for visitor parking that would be generated by the future development on the mixed use lots (including this site) along Regents Park Road.</p> <p>SPP7.3 DG3.9.3 states ‘Visitor parking may be reduced where there is adequate on-street parking or public parking in the near vicinity of the development.’</p> <p>Ample on-street parking close to the development is demonstrated by:</p> <ul style="list-style-type: none"> <li>the proximity of car embayments on Regents Park Road to the building entry are as follows:</li> </ul> <table border="1"> <thead> <tr> <th>Distance from site</th><th>Number embayments</th></tr> </thead> <tbody> <tr> <td>&lt;20m</td><td>5</td></tr> <tr> <td>&lt;50m</td><td>14</td></tr> <tr> <td>&lt;100m</td><td>28</td></tr> </tbody> </table> <ul style="list-style-type: none"> <li>an additional 20 off-street car parking spaces are located at the Regents Park POS, some 80 - 120m walking distance from the site;</li> <li>also, there are on-street parking opportunities on Plaistow Street, Putney Place and Upney Mews close to the site;</li> <li>the on-street car parking, and Regents Park POS car parking is controlled by the City of Joondalup, which imposes a 2 hour time limit from 9am – 5pm Monday – Friday; and</li> <li>each residential address is entitled to apply for three annual parking permits, which can be used by its visitors for on-street parking.</li> </ul> | Distance from site | Number embayments | <20m | 5 | <50m | 14 | <100m | 28 |
|-----------------------------------|---|--------------------|-------------------|------|---|------|----|-------|----|
| Distance from site                | Number embayments   |                    |                   |      |   |      |    |       |    |
| <20m                              | 5   |                    |                   |      |   |      |    |       |    |
| <50m                              | 14  |                    |                   |      |   |      |    |       |    |
| <100m                             | 28  |                    |                   |      |   |      |    |       |    |
| 4.1.1 – Solar and daylight access | <p>The orientation of the building extension is fixed by the:</p> <ul style="list-style-type: none"> <li>existing development, which was constructed in accordance with the a Development Approval granted in October 2000 based on the relevant planning requirement and building standards in force at the time;</li> <li>small 249m<sup>2</sup> undeveloped portion of the site on which the building extension is to be constructed;</li> <li>undeveloped portion of the site having a 15.98m eastern aspect, 8.5m northern-eastern aspect, and a 6.7m northern aspect; and</li> <li>JACP Figure 11 that specifies a semi-active frontage to the streets.</li> </ul> <p>In accordance with the intent of Element 4.1 solar and daylight access has been optimize, by maximizing the number of dwellings with a northern aspect. Five dwelling of the eight in the total development (i.e.</p>   |                    |                   |      |   |      |    |       |    |

|                                   |  |
|-----------------------------------|--|
|                                   | <p>Townhouses 1 &amp; 2, and Apartments 1, 3 &amp; 5) have northern aspect resulting in their living rooms and private open spaces receiving at least 2 hours of sunlight between 9am - 3pm.</p> <p>For Apartments 2, 4 &amp; 6 have an eastern aspect and during the winter solstice the:</p> <ul style="list-style-type: none"> <li>• private open spaces receives at least 2 hours of sunlight between 9am - 3pm;</li> <li>• living areas adjoin the private open spaces;</li> <li>• living areas receive an additional 1.5 hours of direct sunlight before 9am (i.e. from shortly after sun rise at 7.17am);</li> <li>• ceiling height of the ground floor Apartment 2 and the first floor Apartment 4 has been increased ceiling to 3.4m and 2.92m respectively to improved solar access.</li> </ul>  |
| 4.1.4 – Solar and daylight access | <p>Passive solar design techniques have been used to reduce solar gain and glare from mid-spring to autumn, so that awning are not require to the Apartments 1, 3 &amp; 5 north facing windows. These alternative passive solar design techniques include:</p> <ul style="list-style-type: none"> <li>• locating north facing windows to benefit from the shading provided by the existing deciduous street tree (8m high, 8m dia. canopy) in the Plaistow Street verge;</li> <li>• master suite's north facing windows, being setback 500mm from the building line to reduce the amount of direct morning and afternoon sunlight entering these windows; and</li> <li>• bed 2's being designed with two small relatively north facing windows (i.e. 600mm x 600mm).</li> </ul>  |
| 4.2.2 – Natural ventilation       | <p>All dwellings have multiple aspects and therefore fulfil the objectives of Element 4.2 by meeting all the acceptable outcomes (i.e. <b>A4.2.1 - 4.2.4</b> inclusive).</p> <p>It is noted that the reference in acceptable outcome <b>A4.2.2 (b)</b> to preferred ventilation openings to the south or west is in relation to single aspect apartments.</p> <p>Major opening to west and south as suggested, have not been provided because of the site constraints and design principles set-out below:</p> <p><u>Apartments 1, 3 &amp; 5</u></p> <p><i>No south facing major openings</i> due to:</p> <ul style="list-style-type: none"> <li>• the need to provide a secure entry, staircase and lift foyer from the primary street (i.e. Regents Park Road), and the residents' car park.</li> </ul> <p><i>No west facing major openings</i> due to:</p> <ul style="list-style-type: none"> <li>• the need to avoid overlooking of Townhouse 2's private open space; and</li> <li>• passive solar design principles which recommend minimising west facing windows to reduce glare and</li> </ul> |

|                                      |  |
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|                                      | <p>heating by the summer sun.</p> <p><u>Apartments 2, 4 &amp; 6</u><br/> <i>No south facing major openings</i> due to the: <ul style="list-style-type: none"> <li>• fire rating requirements for the parapet wall on the southern boundary for the length of the building, and</li> <li>• impact on the future redevelopment of the adjoin lot should their be major openings on the common boundary.</li> </ul> <i>No west facing major openings:</i> <ul style="list-style-type: none"> <li>• as west facing highlight windows have been provided to facilitate natural cross ventilation and ensure privacy of Townhouse 2 bedroom 2 window facing east, and</li> <li>• passive solar design principles that recommend minimise west facing windows to reduce glare and heating by the summer sun.</li> </ul> </p>  |
| 4.3.2 – Size and layout of dwellings | <p>Apartments 2, 4 &amp; 6 living room minimum internal dimensions are only slightly below (i.e. 60mm) the minimum requirement in SPP7.3 <b>Table 4.3b</b>.</p> <p>Apartments 1, 3 &amp; 5 bed 2 and living room internal dimension are 270mm and 840mm below the minimum in <b>Table 4.3b</b>, due to the constraint of the Regents Park Road/Plaistow Street intersection truncation.</p> <p>Where the acceptable outcome is below the minimum in <b>Table 4.3b</b> an alternative design that meets the Elements 4.3 Objectives is demonstrated by illustrating in the design drawings potential furniture layouts, using realistically sized furniture, to show:</p> <ul style="list-style-type: none"> <li>• internal floor area is sufficient for the expected household size and the layout optimises flexibility and privacy for occupants (<b>DG4.3.1</b>);</li> <li>• internal circulation areas are co-located to maximize the room usable area and improve privacy between different functions (<b>DG4.3.2</b>);</li> <li>• room sizes are functional and has the flexibility to cater for a variety of furniture arrangements (<b>DG4.3.1</b>); and</li> <li>• additional ceiling height on the ground and first floors improving the sense of space (<b>DG4.3.4</b>).</li> </ul> |
| 4.7.1 – Managing the impact of noise | <p>The objectives of Element 4.7 have been fulfilled by the design of the building extension meeting all the acceptable outcomes, as outlined below.</p>   |

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|                          | <p><b>A4.7.1</b> – The building extension layout have been designed to exceed the minimum requirements of NCC by using appropriate materials and construction by:</p> <ul style="list-style-type: none"> <li>• locating services away from sensitive areas in a apartments;</li> <li>• planning quiet areas (e.g. bedrooms) away noisy areas (e.g. living rooms, kitchens, laundries and bathrooms) and services;</li> <li>• designing buffer areas between units where possible (i.e. storerooms between apartments on the 2<sup>nd</sup> &amp; 3<sup>rd</sup> floors);</li> <li>• allowing for sufficient width for walls and sufficient depth for floor and ceilings in initial planning;</li> <li>• noisy areas external to the apartments being located as far away as possible to noise sensitive areas within dwellings.</li> </ul> <p><b>A4.7.2</b> – The design demonstrates that potential noise sources (driveways, service areas, building services, and mechanical equipment) are not located adjacent to the external wall of habitable rooms or within 3m of a window to a bedroom in the building extension. The bin store is adjacent to the Apartment 2, due ground floor area constraints of the small development site area caused by the existing development. To mitigate potential noise Apartment 2 has been designed with a double brick wall separating the bin store its master suite and bathroom, and the bin store will be fitted with soft close gates.</p> <p><b>A4.7.3</b> – There are no external noise sources that require the orienting away or shielding of major openings to habitable rooms.</p> |
| 4.9.1 – Universal design | <p>Across the total development 25% of dwellings (i.e. Apartments 4 &amp; 6) have been designed to meet Liveable Housing Design Guidelines ‘Silver Level’ requirements, which exceed the 20% requirement in Acceptable Outcome <b>A4.9.1</b>.</p> <p>The drawings demonstrate that the performance standards have been met for the seven Core Design Elements of the Silver Level in Apartments 4 &amp; 6 as follows:</p> <ol style="list-style-type: none"> <li>1. Dwelling Access - the path of travel from the street entrance is safe, continuous and step free being greater than 1000mm wide, having no steps and maximum pathway ramps of less than 1:14.</li> <li>2. Dwelling Entrance - entry to these apartments have no steps, a 1200mm x 1200mm level landing area, a minimum clear opening of 820mm, and are sheltered from the weather. The travel path from the street entrance to the dwelling entry is safe, continuous and step free via a 1500mm wide corridor (i.e.&gt;1000mm) to the lift foyer and the entry doors to these apartments are direct off the lift lobby on the relevant floor.</li> <li>3. Internal Doors &amp; Corridors - internally these apartments have door openings of at least 820mm, no</li> </ol>   |

|                                  |           |   |
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|                                  |           | <p>steps, and internal passageways at least 1000mm wide.</p> <p>4. Toilet - the toilets are located in the corner of the bathroom to allow for installation of grab rails in the future, a minimum 900mm clear width between walls/shower recess, and a minimum 1200mm clear circulation area in front of the toilet pan.</p> <p>5. Shower - the shower recess are slip resistant, hob-less, have a removable shower screen, and are located in the corner of bathroom to allow for installation of grab rails in the future.</p> <p>6. Reinforce Toilet &amp; Shower Walls - the masonry walls of these areas. require no additional reinforcing for the safe installation of grab rails in the future.</p> <p>7. Internal Stairways - there are no internal stairs in these apartments.</p> |
| 4.16.1 – management conservation | Water and | All dwellings will be individually metered for water usage in accordance with Acceptable Outcome <b>A4.16.1</b> .   |
| 4.16.3 – management conservation | Water and | To prevent flooding of the dwelling, should the system overflow in times of prolonged heavy storms an above ground overflow path has been designed via the existing driveway to the local storm water drainage system, as per Acceptable Outcome <b>A4.16.3</b> .   |
| 4.18.2 – Utilities               |           | The new building extension will have the appropriate cabling installed throughout the site and to every new apartment to ensure each can be connected to the NBN upon completion.   |



## Full assessment summary

### Joondalup Activity Centre Plan

| Item                          | Required   | Proposed   | Comment   |
|-------------------------------|--|--|---|
| <b>Building Height</b>        | Minimum 13.5m<br>Maximum 20.5m   | 9.6m wall height<br>12.26m roof height.  | The proposed height is below the minimum required height of 13.5 metres (maximum 20.5 metres). This matter is discussed in the body of the report.  |
| <b>Street Interface</b>       | Where an active or semi-active frontage is not required the following applies: <ul style="list-style-type: none"> <li>Passive frontage provided to GF office and residential uses.</li> <li>Attractive frontage provided to improve visual appearance.</li> <li>Multi-storey parking decks treated aesthetically.</li> </ul> | Passive frontage with major openings and outdoor living areas facing the street along Regents Park Road and Plaistow Street.<br><br>Articulated frontage with use of varying materials to create visual interest.<br><br>No multi-storey parking decks.  | The development incorporates facades which promote activation and surveillance over the public realm. The level of glazing and fencing provided is considered sufficient in the context of the development which is discussed in the body of the report.  |
|                               | Glazing to ground floor min 50%  | 30.9% glazing provided across the ground floor elevations.   |   |
|                               | No fencing to public road or public space  | Visually permeable fencing.  |   |
| <b>Screening of Equipment</b> | All equipment shall be screened from view and located to minimise any visual and noise impact to adjoining developments and public spaces.   | Screening of air-conditioner units between units 3 and 4 and between units 5 and 6 is provided through metal covers.<br><br>Air-conditioner units are also located on the western façade of the development which is not visible from the street.<br><br>Instant gas hot water systems are located within courtyard/balcony areas. | The services associated with the development are not considered to have any adverse impact on the street. The air conditioning units are screened from the primary street and have been provided on the first floor to the rear to minimise impact on surrounding residents. Hot water units are located within the balcony, but these are deemed to blend in with the balcony due to the minimal width.<br><br>A condition is recommended should the development be approved |

|                                 |   |  |  |
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|                                 |   |  | for full details on screening of services and utilities for provided.  |
| <b>Service Areas</b>            | Waste storage area must be provided. Facilities for loading/unloading of service/delivery vehicles  | The refuse and recycling areas are located at the rear of the lot adjacent to the car parking areas.                                   | Service facilities and refuse and recycling facilities are located so as not to be visible from the street. A Level 1 Waste Management Plan has been provided to ensure appropriate location and ease of collection. |
| <b>Adaptable Building</b>       | Buildings to have minimum floor to floor height of 4.5m at ground floor.  | The ground floor has a minimum floor to floor height of 3.68m.   | The proposal does not meet the minimum floor to floor heights. This is discussed in the body of the report.  |
| <b>Street Setbacks</b>          | Primary Street<br>Minimum 1m<br>Maximum 3m  | Primary Street<br>Minimum 0m<br>Maximum 0.6m   | The proposed setbacks do not meet the minimum requirements. This is discussed in the body of the report.   |
|                                 | Secondary Street<br>Minimum 1m  | Secondary Street<br>Minimum 0m   |  |
| <b>Open space and landscape</b> | Building front setback areas shall be landscaped.   | Small area of landscaping where the development is set back from the street boundary.  | The proposal meets the minimum requirements for landscaping and open space. This, along with incorporation of objectives from SPP7.3 are discussed in the body of the report.  |
|                                 | A minimum of 30% open space shall be provided.  | 40% open space provided across the development site.   |  |
| <b>Visual privacy</b>           | Major openings and unenclosed outdoor active habitable spaces which directly overlook the OLAs or windows of any other residential property shall be avoided. | All habitable rooms and balcony areas overlook public land and do not look directly into outdoor living areas or other major openings. | There is no visual privacy impact on any adjoining properties.   |
| <b>Car Parking and Access</b>   | As per R-Codes  | See SPP7.3 assessment below.   |  |

### State Planning Policy 7.3 (SPP7.3)

| Element  | Objectives   | Acceptable Outcome  | Proposed  | Design Guidance |
|--|--|---|---|-----------------|
| <b>2.2<br/>Building height</b>                 | N/A – Replaced by JACP as discussed in the body of the report. |   |   |                 |
| <b>2.3<br/>Street setbacks</b>                 | N/A – Replaced by JACP as discussed in the body of the report. |   |   |                 |
| <b>2.4<br/>Side and rear setbacks</b>          | N/A – Replaced by JACP as discussed in the body of the report. |   |   |                 |
| <b>2.5<br/>Plot ratio</b>                      | Achieved as discussed in the body of the report.               | 1.3 (863m <sup>2</sup> ) (A2.5.1)   | 1.1 (741m <sup>2</sup> )  | Not applicable  |
| <b>2.6<br/>Building depth</b>                  | Achieved.  | 20m for single aspect apartments (A2.6.1)   | All apartments are dual aspect.   | Not applicable  |
| <b>2.7<br/>Building separation</b>             | Achieved.  | Meets side and rear setback requirements of JACP as well as visual privacy.   | Meets element objectives for side, rear and visual privacy setbacks.  | Not applicable  |
| <b>3.2<br/>Orientation</b>                     | Achieved.  | Buildings on street orientated to face public realm and incorporate direct access from the street.<br><br>No overshadowing requirement for R100<br><br>Buildings orientated to maintain 4 hours per day for existing solar collectors on neighbouring site. | Building is orientated to the public realm and incorporates direct street access.<br><br>46.2% overshadowing.<br><br>No solar collectors on adjoining site. | Satisfied       |
| <b>3.3<br/>Tree canopy and deep soil areas</b> | N/A – Replaced by JACP as discussed in the body of the report. |   |   |                 |
| <b>3.4<br/>Communal open space</b>             |  |   |   |                 |

|  |           |  |   |   |
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| <b>3.5<br/>Visual<br/>privacy</b>                    |           |  |   |   |
| <b>3.6<br/>Public<br/>domain<br/>interface</b>       |           |  |   |   |
| <b>3.7<br/>Pedestrian<br/>access and<br/>entries</b> | Achieved. | <p>Pedestrian entries connected</p> <p>Pedestrian entries protected from weather.</p> <p>Pedestrian entries well-lit, visible from public domain and enable casual surveillance.</p> <p>Pedestrian access via shared zone, path is clearly delineated and/or incorporated to prioritise pedestrian and constrain vehicle speed.</p> <p>Services and utilities located at pedestrian entry are screened from view.</p> <p>Bins not located at primary pedestrian entry.</p> | <p>Pedestrian entries are connected.</p> <p>Pedestrian canopy provided.</p> <p>Pedestrian entry is visible from public domain and is provided casual surveillance.</p> <p>Pedestrian path provided in carpark that is clearly delineated.</p> <p>No service and utilities located at pedestrian entry.</p> <p>Bins located to rear of development and concealed from primary entry.</p> | <p>Satisfied</p> <p>DG3.7.2 The design of entries is well lit, clearly visible and allow direct access.</p> |
| <b>3.8<br/>Vehicle<br/>access</b>                    | Achieved. | <p>Vehicle access one opening per 20m.</p> <p>Vehicle entries identifiable from the street, integrated with faced and/or located behind primary building line.</p> <p>Vehicle entries have adequate separation from street intersection.</p> <p>Vehicle circulation areas avoid headlights shining into habitable rooms within the development and adjoining properties.</p>   | <p>One vehicle access point.</p> <p>Vehicle entry is identifiable and suitably integrated with the overall façade.</p> <p>Adequate separation of vehicle entry from street intersection provided.</p> <p>Vehicle circulation areas appropriate.</p>   | Satisfied.  |

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|   |   | <p>Driveway width minimum for functionality.</p> <p>Driveway designed for two-way access.</p> <p>Replaced by City's RDLPP clause 6.2.3.</p> <p>Pillars/structures in truncation area to be no greater than 350mm in dimension and solid walls no greater than 750mm in truncation area.</p>  | <p>Driveway minimum provided.</p> <p>Driveway permits two-way access.</p> <p>Access to the laneway is being retained. Gate will be visually permeable.</p>  |   |
| <p><b>3.9</b></p> <p><b>Car and bicycle parking</b></p> | <p>Achieved as discussed in the body of the report.</p> | <p>Four secure, undercover bicycle parking and accessed via a continuous path of travel from the entry.</p> <p>Eight resident car parking bays; and two visitor car-parking bays (A3.9.2)</p> <p>Maximum parking provision does not exceed double the minimum.</p> <p>Car parking areas and vehicle circulation areas designed in accordance with AS2890.1.</p> <p>Carparking areas not located within street setback and not visually prominent from the street (A3.9.5).</p> <p>Car parking designed, landscaped or screened to mitigate visual impacts when viewed from the dwellings and private outdoor spaces (A3.9.6).</p> <p>Visitor parking clearly visible from driveway, signed and accessible.</p> | <p>Eight available on within individual storeroom which is considered in design guidance related to storage (DG4.6.3)</p> <p><b>Eight resident bays and nil visitor parking bays.</b></p> <p>Parking provision is less than double the minimum.</p> <p>Car parking and circulation as per AS2890.1.</p> <p>All residential bays located to rear of development.</p> <p>Does not abut private outdoor spaces.</p> <p><b>No visitor parking provided.</b></p> | <p>Satisfied.</p> <p>DG 3.9.2 as the development is located in close proximity to centres, public parking and public transport.</p> <p>DG 3.9.3 Visitor bays being reduced due to on street or public parking near the development.</p> |
| <p><b>4.1</b></p>                                       | <p>Achieved as discussed in</p>                         | <p>Minimum 70% dwellings having living</p>   | <p><b>50% (Apartment 1, 3 and 5) facing</b></p>   | <p>Satisfied.</p>   |

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| <b>Solar and daylight access</b>        | the body of the report.                          | <p>rooms and private open space obtaining at least 2 hours direct sunlight; and maximum 15% receiving no direct sunlight (A4.1.1).</p> <p>Habitable rooms one window in external wall, visible from all parts of room, glazed area not less than 10% of floor area and minimum 50% clear glazing.</p> <p>Light wells and/or skylights not primary source of daylight to any habitable room.</p> <p>Building orientated and incorporates external shading devices.</p>     | <p>north with minimum 2 hours.</p> <p>50% (Apartment 2, 4 and 6) have elements that have 2 hours, but living areas appear to not have the required sunlight between 9am – 11am</p> <p>Windows provided &gt;10% of floor area with minimum 50% clear glazing.</p> <p>No lightwells proposed.</p> <p>Some awnings provided however not for north facing windows.</p> |            |
| <b>4.2 Natural ventilation</b>          | Achieved.  | <p>Habitable rooms have openings on at least two walls with straight line distance 2.1m</p> <p>Minimum 60% of dwellings are naturally cross ventilated; and single aspect apartments included must have ventilation openings oriented to prevailing cooling winds; and room depth no greater than 3*ceiling height.</p> <p>Depth of cross-over and cross-through apartments with openings either side not exceed 20m.</p> <p>No habitable room relies on light wells.</p> | <p>Minimum distance of 2.1m</p> <p>All units have multiple aspect as which permits cross ventilation.</p> <p>Depth of cross-over and cross-through apartments with openings either side &lt;20m.</p> <p>No reliance solely on lightwells.</p>  | Satisfied. |
| <b>4.3 Size and layout of dwellings</b> | Achieved as discussed in the body of the report. | <p>Dwellings internal floor areas as per Table 4.3a.</p> <p>Habitable room floor areas as per Table 4.3b.</p> <p>Floor to ceiling height 2.7m for habitable rooms, 2.4m for non-</p>  | <p>Adequate internal floor spaces provided.</p> <p>Apartment 3 and 5 have minimum 3m internal dimension.</p>   | Satisfied  |



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|   |  | habitable rooms, and other as per National Construction Code.<br><br>Maximum length of single aspect open plan living area 9m (A4.3.4)  | Living areas have less than 4m<br><br>Ceiling height 2.7minimum.<br><br>All units meet maximum lengths.   |   |
| <b>4.4</b><br><b>Private open space and balconies</b> | N/A – Replaced by JACP as discussed in the body of the report. |   |   |   |
| <b>4.5</b><br><b>Circulation and common spaces</b>    | Achieved.  | Circulation corridor 1.5m min.<br><br>Circulation and common space capable of passive surveillance.<br><br>Circulation and common spaces lit without light spill to habitable rooms.  | 1.5m on ground floor, 1.2m on stairs and upper floors.<br><br>No passive surveillance from houses but common area does provide some level of surveillance over vehicle access.<br><br>Internal lighting to be provided. No light spill onto adjacent dwellings. | Satisfied.  |
| <b>4.6</b><br><b>Storage</b>                          | Achieved as discussed in the body of the report.               | Store sizes as per Table 4.6.<br><br>Minimum dimension 1.5m and 4m <sup>2</sup> and minimum height of 2.1m.<br><br>Stores conveniently located, safe, well-lit, secure and subject to passive surveillance.<br><br>Stores provided separately from dwellings or within or adjacent to private open spaces (A4.6.3). | Store sizes acceptable with exception of store under stairs which has minimum height of 1.9m<br><br>Stores acceptable.<br><br>Ground floor stores not visible from public domain. Upper floor stores sufficiently screened.                                     | Satisfied.<br><br>DG4.6.4: Store areas are considered to be wide enough to accommodate larger and less frequently access items. |
| <b>4.7</b><br><b>Managing the impact of noise</b>     | Achieved.  | Exceed National Construction Code requirements.<br><br>Potential noise sources not adjacent external wall habitable room or within 3m of bedroom (A4.7.2).  | Noise sources setback from external wall to habitable room and >3m from bedrooms.<br><br>Major openings located away from AC units, bin   | DG4.7.1: No windows to habitable spaces are in close proximity/impacted.  |

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|                                 |           | Major openings oriented away/shielded from external noise sources.  | stores and parking area.  |            |
| <b>4.8<br/>Dwelling mix</b>     | Achieved. | Acceptable Outcome is not applicable as less than 10 dwellings are proposed.  | One unit is one bedroom one bathroom and the remaining having two bedrooms and two bathrooms.   | Satisfied. |
| <b>4.9<br/>Universal design</b> | Achieved. | 20% of dwellings achieve Silver Level requirements as defined in the <i>Liveable Housing Design Guidelines</i> , or 5% achieve Gold Level requirements.   | Across the total development 25% of dwellings (Apartment 4 & 6) have been designed to meet Liveable Housing Design Guidelines Silver Level requirements.  | Satisfied. |
| <b>4.10<br/>Façade design</b>   | Achieved. | <p>Façade design includes scaling, articulation, materiality and detailing at lower levels that reflect the scale, character and function of the public realm. The façade design provides rhythm and interest achieved by a combination of building articulation, the composition of different elements and changes in texture, material and colour.</p> <p>Façade includes elements that relate to key datum lines of adjacent buildings.</p> <p>Building services fixtures integrated in design and not visually intrusive from public realm.</p> | <p>Façade is considered to use various materials and colours and articulation to improve public realm.</p> <p>Modifications were made to materials and landscaping in accordance with Design Reference Panel.</p> <p>The proposal incorporates horizontal elements that match into the existing townhouse development.</p> <p>Building services elements mostly screened.</p> | Satisfied. |
| <b>4.11<br/>Roof design</b>     | Achieved. | <p>Roof form or top of building complements façade design and desired streetscape character.</p> <p>Building services located on roof not</p>   | <p>Roof form acceptable.</p> <p>No services located on the roof.</p>  | Satisfied. |

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|   |           | visually obtrusive from street.<br>(A4.11.3 N/A)  |   |            |
| <b>4.12<br/>Landscape design</b>                  | Achieved. | Landscaping plan required to be prepared by competent landscape designer demonstrating plant species and irrigation plan demonstrating achievement of Waterwise design principles.<br><br>Landscaping areas located and design to support trees and improve outlook and amenity.<br><br>Building services integrated with landscaping and not visually obtrusive. | Landscape plan and irrigations drawings provided.<br><br>One retained mature tree abutting existing development.<br><br>No building fixtures within landscaped areas. | Satisfied. |
| <b>4.13<br/>Adaptive reuse</b>                    | N/A       | Not applicable as development not heritage.   | N/A   | N/A        |
| <b>4.14<br/>Mixed use</b>                         | N/A       | Ground floor units are designed for future adaption to non-residential uses.<br><br>Ground floor uses including non-commercial uses address, enhance and activate the street.   | Minimum floor to ceiling heights required by JACP.<br><br>Courtyards and windows activate the street.   | N/A        |
| <b>4.15<br/>Energy efficiency</b>                 | Achieved. | Incorporate at least one significant energy efficiency initiative; or all dwellings exceed minimum NATHERS requirements for apartments by 0.5 stars.  | Use of thermal mass in building materials for storing heat and use of insulation and draft sealing.   | Satisfied. |
| <b>4.16<br/>Water management and conservation</b> | Achieved. | Dwellings are individually metered for water usage.<br><br>Storm water runoff is managed on-site.<br><br>Provision of an overland flow path for safe conveyance of  | All units are individually metered.<br><br>All stormwater will be contained on-site.  | Satisfied. |

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|                                  |  | runoff from major rainfall events to the local stormwater drainage system.  | Overland path via existing driveway.   |            |
| <b>4.17<br/>Waste management</b> | Achieved as discussed in the body of the report. | <p>Waste storage facilities.</p> <p>Waste Management Plan.</p> <p>Sufficient area for storage of green waste, recycling and general waste (separate).</p> <p>Communal waste storage sited and designed to be screened from view from the street, open space and private dwellings.</p>  | <p>Waste management plan provided and satisfies City's requirements.</p> <p>Sufficient area provided for bin storage that is screened from street, dwellings and open space areas.</p>   | Satisfied. |
| <b>4.18<br/>Utilities</b>        | Achieved.  | <p>Utilities located within front setback or on visible parts of rooms are integrated into design.</p> <p>Developments fibre-to-premises ready.</p> <p>Hot water units, AC condenser units and clotheslines not visually obtrusive.</p> <p>Laundries are designed and located to be convenient, weather protected and well ventilated and size appropriate.</p> | <p>Utilities appropriately located and screened.</p> <p>Development includes fibre-to-premises connections.</p> <p>Airconditioning units located on rear façade on ground or first level to reduce impact. Instant gas hot water within balcony but not considered to impact streetscape.</p> <p>Laundries provided within each dwelling.</p> <p>No clothes lines proposed, with condenser dryers provided within the dwellings.</p> | Satisfied. |

Please note that the acceptable outcomes stated above is a summary only and when considering compliance with these requirements, please refer to the full requirement as detailed in *State Planning Policy 7.3 Residential Design Codes Volume 2 – Apartments*.

## Summary of submissions

| Issue Raised   | Summary of Applicant Response  | Officer comment   |
|--|--|---|
| <p>Maximum height is not in keeping with the area which is either single or double storeys.</p> <p>The height will be detrimental to the aesthetic appearance of the street.</p>   | <p>The height of the proposed building responds to the desired future scale and character of the street and local area, as envisioned by current planning framework set out in the JACP.</p> <p>Under the superseded Joondalup City Centre Development Plan and Manual (August 1997) (<b>JCCDP&amp;M</b>) for City North District the land use for this site fronting Regents Park Road was designated as Residential/Mixed Use.</p> <p>The JCCDP&amp;M for the City North District specified a maximum height (Clause A4.5) of:</p> <ul style="list-style-type: none"> <li>• 2 storeys for the Residential Precinct, and</li> <li>• 3 storeys for the Residential/Mixed and that in exceptional circumstances higher development may be considered.</li> </ul> <p>The proposed building extension will enhance the amenity and safety of Regents Park, by:</p> <ul style="list-style-type: none"> <li>• developing the vacant portion of the site fronting Regents Park Road and Plaistow Street, and</li> <li>• being designed with all private open space and habitable rooms major orientated to the streets.</li> </ul> | <p>The building height is less than the minimum height required within the JACP.</p> <p>Refer to comments under planning assessment section in the report.</p>  |
| <p>More residents will result in more vehicles which will have an impact on the parking availability in the area which is already busy and will impact current residents.</p> <p>Development with only one parking space is not sufficient.</p> <p>The under provision of parking will negatively impact businesses in the area.</p> | <p>The six additional 1-2-bedroom apartments are unlikely to significantly impact on street car parking availability in the locality, given:</p> <ul style="list-style-type: none"> <li>• resident car parking has been provided on site in accordance with the requirements under SPP7.3 Residential Design Codes Volume 2 - Apartments (SPP7.3);</li> <li>• a high frequency bus route runs along Grand Boulevard that connects to the nearby Joondalup Transit Station and will reduce car dependency;</li> <li>• the primary building entry is on Regents Park Road, where there are 28 car bays within 100m that are available to residents/visitors outside of business hours (9am - 5:30pm Monday to Friday and</li> </ul>  | <p>The development is considered to be located within an area of high accessibility, as well as being surrounding by on street parking bays. This is deemed acceptable as discussed in the planning assessment section in the report.</p> |

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|  | 9am-12noon Saturdays), when the two-hour time limit no longer applies.  |  |
| <p>The increased residential development will increase the traffic on the already busy roads.</p> <p>Plaistow Street is already too narrow for vehicles to pass with more vehicles reducing the safety even further.</p> | <p>The proposed development is in keeping with the original vision for the site under the JCCDP&amp;M for the City North District, and the roads in the district were designed to cater more non-residential uses and higher densities than has been developed in the locality to date.</p> <p>The original developer of the land designed and constructed Plaistow Street in accordance with the standard applicable at that time.</p> <p>It is submitted that the vehicles parking on Plaistow Street reduce vehicle speeds thereby increasing both vehicle and pedestrian safety.</p>  | <p>The existing road network has the capacity to accommodate the additional traffic volumes.</p>   |
| <p>The proposal is considered overdevelopment and should have less residential units.</p>  | <p>The proposed building extension responds to the desired future scale and character of the street and local area as stated in the objectives for the JACP Lakeside Precinct objectives and is in keeping with the original vision for the site anticipated by the JCCDP&amp;M for City North District.</p>  | <p>The proposal is considered appropriate by way of density and built form and. responds to the desired future scale of development as outlined in the JACP.</p>   |
| <p>The development will add a huge amount of foot traffic and traffic noise to an already congested area which will create noise.</p>  | <p>It is unlikely that six additional 1 and 2 bedroom dwellings will result in a huge increase in foot traffic. It is more likely that any additional foot traffic would benefit the local community through increased passive surveillance improving safety and security in the locality.</p>  | <p>As identified by the applicant, the increase in six units is not considered to have a significant impact on the volume of pedestrians to an extent that will impact surrounding dwellings.</p>  |
| <p>Residents will be affected by the construction of these apartments.</p>   | <p>It is acknowledged that construction of this small apartment building will affect nearby residents in the short term; however once complete it will improve the streetscape and amenity of the locality, whilst also increasing the number of residents in the catchment of the local businesses.</p> <p>The construction will be managed to reduce the inconvenience to residents where practicable. This will include compliance with the Environmental Protection (Noise) Regulations 1997 that restricts noisy construction work to be carried out between 7.00am and 7.00pm on Monday to Saturday (excluding public holidays) providing that the equipment is in good working</p> | <p>If approved, a condition is recommended for a construction management plan, prior to the commencement of works, which will address how building works will be undertaken to minimise disruptions on surrounding residents. This will include dust management, parking arrangements and delivery/storage of materials.</p> |

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|  | order and is used in the manner it was designed for.  |   |
| The development should be located elsewhere with ample opportunities in other areas for apartments.                            | The proposed building extension responds to the desired future scale and character of the street and local area, in accordance with the objectives of JACP Lakeside Precinct, and is in keeping with the original vision for the site in the JCCDP&M for City North District.   | This site has always had the potential to be developed, with the development being of a scale consistent with the JACP.       |
| The land was supposed to be built on within 2 years of purchase. The standards at the time only permitted 2 storeys.           | A building containing two town houses fronting Plaistow Street was constructed on the property within 2 years of the land being purchased. Subsequently, the restrictive covenant was removed from the Certificate of Title.<br><br>As above, the JCCDP&M for the City North District permitted three storeys.  | The matter is between the landowner and the developer with the City not involved in any agreements for timing of development. |
| The development will overlook backyards of surrounding developments.   | All the habitable rooms and private open spaces in the building extension are oriented toward Plaistow Street (north) and Regents Park Road (east). There is no private open space or major openings to habitable rooms oriented west or south overlooking private open adjoining properties, as demonstrated by the submitted drawings.  | The proposal complies with the relevant requirements relating to overlooking and visual privacy.                              |
| A mandatory shop front/office is required for any properties with a boundary on Regents Park Road which has not been provided. | The JCCDP&M for City North District identified the land use for this site as Residential/Mixed-Use. Clause A1.2 of the JCCDP&M list all the preferred uses in including residential retail, office, entertainment, restraint/café, artisan/craft workshop, medical suites, accommodation, community facilities and recreation; however only states that the residential use is mandatory. | The JACP does not mandate commercial development on the ground floor in this location.  |
| The development faces Regents Park Road and should therefore have an address on Regents Park Road rather than Plaistow Street. | As the primary entry to the proposed building extension is on Regent Park Road, it is envisaged that the building will have a Regent Park Road street address.  | The address is not a relevant consideration in determining the appropriateness of the development.                            |



# Environmentally Sustainable Design – Checklist

Under the City's planning policy, *Environmentally Sustainable Design in the City of Joondalup*, the City encourages the integration of environmentally sustainable design principles into the construction of all new residential, commercial and mixed-use buildings and redevelopments (excluding single and grouped dwellings, internal fit outs and minor extensions) in the City of Joondalup.

Environmentally sustainable design is an approach that considers each building project from a 'whole-of-life' perspective, from the initial planning to eventual decommissioning. There are five fundamental principles of environmentally sustainable design, including: siting and structure design efficiency; energy efficiency; water efficiency; materials efficiency; and indoor air quality enhancement.

For detailed information on each of the items below, please refer to the *Your Home Technical Manual* at: [www.yourhome.gov.au](http://www.yourhome.gov.au), and *Energy Smart Homes* at: [www.clean.energy.wa.gov.au](http://www.clean.energy.wa.gov.au).

This checklist must be submitted with the planning application for all new residential, commercial and mixed-use buildings and redevelopments (excluding single and grouped dwellings, internal fit outs and minor extensions) in the City of Joondalup.

The City will seek to prioritise the assessment of your planning application and the associated building application if you can demonstrate that the development has been designed and assessed against a national recognised rating tool.

Please tick the boxes below that are applicable to your development.

## Siting and structure design efficiency

Environmentally sustainable design seeks to affect siting and structure design efficiency through site selection, and passive solar design.

Does your development retain:

- ☐ existing vegetation; and/or
- ☒ natural landforms and topography

Does your development include:

- ☒ northerly orientation of daytime living/working areas with large windows, and minimal windows to the east and west
- ☒ passive shading of glass
- ☒ sufficient thermal mass in building materials for storing heat
- ☒ insulation and draught sealing
- ☐ floor plan zoning based on water and heating needs and the supply of hot water; and/or
- ☐ advanced glazing solutions

### Energy efficiency

Environmentally sustainable design aims to reduce energy use through energy efficiency measures that can include the use of renewable energy and low energy technologies.

Do you intend to incorporate into your development:

- ☒ renewable energy technologies (e.g. photo-voltaic cells, wind generator system, etc); and/or
- ☒ low energy technologies (e.g. energy efficient lighting, energy efficient heating and cooling, etc); and/or
- ☒ natural and/or fan forced ventilation

### Water efficiency

Environmentally sustainable design aims to reduce water use through effective water conservation measures and water recycling. This can include stormwater management, water reuse, rainwater tanks, and water efficient technologies.

Does your development include:

- ☐ water reuse system(s) (e.g. greywater reuse system); and/or
- ☐ rainwater tank(s)

Do you intend to incorporate into your development:

- ☒ water efficient technologies (e.g. dual-flush toilets, water efficient showerheads, etc)

### Materials efficiency

Environmentally sustainable design aims to use materials efficiently in the construction of a building. Consideration is given to the lifecycle of materials and the processes adopted to extract, process and transport them to the site. Wherever possible, materials should be locally sourced and reused on-site.

Does your development make use of:

- ☐ recycled materials (e.g. recycled timber, recycled metal, etc)
- ☒ rapidly renewable materials (e.g. bamboo, cork, linoleum, etc); and/or
- ☐ recyclable materials (e.g. timber, glass, cork, etc)
- ☐ natural/living materials such as roof gardens and "green" or planted walls

### Indoor air quality enhancement

Environmentally sustainable design aims to enhance the quality of air in buildings, by reducing volatile organic compounds (VOCs) and other air impurities such as microbial contaminants.

Do you intend to incorporate into your development:

- ☒ low-VOC products (e.g. paints, adhesives, carpet, etc)

### 'Green' Rating

Has your proposed development been designed and assessed against a nationally recognised "green" rating tool?

- ☐ Yes
- ☒ No

If yes, please indicate which tool was used and what rating your building will achieve:

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If yes, please attach appropriate documentation to demonstrate this assessment.

If you have not incorporated or do not intend to incorporate any of the principles of environmentally sustainable design into your development, can you tell us why:

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Is there anything else you wish to tell us about how you will be incorporating the principles of environmentally sustainable design into your development:

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When you have checked off your checklist, sign below to verify you have included all the information necessary to determine your application.

Thank you for completing this checklist to ensure your application is processed as quickly as possible.

Applicant's Full Name: DESIGN BETTER BUILDINGS Contact Number: 0917907012

Applicant's Signature:  Date Submitted: 18/2/2019

Accepting Officer's Signature: \_\_\_\_\_

Checklist Issued: March 2011