**ATTACHMENT 3 – ASSESSMENT AGAINST ADG, LLUDG and DCP**

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| **APARTMENT DESIGN GUIDE ASSESSMENT** | | | |
| **Control** | **Requirement** | **Proposed** | **Complies** |
| **Communal and Public Open Space** | Communal open space has a minimum area equal to 25% of the site.  Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid-winter) | The available site area is 2,498m2 and common open space areas of 626m2 are required.  A total of 752m2 is provided.  Over 50% direct sunlight to the north facing communal open space areas is achieved for a minimum of 2 hours between 9 am and 3 pm on 21 June. | Yes  Yes |
| **Deep Soil Zones** | Deep soil zones are to meet the following minimum requirements:   |  |  |  | | --- | --- | --- | | **Site area** | **Min. dimensions** | **Deep soil zone**  **% of site area** | | Greater than 1,500m2 | 6m | 7% |   On some sites it may be possible to provide larger deep soil zones, depending on the site area and context:  • 10% of the site as deep soil on sites with an area of 650m2 - 1,500m2  • 15% of the site as deep soil on sites greater than 1,500m2 | 174.86m2 of deep soil is required.  376m2 is provided which equates to 15% of the site area.  376m2 is provided which equates to 15% of the site area. | Yes  Yes |
| **Visual Privacy** | Separation between windows and balconies is provided to ensure visual privacy is achieved. Minimum required separation distances from buildings to the side and rear boundaries are as follows:   |  |  |  | | --- | --- | --- | | **Building height** | **Habitable rooms and balconies** | **Non-habitable rooms** | | up to 12m (4 storeys) | 6m | 3m | | up to 25m (5-8 storeys) | 9m | 4.5m | | Over 25m (9+ storeys) | 12m | 6m | | The proposed development does not share any boundaries with developable lots other than Building B.  Separation to Building B will exceed 24m. | Yes |
| **Bicycle and Car Parking** | For development in the following locations:   * + on sites that are within 800 metres of a railway station or light rail stop in the Sydney Metropolitan Area; or   + on land zoned, and sites within 400 metres of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre   The minimum car parking requirement for residents and visitors is set out in the *Guide to Traffic Generating Developments*, or the car parking requirement prescribed by the relevant council, whichever is less.  The car parking needs for a development must be provided off street. | Parking satisfies the North Ryde Station DCP (which requires less parking than the RMS Guidelines)  236 spaces are required.  242 spaces are provided. | Yes |
| **Solar Access and Daylight** | Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid-winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas.  A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid-winter | 166 apartments (71.8%) receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid-winter.  44 apartments (19%) receive no direct sunlight.  Those apartments have additional openings to receive non-direct sunlight and also have an outlook to the south west. | Yes  No |
| **Natural Ventilation** | At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building. Apartments at ten storeys or greater are deemed to be cross ventilated only if any enclosure of the balconies at these levels allows adequate natural ventilation and cannot be fully enclosed.  Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line | 60 apartments in the first 9 storeys (64%) achieve natural cross ventilation.  Cross-over or cross-through apartments do not exceed 18m in depth. | Yes  Yes |
| **Ceiling Heights** | Measured from finished floor level to finished ceiling level, minimum ceiling heights are:   * Habitable Rooms – 2.7m * Non-habitable rooms – 2.4m * 2 storey apartments - 2.7m for main living area and 2.4m for second floor where its area does not exceeds 50% of the apartment area * Attic Spaces - 1.8m at the edge of the room with a 30 degree minimum ceiling slope. * If located in a mixed use area - 3.3m for ground and first floor to promote future flexibility   These minimums do not preclude higher ceilings if desired. | Floor to floor heights of 3.1m are provided, allowing 400mm slab thickness.  N/A.  N/A  N/A | Yes |
| **Apartment Size and Layout** | Apartments are required to have the following minimum internal areas:   * 1 Bedroom - 50m2 * 2 Bedroom - 70m2 * 3 Bedroom - 90m2   The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m2 each.  A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m2 each.  Every habitable room must have a window in an external wall with a total minimum glass area of not less than 10% of the floor area of the room. Daylight and air may not be borrowed from other rooms.  Habitable room depths are limited to a maximum of 2.5 x the ceiling height.  In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window.  Master bedrooms have a minimum area of 10m2 and other bedrooms 9m2 (excluding wardrobe space).  Bedrooms have a minimum dimension of 3m (excluding wardrobe space).  Living rooms or combined living/dining rooms have a minimum width of:   * + 3.6m for studio and 1 bedroom apartments   + 4m for 2 and 3 bedroom apartments   The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts. | Apartment sizes satisfy the minimum.  2 and 3 bedroom apartments include en-suites and as such satisfy the “minimum + 5m2”.  N/A  Window sizes, habitable room depths and apartment depths satisfy the relevant criteria. | Yes |
| **Private Open Space and Balconies** | All apartments are required to have primary balconies as follows:   * Studio – 4m2 * 1 Bedroom - 8m2 (Minimum depth of 2m) * 2 Bedroom - 10m2 (Minimum depth of 2m) * 3 Bedroom - 12m2 (Minimum depth of 2.4m)   The minimum balcony depth to be counted as contributing to the balcony area is 1m. | Minimum balcony sizes are compliant. | Yes |
| **Common Circulation and Spaces** | The maximum number of apartments off a circulation core on a single level is 8.  For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40. | The maximum number of apartments off a circulation core on a single level is 5.    4 lifts are provided. | Yes  Yes |
| **Storage** | In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:  - 1 bedroom – 6m3  - 2 bedroom – 8m3  - 3 Bedroom - 10m3  At least 50% of the required storage is to be located within the apartment. | Storage is provided in each unit in storage cabinets (outside of kitchens, bathrooms and bedrooms).  Storage is also provided within the basement carpark areas for each unit. | Yes |
| **Acoustic privacy** | Adequate building separation is provided within the development and from neighbouring buildings/adjacent uses (see also section 2F Building separation and section 3F Visual privacy).  Window and door openings are generally orientated away from noise sources.  Noisy areas within buildings including building entries and corridors should be located next to or above each other and quieter areas next to or above quieter areas.  Storage, circulation areas and non-habitable rooms should be located to buffer noise from external sources.  The number of party walls (walls shared with other apartments) are limited and are appropriately insulated.  Noise sources such as garage doors, driveways, service areas, plant rooms, building services, mechanical equipment, active communal open spaces and circulation areas should be located at least 3m away from bedrooms. | Building separation is compliant with 2F and 3F and the ADG.  Window and door openings are generally orientated away from noise sources.  Okay.  Okay  Generally like room uses adjoin each. Sound transmission between apartments is addressed in the BCA Report as compliant with F7 of the BCA. | Yes  Yes  Yes  Yes  Yes |
| **Apartment mix** | A variety of apartment types is provided.  The apartment mix is appropriate, taking into consideration:  • the distance to public transport, employment and education centres  • the current market demands and projected future demographic trends  • the demand for social and affordable housing  • different cultural and socioeconomic groups  Flexible apartment configurations are provided to support diverse household types and stages of life including single person households, families, multi-generational families and group households | The apartment mix is satisfactory.  1 bed: 45 (19.5%)  2 bed: 14845 (64.1%)  3 bed: 38 (16.4%)  A mix of apartments is provided across floors where possible. | Yes |
| **Ground floor apartments** | Direct street access should be provided to ground floor apartments.  Activity is achieved through front gardens, terraces and the facade of the building. Design solutions may include:  • both street, foyer and other common internal circulation entrances to ground floor apartments  • private open space is next to the street  • doors and windows face the street  Retail or home office spaces should be located along street frontages.  Ground floor apartment layouts support small office home office (SOHO) use to provide future opportunities for conversion into commercial or retail areas. In these cases provide higher floor to ceiling heights and ground floor amenities for easy conversion. | The layout of the site does not lend itself to providing direct street access to apartments.  Not applicable.  Not applicable. | Yes  N/A  N/A |
| **Universal design** | Developments achieve a benchmark of 20% of the total apartments incorporating the Livable Housing Guideline's silver level universal design features. | 46 livable/adaptable units are provided (20%). | Yes |

**ASSESSMENT AGAINST THE LACHLAN’S LINE URBAN DESIGN GUIDELINES**

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| --- | --- | --- | --- |
| **PROVISION** | | **COMMENT** | **OK?** |
| **3.0 PRECINCT PLANNING** | | | |
| **3.1 PRECINCT PLANNING** | | | |
| **1** | Ensure the Layout Plan for any development must be consistent with the underlying principles of the relevant State Significant Development Consent for the High-Density Residential Precinct and Lot 107. | The proposal avails itself of the layout plan and satisfies the principles of the layout plan. | Yes |
| **2** | Any modification and/or variation to the relevant State Significant Development Consent must demonstrate that the underlying principles and desirable planning outcomes are still being achieved. | Noted | - |
| **3.2 CIRCULATION NETWORKS** | | | |
| **1** | Mews roads are to be included in the applications for the final built form on each development lot. | A Mews road is provided off the layback that was provided at the subdivision stage and in accordance with Figure 3. | Yes |
| **2** | Mews roads must be constructed in accordance with the Vehicular Movement Plan as shown in Figure 03, which are consistent with the relevant State Significant Development Consent. | A Mews road is provided off the layback that was provided at the subdivision stage and in accordance with Figure 3. | Yes |
| **3** | Any proposed modifications to the Vehicular Movement Plan in Figure 03, Table 3.1 or the Street Sections in Figure 08 to Figure 11 must demonstrate that:   1. The proposed changes meet the Objectives for this section; 2. Adequate vehicular and pedestrian connections can be provided in Lot 109 to the adjoining site (Lot 1, DP1151499); 3. Emergency access and servicing access are provided. | The Mews Road dimensions accord with the UDG. | Yes |
| **3.3 OPEN SPACE** | | | |
| **1** | Open space is to be provided in Lot 108 in accordance with the Open Space Plan at Figure 04 and embellished as set out in Table 3.2. | The proposal does not impact the open space network. | Yes |
| **2** | The local park should be designed to maximise solar access. |  | N/A |
| **3** | Trees will be predominantly indigenous with some specimen exotic trees. Tree selection and planting should be undertaken in accordance with the City of Ryde Street Tree Master Plan. |  | N/A |
| **4** | The park is to be designed in accordance with public open space described in the Public Open Space Plan Figure 04. | The proposal does not impact the open space network. | Yes |
| **5** | Provide communal open space on each lot exceeding 25% of the site area. | Communal open space on each lot exceeds 25% of the site area at approximately 30%. | Yes |
| **6** | Any proposed amendment to the Open Space Plan at Figure 04 must demonstrate that:   1. The proposed changes meet the Objectives for this section; 2. At least 50% of existing and future public space is to receive 3 hours of sunlight on June 21 between 9am and 3pm. | Not applicable. | N/A |
| **3.4 LANDSCAPE AND DEEP SOIL** | | | |
| **1** | Deep soil zones are to meet the following minimum requirements:  - 10% of the site as deep soil on sites with an area of 650m2 - 1,500m2;  - The minimum dimension of the deep soil zone is to be 3m in any direction on sites with an area of 650m2 - 1,500m2;  **- 15% of the site as deep soil on sites greater than 1,500m2;**  - The minimum dimension of the deep soil zone is to be 6m in any direction on sites  greater than 1,500m2. | 376m2 is provided which is equivalent to 15%. | Yes |
| **2** | Private mews roads to be constructed as part of future applications will include street tree planting showing the location, species, planting methodology and maintenance of street trees to satisfy the Objectives and Controls of this section, and ensure an appropriate degree of consistency is achieved between the different Sub-Precincts. | Planting on the north side of the Mews Road is proposed. Planting on the south side is proposed under the application for Building B. | Yes |
| **3** | All street trees must be provided in accordance with the approved Street Tree Plan as per the development consents for each Sub-Precinct. | Refer to the landscaping plan which shows public domain embellishment. | Yes |
| **4** | Street tree planting in mews roads is to be designed in accordance with the following principles:   1. Street trees should be used to distinguish between public and private space; 2. Street tree planting should be durable and include a mix of indigenous and exotic species; 3. Street trees are to contribute to place making and way finding; and 4. Street trees should generally be of uniform species within the one street. | Refer to the landscaping plan which shows embellishment along the Mews Road. | Yes |
| **5** | Street tree planting is to be coordinated with subdivision layout, traffic plan and services layouts to ensure appropriate configuration with vehicle crossovers, sight lines, drainage swales, lighting and other services. | Noted | - |
| **6** | Any modification and/or variation to tree planting must satisfy the Objectives above and Part 3.3 of this guide. | Noted | - |
| **3.5 STORMWATER MANAGEMENT** | | | |
| **1** | An Integrated Water Management Plan was approved as part of SSD 5093. Any modifications which would change the performance of the approved Plan must comply with the principles above. | Refer to the stormwater plan and engineering assessment. | - |
| **3.6 HOUSING DIVERSITY** | | | |
| **1** | Provide a diversity of housing types in the Precinct, e.g. townhouses, double-storey apartments and penthouses. | The proposal contributes to housing diversity in the precinct. | Yes |
| **2** | Provide a variety of apartment types, including studios, one-bedroom, two-bedroom, three- bedroom and three-bedroom+ units. | A variety of apartment types is provided. | Yes |
| **3** | Development is to provide a diverse mix of dwelling sizes generally within the following ranges: | The following mix is provided:  1 bedroom: 19.6%  2 bedroom: 64.5%  3 bedroom: 15.8% | Yes |
| **4** | All apartments should meet the ‘Silver Level’ requirements of the Livable Housing Design Guidelines by Livable Housing Australia (LHA). | 55 Silver Level apartments are provided which exceeds the ADG requirements. | Yes |
| **4.0 BUILT FORM** | | | |
| **4.1 HEIGHTS AND FSR UNDER RYDE LEP 2014** | | | |
| **1** | SSD 5093 is a Staged Development Consent for the High-Density Residential Precinct and Mixed- Use Precincts which allocates the gross floor area (GFA) achievable under Ryde LEP 2014 to each of the development lots to be created by the subdivision in accordance with the Table 1.  Indicative storeys: 24 | The GFA allocation under SSD 5093 is not exceeded.  The building is 24 storeys in form. | Yes  Yes |
| **4.2 CONSTRUCTION OF MEWS ROADS AND VEHICULAR ACCESS** | | | |
| **1** | Mews roads are private access ways nominated in Figure 03 to provide access to each development lot. The location of the mews road presupposes the developer will be required to construct the mews road located primarily on that development lot, even where a part those works may benefit adjoining lots. (See mew road cross-sections on Figure 07 to Figure 11 and possible vehicular access locations on Figure 12). | A Mews road is provided off the layback that was provided at the subdivision stage and in accordance with Figure 3. | Yes |
| **2** | Mews roads can incorporate visitor parking for the development and car share spaces as well as access into basements on elevations other than the Halifax Street frontage. | The Mews roads incorporates share spaces as well as access into basements. | Yes |
| **3** | The Mews road location and notional width through the site is important in providing building separation. Entry lobbies and individual entries to residential units will help activate these roads on the eastern side of Halifax Street. | Noted | - |
| **4** | Flexibility on the location or inclusion of the entre length of the mews road could be considered where a better outcome can be achieved, which would be considered on a merit basis. | Noted | - |
| **5** | Driveway widths/grades, vehicular ramp width/grades and passing bays off mews roads are to be in accordance with the relevant Australian Standard. Design of driveway crossings is to be in accordance with Part 8.3 of Ryde DCP 2014 with the paving material to be Bipave 80 coloured ‘Fossil - River Gravel” shot blast finish, with aggregate inlay. | See engineering assessment. | - |
| **6** | The location and design of access ways to underground parking is to be located away from the Halifax Street elevation; design must also consider residential amenity particularly the location of doors and windows of habitable rooms. | Parking is accessed off the Mews Road. | Yes |
| **7** | Potential pedestrian/vehicle conflict is to be minimised by:   1. Providing vehicle access from minor or secondary streets rather than primary streets or streets with major pedestrian activity, where practicable; 2. Limiting the width to no more than 6m; 3. Limiting the number of vehicle access points - generally one crossing per lot will be permitted and where practicable, adjoining buildings may share or amalgamate vehicle access points; 4. Ensuring clear sight-lines and clearly distinguishing pedestrian and vehicle crossings; 5. Utilising traffic calming devices; 6. All vehicles must be able to enter and leave the site in a forward direction. | The Mews Road and basement access, service areas etc are satisfactory in managing vehicle and pedestrian conflicts. | Yes |
| **8** | The appearance of car parking and service entries is to be improved by:   1. Minimising the size, quantity and visual intrusion of vehicle access points; 2. Locating or screening garbage collection, loading and servicing areas visually away from the street; 3. Setting back or recessing car park entries from the main façade line; 4. Avoiding black holes in the façade by providing security doors to car park entries; 5. Where doors are not provided, it is to be ensured that the visible interior of the car park is incorporated into the façade design and material selection and that building services pipes and ducts are concealed; 6. Returning the façade material into the car park entry recess for the extent visible from the street as a minimum; and 7. Avoiding ramping vehicular access along boundary alignments edging the public domain and streets. | The proposal:  Minimises entry points.  Located service areas so as not to be highly visible.  Locates basement entries away from the key facades.  The design avoids black holes in the façade  The basement is not visible  The car park entry has been appropriately designed.  Ramping does not follow the boundary alignment. | Yes  Yes  Yes  Yes  Yes  Yes  Yes |
| **4.3 APPLICATION OF STATE ENVIRONMENTAL PLANNING POLICY NO 65** | | | |
| **1** | All developments for residential flat buildings must meet the requirements of State Environmental Planning Policy No 65 – Design Quality of Residential Apartment Development (SEPP 65). SEPP No 65 requires that applications for residential flat buildings, including residential accommodation above shops, can be determined after Council has considered:   1. The advice obtained from the design review panel, 2. The design quality of the development when evaluated in accordance with the design quality principles, and 3. The Apartment Design Guide. | See separate ADG assessment. | Yes |
| **4.4 LIMITING OVERSHADOWING AND ACCESSING SUNLIGHT** | | | |
| **1** | Detailed overshadowing studies are to be lodged with development applications for buildings. | Shadow studies have been prepared. | Yes |
| **2** | At least 50% of new and existing public open space is to receive 3 hours direct sunlight between 9am and 3pm on June 21. | Public open space receives solar access throughout the day or in the afternoon hours. | Yes |
| **3** | No overshadowing of residential lots outside of the Precinct is to occur after 11 am on June 21. | No overshadowing of residential lots outside of the Precinct occurs. | Yes |
| **4** | No overshadowing of Blenheim Park is to occur after 9am on June 21. | Blenheim Park is unaffected. | Yes |
| **5** | 100% of Bundara Reserve must receive a minimum of 3 hours direct sunlight between 9am and 3pm on June 21. | Bundara Reserve is unaffected. | Yes |
| **6** | Residential flat buildings are to comply with Daylight Access provisions in the *Apartment Design Guide*. | See ADG assessment. | Yes |
| **7** | At least 50% of communal courtyards must receive a minimum of 2 hours direct sunlight between 9am and 3pm on June 21. | The communal spaces receive a minimum of 2 hours direct sunlight to at least 50% on the winter solstice. | Yes |
| **4.5 BUILDING SETBACKS** | | | |
| **1** | Building setbacks are to be provided generally in accordance with Table 6. All setbacks are measured from the development lot boundaries and hence exclude the linear park or any mews roads to be constructed through the development lot. | The building setbacks are satisfied with the exception of the encroachment into the 8m setback to the eastern boundary by the north eastern apartments.  The encroachment does not compromise the provision of deep soil and associated planting.  The setback encroachment is considered acceptable as the proposal has reorientated the tower within the UDG envelope to ensure appropriate tower separation, residential amenity, appropriate view sharing and equitable access to solar.  This strategy delivers a greater overall tower setback relative to the western boundary and ensures an appropriate visual termination of Halifax Street when looking north. | No |
| **2** | All building cantilevers/overhangs must be at least 2 storeys up (ground and first floor setback). | Not applicable. | N/A |
| **3** | The Primary Building Setbacks are shown on Figure 13 and is measured from the lot boundary of each development lot to that part of the building above the ground and first floors. The Primary Building Setbacks are ‘built to lot boundaries’ to define and frame the street edge / built form and to achieve the desired streetscape appearance within the Precinct. | Noted | - |
| **4** | The Secondary Building Setbacks are shown on Figure 14 and is measured from the property boundary of each development lot relate to the ground and first floor components of a building. The Secondary Building Setbacks create a sheltered pedestrian walkway. Where no Secondary Building Setback is specified, the setback should be consistent with the Primary Building Setback. | Noted | - |
| **5** | The Landscape Setbacks are shown on Figure 15 and are measured from the lot boundary of each development lot to any part of the basement podium protruding above ground level. | Noted | - |
| **6** | On Lots 102 and 116, the setbacks nominated are to be minimum setbacks to allow tower built form. | Noted | - |
| **7** | Where no building setback is specified, the setback will be considered on merits which can include a nil building setback. | Noted. This is applied to the open space to the north and allows surveillance of the park. Applying a greater setback would not greatly alter the relationship between the building and the park. | Yes |
| **8** | Roof plant must be setback at least 3m from the top of the building. | Roof plant is located so as not to be obtrusive. | Yes |
| **9** | Where a development lot adjoins the linear park (Lots 102, 110, 114 and 115):   1. The ground level setback and ‘entry points’ (such as gates or front doors) are to activate the open space, and make it feel inhabited to maximise visibility along the public domain. 2. The ground floor level is to step with the topography of the site and be no more than 1m above the street. | Open space is activated particularly by the placement of balconies and the main pedestrian entry to the west. | Yes |
| **10** | Setbacks between buildings are to comply with SEPP 65 and the ADG. | See ADG assessment. | Yes |
| **11** | Buildings are to provide clear delineation between the public and private domain. | Buildings provide clear delineation between the public and private domain. | Yes |
| **12** | Where a site is constrained, basement parking may protrude above natural ground level by up to 1m. This will only be considered where the encroachment is appropriately designed to incorporate functional features such as ramps, courtyards and landscaping beds to minimise this impact. | Basement parking is contained under the ground level. | Yes |
| **13** | Where landscaping cannot provided in the verge, the ground floor apartments are to be raised by up to 1m above the footpath to increase privacy for the occupants. | The landscaping treatment assists with privacy to the ground floor apartments. | Yes |
| **14** | Minor encroachments up to 450mm into the setback may be considered, where it does not involve any GFA, provides articulation to the building and does not reduce any required landscaped setbacks. | See 1 above. | - |
| **4.6 BUILDING DEPTH AND BULK** | | | |
| **1** | No building above 22 metres in height is to have a building length that aligns to a street in excess of 40 metres without a recess. | The design provides for sufficient articulation and modulation. | Yes |
| **2** | Each recess is to be open to the sky and have a minimum dimension of 3m in width and 3m in depth. | Noted | - |
| **3** | For residential tower buildings over 8 storeys, each building footprint is to be a maximum of 1,090m2 (Gross Building Area). | The building footprint does not exceed 1,090m2. | Yes |
| **4** | A one storey ‘waist line’ is to be created to residential tower buildings to articulate the base and tower forms in accordance with Figure 18 and Figure 19; this is achieved by providing a 3 metre setback to the storey above the street wall. | The waist line is not provided, rather, the application relies on the podium level open space to create the break, supported by modulation in the built form. | No |
| **5** | Use atria, light wells and courtyards to improve internal building amenity and achieve cross ventilation and/or stack ventilation. | Internal amenity is satisfactory without requiring atria and light wells etc. | Yes |
| **6** | Atria and light wells are not to be used as the primary air and/or light source for any apartment units. | Noted. | - |
| **7** | Building façades are not to be dominated by continuous balconies. | Balconies are separated from each other. | Yes |
| **4.7 MIX USED BUILDINGS** | | | |
| Not applicable. | | | |
| **4.8 AWNINGS** | | | |
| **1** | Awnings are to be provided at key pedestrian and active frontage locations in Lot 107. | An awning has been provided to the landing at the top of the main entry stairs. | Yes |
| **2** | Awning width is to be appropriate to the building design and streetscape and have regard to the location of street trees and open space. | Noted | - |
| **3** | Awnings are to have a minimum soffit height of 3m above the finished ground floor level. On sloping sites, awning soffit height may vary from 3.6m to 4.2m. | Noted | - |
| **4** | Where the topography slopes along the street, awnings are to step to provide a regular height over the footpath. | Noted | - |
| **5** | Awnings are to provide adequate weather protection. | Noted | - |
| **6** | Under awning lighting is to be provided to achieve appropriate luminance levels for pedestrians (refer to relevant Australian Standards). This should be recessed into the soffit of the awning. | Noted | - |
| **7** | Entry canopies and discontinuous awnings may be provided to building entries not located along active frontages. | Noted | - |
| **8** | Entry canopies may be glazed or solid, and are to be coordinated with the overall facade design. | Noted | - |
| **4.9 ACTIVE STREET FRONTAGES** | | | |
| **1** | Active frontages are required to be provided in accordance with Figure 20. | Active frontages meet those shown on Figure 20. | Yes |
| **2** | Buildings adjacent to or opposite open space are to have ‘entry points’, such as gates or front doors, to activate the space and make it feel inhabited to maximise visibility along the public domain (Refer to No 1 in Figure 20). | Active frontages meet those shown on Figure 20. | Yes |
| **3** | Entries to residential lobbies and tenancies are to be accessible and at the same level as the adjacent footpath. (Refer to No 2 in Figure 20) | The residential lobby is raised due to topography. | Yes |
| **4** | Retail development is to be provided within Lot 107. | Not applicable. | N/A |
| **5** | Buildings within Lot 107 are to be designed to provide high activity zones. Active ground level uses are required on all street frontages. | Not applicable. | N/A |
| **6** | Glazing of windows and doors of building frontages in Lot 107 should be maximised. | Not applicable. | N/A |
| **7** | Commercial and residential lobbies are not to occupy more than 25% of the total length of the building’s street frontage | Residential lobbies do not occupy more than 25% of the total length of the building’s street frontage. | Yes |
| **8** | Retail uses in Lot 107 are to have a tenancy depth that encourages different uses and design flexibility. | Not applicable. | N/A |
| **9** | Apartments are not to be subterranean. Ground floor apartments must step with the topography and relate to the grade and ground level of the site (see Figure 21), with the ground floor level no more than 1m above the public footpath. | There are no subterranean apartments. | Yes |
| **10** | Where ground floor apartments have to be raised by more than 1m above the natural ground level due to site constraints, terraced garden beds are to be provided along the frontage to enhance privacy and amenity (see Figure 22). | Landscaping is used to enhance privacy. | Yes |
| **11** | Private gardens with individual street access are to be provided to address the public domain. | Street access from private gardens is not provided due to the layout of the building and the change in topography. | Yes |
| **12** | Residential buildings adjacent to the public domain are to have a front door, living room and/ or kitchen window facing the street. Buildings which have only bedrooms facing the street are to be avoided. | Casual surveillance of the public domain is provided by windows and balconies. | Yes |
| **4.10 BUILDING DESIGN AND MATERIALS** | | | |
| **1** | Balconies and terraces that assist in providing passive surveillance are to be provided. | Balconies and terraces are provided to provide passive surveillance. | Yes |
| **2** | Balconies are to have a minimum dimension of 1m in any direction and to allow for usable private open space. | Balconies have a minimum dimension of 1m in any direction and to allow for usable private open space, in accordance with the ADG. | Yes |
| **3** | Air conditioning units, hot water gas heaters and other mechanical services must be screened (if visible from the public domain) and integrated with the building design. | Services are screened and integrated with the building design. | Yes |
| **4** | Provide landscaped communal open space at podium-level setbacks. Refer to NSW Government’s *Technical Guidelines for Urban Green Cover in NSW* and Part 4P Planting on Structures of the *Apartment Design Guide*. | Landscaped communal open space is provided at Level 7. | Yes |
| **5** | Articulate façades so that they address the street and add visual interest. Avoid extensive expanses of any single material. | Facades are articulated. Comments from the design review forum to be considered. | Yes |
| **6** | Building design is to include articulation of the ground floor elevation to enable it to read differently from the upper floors. | Tge ground floor elevation reads differently from the upper floors. | Yes |
| **7** | External walls are to be constructed of high-quality and durable materials and finishes with ‘self-cleaning’ attributes, such as face brickwork, rendered brickwork, stone, concrete and glass. | External walls are proposed to be constructed of high-quality and durable materials and finishes with ‘self-cleaning attributes. | Yes |
| **8** | Finishes with high maintenance costs, those susceptible to degradation or corrosion, such as painted render finishes, that result in unacceptable amenity impacts, such as reflective glass, are to be avoided. | External walls are proposed to be constructed of high-quality and durable materials and finishes with ‘self-cleaning attributes. | Yes |
| **9** | Maximise glazing for retail uses and break glazing into sections to avoid large expanses of glass. | Not applicable. | N/A |
| **10** | Driveways and car park entries should not be located along the primary street frontage and should not constitute more than 20 per cent (maximum 8 metres) of the secondary street frontage. | Driveways and car park entries are located off the Mews Road s and do not constitute more than 20 per cent of the secondary street frontage. | Yes |
| **11** | Highly reflective finishes and curtain wall glazing are not permitted above ground floor level. | Highly reflective finishes and curtain wall glazing are avoided. | Yes |
| **12** | A materials sample board and schedule is required to be submitted with applications for development with a capital investment value of $1 million or more for that part of any development built to the street edge. | Noted. | - |
| **13** | Minor projections up to 450mm from building walls in accordance with those permitted by the Building Code of Australia may extend into the public space, providing they do not fall within the definition of gross floor area and there is a public benefit, such as expressed cornice lines that assist in enhancing the streetscape. | Noted. | - |
| **14** | The design of roof plant rooms and lift overruns is to be integrated into the overall architecture of the building. Setbacks and screening are to be utilised where appropriate. | Roof plant is set back. | Yes |
| **15** | Facade design is to reflect and respond to the orientation of the site using elements such as sun shading and environmental controls where appropriate. | Facade design responds to the orientation of the site using elements such as sun shading and environmental controls where appropriate. | Yes |
| **16** | Important corners are to be expressed by giving visual prominence to parts of the façade (e.g. a change in building articulation, material or colour). | The building corners are expressed with articulation. | Yes |
| **17** | Ventilation louvres and car park entry doors are to be coordinated with the overall façade design. | Ventilation louvres and car park entry doors are coordinated with the overall façade design. | Yes |
| **18** | Balcony balustrades on the first floor are to be opaque to maintain privacy of the occupants. | Solid balconies are proposed where privacy is required. | Yes |
| **4.11 ACTIVE TRANSPORT AND PARKING** | | | |
| **1** | DAs for residential and commercial development must be accompanied by a traffic and transport impact assessment. The traffic and transport impact assessment is to:   1. Provide an assessment of the impact of the proposal on the traffic network; 2. Demonstrate how the development maximises access by sustainable modes of transport and reduces car dependency consistent with Transit-Oriented Development principles; and 3. Accommodate car share schemes. | A traffic assessment is provided with the DA. | Yes |
| **2** | A Framework Travel Plan (FTP) is to be submitted to Council for all DAs in accordance with Section 4.4C of Part 4.5 Macquarie Park Corridor of the Ryde DCP 2014. | A Travel Plan has been provided with the DA. | Yes |
| **3** | Car parking is to be provided in accordance with the car parking controls for Macquarie Park, as set out in Section 9.3 of the Ryde DCP 2014. | Carparking has been provided in accordance with the DCP which requires 25 spaces.  245 spaces have been provided for Building A. | Yes |
| **4** | Bicycle parking is to be provided in accordance with Part 9.3 of the Ryde DCP 2014. | A minimum of 25 bicycle spaces are required. 30 spaces are provided. | Yes |
| **5** | Car share spaces are to be provided throughout the development, with 29 spaces to be provided in the high-density residential precinct. It is intended that the car share spaces in the high-density residential precinct be provided as perpendicular parking in mews roads. The mews roads west of Halifax Street will incorporate 3 car share spaces each, and the mews roads on the east of Halifax Street will each incorporate 8 spaces, 7 spaces, 5 spaces and 3 spaces within each mews road from south to north, respectively. | 5 carshare spaces are provided in accordance with the DCP. | Yes |
| **4.12 SITE FACILITIES AND SERVICES** | | | |
| **1** | Site facilities and services are to comply with the Macquarie Park controls set out in Section 8.5 of Part 4.5 of the Ryde DCP 2014 | See separate assessment | - |
| **4.13 ACCESSIBLE DESIGN** | | | |
| **1** | Development is to be designed to comply with the controls set out in Part 9.2 of the Ryde DCP 2014 – Access for People with Disabilities. | Refer to Access Report. | - |
| **2** | In designing new developments and the public domain, consideration is to be given to the recommendations of the National Disability Strategy NSW Implementation Plan 2012 (particularly the section titled Inclusive and Accessible Communities) and the NSW Disability Action Plan 2012-2017. | Refer to Access Report. | - |
| **4.14 ENVIRONMENTAL PERFORMANCE** | | | |
| **1** | Development is to comply with *State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004*. | BASIX certification is provided. | Yes |
| **2** | All multi-unit residential buildings are to be assessed and certified against Green Star (Design Rating) and achieve a minimum 4 star rating. | A minimum 4 star rating has been achieved. | Yes |
| **3** | All commercial buildings are to be assessed and certified against Green Star (Design Rating) and achieve:   1. A minimum 5 star rating (if the associated Development Application is lodged before 1 January 2017); 2. A minimum 6 star rating (if the associated Development Application is lodged on or after 1 January 2017). | Not applicable. | N/A |
| **4** | Potable water demand in residential buildings is to be reduced by at least 50% from BASIX baseline for an average household. | See BASIX. | Yes |
| **5** | Potable water demand in commercial buildings is to be reduced to achieve a 4.5 stars NABERS water rating. | Not applicable. | N/A |
| **6** | Potable water demand in retail buildings is to be reduced to achieve a 4.5 stars NABERS water rating. | Not applicable. | N/A |
| **7** | All buildings are to be connected to smart water metering. | Noted. | - |
| **8** | All buildings with basement parking should make provision for electro-voltaic charging infrastructure to allow for the transition to electric car technology. | EV charging is proposed. | Yes |
| **9** | The following targets for the reduction in energy use are to be met.   * 1. BASIX 25 – achieve a 25% reduction in kgCO2 – e/person/year in residential buildings 6 storeys or higher;   2. BASIX 35 – achieve a 35% reduction in kgCO2 – e/person/year in residential buildings 4-5 storeys;   3. BASIX 45 – achieve a 40% reduction in kgCO2 – e/person/year in residential buildings 1-3 storeys. | Refer Energy Efficiency and Ecologically Sustainable Design Report. | Yes |
| **10** | All residential buildings are to achieve:   * 1. A 7 star NatHERS for heating and cooling where development applications are lodged prior to 1 January 2017;   2. **An 8 star NatHERS for heating and cooling where development are lodged on or after 1 January 2017.** | A 7.1 star rating has been achieved which is compliant with NatHERS. | Yes |
| **11** | Commercial buildings are to achieve NABERS 5.5 star (equating to an 11% kgCO2 e/sqm/year reduction compared to 5 star). | Not applicable. | N/A |
| **4.15 WIND MITIGATION** | | | |
| **1** | Development is to comply with the Macquarie Park Wind Impact controls set out in Section 9.1 of Part 4.5 of the Ryde DCP 2014. | A wind assessment has been provided with the DA which demonstrates compliance with the DCP requirements. | Yes |
| **4.16 AIR, NOISE AND VIBRATION** | | | |
| **1** | The provisions of State Environmental Planning Policy (Infrastructure) 2007 and Development near Rail Corridors and Busy Roads Interim Guideline must be taken into consideration to minimise impacts of busy roads and railway corridors on residential and other sensitive development such as child care centres and health services facilities. | An acoustic assessment has been provided which demonstrates that mitigation measures can be implemented through the use of appropriate materials. | Yes |
| **2** | An Acoustic Impact Assessment report prepared by a suitably qualified acoustic consultant is to be submitted with all development applications for commercial, retail and residential buildings, with the exception of applications for minor building alterations or where Council considers an assessment is not required. | An acoustic assessment has been provided. | Yes |
| **3** | Non-residential development is not to adversely affect the amenity of adjacent and nearby residential development and public spaces as a result of noise, hours of operation and/or service deliveries. Acoustic and vibration attenuation must be implemented to ensure the amenity of adjacent residential use. | Not applicable. | N/A |
| **4** | Noise from plant and equipment (including roof plant, air conditioning ducts and plant and servicing associated with green infrastructure) is to be attenuated to an appropriate level to ensure the amenity of adjacent and nearby uses is achieved and maintained. | Refer to the acoustic assessment. | Yes |
| **5** | Mechanical ventilation systems are to be designed to meet the requirements of the Building Code of Australia and relevant Australian Standards, and air intakes are to be sited as far as practicable from major sources of air pollution. | Refer to the acoustic assessment. | Yes |
| **6** | A vegetation buffer is to be established between the M2 Motorway and any residential buildings prior to occupation. The vegetation buffer is to be of sufficient width to assist in intercepting wind-blown dust by physical entrapment of airborne particles. | A landscaped buffer is provided. | Yes |
| **4.17 WASTE MANAGEMENT** | | | |
| **1** | Development is to comply with the Macquarie Park Waste Management controls set out in Part 7 of the Ryde DCP 2014. | A Waste Management Plan has been prepared. | Yes |

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| **4.18 SOIL MANAGEMENT** | | | |
| **1** | Development is to comply with the Macquarie Park Soil Management controls set out in Section 9.4 of Part 4.5 of the Ryde DCP 2014. | Noted. | - |
| **4.19 FLOODING** | | | |
| **1** | To ensure emergency vehicles can access the site during a major storm event, alternative site access is to be provided to the high density residential precinct for emergency vehicles. The alternative access is to be identified in consultation with the NSW State Emergency Service and other relevant agencies. | Emergency vehicles can access the site. | Yes |
| **2** | Development applications for proposed residential buildings within lots identified as having a Medium Flood Risk, as identified in the Macquarie Park Floodplain Risk Management Study and Plan (Final Report, Bewsher Consulting, February 2011) are to:   1. Be accompanied by a site specific flood assessment; 2. Ensure that floor levels are designed at 0.5m above the 1 in 100 year ARI flood event; 3. Be designed for safe egress and evacuation; 4. Demonstrate that either:   - A setback or drainage easement will divert stormwater runoff away from adjacent lots and into the Porters Creek corridor; or  - Compensatory storage can be provided to offset any loss in floodplain storage resulting from the development of this area.   1. Dedicated use of buildings for the infirm or elderly, or for essential emergency services, is prohibited on Lot 102 within the north-eastern development area of the high-density residential precinct. 2. Development is to comply with the floodplain management controls set out in Part 8.2 of the Ryde DCP 2014. | The Stormwater Management Report deals with flooding and confirms the site is affected by the PMF only.  Floor levels achieve the appropriate freeboard. | Yes  Yes |

**RYDE DCP ASSESSMENT**

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| **PROVISION** | | **COMMENT** | **OK?** |
| **NORTH RYDE STATION PRECINCT DEVELOPMENT CONTROL PLAN 2013** | | | |
| **3.0 URBAN STRUCTURE** | | | |
| **3.1 Urban Structure** | | | |
| **3.1.1 Indicative Layout Plan** | | | |
| 1 | All development applications are to be generally in accordance with the Indicative Layout Plan. However, the Indicative Layout Plan is preliminary only and shows one option for development of the Precinct. An alternative layout can be considered. | The development application accords with the Indicative Layout Plan and does not hinder achievement of the Indicative Layout Plan by other sites. | Yes |
| **3.2 Circulation Networks** | | | |
| 1 | Development applications for subdivision are to be generally in accordance with the Indicative Vehicular Movement Plan at Figure 4. | The proposal is in accordance with the Indicative Vehicular Movement Plan, having regard to the subdivision layout that has taken place. | Yes |
| 2 | Provide a clear hierarchy of streets, including a spine road to link Epping Road and Wicks Road. | Not applicable to the subject land. | N/A |
| 3 | Provide emergency access to the M2 Motorway. | Not applicable to the subject land. | N/A |
| 4 | A signalised intersection is to be provided at Wicks Road/Waterloo Road. | Not applicable to the subject land. | N/A |
| 5 | Any proposed variations to the Indicative Vehicular Movement Plan must demonstrate that:   1. the proposed changes meet the Objectives for this section; 2. adequate connections are provided to key areas surrounding the site, including Macquarie Park and Riverside Corporate Park; and 3. emergency access is provided. | The proposal is in accordance with the Indicative Vehicular Movement Plan, having regard to the subdivision layout that has taken place. | Yes |
| **3.3 Public Transport** | | | |
| Not applicable to the development. | | | N/A |
| **3.4 Open Space** | | | |
| Open space has been provided in accordance with the Indicative Open Space Typologies Plan. The proposal does not impact the provision of open space. | | | Yes |
| **4.0 PUBLIC DOMAIN** | | | |
| **4.1 Streets** | | | |
| Not applicable to the development. | | | N/A |
| **4.2 Pedestrian and Cycle Network** | | | |
| Not applicable to the development. | | | N/A |
| **4.3 Pedestrian and Cycle Station Link** | | | |
| Not applicable to the development. | | | N/A |
| **4.4 Stormwater Management** | | | |
| Not applicable to the development. | | | N/A |
| **4.5 Street Tree Planting** | | | |
| Not applicable to the development.  In any event, the development does not impact the provision of street trees at appropriate intervals. | | | N/A |
| **4.6 Street Furniture and Lighting** | | | |
| 1 | Street furniture and lighting is to be provided in accordance with the Macquarie Park Public Domain Technical Manual. | Not applicable to the development.  In any event, the development does not impact the provision of street furniture and lighting. | N/A |
| **4.7 Public Art** | | | |
| 1 | Developments (excluding infrastructure works) with a capital investment value of $5 million or more are to include an element of public art. | A Public Art Strategy accompanies the development application. | Yes |
| 2 | Details of the nature of the work, its approximate location and size are to accompany the development application. | A Public Art Strategy accompanies the development application. | Yes |
| 3 | The application must address how the proposed public art meets the following Design Selection Criteria:   1. Standards of excellence and innovation; 2. Relevance and appropriateness of the work in relation to its site; 3. Its contribution to creating sense of place, and integration into the built form; 4. Where possible, participation of local artists, local groups, youth or indigenous groups; 5. Consideration for public safety and the public’s use of and access to the public space; 6. Consideration of maintenance and durability requirements of materials, including potential for vandalism and graffiti; 7. Where applicable, consistency with current planning, heritage and environmental policies and plans of management; and 8. Evidence of appropriate Public Liability Insurance to cover construction and installation of work. | A Public Art Strategy accompanies the development application and is considered satisfactory by relevant Council departments. | Yes |
| **4.8 Safety** | | | |
| 1 | Incorporate the principles of Crime Prevention Through Environmental Design (CPTED) and Safer by Design (NSW Police) into the design of the public domain. | The proposal does not impact the public domain beyond the carrying out of the Mews Road across the footway at the designated location. | Yes |
| 2 | Planting alongside pathways is to be a combination of canopy trees and groundcovers so that sight lines are not obstructed. | Planting alongside pathways does not obstruct sight lines. | Yes |
| 3 | The public domain is to be lit to comply with Australian Standards. | Active public spaces are lit to comply with Australian Standards. | Yes |
| 4 | Open spaces are to have more than two access points so that people cannot be cornered. | Not applicable to the development. | N/A |
| 5 | Retail and commercial activities are to be located adjacent to open space so that the open space is activated. | Not applicable to the development. | N/A |
| 6 | In areas not zoned for retail or commercial activities, buildings are to be designed with entries and windows to habitable rooms overlooking open space. | Casual surveillance of open space areas is promoted. | Yes |
| 7 | Road widths and lengths, block lengths, and building setbacks are to be designed to reinforce the human scale of the development and encourage walking, cycling and use of the public domain. | See assessment of setbacks in the LLUDG assessment. | - |
| **5.0 BUILT FORM** | | | |
| **5.1 Street Frontage Heights** | | | |
| 1 | Buildings are to generally comply with street frontage heights as shown in Figures 14 to 16. | See assessment of building form in the LLUDG assessment. | - |
| **5.2 Building Setbacks** | | | |
| 1 | Building setbacks are to be provided generally in accordance with Table 5. | Minimum setbacks are achieved. | Yes |
| 2 | Setbacks between buildings are to comply with SEPP 65 and the Residential Flat Design Code. | Setbacks between buildings comply with SEPP 65 and the ADG. | Yes |
| 3 | Buildings are to be aligned to the street to define and frame the street edge. | Buildings are aligned to the street to define and frame the street edge as appropriate. | Yes |
| 4 | Buildings are to provide clear delineation between the public and private domain. | Buildings provide clear delineation between the public and private domain. | Yes |
| **5.3 Building Depth and Bulk** | | | |
| 1 | No building above 22 metres in height is to have a building length that aligns to a street in excess of 50 metres. | Building length to the street does not exceed 50m. | Yes |
| 2 | All points on an office floor are to be no more than 10 metres from a source of daylight (e.g. windows, atria or light wells) in buildings less than 24 metres in height, and no more than 12.5 metres from a window or daylight source in buildings over 24 metres in height. | Not applicable. | N/A |
| 3 | Use atria, light wells and courtyards to improve internal building amenity and achieve cross ventilation and/or stack ventilation. |  |  |
| **5.4 Mixed Use Buildings** | | | |
| Not applicable. | | | N/A |
| **5.5 Building Design and Materials** | | | |
| 1 | Balconies and terraces are to be provided, particularly where buildings overlook parks and on low rise parts of buildings. Gardens on the top of setback areas of buildings are encouraged. | Balconies overlook parks and the public domain. | Yes |
| 2 | Articulate façades so that they address the street and add visual interest. Avoid extensive expanses of any single material. | The building façade is articulated to address the street and add visual interest. Extensive expanses of any single material are avoided. | Yes |
| 3 | Building design is to include articulation of the ground floor elevation to enable it to read differently from the upper floors. | The ground floor reads differently from the upper floors. | Yes |
| 4 | External walls are to be constructed of high quality and durable materials and finishes with ‘self-cleaning’ attributes, such as face brickwork, rendered brickwork, stone, concrete and glass. Finishes with high maintenance costs, those susceptible to degradation or corrosion that result in unacceptable amenity impacts, such as reflective glass, are to be avoided. | External walls are to be constructed of high quality and durable materials. | Yes |
| 5 | Limit opaque or blank walls for ground floor uses. | The ground floor is appropriately designed. | Yes |
| 6 | Maximise glazing for retail uses and break glazing into sections to avoid large expanses of glass. | Not applicable. | N/A |
| 7 | Highly reflective finishes and curtain wall glazing are not permitted above ground floor level. | Highly reflective finishes and curtain wall glazing are avoided. | Yes |
| 8 | A materials sample board and schedule is required to be submitted with applications for development with a capital investment value of $1 million or more for that part of any development built to the street edge. | Noted. | - |
| 9 | Minor projections up to 450mm from building walls in accordance with those permitted by the Building Code of Australia may extend into the public space, providing they do not fall within the definition of gross floor area and there is a public benefit, such as expressed cornice lines that assist in enhancing the streetscape. | Noted. | - |
| 10 | The design of roof plant rooms and lift overruns is to be integrated into the overall architecture of the building. | The design of roof plant rooms and lift overruns is integrated into the overall architecture of the building. | Yes |
| 11 | Facade design is to reflect and respond to the orientation of the site using elements such as sun shading and environmental controls where appropriate. | Facade design responds to the orientation of the site using elements such as sun shading and environmental controls where appropriate. | Yes |
| 12 | Important corners are to be expressed by giving visual prominence to parts of the façade (e.g. a change in building articulation, material or colour). | Not applicable. | N/A |
| 13 | Ventilation louvres and car park entry doors are to be coordinated with the overall façade design. | Ventilation louvres and car park entry doors are hidden from the public domain. | Yes |
| **5.6 Overshadowing** | | | |
| 1 | Detailed overshadowing studies are to be lodged with development applications for buildings. | Detailed overshadowing plans have been lodged. | Yes |
| 2 | Daylight access for residential flats is to be provided in accordance with the Daylight Access provisions in the Residential Flat Design Code. | See ADG assessment. | Yes |
| 3 | Solar access to communal open spaces for residents is to be maximised. At least 50% of communal courtyards must receive a minimum of 3 hours direct sunlight between 9am and 3pm on June 21. | See ADG assessment. | Yes |
| 4 | At least 50% of new public open space is to receive 3 hours direct sunlight between 9am and 3pm on June 21. | The proposal ensures solar access to public open space. | Yes |
| 5 | No overshadowing of residential lots outside of the Precinct is to occur after 11 am on June 21. | No overshadowing of residential lots outside of the Precinct takes place. | Yes |
| 6 | No overshadowing of Blenheim Park or Bundara Reserve is to occur after 9am on June 21. | The proposal ensures solar access to public open space. | Yes |
| 7 | No overshadowing of Myall Reserve is to occur after 11 am on June 21. | The proposal ensures solar access to public open space. | Yes |
| 8 | No overshadowing of Yinnell Reserve is to occur after 12:30 pm on June 21. | The proposal ensures solar access to public open space. | Yes |
| **5.7 Landscape Design** | | | |
| 1 | A minimum 30% of the developable area of residential sites is to be provided as Landscaped Area. For the purposes of Section 5.8 Landscape Design, Landscaped Area means:  Area on the site not occupied by any buildings, except for swimming pools or open air recreation facilities, which is landscaped by way of gardens, lawns, shrubs or trees and is available for use and enjoyment by the occupants of the building, excluding areas used for driveways, parking areas or drying yards. | Landscaped area is compliant with the ADG provisions. | Yes |
| 2 | Appropriate shading is to be provided in the design of communal spaces to facilitate use during summer. | Shading is provided to communal open space both at ground floor and on the podium. | Yes |
| 3 | Communal open spaces are to incorporate the primary deep soil area where possible. The landscaping of courtyard spaces is to provide for the growth of mid to large size trees. | Part of the communal open space is within the deep soil area. | Yes |
| 4 | Landscaped areas are to incorporate trees, shrubs and ground covers endemic to the area where appropriate. | Landscaped areas incorporate trees, shrubs and ground covers endemic to the area where appropriate. | Yes |
| 5 | Landscaping is to contribute to water efficiency and effective stormwater management. | Landscaping contributes to water efficiency and effective stormwater management. | Yes |
| 6 | Deep soil planting within residential and mixed use developments is to be provided in accordance with the Deep Soil Zone provisions in the Residential Flat Design Code. | Deep soil planting is provided in accordance with the Deep Soil Zone provisions in the ADG. | Yes |
| **6.0 PEDESTRIAN AMENITY** | | | |
| **6.1 Active Street Frontages** | | | |
| 1 | Retail development is to be provided within the mixed use precinct adjacent to the central open space and in the vicinity of the entrance to North Ryde Station within the station precinct. | Not applicable. | N/A |
| 2 | Buildings within the mixed use and station precincts are to be designed to provide high activity zones. Active ground level uses are required on all street frontages in these areas. | Not applicable. | N/A |
| 3 | Buildings adjacent to or opposite open space are to have ‘entry points’ (such as gates or front doors) to activate the space, and make it feel inhabited to maximise visibility along the public domain. | Entry points are provided off the liner park. | Yes |
| 4 | Glazing of windows and doors of building frontages in the mixed use zone should be maximised. | Not applicable. | N/A |
| 5 | Commercial and residential lobbies are not to occupy more than 25% of the total length of the building’s street frontage | Residential lobbies do not occupy more than 25% of the total length of the building’s street frontage. | Yes |
| 6 | Entries to active frontage tenancies are to be accessible and at the same level as the adjacent footpath. | Not applicable. | N/A |
| 7 | Active uses in the mixed use zone are to occupy the street frontage for a depth of at least 10m. | Not applicable. | N/A |
| 8 | Residential street frontages are to ensure access by gate or door from the public domain. Partially visible private gardens should be considered. | The interface to the public domain is appropriate. | Yes |
| **6.2 Awnings** | | | |
| 1 | Awnings are to be provided at key pedestrian and active frontage locations, including along Delhi Road adjacent to the station and within the mixed use precinct. | An awning is provided to the building entry. | Yes |
| 2 | Awning width is to be appropriate to the building design and streetscape and have regard to the location of street trees. | The awning design is appropriate. | Yes |
| 3 | Awnings are to have a minimum soffit height of 3.6m above the finished ground floor level. On sloping sites, awning soffit height may vary from 3.6m to 4.2m. | The soffit height is appropriate. | Yes |
| 4 | Where the topography slopes along the street, awnings are to step to provide a regular height over the footpath. Steps in awnings should not exceed 600mm. | Not applicable noting the setback of the building. | N/A |
| 5 | Awnings are to provide adequate weather protection. | Noted. | - |
| 6 | Glazing is not permitted in continuous awnings. | Noted. | - |
| 7 | Under awning lighting is to be provided to achieve appropriate luminance levels for pedestrians (refer to relevant Australian Standards). This should be recessed into the soffit of the awning. | Noted. | - |
| 8 | Entry canopies and discontinuous awnings may be provided to building entries not located along active frontages. | Not applicable. | N/A |
| 9 | Entry canopies may be glazed or solid, and are to be coordinated with the overall facade design. | Noted. | - |
| 10 | Canopies are to have a minimum soffit height of 3.6m, and canopy soffit height may vary from 3.6m to 4.2m. | The soffit height is appropriate. | Yes |
| **6.3 Signage** | | | |
| 1 | Signage is to comply with the Macquarie Park controls as set out in Section 6.1.14 of Part 4.5 of the Ryde DCP 2010. In particular, wayfinding and directional signage is to be installed throughout the development and at site entry points. | Not applicable. | N/A |

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| **7.0 ACCESS PARKING AND SERVICES** | | | |
| **7.1 Vehicular Access** | | | |
| 1 | Design of driveway crossings is to be in accordance with Part 8.3 of Ryde DCP 2010. | Driveway design has been considered by Council’s Engineering department. | Yes |
| 2 | Driveway widths/grades, vehicular ramp width/grades and passing bays are to be in accordance with the relevant Australian Standard. | Driveway design has been considered by Council’s Engineering department. | Yes |
| 3 | The location and design of access ways to underground parking is to consider residential amenity particularly the location of doors and windows of habitable rooms. | Basement access has considered residential amenity. | Yes |
| 4 | Potential pedestrian/vehicle conflict is to be minimised by:   1. providing vehicle access from minor or secondary streets rather than primary streets or streets with major pedestrian activity, where practicable; 2. limiting the width and number of vehicle access points - generally one crossing per lot will be permitted and where practicable, adjoining buildings may share or amalgamate vehicle access points; 3. ensuring clear sight lines at pedestrian and vehicle crossings; 4. utilising traffic calming devices; 5. separating and clearly distinguishing between pedestrian and vehicular accessways; and 6. all vehicles must be able to enter and leave the site in a forward direction. | Potential pedestrian/vehicle conflict is minimised by separating vehicle and pedestrian accesses, ensuring clear sight lines and provided clear manoeuvring. | Yes |
| 5 | The appearance of car parking and service entries is to be improved by:   1. minimising the size, quantity and visual intrusion of vehicle access points; 2. locating or screening garbage collection, loading and servicing areas visually away from the street; 3. setting back or recessing car park entries from the main façade line; 4. avoiding black holes in the façade by providing security doors to car park entries; 5. where doors are not provided, it is to be ensured that the visible interior of the car park is incorporated into the façade design and material selection and that building services pipes and ducts are concealed; 6. returning the façade material into the car park entry recess for the extent visible from the street as a minimum; and 7. avoiding ramping vehicular access along boundary alignments edging the public domain and streets. | Car park entries are minimised and are designed so as not to be prominent when viewed from Halifax Street. | Yes |
| **7.2 Car Parking** | | | |
| 1 | A Parking Management Strategy is to be prepared to address the co-ordination and management of on- street parking for the Precinct and identify measures to address potential parking overspill into surrounding areas, including the Macquarie Park Cemetery and Crematorium. | Not applicable. | N/A |
| 2 | Two separate Parking Management Strategies may be prepared for the Precinct, being for:  a. the station precinct; and  b. the high density residential and mixed use precincts combined. | Not applicable. | N/A |
| 3 | The Parking Management Strategy(ies) is/are to address the objectives and controls of this section and identify any combined/cumulative impacts and shared parking management measures, as relevant. | Not applicable. | N/A |
| 4 | The Parking Management Strategy(ies) is/are to be lodged with the first development application for residential/commercial development and approved prior to first occupation by residents/workers. | Not applicable. | N/A |
| 5 | Development applications for residential and commercial development must be accompanied by a traffic and transport impact assessment. The traffic and transport impact assessment is to:   1. provide an assessment of the impact of the proposal on the traffic network; 2. demonstrate how the development maximises access by sustainable modes of transport and reduces car dependency consistent with Transit Oriented Development principles; and 3. accommodate car share schemes based on consultation with car share providers and having regard to best practice. | A traffic and parking assessment accompanies the DA. | Yes |
| 6 | Development is to comply with the car parking controls for Macquarie Park, as set out in Section 6.3.8 of Part 4.5 of the Ryde DCP 2010, with the exception of car parking rates which are to comply with Table 6 below. | Parking satisfies the RDCP provisions as noted in the ADG assessment. | Yes |
| **7.3 Bicycle Parking** | | | |
| 1 | Bicycle parking is to be provided in accordance with Section 6.3.8 of Part 4.5 of the Ryde DCP 2010. | Bicycle parking for residents is provided in the basement as well as visitor cycle parking near the entry. | Yes |
| **7.4 Site Facilities and Services** | | | |
| 1 | Site facilities and services are to comply with the Macquarie Park controls set out in Section 6.3.6 of Part 4.5 of the Ryde DCP 2010. | See below. | - |

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| **7.5 Work Place Travel Plan** | | | |
| Not applicable. | | | N/A |
| **7.6 Accessible Design** | | | |
| 1 | Development is to be designed to comply with the controls set out in Part 9.2 of the Ryde DCP 2010 – Access for People with Disabilities. | The proposed development is satisfactory when considered against AS1428. | Yes |
| 2 | In designing new developments and the public domain, consideration is to be given to the recommendations of the National Disability Strategy NSW Implementation Plan 2012 (particularly the section titled *Inclusive and Accessible Communities*) and the NSW Disability Action Plan 2012-2017. | Noted. | - |
| **8.0 ENVIRONMENTAL MANAGEMENT** | | | |
| **8.1 Environmental Performance** | | | |
| 1 | All multi-unit residential buildings are to be assessed and certified against Green Star (Design Rating) and achieve a minimum 4 star rating. | See BASIX and NatHERS certificates. | Yes |
| 2 | All commercial buildings are to be assessed and certified against Green Star (Design Rating) and achieve:   1. A minimum 5 star rating (if the associated Development Application is lodged before 1 January 2017); 2. A minimum 6 star rating (if the associated Development Application is lodged on or after 1 January 2017). |
| 3 | Potable water demand in residential buildings is to be reduced by at least 50% from BASIX baseline for an average household. |
| 4 | Potable water demand in commercial buildings is to be reduced to achieve a 4.5 stars NABERS water rating. |
| 5 | Potable water demand in retail buildings is to be reduced to achieve a 4.5 stars NABERS water rating. |
| 6 | All buildings are to be connected to smart water metering. |
| 7 | All buildings with basement parking should make provision for electro-voltaic charging infrastructure to allow for the transition to electric car technology. | Vehicle charging is proposed. | Yes |
| 8 | The following targets for the reduction in energy use are to be met.   1. BASIX 25 – achieve a 25% reduction in kgCO2 – e/person/year in residential buildings 6 storeys or higher; 2. BASIX 35 – achieve a 35% reduction in kgCO2 – e/person/year in residential buildings 4-5 storeys; 3. BASIX 45 – achieve a 40% reduction in kgCO2 – e/person/year in residential buildings 1-3 storeys. | See BASIX and NatHERS certificates. | Yes |
| 9 | All residential buildings are to achieve:   1. A 7 star NatHERS for heating and cooling where development applications are lodged prior to 1 January 2017; 2. An 8 star NatHERS for heating and cooling where development are lodged on or after 1 January 2017. | See BASIX and NatHERS certificates. | Yes |
| 10 | Commercial buildings are to achieve NABERS 5.5 star (equating to an 11% kgCO2 e/sqm/year reduction compared to 5 star). | Not applicable. | N/A |
| **8.2 Flooding** | | | |
| Not applicable. | | | N/A |
| **8.3 Wind Mitigation** | | | |
| 1 | Development is to comply with the Macquarie Park Wind Impact controls set out in Section 6.1.16 of Part 4.5 of the Ryde DCP 2010.1 | See below. | - |
| **8.4 Air, Noise and Vibration** | | | |
| 1 | The provisions of *State Environmental Planning Policy (Infrastructure) 2007* and *Development near Rail Corridors and Busy Roads Interim Guideline* must be taken into consideration to minimise impacts of busy roads and railway corridors on residential and other sensitive development such as child care centres and health services facilities. | The provisions of *State Environmental Planning Policy (Infrastructure) 2007* and *Development near Rail Corridors and Busy Roads Interim Guideline* have been considered in the assessment of the DA. | Yes |
| 2 | An Acoustic Impact Assessment report prepared by a suitably qualified acoustic consultant is to be submitted with all development applications for commercial, retail and residential buildings, with the exception of applications for minor building alterations or where Council considers an assessment is not required. | An acoustic assessment accompanies the DA. | Yes |
| 3 | Non-residential development is not to adversely affect the amenity of adjacent and nearby residential development and public spaces as a result of noise, hours of operation and/or service deliveries. | Not applicable. | N/A |
| 4 | Noise from plant and equipment (including roof plant, air conditioning ducts and plant and servicing associated with green infrastructure) is to be attenuated to an appropriate level to ensure the amenity of adjacent and nearby uses is achieved and maintained. | Noise from plant and equipment is attenuated to an appropriate level to ensure amenity of residences. | Yes |
| 5 | Mechanical ventilation systems are to be designed to meet the requirements of the Building Code of Australia and relevant Australian Standards, and air intakes are to be sited as far as practicable from major sources of air pollution. | Mechanical ventilation systems must satisfy relevant Australian Standards. | Yes |
| 6 | A vegetation buffer is to be established between the M2 Motorway and any residential buildings in the mixed use precinct prior to occupation. The vegetation buffer is to be of sufficient width to assist in intercepting wind-blown dust by physical entrapment of airborne particles. | A vegetation buffer is proposed to be established between the M2 Motorway and the building. | Yes |
| **8.5 Waste Management** | | | |
| 1 | Development is to comply with the Macquarie Park Waste Management controls set out in 6.3.3 of Part 4.5 of the Ryde DCP 2010. | Refer to Waste Management Plan and comments from Council’s Waste Team. | Yes |
| **8.6 Vegetation Management** | | | |
| 1 | Wherever practical, development within the Precinct should be sited to minimise impacts on existing vegetation and avoid removal of significant trees. | The proposal retains existing trees where possible, particularly along the boundary with the M2 Motorway. | Yes |
| 2 | An arborist report for each Sub-Precinct is to be lodged with the first development application for road construction works and approved prior to the commencement of road construction works for that Sub- Precinct. The arborist report is to identify significant trees within the precinct and provide an assessment of whether the trees should be retained, removed or pruned, and protection measures during construction for trees to be retained. | Not applicable. | N/A |
| 3 | A site specific Vegetation Management Plan (VMP) is to be prepared and implemented for the Northern Bushland Park. This plan is to be lodged with the first development application for road construction in the high density residential precinct and approved prior to the commencement of road construction works in this precinct. | Not applicable. | N/A |
| 4 | The VMP is to be prepared in accordance with relevant guidelines and based on standard vegetation management actions including:  a. Collection of seed from any native vegetation proposed to be cleared at the site;  b. Weed control;  c. Management of fire for conservation;  d. Management of human disturbance;  e. Retention of regrowth and remnant native vegetation;  f. Replanting or supplementary planting where natural regeneration will not be sufficient;  g. Retention of dead timber;  h. Erosion control; and  i. Retention of rocks. |
| 5 | The VMP is to ensure the rehabilitation and regeneration of the Porters Creek vegetated riparian corridor (being 30 metres wide on  either side of the creek measured from top of bank), taking into account Council’s priority creek rehabilitation works. |
| 6 | The VMP is to provide for a minimum 2 year monitoring and maintenance period for the rehabilitated riparian area and other revegetation following final planting. |
| 7 | A 30m buffer is to be provided from the top of the nearest bank of Porters Creek to any future development. | Not applicable. | N/A |
| **8.7 Soil Management** | | | |
| 1 | Development is to comply with the Macquarie Park Soil Management controls set out in 6.3.4 of Part 4.5 of the Ryde DCP 2010. | See below. | - |
| **8.8 Site Contamination** | | | |
| 1 | Development is to comply with the Macquarie Park Site Contamination controls set out in 6.3.5 of Part 4.5 of the Ryde DCP 2010. | A DSI has been provided with the DA. | Yes |
| **8.9 Heritage and Archaeology** | | | |
| 1 | Development applications for buildings in the high density residential precinct to the east of the Spine Road adjacent to the M2 Corridor are to be accompanied by a visual impact assessment which considers the visual impact of the development on the heritage significance of the Macquarie Park Cemetery and Crematorium. Council may waive this requirement for a visual impact assessment if it considers that the proposed development is low scale and will not result in significant adverse visual impacts. | The proposal is in keeping with the anticipated form of development under the LLUDG. The development is not considered to have an adverse impact on the heritage significance of the Macquarie Park Cemetery and Crematorium. | Yes |
| 2 | Where works are proposed in the vicinity of the bricked domed well or cistern located within the mixed use precinct (as identified in Figure 16 of the North Ryde Station Precinct Rezoning Study - Aboriginal Heritage Assessment and Non-Indigenous Archaeological Assessment (Artefact Heritage, November 2012)), a report is to be provided detailing the arrangements for the archaeological monitoring of the cistern. These should include that:   1. When the well/cistern is located during construction excavation works, all works within 15m of the well/cistern are to cease immediately and a heritage/archaeological consultant is to be engaged; 2. The archaeological consultant is to prepare a report on the condition of the item and its significance. This heritage assessment is to be submitted to Council and a site visit undertaken by Council; and 3. Once Council is satisfied the appropriate research works and methodology have been prepared, written approval is to be issued by Council prior to any works commencing within this 15m restricted zone. | Not applicable. | N/A |
| 3 | Protective fencing is to be installed at the 15 m perimeter setback from the well/cistern whilst the investigation works are being undertaken. | Not applicable. | N/A |
| **RYDE DEVELOPMENT CONTROL PLAN 2014**  **PART 4.5 – MACQUARIE PARK CORRIDOR** | | | |
| The following assessment responds to those matters contained in the Ryde Development Control Plan 2014 Part 4.5 – Macquarie Park Corridor that are called up by the North Ryde Station DCP. | | | |
| **8.0 SITE PLANNING AND STAGING** | | | |
| **8.5 Site Facilities** | | | |
| **Residential** | | | |
| d. | Provide either communal or individual laundry facilities to each dwelling, and at least one external clothes drying area. The public visibility of this area should be minimised. Clothes drying is only permitted on balconies that are permanently screened from view from the public domain. | Laundries are provided within each apartment.  Clothes drying is possible on balconies where solid balustrades are provided. | Yes |
| e. | Provide storage to dwellings in accordance with SEPP 65 requirements. | Storage is provided in accordance with the ADG requirements. | Yes |
| f. | Lockable mail boxes are to be provided in a location visible from the public domain. Mailboxes are to be integrated with the design of building entries and to Australia Post standards. | Lockable mail boxes are proposed to be provided in a location visible from the public domain. | Yes |
| **9.0 ENVIRONMENTAL PERFORMANCE** | | | |
| **9.1 Wind Impact** | | | |
| a. | Buildings shall not create uncomfortable or unsafe wind conditions in the public domain which exceeds the Acceptable Criteria for Environmental Wind Conditions. Carefully locate or design outdoor areas to ensure places with high wind level are avoided. | An Environmental Wind Tunnel Study accompanies the DA which concludes the overall effect of the proposed development on the local wind microclimate, with the wind mitigation treatments recommended, is predicted to be “not significant.” | Yes |
| b. | All applications for buildings over 5 storeys in height shall be accompanied with a wind environment statement. For buildings over 9 storeys and for any other building which may be considered an exposed building shall be accompanied by a wind tunnel study report. Refer to Council for documentation and report requirements. |
| c. | Calculation rules   * 1. Natural wind conditions are intensified by certain types of buildings by the way they relate to the surrounding area. In this section, those buildings are called exposed buildings.   2. A building may be considered exposed if half or more of its height rises above surrounding buildings and/or the building lies on the perimeter of a built up area.   3. Exposed buildings are likely to create unpleasant and even dangerous high winds, mainly in three locations: at the base, around corners or through arcades or other openings at the base of the building.   4. In addition the areas within the exposed buildings that could potentially experience adverse wind effects are the areas on the podium, terraces on the roof or on setbacks in the tower as well as projecting or corner balconies. |
| **9.4 Soil Management** | | | |
| a. | Development is to comply with the City of Ryde DCP 2014. | Noted. | - |
| b. | Development is to be designed and constructed to integrate with the natural topography of the site to minimise the need for excessive sediment disturbance and prevent soil loss. | Development has been designed to integrate with the natural topography of the site. | Yes |
| c. | Effective site management and maintenance practices are to be followed to prevent soil loss. | Effective site management and maintenance practices are demonstrated in the Stormwater Plans. | Yes |
| d. | Ensure that suspended Solid concentrations in stormwater leaving the site do not exceed more than 50 mg/litre. | Noted. | - |
| e. | An Erosion and Sediment Control Plan (ESCP), prepared by a suitably qualified environmental engineer, is required to be submitted in support of all development proposals requiring development consent under the Ryde Local Environmental Plan, (other than for minor building modifications) including: Demolition; Excavation; Trenching and Building. | An Erosion and Sediment Control Plan has been prepared by a suitably qualified environmental engineer, and has been submitted with the DA. | Yes |
| f. | The ESCP must make reference to the entire construction and post construction period, and all devices must be installed prior to commencement of any demolition or construction works on-site. |
| g. | The ESCP is to be prepared in conjunction with the Site Stormwater Management Plan and as a minimum contain the following information:   * 1. Property details;   2. Site analysis (contours, access points, location of existing vegetation/creeks or other features);   3. Extent and degree of clearing works and any excavations;   4. Conservation/protection of sensitive areas and trees either on site or adjoining development;   5. Truck movements and access arrangements/routes (load limits);   6. Sediment and Erosion Control Measures (location and type of all control measures);   7. Excavation pit protection;   8. Material stockpile location and control method, waste management;   9. Pump out method (if required);   10. Dust control measures to reduce surface or airborne movement of sediment from exposed areas of the site;   11. Hours of operation   12. Ongoing maintenance methods   13. Risks, safeguards and safety precautions; and   14. Contingencies. |