

Approved Plans and Specifications

- 1 The development shall be implemented substantially in accordance with the details and specifications set out on:

2017-02-A-101-B dated 26/04/19
2017-02-A-102-B dated 26/04/19
2017-02-A-103-B dated 26/04/19
2017-02-A-104-B dated 26/04/19
2017-02-A-105-B dated 26/04/19
2017-02-A-106-B dated 26/04/19
2017-02-A-107-B dated 26/04/19
2017-02-A-108-B dated 26/04/19
2017-02-A-109-B dated 26/04/19
2017-02-A-110-B dated 26/04/19
2017-02-A-111-B dated 26/04/19
2017-02-A-112-B dated 26/04/19
2017-02-A-113-B dated 26/04/19
2017-02-A-114-B dated 26/04/19
2017-02-A-115-B dated 26/04/19
2017-02-A-116-B dated 26/04/19
2017-02-A-117-B dated 26/04/19
2017-02-A-201-C dated 22/10/19
2017-02-A-202-B dated 26/04/19
2017-02-A-203-B dated 26/04/19
2017-02-A-204-B dated 26/04/19
2017-02-A-205-C dated 24/10/19
2017-02-A-206-B dated 26/04/19

and any details on the application form, and with any supporting information received, except as amended by the conditions specified and imposed hereunder.

General Matters

- 2 **Building Work - Compliance with the Building Code of Australia**
All building work must be carried out in compliance with the provisions of the Building Code of Australia.
- 3 **Construction Certificate**
A Construction Certificate must be obtained from Council or an Accredited Certifier prior to work commencing.

A Construction Certificate certifies that the provisions of Clauses 139-148 of the Environmental Planning and Assessment Amendment Regulations, 2000 have been satisfied, including compliance with all relevant conditions of Development Consent and the Building Code of Australia.

Note: The submission to Council of two (2) copies of all stamped Construction Certificate plans and supporting documentation is required within two (2) days from the date of issue of the Construction Certificate, in the event that the Construction Certificate is not issued by Council.
- 4 **Access to Premises Standards**
Access for people with disabilities must be provided as required by and in accordance with the Commonwealth Disability (Access to Premises – Buildings) Standards 2010 (the Premises Standards) and AS1428.1.
- 5 **Disability Discrimination Act 1992**
This consent does not imply or confer compliance with the requirements of the Disability Discrimination Act 1992.

It is the responsibility of the applicant to guarantee compliance with the requirements of the Disability Discrimination Act 1992. The current Australian Standard AS1428.1 (2009) – Design

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for Access and Mobility is recommended to be referred for specific design and construction requirements, in order to provide appropriate access to all persons within the building.

6 Maintenance of Access to Adjoining Properties

Access to all properties not the subject of this approval must be maintained at all times and any alteration to access to such properties, temporary or permanent, must not be commenced until such time as written evidence is submitted to Council or the Principal Certifying Authority indicating agreement by the affected property owners.

7 Protection of Public Infrastructure

Council must be notified in the event of any existing damage to any of its infrastructure such as the road, kerb and gutter, road shoulder, footpath, drainage structures and street trees fronting the development site, prior to commencement of any work.

Adequate protection must be provided for Council infrastructure prior to work commencing and during building operations.

Any damage to Council's assets shall be made good, prior to the issue of any Occupation Certificate or commencement of the operation.

8 Geotechnical

- A dilapidation report is required for all structures located within the zone of influence of the proposed earthworks as determined by the geotechnical consultant.
- All excavations need to be supported during and after construction particularly to protect adjoining property with nearby existing development.
- No disturbance of ground is to occur beyond site boundaries. A minimum buffer between site boundaries and the construction of retaining structures is to be recommended by the geotechnical consultant to ensure adjoining property is not adversely impacted upon by this development.
- Retaining wall design is not to include anchors extending on to adjoining property without the written consent of the adjoining property owner.
- All work is to be in accordance with the geotechnical recommendations contained in the report dated 31 August 2017 by Douglas Partners and any subsequent geotechnical report required to address unanticipated conditions encountered during construction.
- All site preparation earthworks including drainage, retaining wall and footing construction is to be subject to Level 1 geotechnical supervision as defined in Australian Standard AS3798 Guidelines for Earthworks for Commercial and Residential Developments. Where necessary amendments are to be made to the designs during construction based on supplementary geotechnical advice given during the supervision to ensure that the completed works accommodates all encountered geotechnical constraints.
- Hard bedrock where encountered will be difficult to excavate. Alternative excavation methods should be considered to minimise noise and vibration.
- All excavations for foundations are to be inspected by the geotechnical consultant and certified that the ground has been suitably prepared for the placement of footings.

9 Adaptable Units

The nominated adaptable units within the development must be designed and constructed so as to be capable of adaptation for disabled or elderly residents. Dwellings must be designed in accordance with the Australian Adaptable Housing Standard (AS 4299-1995), which includes "pre-adaptation" design details to ensure visitability is achieved. Level access is required to be provided between the internal living space and balcony of the adaptable units and sufficient circulation space is required throughout.

10 Occupation Certificate

An Occupation Certificate must be issued by the Principal Certifying Authority prior to occupation or use of the development. In issuing an Occupation Certificate, the Principal Certifying Authority must be satisfied that the requirements of Section 109H of the Environmental Planning and Assessment Act 1979, have been complied with as well as all of the conditions of the Development Consent.

11 Separate Consent for Retail Spaces

Unless otherwise exempt, separate development consent shall be obtained for the use of the commercial/retail spaces within the building.

- 12 **Separate Consent Required for Advertising Signage**
This consent does not authorise the erection of any advertising signage. Any such advertising signage will require separate Council approval, in the event that such signage is not exempt development.
- 13 **Occupation Certificate**
An Occupation Certificate must be issued by the Principal Certifying Authority prior to occupation or use of the development. In issuing an Occupation Certificate, the Principal Certifying Authority must be satisfied that the requirements of section 6.9 of the Environmental Planning and Assessment Act 1979, have been complied with as well as all of the conditions of the Development Consent.
- 14 **Stormwater Quality Management**
The stormwater treatment system must be designed to achieve pollutants and nutrients removal minimum: GP – 90%, TSS – 80%, TP – 55% and TN – 40%. The developer and/or future strata manager shall ensure that the stormwater filtration system is maintained in good working order to achieve these stormwater quality objectives in perpetuity.
- 15 **Tree Retention / Removal**
The Developer shall retain the existing street trees indicated on the Landscape Concept Plans by Ochre Landscape Architects dated 29.04.19, the Arboricultural Impact Assessment Report by Allied Tree Consultancy dated December 2018 and the amended Arboricultural Impact Assessment Report by Allied Tree Consultancy dated April 2019, consisting of trees numbered T10, T11 and T12.

Any branch pruning, which has been given approval, must be carried out by a qualified arborist in accordance with Australian Standard AS4373-2007.

All tree protection measures are to be installed in accordance with Australian standard AS4970-2009 Protection of Trees on development Sites.

All recommendations in amended Arboricultural Impact Assessment Report by Allied Tree Consultancy dated April 2019, are to be implemented including and not restricted to: remedial tree pruning, deadwood removal, fencing and signage, sediment buffer, stem protection, establishing tree protection zones and watering and root hormone application if required.

This consent permits the removal of trees within the subject site pursuant to DA-2017/1462. No other trees shall be removed without prior written approval of Council.
- 16 **Tree Protection**
Prior to commencement of any work on the site, including any demolition, all trees not approved for removal as part of this consent that may be subjected to impacts of this approved development must be protected in accordance with Section 4 of the Australian Standard Protection of Trees on Development Sites (AS 4970-2009).

Tree protection zones must be established prior to the commencement of any work associated with this approved development.

No excavation, construction activity, grade changes, storage of materials stockpiling, siting of works sheds, preparation of mixes or cleaning of tools is permitted within Tree Protection Zones.

Prior to the Issue of the Construction Certificate

- 17 **Demolition of Structures Around the Street Trees**
- a) The demolition process must remove all other site structures before removal of the concrete surfaces (including the portion of the drive/footpath, kerb) that are within the area of Kembla Street. These will be the final structures removed from the site.
 - b) Machinery can be used for part of this removal, however, must always be retained to a hard surface (roadway; Kembla Street). No machine should on any occasion work on a soil based surface within the area of the TPZ.
 - c) That part of any existing surface (footpath/kerb/gutter/roadway) that falls within the area of 3m radius from the girth of these trees must be removed via hand tools, e.g., Jackhammers, etc. removal of the remaining surface must disturb as little area beneath the surface as possible. The project arborist is required to be on site during this exercise.

- d) If machinery is required to enter the TPZ where no hard surface exists, then ground protection methods are required to be employed. No pruning can occur for access to machinery.
- e) After removal of the concrete surface and brick fence, remediation of the TPZ is required. The following measures are required, vertical mulching and a soil conditioner to be applied immediately over the TPZ, being the area from the kerb to the line of the proposed basement wall. This exercise is required to be performed by the project arborist.

Prior to release of the Construction Certificate, a demolition plan shall be submitted to Wollongong City Council for approval prior to being submitted to the Principal Certifying Authority.

18 **Construction Management Plan**

Prior to the release of a Construction Certificate or the commencement of any works at the site, a detailed Construction Management Plan (CMP) prepared by a suitably qualified person in consultation with adjoining land owners shall be submitted to and approved by Council. The construction management plan shall include (but not be limited to) the following details:

- plan of proposed construction storage area;
- parking for construction workers during the demolition and construction phases;
- the type of materials/plant/ equipment to be transported to and stored at the site and how it is to be transported and stored;
- timing of delivery of materials;
- the proposed access points to the site during construction;
- treatment of barricading/ hoarding for construction/and restricting access;
- address all environmental aspects of the development's demolition and construction phases including soil and water management/erosion and sediment control plan; noise and vibration management plan; dust suppression/dust management plan; waste management plan and litter control;
- construction noise mitigation measures;
- timing of waste collection during construction.

A community engagement plan be prepared and incorporated into the Construction Management Plan, including regular updates and contact numbers for complaints and consultation for schedule of works.

A Construction Certificate shall not be released by the Principal Certifying Authority and no works shall commence until such time as Council's written approval has been obtained for the construction management plan. The approved construction management plan shall be complied with at times.

19 **Construction Environmental Management Plan**

Prior to the commencement of work, a construction environmental management plan shall be provided to the PCA. The plan shall address (as a minimum) vehicle traffic, odour and vapour, dust, plant and machinery noise, water and sediment management, ground and surface water, subsurface seepage and accumulated excavation water, sediment from equipment and cleaning operations, site security, working hours, contact information, incident response and contingency management.

Additionally, submit an excavated soil material disposal plan to the PCA, with the batching, sampling and analysis procedures as per the DECCW (2009) Waste Classification Guidelines. The plan shall be prepared by a suitably qualified and experienced consultant. A copy of the plan shall be forwarded to Council.

The Construction Environmental Management Plan shall be implemented at all times during the course of demolition and construction.

20 **Site Environmental Management Plan**

The submission of a detailed Site Environmental Management Plan which addresses the following issues:

1. Environmental monitoring methods involving:
 - a. ground and surface waters;
 - b. dust generation and mitigating measures;
 - c. flora and fauna management (if relevant); and

d. erosion and sedimentation controls and proposed soil erosion control measures;

2. On-site materials management including soil conservation;
3. Emergency/contingency plans; and
4. Site rehabilitation works.
5. Unexpected Finding Protocol.

The Environmental Management Plan should also include unexpected finding protocol as recommended by Douglas Partners Consulting and to be submitted to the Principal Certifying Authority for approval prior to the issue of the Construction Certificate.

21 **Soil and Water Management Plan (SWMP) – Greater than 2500m² disturbance**

A Soil and Water Management Plan (SWMP) must be prepared by a suitably qualified person in strict accordance with the requirements set out in “Managing Urban Stormwater: Soils and Construction” NSW Dept of Housing, 4th Edition. The plan must be submitted to the Certifying Authority for approval prior to the issue of the Construction Certificate.

22 **Section 73 Compliance Certificate**

A Section 73 Compliance Certificate under the Sydney Water Act 1994 must be obtained from Sydney Water Corporation. Application must be made through an authorised Water Servicing Coordinator. Please refer to the “Builders and Developers” section of the web site www.sydneywater.com.au then search to “Find a Water Servicing Coordinator”. Alternatively, telephone 13 20 92 for assistance.

Following application, a “Notice of Requirements” will advise of water and sewer infrastructure to be built and charges to be paid. Please make early contact with the Coordinator, since building of water/sewer infrastructure can be time consuming and may impact on other services and building, driveway or landscape design.

The Notice of Requirements must be submitted to the Principal Certifying Authority prior to issue of the Construction Certificate.

23 **Present Plans to Sydney Water**

Approved plans must be submitted online using Sydney Water Tap, available through www.sydneywater.com.au to determine whether the development will affect Sydney Water's sewer and water mains, stormwater drains and/or easements, and if further requirements need to be met.

The Certifying Authority must ensure that Sydney Water has issued an approval receipt prior to the issue of a Construction Certificate.

Visit www.sydneywater.com.au or telephone 13 20 92 for further information.

24 **Endeavour Energy Requirements**

The submission of documentary evidence from Endeavour Energy to the Principal Certifying Authority is required confirming that satisfactory arrangements have been made with Endeavour Energy for the provision of electricity supplies to the development, prior to the release of the Construction Certificate.

Note: Applications should be made to Customer Connections – South Coast, Endeavour Energy PO Box 811 Seven Hills NSW 1730.

25 **Access to Substation**

Documentary evidence must be provided to Council verifying that legal access to the substation within the neighbouring Lot 50 is available to service this subject site for perpetuity.

26 **Telecommunications**

The submission of documentary evidence from an approved telecommunications carrier to the Principal Certifying Authority confirming that underground telecommunication services are available for this development is required prior to the issue of the Construction Certificate.

27 **Utility Services**

Should a proposed Vehicular Crossing be located where it is likely to disturb or impact upon a utility installation (ie power pole, Telstra pit etc) written confirmation from the affected supplier that they have agreed to the proposed impacts shall be submitted to the Principal Certifying Authority prior to the issue of the Construction Certificate.

28 The arrangements and costs associated with any adjustment to a public utility service shall be

borne by the applicant/developer. Any adjustment, deletion and/or creation of public utility easements associated with the approved works are the responsibility of the applicant/developer. The submission of documentary evidence to the Principal Certifying Authority which confirms that satisfactory arrangements have been put in place regarding any adjustment to such services is required prior to the release of the Construction Certificate.

- 29 The depth and location of all services (ie gas, water, sewer, electricity, telephone, traffic lights, stormwater etc) must be ascertained and reflected on the Construction Certificate plans and supporting documentation.

30 **Dilapidation Report Prior to Construction**

A Dilapidation Report detailing the current structural condition of adjoining buildings, infrastructure and roads shall be prepared and endorsed by a qualified structural engineer. The report shall be submitted to the satisfaction of the certifying authority prior to issue of the Construction Certificate. The report shall also identify the condition of all Council assets in the vicinity of the proposed works. The report shall outline measures for the protection of existing public and private infrastructure during the works.

A copy of the report is to be forwarded to Council and the owners of adjoining properties prior to the issue of a Construction Certificate.

Any damage to infrastructure items and relics which is caused by the developer shall be repaired to the satisfaction of the Principal Certifying Authority prior to the issue of an Occupation Certificate.

31 **Groundwater Management Plan**

Prior to the release of the Construction Certificate, a groundwater management plan must be prepared. The plan must be prepared by a qualified and experienced geotechnical engineer, and must include (but not limited to):

- a The necessary requirements to manage infiltration of groundwater into the basement excavation. This includes infiltration, storage, testing and pump-out requirements during construction. Water Quality targets for pump-out must be specified and be in accordance with relevant guidelines.
- b The necessary design requirements to ensure the structural and hydraulic design of the building considers long term groundwater impacts and management requirements.
- c The mitigation requirements of groundwater drawdown to ensure no impacts on adjoining properties and adjacent public infrastructure as a result of potential groundwater draw down and associated settlement.

This information must be to the satisfaction of the Principal Certifying Authority.

32 **External Finishes**

The building shall be constructed and finished in accordance with the approved schedule of finishing materials and colours except where amended by conditions of this consent. This requirement shall be reflected on the Construction Certificate plans and supporting documentation.

33 **Glass Reflectivity Index**

The reflectivity index of the glass and other finishing materials used in the external façade of the building shall not exceed 20 per cent. The details and samples of the glass to be used are to be submitted with the Construction Certificate together with written evidence that the reflectivity of the glass is 20 per cent or less.

- 34 Pedestrian access ways, entry paths, arcades and lobbies must be constructed with durable materials commensurate with the standard of the adjoining public domain with appropriate slip resistant materials, tactile surfaces and contrasting colours.

35 **Finish of Vehicular Entries**

Vehicular entries are to have high quality finishes to walls and ceilings as well as high standard detailing. No ducts or pipes are to be visible from the street.

36 **Placement of Air Conditioning Units**

Air conditioning systems are to not to be located where they are visible from the public streets abutting the site. Plans submitted to the Principal Certifying Authority prior to issue of the Construction Certificate are to identify any external components of air conditioning systems to ensure they meet the requirements of this condition.

- 37 **Integration of Rooftop Structures in Approved Building Envelope**
All rooftop or exposed structures including lift rooms, plant rooms together with air conditioning units, ventilation and exhaust systems are to be integrated within the approved rooftop envelope. This requirement shall be reflected on the Construction Certificate plans.
- 38 **Mechanical Ventilation of the Car park**
The car park shall be mechanically ventilated, to be ducted to the roof. Details demonstrating compliance shall be provided with the Construction Certificate.
- 39 **Permeable Garage Shutter**
Any shutters provided within the basement car parks shall be permeable so as to improve basement ventilation, as per the requirements of 3J-4 of the Apartment Design Guide.
- 40 **External Lighting**
Any lighting of external areas within the development such as the communal open space areas, driveways and car parking entries, shall be designed and located in a manner to prevent light spill and/or glare impacts on neighbouring properties. Light placement and design shall be indicated on the construction certificate drawings.
- 41 **Compliance with the Recommendations of the Acoustic Report**
The recommendations for noise attenuation outlined in the Acoustic Report (reference 182957-AUR01 Rev B) prepared by Northrop dated 14 December 2018, shall be implemented. Details demonstrating compliance shall be provided on the drawings submitted with the Construction Certificate.
- 42 **Water/Wastewater Entering Road Reserve**
Provision shall be made for a minimum 200mm wide grated box drain along the boundary of the property at the vehicular crossing/s to prevent surface water entering the road reserve. This requirement shall be reflected on the Construction Certificate plans.
- 43 **Stormwater Drainage Design**
A detailed drainage design for the development must be submitted to and approved by the Principal Certifying Authority prior to the release of the Construction Certificate. The detailed drainage design must satisfy the following requirements:
- a Be prepared by a suitably qualified civil engineer in accordance with Chapter E14 of Wollongong City Council's Development Control Plan 2009, Subdivision Policy, conditions listed under this consent, and generally in accordance with the conceptual site works and drainage plan lodged for development approval, prepared by Northrop Engineers, Job No. 182597, Drawing No. C3.01, Revision 2 dated 29/04/2019';
 - b Include details of the method of stormwater disposal. Stormwater from the development must be piped to Council's existing underground stormwater drainage system
 - c Engineering plans and supporting calculations for the stormwater drainage system are to be prepared by a suitably qualified engineer and be designed to ensure that stormwater runoff from upstream properties is conveyed through the site without adverse impact on the development or adjoining properties. The plan must indicate the method of disposal of all stormwater and must include rainwater tanks, existing ground levels, finished surface levels on all paved areas, estimated flow rates, invert levels and sizes of all pipelines.
 - d Overflow paths shall be provided to allow for flows of water in excess of the capacity of the pipe/drainage system draining the land, as well as from any detention storage on the land. Blocked pipe situations with 1 in 100 year ARI events shall be incorporated in the design. Overflow paths shall also be provided in low points and depressions. Each overflow path shall be designed to ensure no entry of surface water flows into any building and no concentration of surface water flows onto any adjoining property. Details of each overflow path shall be shown on the detailed drainage design.
- 44 **Flood Level Requirements**
The following requirements shall be reflected on the Construction Certificate plans, prior to the release of the Construction Certificate:
- a Habitable floor levels must be constructed at no lower than shown the plans approved under this consent;

- b The driveway access to the basement level shall include a crest set at a minimum of 0.2 metres above the 100 year flood level in the adjacent roadway;
- c Any portion of the building or structure below the 100 year flood level plus 0.5 metres freeboard should be built from flood compatible materials. Where materials are proposed and not listed in Appendix B of Chapter E13 of the Wollongong DCP2009, relevant documentation from the manufacturer shall be provided demonstrating that the materials satisfy the definition of 'flood compatible materials' as stated in Chapter E13 of the Wollongong DCP2009.
- d The proposed building shall be designed to withstand the forces of floodwater, debris and buoyancy up to and including the Probable Maximum Flood (PMF) level plus 0.5 metres freeboard.

45 **Civil Works within Council Road Reserve**

A detailed civil engineering design shall be provided for the proposed footpath and drainage works within the road reserve and/or Council Land, including pit and pipeline connecting to Council's existing underground stormwater drainage system in Stewart Street. The details must be submitted to and approved by Council's Development Engineering Manager. The detailed civil engineering design shall be prepared by a suitably qualified practicing civil engineer in accordance with the relevant Council engineering standards. The design plans shall be generally in accordance with the conceptual site works and drainage plan lodged for development approval, prepared by Northrop Engineers, Job No. 182597, Drawing No. C3.01, Revision 2 dated 29/04/2019, and shall include the following:

- a Levels and details of all existing and proposed infrastructure/services such as kerb and gutter, public utility, pits, poles, fencing, stormwater drainage, adjacent road carriageway crown, street signs (clearly identifying the type of sign) and footpath levels, and shall extend a minimum of 5 metres beyond the limit of works.
- b Footpath longitudinal sections, and cross-sections at 10 metre intervals as well as including building entrance points and transitions to existing at the property boundary demonstrating compliance with the latest versions of AS 1428.1, AS/NZS 2890.1, the Disability Discrimination Act and the AUSTROAD road design standards.
- c Engineering details of the proposed pit and pipe stormwater drainage system within Council's road reserve, including a hydraulic grade line analysis and longitudinal section of the proposed system showing calculated flows, velocity, pits, pipe size/class, grade, inverts and ground levels. Each proposed pit must be constructed generally in accordance with Wollongong City Council's Engineering Standard Drawings.
- d Details of Council's receiving stormwater drainage system (incl. pit and pipeline) shall be verified by site investigations and detailed survey. This must include details, dimensions, invert levels, pipe size/type/alignment of receiving pit and pipe drainage system extending downstream to the existing kerb inlet pit in Stewart St adjacent to Lot 126 DP 596582 (No. 28 Stewart St), being approximately 40 metres east of the development site frontage.
- e A hydraulic grade line analysis and longitudinal section of the receiving stormwater drainage system showing calculated flows, velocity, pits, pipe size/class, grade, inverts and ground levels, extending downstream to the existing kerb inlet pit in Stewart St adjacent to Lot 126 DP 596582 (No. 28 Stewart St). This information must demonstrate that the receiving system has sufficient capacity to cater for the additional stormwater discharges from the development in storm events up to and including a 10 year ARI storm event.
- f If any part of the receiving stormwater system upstream of the existing kerb inlet pit in Stewart St adjacent to Lot 126 DP 596582 (No. 28 Stewart St) is found to not have the required capacity, then that part must be augmented/ amplified to take the additional flow.
- g Where any adjustments to public utilities are proposed the applicant shall submit documentary evidence that they have the consent of the owner of the public utility authority.

- h All construction must be in accordance with the requirements of Council's Subdivision Code. Evidence that this requirement has been met must be detailed on the engineering drawings.
- i Details are to be provided regarding the type of materials used for construction. They should conform to the adjacent road reserves. Pavement designs must be provided for road reconstruction works, the pavement must be designed by a suitably qualified engineer to the expected traffic loadings and type.

Evidence that the above requirements have been met must be detailed on the engineering drawings. The detailed design and supporting documentation shall be submitted to and approved by Wollongong City Council's Development Engineering Manager prior to the issue of the Construction Certificate.

46 **Flows from Adjoining Properties**

Flows from adjoining properties shall be accepted and catered for within the site. Finished ground and top of retaining wall levels on the boundary shall be no higher than the existing upslope adjacent ground levels. The above requirements must be clearly shown on construction certificate plans prior to the release of the construction certificate.

47 **Pump System**

A pump system shall be provided in association with the detailed drainage design for the site to cater for stormwater from a prolonged/extreme storm event entering the basement. The pump system shall be designed by a suitably qualified and experienced civil engineer and reflected on the Construction Certificate plans and supporting documentation.

48 **Basement Waterproofing**

Full engineering details of the proposed wall around the basement car park shall be submitted to the Principal Certifying Authority prior to the issue of the Construction Certificate. These shall include construction details indicating that no ingress of stormwater is possible into the basement levels. This applies to any proposed opening such as doors, driveway access, and ventilation louvres.

49 **Protection of Buildings from Ingress of Stormwater Runoff**

Detailed design of the development shall ensure that there will be no ingress of surface stormwater runoff into the proposed buildings. All building entrances shall be provided with a suitable freeboard above the adjacent local blocked pipe situation 100 year ARI water surface level. These requirements shall be reflected on the Construction Certificate plans and supporting documentation prior to the release of the Construction Certificate.

50 **Car Parking and Access**

The development shall make provision for the following:

Residential Parking

- 104 car parking spaces
- 21 residential visitor parking spaces
- 6 motorcycle spaces
- 34 secure (Class B) residential bicycle spaces
- 9 residential visitor bicycle spaces (Class C)

Commercial

- 42 commercial car parking spaces
- 2 motorcycle spaces
- 11 secure (Class B) employee bicycle spaces
- 4 commercial visitor bicycle spaces (Class C)

This requirement shall be reflected on the Construction Certificate plans. Any change in above parking numbers shown on the approved DA plans shall be dealt with via a section 4.55 modification to the development. The approved car parking spaces shall be maintained to the satisfaction of Council, at all times.

- 51 The parking dimensions, internal circulation, aisle widths, kerb splay corners, head clearance heights, ramp widths and grades of the car parking areas are to be in conformity with the current relevant Australian Standard AS2890.1, except where amended by other conditions of this consent. Details of such compliance are to be reflected on the Construction Certificate plans.
- 52 Each disabled person's parking space must comply with the current relevant Australian Standard AS2890.6 – Off-street parking for people with disabilities. This requirement shall be reflected on the Construction Certificate plans.
- 53 The provision of suitable barriers, line-marking and painted signage delineating vehicular flow movements within the car parking areas. These details shall be reflected on the Construction Certificate plans.
- 54 Bicycle parking facilities must have adequate weather protection and provide the appropriate level of security as required by the current relevant Australian Standard AS2890.3 - Bicycle Parking Facilities. This requirement shall be reflected on the Construction Certificate plans.
- 55 **Designated Loading/Unloading Facility**
The designated loading/unloading facility must be clearly delineated with appropriate signage and or line marking to ensure the area is kept clear at all times. The designated loading/unloading facility shall be shown on the Construction Certificate plans.
- 56 **Security Roller Shutters for Basement Car Parking Areas**
The installation of any security roller shutter for the basement car parking area shall not restrict access to any designated visitor car parking space. In the event that the approved visitor car parking spaces are located behind any proposed security roller shutter, an intercom system is required to be installed to enable visitor access into the basement car parking area. This requirement is to be reflected on the Construction Certificate plans and any supporting documentation for the endorsement of the Principal Certifying Authority prior to the release of the Construction Certificate.
- 57 A change in driveway paving is required at the entrance threshold within the property boundary to clearly show motorists they are crossing a pedestrian area. Between the property boundary and the kerb, the developer must construct the driveway pavement in accordance with the conditions, technical specifications and levels to be obtained from Council's Manager Works. This requirement shall be reflected on the Construction Certificate plans and any supporting documentation.
- 58 Gradients of ramps and access driveways shall be provided in accordance with the current relevant Australian Standard AS2890.1 - Off Street Car Parking. This requirement shall be reflected on the Construction Certificate plans.
- 59 **Structures Adjacent to Driveway**
Any proposed structures adjacent to the driveway shall comply with the requirements of the current relevant Australian Standard AS2890.1 to provide for adequate pedestrian and vehicle sight distance. This includes, but is not limited to, structures such as signs, letterboxes, retaining walls, dense planting etc. This requirement shall be reflected on the Construction Certificate plans.
- 60 **Landscaping**
The submission of a final Landscape Plan will be required in accordance with the requirements of Wollongong City Council DCP 2009 Chapter E6 and the approved Landscape Plan (ie as part of this consent) for the approval by the Principal Certifying Authority, prior to the release of the Construction Certificate.
- 61 The submission of a final Landscape Plan to the Principal Certifying Authority, prior to the release of the Construction Certificate. The final Landscape Plan shall address the following requirements:
- a the pavement must be amended to comply with the current WCC Public Domain Technical Manual detailing;
 - b a schedule of proposed planting, including botanic name, common name, expected mature height and staking requirements as well as number of plants and pot sizes;
 - c the location of all proposed and existing overhead and underground service lines. The location of such service lines shall be clear of the dripline of existing and proposed trees; and

- d any proposed hard surface under the canopy of existing trees shall be permeable and must be laid such that the finished surface levels match the existing level. Permeable paving is to be installed in accordance with the manufacturer's recommendations.
- The completion of the landscaping works as per the final approved Landscape Plan is required, prior to the issue of Occupation Certificate.

62 **Landscape and Drainage Compatibility**

The submission of certification from a suitably qualified and experienced landscape designer and drainage consultant to the Principal Certifying Authority prior to the release of the Construction Certificate, confirming that the landscape plan and the drainage plan are compatible.

63 **Landscape Maintenance Program**

The implementation of a landscape maintenance program in accordance with the approved Landscape Plan for a minimum period of 12 months to ensure that all landscape work becomes well established by regular maintenance. Details of the program must be submitted with the Landscape Plan to the Principal Certifying Authority prior to release of the Construction Certificate.

64 **Tree Protection and Management of Street Trees**

The existing street trees are to be retained shall not be impacted upon during the excavation or construction phases of the development. This will require the installation and maintenance of appropriate tree protection measures, including (but not necessarily limited to) the following:

- a) Installation of Tree Protection Fencing - Protective fencing shall be 1.8 metre cyclone chainmesh fence, with posts and portable concrete footings.
- b) Ground protection is required to be laid in the area where the existing footpath is located and after removal of the concrete.
- c) Hoarding shall be designed to incorporate ground protection. Pending the design, this will require a passive irrigation system consisting of weeping hose to be included as part of the design. The irrigation design and water schedule will require design by the project arborist.
- d) Stem Protection is required to be installed to protect the stem from all site-related work and is recommended to be located in accordance with the requirements of the AS 4970. This must be installed prior to the commencement of any demolition, excavation or construction works and shall be maintained throughout the entire construction phase of the development, and until landscaping works is required. A bound coil of agricultural pipe (50mm) is required. This measure can be superseded if alternative protection is offered by the hoarding design, although it will require confirmation via the project arborist.
- e) Install a mulch of composted coarse wood chips to 50-75 mm depth (and no deeper) over the area of the TPZ. The mulch is required to extend over all areas of exposed ground. The mulch must be maintained at a minimum depth of 50-75 mm for the duration of the project.

Details and location of protective measures must be indicated on the architectural and engineering plans to be submitted to the Principal Certifying Authority prior to release of the Construction Certificate.

65 **Footpath Paving City Centre**

The developer is responsible for the construction of footpath paving for the entire frontage of the development for the full width of the verge. The type of paving for this development shall be in accordance with the Wollongong City Council Public Domain Technical Manual.

A nominal two percent (2%) minimum one percent (1%), maximum two and a half percent (2.5%) cross fall to be provided from property line to back of kerb. Any changes of level, ramps or stairs and associated tactile markers and handrails are to be contained within the property boundary.

The driveway entry threshold from the property boundary line to the face of kerb is to match the footpath material and be designed to withstand predicted traffic loadings.

The driveway threshold finish within property boundary line is to contrast with driveway entry.

The footpath and driveway entry on the council property must be installed to the satisfaction of WCC Manager of Works.

A Landscape Plan is to be submitted to Council for approval prior to the issue of the Construction Certificate showing proposed paving, footpath design levels, street tree details and location of all services.

66 **Street Trees City Centre**

The Developer must address the street frontage by installing street tree planting on Stewart Street. The number and species for this development four *Waterhousia floribunda* 'Green Avenue', 200 litre container size in accordance with AS 2303:2018 Tree stock for landscape use. Tree pit detailing is to be in accordance with the Wollongong City Council Public Domain Technical Manual. Dial Before You Dig must be consulted prior to any excavation on site. Pot holing must be carried out to determine service location. Location of street tree plantings to be sited to ensure no conflict occurs with street light poles.

Tree pits must be adequately mulched; plants installed and tree guard/staking/tree grille/edging installed to the satisfaction of WCC Manager of Development Engineering.

These requirements shall be reflected on the Construction Certificate plans and any supporting documentation.

67 **Street Tree Establishment Period – City Centre/Commercial Village Centre**

The Developer must comply with the terms of an approved landscape maintenance program for a minimum period of 12 months (commencing from the issue of the Occupation Certificate) to ensure that all landscape works within Council's road reserve or Council owned or controlled land becomes well established by regular maintenance. The program must include the following elements: watering, weeding, litter removal, mulching, fertilising, tree guard and grate maintenance, and pest and disease control.

Details of the proposed program must be submitted with the Landscape Plan to the Principal Certifying Authority for approval prior to release of the Construction Certificate.

68 **Dilapidation Survey**

A dilapidation survey and report shall be submitted to the Principal Certifying Authority. The dilapidation survey and report shall accurately reflect the condition of existing public and private infrastructure in the adjacent street(s) fronting the lots. The report shall outline measures for the protection of existing public and private infrastructure during the works.

Any damage to infrastructure items and relics which is caused by the developer shall be repaired to the satisfaction of the Principal Certifying Authority prior to the issue of a Certificate of Practical Completion for Subdivision works.

69 **Podium Planting**

All podium planting areas to have a waterproofing membrane that can provide a minimum 10 year warranty on product. Protective boarding to be installed to protect membrane from damage. All podium planting areas to be provided with an adequate drainage system connected to stormwater drainage system. Planter box to be backfilled with free draining planter box soil mix. Organic mulch only. Maximum decorative gravel pebble size 10mm diameter.

70 **Engineering Plans and Specifications - Retaining Wall Structures Greater than One (1) Metre**

The submission of engineering plans and supporting documentation of all proposed retaining walls greater than 1m to the Principal Certifying Authority for approval prior to the issue of the Construction Certificate. The retaining walls shall be designed by a suitably qualified and experienced civil and/or structural engineer. The required engineering plans and supporting documentation shall include the following:

- 1 A plan of the wall showing location and proximity to property boundaries;
- 2 An elevation of the wall showing ground levels, maximum height of the wall, materials to be used and details of the footing design and longitudinal steps that may be required along the length of the wall;
- 3 Details of fencing or handrails to be erected on top of the wall;
- 4 Sections of the wall showing wall and footing design, property boundaries, subsoil drainage and backfill material. Sections shall be provided at sufficient intervals to determine the impact of the wall on existing ground levels. The developer shall note

that the retaining wall, subsoil drainage and footing structure must be contained wholly within the subject property;

- 5 The proposed method of subsurface and surface drainage, including water disposal. This is to include subsoil drainage connections to an inter-allotment drainage line or junction pit that discharges to the appropriate receiving system;
- 6 The assumed loading used by the engineer for the wall design.
- 7 Flows from adjoining properties shall be accepted and catered for within the site. Finished ground and top of retaining wall levels on the boundary shall be no higher than the existing upslope adjacent ground levels.

71 **Property Addressing Policy Compliance**

Prior to the issue of any construction certificate, the developer must ensure that any site addressing complies with Council's **Property Addressing Policy** (as amended). Where appropriate, the developer must also lodge a written request to Council's **Infrastructure Systems & Support – Property Addressing** (propertyaddressing@wollongong.nsw.gov.au), for the site addressing prior to the issue of the construction certificate. Please allow up to 3-5 business days for a reply. Enquiries regarding property addressing may be made by calling 4227 8660.

72 **Site Management, Pedestrian and Traffic Management Plan (Where Works are Proposed in a Public Road Reserve)**

The submission of a Site Management, Pedestrian and Traffic Management Plan to the Principal Certifying Authority and Council (in the event that Council is not the Principal Certifying Authority) for approval of both the Principal Certifying Authority and Council is required, prior to the issue of the Construction Certificate. This plan shall address what measures will be implemented for the protection of adjoining properties, pedestrian safety and traffic management and shall be in compliance with the requirements of the latest versions of Australian Standard AS1742 - Traffic Control Devices for Works on Roads and the RMS Traffic Control at Worksites Manual.

This plan is required to maintain public safety, minimise disruption to pedestrian and vehicular traffic within this locality and to protect services, during demolition, excavation and construction phases of the development. This plan shall include the following aspects:

- a proposed ingress and egress points for vehicles to/from the construction site;
- b proposed protection of pedestrians, adjacent to the construction site;
- c proposed pedestrian management whilst vehicles are entering/exiting the construction site;
- d proposed measures to be implemented for the protection of all roads and footpath areas surrounding the construction site from building activities, crossings by heavy equipment, plant and materials delivery and static load from cranes, concrete pumps and the like;
- e proposed method of loading and unloading excavation machines, building materials formwork and the erection of any part of the structure within the site;
- f proposed areas within the site to be used for the storage of excavated material, construction materials and waste containers during the construction period;
- g proposed traffic control measures such as advanced warning signs, barricades, warning lights, after hours contact numbers etc are required to be displayed where works are in progress in any road reserve and shall be in accordance the latest versions of the NSW Roads and Maritime Service's Specification - "Traffic Control at Work Sites Manual" and the Australian Standard AS1742. – "Manual of Uniform Traffic Control Devices" and accompanying field handbooks (SAA HB81);
- h proposed method of support of any excavation, adjacent to adjoining buildings or the road reserve. The proposed method of support is to be certified by an accredited certifier in Civil Engineering; and
- i proposed measures to be implemented, in order to ensure that no soil/excavated material is transported on wheels or tracks of vehicles or plant and deposited on the roadway.

The approved plan shall be implemented, prior to the commencement of any works upon the construction site.

Note: Any proposed works or placement of plant and equipment and/or materials within any road reserve will require the separate approval of Council, prior to the commencement of such works, pursuant to the provisions of the Roads Act 1993.

73 Works in Road Reserve

Prior to the issue of a Construction Certificate, the owner or contractor shall provide evidence to the Council of a Public Risk Insurance Policy with a minimum cover of \$10 million in relation to the occupation of and works within Council's road reserve, for the full duration of the proposed works. The policy is to note Council as an interested party.

74 Supervision of Works within Road Reserve

The works within Council's road reserve shall be supervised by a suitably qualified and experienced Civil Engineer or Civil Engineering Foreman. The supervisor's name, address and contact details (including telephone number), together with a written construction program and anticipated duration of the construction works shall be submitted to Council's Development Engineering Manager prior to the commencement of works within the road reserve.

75 Council Footpath Reserve Works – Driveways and Crossings

All redundant vehicular crossings and laybacks rendered unnecessary by this development must be reconstructed to normal kerb and gutter or existing edge of carriageway treatment to match the existing. The verge from the back of kerb to the boundary must be removed and the area appropriately graded, topsoiled and turfed in a manner that conforms with adjoining road reserve. The area forward of the front boundary must be kept smooth, even and free from any trip hazards. All alterations of public infrastructure where necessary are at the developer's expense.

All new driveway laybacks and driveway crossings must be designed in accordance with Wollongong City Council Standards. Details and locations are to be shown on the Construction Certificate Plans.

76 Development Contributions - City Centre

Pursuant to Section 4.17 of the Environmental Planning and Assessment Act 1979 and the Wollongong City-Wide Development Contributions Plan (2018), a monetary contribution of \$865,400 (subject to indexation) must be paid to Council towards the provision of public amenities and services, prior to the release of any associated Construction Certificate.

This amount has been calculated based on the estimated cost of development and the applicable percentage rate as outlined in Clause 25K of the Environmental Planning and Assessment Regulation 2000.

The contribution amount will be subject to indexation until the date of payment. The formula for indexing the contribution is:

Contribution at time of payment = \$C x (CP2/CP1)

Where:

\$C is the original contribution as set out in the Consent

CP1 is the Consumer Price Index; All Groups CPI; Sydney at the time the consent was issued

CP2 is the Consumer Price Index; All Groups CPI; Sydney at the time of payment

Details of CP1 and CP2 can be found in the Australian Bureau of Statistics website – Catalogue No. 6401.0 - Consumer Price Index, Australia.

The following payment methods are available:

METHOD	HOW	PAYMENT TYPE
Online (Full payment only)	http://www.wollongong.nsw.gov.au/applicationpayments Your Payment Reference: 1068060	<input type="checkbox"/> Credit Card
In Person	Wollongong City Council Administration Building - Customer Service Centre Ground Floor 41 Burelli Street, WOLLONGONG	<input type="checkbox"/> Cash <input type="checkbox"/> Credit Card <input type="checkbox"/> Bank Cheque
PLEASE MAKE BANK CHEQUE PAYABLE TO: Wollongong City Council		

A copy of the Wollongong City-Wide Development Contributions Plan (2018) and accompanying Fact Sheet may be inspected or obtained from the Wollongong City Council Administration Building, 41 Burelli Street, Wollongong during business hours or on Council's web site at www.wollongong.nsw.gov.au

Prior to the Commencement of Works

77 **Heritage - Photographic Recording**

Prior to the commencement of works the existing building (including the DMR mosaic) is to be documented through a photographic recording prepared in accordance with the NSW Heritage Branch Guidelines. A copy of the recording is to be provided to Council's Heritage Staff for written approval prior to the commencement of works. A copy of the final recording is to be provided to Wollongong City Council for inclusion in the local studies collection of the Wollongong City Library.

78 **Temporary Road Closure(s)**

If a road closure is required, an approval must be obtained from City of Wollongong Traffic Committee and Wollongong City Council.

Note: It may take up to eight (8) weeks for approval. An application for approval must include a Traffic Control Plan prepared by a suitably qualified person which is to include the date and times of closure and any other relevant information. The traffic control plan shall satisfy the requirements of the latest versions of Australian Standard AS1742-Traffic Control Devices for Works on Roads and the RMS Traffic Control at Worksites Manual.

79 **Works in Road Reserve - Minor Works**

Approval, under Section 138 of the Roads Act must be obtained from Wollongong City Council's Development Engineering Team prior to any works commencing or any proposed interruption to pedestrian and/or vehicular traffic within the road reserve caused by the construction of this development.

The application form for Works within the Road Reserve – Section 138 Roads Act can be found on Council's website. The form outlines the requirements to be submitted with the application, to give approval to commence works under the roads act. It is advised that all applications are submitted and fees paid, five (5) days prior to the works within the road reserve are intended to commence. The Applicant is responsible for the restoration of all Council assets within the road reserve which are impacted by the works/occupation. Restoration must be in accordance with the following requirements:

- a All restorations are at the cost of the Applicant and must be undertaken in accordance with Council's standard document, "Specification for work within Council's Road reserve".
- b Any existing damage within the immediate work area or caused as a result of the work/occupation, must also be restored with the final works.

80 **Works in Road Reserve – Major Works**

Any occupation, use, disturbance or work on the footpath or road reserve for construction purposes, which is likely to cause an interruption to existing pedestrian and/or vehicular traffic flows requires Council consent under Section 138 of the Roads Act 1993.

The application form for Works within the Road Reserve – Section 138 Roads Act can be found on Council's website. The form outlines the requirements to be submitted with the application, to give approval to commence works under the roads act. It is advised that all applications are submitted and fees paid, five (5) days prior to the works within the road reserve are intended to commence. An application must be submitted must be obtained from Wollongong City Council's Development Engineering Team prior to any works commencing where it is proposed to carry out activities such as, but not limited to, the following:

- a Digging or disruption to footpath/road reserve surface;
- b Loading or unloading machinery/equipment/deliveries;
- c Installation of a fence or hoarding;
- d Stand mobile crane/plant/concrete pump/materials/waste storage containers;
- e Pumping stormwater from the site to Council's stormwater drains;

- f Installation of services, including water, sewer, gas, stormwater, telecommunications and power;
- g Construction of new vehicular crossings or footpaths;
- h Removal of street trees;
- i Carrying out demolition works.

Restoration must be in accordance with the following requirements:

- a All restorations are at the cost of the Applicant and must be undertaken in accordance with Council's standard document, "Specification for work within Council's Road reserve".
- b Any existing damage within the immediate work area or caused as a result of the work/occupation, must also be restored with the final works.

81 **Application for Occupation, Use, Disturbance or Work on Footpath/Roadway**

Any occupation, use, disturbance or work on the footpath or road reserve for construction purposes, which is likely to cause an interruption to existing pedestrian and/or vehicular traffic flows requires Council consent under Section 138 of the Roads Act 1993. An application must be submitted and approved by Council prior to the works commencing where it is proposed to carry out activities such as, but not limited to, the following:

- a Digging or disruption to footpath/road reserve surface;
- b Loading or unloading machinery/equipment/deliveries;
- c Installation of a fence or hoarding;
- d Stand mobile crane/plant/concrete pump/materials/waste storage containers;
- e Pumping stormwater from the site to Council's stormwater drains;
- f Installation of services, including water, sewer, gas, stormwater, telecommunications and power;
- g Construction of new vehicular crossings or footpaths;
- h Removal of street trees;
- i Carrying out demolition works.

82 **Appointment of Principal Certifying Authority**

Prior to commencement of work, the person having the benefit of the Development Consent and a Construction Certificate must:

- a Appoint a Principal Certifying Authority (PCA) and notify Council in writing of the appointment irrespective of whether Council or an accredited private certifier is appointed; and
- b notify Council in writing of their intention to commence work (at least two days notice is required).

The Principal Certifying Authority must determine when inspections and compliance certificates are required.

83 **Sign – Supervisor Contact Details**

Before commencement of any work, a sign must be erected in a prominent, visible position:

- a stating that unauthorised entry to the work site is not permitted;
- b showing the name, address and telephone number of the Principal Certifying Authority for the work; and
- c showing the name and address of the principal contractor in charge of the work site and a telephone number at which that person can be contacted at any time for business purposes.

This sign shall be maintained while the work is being carried out and removed upon the completion of the construction works.

84 **Temporary Toilet/Closet Facilities**

Toilet facilities are to be provided at or in the vicinity of the work site on which work involved in the erection or demolition of a building is being carried out at the rate of one toilet for every 20 persons or part of 20 persons employed at the site.

Each toilet provided must be:

- a a standard flushing toilet; and
- b connected to either:
 - i the Sydney Water Corporation Ltd sewerage system or

- ii an accredited sewage management facility or
- iii an approved chemical closet.

The toilet facilities shall be provided on-site, prior to the commencement of any works.

85 **Structural Engineer's Details**

Structural engineer's details for all structurally designed building works such as reinforced concrete footings, reinforced concrete slabs and structural steelwork must be submitted to the Principal Certifying Authority, prior to the commencement of any works on the site.

86 **Enclosure of the Site**

The site must be enclosed with a suitable security fence to prohibit unauthorised access, to be approved by the Principal Certifying Authority. No building work is to commence until the fence is erected.

87 **Hoardings (within any Public Road Reserve)**

The site must be enclosed with a suitable hoarding (type A or B) or security fence of a type in accordance with the Works and Services Division Design Standard, and must satisfy the requirements of the Occupational Health and Safety Act, the Occupational Health and Safety Regulations and Australian Standard AS 2601. This application must be submitted to Council's Works and Services Division, and a permit obtained, before the erection of any such hoarding or fence.

88 **Consultation with SafeWork NSW**

Prior to any work commencing on the site it is the responsibility of the owner to contact SafeWork NSW in writing in respect to any demolition or use of any crane, hoist, plant or scaffolding.

89 **Support for Neighbouring Buildings**

This consent requires the preservation and protection of neighbouring buildings/structures from any damage and if necessary, requires the underpinning and support of any neighbouring building/structure in an approved manner. The applicant or the contractor carrying out the work must at least seven days in advance of any excavation works below the level of the base of the footings of a building/structure on an adjoining allotment, including a public road or place, give written notice of intention to carry out such works to the property owner of the affected adjoining building/structure and furnish specific written details and supporting plans or other documentation of the proposed work.

The adjoining property owner of land is not liable for any part of the cost of work carried out for the purposes of this condition, whether carried out on the allotment of land being excavated or on the adjoining allotment of land.'

90 **Site Management Program – Sediment and Erosion Control Measures**

A site management program incorporating all sediment and erosion control measures (eg cleaning of sediment traps, fences, basins and maintenance of vegetative cover) is to be initiated prior to the commencement of any demolition, excavation or construction works and maintained throughout the demolition, excavation and construction phases of the development.

91 **Sediment Control Measures**

The developer must ensure that sediment-laden runoff from the site is controlled at all times subsequent to commencement of construction works. Sediment control measures must be maintained at all times and checked for adequacy at the conclusion of each day's work.

92 **Copy of Consent to be in Possession of Person carrying out Tree Removal**

The applicant/developer must ensure that any person carrying out tree removal/vegetation clearance is in possession of this development consent and/or the approved landscape plan, in respect to the trees/vegetation which have/has been given approval to be removed in accordance with this consent.

93 **Certification from Arborist - Adequate Protection of Trees to be Retained**

A qualified arborist is required to be engaged for the supervision of all on-site excavation or land clearing works. The submission of appropriate certification from the appointed arborist to the Principal Certifying Authority is required which confirms that all trees and other vegetation to be retained are protected by fencing and other measures, prior to the commencement of any such excavation or land clearing works.

94 **Supervising Arborist – Tree Inspection and Installation of Tree Protection Measures**
Prior to the commencement of any demolition, excavation or construction works, the supervising arborist must certify in writing that tree protection measures have been inspected and installed in accordance with the arborist's recommendations and relevant conditions of this consent.

95 **Tree Protection**
Prior to commencement of any work on the site, including any demolition, all trees not approved for removal as part of this consent that may be subjected to impacts of this approved development must be protected in accordance with Section 4 of the Australian Standard Protection of Trees on Development Sites (AS 4970-2009).

Tree protection zones must be established prior to the commencement of any work associated with this approved development.

No excavation, construction activity, grade changes, storage of materials stockpiling, siting of works sheds, preparation of mixes or cleaning of tools is permitted within Tree Protection Zones.

During Demolition, Excavation or Construction

96 **Restricted Hours of Construction Work**
The developer must not carry out any work, other than emergency procedures, to control dust or sediment laden runoff outside the normal working hours, namely, 7.00 am to 5.00 pm, Monday to Saturday, without the prior written consent of the Principal Certifying Authority and Council. No work is permitted on public holidays or Sundays.

Any request to vary these hours shall be submitted to the Council in writing detailing:

- i the variation in hours required (length of duration);
- ii the reason for that variation (scope of works);
- iii the type of work and machinery to be used;
- iv method of neighbour notification;
- v supervisor contact number;
- vi any proposed measures required to mitigate the impacts of the works.

Note: The developer is advised that other legislation may control the activities for which Council has granted consent, including but not limited to, the Protection of the Environment Operations Act 1997.

97 **Minimise Nuisance**
The developer must carry out work at all times in a manner which will not cause a nuisance, by the generation of unreasonable noise, dust or other activity, to the owners and/or occupiers of adjoining and adjacent land.

98 The lighting of the premises must be directed so as not to cause nuisance to the owners or occupiers of adjoining premises or to motorists on adjoining or nearby roads.

99 **Notification Prior to Use of Rock Hammers**
At least two (2) days written notice shall be given to any residence or business within 50m of the site prior to the commencement of any work involving hydraulic rock hammers.

100 **Acid Sulfate Soils**
The Wollongong Local Environmental Plan 2009 Acid Sulfate Soils Map has identified that this property may be affected by classes 3, 4 or 5 Acid Sulfate Soils. Acid Sulfate Soils contain iron sulfides which, when exposed to air due to drainage or disturbance, may produce sulfuric acid and release toxic quantities of iron, aluminium and heavy metals. The Acid Sulfate Soils Map is an indication only and you are advised that you may encounter acid sulfate soils during the excavation for the proposed development.

Any spoil material extracted or excavated from the foundations must be neutralised with commercial lime (calcium bicarbonate) by the addition of 10 kilograms of lime per 1 cubic metre of spoil material before it is disposed of or re-used on-site. Lime is to be added by evenly distributing over all exposed surface areas, drilled piers and footing trenches on the site, prior to pouring concrete.

Council suggests the applicant refer to the Acid Sulfate Soils Assessment Guidelines contained in the Acid Sulfate Soils Manual, prepared by NSW Acid Sulfate Management Advisory Committee, August 1998 for further information.

101 **Heritage – Unexpected Discovery of Historical Relics**

Relics are protected in NSW under the Heritage Act 1977. Relics cannot be disturbed except with a permit or exception/exemption notification. Should unanticipated relics not skeletal in nature be discovered during the course of the project, work in the vicinity must cease and an archaeologist contacted to make a preliminary assessment of the find. The Heritage Council will require notification if the find is assessed as a relic.

102 **Heritage - Unanticipated finds of Aboriginal Objects**

All Aboriginal objects and Places are protected under the NSW National Parks and Wildlife Act 1974. It is an offence to knowingly disturb an Aboriginal site without a consent permit issued by the Office of Environment and Heritage (OEH). Should any Aboriginal objects be encountered during works associated with this proposal, works must cease in the vicinity and the find should not be moved until assessed by a qualified archaeologist. If the find is determined to be an Aboriginal object the archaeologist will provide further recommendations. These may include notifying the OEH and Aboriginal stakeholders.

103 **Heritage - Discovery of Aboriginal Ancestral Remains**

Aboriginal ancestral remains may be found in a variety of landscapes in NSW, including middens and sandy or soft sedimentary soils. If any suspected human remains are discovered during any activity you must:

1. Immediately cease all work at that location and not further move or disturb the remains;
2. Notify the NSW Police and OEH's Environmental Line on 131 555 as soon as practicable and provide details of the remains and their location;
3. Not recommence work at that location unless authorised in writing by OEH.

104 **Provision of Waste Receptacle**

The developer must provide an adequate receptacle to store all waste generated by the development, pending disposal. The receptacle must be regularly emptied and waste must not be allowed to lie or accumulate on the property other than in the receptacle. Consideration should be given to the source separation of recyclable and re-usable materials.

105 The building site must be kept free of rubbish at all times. All refuse capable of being wind blown must be kept in a suitable waste container.

106 Building operations such as brick cutting, the washing of tools or paint brushes, or other equipment and the mixing of mortar must not be carried out on the roadway or public footpath or any other locations which could lead to the discharge of materials into the stormwater drainage system or natural watercourse.

107 **Dust Suppression Measures**

Activities occurring during the construction phase of the development must be carried out in a manner that will minimise the generation of dust. All sealed surfaces intended to carry vehicular traffic must be managed with the aim of preventing windblown dust emissions.

108 **No Adverse Run-off Impacts on Adjoining Properties**

The design of the development shall ensure there are no adverse effects to adjoining properties or upon the land as a result of construction. Attention must be paid to ensure adequate protection for buildings against the ingress of surface run-off.

109 **Re-direction or Treatment of Stormwater Run-off**

Allowance must be made for surface run-off from adjoining properties. Any redirection or treatment of that run-off must not adversely affect any other property.

110 **Piping of Stormwater to Existing**

All engineering works associated with the development are to be carried out under the supervision of a practicing engineer.

111 **Pipe Connections**

All pipe connections to existing stormwater drainage systems within the road reserve shall be constructed flush with the pit wall in accordance with good engineering practice. The developer shall ensure that the condition of the existing stormwater drainage system is not compromised

and that the service life of the existing stormwater drainage system is not reduced as a result of the connection.

112 Flood Compatible Materials – Electrical

All power service (metering) equipment, power outlets, switches etc. shall be located above the 100 year flood plus 0.5 metres freeboard'. All electrical wiring installed below this level should be suitable for continuous underwater immersion and should contain no fibrous components. Earth leakage circuit breakers shall also be installed. Any equipment installed below or partially below the 100 year flood plus 0.5 metres freeboard should be capable of disconnection by a single plug and socket assembly.

113 Protection of Excavations

If an excavation associated with the erection or demolition of a building extends below the level of the base of the footings of a building on adjoining allotment of land, the person causing the excavation to be made:

- a must preserve and protect the adjoining building from damage; and
- b if necessary, must underpin and support the building in an approved manner; and
- c must, at least seven (7) days before excavation below the level of the base of the footings of a building on an adjoining allotment of land, give notice of intention to do so to the owner of the adjoining allotment of land and furnish particulars of the excavation.

114 All excavations and backfilling associated with the erection of a building must be executed safely and in accordance with appropriate professional standards.

115 All excavations and backfilling associated with the erection of a building must be properly guarded and protected to prevent them from being dangerous to life or property.

116 Excess Excavated Material - Disposal

If the excess excavated material appears to be contaminated, unexpected finding protocol must be implemented and material shall be classified according to the NSW Environment Protection Authority's Waste Classification Guidelines – Part 1: Classifying Waste (2014) prior to being transported from the site and shall be disposed of only at a location that may lawfully receive that waste.

117 Importation of Soils to Site

Prior to importing any soils to site for the purpose of back-filling also requires validation testing following the EPA (1995) Sampling Design Guidelines to confirm suitability for the proposed land use.

118 Discharge of Accumulated Water

Any water accumulating in excavations on-site or in the settlement ponds shall not be discharged to Council's stormwater system, unless all the following criteria are met:

- 1 The concentration of suspended solids in the water to be discharged does not exceed 50 mg/L; and
- 2 The pH of the water to be discharged is between 6.5 and 8.5; and
- 3 The water to be discharged contains no visible oil or grease; and
- 4 If alum has been used to reduce suspended solids, the concentration of aluminium in the water to be discharged does not exceed 0.055 mg/L; and
- 5 The water to be discharged does not contain any substances known to be toxic to aquatic life; and
- 6 The flow rate of discharged water does not exceed 55 litres per second in dry weather conditions, or is less than the capacity of the receiving stormwater drain; and
- 7 A copy from a NATA accredited laboratory of sample test results for suspended solids and pH (and aluminium if applicable) confirming the water to be discharged meets criteria 1 and 2 (and criteria 4 if applicable) as stated above is submitted to Council's Environment Planning Team (phone 4227 7111; fax 4227 7277; email records@wollongong.nsw.gov.au, attention Environment Planning Team Manager); and
- 8 Written permission is obtained from Council's Environment Planning Team prior to any discharge.

Alternatively, such waters are to be removed by tanker for disposal at a NSW Environment Protection Authority licensed waste facility.

119 **Survey Report for Floor Levels**

A Survey Report must be submitted to the Principal Certifying Authority verifying that the ground floor and driveway crest accords with the plans and levels as approved under this consent. The survey shall be undertaken after the formwork has been completed and prior to the pouring of concrete for the respective component of the building. All levels shall relate to Australian Height Datum.'

120 **Installation of WSUD treatment train**

The developer shall install the WSUD infrastructure (water quality improvement devices) as identified in the Water Sensitive Urban Design (WSUD) report prepared by Northrop Consulting Engineers dated 29 April 2019 and associated drawings. The WSUD design shall meet the www.wsud.org "Sydney Metropolitan Catchment Management Authority Typical Drawings for WSUD" and shall be implemented to achieve the stormwater quality objectives of Chapter E15 of Wollongong DCP 2009.

121 **Site Validation Report**

A Validation Report (Stage IV) stating that site suitable for proposed used. The report shall verify that:

- a) the site is not affected by soil and/or groundwater contamination, above the NSW EPA threshold limit criteria; and
- b) the site is suitable for the proposed development.

The validation report must be prepared by contaminated land consultant who has one of the certification scheme as stated below:

- the Site Contamination Practitioners Australia (SCPA) scheme;
- the Environment Institute of Australia and New Zealand's (EIANZ) Contaminated Land Assessment Specialist Certification Environmental Practitioner (CLA Specialist CEnvP) scheme; and
- the Soil Science Australia (SSA) Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM) certification.

The contaminated land consultant should send document (Validation Report) directly to Council. No third party submissions will be accepted.

122 **Acoustic Glazing**

All of the recommendations contained within Section 8.0 Recommendations of the Acoustic Report prepared by Northrop Consulting Engineers dated 14 December 2018 (reference SY182597-AUR01 Revision B) shall be implemented. The following LAeq levels are not exceeded:

- in any bedroom in the building : 35dB(A) at any time between 10pm and 7am
- anywhere else in the building (other than a garage, kitchen, bathroom or hallway): 40dB(A) at any time between 10pm and 7am.
- All mechanical plant must be satisfactorily attenuated to levels complying with noise emission criteria through appropriate location and (if necessary) standard acoustic treatments such as noise screens, enclosures, in-duct treatments (silencers/lined ducting) or similar as recommended by Section 8 of the Acoustic Report.
- The recommendations in relation to the use of the communal open spaces provided in Section 8.8 of the report shall be implemented by the building management and shall be reflected in any future strata by-laws.

123 **External Plant and Equipment**

All external plant such as air conditioners, compressors/pumps, exhaust systems and other equipment shall be install as per the acoustic assessments recommendations so that the noise ($L_{Aeq(15min)}$) emanating from the operation of external plant and equipment does not exceed 5dB(A) above the background noise level ($L_{A90(15min)}$) of the area at any boundary of the land.

124 **Piping of Stormwater to Existing Stormwater Drainage System**

Stormwater for the land must be piped to Council's existing underground stormwater drainage system.

- 125 **Provision of Taps/Irrigation System to Landscaped Areas**
The provision of common taps and/or an irrigation system is required to guarantee that all landscape works are adequately watered. The location of common taps and/or irrigation system must be implemented in accordance with the approved Landscape Plan.
- 126 **Podium Planting**
All podium planting areas are to have a waterproofing membrane that can provide a minimum 10 year warranty on product. Protective boarding is to be installed to protect membrane from damage.
- All podium planting areas to be provided with an adequate drainage system connected to the stormwater drainage system. The planter box is to be backfilled with free draining planter box soil mix.
- If selected mulch is decorative pebbles/gravel, the maximum gravel pebble size is 10mm diameter.
- 127 **BASIX**
All the commitments listed in each relevant BASIX Certificate for the development must be fulfilled in accordance with Clause 97A(2) of the Environmental Planning & Assessment Regulation 2000.
- A relevant BASIX Certificate means:
- a A BASIX Certificate that was applicable to the development when this development consent was granted (or, if the development consent is modified under section 4.55 of the Environmental Planning & Assessment Act 1979, a BASIX Certificate that is applicable to the development when this development consent is modified); or
 - b if a replacement BASIX Certificate accompanies any subsequent application for a construction certificate, the replacement BASIX Certificate; and
- BASIX Certificate has the meaning given to that term in the Environmental Planning & Assessment Regulation 2000."

Prior to the Issue of the Occupation Certificate

- 128 **Drainage**
The developer must obtain a certificate of Hydraulic Compliance (using Council's M19 form) from a suitably qualified civil engineer, to confirm that all stormwater drainage and on-site detention works have been constructed in accordance with the approved plans. In addition, full works-as-executed plans, prepared and signed by a Registered Surveyor must be submitted. These plans and certification must satisfy all the stormwater requirements stated in Chapter E14 of the Wollongong DCP2009. This information must be submitted to the Principal Certifying Authority prior to the issue of the final Occupation Certificate.
- 129 **CCTV of Works in Existing Road**
All stormwater pipes within road reserves intended to be dedicated to Council must be inspected by CCTV. A copy of the CCTV inspection must be submitted to Councils Development Engineering Manager for assessment prior to the issue of the Occupation Certificate. Below standard work must either be replaced or repaired to Councils satisfaction prior to the issuing of the Occupation Certificate.
- 130 **Completion Report for Excavation Adjacent to a Public Road**
A report be provided to Wollongong City Council and Principal Certifying Authority, prepared by a qualified Civil Engineer, NPER 3 accreditation with the Institute of Engineers Australia and experienced in structural design that:
- Certifies that all proposed retaining structures within the zone of influence of any Council assets including the road pavement, stormwater pipes and pits was constructed in accordance with the approved plans prepared in accordance to RMS Technical direction GTD 2012/001.
 - Certifies that the monitoring of the site was carried out in accordance with the requirements of RMS Technical direction GTD 2012/001.
 - Provides a post construction dilapidation survey.

- 131 **Works-As-Executed Plans - Works within Council Land**
The submission of a Works-As-Executed (WAE) plan for approved works in Council land and or road reserve must be submitted to and approved by Council's Development Engineering Manager, prior to the release of the Occupation Certificate. The Works-As-Executed plans shall be certified by a registered surveyor indicating that the survey is a true and accurate record of the works that have been constructed. The Works-As-Executed dimensions and levels must also be shown in red on a copy of the approved Construction Certificate plans. The Works-As-Executed (WAE) plans must include:
- a Final locations and levels for all works associated with the development within Council land.
 - b The plan(s) must include, but not be limited to, the requirements stated in Chapter E14 of the Wollongong DCP 2009.
- 132 **CCTV of Works in Existing Road**
All stormwater pipes within road reserves intended to be dedicated to Council must be inspected by CCTV. A copy of the CCTV inspection must be submitted to Councils Development Engineering Manager for assessment prior to the issue of the Occupation Certificate. Below standard work must either be replaced or repaired to Councils satisfaction prior to the issuing of the Occupation Certificate.
- 133 **Completion of Engineering Works**
The completion of all engineering works within Council's road reserve or other Council owned or controlled land in accordance with the conditions of this consent and any necessary work to make the construction effective must be to the satisfaction of Council's Manager Development Engineering. The total cost of all engineering works shall be fully borne by the applicant/developer and any damage to Council's assets shall be restored in a satisfactory manner, prior to the issue of the Occupation Certificate.
- 134 **Retaining Wall Certification**
The submission of a certificate from a suitably qualified and experienced structural engineer or civil engineer to the Principal Certifying Authority is required, prior to the issue of the Occupation Certificate or commencement of the use. This certification is required to verify the structural adequacy of the retaining walls and that the retaining walls have been constructed in accordance with plans approved by the Principal Certifying Authority.
- 135 **Structural Soundness Certification**
The submission of a report from a suitably qualified and experienced structural engineer to the Principal Certifying Authority is required, prior to the issue of the final Occupation Certificate and commencement of use. This report is required to verify that the building can withstand the forces of floodwater, debris and buoyancy up to and including the Probable Maximum Flood (PMF) level plus 0.5 metres freeboard.
- 136 **Drainage WAE**
The developer shall obtain written verification from a suitably qualified civil engineer, stating that all stormwater drainage and related work has been constructed in accordance with the approved Construction Certificate plans. In addition, full works-as-executed plans, prepared and signed by a Registered Surveyor shall be submitted. These plans shall include levels and location for all drainage structures and works, buildings (including floor levels), and finished ground and pavement surface levels. This information shall be submitted to the Principal Certifying Authority prior to the issue of the final occupation certificate.
- 137 **Water Sensitive Urban Design Compliance Certificate**
The developer shall submit an engineering certificate certifying that the that the recommended water sensitive urban design filtration system/treatment devices were installed as per the recommendations of the Northrop Water Sensitive Urban Design (WSUD) Report dated 29 April 2019 to ensure compliance with Wollongong DCP 2009 Chapter E15 Water quality objectives.
- 138 **Arborist Verification – Street Tree Installation**
Prior to the issue of Occupation Certificate, the developer must supply certification in the form of a report, including photographic evidence, from an AQF Level 5 Arborist to the Principle Certifying Authority and Wollongong City Council to verify:
- The tree stock complies with AS 2203:2018 Tree Stock for Landscape Use

- The tree pits have been constructed and the trees installed in accordance with the requirements of the Wollongong City Council City Centre Public Domain Technical Manual and arboricultural best practice.

139 **Completion of Landscape Works**

The completion of the landscaping works as per the final approved Landscape Plan is required prior to the issue of Occupation Certificate.

140 **Completion of Landscape Works on Council Owned or Controlled Land**

The Developer must complete all landscape works required within Council's road reserve, or other Council owned or controlled land, in accordance with the conditions of this consent. The total cost of all such landscape works shall be fully borne by the Developer and any damage to Council's assets shall be the subject of restoration works sufficient to restore the asset to its previous state and configuration previous to the commencement of works. Evidence that this requirement has been met must be satisfied prior to the issue of the Occupation Certificate.

141 **BASIX**

A final occupation certificate must not be issued unless accompanied by the BASIX Certificate applicable to the development. The Principal Certifying Authority must not issue the final occupation certificate unless satisfied that selected commitments have been complied with as specified in the relevant BASIX Certificate. NOTE: Clause 154B of the Environmental Planning and Assessment Regulation 2000 provides for independent verification of compliance in relation to certain BASIX commitments.

142 **Mailboxes and Street Numbering**

The developer must install mailboxes in accordance with Australia Post Guidelines and Clause 4.5.2 of Chapter D13 of Wollongong Development Control Plan 2009. The mailboxes must be provided in one accessible location adjacent to the main entrance to the development, integrated into a wall if possible and constructed of materials consistent with the appearance of the building. Letterboxes shall be secure and large enough to accommodate articles such as newspapers, parcels and the like. Prominent house numbers are to be displayed, with a minimum number size of 150 mm in height for each number and letter in the alphabet.

Prominent house numbers are to be displayed, with a minimum number size of 150 mm in height for each number and letter in the alphabet. The developer must install minimum two (2 No.) reflective paint house number on face of kerb along street frontage of the property to assist emergency services/deliveries/visitors.

Operational Phases of the Development/Use of the Site

143 **Waste Collection**

All waste collection is to be undertaken from within the site. On-street collection of waste is not permitted at any time.

144 **Storage of Waste Bins and Waste**

All waste and bins associated with the development shall be stored within the waste storage rooms at all times. No waste shall be allowed to accumulate or shall be stored on or adjacent to the street frontage of the site at any time.

145 **Loading/Unloading Operations/Activities and Maintenance Vehicles**

Vehicles associated with deliveries to the building and any maintenance shall park within the designated loading zones or on-site car parking areas.

146 **Storage of Goods and Materials**

All goods, materials and equipment shall be stored within the building and no part of the land shall be used for purposes of storage.

147 **Graffiti Removal**

Any graffiti shall be removed immediately from the exterior of the building or any associated structures including any fences, site services and retaining/planter bed walls.

148 **Strata Plan Requirements**

Should a Strata Plan be prepared for this development in the future, the following matters must be addressed:

- a Garbage and recycling rooms must be contained within the common area;

- b Motorbike and bicycle storage areas and visitor car parking must be contained within the common area; and
- c Appropriate allocation of carparking and storage areas to the dwellings.

149 **Clothes Drying on Balconies/Terrace Areas Prohibited**

The use of the balconies/terrace areas for the external drying of clothes is strictly prohibited.

150 **Residential Storage**

Each residential unit shall be allocated storage within the residential storage area provided within the building. The residential storage area shall be appropriately secured and fitted with CCTV surveillance. This requirement shall be reflected on the Construction Certificate plans.

151 **Communal Open Space Usage**

The recommendations in relation to the use of the communal open spaces provided in Section 8.8 of the Acoustic report prepared by Northrop Consulting Engineers dated 14 December 2018 shall be implemented by the building management and shall be reflected in any future strata by-laws.

152 **Street Tree Establishment Period – City Centre/Commercial Village Centre**

The Developer must comply with the terms of an approved landscape maintenance program for a minimum period of 12 months to ensure that all landscape works within Council's road reserve or Council owned or controlled land becomes well established by regular maintenance. The Street Tree Establishment Period shall commence from the issue of the Occupation Certificate.

The program must include the following elements: watering, weeding, litter removal, mulching, fertilising, tree guard and grate maintenance, and pest and disease control.

Details of the proposed program must be submitted with the Landscape Plan to the Principal Certifying Authority for approval prior to release of the Construction Certificate.