

Consistency with Pittwater Development Control Plan 21

Pittwater 21 DCP	Compliance	Comment
Part B – General Controls		
B2 Density Controls		
B2.8 Dwelling Density – Warriewood Valley	Compliance	Comment
<p>Outcomes</p> <ul style="list-style-type: none"> The density and scale of development reflects the infrastructure and environmental capability of the area. The development does not adversely impact on adjoining development. A range of lot sizes and dwelling types to cater for a mix of residential development styles. <p>Controls</p> <p>Buffer Area 3 – 142 dwellings.</p>	No (refer to comment)	<p>The proposed development complies with the outcomes as specified in Dwelling Density – Warriewood Valley. The proposal provides for a density and scale of development that is considerate and responsive to the environmental constraints of the site and surrounds, particularly Warriewood Wetland.</p> <p>The proposed development encourages and provides for a range of dwelling types in the form of 3 and 5 storey residential flat buildings, comprising a mix 1, 2 and 3 bedroom units.</p> <p>The proposed density is 600 dwellings across the site, with 313 to be provided in the Stage 1 development. It is acknowledged that this figure is higher than PDCP & LEP density figure of 142 dwellings for the site. However it is demonstrated in this report, that the site is suitable and capable of this dwelling density, without significant adverse impacts on the surrounding environs and infrastructure network.</p>
B3 Hazard Controls		
B3.1 Landslip Hazard	Compliance	Comment
<p>Outcomes</p> <ul style="list-style-type: none"> Protection of people Protection of the natural environment Protection of private and public infrastructure and assets. <p>Controls</p> <ul style="list-style-type: none"> All development on land to which this control applies must comply with the requirements of the Geotechnical Risk Management Policy for Pittwater. Development must be designed and constructed in to ensure that every reasonable and practical means available is used to remove risk to an acceptable level as defined by the Geotechnical Risk Management Policy for Pittwater for the life of the development. The development must not adversely affected by geotechnical processes nor must it increase the level of risk for any people, assets and infrastructure in the vicinity due to geotechnical hazards. 	Yes	<p>A Geotechnical Report and Geotechnical Risk Management for Pittwater checklist has been prepared by Jeffery and Katauskas Pty Ltd is provided at Appendix W.</p> <p>The report concludes that the risk analysis has shown that the site and existing and proposed development can achieve the “Acceptable Risk Management” criteria in the Pittwater Risk Management Policy provided that the recommendations given in the report are adopted. These recommendations form an integral part of the Landslide Risk Management Process. This is discussed further in the main body of the Environmental Assessment.</p>
B3.2 Bushfire Hazard		
<p>Outcomes</p> <ul style="list-style-type: none"> Protection of people. Protection of the natural environment. Protection of public infrastructure and assets <p>Controls</p> <ul style="list-style-type: none"> All development is to be designed and constructed so as to manage risk due to the effects of bushfire throughout the life of the development. 	Yes	<p>A Bushfire Risk Assessment has been prepared by FlameZone bushfire consulting and is provided at Appendix C.</p>

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<ul style="list-style-type: none"> Development land to which this control applies must comply with the requirements of Planning for Bushfire Protection (2006). 		
B3.5 Acid Sulphate Soils		
<p>Outcomes</p> <ul style="list-style-type: none"> Protection of people. Protection of the natural environment. Protection of public infrastructure and assets <p>Controls</p> <ul style="list-style-type: none"> Works involve the disturbance of soil or the change of groundwater levels, as described in the following table shall not be carried out on land of the class specified for those works, unless it has been determined whether acid sulphate soils are present and whether the proposed works are likely to disturb these soils. 	Yes	<p>A Environmental Site Assessment focussing on contamination has been undertaken by Environmental Site Audits of Australia and is provided at Appendix R.</p> <p>The results of the Environmental Site Assessment, soil sampling and analysis indicate that there is no acid sulphate soil on the site.</p>
B3.5 Contaminated Land & Potentially Contaminated Land		
<p>Outcomes</p> <ul style="list-style-type: none"> Protection of people. Protection of the natural environment. Protection of public infrastructure and assets <p>Controls</p> <ul style="list-style-type: none"> Council shall not consent to the carrying out of any development on land unless it has considered SEPP No 55 Remediation of Land. In particular, Council shall consider: Whether the land is contaminated; and If the land is contaminated, whether the land is suitable in its contaminated state (or will be suitable after remediation) for the purpose for which the development is proposed to be carried out, and If the land requires remediation, whether the land will be remediated before the land is used for that purpose. 	Yes	<p>A Environmental Site Assessment focussing on contamination has been undertaken by Environmental Site Audits of Australia and is provided at Appendix R.</p> <p>The results of the Environmental Site Assessment, soil sampling and analysis indicate that there is no acid sulphate soil on the site or environmental contamination is present at levels above the nominated guidelines.</p>
B3.22 Flood Hazard – Flood Category 3 – All Development		
<p>Outcomes</p> <ul style="list-style-type: none"> Protection of people. Protection of the natural environment. Protection of public infrastructure and assets <p>Controls – general to all development</p> <ul style="list-style-type: none"> There is no additional adverse floor impact on surrounding properties or flooding processes for any event up to the Probably Maximum Flood event and; There is no net decrease floodplain volume of a floodway or Flood Storage Area within the property for any flood event up to the 1% AEP flood event; and; All foundation structures within the area of the property affected by the Flood Planning Level is equal to the is equal or greater than 500mm above the existing ground level, is to incorporate 	Yes	<p>A Stormwater and Environmental management plan has been prepared by Brown Consulting and is provided at Appendix J.</p>

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<p>a suspended floor system on open pier/pile footings with openings in perimeter walls to allow for the flow of surface water and flood storage up to the level of 1% AEP flood and;</p> <ul style="list-style-type: none"> • All structural element below the Flood Planning Level shall be constructed from flood compatible materials and • All structures must be designed and constructed to ensure structural integrity for immersion and impact on velocity and debris up to the level of 1% AEP flood. If the structure is to be relied upon for 'shelter in place' evacuation then structural integrity must be ensured up to the level of the Probably Maximum Flood and • All electrical equipment, wiring, fuel lines or any other service pipes and connections must be waterproofed to the Flood Planning level and • The storage of toxic or potentially polluting goods, materials or other products which may be hazardous or pollute floodwaters, will not be permitted below the flood planning level. • To ensure the recommended flood evacuation strategy of 'shelter-in-place' it will need to be demonstrated that there is pedestrian access via a low flood hazard area to be a 'safe haven' above the Flood Planning Level or 300mm below the level of the Probable Maximum Flood (whichever is higher). 		
B4 Controls relating to the Natural Environment		
B4.14 Development in the Vicinity of Wetlands		
<p>Outcomes</p> <ul style="list-style-type: none"> • The impacts from development on wetlands and their catchments are reduced. • The physical, chemical and biological processes of watery habitats in Pittwater are improved, maintained or restored. • The social and cultural values of wetland areas are conserved and enhanced. • Biodiversity, ecological processes and other wetland values are conserved. • The impact of development in the wetlands catchment is reduced. <p>Controls</p> <ul style="list-style-type: none"> • Development in a wetlands catchment shall not adversely impact on those wetlands. • Development shall dispose of stormwater, wastewater and other drainage in a manner that will not adversely impact on wetlands. • Development must minimise changes to the following: <ul style="list-style-type: none"> • Local surface runoff, groundwater flows and water flow regimes to the wetland; • Temperature, salinity, chemical makeup and sediment loads; • Stormwater is to mimic natural conditions with a dispersed pattern of flow • Development shall provide adequate buffering to wetlands • Existing wildlife corridors are to be maintained 	Yes	<p>The site is situated adjacent to Warriewood Wetlands. A stormwater and environmental management plan has been prepared by Brown Consulting and is provided at Appendix J. The landscaping plan has been designed in accordance with the Warriewood Valley Landscape Design Guidelines (2004) and the DCP 21 controls as stipulated.</p> <p>Furthermore, the proposed revegetation and creek restoration works associated with the 'Fern Creek; Riparian corridor, Wetland buffer zone and associated 'Asset Protection Zones' are in accordance with the approved plans and Condition number 1 of Development Application 0526/08.</p>

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<p>and functional habitat links provided wherever possible.</p> <ul style="list-style-type: none"> Development shall ensure any landscaping works are made up of a minimum 80% locally native plant species (i.e s pecies in Native Plants for your garden on Pittwater website). 		
B4.15 Saltmarsh Endangered Ecological Community and Other Foreshore Vegetation		
<p>Outcomes</p> <ul style="list-style-type: none"> To conserve and enhance saltmarsh and foreshore vegetation. <p>Controls</p> <ul style="list-style-type: none"> Development shall retain and enhance saltmarsh and foreshore vegetation. Development shall restore and/or regenerate saltmarsh and foreshore vegetation. Stormwater, wastewater and other drainage shall not be disposed of into saltmarsh. Development shall have an adequate buffer to saltmarsh and foreshore vegetation. Where mangroves have been shown as invading saltmarsh, mudflats and / or foreshore vegetation, Council may consider mangrove removal (with permission from NSW Fisheries) for the purposes of restoring or regenerating these habitats. Any works or activities proposed w ithin the foreshore building line must be consistent with maximising the long term survival of Saltmarsh. 	Yes	<p>An Arboricultural Assessment and Vegetation Management Report prepared by Tree and Landscape Consultants is provided at Appendix X.</p> <p>The report makes a number of recommendations in relation to re-vegetation and weed eradication in the core riparian zone in and around Fern Creek.</p>
B5 Water Management		
B.5.2 Wastewater Management		
<p>Outcomes</p> <ul style="list-style-type: none"> Effective management of sewage and wastewater systems and disposal to central reticulation system. Effective management of on-site sewage and effluent systems to ensure environmental standards. <p>Controls</p> <ul style="list-style-type: none"> All premises must be connected to the centralised sewerage waste disposal system operated by Sydney Water where available. 	Yes	<p>The management of sewage and wastewater systems are discussed in the Stormwater and Environmental Management Plan provided at Appendix J.</p> <p>The development will provide rainwater collection and re-use for each dwelling in accordance with the NSW governments BASIX requirements, in addition to utilising stormwater quality treatment such as bio-retention basins and pollutant traps. The development will also provide on-site detention to maintain existing flow regimes and provide additional flood storage to ensure no loss in the floodplain volume for Fern Creek.</p>
B5.12 Stormwater Discharge into Waterways & Coastal Areas		
<p>Outcomes</p> <ul style="list-style-type: none"> Safe and convenient access. Adverse visual impact of driveways is reduced. Pedestrian safety. An effective road drainage system. <p>Controls</p> <ul style="list-style-type: none"> Access driveways include the driveway 	Yes	<p>The stormwater management plan for the site has been prepared by Brown Consultants in accordance with Pittwater Councils Water Management Specification and is provided at Appendix J. The stormwater components used in the development will meet the principle objectives being:</p> <ul style="list-style-type: none"> Ensuring that peak flows are maintained at a rate not exceeding that of existing conditions, while maintaining a similar design storm hydrograph. Improving water quality of stormwater discharging from the

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<p>pavements, gutter crossings, supporting retaining walls, suspended slabs and related structures located on the public road reserve between the road edge and property boundary as illustrated in Appendix 10 - Driveway Profiles.</p> <ul style="list-style-type: none"> An access driveway to the standards as set out below must be provided for: any new development any alterations and additions where the sum of the additional Gross Floor Area (GFA) of the dwelling exceeds 30 m²; and where additional car parking spaces and/or garage are proposed. Where there is an existing driveway and the applicant proposes to retain the existing driveway, the applicant will be required to demonstrate compliance with this control. 		<p>site are no greater than that of existing conditions.</p> <ul style="list-style-type: none"> Ensuring that the average annual flows from the site are no greater than that of existing conditions. Promoting WSUD in the design. <p>Extensive landscaping to the proposed drainage lines and public domain will complement the stormwater drainage design. The use of indigenous vegetation will assist in enhancing the biodiversity of habitat along the drainage reserves.</p>
B8 Site Works Management		
B8.1 Construction and Demolition – Excavation and Landfill		
<p>Outcomes</p> <ul style="list-style-type: none"> Site disturbance is minimised. Excavation, landfill and construction not to have an adverse impact. Excavation and landfill operations not to cause damage on the development or adjoining property. <p>Controls</p> <ul style="list-style-type: none"> Excavated and landfill areas must be constructed to have no adverse impact on any structures, bushland or significant trees to be retained on the site. Excavation and landfill must be constructed to have no adverse impact on any adjoining public or private lands due to settlement or structural instability. Excavation and landfill areas must be constructed so as not to redirect or concentrate stormwater or surface water runoff onto adjoining properties so as to cause a nuisance. All landfill imported to the site must be clean fill and not contain any materials that are contaminated and must comply with the relevant legislation. All excess material excavated from land identified as subject to possible landslip hazard, coastline (bluff) hazard or other geotechnical constraints must be removed from the site. 	Yes	<p>A Construction Management Plan will be prepared prior to the commencement of any works on the site as stipulated in the statement of commitments in Section 8.</p>
B8.2 Construction and Demolition – Erosion and Sediment Management/ Waste Minimisation/Site Fencing and Security		
<p>Outcomes</p> <ul style="list-style-type: none"> Waterways, coastal areas, watercourses, drainage systems and the public domain are protected from the transportation of sedimentation from development sites. Reduction of waste throughout all phases of development. 	Yes	<p>A demolition and construction waste management plan is to be prepared prior to any works commencing on site.</p> <p>An Erosion and Sediment Control Plan prepared by Brown is provided at Appendix J.</p> <p>The Construction Management Plan will be prepared prior to the commencement of works on the site which will outline the Site Fencing and Security arrangements during construction.</p>

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<ul style="list-style-type: none"> Public safety is ensured. Protection of the public domain. <p>Controls</p> <p><u>Erosion and Sediment Management</u></p> <p>Erosion and sedimentation prevention measures must be installed on all sites to prevent the migration of sediment off the site into any waterway, drainage systems, public reserves, road reserve or adjoining private lands.</p> <p><u>Waste Minimisation</u></p> <p>Waste materials generated through demolition, excavation and construction works are to be minimised by reuse on-site, recycling, or disposal at an appropriate waste facility.</p> <p><u>Site Fencing and Security</u></p> <p>All sites are to be protected by site fencing for the duration of the works.</p> <p>Where building construction is undertaken adjacent to the public domain, pedestrian and vehicular facilities are to be protected by a hoarding in accordance with Section 126(1) of the Roads Act.</p>		
B8.6 Construction & Demolition – Traffic Management Plan		
<p>Outcomes</p> <ul style="list-style-type: none"> Minimal disturbance to the residential community. Protection of Roads. <p>Controls</p> <ul style="list-style-type: none"> For all development where either excavated materials to be transported from the site or the importation of fill material to the site is 100m³ or greater, a Construction Traffic Management Plan indicating truck movements, and truck routes is to be provided and approved by Council prior to the commencement of works All transport works must not cause adverse disruption or nuisance to adjoining residences, businesses or the street system. 	Yes	A Construction Traffic Management Plan will be provided as part of the Construction Certificate documentation, as detailed in Section 8 Statement of Commitments.
Part C – Development Control Types		
C1 – Design Criteria for Residential Development		
C1.9 - Accessibility		
<p>Outcomes</p> <ul style="list-style-type: none"> The community's lifecycle housing needs are met within Pittwater through well designed adaptable housing. All members of the community enjoy equitable access to buildings to which the general public have access. Housing for older people and people with a disability are accessible, adaptable and safe. 	Refer to comment.	<p>The development provides a residential flat building development with a variety of apartment size and types. A total of 13 adaptable studio apartments are proposed in the Stage 1 development.</p> <p>Public domain areas are designed to allow for equitable access in accordance with Council's roads Master Plan for the Warriewood Valley.</p>

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<p>Controls</p> <p>The design of residential development shall meet the criteria of AS 4299-1995: <i>Adaptable Housing</i> as follows:</p> <table border="1"> <tr> <th>Development</th><th>Percentage (%) of adaptable units (rounded up)</th><th>Minimum class under AS 4299-1995</th></tr> <tr> <td>Within Warriewood STP Buffer Area</td><td>50</td><td>Class B</td></tr> </table> <p>Development within areas subject to flooding must provide for access on land within private ownership. In this regard ramps must not encroach into the public domain.</p> <p>The design of all other residential development to meet the criteria of AS 4299-1995: <i>Adaptable Housing</i> is encouraged.</p> <p>Development shall include the design and construction of works in the public domain to ensure accessibility for the full frontage of the site to any public road and to ensure access to the site from the public domain.</p>	Development	Percentage (%) of adaptable units (rounded up)	Minimum class under AS 4299-1995	Within Warriewood STP Buffer Area	50	Class B		
Development	Percentage (%) of adaptable units (rounded up)	Minimum class under AS 4299-1995						
Within Warriewood STP Buffer Area	50	Class B						
C1.13 Pollution Control								
<p>Outcomes</p> <ul style="list-style-type: none"> Development that does not adversely impact on public health, the environment or other lands. <p>Controls</p> <ul style="list-style-type: none"> Residential premises must be designed, constructed, maintained and used in a proper and efficient manner to prevent air, water, noise or land pollution. Developments must comply in all respects with the Protection of the Environment Operations Act, 1997, and other relevant legislation. 	Yes	The development does not pose any adverse impacts in terms of pollution on public health, the environment or other lands.						
C6 Design Criteria for Warriewood Land Release								
C6.2 Aboriginal Heritage – Warriewood Valley								
<p>Outcomes</p> <ul style="list-style-type: none"> Heritage items and places of Aboriginal culture are conserved. <p>Controls</p> <ul style="list-style-type: none"> A report prepared by a suitably qualified archaeologist including consultation with the National Parks and Wildlife Service and appropriate Aboriginal groups must be obtained and submitted to Council regarding the existing and/or preservation of any heritage items and places of Aboriginal culture on the land. If an Aboriginal site or relic is discovered, it must be reported to SEC (National Parks and Wildlife Service) and all works stopped. 	Yes	An Aboriginal Archaeological and cultural Heritage Impact Assessment has been prepared by Banksia Heritage and Archaeology and is provided at Appendix K .						

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C6.3 European Heritage – Warriewood Valley		
<p>Outcomes</p> <ul style="list-style-type: none"> Development of or adjoining identified heritage items are sympathetically designed to complement that item. <p>Controls</p> <ul style="list-style-type: none"> The Council shall not grant consent to an application to carry out development on land in the vicinity of a heritage item, unless the applicant has made an assessment of the effect that the carrying out of that development will have on the heritage significance of the item and its setting. 	Yes	<p>There are no heritage items on the site.</p> <p>The development will not adversely impact upon nearby heritage items. Graham Brooks and Associates have undertaken a heritage impact assessment of the proposed development and it is provided at Appendix O.</p>
C6.4 Flood – Warriewood Valley Residential Sectors		
<p>Outcomes</p> <ul style="list-style-type: none"> Development is designed to minimise the risk posed by flooding <p>Controls</p> <p><u>Flood Levels within the Warriewood Valley Land Release Area</u></p> <p>Flood levels for sectors within the Warriewood Valley Land Release Area are to be determined from the Water Management Report to be prepared by the Applicant in accordance with Council's Warriewood Valley Urban Land Release Water Management Specification (February 2001), or as amended. A copy of this specification can be obtained from Council's web site.</p> <p><u>Building Development</u></p> <p>The minimum floor level requirements for development shall be as set out in the Flood Hazard Controls of this DCP for the specific development use based on the Flood Hazard (high or low) and Flood Category (1, 2 or 3) as defined in the Water Management Report for the Sector.</p>	Yes	<p>Brown Consulting Engineers have provided a Flood Management Plan (Appendix J) which addresses stormwater management, earthworks and flooding across the site.</p> <p>The proposed minimum floor levels are 4.5m AHD, which is above the 1 in 100 year floor hazard and has also accounted for potential sea level rise in accordance with the State Government's Sea Level Rise policy.</p>
C6.6 Bushfire Protection – Warriewood Valley		
<p>Outcomes</p> <ul style="list-style-type: none"> The risk to life and property from the threat of bushfire is minimised. To ensure that development has an appropriate degree of safety for people and property from the threat of bushfire. <p>Controls</p> <ul style="list-style-type: none"> Hazard reduction strategies for fire protection zones within or adjoining flora or fauna conservation areas must be compatible with the management requirements of those areas 	Yes	<p>Flamezone Bushfire Consulting have prepared a bushfire risk assessment of the subject site. Refer to Appendix C.</p> <p>Hazard reduction strategies include a 25 metre Asset Protection Zone, within the subject site. This zone will have carefully selected vegetation so as not to create a firepath.</p>
C6.7 Water Management and Creekline Corridors – Warriewood Valley		
<p>Outcomes</p> <ul style="list-style-type: none"> A network of multi-functional living creekline corridors on Narrabeen Creek, Fern Creek and Mullet Creek for the creek, floodway, flora and fauna habitat, water quality treatment, cyclist and pedestrian access, and drainage, linking the 	Yes	<p>Brown Consulting Engineers have provided a Stormwater and Environmental Management Plan (Appendix J) which addresses water cycle management, water quality management, watercourse and corridor management, and floodplain management across the proposed development.</p>

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<p>Warriewood escarpment with Warriewood Wetlands and Narrabeen Lagoon.</p> <ul style="list-style-type: none"> Remnant native vegetation along creeklines, escarpment vegetation, and the Warriewood Wetlands, including stands of Swamp Mahogany, Forest and Swamp Oaks, and Angophora woodlands are conserved and restored to provide linkages and stepping stones for wildlife movement. Natural creeklines are wildlife corridors with riparian vegetation, providing a functioning habitat for birds and diverse native flora. <p>Controls</p> <p>A Water Management Report is to be prepared for each sector of the land release in accordance with Councils Warriewood Valley Urban Land Release Water Management Specification (February 2001), or as amended. The report must incorporate water cycle management, water quality management, watercourse and corridor management, and floodplain management. A copy of the specification can be obtained from Council.</p> <p>Where a creek passes through a sector or is located on the boundary of a sector, the creekline corridors will generally comprise a total width of 100 metres, consisting of a 50 metre wide multi-function public corridor with a 25 metre private buffer strip each side. The location of the centreline of the creek may vary within the 50m wide public corridor.</p> <p>A 50 metre wide multi-function corridor is required to be brought into public ownership to contain the creek, floodway, flora and fauna habitat, and the pedestrian path/cycleway. The 50 metre public creek-line corridor is to be designed and constructed to contain the 1% Annual Exceedence Probability (AEP) flow.</p> <p>Pedestrian paths/cycleways within the creekline corridors are to be sited above the 20% AEP flood level to reduce the incidence of flood damage to a manageable level and achieve a satisfactory safety level for regular use. The alignments of pedestrian paths/cycleways and associated landscaping must provide adequate sightlines for cyclists.</p> <p>In order to provide connectivity for the entire release area, certain infrastructure will be required within and adjacent to the creekline corridors. This is outlined in detail in the Warriewood Valley Section 94 Contributions Plan.</p>		<p>Water and floodplain management is discussed in detail in the main body of the Environmental Assessment of the EA report.</p>
C6.8 The Road System – Warriewood Valley		
<p>Outcomes</p> <ul style="list-style-type: none"> Sustainable transport and travel to, from and within Warriewood Valley together with less use of private motor vehicles, fewer motor vehicle kilometres travelled, and improved air quality. Safety for all road users, particularly pedestrians, cyclists, children and older people. Safe, convenient and direct access by non-motorised means from residences to public transport, employment areas, adjoining sectors, open space, community facilities and other services. Travel by pedestrians, cyclists and public 	<p>Yes</p>	<p>A network of streets and laneways are proposed for the subject site in accordance with the Warriewood Valley Roads Master Plan.</p> <p>The local road through the development is to be constructed and dedicated to Council. The private roads that service the residential development are to be community title roads and are not to be dedicated to Council.</p>

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<p>transport, and by telecommunications, rather than travel by private motor vehicle.</p> <ul style="list-style-type: none"> Less car-dependent and reduce the private motor vehicle kilometres travelled. Provision of a range of traffic and transport routes throughout the Valley <p>Controls</p> <p><u>Design Criteria</u></p> <p>A traffic analysis and road master plan for the sector demonstrating that the objectives and controls in regard to the roads will be achieved must be prepared by a suitably qualified professional.</p> <p><u>Subdivision Adjoining a Public Road Reserve</u></p> <p>Where the subdivision adjoins a public road reserve, the subdivision shall include the design and construction of the perimeter road for half width of construction including, road pavement, vertical kerb and gutter, footpaths, cycleways (minimum 1.5m width footpath or a minimum 2.1m width where a cycleway is required), public road reserves and shall include any intersection to provide access to the subdivision at full cost to the developer.</p> <p><u>Subdivision to be Created as a Community Title</u></p> <p>Where a subdivision is to be created as a community title allowing full public access, the design and construction of the road and pedestrian network shall provide for full pedestrian vehicular access and on-road related parking similar to a function as a public road network.</p>		
C6.9 Pedestrian and Cyclist Network – Warriewood Valley		
<p>Outcomes</p> <p>A unified off-road pedestrian and cyclist network in Warriewood Valley for transportation and recreation, providing access to key activity generators both within and outside the land release (including public transport nodes, retail and commercial centres, and areas of public open space).</p> <p>Sustainable, non-motorised modes of transport are utilised.</p> <p>Drainage corridors and nominated buffer areas are used as dual use corridors.</p> <p>Controls</p> <p>The pedestrian/cycleway must be located off-road, where practical. Where a pedestrian/cycleway is located in a public reserve, the minimum width is 2.5 metres and where a pedestrian/cycleway is located in the road verge adjacent to the road carriageway, the minimum width is 2.1m.</p>	Yes	<p>In accordance with the Warriewood Valley Urban Release Area Master plan, the concept plan includes a connection of pedestrian/cycle paths, which links Macpherson Street, the proposed development and the adjoining development pedestrian/cycle path, which connects all the way through to Warriewood Shopping Centre and Jackson Road.</p> <p>The shared pedestrian/cycle path, has been located to form the primary buffer between the Asset Protection Zone (APZ) and the core riparian zone. The path is to link with similar paths on adjoining land. The proposal allows for 3 (three) lookouts to be located at suitable points for viewing into the wetlands. Elevated timber boardwalks are to provide access over sensitive Riparian planting and flood storage area. Seating, signage, solar lights and litter bins will be provided, however this level of detail will be subject to further discussion with Pittwater Council.</p> <p>The path will comply with the minimum width requirements of 2.5 metres.</p>
6.10 Ecologically Sustainable Development – Warriewood Valley Residential Sectors		
<p>Outcomes</p> <ul style="list-style-type: none"> An ecologically sustainable environment is developed and/or maintained. Use of renewable energy is encouraged and 	Yes	<p>BASIX Certificates demonstrating compliance with BASIX standards are provided at Appendix G.</p>

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<p>fossil fuel use minimised.</p> <ul style="list-style-type: none"> New dwellings have maximum solar access, adequate daylight and ventilation to habitable rooms and adequate sunlight to private open spaces. Adverse impacts upon air quality are minimised. Energy and water in and around the development are conserved. Costs to residents for energy and water usage are reduced. Use of air conditioners is minimised. Low impact, environmentally sustainable building materials are used. <p>Controls</p> <p>Development should be designed and located with consideration to orientation, topography, vegetation, microclimate, adjoining development and landscape.</p> <p>Room(s) capable of being used as living areas should be located on the north side of the dwelling, and sunshine used for lighting and water heating.</p> <p>Windows within buildings should be sized, located and shaded to reduce summer heat and allow entry of winter sun. Horizontal or vertical screening can be provided by recessed windows or overhanging balconies, eaves, verandahs, pergolas, shutters and louvres; and/or windows may be shaded by the planting of large trees, including deciduous species which block out the hot summer sun but let in the warm winter sun.</p> <p>New multi-unit housing development must achieve a minimum 3.5 star NatHERS rating for typical units and must comply with the provisions of BASIX. For further information on BASIX see www.BASIX.nsw.gov.au.</p>		<p>There has been a commitment to use the requirements of BASIX as a minimum requirement. The development will be also in accordance with the building requirements contained in the Pittwater DCP 21 and the BCA.</p> <p>Efficient Living consultants report (Appendix G) assesses the proposal in accordance with the requirements of BASIX.</p> <p>The resulting BASIX scores are:</p> <ul style="list-style-type: none"> Energy 35 Water 41 Thermal Comfort - Pass <p>ESD initiatives are discussed in the main body of the Environmental Assessment.</p>
C6.11 Natural Environment – Warriewood Valley		
<p>Outcomes</p> <ul style="list-style-type: none"> Local indigenous trees, shrubs and groundcover are retained, regenerated and promoted wherever possible. The canopy cover and the habitat value are increased. The natural landscape character of the area is improved. <p>Controls</p> <ul style="list-style-type: none"> Development must be designed to maximise the restoration, retention and preservation of indigenous trees, shrubs and groundcovers, as well as natural features, including rock features and watercourses. In land adjoining creekline corridors, buffer strips and reserves, preference should be given to local species identified as food sources for native fauna. Refer to species lists contained in Appendix 8 of this DCP. 	Yes	<p>Landscape plans are provided at Appendix P. The landscape design has been in accordance with the DCP controls as well as the Warriewood Valley Landscape Design Guidelines (2004).</p> <p>The revegetation and Fern Creek restoration works associated with the Fern Creek Riparian Corridor, Wetland Buffer Zone and associated 'Asset Protection Zones' are in accordance with the approved plans and condition 1 of DA 0526/08.</p>

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C6.12 Public Recreation and Open Space – Warriewood Valley		
<p>Outcomes</p> <ul style="list-style-type: none"> The needs for public recreation and open space are met. Remnant bushland and wetland areas are conserved and green space and visual amenity for the Valley is provided. Safe and suitable park settings and multiple uses of the reserves to enable a wide variety of recreational opportunities to be accommodated are provided, to meet the differing needs of people throughout their lifetimes. <p>Controls</p> <ul style="list-style-type: none"> To meet the needs of the incoming population the provision of a sportsfield, district park, and four neighbourhood parks is required. There is also linear open space associated with the creeklines, landscaped amenity buffers, bushfire protection trail, and pedestrian cycleway network. Council's Warriewood Valley and Landscape Masterplan and Design Guidelines indicate the location of neighbourhood parks, the district park and sportsfield in Warriewood Valley based on an equitable distribution to meet the needs of the incoming population. The locations shown are indicative only. 	Yes	Public open space is provided for on the site. A 50 metre public riparian zone will be planned and implemented as a multi-use open space corridor, as per the landscape plans provided at Appendix P .
C6.13 Landscaped Amenity Buffer Strips – Warriewood Valley		
<p>Outcomes</p> <ul style="list-style-type: none"> Landscaped zones provide amenity buffers between incompatible land uses, such as the Warriewood Wetlands and residential areas, and between light industrial and residential areas. The character of the escarpment is carried into the Valley. Any adverse impact on environmentally sensitive areas or impacts of differing land uses are mitigated. The canopied nature of Pittwater and native flora and fauna habitats are reinforced. <p>Controls</p> <ul style="list-style-type: none"> A minimum landscaped buffer of 10 metres in width is to be provided between light industrial or residential areas and the Warriewood Wetlands. The buffer strips are to be extensively landscaped. Landscaped mounds with mass plantings of native trees and shrubs are to be provided in suitable locations in consultation with Councils Landscape Architect. Planting should consist of a framework of locally indigenous canopy trees with native shrubs and groundcovers. In areas of low use, native groundcovers should be used as an alternative to lawn. A landscape plan for the buffer adjoining the sector must be prepared. The buffer strips are to contain pedestrian/cycleway paths, with vandal-resistant solar lighting, and allow casual surveillance of the path from adjacent buildings. 	Yes	Landscape buffer strips are provided for in accordance with Councils controls and are detailed in the landscape plans provided at Appendix P .

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C6.14 Subdivision Layout – Warriewood Valley		
<p>Outcomes</p> <ul style="list-style-type: none"> • Superior design is achieved. • Solar access and microclimatic benefits to residential lots are maximised. • Topographical features, site characteristics and constraints, and special features within a sector are considered. • Housing diversity and choice are provided. • Surveillance of public open spaces is facilitated. • Non-motorised modes of transport and accessibility are encouraged through design. • An ecologically sustainable environment, reduced use of fossil fuels and use of renewable energy is developed and maintained • Driveways onto the major roads in Warriewood Valley are minimised. • Connectivity within the sector ensures most homes are within 400 metres walking distance to bus stops. <p>Controls</p> <p>A Masterplan prepared by a qualified Urban Designer, who is a member of an appropriate professional organisation, is to be submitted with an application to rezone land. The Masterplan is to reflect the outcomes and controls of this DCP.</p> <p>Lots must have the appropriate area and dimensions for the siting of dwellings, canopy trees and other vegetation, private outdoor open space, rainwater tank, and vehicular access and on-site parking. Lots must be of sufficient size and orientation with the main living room(s) able to receive northern sunlight in winter.</p> <p>Lot size and layout must respond to the physical characteristics particular to each sector, such as slope and existing significant vegetation, and site constraints including bushfire risk.</p> <p>A variety of lot sizes and dimensions must be provided in the sectors nominated for mixed residential development.</p> <p>Lot design is to facilitate housing fronting onto creekline corridors and other areas of public open space, to incorporate these spaces into the living environment, facilitate surveillance, and prevent isolation and degradation of these spaces.</p> <p>The subdivision layout is to incorporate adequate pedestrian, cycle and vehicle links to the road network, public transport nodes, pedestrian/cyclist network, and public open space areas.</p> <p>The street and subdivision layout should minimise fuel use by reducing travel distances and maximising public transport effectiveness.</p> <p>The number of driveway entrances from any sector onto major roads in Warriewood Valley including Garden Street, Macpherson Street, Forest Road and Warriewood Road are to be minimised. For example, a single access point to each sector serviced by a roundabout or other on street traffic management facilities (if necessary) with access to individual lots</p>	Yes	<p>Concept Plan diagrams based on the urban design analysis of Stanistic Architects have been prepared by Architectus and are provided at Appendix B.</p> <p>The Concept Plan diagrams are discussed providing an urban design analysis of the building, road and open space layout is provided in the main body of the Environmental Assessment.</p>

Pittwater 21 DCP	Compliance	Comment
within the subdivision being from internal roads within that subdivision.		
C6.23 Site Coverage, Sector Development, Warriewood Valley		
Outcomes <ul style="list-style-type: none"> Achieve the desired future character of the Locality. The bulk and scale of the built form is minimised. A reasonable level of amenity and solar access is provided and maintained. Vegetation is retained and enhanced to visually reduce the built form. Conservation of natural vegetation and biodiversity. Stormwater runoff is reduced, preventing soil erosion and siltation of natural drainage channels. The rural and bushland character of the escarpment is conserved and enhanced. The footprint of development on the site is minimised. Controls The total site coverage within a residential sector shall not exceed 50% of the sector area. The remaining 50% of the sector area must be landscaped area.	Yes	The proposal complies with the site coverage controls proposing a maximum site coverage of 43%, which is less than the maximum 50% site coverage requirement.
Part D – Locality Specific Development Controls		
D14 Warriewood Valley		
D14.1 Character as viewed from a public space		
Outcomes <ul style="list-style-type: none"> Achieve the desired future character of the Locality. The visual impact of the built form is secondary to landscaping and vegetation, or in commercial areas and the like, is softened by landscaping and vegetation. High quality buildings designed and built for the natural context and any natural hazards. Buildings do not dominate the streetscape and are at human scale. Within residential areas, buildings give the appearance of being two-storey maximum. Parking structures are minimised and secondary to the built form, landscaping and vegetation. Access to public places and spaces is clear and defined. Controls Buildings which front the street or creekline corridors must have a street presence and incorporate design elements (such as roof forms, textures, materials, the arrangement of windows, modulation, spatial separation, landscaping etc) that are compatible with any design themes for the locality. Blank street	Yes	<p>The proposed development will be of a high quality architectural design incorporating quality materials and finishes.</p> <p>Overall, the proposed building design, materials and finishes provide an interesting and well articulated built form. This provides visual interest and reduces the overall perceived bulk and scale of the development, with the levels being designed to appear as separate and distinct features of the one overall development, which is necessary on a site of this size.</p> <p>Positive urban design, built form and economic benefits including increased connectivity, aesthetic appearance and economic revitalisation are expected to result from the proposal.</p>

Pittwater 21 DCP	Compliance	Comment
<p>frontage facades without windows shall not be permitted.</p> <p>Walls without articulation shall not have a length greater than 8m to any street frontage.</p> <p>Any building facade to a public place must incorporate at least two of the following design features:</p> <ul style="list-style-type: none"> (i) entry feature or portico; (ii) awnings or other features over windows; (iii) verandahs, balconies or window box treatment to any first floor element; (iv) recessing or projecting architectural elements; (v) open, deep verandahs; or (vi) verandahs, pergolas or similar features above garage doors. <p>The bulkiness of buildings must be minimised.</p> <p>Garages, carports and other parking structures including hardstand areas must not be the dominant site feature when viewed from a public place. Parking structures must be located behind the front building line, preferably set back further than the primary building, and be no greater in width than 50% of the lot frontage, or 7.5 metres, whichever is the lesser.</p> <p>Landscaping shall be integrated with the building design and shall screen structures wherever possible.</p> <p>Television antennas, satellite dishes and other telecommunications equipment must be minimised and screened as far as possible from public view. General service facilities must be located underground.</p>		
D14.2 Scenic Protection – General		
<p>Outcomes</p> <ul style="list-style-type: none"> • Achieve the desired future character of the Locality. • Bushland landscape is the predominant feature of Pittwater with the built form being the secondary component of the visual catchment. • Preservation of the visual significance of the Ingleside/Warriewood Escarpment. <p>Controls</p> <ul style="list-style-type: none"> • Development shall minimise any visual impact on the natural environment when viewed from any waterway, road or public reserve. 	Yes	The development does not minimise any visual impact on the Warriewood Wetlands. Sightlines are provided from Macpherson Street through the development towards the wetlands.
D14.17 Retaining Walls, terracing and undercroft areas		
<p>Outcomes</p> <ul style="list-style-type: none"> • Achieve the desired future character of the Locality. The natural topography of the land is preserved. (En) • Retaining walls and terracing are minimised. <p>Controls</p> <ul style="list-style-type: none"> • Where retaining walls and terracing are visible from a public place, preference is given to the use of sandstone or sandstone like materials. • In the provision of outdoor entertaining areas, preference is given to timber decks rather than cut/fill, retaining walls and/or terracing. • Undercroft areas shall be limited to a maximum 	Refer to comment	The raising of the habitable floor levels for flood mitigation will be ameliorated with a sloping batter from the local road into the riparian zone and buffer area without the need for retaining walls.. Low retaining walls along the Macpherson Street and Boondah Road frontages are proposed which is generally consistent with the landscape character adjoining development to the west.

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height of 3.5 metres. Adequate landscaping shall be provided to screen undercroft areas.		
D14.18 Building Colours, Materials and Construction – Warriewood Valley		
<p>Outcomes</p> <ul style="list-style-type: none"> Achieve the desired future character of the Locality. The development enhances the visual quality and identity of the streetscape. The colours and materials of the development harmonise with the natural environment. The visual prominence of the development is minimised. The development reflects the natural amphitheatre of the locality. Damage to existing native vegetation and habitat is minimised. Colours and materials harmonise with the escarpment. <p>Controls</p> <ul style="list-style-type: none"> External colours and materials shall be natural tones such as green, brown and dark earthy colours. Wall colours are to harmonise with the natural environment and are to be recessive colours. Roofs to all structures are restricted to the dark colours of the grey sandy earth and the native vegetation, being recessive colours of mid to dark greys, mid to dark browns and mid to dark greens. White, light coloured, red or orange roofs and walls are not permitted: Limited use of corporate colours may be permitted within Business and Light Industrial zoned land. Finishes are to be of a low reflectivity. Lightweight construction and pier and beam footings should be used in environmentally sensitive areas Large unbroken areas of roofs must be avoided and building facades must be modulated and/or contain shade elements (such as verandahs or pergolas) to visually reduce the bulk and scale of development. Large expanses of roof and wall areas are not acceptable. 	Yes	<p>A materials and colours sample board is provided.</p> <p>The proposed materials and finishes are illustrated on the coloured elevation drawings included at Appendix _ and the accompanying materials and finishes sample boards submitted under separate cover. A simple and refined palette of materials and colours is proposed that will provide visual interest and fine quality detailing to effectively articulate each of the building facades.</p> <p>The selection of materials and finishes is generally consistent with the range of contemporary materials being used in other recent developments at Warriewood Valley.</p> <p>The external materials selected includes:</p> <ul style="list-style-type: none"> Powder coated aluminium vertical louvers, window frames and sliding doors/handrails. Painted concrete pre cast panels, Rendered and coated masonry courtyard fences, Colour panel as detailed on the materials and finishes board. <p>The detailed elevations provided within architectural drawings at Appendix A contain the indicated materials and finishes.</p>

Pittwater 21 DCP	Compliance	Comment									
D14.19 Front Building lines – Warriewood Valley											
<p>Outcomes</p> <ul style="list-style-type: none"> Achieve the desired future character of the Locality. The bulk and scale of the built form is minimised. Equitable preservation of views and vistas to and from public/private places. Vegetation is retained and enhanced to visually reduce the built form. Access to the dwelling, parking area and recreation space within individual residential properties. Sufficient space for vehicle manoeuvrability and clear sight lines. <p>For residential development the following minimum front setbacks shall apply:</p> <table border="1"> <thead> <tr> <th>Development</th><th>Min. frontage setback (m)</th><th>Min. setback to garage/carport (m)</th></tr> </thead> <tbody> <tr> <td>Abutting Avenues (ie. Warriewood Road, Macpherson Street, Garden Street, Orchard Road, Boondah Road)</td><td>6.5</td><td>6.5*</td></tr> <tr> <td>Abutting Sectors Streets, Accessways, Shareways, Access Places</td><td>4.0</td><td>5.5</td></tr> </tbody> </table> <p>The minimum setbacks are subject to the incorporation of canopy trees and other landscaping required under this DCP. Consideration must be given to tree root systems in the design and setback of dwellings.</p> <p>Covered carspace structures (such as garages and carports) are to be setback a minimum of 5.5m from the property boundary (* a minimum setback of 6.5m applies to development abutting Avenues). This is to reduce the dominance of the garage/carport in the streetscape. Open spaces for vehicles do not need to be setback from the property boundary.</p> <p>Multi-unit housing must be part of an integrated housing design incorporating modulated facade design and presentation to the streetscape.</p> <p>Variations</p> <p>Corner blocks or blocks with a double street frontage may apply for a reduced building line (eg. for a minimum frontage setback of 4.0m, a minimum side setback to corner street of 2.0m would apply. See table below). Secondary street setback variations must consider the character of the secondary street and the predominant setbacks to that street. The minimum secondary setback is subject to the incorporation of canopy trees and other landscaping required under this DCP.</p>	Development	Min. frontage setback (m)	Min. setback to garage/carport (m)	Abutting Avenues (ie. Warriewood Road, Macpherson Street, Garden Street, Orchard Road, Boondah Road)	6.5	6.5*	Abutting Sectors Streets, Accessways, Shareways, Access Places	4.0	5.5	Yes	The development complies with the front building line controls, by providing a 6.5 metre minimum frontage setback to Macpherson Street and Boondah Road.
Development	Min. frontage setback (m)	Min. setback to garage/carport (m)									
Abutting Avenues (ie. Warriewood Road, Macpherson Street, Garden Street, Orchard Road, Boondah Road)	6.5	6.5*									
Abutting Sectors Streets, Accessways, Shareways, Access Places	4.0	5.5									

Pittwater 21 DCP		Compliance	Comment					
<table><tr><td>Development</td><td>Min. Setback to Secondary Street (m)</td></tr><tr><td>Abutting Avenues (ie. Warriewood Road, Macpherson Street, Garden Street)</td><td>3.0</td></tr><tr><td>Abutting Sectors Streets, Accessways, Shareways, Access Places</td><td>2.0</td></tr></table>	Development	Min. Setback to Secondary Street (m)	Abutting Avenues (ie. Warriewood Road, Macpherson Street, Garden Street)	3.0	Abutting Sectors Streets, Accessways, Shareways, Access Places	2.0		
Development	Min. Setback to Secondary Street (m)							
Abutting Avenues (ie. Warriewood Road, Macpherson Street, Garden Street)	3.0							
Abutting Sectors Streets, Accessways, Shareways, Access Places	2.0							
D14.20 Side and Rear building lines - Warriewood Valley Residential Sectors								
Outcomes <ul style="list-style-type: none">Achieve the desired future character of the Locality.The bulk and scale of the built form is minimised.Equitable preservation of views and vistas to and from public/private places.A reasonable level of privacy, amenity and solar access is provided and maintained to residential properties.Substantial landscaping, a mature tree canopy and an attractive streetscape.Flexibility in the siting of buildings and access.Vegetation is retained and enhanced to visually reduce the built form.Consistent setbacks from the buildings to the boundary with the street, creeklines, open space reserves and buffer strips.Visual and spatial separation of built forms.Regard to the impact of proposed development or redevelopment on adjacent and adjoining properties.Access to the dwelling, parking area and recreation space within individual residential properties. Controls <ul style="list-style-type: none">Where zero lot line is incorporated into the building design, the following shall apply:- Walls are to be generally 180mm clear of the side boundary (to allow gutter and fascia overhangs).Two storey elements shall be no closer than 1500mm to adjoining dwelling.- All roofing is to be clear of the side boundary for fascia and gutter unless a suitable easement is created over the encroachment.- The length of the zero lot line wall is limited to 50% of the length of the adjacent side boundary.- No windows are permitted in zero lot line wall.- A maintenance easement is to be provided on the adjoining property to the zero lot line wall. The maintenance easement should be minimum 700mm wide.	Yes	The proposed residential apartment blocks provide adequate side and rear separation distances in accordance with the principles of SEPP 65 and the RFDC where variations to the recommended separation distances are proposed, units have been configured and screening provided to window openings to mitigate potential overlooking between buildings.						
D14.22 Site Coverage – Warriewood Valley Residential Sectors								
Outcomes <ul style="list-style-type: none">Achieve the desired future character of the Locality.The bulk and scale of the built form is minimised.	Yes	The proposal does not exceed the 55% site coverage requirement. The proposed site coverage is 43%, with 57% to be provided as open space and roads.						

Pittwater 21 DCP	Compliance	Comment
<ul style="list-style-type: none"> A reasonable level of amenity and solar access is provided and maintained. Vegetation is retained and enhanced to visually reduce the built form. Conservation of natural vegetation and biodiversity. Stormwater runoff is reduced, preventing soil erosion and siltation of natural drainage channels. The rural and bushland character of the escarpment is conserved and enhanced. The footprint of development on the site is minimised. <p>Controls</p> <p>Single Dwellings</p> <p>The total built upon area on individual residential allotments shall not exceed 55% of the site area of the allotment. The remaining 45% of the site area shall be landscaped area.</p>		
<p>D14.23 Fences – Warriewood Valley Residential Sectors</p>		
<p>Outcomes</p> <ul style="list-style-type: none"> Achieve the desired future character of the Locality. A safe and clear view of public areas such as the street, creekline, buffer strip or reserve for pedestrians, cyclists and motorists. Casual surveillance of public areas from buildings. Fences and walls, where provided, are attractive, complement the development and adjoining development, and provide visual interest for the streetscape. <p>Controls</p> <ul style="list-style-type: none"> In all cases, vegetation is preferable over fencing to delineate the property boundary. <p>Fencing of properties is restricted to side and rear boundaries only.</p> <p>No fencing is permitted forward of the building line of the dwelling.</p> <p>If fencing exceeds one (1) metre in height and abuts a public road, it must be set back from the boundary a minimum of one metre (in the case of corner lots or lots with more than one frontage this setback may be varied based on merits). This set back area shall be landscaped to screen the fence from the public road.</p> <p>Any fencing must:</p> <ul style="list-style-type: none"> - allow native animals to move between and to areas of environmental sensitivity and areas of habitat value; - enable outlook from buildings for safety and surveillance; - assist in highlighting entrances and in creating a sense of community identity; - be compatible with facilities in the street frontage area, such as mail boxes and garbage collection areas; and - complement any facilities and landscaping in public areas. <p>Side and rear boundary fencing must not exceed 1.8</p>	<p>Refer to comment.</p>	<p>Courtyard walls of variable height are proposed to ground level units. Palisade style fences along the Boondah Road and Macpherson Street are proposed to define the public and private domain.</p>

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<p>metres in height. Fencing must be located on the natural ground level of the property boundary, not raised by retaining walls or the like.</p> <p>Where residential lots are located adjacent to Avenues and Sector Streets (e.g. Macpherson, Garden and Orchard Streets, and Warriewood Road), dwelling frontages, pedestrian access and postal addresses are to be maintained to these roads, whether or not driveways are provided to these roads. Corner blocks are exempt from this requirement, where applicable. Fencing adjoining these roads resulting in walled or gated communities is not permitted.</p>		
D14.24 Retaining Walls – Warriewood Valley Residential Sectors		
<p>Outcomes</p> <ul style="list-style-type: none"> Natural topography is preserved Natural vegetation is maintained and enhanced. Visual scarring of the landscape is prevented. Retaining walls and terracing are kept to a minimum. <p>Controls</p> <ul style="list-style-type: none"> The use of coppers logs as a retaining wall material, where visible from the street, is not permitted. Extensive filling of land will not be permitted. The ground level at the property boundary is not to be raised above that of the adjoining residential property. 	Yes	The proposed earthworks are described in the Brown Consulting report at Appendix J .
D14.25 Utilities and Telecommunications Services – Warriewood Valley		
<p>Outcomes</p> <ul style="list-style-type: none"> Adequate utility services capacity to meet the demands of subdivision development. Safety of building occupants being maintained and enhanced. Security of utility services is improved. Opportunities for street tree planting enhanced. Visual pollution by aerial cables is reduced. Telecommunications and technological innovation and instalment are incorporated. <p>Controls</p> <p>All lots within the subdivision are to be fully serviced by:</p> <ul style="list-style-type: none"> Electricity Water Gas Communications Sewer <p>All existing and proposed utility services to the site are to be located underground within the proposed road reserve within the developed lands and within the lots created within the subdivision.</p> <p>Subdivision and development is to be constructed to allow internal access for telecommunications, intelligent lighting and home automation facilities from underground street electrical and telecommunications</p>	Yes	Correspondence from Sydney Water, Energy Australia and Natural Gas utilities providers are provided at Appendix V in relation to the provision of utility services to the site. All utilities and services can be augmented to adequate cater for the proposed development.

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<p>cabling without costly retro-fitting.</p> <p>Buildings are to be designed to enable sufficient riser capacity and sufficient space within ceilings to permit connection to a central point for communications wiring for televisions, telephones, satellite, computers and burglar alarms. Consideration should be given to the provision of a "patch panel" in dwellings. This is a central point for communications wiring with conduits to various points such as living rooms and bedrooms.</p>		
D14.26 Pets and Companion Animals – Warriewood Valley		
<p>Outcomes</p> <p>A balance between human needs for pets/ companion animals and environmental considerations.</p> <p>Controls</p> <ul style="list-style-type: none"> The need for pets and companion animals must take into account their relationship with native animals, including endangered species, and their habitat. Pets should be contained within the owners property and/or dwelling, especially at night to prevent predation on wildlife. Pets and companion animals must be kept in accordance with the Companion Animals Act and Council registration as required. 	Yes	<p>Pets can be contained in the private open space of developments. Ground floor units have courtyard walls of variable height which will contain pets.</p> <p>Future strata subdivision applications will outline the management arrangement for pet ownership.</p>
D14.27 Location and Design of Parking Facilities – Warriewood Valley Residential Sectors		
<p>Outcomes</p> <ul style="list-style-type: none"> Adequate car, motorcycle and bicycle parking is provided onsite, and is sympathetic to the locality. Parking areas are appropriately landscaped to maintain and enhance the visual and environmental qualities. Garages and carports do not dominate the streetscape <p>Controls</p> <ul style="list-style-type: none"> Covered carspace structures such as garages and carports must be setback a minimum of 5.5m or 6.5m from the front property boundary. (Refer to front building setbacks listed in this DCP). <p>Garages and carports are to be integrated with the design of the dwelling, such as located behind the building frontage or designed in such a way so as to not be prominent when viewed from the street.</p> <ul style="list-style-type: none"> Car spaces on site may be covered or uncovered. Tandem parking is encouraged for lots with a frontage width of 11 metres or less (i.e. incorporation of a single garage / carport and an uncovered car space in front). A double garage/carport may dominate the facade of the dwelling and is not suitable for smaller lots. 	Yes	<p>Car parking is provided on-site in the Stage 1 Development, within two basement levels. The layout and design of the parking spaces has been designed in accordance with the relevant Australian Standards.</p>
D14.28 Landscaping Warriewood Valley		
<p>Outcomes</p> <p>Landscaping enhances and complements the natural environment and surrounding landscape character,</p>	Yes	<p>The landscape plan and report prepared by Site Image is provided at Appendix P.</p>

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<p>reinstates elements of the natural environment, reduces the visual bulk and scale of development, and complements the design of the proposed development.</p> <p>Warriewood Valley achieves a unified and high quality landscape character that contributes to the sense of place.</p> <p>Landscaping promotes ecologically sustainable outcomes, maintaining and enhancing visual and environmental qualities, biological diversity and ecological processes.</p> <p>New development is blended into the streetscape and neighbourhood.</p> <p>A pleasant and safe living environment that is environmentally responsive.</p> <p>Landscaping is to be provided on residential lots as follows:-</p> <p>? At least two (2) canopy trees within the front yard and one (1) canopy tree in the rear yard per dwelling. On smaller lots, Council may consider varying this standard if insufficient area is available to support required canopy tree planting. An application will be assessed on its merits in this instance.</p> <p>? Canopy tree planting is to be provided for multi-unit housing in accordance with Appendix 8 Landscaping and Vegetation Management.</p> <p>? All canopy trees are to achieve a canopy height greater than 8.5 metres at maturity to visually reduce the height, bulk and scale of the building. All canopy trees are to have a minimum container size at time of planting of 45 litres with a minimum trunk diameter of 20-30mm, measured 300mm above soil level.</p> <p>? Understorey planting of species which, after five (5) years from the date of issue of the occupation certificate, will in conjunction with the canopy planting screen 50% of the built form when viewed from the street. In order to achieve this, all understorey planting is to have a minimum container size of 200mm at the time of planting.</p> <p>? All canopy trees are to be indigenous to the local area . For other plantings, the predominant usage of native species is to be incorporated. (Refer to Appendix 8 of this DCP for species lists).</p> <p>All development applications, except for interior works, must include a landscape plan / working drawing prepared in accordance with Appendix 8 - Landscaping and Vegetation Management indicating:</p> <p>? details of all existing trees and vegetation to be retained, removed and proposed, including canopy spread, trunk location and condition;</p> <p>? existing/proposed building footprint, details of excavation levels and drainage;</p> <p>? a plant schedule including stratum, species/common names, species numbers, pot size at time of planting and proposed staking details;</p> <p>? a schedule of materials (including such elements as turfing, edging, walling, paving and fencing);</p> <p>? the proposed finished treatment of garden areas, including soil depth and mulching details;</p>		<p>Significant landscaping works are proposed across the site. The landscape plan has been designed generally in accordance with Pittwater Councils Warriewood Valley DCP 21 as well as the Warriewood Valley Landscape Design Guidelines 2004.</p> <p>Landscaping across the site is discussed in the main body of the Environmental Assessment.</p>

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<p>? the location of underground services; and</p> <p>? details of any automatic watering system.</p> <p>The landscape plan / working drawing is to incorporate a landscape maintenance strategy for the owner/occupier to administer over a 12 month establishment period. This strategy is to address maintenance issues such as irrigation, soil testing, weeding, plant staking, fertilising, pest and disease control, replanting, remedial pruning and the like.</p>		
D14.29 Solar Access – Warriewood Valley Residential Sectors		
<p>Outcomes</p> <ul style="list-style-type: none"> Development is sited and designed to maximise solar access, adequate daylight and ventilation to habitable rooms and adequate sunlight to private open spaces during mid-winter. A reasonable level of solar access is maintained for existing residential properties, unhindered by adjoining development. Development allows reasonable solar access to recreational and living areas of adjoining residential developments. <p>Controls</p> <p>Windows to the principal living area of the proposal, and windows to the principal living area of adjoining dwellings, are to receive a minimum of 4 hours of sunlight between 9am and 3pm on June 21st (that is to at least 50% of the glazed area of those windows).</p> <p>Where the principal living area within an existing dwelling currently receives sunshine during midwinter, any proposed adjacent development is not to reduce that solar access below four (4) hours.</p> <p>Solar collectors for hot water or electricity shall receive at least 6 hours of sunshine between 9am and 3pm during midwinter.</p> <p>The existing/proposed private open space within the subject property and the existing/proposed private open space of any adjoining dwellings are to receive a minimum of 4 hours of sunshine between 9am and 3pm during midwinter. This shall be a reasonable area giving consideration to existing site constraints and block size. Where the adjoining residential land is vacant, at least 50% of the rear yard area of the adjoining land is to receive sunshine in accordance with this control.</p> <p>Where an existing structure already impinges upon the solar access of an adjoining property to a greater degree than that specified, any new structures or modifications must maintain that existing solar access as a minimum. Further, Council encourages new structures to reduce the solar impact onto adjoining properties.</p>	Yes	<p>The development has been designed to achieve maximum solar access to each of the residential units, thereby orientating the bulk of the development to the southern eastern and south western portions of the site (Stage 1 development area).</p> <p>The majority of the residential units enjoy a northerly or north easterly north westerly aspect with a few units oriented with a single aspect directly south, thereby optimising maximum natural sunlight access to the majority of units living room areas. The majority of units will enjoy a minimum of 3 hours natural sunlight during the winter months.</p> <p>The proposed layout of buildings has effectively balanced solar access objectives with other urban design objectives such as views to the Warriewood Wetlands to the south of the site.</p> <p>Solar access for the concept plan area and Stage 1 application is discussed in detail in the main body of the Environmental Assessment.</p>

Pittwater 21 DCP	Compliance	Comment
D14.30 Height – Warriewood Valley		
<p>Outcomes</p> <ul style="list-style-type: none"> Buildings and structures below the tree canopy. Visual dominance of buildings is minimised. Environmental impacts, including overshadowing, on natural vegetation, trees and residential and recreational areas are minimised. <p>Controls</p> <p>The maximum height of a building or structure shall be 8.5 metres measured from the highest point of the building (including the top of the ridgeline) in a vertical line to natural ground level below, and shall apply to any point on the building.</p> <p>Note: For the purposes of this clause, natural ground level means the actual physical level of the land at the time this DCP was adopted (16 July 2001) excluding areas of fill or excavation. In these areas the natural ground level shall be determined by interpolation of existing natural ground level surrounding the disturbed area, and confirmed by survey at subdivision stage.</p>	No (refer to comment)	<p>The proposed development height ranges from one (1) storeys to five (5) storeys, with the height along the main street frontages (Boondah Road and Macpherson Street) being maintained at 3 storeys, stepping up to 5 five storeys to the middle and rear of the site. The childcare centre to the north western corner of the site is single storey with the swimming pool/gymnasium building also being a single storey in height.</p> <p>The Pittwater DCP 21 specifies a maximum height limit of 8.5 metres. The Stage 1 development propose a maximum height limit of 15.7 metres (RL 21.7), measured to the roof.</p> <p>The building height strategy is discussed in relation to the Concept Plan proposal in the main body of the Environmental Assessment.</p>