**Attachment : Assessment of Shoalhaven Development Control Plan 2014**

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| **G1: Site Analysis, Site Design and Building Materials** |
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| **5.1 Site analysis** |
| **Performance Criteria**P1.1 The characteristics of the site and its surrounds have been adequately considered through preparation of a thorough site analysis plan.P1.2 The site analysis informs the site design and layout.P1.3 The site layout integrates with the surrounding environment through:* Adequate pedestrian, cycle and vehicle links to street and open space networks.
* Buildings that face and address streets and the public domain.
* Buildings, streetscape and landscape design that relates to the site topography and to the surrounding neighbourhood character.

P1.4 The site layout enhances personal safety and minimises potential for crime and vandalism.Comment: Notwithstanding the lack of a site analysis plan, the development is generally consistent with the above Performance Criteria. |
| **Acceptable Solutions** | **Proposal** | **Compliance** |
| A1.1 A site analysis plan is provided with a development application that shows the following, as appropriate:* Constraints (including but not limited to):
* Location of services such as power, sewer, water and drainage lines.
* Existing trees and vegetation within and adjacent to the land being developed.
* Natural hazards which are likely to impact upon the development such as bush fire prone land, coastal hazard areas or flood prone land
* Opportunities (including but not limited to):
* Views from the site.
* Solar access.
* Existing mature trees and vegetation.
* Context information for the site and adjoining/ adjacent development (including but not limited to):
* Height and use of buildings.
* Front setbacks.
* Driveways.
* Boundary treatments (including retaining walls).
* Easements.
* Stormwater management.
 | A site analysis plan has not been submitted with the application. Despite deficiencies with such information, the plans accompanying the application (i.e. the survey plan, site/floor plans, etc.) and accompanying reports (e.g. the bushfire risk management plan, etc.) contain sufficient information for an assessment to identify hazards and constraints, noting that there are no trees on the site, and the site is not constrained by considerations such as views and natural hazards other than bushfires. The lack of a site analysis plan is therefore considered to be acceptable in this specific instance. | No |
| A1.2 For development other than for a single dwelling house and associated structures, a development application must detail, as appropriate:* Topographical features such as slope, existing natural trees and vegetation and opportunities for the creation of views and vistas.
* Opportunities to orientate buildings and private open spaces having regard to solar access, winds and views.
* The character of the surrounding development, particularly to setbacks and subdivision layout.
* The likely impact on surrounding development, particularly with regard to overshadowing, privacy and obstruction of views.
* The extent to which driveways and/or parking areas are likely to dominate the appearance of the development.
* The visibility, width and design speed of proposed roads and/or driveways.
* Bush fire, flooding and drainage constraints, easements for services and extent of contaminated land.
* The character of any adjacent public land/reserves, particularly the location of mature trees in relation to the proposed developments
 | Information submitted with the development application contains sufficient detail regarding relevant matters such as topographical/natural features, responsiveness to hazards and details of proposed structures and associated impacts. | Yes |
| A1.3 The proposed site layout responds to and implements the findings of the site analysis plan prepared in accordance with A1.1 and A1.2 (see example at Figure 3). | As indicated above, a site analysis plan has not been provided. Subject to recommended conditions, the proposed site layout is generally responsive to major site considerations. | No |

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| **G2: Sustainable Stormwater Management and Erosion/Sediment Control** |
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| **5.1 Stormwater** |
| **5.1.1 Minor and Major Systems Design** |
| **Performance Criteria**P1 Minor and major drainage systems are appropriately designed to:* Not increase the risk to life or safety of persons during a storm event. Note: Refer to Supporting Document 1: Sustainable Stormwater Technical Guidelines.
* Manage stormwater discharge from the development or work to safely convey stormwater flows.
* Discharge runoff from the development without adverse impacts on existing infrastructure and neighbouring properties.
* Ensure continuity of overland flow paths where possible.
* Ensure stormwater systems are designed in accordance with industry standards

Comment: The development is consistent with the above Performance Criteria. |
| **Acceptable Solutions** | **Proposal** | **Compliance** |
| *General*A1.1 Runoff from impervious areas must not be concentrated or directed onto neighbouring properties. | Subject to recommended conditions, the design of the proposed drainage system will not direct runoff onto adjoining sites. | Yes |
| A1.2 For residential and rural residential areas, drainage must be designed to cater for a 5 year Average Recurrence Interval (ARI) event. | The site is not located within a rural or residential area. | N/A |
| A1.3 For mixed residential/commercial, commercial and industrial development, the drainage must be designed to cater for a 10 year ARI event. | The site is not located within a commercial or residential area. The proposed drainage system us capable of satisfying the this requirement, subject to recommended conditions. | Yes |
| A1.4 Kerb and gutters are required where soil permeability is not sufficient to allow natural infiltration of stormwater runoff without causing adverse impacts onsite or to neighbouring properties. | The stormwater design does not rely upon soil permeability to avoid runoff impacts on surrounding sites. | N/A |
| A1.5 Runoff from roofs and other impervious areas shall be directed to an existing or proposed stormwater system when it can be proven to Council’s satisfaction that the design capacity of the system is not exceeded. | Runoff is to be directed to a drainage easement that adjoins the rear boundary of the site. Capacity and design of the system is subject to conditions recommended by Council’s Development Engineer. | Yes |
| A1.6 Where onsite infiltration / absorption is proposed for stormwater disposal, supporting geotechnical reports are submitted with a development application to assess the suitability of the proposal. | Not proposed; the development proposes an OSD system discharging to the public drainage system. | N/A |
| A1.7 Stormwater inlet structures must be designed with a blockage factor provision in accordance with the latest version of the Australian Rainfall and Runoff (ARR) guidelines. | Compliance is subject to conditions recommended by Council’s Development Engineer. | Yes |
| *Major System Drainage*A1.8 Major system drainage must be designed for a 100 year ARI event. | Compliance is subject to conditions recommended by Council’s Development Engineer. | Yes |
| A1.9 Trunk stormwater systems (e.g. open channels, large conduits and overland flow paths) are designed for storms up to 100 year ARI event. | Trunk stormwater systems are not shown, however conditions recommended by the Development Engineer will be required to identify major flow paths on revised stormwater plans, and how pit blockage or design storms will not result in the flooding of onsite units. | Yes |
| A1.10 The following overland flow paths shall be utilised as major system flow routes:* Roadways including footpath.
* Pathways.
* Parkland or open space.
 | As above. | N/A |
| A1.11 Flow paths must be designed to ensure a velocity depth product of less than 0.3m2/s for a 100 year ARI storm event. | As above. | N/A |
| A1.12 The continuity of overland flow paths must not be obstructed by fences, walls, footpaths and the like. | As above. | N/A |
| **5.1.2 Disposal of Stormwater from Development Sites** |
| **Performance Criteria**P2 Stormwater is appropriately accommodated in the design including:* Stormwater from roofed areas is collected, stored and/ or conveyed to appropriate discharge points or disposal areas.
* Paved/impervious areas associated with buildings and driveways are graded and drained to prevent the discharge of surface water onto adjoining land.
* Permeable areas are utilised to reduce stormwater runoff.

Comment: The development is consistent with the above Performance Criteria. |
| **Acceptable Solutions** | **Proposal** | **Compliance** |
| A2.1 Roof water is to be collected by gutter and downpipe systems, or other equivalent means, and conveyed to an approved discharge point in accordance with the requirements of Part 3.1.2 of the Building Code of Australia and AS 3500.3. This could be:1. A gutter or table drain in a road reserve, or
2. A stormwater easement or easement to drain water, or
3. A charged line system where (a) and (b) above are not available and the development site will have no more than two dwellings. Where a charged line system is proposed, the following must be included with the development application:
* Acknowledgement from adjoining property owners indicating a refusal to grant a drainage easement. The acknowledgement must indicate that a reasonable amount of compensation has been offered for the proposed drainage easement and that the advantages of creating as easement were explained.
* Demonstrate a minimum of 1.8m of fall between the roof gutters and the front boundary of the site.
* Demonstrate fall from the front boundary to the kerb line.
* Detailed design, inclusive of site plan and longitudinal section including all calculations, levels and further details of pits, gutters and maintenance facilities as required, or
1. A disposal/absorption trench, where (a), (b) or (c) above are not available, and soil conditions are suitable, or e) A water tank/on-site detention system with an overflow connected to a disposal method in (a), (b), (c) or (d), above.
 | Roof water is proposed to be collected via gutters and downpipes. The water is to be distributed via pits and pipes to three OSD systems towards the rear of the site. Two drainage connections are to be provided through an existing easement on an adjoining site (Lot 117 in Deposited Plan 1122371) and the creation of a second drainage easement on an adjoining site (Lot 40 in Deposited Plan 802671)Detailed stormwater plans (prepared by SETS Consultants) have been submitted, and conditions are recommended by Council’s Development Engineer to ensure that drainage arrangements are in accordance with Council specifications. | Yes |
| A2.2 Surface water from paved areas including driveways is to be directed to an approved discharge point (see A2.1) that minimises impact on adjoining land. | As above; subject to recommended conditions, proposed connection points will not adversely affect adjoining sites. | Yes |
| A2.3 Where the area of buildings, pavement and other impervious areas exceeds 65% of the site area, the proposal is to include details of the methods to be used to harvest rainwater and minimise increased runoff to surrounding land and public stormwater infrastructure. The details are to include assessment of pre-development and post development stormwater flows. | Not proposed. OSDs are to minimise runoff during peak storm events. | N/A |
| **5.1.3 Climate Change Controls** |
| **Performance Criteria**P3 Major system design must consider the impact of changes to rainfall intensity due to climate change.P4 Where relevant, major and minor system design must consider the impact of sea level rise.Comment: The development is consistent with the above Performance Criteria. |
| **Acceptable Solutions** | **Proposal** | **Compliance** |
| A3.1 Climate change impacts, such as changes to rainfall intensity, shall be considered in system design as per relevant policies and/or Australian Rainfall and Runoff Guidelines. | To be applied where required by conditions of consent. | Yes |
| A4.1 Sea level rise shall be considered in system design as per relevant policies and/or Australian Rainfall and Runoff Guidelines. |  | N/A |
| **5.1.4 Onsite Stormwater Detention** |
| **Performance Criteria**P3 Major system design must consider the impact of changes to rainfall intensity due to climate change.P4 Where relevant, major and minor system design must consider the impact of sea level rise.Comment: The development is consistent with the above Performance Criteria. |
| **Acceptable Solutions** | **Proposal** | **Compliance** |
| A5.1 Onsite stormwater detention is to be sized to match pre-development peak flow rates for the 5, 20 and 100-year ARI rain events for the site. | To comply, subject to recommended conditions by Development Engineer. | Yes |
| A5.2 For development other than subdivision, pre and post-development peak flow calculations must be based on the:* Impervious percentages in Table 1, or
* Actual impervious surface area as detailed on development plans, whichever is greater.

 | Stormwater peak flow calculations are to be based upon development plans, which shows impervious area of approximately 93.6%. To be subject to conditions in the event of approval. | Yes |
| A5.3 For subdivisions, pre and post development peak flow calculations must be based on the impervious percentages in Table 1. | Subdivision is not proposed. | N/A |
| A5.4 Onsite stormwater detention design must consider downstream boundary conditions for the 100-year ARI level of the receiving water. | Compliance is subject to conditions recommended by Council’s Development Engineer. | Yes |
| A5.5 Detention storage must be located at a level above the 5-year ARI flood level. | The site is not flood prone. | N/A |
| A5.6 If onsite stormwater detention is provided in landscaped areas, the desirable maximum depth of ponding under design conditions is 300mm. | OSD systems are proposed beneath driveway areas. | N/A |
| A5.7 Despite A5.6, the desirable maximum depth of ponding under design conditions can be increased to 1200mm provided that:* Site slopes of the basin are 1:6 or shallower (less than 1:6); or
* The provided storage is fenced off.
 | As above. | N/A |
| A5.8 For subdivisions, onsite stormwater detention shall be:* Designed at the subdivision stage. Constructed at the individual dwelling stage where OSD is proposed to be provided on each lot.
* Constructed at the subdivision stage where OSD is proposed to be provided through dedicated detention storage.
 | Subdivision is not proposed. | N/A |
| A5.9 50% of any retention volume can contribute towards the onsite stormwater detention volume required for the development, where continual reuse of the retention volume can be demonstrated. | Not applicable. | N/A |
| **5.2.1 Erosion and Sediment Control** |
| **Performance Criteria**P6 The development or work will not:* + Cause erosion and/or siltation.
	+ Have an adverse impact on receiving waterways from increased concentrations and loads of sediment.

Comment: The development is consistent with the above Performance Criteria. |
| **Acceptable Solutions** | **Proposal** | **Compliance** |
| A6.1 Where vegetation exists on the site, buffer zones of vegetation shall be retained along the boundaries of the site where practicable, particularly those adjacent to creeks and street gutters. | There is no vegetation on the site. | N/A |
| A6.2 Sediment and erosion control measures shall not adversely impact on stormwater management measures of the site or any existing public drainage structures or systems. | Compliance is subject to conditions recommended by Council’s Development Engineer. | Yes |
| **5.2.2 Stormwater Retention and Reuse** |
| **Performance Criteria**P7 The development provides adequate retention storage where there is an increase in impervious surface area.P8 The reuse of stormwater is optimised to provide an alternative water supply.Comment: The development is consistent with the above Performance Criteria. |
| **Acceptable Solutions** | **Proposal** | **Compliance** |
| A7.1 The volume of retention storage provided is to be equal to or greater than:[storage depth at Table 2] X [increase in impervious surfaces compared to predevelopment]. | Compliance is subject to conditions recommended by Council’s Development Engineer. | Yes |
| A8.1 Residential development shall install rainwater tanks to meet a portion of supply such as outdoor use, toilets, laundry. | Residential development is not proposed. | N/A |
| A8.2 Any overflow from rainwater tanks shall be directed into an existing stormwater system where possible, alternatively the overflow will be managed so that it does not cause nuisance to neighbouring properties. | Rainwater tanks are not proposed. | Yes |
| A8.3 Stormwater use within public open space (e.g. irrigation, street cleaning, public amenities) is encouraged. | Not applicable. | N/A |
| **5.2.4 Large Scale Development** |
| **Performance Criteria**P10 Large scale development mitigatesadverse impacts by:* Minimising post development pollutant loads to not unduly impact on the quality of receiving waterways.
* Protecting stream stability and habitats through retention, infiltration and detention to limit post development flows.

Comment: The development is consistent with the above Performance Criteria. |
| **Acceptable Solutions** | **Proposal** | **Compliance** |
| A10.1 For development within Sydney’s drinking water supply catchments, a neutral or beneficial effect must be demonstrated in accordance with the State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011. | **Note:** The SEPP has been repealed and replaced with SEPP (Biodiversity and Conservation) 2021.The site is not within a Sydney drinking water catchment. | N/A |
| A10.2 For development outside Sydney’s drinking water supply catchments, pollutant load reduction must be a minimum reduction of the post development average annual load of pollutants in accordance with Table 3, and the following as relevant:* For greenfield sites or sites draining to a natural stream of 3rd order or lower, the 1.5 year ARI pre-development peak discharge must be maintained; and
* For development discharging to a natural stream, the post development duration of stream forming flows must be no greater than a stream erosion index of 2; and
* For development discharging to a tidal area or natural watercourse, outlets must be designed to limit erosion and sedimentation at the discharge point; and
* For development discharging to St Georges Basin, Swan Lake, Lake Conjola, Burrill Lake, Lake Tabourie, Willinga Lake and Wollumboola Lake, a higher Total Phosphorus reduction target of 65% must be achieved; and
* For development discharging into an area of significant biodiversity value, the post-development residual pollutant concentrations must not exceed the ecological trigger values listed in the Australian and New Zealand Guidelines for Fresh and Marine Water Quality; and
* Uncoated metal (i.e. copper etc) roofs, facades and/or downpipes are will not be supported due to heavy metal concentrations in stormwater runoff from these surfaces being harmful to receiving waterways.
 | The site is not within a greenfield area and the proposed development will not discharge to natural waterways, areas of biodiversity value. Uncoated metal roofs are however not proposed. | N/A |
| **5.2.5 Design and Maintenance of Stormwater Treatment Measures** |
| **Performance Criteria**P11 Stormwater treatment measures for large scale development are appropriately designed and are able to be maintained appropriately to ensure their optimal efficiency including:* Protection of permanent stormwater treatment against siltation/ sedimentation and clogging during construction.
* Not unduly increasing health and safety risks.
* Not unduly increasing maintenance requirements of stormwater infrastructure by Council.
* Design in accordance with best industry practices.
* Ensuring the ongoing reduction of stormwater pollutants.

Comment: The development is consistent with the above Performance Criteria. |
| **Acceptable Solutions** | **Proposal** | **Compliance** |
| A11.1 Where practicable, trunk drainage is to be provided as a naturally vegetated stable channel. | Trunk drainage from the site is to connect to the easements adjoining the rear of the site. | Yes |
| A11.2 Where practicable due to adequate catchment area, constructed wetlands are preferred over the use of bioretention basins and water quality ponds. The preference between a water quality pond and bioretention device will depend on site specific constraints. | Not proposed. | N/A |
| A11.3 An Operation and Maintenance Plan shall be submitted to Council for all stormwater treatment measures proposed, whether the asset is to remain in private ownership or to be handed over to Council. | To be satisfied by recommended conditions of consent if installed. | Yes |
| A11.4 System design shall allow for maintenance (i.e. access and room to operate safely) at all times. | As above. | N/A |
| A11.5 Stormwater treatment measures must not be connected until the majority of catchment infrastructure is completed and landforms stabilised with impervious or fully established grassed surfaces. Bioretention devices and constructed wetlands must be established offline from inflows until they are fully established. | As above. | N/A |
| A11.6 Where the development is staged, sacrificial zones must be included in the design of the stormwater treatment measures. Sacrificial zones are to be rectified upon completion of development at the developers cost. | As above. | N/A |
| A11.7 Structural stormwater treatment measures must be able to bypass flows in excess of the design discharge with negligible afflux resulting from over topping or blockage of the device. | As above. | N/A |
| A11.8 Trash racks are generally preferred over proprietary gross pollutant traps (GPTs) by Council. In some circumstances Council may consider proprietary GPT devices where it can be demonstrated that* The device can achieve the desired treatment performance; and
* The maintenance costs are less than that of an equivalent conventional device; and
* No specialist equipment is required to carry out maintenance activities; and
* Major consumable parts e.g. filters and cartridges are not required to be purchased by Council on a regular basis. Where a proprietary GPT is supported by Council, the developer must provide documentation from the supplier providing evidence that the proposed device has been appropriately sized for the contributing catchment.
 | As above. | N/A |
| A11.9 In the event of a stormwater discharge, stormwater treatment structures must not allow the release of any previously trapped material. | As above. | N/A |
| A11.10 Stormwater treatment measures must consider mosquito control in the design, including:* Permanent water ponding;
* Water depth;
* Exposure to sunlight and wind; and
* Proximity to residential development.
 | Not proposed. | N/A |
| A11.11 All filter media used in bioretention stormwater treatment measures must meet the current specifications for Filter Media in Adoption Guidelines for Stormwater Biofiltration Systems or a demonstrated and approved equivalent and be verified by a soil laboratory registered by the National Association of Testing Authorities. | Not proposed. | N/A |
| A11.12 Design of stormwater treatment measures must be in accordance with Supporting Document 1: Sustainable Stormwater Technical Guidelines. | Complies; no issue with the documentation has been raised by Council’s Development Engineer. | Yes |
| A11.13 Development adjacent to a watercourse or stormwater drain addresses environmental impact on the waterbody. | The site is not in close proximity to a waterbody or watercourse. | N/A |
| A11.14 Constructed wetlands and bioretention basins must be located in a treatment train approach immediately downstream of a sediment basin/forebay that:* Has been sized to capture approximately 75% of coarse sediment; and
* Is offline from the stormwater network to allow flows exceeding the capacity of the piped stormwater network to bypass the treatment devices.

The sediment basin/forebay can be either wet or dry. A trash rack can be incorporated into the sediment basin inlet structure provided the invert of the trash rack is above the permanent water level of the pond. | Not proposed. | N/A |
| A11.15 Bioretention devices must be designed in accordance with the latest version of the Adoption Guidelines for Stormwater Biofiltration Systems (CRC for Water Sensitive Cities) and Facility for Advancing Water Biofiltration (FAWB) Guidelines. | Not proposed. | N/A |
| A11.16 Constructed wetlands must be designed in accordance with the latest version of the Melbourne Water Wetland Design Manual or a demonstrated and approved equivalent. | Not proposed. | N/A |

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| **G3: Landscaping Design Guidelines** |
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| **5.1 Controls** |
| **Performance Criteria**P1 Development minimises site disturbance and preserves the existing landscape elements which make a positive contribution to the character of the area, through appropriate site design and by retaining mature shade trees.Comment: The development is consistent with the above Performance Criteria. |
| **Acceptable Solutions** | **Proposal** | **Compliance** |
| A1.1 Existing trees and landscape elements which make a positive contribution to the character of the area, especially semimature/mature shade trees, should be retained and integrated into the proposal. | There are no existing trees on site. | N/A |
| A1.2 Proposals to remove existing trees and landscape elements must propose suitable landscaping to retain streetscape character. | As above. | N/A |
| A1.3 Tree planting and landscaping considers amenity by providing summer shade and winter sun. | Tree planting includes species that will be capable of providing summer shade, while still enabling solar access during winter. | Yes |
| **Performance Criteria**P2.1 The landscape plan:* Is designed to meet user requirements taking into account maintenance, exercise opportunities, shade provision and aesthetic quality.
* Enhances the appearance of the streetscape through the provision of substantial landscaping to the street frontage.
* Integrates the development into the streetscape.

P2.2 The landscape plan:* Specifies the location and species of trees, shrubs and ground cover.
* Uses vegetation types and landscaping styles that blend the development in with the streetscape.
* Complements the functions of the street and reinforce desired traffic speed and behaviour.
* Is an appropriate scale relative to both the street reserve width and the building bulk.
* Considers personal safety (safety by design) by ensuring good visibility and lighting at dwelling entries, along paths and driveways and avoids shrubby landscaping near thoroughfares.
* Contributes to energy efficiency and amenity by providing substantial shade in summer especially to west facing windows and open car park areas and admitting winter sunlight to outdoor and indoor living areas.
* Improves privacy and minimises overlooking between dwellings.
* Minimises risk of damage to proposed buildings, overhead and underground power lines and other services.
* Minimises the risk of damage due to bushfire if the land is within a bushfire prone area as mapped by Council.
* Retains or plants mature shade trees to assist in reducing the urban heat effect.
* Reduces the removal of native vegetation and dominant locally occurring native trees.

Comment: The development is consistent with the above Performance Criteria. |
| **Acceptable Solutions** | **Proposal** | **Compliance** |
| A2.1 For development other than a new dwelling house or alterations and additions to a dwelling house, landscaping must be in accordance with an approved landscape plan for the site, prepared by a suitably qualified landscape professional. | Amended landscape plans have been provided. The design of some landscape areas (particularly at the rear of the site) are inconsistent with the submitted architectural plans (as modified). A condition is therefore recommended that will require modifications to the construction plans to ensure consistency with the landscape layout shown on the latest issue of the landscape plan. | Yes |
| A2.2 The landscape plan must:* Relate to the site plan for the proposed development.
* Address P2.1 and P2.2.
* Include the landscape plan and planting schedule requirements at Section 6.1 of this Chapter, as appropriate to the scale of the development.
 | As above. | Yes |
| **Performance Criteria**P3 Paving is designed to be fit for the intended purpose, low maintenance and complementary to the development.Comment: The development is consistent with the above Performance Criteria. |
| **Acceptable Solutions** | **Proposal** | **Compliance** |
| A3.1 Where paving is provided to driveways, walkways and in the vicinity of garbage bin enclosures, letterboxes and clotheslines such paving should:* Use materials and colours which complement the development.
* Feature nonslip finishes and be suitable for use by people with disabilities.
* Minimise maintenance requirements where appropriate and practicable, taking into account the ownership of and proposed management of the landscaped area, particularly in bushfire prone areas.
 | Paved areas adjacent to landscaped areas are proposed to be finished using concrete surfaces; such materials are to be low maintenance and slip resistance, noting that they are designed to be capable of supporting the movement of both persons and vehicles of varying sizes and weights.  | Yes |
| **Performance Criteria**Street trees are included and retained/replaced, where appropriate, including in car parks, to provide shade and improve streetscape amenity.Comment: The development is consistent with the above Performance Criteria. |
| **Acceptable Solutions** | **Proposal** | **Compliance** |
| A4.1 Street tree planting that provides summer shade, winter sun and enhances site lines for pedestrians shall be included and retained/replaced, where appropriate. | Street trees are not proposed, as the placement of such vegetation within the road reserve is limited by electricity infrastructure within the street that includes elevated 11kV electricity lines. | N/A |
| A4.2 Street trees and trees within the road reserve shall be positioned to maximise shade opportunities for pedestrians and car parking and minimise disturbance to service lines. | As above | N/A |
| A4.3 Shade trees should be provided at a rate of one tree per row of six (6) car parking spaces or through the provision of shade to at least 50% of the car park. | As above. | N/A |

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| **G7: Waste Minimisation and Management Controls** |
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| **5 Controls** |
| **Performance Criteria**P1 The development appropriately accounts for waste generation in a way that meets the objectives of this Chapter.Comment: The development is consistent with the above Performance Criteria. |
| **Acceptable Solutions** | **Proposal** | **Compliance** |
| A.1.1 A waste management plan is submitted with the development application in accordance with the Waste Minimisation and Management Guidelines. | A WMP has been submitted, however it has not been updated to reflect amendments made to the plans (i.e. the placement of an additional waste storage area, and the distances of storage areas from some proposed units). An amended WMP is to be prepared in accordance with waste management guidelines to reflect the updates to the proposal. A condition is also recommended that will require one additional communal waste collection point to be provided, in order to reduce travel distances from units to a collection point in accordance with the guidelines. | Yes |

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| **G20: Industrial Development** |
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| **5.1 Site Suitability** |
| **Performance Criteria**P1 The development is compatible with the character of the site.P2 The site has sufficient area and dimensions to accommodate all areas necessary for the proposed industrial development.P3 Adjoining sites are not be negatively impacted by the proposed development and drainage works.Comment: The development is generally consistent with the above Performance Criteria. |
| **Acceptable Solutions** | **Proposal** | **Compliance** |
| A1.1 Cut and fill on the site does not exceed 1.0m. | Except for excavation required for footings and stormwater works, cut and fill for structures is limited to approximately 600mm. | Yes |
| A1.2 A site plan and site analysis plan is submitted with the development application. | A site analysis plan has not been submitted. Despite the lack of such information, the other information provided to Council (i.e. a survey plan, site plan, etc.) is otherwise sufficient for an assessment to identify hazards and constraints, noting that there are no trees on the site, and the site is not constrained by considerations such as views and natural hazards other than bushfires. The lack of a site analysis plan is therefore considered to be acceptable in this specific instance. | No |
| A2.1 A site plan showing location and dimensions of buildings, parking area, service vehicle areas, storage and landscaping is submitted with the development application. | The submitted site and floor plans contain sufficient detail regarding the placement of structures and services. There are discrepancies between site and landscape plans with regard to the size and placement of landscaped areas on the site; a condition is therefore recommended that will require amendments to construction plans to show landscaped areas as shown on the landscape plans. | Yes |
| A3.1 Adequate drainage is designed and provided to ensure stormwater is discharged to an approved discharge point, easement or road drainage system. | Capable of compliance, subject to conditions recommended by Council’s Development Engineer. | Yes |
| A3.2 A drainage plan is submitted with the development application. | Stormwater information (including plans and a Concept Water Cycle Management Plan) have been submitted as part of the application package; these will be subject to conditions of consent recommended by Council’s Development Engineer. | Yes |
| **5.2 Building Setbacks** |
| **General Controls****Performance Criteria**P4 The building setbacks are consistent with adjoining development and enable:* the efficient use of the site;
* vehicle manoeuvring areas where vehicles can enter and exit the site in a forward direction;
* visible staff and visitor parking;
* an attractive streetscape character;
* the location of utility services, storage and drainage paths; and
* Unimpeded development of adjacent sites.

Comment: The development is generally consistent with the above Performance Criteria. |
| **Acceptable Solutions** | **Proposal** | **Compliance** |
| A4.1 A minimum front setback of 10m is provided. | Refer to control A5.2 for development within Flinders Industrial estate.  | N/A |
| A4.2 A minimum secondary setback of 5m is provided. | The site does not have a secondary frontage. | N/A |
| A4.3 The side and rear setbacks satisfy:* The fire safety construction requirements of the Building Code of Australia for the proposed building, and
* Site development requirements for drainage, landscaping, vehicle access and manoeuvring.
 | Zero side and rear setbacks are proposed. In the event of approval, subject to conditions the development is capable of satisfying fire safety construction requirements as stipulated by the BCA and NCC.The proposed setbacks are also capable of providing sufficient space for drainage facilities.The submitted swept path plans indicate that the setbacks of the building are insufficient for the onsite manoeuvring of articulated vehicles, therefore a condition is recommended that will prohibit access to the site by articulated vehicles. | Yes |
| **Additional Area Specific Controls****Performance Criteria**P5 The building setbacks are satisfactory to Council in the Flinders Industrial Estate, South Nowra.Comment: The development is consistent with the above Performance Criteria. |
| **Acceptable Solutions** | **Proposal** | **Compliance** |
| A5.1 Where a service road to Albatross Road applies, a minimum front setback of 10m is provided. | The site does not front Albatross Road. | N/A |
| A5.2 For all other sites, a minimum front setback of 15m and minimum secondary setback of 10m is provided. | Proposed setbacks:* To café roof: 12.98m
* To building line: 15m

While the wall setbacks comply with the minimum 15m requirement specified by control A5.2 (see above), the roof above the outdoor dining area of the café has a minimum 12.98m setback to the road boundary.The element which breaches the 15m setback requirement is an open/lightweight element, as it is an open structure that is to be finished in contrasting colours and in a location that is well below the roof parapet at the front of the building. A large landscaped area is proposed within the front setback (and which will be further increased in size a result of the condition requiring deletion of the outdoor dining area) that will also include two large trees, which will further screen the café roof and filter its visual impact from the primary domain.The element breaching the minimum 15m setback will subsequently not add to the height, bulk and scale of the development, and will not adversely affect the character of the streetscape. The variation is therefore considered to be satisfactory and supportable on merit in this specific instance.Secondary setback controls do not apply, as the site has only one road frontage. | No |
| A5.3 Only landscaping and minimal car parking are provided within the front/primary and secondary setbacks. | Landscaped areas, vehicular access and carparking (i.e. seven (7) spaces; which equates to 6.1% of all proposed parking) and a substation are proposed within the front setback. Including an outdoor dining area that is to be deleted by condition, 43.6% of the front setback areas will consist of landscaped area that contains a number of vegetation types.The proportion of landscaping contained within the front setback is considered to be appropriate in the context of this specific proposal. | Yes |
| **Performance Criteria**P6 The building setbacks are satisfactory to Council in the South Ulladulla Industrial precinct.Comment: The subject site is not located within the South Ulladulla Industrial precinct; the performance criteria therefore does not apply to the proposal. |
| A6.1 Sites west of the Princes Highway provide a minimum front setback of 18m. | Refer to control A5.2 for development within Flinders Industrial estate. | N/A |
| A6.2 Council may consider a reduced minimum front setback of 12.5m if it can be demonstrated that the mass and bulk of the main structure will be reduced through the addition of a lightweight structure (eg, showroom or office). | As above. | N/A |
| **Performance Criteria**P7 The building setbacks are satisfactory to Council in South Nowra (Bellevue Street, Prosperity Street, Jellicoe Street, Central Avenue, Quinns Lane and Browns Road, South Nowra).Comment: The subject site is not located within the nominated streets; the performance criteria therefore does not apply to the proposal. |
| A7.1 The 10m front setback (the concessional zone) may be encroached into if it can be demonstrated that the development will not negatively impact on the amenity or character of the area. | Refer to control A5.2 for development within Flinders Industrial estate. | N/A |
| A7.2 The concessional zone has a minimum front setback of 6m and an average minimum front building line of 8m. | As above. | N/A |
| A7.3 Buildings within the concessional zone do not reduce the ability of service vehicles to manoeuvre onto, around and out of the site. | As above. | N/A |
| A7.4 Buildings within the concessional zone are single storey in height. | As above. | N/A |
| A7.5 The main use of the concessional zone is for landscaping. Car parking and manoeuvring areas are discouraged. | As above. | N/A |
| **5.3 Building and Site Design** |
| **Additional Area Specific Controls****Performance Criteria**P8 The building has a height and bulk consistent with the streetscape.Comment: The development is consistent with the above Performance Criteria. |
| **Acceptable Solutions** | **Proposal** | **Compliance** |
| A8.1 The building complies with the height limits in the Shoalhaven LEP 2014. | Maximum permitted height pursuant to cl. 4.3(2A): 11 metres.Maximum proposed building height: 8 metres (sign RL 63.1 to corresponding RL 55.1 ground level) | Yes |
| A8.2 If Shoalhaven LEP 2014 does not specify a height limit, the building does not exceed 11m above the natural ground level. | As above. | Yes |
| **Performance Criteria**P9 Visual elements are introduced to reduce the bulk, height and scale of the building.Comment: The development is consistent with the above Performance Criteria. |
| A9.1 The elevation closest to the road includes additional design relief or a lower scale building form. | Additional design relief is to be provided at the front of the building in the form of a contrasting parapet roof and signage, in addition to a lower roof feature that is to wrap around the northeast and southeast parts of the proposed café. | Yes |
| **Performance Criteria**P10 The front of the building addresses the road frontage.Comment: The development is consistent with the above Performance Criteria. |
| A10.1 The main entry to the building is easilyidentifiable from the street and directly accessible through the front of the building. | The proposed development consists of multi-tenancy buildings with individual pedestrian and vehicular access points. The driveway entrance points that connect those tenancies to the road frontage are clearly identifiable and accessible. | Yes |
| A10.2 Street numbering that is at least 300mm high and easily visible for pedestrians and motorists in identifying the premises is provided. | Capable of compliance via conditions in the event of approval. | Yes |
| A10.3 Showroom display areas and other low scale building elements are located at the front of the building and face the road frontage. | 'The ‘café’ is to be located at the front of the site and will address the Norfolk Avenue frontage. | Yes |
| **Performance Criteria**P11 The design incorporates the use of materials appropriate to the emerging character of the locality, with innovation being encouraged.Comment: The development is generally consistent with the above Performance Criteria |
| A11.1 The building surfaces, texture, coloursor material arrangement are sympathetic to the emerging character of the area. | External finishes are to consist of precast concrete, cladding and metal doors and windows. Such materials and associated colours are consistent with existing and likely future development within the Flinders Industrial Estate. | Yes |
| A11.2 Building materials provide interest and variation to complement the streetscape. | The proposed colours and materials, particularly on the front building elevations will provide interest and variation to the Norfolk Avenue streetscape. | Yes |
| A11.3 Building design does not include large unbroken expanses of wall or building mass. | The development application proposes a variation, in that large unbroken expanses of walls are proposed along the side elevations addressing the northern and southern boundaries.The visual impact of the development will be reduced to the north, as a result of existing development at 15 Norfolk Avenue that is already built with a zero-side setback to the southern boundary. While the location of development on the adjoining site to the south (i.e. 19 Norfolk Avenue) will allow for the variation to be highly visible from the Norfolk Avenue road reserve, the development controls for the locality likely envision the setbacks of future development to be more akin to that proposed by the subject DA.It is agreed with the SEE’s arguments that there are numerous other examples within the Flinders Industrial Estate where industrial developments have been permitted with large unbroken expanses on/close to side boundaries; a review of the area noted examples including:* 11 Norfolk Avenue
* 35 Norfolk Avenue
* 10 Tom Thumb Avenue
* 28 Trim Street

It is also agreed that the variation will not adversely affect the amenity of surrounding sites (noting that such sites either contain other industrial developments or will undeveloped for the foreseeable future), nor defence against bushfires.While issues are noted with regard to onsite manoeuvring by articulated vehicles, such an issue is unrelated to the variation proposed by this DA.The proposed variation is therefore considered to be satisfactory and supportable on merit in this specific instance. | No |
| A11.4 Council will not agree to the use of “zincalume” material on any industrial building if an adverse impact on amenity or traffic safety will result and/or if substantial glare nuisance occurs; the amenity of workers on the site is of primary importance.Council may consider the use of “zincalume” where it can be demonstrated that will not have substantial impact.” | Not proposed. | Yes |
| **Performance Criteria**P12 The development recognises and implements energy and water conservation principles.Comment: The development is consistent with the above Performance Criteria. |
| A12.1 The industrial development is designed to reduce reliance on energy consumption and water usage. | The development has been designed to minimise reliance upon energy and water consumption where necessary. A Section J compliance report has been prepared for the café, and compliance with this document will be conditioned in the event of approval. | Yes |
| **Performance Criteria**P13 The building design is energy efficient and provides good solar access to the development and surrounding development.Comment: The development is consistent with the above Performance Criteria. |
| A13.1 Direct solar access must be maintained for at least 3 hours between 9am and 3pm on June 21 to:* Existing rooftop solar systems;
* 10m² of north facing roofs where a rooftop solar system is not yet in place.
 | The proposed development will not result in overshadowing of roofs where future photovoltaic (PV) systems may be installed, on adjoining sites, noting that there are no existing PV systems on surrounding sites (refer to ***figure 8*** within the planning assessment report). | Yes |
| A13.2 A reliable and accurate shadow diagram may be required to demonstrate the impact of shadows resulting from existing and proposed building works between 9am and 3pm on June 21. | Solar access plans showing overshadowing impacts for 22 September rather than for June. Despite such a deficiency, the layout of development on the adjoining industrial site to the south and the proximity of the subject site to the nearest residential development is such that the proposal will not adversely affect the amenity of sensitive areas. | No |
| **Performance Criteria**P14 The roof/wall design and materials avoid glare hazard to traffic users in the adjacent road system.Comment: The development is consistent with the above Performance Criteria. |
| A14.1 Roof and wall materials (especially uncoloured or light-coloured metal cladding) do not cause excessive glare to traffic using the adjacent roads. | Subject to conditions of consent, the proposed external colours and materials will not cause excessive glare. | Yes |
| **Performance Criteria**P15 Car parking is located to avoid conflict and promote safetyComment: The development is consistent with the above Performance Criteria. |
| A15.1 Visitor and customer car parking is separated from delivery and operational vehicle movements. | Onsite car parking will be separate from the designated loading areas of individual tenancies. | Yes |
| **5.4 Provisions for Fences and Screen Walls** |
| **Performance Criteria**P16 The development provides fences and walls which:* + are attractive and blend with landscaping on the premises;
	+ consider location, height, materials and colours to provide compatibility with and compliment or enhance the streetscape;
	+ Do not impede the sight lines of vehicles using the driveway.
	+ provide effective screening of external storage areas or incompatible uses on the site, and
	+ Assist in highlighting entrances and paths.

Comment: The development is consistent with the above Performance Criteria. |
| **Acceptable Solutions** | **Proposal** | **Compliance** |
| A16.1 Fencing forward of the front building lineis of an open form and a maximum of 2.4m in height above the natural ground level. | 2.4-metre-high chain link fencing is proposed along the southern elevation forward of the building line. Front boundary fencing is not proposed. | Yes |
| A16.2 Fence materials do not conceal the area between the road frontage and the building. | As above. | N/A |
| A16.3 Fences do not obstruct sight distances for traffic, the entry and exit of vehicles or pedestrian safety. | As above. | N/A |
| A16.3 Fences do not obstruct sight distances for traffic, the entry and exit of vehicles or pedestrian safety. | As above. | N/A |
| A16.5 Where a site has direct frontage to the Princes Highway or other major road, gates are located away from the front boundary to allow the largest vehicle to normally use the premises to park onsite while the gate is opened. | As above, noting that the site does not adjoin a major road. | N/A |
| A16.6 Solid fences or screen walls are located along the side and rear site boundary (and around external storage areas) as long as they are behind the front building line. | 2.4-metre-high chain link fencing is proposed within building openings along the rear elevation. | N/A |
| A16.7 Fence materials do not cause excessive glare to traffic using the adjacent roads. | No fencing is proposed on the front boundary. | N/A |
| A16.8 The location of fencing does not interfere with utilities, services, operational requirements or other sites. | Internal fence placement (such as around the substation) will be provided for safety purposes, and as such will not interfere with onsite activities. | Yes |
| **5.5 Landscaping** |
| **Performance Criteria**P17 Landscaping softens the building/site when viewed from public roads and provides a landscaping buffer where an industrial area is adjacent to residential areas.Comment: The development is consistent with the above Performance Criteria. |
| A17.1 Landscaping is provided between the front boundary and the building line. | Landscaped areas of varying sizes are located within the front setback. | Yes |
| A17.2 Defined landscaping beds are a minimum of 1m in width not including kerbs or borders. | Landscaped areas calculated within the front setback exceed one metre in width. | Yes |
| A17.3 Deep soil plantings, low maintenance planting and low water use species are provided where appropriate. | The proposed landscape layout includes native shrubs and trees of varying sizes. | Yes |
| A17.4 Landscaping does not interfere with the sight lines required for pedestrian and vehicles both internal and external to the site. | Aside from large trees (which are to consist of Eucalyptus species with high-spreading canopies), landscaping within trafficked areas is to consist of species with mature heights of between 600mm-1m. Such landscaped heights will not affect traffic sightlines or movements, and the maintenance of such landscaping will be subject to conditions in the event of approval to prevent overgrowth and adverse impacts on internal traffic circulation. | Yes |

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| **G21: Car Parking and Traffic** |
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| **5.1 Car Parking Schedule** |
| The car parking rates in the following car parking schedule is a guide to typical minimum requirements that need to be provided onsite. |
| **Acceptable Solutions** | **Proposal** | **Compliance** |
| **Required:*** Industry
* 1 space per 100m2 of GFA.
* Café
* 1 space per 6.5m2 of public dining area
 | Required parking:* Proposed GFA of site (excluding café)
* Excluding mezzanines: 5,467.2m2
* Including mezzanines: 6,342.5m2
* Required parking spaces:
* Excluding mezzanines: 54.7 (rounded up to 58)
* Including mezzanines: 63.4 (rounded up to 64)
* Proposed area of café public dining area: 37.2m2
* Minimum parking spaces required: 5.7 (rounded up to 6)

Total spaces required: 64-70Total spaces proposed: 115**Note 1:** Given that proposed parking rates significantly exceed minimum requirements, a condition is recommended that will require some parking spaces to be converted to communal waste storage areas. The provision of one additional waste storage areas will likely require the removal of three spaces, therefore a condition will be imposed requiring that at least 112 onsite car parking spaces be provided (as opposed to the 115 currently proposed). **Note 2:** The outdoor dining area excluded from calculations, as this area is to be deleted via condition (refer to the planning assessment report). | Yes |
| **5.3 Parking, Layout and Dimensions** |
| **General Controls****Performance Criteria**P1.1 The car park area:* Provides safe and efficient circulation, manoeuvring and parking of vehicles.
* Ensures that a vehicle can safely enter and leave the parking space in no more than two manoeuvres.
* Minimises potential for pedestrian conflict.
* Ensures effective and safe use of speed humps.
* Ensures efficient operation and safety of parking and loading areas through appropriate signage.
* Includes appropriate lighting to ensure the safety of persons using, and security of vehicles parked within.

P1.2 Any substantial loss of on-street carparking spaces are replaced within the development site.Comment: The development is consistent with the above Performance Criteria. |
| **Acceptable Solutions** | **Proposal** | **Compliance** |
| A1.1 Car parking spaces are provided on-site and are readily accessible from the road frontage of the development. | All car parking spaces are located within site boundaries and are accessible via the proposed Norfolk Avenue crossover. | Yes |
| A1.2 Where a substantial loss of on-street car parking directly related to a development is proposed, these spaces are to be replaced on site. | Some on-street parking is expected to be lost as a result of the placement of the driveway layback and crossover; such a loss of parking is not considered to be significant, and replacement on-street parking is therefore not required. | N/A |
| A1.3 Entrance to parking areas must not be accessed through buildings or carports. | Access to parking will be obtainable directly via the front of each industrial tenancy. | Yes |
| A1.4 The proposed parking layout, including but not limited to access design, space dimensions, offsets, ramps, aisle dimensions, speed humps (and the like), shall be designed in accordance with AS2890. | Compliance is subject to conditions in the event of approval. | Yes |
| A1.5 Stack parking of vehicles will only be supported when part of a mixed use, commercial, managed residential development or a mix of these uses, and where all the following criteria are met:* + A management plan is in place.
	+ No more than two (2) cars are permitted to park in a stacked arrangement.
	+ The parking spaces in a stack configuration must be connected to a single unit or commercial shop or office.
* Have a maximum longitudinal grade of 5% and a maximum crossfall of 6.25%.
 | Stack parking is not proposed. | N/A |
| A1.6 Dead-end parking aisles longer than 15m are not permitted, unless used in situations of low vehicle turnover, such as employee parking and are to be sign posted accordingly. | Dead end parking aisles do not exceed 15 metres in length. The ‘avenues’ provided throughout the site are not considered to be parking aisles, as they provide driveway access to tenancy-dedicated loading and parking spaces. | Yes |
| A1.7 Redundant areas within car parks should be considered for motorcycle parking. A maximum of 2% of total car parking provision can be provided as motorcycle parking. | Motorcycle parking is not proposed. | N/A |
| A1.8 The location and availability of parking spaces must be clearly marked with line marking and signage (if restrictions are required to regulate or improve safety and/or efficiency) and must be installed in accordance with relevant standards. | Proposed car parking spaces are capable of being clearly indicated by markings and signage. Satisfaction of the control is capable of being achieved by conditions in the event of approval. | Yes |
| A1.9 Vehicle entry and exit points to the site and desired traffic movements should be clearly marked with pavement arrows (preferably in a highly visible colour such as white (or yellow if there is a contrast issue)) and signage. | Subject to conditions in the event of approval. | Yes |
| A1.10 Lighting must be incorporated into car park areas where required. | Subject to conditions in the event of approval. | Yes |
| **Performance Criteria**P2 To ensure adequate provision of car parking is available for people with a disability.Comment: The development is consistent with the above Performance Criteria. |
| **Acceptable Solutions** | **Proposal** | **Compliance** |
| A2.1 Where buildings and car parks are required to be accessible, the development and design will comply with the requirements of Part D3 of the Building Code of Australia. | Subject to conditions in the event of approval. | Yes |
| A2.2 Where access for people with a disability is expected, a minimum of 1 accessible space is required and thereafter one additional space per 100 spaces or part thereof. | Proposed number of car parking spaces: 115Required number of accessible car parking spaces: 2 (rounded up from 1.15)Proposed number of accessible car parking spaces: 2 | Yes |
| A2.3 For Class 6 and 9b buildings:* Up to 1000 car parking spaces – 1 accessible space is require for every 50 car parking spaces or part thereof.
* In excess of 1000 car parking spaces - 1 accessible space is required for each additional 100 car parking spaces or part thereof.
 | The proposed café is classified as a Class 6 buildingRequired parking for café: 17 spacesProposed number of accessible car parking spaces: 2 | Yes |
| A2.4 Accessible parking shall be:* Compliant with AS2890. Associated kerb ramps and path access must also be provided and need to comply with AS2890 and AS1428.
* Located close to the entry of the building to minimise travel distances and maximise accessibility.
* Located at ground level.
* Identified through the use of signs, logos and colouring.
 | The 2 car parking spaces are located at the front of the site in close proximity to the café.Necessitated compliance with AS1428 and AS2890 is capable of being addressed via conditions in the event of approval. | Yes |
| **Performance Criteria**P3 Provision is made for charging facilities for electric vehicles.Comment: The Performance Criteria is not applicable to the proposed development. |
| **Acceptable Solutions** | **Proposal** | **Compliance** |
| A3.1 The installation of electrical conduits for electric vehicle charging for each dwelling in a residential development (excluding single dwelling houses and, dual occupancies or boarding houses) to facilitate cost effective installation of vehicle charging stations and associated wiring at a later date. | The site does not include a residential component. | N/A |
| A3.2 Where 10 or more parking spaces are required for non-residential development within the B3 Commercial Core and B4 Mixed Use zones in the Nowra CBD, a minimum of 10% of spaces are to be designed and constructed so that electrical vehicle charging points/stations can be installed now, or at a later time. | The site is not within a B3 or B4 zone. | N/A |
| **Performance Criteria**P4 Angled parking minimises impacts of vehicle fumes on alfresco dining areas and improves driveability.Comment: The Performance Criteria is not applicable to the proposed development. |
| **Acceptable Solutions** | **Proposal** | **Compliance** |
| A4.1 Angled parking shall be “nose in” parking. | Angled parking is not proposed. | N/A |
| **Performance Criteria**P5 To encourage the use of bicycles.Comment: The Performance Criteria is not applicable to the proposed development. |
| A5.1 New developments, particularly educational establishments, recreational facilities, shops and civic buildings, should provide appropriate bicycle parking/storage facilities in accordance with current AUSTROADS Guidelines and or Australian Standards. | Bicycle parking is not proposed. | N/A |
| A5.2 The design and installation of bicycle parking facilities should also comply with AS2890.3. | As above. | N/A |
| A5.2 The design and installation of bicycle parking facilities should also comply with AS2890.3. | As above. | N/A |
| **5.4 Car Park Landscape Design** |
| **Performance Criteria**P6 The car park landscape design:* + Lessens the visual impact of car park areas.
	+ Provides shade areas for cars and pedestrians.
	+ Ensures that the landscaping is an integral part of the car park design.

P7 Landscaping does not interfere with the proper functioning of car park areas.Comment: The development is consistent with the above Performance Criteria. |
| **Acceptable Solutions** | **Proposal** | **Compliance** |
| A6.1 A development application must include detailed landscape plans indicating dimensions, levels and drainage, existing vegetation as well as location, type and character of proposed plantings. | Detailed landscape plans provided. A condition is recommended requiring that landscape and construction plans are consistent. | Yes |
| A7.1 Car parks should be located to complement existing streetscape qualities. Consideration should be given to the streetscape qualities of the locality and the possibility of locating a car park to the rear of a site, or the provision of suitable landscaping to minimise any visual intrusion. | 108 of the 155 proposed onsite carparking are to be situated behind the proposed building lines. | Yes |
| A7.2 Perimeter planting to screen the proposed car park is to be defined in the landscape plan. The minimum width of perimeter planting is 1m and 0.5m for driveways. | Perimeter planting is proposed. | Yes |
| A7.3 Internal plantings in a car parking area are to be of a nature to shade cars and soften the impact of hard paved surfaces without obscuring visibility. | Internal plantings are of sufficient heights so as not to obscure sightlines. | Yes |
| A7.4 Consideration should be given to incorporating stormwater control measures in the design of landscaped areas to control and reduce the level of stormwater which enters Council's stormwater drainage systems. | Stormwater control measures are not incorporated with landscaped areas. | N/A |
| **6.1 Traffic** |
| **Performance Criteria**P9 To ensure new development:* Can be accommodated without adverse impact on the surrounding road network.
* Does not jeopardise the provision of future network requirements.

Comment: The development is consistent with the above Performance Criteria. |
| **Acceptable Solutions** | **Proposal** | **Compliance** |
| A9.1 A Traffic Study is provided as required by the relevant State Environmental Planning Policies (SEPPs), or in accordance with the Transport for NSW guidelines. | The proposal does not constitute ‘traffic generating development’ pursuant to Schedule 3 of SEPP (Transport and Infrastructure) 2021. | N/A |
| A9.2 A Traffic Statement is provided where the application falls outside SEPPs requirements, or where requested by Council. | A traffic statement has not been requested by Council. | N/A |
| A9.3 A Traffic Study or Statement must be prepared in accordance with the Transport for NSW, Australian Standards and AUSTROADS guidelines to the satisfaction of Council. | As above. | N/A |
| **6.2 Access** |
| **Performance Criteria**P10.1 To ensure that driveways relate to:* + Type of land use.
	+ Frontage road type.
	+ Size of parking facility.
	+ Type of vehicle likely to enter the development.

P10.2 To ensure that traffic safety is preserved both on-site and within the local road network.P10.3 To ensure that where any development has frontage to more than one road, access is provided to the lower order, lower traffic volume road, to protect the integrity and efficiency of the local and main road networks.Comment: The development is consistent with the above Performance Criteria. |
| **Acceptable Solutions** | **Proposal** | **Compliance** |
| A10.1 The development must:* Satisfy the provisions of AS2890, and
* Be designed so that vehicles enter and leave the premises in a forward direction (except for dwelling houses and dual occupancy development).
 | The driveway layout permits forward vehicular access and egress.Compliance with AS2890 is capable of being satisfied by conditions in the event of approval. | Yes |
| A10.2 Each site must minimise the number of ingress and egress points to any street frontage. | One driveway access/egress point is proposed. | Yes |
| A10.3 Where car parking exceeds 50 spaces separate provision must be made for ingress and egress. | One driveway access/egress point is proposed; a central island is proposed to separate the ingress and egress points. | Yes |
| A10.4 Where more than one access point is proposed to a site, the first driveway reached by traffic must be the entrance. | One driveway access/egress point is proposed. | N/A |
| A10.5 For all development that has frontage to more than one road, access is to be provided to the lower order, lower traffic volume road. | The site has a single road frontage to Norfolk Avenue. | N/A |
| A10.6 Vehicular access to parking areas will not be permitted in close proximity to traffic signals, major intersections or where sight distance is considered inadequate. Site distance requirements must comply with Figure 3.2 in AS2890.1. | There are no major intersections or traffic control measures located in close proximity to the site. | Yes |
| A10.7 Driveways must be located a minimum of six (6) metres from the corner of a building located on corner lots and a minimum of 1m from the side boundary. | The site is not a corner allotment. | N/A |
| A10.8 Buildings must be designed to ensure that there is adequate sight distance at intersections and driveways. In some instances this may require the provision of splay corners on buildings (e.g. where a driveway adjoins a building). | Capable of compliance, subject to conditions.  | N/A |
| A10.9 The vehicular entrance to the development shall demonstrate satisfactory provisions for pedestrian safety, considering the anticipated volume of both vehicular and pedestrian traffic. | The vehicular entrance point is segregated from pedestrian access points from the public domain. | Yes |
| A10.10 Footpaths are to be continuous across driveways in accordance with AS2890.1. | Subject to conditions in the event of approval. | Yes |
| A10.11 Ramps must not extend across the footpath. The development must demonstrate satisfactory provisions for pedestrian safety. | The proposed development does not demonstrate satisfactory provisions for pedestrian safety. While the site provides for continuous and line-marked paths of travel between the front of the site and Units 1-15 and 36-37, line-marked pathways do not connect these units to the proposed buildings that will contain Units 18-22 and 23-30.A condition is therefore recommended that will require amendments to be made to ensure that adequately-marked and connected pedestrian pathways are provided through the site in accordance with relevant standards; the condition will require such pathways not be permitted to encroach upon proposed landscaped areas, in order to both maximise landscaped area and visibility of pedestrian routes throughout the site. | No |
| A10.12 When new principal arterial roads (including sub-arterial roads, classified main roads, and designated regional roads) are provided, there shall be no direct access for new allotments where alternative access can be provided. | Road construction is not proposed. | N/A |
| A10.13 Where direct access from allotments to arterial roads currently exist (including sub-arterial roads, classified main roads, and designated regional roads), partial access may be considered when feasible, except where the access provisions cannot satisfy the requirements of State Environmental Planning Policy (Infrastructure) 2007. | Norfolk Avenue is not a major road that is subject to the provisions of SEPP (Transport and Infrastructure) 2021. | N/A |
| **Performance Criteria**P11 To cater for pedestrian access and accessibility.Comment: The development is consistent with the above Performance Criteria. |
| **Acceptable Solutions** | **Proposal** | **Compliance** |
| A11.1 Ensure pedestrians and cyclists can safely access the development and that passing pedestrians and cyclists safety is not compromised by the development. | A segregated pedestrian access route to the front of the site is proposed. | Yes |
| A11.2 Ensure the development considers relevant Council pedestrian access and mobility plans and strategies to provide the logical and practical extensions of the existing and proposed pathway network (where relevant) to provide safe and efficient connections between the development and the surrounding community. | Pedestrian access and mobility strategies do not apply to the site or surrounding area more broadly. | N/A |
| **6.3 Manoeuvrability** |
| **Performance Criteria**P12 Adequate space is provided for the manoeuvring of vehicles, particularly rigid and articulated heavy vehicles.Comment: The development is consistent with the above Performance Criteria. |
| **Acceptable Solutions** | **Proposal** | **Compliance** |
| A12.1 The minimum turning paths in Table 2are achieved. | The swept path plans provided with the most recent amendments to the plans suggest that access for vehicles up to and including 19-metre-long articulated vehicles (i.e. semi-trailers) is proposed.Such swept path plans are inadequate for the following reasons:* Access from the south is only attainable by using the south-bound lane of Norfolk Avenue (i.e. access from the south requires using the wrong side of the road).
* Egress to the north is only attainable by using the south-bound lane of Norfolk Avenue (i.e. egress to the north requires using the wrong side of the road), and also requires encroachment upon the centre dividing island.
* Manoeuvring space around Unit 23 requires encroachment upon landscape areas (noting that the landscape plans propose wider landscaped areas within this location).
* Manoeuvring space around Unit 24 requires encroachment upon landscape areas.
* It has not been demonstrated that articulated vehicle access and associated manoeuvring to Units 10-15 and 16-19 is possible without reversing a significant distance within the site.
* The proposed loading areas within the industrial units are of insufficient lengths to accommodate a 19-metre-long vehicle without significant encroachment into the ’avenues’ throughout the site, and no shared loading facilities for a 19-metre-long vehicle are proposed.

Swept path plans for Heavy Rigid Vehicles (HRVs) also show an impractical approach angle to the site in addition to encroachment upon landscaped areas in order to manoeuvre around Unit 23.No justification has been provided with regard to the above.A condition is therefore recommended that will require the following:* Prohibition of articulated vehicles from the site, with signage to be erected to advise incoming traffic of this restriction.
* Revised swept path plans for HRVs are to be submitted for Council’s approval prior to the issue of a Construction Certificate.
 | No |
| A12.2 Turning paths for vehicles will be based upon the largest vehicles likely to utilise the premises. | Noted; also see above. | - |
| A12.3 For bus routes in all new subdivisions, a practical bus route with a minimum 9m width is to be designated. The route must satisfy swept paths for a 14.5m rigid bus with satisfactory turnaround provided for each stage of the development. | Subdivision is not proposed. | N/A |
| **6.4 Service Areas** |
| **Performance Criteria**P13 Suitable areas for safe and efficient loading/unloading of goods is provided.Comment: The development is consistent with the above Performance Criteria. |
| **Acceptable Solutions** | **Proposal** | **Compliance** |
| A13.1 Service areas should operate independently of other parking areas. | Loading areas within each unit are capable of operating independently of car parking areas. | Yes |
| A13.2 The location of loading/servicing areas should be clearly indicated by the use of signs. | The location of loading areas is identifiable via large doors within each tenancy, in addition to wayfinding signage within the site. | Yes |
| **Performance Criteria**P14 All servicing occurs on-site.Comment: The development is consistent with the above Performance Criteria. |
| **Acceptable Solutions** | **Proposal** | **Compliance** |
| A14.1 Internal roadways must be adequate in construction and design for the largest vehicle anticipated to utilise the site. | Refer to the assessment A12.1 above. | No |
| A14.2 Service docks are designed to cater for the largest vehicle anticipated to use the premises. | Uses of individual units are not proposed, which will likely dictate the size of vehicles to service each unit. | - |
| A14.3 Service areas are designed to avoid the need for service vehicles to reverse across the pedestrian desire lines. | Service areas such as common waste areas are to be separated from pedestrian passageways. | Yes |
| **6.5 Design of Driveways** |
| **Performance Criteria**P15 Driveways are designed to reflect the nature of development that they serve.Comment: The development is consistent with the above Performance Criteria. |
| **Acceptable Solutions** | **Proposal** | **Compliance** |
| 15.1 Driveway design is consistent with AS2890.1 and/or AS2890.2 as applicable to the type of development. | Subject to conditions in the event of approval. | Yes |
| A15.2 Driveway types 1 and 2 shall be constructed as single driveway access points to minimise the number of driveway conflicts on the network. | Noted. | - |
| **6.6 Construction Requirements** |
| **Performance Criteria**P16 The construction of internal driveways, roads, car parks, service areas and works in the road reserve is of a suitable standard according to land use type.Comment: The development is consistent with the above Performance Criteria. |
| **Acceptable Solutions** | **Proposal** | **Compliance** |
| A16.1 The construction of internal driveways, roads, car parks, service areas and works in the road reserve comply with Table 3.**Industrial Construction Requirement:*** Heavy duty concrete; or
* Industrial asphaltic concrete AC10 with minimum pavement thickness of 200mm subject to pavement testing for a design load of 1 x 106.

All with associated stormwater drainage designed in accordance with the relevant Australian Standards. | Subject to conditions in the event of approval. | Yes |

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| **G22: Advertising Signs and Structures** |
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| **5.5 General Controls** |
| **All Business and Industrial Zones****Performance Criteria**P1 To ensure advertising signs/structures:* are associated with a lawful use of the land; and
* relates to the land, or to the premises situated on that land; or
* identifies a person residing or carrying on an occupation or business on the land or premises; and/or
* gives particulars of the goods or services dealt with or provided on the land or premises;
* is a directional sign for an approved tourist facility in the Shoalhaven; or
* Is an advertisement for a business located in the Shoalhaven.
* relate well to and integrates with existing built and vegetated forms
* do not dominate the streetscape or skyline
* do not adversely affect traffic safety
* do not restrict sight distances at entrance/exit to any property
* do not obstruct sightlines to signs on adjoining property
* do not detract from the heritage significance of the building or place
* do not project over windows or architectural features of a building
* are consistent with the design guidelines outlined in this Chapter are treated on the rear view of single-sided signs to blend with the surrounding streetscape or field of view
* reduce visual clutter
* achieve equity between property owners/occupiers
* have a design relationship between multiple signs
* have a design relationship to each other individual signs in the case of a free-standing directory sign
* are capable of accommodating the signs of other tenants in respect of any free-standing sign on a multi-tenanted site
* Affixed to structures are wholly contained within the dimensions of the structure.

Comment: The development is consistent with the above Performance Criteria. |
| **Acceptable Solutions** | **Proposal** | **Compliance** |
| *On-Building Signs*A1.1 For corner lots, maximum sign face area is to be calculated by taking the average building width when measured parallel to both the front property boundary and secondary street frontages. | The site is not a corner allotment. | N/A |
| A1.2 Maximum sign face area of any one (1) sign is not to exceed 8m2. | Largest proposed signage area: 5m2 | Yes |
| A1.3 Maximum sign face area should not exceed 1.5m2 of sign face area per metre of maximum building width which is measured parallel to the front property boundary. | Café:* Front elevation:
* Elevation width: 13m
* Maximum permitted sign area: 19.5m2
* Proposed sign area: 4m2
* Side elevation:
* Elevation width: 6.65m
* Maximum permitted sign area: 9.975m2
* Proposed sign area: 4m2

Individual tenancies:* Elevation width: 10-17m
* Maximum permitted sign area: 15-25.5m2
* Proposed sign area: 5m2
 | Yes |
| *Free-Standing Signs*A1.4 Maximum sign face area should not exceed 0.35m2 of sign face area per linear metre of road frontage. | Frontage length: 40.435m2Maximum permitted sign area: 14.15m2Proposed sign area: 16.38m2 (per side)The size of the proposed signage variation is not significant and will not be discernible when viewed from the public domain. The variation is therefore considered to be supportable on merit in the circumstances of this proposal. | No |
| A1.5 Maximum sign face area of any one (1) sign is not to exceed 8m2. e.g. A 20m frontage will permit 7m2 of sign face area for a freestanding sign. | As above. | No |
| A1.6 Maximum height should not exceed:* 40-99m frontage:
* Single sign: 7-10m
* Two or more signs: 5-7m

Minimum separation distance between freestanding signs is calculated by adding together the height of the proposed sign and the nearest adjacent sign as follows:Height of proposed sign + height of adjacent sign = separation distance required. e.g. The separation distance required between two free-standing signs (6m and 3m each) would be 9m. | Frontage length: 40.435m2Maximum permitted sign height (single sign): 7-10mProposed sign height: 6.2m | Yes |
| A1.7 Minimum side boundary setback is 3m. | Minimum side setback (northeast boundary): 8.45m | Yes |
| *Signs on Structures*A1.8 Maximum sign face area should equal 1% of floor area or site area occupied. | Signage structures (other than free standing signs and on-building signs) are not proposed. | N/A |
| A1.9 Maximum sign face area of any one (1) sign is not to exceed 8m2. | As above. | N/A |
| **All Business and Industrial Zones – Multiple Tenancies****Performance Criteria**P2 To ensure advertising signs/structures allow for multiple tenancies within a single building or development.Comment: The development is consistent with the above Performance Criteria. |
| A2.1 Maximum sign face area should be calculated as follows: | Proposed signage area: 215m2Proposed number of tenancies (incl. café): 43Signage face for each unit: 5m2Maximum sign face area per unit: 4.97m2 | Yes |

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| **G26: Acid Sulfate Soils and Geotechnical (Site Stability) Guidelines** |
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| **5.1 Acid Sulfate Soils** |
| **Performance Criteria**P1 Where land is identified on the Acid Sulfate Soils Map, proposed development doesn’t disturb, expose or drain acid sulfate soils and cause environmental damage.Comment: The development is consistent with the above Performance Criteria. |
| **Acceptable Solutions** | **Proposal** | **Compliance** |
| A1.1 Clause 7.1 of Shoalhaven LEP 2014 is complied with in any development application. | Refer to the assessment of cl. 7.1 of SLEP 2014. To summarise, the site is affected by Class 5 acid sulphate soils; the proposed development does not propose excavation to depths of five or more metres, nor will it result in lowering of the water table. An acid sulphate soils management plan is therefore not required. | Yes |
| A1.2 Where earthworks are proposed, Clause 7.2 of Shoalhaven LEP 2014 is complied with in any development application. | The scale and cut/fill depths of proposed earthworks are considered acceptable, and subject to conditions during construction will not result in adverse impacts on surrounding sites. | Yes |
| **5.2 Geotechnical – Site Stability** |
| **Performance Criteria**P2 Buildings and structures are designed to:* Adequately address specific geotechnical difficulties that exist on site and in the surrounding area.
* Utilise construction techniques that are sympathetic to the natural slope of the land and minimise excessive disturbance of the site.

P3 The site works, including excavated and filled areas, will not have a significant detrimental visual impact on the streetscape or when viewed from adjoining properties.P4 The building/structure and site works will not have a significant detrimental impact on surface or subsurface drainage on the site or on adjoining properties.Comment: The development is consistent with the above Performance Criteria. |
| A2.1 Buildings and structures are to be located on land with a slope less than 20% and are not in an area known or likely to be subject to site stability problems. A geotechnical report is provided if requested by Council. | The site contains an average slope of approximately 1.1%. A geotechnical risk management assessment has not been requested by Council. | Yes |
| A2.2 An application for buildings/structures on land with a slope of 20% or greater, or proposed to be located in an area known or likely to be subject to site stability problems, is accompanied by a geotechnical report. | See above. | N/A |
| A3.1 Excavated and filled areas are retained by appropriately designed retaining walls or provided with a stabilised batter slope, and an effective drainage system. | Areas of cut and fill will be appropriately retained. A suitable onsite drainage system has been proposed. | Yes |
| A3.2 Measures are identified that will retain and/or establish vegetation for erosion control and visual amenity. | An Erosion and Sediment Control Plan has been submitted. Conditions are recommended in the event of approval that will require compliance with standards governing erosion and sediment control. | Yes |
| A4.1 A soil and water management plan is submitted that complies with Council’s guidelines. The plan demonstrates what measures will be utilised both during and after construction to control erosion and sedimentation of local water courses and drainage systems. | As above. | Yes |
| A4.2 Erosion and sediment control devices are installed in accordance with Council’s guidelines. The size, shape and slope of the allotment and the scale of the building will facilitate the installation of appropriate devices. | Subject to conditions in the event of approval. | Yes |

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