

Warringah Development Control Plan 2011

This table of compliance relates to land at 2 Cross Street, Brookvale. The proposal is for the demolition of existing structures and the construction of a two-storey warehouse comprising offices, storage units and warehouse units.

Provisions	Comments	Complies?
Part B - Built Form Controls		
B6 Merit Assessment of Side Boundary Setbacks		
 Side boundary setbacks will be determined on a merit basis and will have regard to: streetscape; amenity of surrounding properties; and setbacks of neighbouring development Generally, side boundary setback areas are to be landscaped and free of any above or below ground structures, car parking or site facilities other than driveways and fences. 	A 3m setback is provided to the site's western boundary and the development at 4 Cross Street. While this is a reduced side setback from the existing development, which comprised a vehicular accessway and carpark, it is more consistent with the surrounding buildings which generally provide zero metre side setbacks.	Yes
B7 Front Boundary Setbacks		
 Development is to maintain a minimum setback of 4.5m to road frontages. The front boundary setback area is to be landscaped and generally free of any structures, basements, carparking or site facilities other than driveways, letter boxes, garbage storage areas and fences. Where primary and secondary setbacks are specified, buildings and structures (such as carparks) are not to occupy more than 50% of the area between the primary and secondary setbacks. The area between the primary setback and the road boundary is only to be used for landscaping and driveways. 	The proposal provides a compliant 4.5 metre setback to its primary street frontage at Cross Street. A 0.5m setback is provided to its secondary street frontage at Green Street. This is therefore non-compliant with the prescribed minimum front	No - Refer to Section ! of SEE
B10 Merit assessment of rear boundary setbacks	boundary setback.	
•	Given Cross Street is the	Yes
 1. Rear boundary setbacks will be determined on a merit basis and will have regard to: streetscape; amenity of surrounding properties; and setbacks of neighbouring development 	development's primary frontage, it is assumed that the rear setback will be from the site's northern boundary. A zero metre setback is provided to the site's northern boundary. This is	162



	consistent with development to the north and east of the site including 20, 20a, 22 15, 13,11 Green Street and 20-22 Cross Street.	
Part C - Siting Factors		
C2 Traffic, Access and Safety		
 Vehicular Access 1. Applicants shall demonstrate that the location of vehicular and pedestrian access meets the objectives. 2. Vehicle access is to be obtained from minor streets and lanes where available and practical. 	Vehicular access to the site is provided via a single 6.25 metre wide entry/exit point that is accessed from Cross Street. Given the site is a corner lot, pedestrian access is provided from two main pedestrian entry points that are located off the site's Cross Street and Green Street frontages. As detailed in the Traffic and Parking	Yes
	Assessment, the proposed vehicle access arrangements are suitable for the site and are in compliance with the relevant Australian Standards.	
On-site loading and unloading 6. Facilities for the loading and unloading of service, delivery and emergency vehicles are to be: appropriate to the size and nature of the development; screened from public view; and designed so that vehicles may enter and leave in a forward direction.	Service vehicles will access the site via the 6.25 metre wide entry/exit point that is accessed from Cross Street. Each unit is provided with an internal loading dock which is designed such that all loading vehicles are able to enter and leave the unit in a forward direction.	Yes
C3 Parking Facilities		
 1. The following design principles shall be met: Garage doors and carports are to be integrated into the house design and to not dominate the façade. Parking is to be located within buildings or on site.; Laneways are to be used to provide rear access to carparking areas where possible; Carparking is to be provided partly or fully underground for apartment buildings and other large scale developments; 	Car parking spaces are located within the proposed building at the ground and first floors. The proposed car parking will therefore not be visible from the public domain and will not obscure views of the street.	Yes





- Parking is to be located so that views of the street from front windows are not obscured; and
- Where garages and carports face the street, ensure that the garage or carport opening does not exceed 6 metres or 50% of the building width, whichever is the lesser.
- 2. Off street parking is to be provided within the property demonstrating that the following matters have been taken into account:
- the land use:
- the hours of operation;
- the availability of public transport;
- the availability of alternative car parking; and
- the need for parking facilities for courier vehicles, delivery / service vehicles and bicycles.
- 3. Carparking, other than for individual dwellings, shall:
- Avoid the use of mechanical car stacking spaces;
- Not be readily apparent from public spaces;
- Provide safe and convenient pedestrian and traffic movement;
- Include adequate provision for manoeuvring and convenient access to individual spaces;
- Enable vehicles to enter and leave the site in a forward direction;
- Incorporate unobstructed access to visitor parking spaces;
- Be landscaped to shade parked vehicles, screen them from public view, assist in micro-climate management and create attractive and pleasant places;
- Provide on site detention of stormwater, where appropriate; and
- Minimum car parking dimensions are to be in accordance with AS/NZS 2890.1.
- 4. Carparking is to be provided in accordance with Appendix 1 which details the rate of car parking for various land uses. Where the carparking rate is not specified in Appendix 1 or the WLEP, carparking must be adequate for the development having regard to the objectives and requirements of this clause. The rates specified in the Roads and Traffic Authority's Guide to Traffic Generating Development should be used as a guide where relevant.

Appendix 1 Car Parking Requirements

The proposed vehicular entry/exit point off Cross Street has been designed to ensure that vehicles are able to leave and enter the site in a forward direction and is situated to provide safe and convenient traffic movement.

Based on the DCP rates, the proposal requires 49 car parking spaces. A total 56 car parking spaces are provided for the development (2 of which are accessible spaces), with 28 spaces provided at both the ground floor and first floor. The proposed parking provision is therefore compliant with the DCP.

Refer to the Traffic and Parking Assessment for further detail.





Business premises	1 space per 40 m² GFA excluding customer service/access areas, plus for customer service/access areas 1 space per 16.4 m² GFA.
Office premises	1 space per 40 m ² GFA.
Warehouse or distribution centre	1.3 spaces per 100 m ² GFA
	(including up to 20% of floor area as office premises space component. Office premises component above 20% determined at office premises rate).

- 5. Adequate provision for staff, customer and courier parking, and parking and turning of vehicles with trailers must be provided if appropriate to the land use.
- 6. Where appropriate, car parking which meets the needs of people with physical disabilities must be provided in accordance with the relevant Australian Standard.

C3(A) Bicycle Parking and End of Trip Facilities

- 1. Bicycle parking facilities must be provided for new buildings and for alterations or additions to existing buildings. In the case of alterations or additions to existing buildings bicycle parking facilities are required for the additional floor area only.
- 2. Bicycle parking shall be designed and constructed in accordance with Australian Standard AS 2890.3 Bicycle Parking Facilities.
- Bicycle parking facilities shall be designed to be an integral part of the development and where visible from public places or streets, will complement the visual quality of the public domain.
- 4. Bicycle parking shall be provided in accordance with the generation rates in the following table and is determined by adding Column 1 and Column 2 requirements and rounding up.

MINIMUM BICYCLE PARKING REQUIREMENTS		
Land Use	Column 1	Column 2
	High-Medium Security Level*	High-Low Security Level**
Business and Retail Premises	1 per 200m2 GFA	Visitors: 1 per 600m2 GFA
Office Premises	1 per 200m2 GFA	Visitors: 1 per 750m2 GFA over 1000m2
Light and General Industry	1 per 200 m2 GFA	Visitors: 1 per 600m2 GFA

Notes to Table

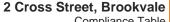
* Bicycles are stored in individual lockers or locked to rails within a secure room/ enclosure. (Refer to Part 7.6 of the NSW Planning Guidelines to Walking and Cycling for more detail.)

** Bicycle frames and wheels are locked to high quality rails. (Refer to Part 7.6 of the NSW Planning Guidelines to Walking and Cycling for more detail.)

Where the parking rate for a particular use is not specified above, justification for the nominated rate is to be made by reference to the rates specified in the NSW Planning Guidelines for Walking and Cycling or Austroads Guide to Traffic Engineering Part 14 – Bicycles.

Column 2 requirements may be incorporated into the Column 1 provisions.

Noted. The proposed development is
capable of accommodating bicycle
parking within each of the warehouse
units.





- 5. End of trip facilities must be provided for new buildings and for alterations or additions to existing buildings. In the case of alterations or additions to existing buildings end of trip facilities are required for the additional floor area only. End of trip facilities are not required for schools, wholly residential buildings or residential components of mixed use buildings.
- 6. End of trip facilities shall be provided in accordance with the following:
 - a) Bathroom/ change area(s) shall be provided and shall contain:
 - i) At least one toilet, wash basin, mirror, clothing hooks and power points (including shaving plugs).
 - ii) A minimum of one shower cubicle per seven (7) required bicycle parking spaces.
 - iii) Each shower cubicle shall include a private clothes changing area with a bench and a minimum of two (2) clothing hooks.
 - b) Clothes Lockers shall be:
 - i) Provided at the rate of one clothes locker for every required bicycle parking space.
 - ii) Secure, ventilated and large enough to store cycling gear (such as panniers, shoes, towels and clothing). Suggested minimum dimensions of a clothes locker are 900mm (height), 350mm (width) and 500mm (depth).



C4 Stormwater

1. Stormwater runoff must not cause downstream flooding and must have minimal environmental impact on any receiving stormwater infrastructure, watercourse, stream, lagoon, lake and waterway or the like. The stormwater drainage systems for all developments are to be designed, installed and maintained in accordance with Council's Water Management for Development Policy.

Stormwater run-off from the roof of the proposed development is collected via box gutters and transported by droppers to the ground floor and then Council's drained to existing stormwater system by pipes and pits. Similarly, stormwater run-off from the first floor car park is collected via rainwater outlets that connect to the first floor droppers via stormwater pipes that are proposed to be suspended under the first floor slab. Such measures will minimise any environmental impact on receiving infrastructure stormwater or waterways.





	Refer to the civil plans prepared by Tonkin Consulting Pty Ltd for further details.	
C7 Excavation and Landfill		
 All landfill must be clean and not contain any materials that are contaminated and must comply with the relevant legislation. Excavation and landfill works must not result in any adverse impact on adjoining land. Excavated and landfill areas shall be constructed to ensure the geological stability of the work. Excavation and landfill shall not create siltation or pollution of waterways and drainage lines, or degrade or destroy the natural environment. Rehabilitation and revegetation techniques shall be applied to the fill. Where landfill is necessary, it is to be minimal and shall have no adverse effect on the visual and natural environment or adjoining and surrounding properties. 	No excavation is proposed for the development. Some filling is proposed to ensure that the development is compatible with the flood planning level. These minor earthworks and regrading will not create siltation or pollution and will be carried out in accordance with the accompanying civil plans.	Yes
C8 Demolition and Construction & C9 Waste Management		
1. All development that is, or includes, demolition and/or construction, must comply with the appropriate sections of the Waste Management Guidelines and all relevant Development Applications must be accompanied by a Waste Management Plan.	A Waste Management Plan prepared by Leda accompanies this application.	Yes
Part D - Design		
D3 Noise		
1. Noise from combined operation of all mechanical plant and equipment must not generate noise levels that exceed the ambient background noise by more than 5dB(A) when measured in accordance with the NSW Industrial Noise Policy at the receiving boundary of residential and other noise sensitive land uses.	The nearest sensitive receiver to the site is the residential development 80 metres north-west of the site. Between the site and this residential development are other industrial and warehouse developments. Given the location of the site within an industrial area separated from residences by other noise-generating sources, it is considered unlikely the	Yes
	operation of the proposed development will have adverse noise impacts.	





D6 Access to Sunlight		
Development should avoid unreasonable overshadowing any public open space.	Shadow diagrams are included in the architectural plans prepared by Pace Architects. The shadows cast by the proposed development are considered acceptable given that the surrounding industrial developments do not require the same level of amenity as other types of non-industrial development, and the shadows cast on Westfield Warringah Mall also only relate to a multi-level car park. Nonetheless, by 12pm at mid-winter the shadows that are cast by the proposed development on surrounding industrial development to the west and Westfield Warringah Mall to the south are completely gone. From 12pm to 3pm the only shadows cast by the proposed development are on itself and the road reserves.	Yes
	The development will not result in the shadowing of any public open space areas such as recreational spaces.	
D7 Views		
Development shall provide for the reasonable sharing of views.	No important views currently exist to or from the site of the proposed development, noting that the site is located in an existing industrial area.	N/A
D9 Building Bulk		
 Side and rear setbacks are to be progressively increased as wall height increases. Large areas of continuous wall planes are to be avoided by varying building setbacks and using appropriate techniques to provide visual relief. 	The height, bulk and scale of the proposed development is consistent with the existing building at the site as well as other surrounding development within the Brookvale Industrial area	Yes







- 3. On sloping land, the height and bulk of development (particularly on the downhill side) is to be minimised, and the need for cut and fill reduced by designs which minimise the building footprint and allow the building mass to step down the slope. In particular:
- The amount of fill is not to exceed one metre in depth.
- Fill is not to spread beyond the footprint of the building.
- Excavation of the landform is to be minimised.
- 4. Building height and scale needs to relate to topography and site conditions.
- 5. Orientate development to address the street.
- 6. Use colour, materials and surface treatment to reduce building bulk.
- 7. Landscape plantings are to be provided to reduce the visual bulk of new building and works.
- 8. Articulate walls to reduce building mass.

generally comprising two or more storeys.

Landscaping and different materials, finishes, colours and horizontal and vertical elements have been incorporated within the design to reduce the appearance of the building's bulk and minimise the presence of large areas of continuous wall planes.

D10 Building Colours and Materials

1. In highly visible areas, the visual impact of new development (including any structures required to retain land) is to be minimized through the use of appropriate colours and materials and landscaping.

External finishes for the proposed development include a mix of high-quality of metal, concrete and glass, which are commonly used within industrial type developments and consistent with surrounding development. A neutral colour palette has been utilised to ensure the proposed development is compatible with the locality and minimises its visual impact.

Refer to the schedule of external finishes in the architectural plans prepared by Pace Architects for further detail.

Yes

D11 Roofs

- 1. Lift overruns, plant and other mechanical equipment are not to detract from the appearance of roofs.
- 2. Roofs should complement the roof pitch and forms of the existing buildings in the streetscape.

The development incorporates flat roof forms. This is consistent with the prevailing roof form of existing industrial buildings in the locality.





PLAN		February 2021
 Articulate the roof with elements such as dormers, gables, balconies, verandahs and pergolas. Roofs shall incorporate eaves for shading. Roofing materials should not cause excessive glare and reflection. Service equipment, lift overruns, plant and other mechanical equipment on the roof shall be minimised by integrating as many services, etc as possible into the building. 		
D12 Glare and Reflection		
 The overspill from artificial illumination or sun reflection is to be minimised by utilising one or more of the following: Selecting an appropriate lighting height that is practical and responds to the building and its neighbours; Minimising the lit area of signage; Locating the light source away from adjoining properties or boundaries; and Directing light spill within the site. Any glare from artificial illumination is to be minimised by utilising one or more of the following: Indirect lighting; Controlling the level of illumination; and Directing the light source away from view lines. Sunlight reflectivity that may impact on surrounding properties is to be minimised by utilising one or more of the following: Selecting materials for roofing, wall claddings and glazing that have less reflection eg medium to dark roof tones; Orienting reflective materials away from properties that may be impacted; Recessing glass into the façade; Utilising shading devices; Limiting the use of glazing on walls and glazed balustrades and avoiding the use of highly reflective glass; and Selecting windows and openings that have a vertical emphasis and are significantly less in proportion to solid massing in walls. 	The proposal provides measures to minimise the occurrence of glare and reflection. All proposed signage will be non-illuminated. Any other forms of artificial lighting for the development will be confirmed at the detailed design stage and can be conditioned as part of the consent. While the external façades of the proposed development fronting Cross Street and Green Street generally comprise glazing at the ground floor level and first floor level, these glass areas have been recessed into the façade to reduce the potential of sunlight reflectivity on surrounding properties.	Yes
D13 Front Fences and Front Walls		
No solid front fences or front walls will be permitted on flood prone land.	The proposal does not incorporate any front fences or front walls.	Yes

Landscaping will instead be terraced





	along each street frontage to compliment the site's topography.	
D14 Site Facilities		
 1. Site facilities including garbage and recycling enclosures, mail boxes and clothes drying facilities are to be adequate and convenient for users and services and are to have minimal visual impact from public places. In particular: Waste and recycling bin enclosures are to be durable, integrated with the building design and site landscaping, suitably screened from public places or streets and located for convenient access for collection; Garbage areas are to be designed to avoid common problems such as smell, noise from collection vehicles and the visibility of containers; Landscaping is to be provided to reduce the impact of all garbage and recycling enclosures; and Mail boxes are to be incorporated into the front fence or landscaping design. They are to be easily accessible and clearly identifiable. 	A mailbox is provided at the southern elevation of the development, in close proximity to the pedestrian entrance off Cross Street. The proposed self-storage premises do not provide any garbage or recycling enclosures, as it will not generate any waste given their use is limited to the storage of items. Any waste generated by the self-storage units will be the owners' responsibility to legally dispose of and will be subject to future usage DAs for the site.	N/A
D18 Accessibility and Adaptability		
 The design is to achieve a barrier free environment with consideration given to the design of door handles and switches, entrances and corridors. Steep, rough and slippery surfaces, steps and stairs and narrow paths should be avoided. There are to be continuous, independent and barrier-free access ways incorporated into the design of buildings. Pathways are to be reasonably level with minimal cross fall and sufficient width, comfortable seating and slip-resistant floor surfaces. Where there is a change of level from the footpath to commercial or industrial floor levels, ramps rather than steps should be incorporated. There is to be effective signage and sufficient illumination for people with a disability. Tactile ground surface indicators for the orientation of people with visual impairments are to be provided in accordance with the relevant Australian Standard. Access for people with a disability is to be provided at the main entrance to the development. 	An Access Review prepared by Morris Goding Access Consulting accompanies the application. The Review concludes that the accessibility requirements pertaining to external site linkages, building access, common area access, sanitary facilities and parking can be readily achieved by the proposed development.	Yes
8. Development is to comply with Australian Standard AS1428.2.		





D20 Safety and Security

- 1. Buildings are to overlook streets as well as public and communal places to allow casual surveillance.
- Service areas and access ways are to be either secured or designed to allow casual surveillance.
- 3. There is to be adequate lighting of entrances and pedestrian areas.
- 4. After hours land use activities are to be given priority along primary pedestrian routes to increase safety.
- 5. Entrances to buildings are to be from public streets wherever possible.
- 6. For larger developments, a site management plan and formal risk assessment, including the consideration of the 'Crime Prevention through Environmental Design' principles may be required. This is relevant where, in Council's opinion, the proposed development would present a crime, safety or security risk. See Crime Prevention and Assessment of Development Applications Guidelines under Section 79C of the Environmental Planning and Assessment Act 1979 prepared by the Department of Urban Affairs and Planning (now Department of Planning).
- 7. Buildings are to be designed to allow casual surveillance of the street, for example by: a) Maximising the glazed shop front on the ground level so that views in and out of the shop can be achieved;
 - b) Providing openings of an adequate size in the upper levels to maximise opportunities for surveillance;
 - c) Locating high use rooms to maximise casual surveillance;
 - d) Clearly displaying the street number on the front of the building in pedestrian view; and
 - e) Ensuring shop fronts are not obscured by planting, signage, awnings and roller shutters.
- 8. Casual surveillance of loading areas is to be improved by:
 - a) Providing side and rear openings from adjacent buildings that overlook service areas and clear sight lines; and
 - b) Providing adequate day and night lighting which will reduce the risk of undesirable activity.
- 9. Design entrances to buildings from public streets so that:
 - a) Building entrances are clearly identifiable, defined, lit and visible;

The proposal ensures a high level of personal safety to employees and customers.

Glazing has been incorporated into the external street-facing facades of the proposed development to provide clear sightlines and opportunities for casual surveillance between the warehouses and the public domain at both Cross and Green Streets.

Clear design features, lighting and materials have been utilised to distinguish entrances and pedestrian areas.

A roller shutter door is located at the building's vehicular entry. The provision of this roller shutter door provides a physical barrier to restrict vehicular access to the relevant people.

Pedestrian pathways located at the site's Cross and Green Street frontages direct people to the building's two main pedestrian entrances which are designed to be clearly identifiable and visible from the street.

Access to and from each unit tenancy will be restricted to allow only relevant users for that unit.





b) The residential component of a shop top housing development has a separate secure pedestrian entrance from the commercial component of the development;c) Main entrances are clearly identifiable;d) Pavement surfaces and signage direct pedestrian movements; and	
e) Potential conflict between pedestrians and vehicles is avoided.	
D21 Provision and Location of Utility Services	
provided, including provision of the supply of water, gas, telecommunications and electricity and the satisfactory management of sewage and drainage.	ubstation located within to be retained and s part of the proposed
	rill continue to utilise the tility services on the site
3. Where possible, underground utility services such as water, gas, telecommunications, electricity and gas are to be provided in a common trench. The main advantages for this are:	water, gas and
a) A reduction in the number of trenches required;	
b) An accurate location of services for maintenance;	
c) Minimising the conflict between services;	
d) Minimising land required and cost;	
5. Where natural features are disturbed the soil profile should be restored and landscaping and tree planting should be sited and selected to minimise impact on services, including existing overhead cables.	
6. Where utilities are located above ground, screening devices should include materials that complement the streetscape, for example fencing and landscaping. The location of service structures such as electricity substations should be within the site area.	
D22 Conservation of Energy and Water	
	lopment is located on a south and east facing
2. Site layout and structures are to allow for reasonable solar access for the purposes of water heating and electricity generation and maintain reasonable solar access to adjoining properties.	es, the building is se directions to face the at Cross Street and
	Access to natural light is
	sed through substantial metal framing at the





- 5. Reuse of stormwater for on-site irrigation and domestic use is to be encouraged, subject to consideration of public health risks.
- 6. All development must comply with Council's Water Management Policy.

ground and first floor levels to offset this. Ample landscaping has been provided to promote the natural environment, regulate temperature and provide shade on the subject site.

Other provisions relating to sustainable design may be investigated at detail design stage or be conditioned as part of any future consent.

D23 Signs

- 1. Signs are to be sited and designed so that they do not adversely impact on the amenity of the streetscape and the surrounding locality. In particular, signs are not to dominate or obscure other signs or result in visual clutter.
- 2. Signs are to be compatible with the design, scale and architectural character of the building or site on which they are to be placed.
- Signs are not to obscure views of vehicles, pedestrians or potentially hazardous road features or reduce the safety of all users of any public road (including pedestrians and cyclists).
- 4. Signs should not be capable of being confused with, or reduce the effectiveness of, traffic control devices.
- 5. Signs are not to emit excessive glare or cause excessive reflection.
- 6. Signs should not obscure or compromise important views.
- 10. No more than one sign is to be located above the awning level for business uses.
- 11. Tenancy boards and the like are encouraged to be in the form of consolidated signs.
- 12. Signs shall meet the following criteria:

Four building identification signs as well as a signage zone and under awning signage for each of the individual units is proposed for the development. None of the signs will be illuminated and are setback such that they will not obscure views of vehicles, pedestrians or hazardous road features.

One of the proposed building identification signs is to be in the form of a freestanding sign. This sign will be erected at ground level and will exceed 2m in height above natural ground level. The sign will have a height of 4.54m, a width of 2.12m and an area of 9.62m² on each side. It is noted that the proposed sign area exceeds the maximum 4m2 area specified within the criteria. Justification for this variance is provided within Section 5.1 of the SEE.

The other three building identification signs are wall signs which will be situated in proximity to the vehicular access off Cross Street and the

No - Refer to Section 5.1 of SEE





Sign	Criteria
Awning fascia sign (attached to the fascia or	Shall not project above, below or beyond the fascia or return end
return end of an awning)	of the awning to which it is attached.
Freestanding signs (not being a sign elsewhere	Shall not exceed 2 metres in height above the existing natural
listed in this table, and includes a bulletin board,	ground level;
tenancy board, and the like)	Shall not have an area greater than 4sqm;
	Shall not project beyond the boundary of the premises; and
	Shall not be illuminated.
Pole or pylon sign (erected on a pole or pylon	Shall not be less than 2.6 metres above ground level;
independent of any building or other structure)	Shall not exceed 6 metres in height above the existing natural
	ground level;
	Must have a maximum area of no more than 4sqm on any single
	face;
	Shall not project beyond the boundary of the premises; and
	No more than one pole/pylon sign per site is permitted.
Top hamper sign (attached to the transom of a	Shall not extend beyond any building alignment or below the
doorway or display window of a building)	level of the head of the doorway or window within the building
	upon which it is attached;
	Shall not exceed 600mm in height; and
	Shall not have an advertising area greater than 5sqm.
Under awning sign (attached to the underside of	Shall not exceed 2.5m in length or 0.3m in height;
an awning)	Shall be no less than 2.7 m above the ground and at right angles
	to the property boundary to which the awning is attached;
	Shall not project beyond the awning; and
	No more than one under-awning sign may be erected per
	business/shop.
Wall sign (painted onto a wall of a building or	Shall not extend within 200mm of the top and sides of the wall.
attached to the wall of a building, not being a	Shall not cover any window or architectural projections;
sign elsewhere listed in this table)	Must be of a size and shape that relates to the architectural
	design of the building to which it is attached;
	Where illuminated, shall not be less than 2.7 metres above the
	existing natural ground level ground; and
	Shall not project more than 300mm from the wall.
Window sign (painted or letters stuck onto the	Must occupy less than 50% of the window area so as to not
inside or outside of a display window)	obstruct natural light; and
	Shall only be permitted on ground floor windows, below awning
	level or equivalent.

pedestrian entry point off Green Street. The signs will be fixed directly to the wall and will not project more than 300mm from the wall. One of these signs is situated such that it extends within 200mm of the side of the wall at the building's west elevation. Justification is provided within Section 5.1 of the SEE.

The signage that is proposed is considered to be compatible with the existing and desired future character of Brookvale's industrial area and consistent with the other outdoor advertising in the locality in that it involves a mix of free-standing building identification signs and business identification signage near the entrances to the development, as well as above or near the entrance to each tenancy.

An assessment against the criteria within Schedule 1 of SEPP 64 has been undertaken within Section 4.5.2 of the SEE.

Part E - The Natural Environment

E1 Preservation of Trees or Bushland Vegetation





Requirements for other Development Applications

Requirements for other Development Applications

When a DA required for clearing vegetation the following requirements apply:

- 1. Development is to be sited and designed to minimise the impact on remnant native vegetation, including canopy trees and understorey vegetation, and on remnant native ground cover species.
- Where the applicant demonstrates that no reasonable alternative design exists and a tree must be removed, suitable compensatory tree planting is required. Details including proposed species and the location of replacement planting are to be provided.
- 3. Development must also avoid any impact on trees on public land.
- 4. For development applications involving the construction of new buildings and works containing Classes 2-9 (BCA), the information contained in Appendix 11 is to be submitted.
- 5. Where trees proposed to be retained may be affected by the construction of new buildings and works of Classes 1 and 10, a Tree Protection Plan as per Appendix 12 is to be submitted.

All eight trees located within the boundaries of the site are proposed to be removed as part of this application.

The Arborist Assessment Report prepared by Abel Ecology supports the proposed removal of all trees that are located within the boundaries of the site, noting the palms are listed as a weed species and could be removed without development consent as exempt development.

These trees are required to be removed as they are in conflict with the design of the proposal. Replacement tree planting is proposed within the Cross Street landscaped front setback area to offset their removal.

The two trees located within the public domain immediately adjacent to the site are proposed to be retained. Measures including the provision of tree protection zones (TPZs), structural root zones (SRZs) and pruning at specific distances are outlined within the Arborist Report.

Yes

E10 Landslip Risk

- 1. The applicant must demonstrate that:
- The proposed development is justified in terms of geotechnical stability; and
- The proposed development will be carried out in accordance with good engineering practice.
- 2. Development must not cause detrimental impacts because of stormwater discharge from the land.
- Development must not cause detrimental impact on the existing subsurface flow conditions including those of other properties.

The site is identified as being in Area A on Council's Landslip Risk Map.

A Preliminary Geotechnical Investigation Report was prepared by JK Geotechnics for the proposal.

The report does not identify the site as being at risk of any potential landslip as a result of the proposed





4. To address Requirements 1 to 3:

i) For land identified as being in Area A:

Council may decide that a preliminary assessment of site conditions is required. If Council so decides, a preliminary assessment of site conditions must be prepared, in accordance with the Checklist for Council's assessment of site conditions (see Notes) by a suitably qualified geotechnical engineer/ engineering geologist. The preliminary assessment must be submitted to Council before the granting of any development consent.

If the preliminary assessment determines that a geotechnical report is required, the same provisions apply in Area A as those that apply in Area B and Area D.

development. Existing drainage patterns are to be retained and no excavation is proposed as part of the proposed development. As such, the ongoing stability of the soils within the site is unlikely to be detrimentally affected.

E11 Flood Prone Land

Form A and A1 (Attachment A of Northern Beaches Council's Guidelines for preparing a Flood Management Report) is to be completed and submitted to Council.

Development that satisfies the prescriptive controls in clause 1.2 is deemed to have satisfied clause 1.1.

1.2 Prescriptive Controls

A. FLOOD EFFECTS CAUSED BY DEVELOPMENT

A3. The applicant shall include in their submission, calculations to illustrate that any fill or other structures that reduce the total flood storage are replaced by Compensatory Works.

B. DRAINAGE INFRASTRUCTURE AND CREEK WORKS

- B1. Flood mitigation works or stormwater devices that modify a major drainage system, stormwater system, natural water course, floodway or flood behaviour within or outside the development site may be permitted subject to demonstration through a Flood Management Report that they comply with the Flood Prone Land Design Standard found on Council's webpage.
- B2. A Section 88B notation under the Conveyancing Act 1919 may be required to be placed on the title describing the location and type of flood mitigation works with a requirement for their retention and maintenance.

C. BUILDING COMPONENTS AND STRUCTURAL SOUNDNESS

C1. All buildings shall be designed and constructed as flood compatible buildings in accordance with Reducing Vulnerability of Buildings to Flood Damage: Guidance on Building in Flood Prone Areas, Hawkesbury-Nepean Floodplain Management Steering Committee (2006).

The site is predominately located within a medium risk precinct for flooding as illustrated on Council's Flood Hazard Map. Small portions of the site are also located within the high and low risk flooding precincts.

A Flood Management Report was prepared for the proposal by Tonkin Consulting Pty Ltd. The assessment within the Flood Management Report concludes that the proposed development will not have any adverse flood affects as it will replicate the existing scenario in terms of building placement. The driveway and western boundary setback are to be graded from north to south such that any floodwaters will be directed to Cross Street and drained into Council's existing stormwater drainage system.

The ground floor of the proposed development has an FFL of RL 11.38 metres in line with the flood planning level.





- C2. All structures must be designed and constructed to ensure structural integrity up to the Flood Planning Level, taking into account the forces of floodwater, wave action, flowing water with debris, buoyancy and immersion. Structural certification shall be provided confirming the above. Where shelter-in-place refuge is to be provided the structural integrity is to be to the Probable Maximum Flood level.
- C3. All new electrical equipment, power points, wiring, fuel lines, sewerage systems or any other service pipes and connections must be waterproofed and/or located above the Flood Planning Level. All existing electrical equipment and power points located below the Flood Planning Level must have residual current devices installed that turn off all electricity supply to the property when flood waters are detected.

D. STORAGE OF GOODS

- D1. Hazardous or potentially polluting materials shall not be stored below the Flood Planning Level unless adequately protected from floodwaters in accordance with industry standards.
- D2. Goods, materials or other products which may be highly susceptible to water damage are to be located/stored above the Flood Planning Level.

E. FLOOD EMERGENCY RESPONSE

- E1. Development shall comply with Council's Flood Emergency Response Planning for Development in Pittwater Policy and the outcomes of any Flood Risk Emergency Assessment Report where it applies to the land.
- E2. New development must provide an appropriately sized area to safely shelter in place above the Probable Maximum Flood level and appropriate access to this area should be available from all areas within the development.
- E3. Adequate Warning Systems, Signage and Exits shall be installed to allow safe and orderly evacuation without reliance upon the SES or other authorised emergency services personnel.

F. FLOOR LEVELS

- F1. New floor levels within the development shall be at or above, the Flood Planning Level. A reduced Flood Planning Level may be considered only where it is permitted in this Development Control Plan. The structure must be flood proofed (wet or dry) to the Flood Planning Level. This control cannot be applied to critical or vulnerable uses.
- F2. All development structures must be designed and constructed so as not to impede the floodway or flood conveyance on the site, as well as ensuring no loss of flood storage in a 1% AEP Event. Where the dwelling is located over a flow path it must be elevated on

An open car park is provided at the First Floor, however given its height above the flood planning level, it is considered that these parking spaces will not be at risk within the floodway.

The Flood Management Report notes that the building will be capable of withstanding the forces of floodwaters, and therefore the proposed development is considered to be compatible with the land's flood hazard.

Refer to the Flood Management Report for further detail.



2 Cross Street, Brookvale

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suspended pier/pile footings such that the level of the underside of all floors including balconies and decks within the flood affected area are at or above, or raised to the Flood Planning Level to allow clear passage of the floodwaters under the building. The development must comply with the Flood Prone Land Design Standard.

F3. Where the lowest floor has been elevated to allow the passage of flood waters, a restriction shall be imposed on the title of the land, pursuant to S88B of the Conveyancing Act confirming that the undercroft area is not to be enclosed.

G. CAR PARKING

- G1. Open carpark areas and carports shall not be located within a floodway.
- G2. The lowest floor level of open carparks and carports (unroofed or with open sides) shall be constructed no lower than the natural ground levels.
- G4. Vehicle barriers or restraints are to be provided to prevent floating vehicles leaving the site where there is more than 300mm depth of flooding in a 1% AEP flood event. The minimum height of the vehicle barriers or restraints must be at or above the Flood planning Level. Vehicle barriers or restraints must comply with the Flood Prone Land Design Standard.
- G7. Where a driveway is required to be raised it must be demonstrated that there is no loss to flood stage in the 1% AEP flood event and no impact on flood conveyance through the site.

H. FENCING

H1. Fencing, including pool fencing, shall be designed so as not to impede the flow of flood waters and not to increase flood affectation on surrounding land. Appropriate fencing must comply with the Flood Prone Land Design Standard in addition to other regulatory requirements of pool fencing.

