

COMPLIANCE TABLE – WOLLONGONG DEVELOPMENT CONTROL PLAN 2009 CHAPTER E3



CLAUSE	TPG NSW COMMENT	COMPLIES	
<b>2.0 OBJECTIVES</b>			
<p>The key objectives of this part of the DCP are to:</p> <ul style="list-style-type: none"> <li>• Ensure that transport networks are able to support the proposed development in a manner that maintains safe levels of service.</li> <li>• Provide adequate and safe vehicular access to sites without compromising streetscape qualities.</li> <li>• Incorporate provisions that manage the demand for parking rather than seeking to accommodate peak demand.</li> <li>• Recognise variable accessibility to public transport in parking rates for different parts of the city.</li> <li>• Support an increase in bicycle and motorcycle usage by requiring provision of bicycle and motorcycle parking, storage and end-of-trip facilities for certain developments.</li> <li>• Ensure that the design of access and parking areas meets relevant Australian Standards.</li> <li>• Ensure that developments are designed to be accessible for pedestrians, cyclists and motorists.</li> <li>• Provide adequate access, loading facilities and on-site manoeuvring for service and waste collection vehicles.</li> <li>• Ensure that parking facilities are integrated into the design of developments and minimise visual impacts.</li> <li>• Ensure safe access for pedestrians and people with a disability</li> </ul>	Refer to Appendix P	✓	
<b>6.0 TRAFFIC IMPACT ASSESSMENT AND PUBLIC TRANSPORT STUDIES</b>			
<p><b>6.1 Car parking and traffic impact assessment study</b></p>	<ul style="list-style-type: none"> <li>• A Car Parking / Traffic Impact Assessment Study shall be submitted in support of the following Development Applications:                             <ol style="list-style-type: none"> <li>a) All Development Applications required to be referred to the NSW Roads and Traffic Authority under Schedule 3 of State Environmental Planning Policy (Infrastructure) 2007; and</li> <li>b) Other Development Applications where in the opinion of Council may cause a potential significant adverse traffic generation or traffic management impact upon the surrounding road network.</li> </ol> </li> <li>• The Car Parking / Traffic Impact Assessment Study must be prepared by a suitably qualified and experienced traffic engineering consultant.</li> <li>• The Car Parking / Traffic Impact Assessment Study shall address (but is not necessarily limited to the following matters / aspects:                             <ol style="list-style-type: none"> <li>a) Assessment of the proposed location and number of car parking spaces within the</li> </ol> </li> </ul>	Refer to Appendix P	✓

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	<p><i>proposed development, including a breakdown of car parking numbers per each level;</i></p> <p><i>b) Full details of the proposed location of any loading dock / servicing areas and waste storage and collection areas;</i></p> <p><i>c) Assessment of the performance of the existing road network / traffic environment, including the existing level of service of key intersections in the locality;</i></p> <p><i>d) Assessment of the anticipated traffic generation from the development;</i></p> <p><i>e) Cumulative impact assessment upon traffic flow movements and traffic safety in the locality, taking into account the traffic generation rates of the development;</i></p> <p><i>f) Assessment of the predicted performance of the surrounding road network and predicted level of service for each key intersection in the locality;</i></p> <p><i>g) Whether road upgrading and / or traffic improvement works are necessary in the locality as a result of the proposed development;</i></p> <p><i>h) Whether public transport (i.e. either on-site and / or in the immediate locality) is necessary to satisfactory cater for public transport demands in relation to the proposed development;</i></p> <p><i>i) Whether the proposed ingress / egress access arrangements of the development are satisfactory taking into account the proposed car parking and loading / servicing facilities within the development and the location of the proposed access points within the surrounding road network and proximity to key intersections in the locality;</i></p> <p><i>j) Whether sight line distance and other safety issues are satisfactory;</i></p> <p><i>k) Whether the construction of new pedestrian facilities or the upgrading of pedestrian areas/ footpaths is required as a result of the proposed development; and</i></p> <p><i>l) Other relevant matters based on the locality or the nature of the proposed development.</i></p> <ul style="list-style-type: none"> <li><i>• Certain traffic generating developments will require intersection and / or network modelling to analyse the potential traffic impacts of the proposed development upon the surrounding road network and key intersections in the locality.</i></li> <li><i>• Accordingly, intersection modelling (eg SIDRA, TRACKS) will be required for any proposed traffic generating development as prescribed in Columns 1, 2 &amp; 3 in Schedule 3 of SEPP (Infrastructure) 2007.</i></li> <li><i>• Network modelling will be required for any proposed traffic generating development as prescribed in Columns 1 &amp; 2 in Schedule 3 of SEPP (Infrastructure) 2007. In this regard, PARAMICS is the preferred network model, given that Council has PARAMICS modelling for certain parts of the city.</i></li> <li><i>• The findings of the modelling analysis are to be addressed in the Car Parking / Traffic Impact Assessment Study with appropriate recommendations as to whether road upgrading, signalisation and / or other traffic management works are necessary</i></li> </ul>		

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<p><b>6.6 Preliminary construction traffic management plan</b></p>	<p><i>to enable the proposed development.</i></p> <ul style="list-style-type: none"> <li>• A preliminary Construction Traffic Management Plan may be required where it is likely that the construction phase of a development may pose a significant impact upon traffic movement, onstreet car parking availability and / or pedestrian safety.</li> <li>• The preliminary Construction Traffic Management plan is required to address the following matters / aspects:                             <ol style="list-style-type: none"> <li>a) Assessment of the existing traffic conditions within the road network and key intersections in the locality;</li> <li>b) Assessment of the existing public domain and pedestrian areas in proximity to the proposed development;</li> <li>c) Assessment of the anticipated traffic generation associated with the construction of the proposed development;</li> <li>d) Proposed heavy vehicle routes for raw material delivery vehicles, demolition / construction heavy vehicles and other service vehicles;</li> <li>e) Assessment of the proposed construction impact of the proposed development upon the surrounding road network, on-street car parking and / or pedestrian areas;</li> <li>f) Proposed traffic control measures required for each phase of the demolition and construction program for the development;</li> <li>g) Proposed hours of the development during both the demolition and construction phases of the development;</li> <li>h) Proposed temporary parking or storage arrangements for heavy vehicles awaiting their turn to service the site, especially demolition and raw material heavy vehicles;</li> <li>i) Proposed car parking arrangements for construction workers, including demand management measures;</li> <li>j) Sight line distances and other safety issues;</li> <li>k) Proposed location, frequency and duration of any road closures required (i.e. during the demolition and / or construction phases of the development), in order to ensure vehicular, pedestrian and construction worker safety; and</li> <li>l) Other relevant matters (ie depending upon the circumstances of the site and the nature of the proposed development).</li> </ol> </li> <li>• In certain cases, Council may elect to forward the preliminary Construction Traffic Management Plan to the NSW Roads and Traffic Authority for appropriate comment.</li> <li>• Should Council ultimately grant consent to the development, Council may also require the preparation of a Final Construction Traffic Management Plan, prior to the release of the Construction Certificate.</li> </ul>	<p>Refer to Appendix P</p>	<p>✓</p>
<p><b>6.3 Public</b></p>	<ul style="list-style-type: none"> <li>• Large-scale residential subdivision residential apartment buildings, mixed use developments,</li> </ul>	<p>Refer to Appendix P</p>	<p>✓</p>

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<p><b>transport study</b> retail shopping centres, business / commercial office developments, community facilities, educational establishments and entertainment facilities etc should be sited in proximity to public transport nodes such as regular bus routes and railway stations, in order to maximise user access to public transport.</p> <ul style="list-style-type: none"> <li>• A Public Transport Study will be required for the following developments:                             <ol style="list-style-type: none"> <li>a) New or major extensions to educational establishments such as Universities and Colleges which provide facilities for 2,000 or more students and which are located outside the boundaries of the Wollongong City Centre.</li> <li>b) Business Parks or new large industrial developments involving a total gross floor area of 20,000m<sup>2</sup> or greater and which are outside the boundaries of the Wollongong City Centre.</li> <li>c) Other development (as determined by Council, at the pre-lodgement stage).</li> </ol> </li> <li>• The Public Transport Study should be prepared by a suitably qualified and experienced traffic engineering consultant.</li> <li>• The Public Transport Study is required to address a range of issues, including (but not necessarily limited to) the following:                             <ol style="list-style-type: none"> <li>a) Locality plan showing the proposed development site in relation to nearest practical public transport route, bus stops and / or railway station;</li> <li>b) Assessment of the condition of any existing pedestrian footway between nearest bus stop or railway station and the development site;</li> <li>c) Where the development site is more than 400 metres from the nearest bus stop, written evidence is required which proves that appropriate negotiations have taken place with the public transport operator and the NSW Ministry of Transport to obtain a bus route and bus stop, in close proximity to the development;</li> <li>d) Full details as to the proposed location and seating arrangements for the bus stop;</li> <li>e) Recommendations as to the provision of a shuttle bus service, to operate between the specific land use and the closest railway station, in order to improve public transport accessibility; and</li> <li>f) Recommendations as to the provision of new pedestrian facilities such as pedestrian footways, pedestrian refuges and / or necessary upgrading of any existing footway, in order to encourage pedestrian access to public transport</li> </ol> </li> </ul>		
<b>7.0 PARKING DEMAND AND SERVICING REQUIREMENTS</b>		
<p><b>7.1 Car Parking, Motor Cycle, Bicycle Requirements</b></p>	<ul style="list-style-type: none"> <li>• The car parking, motorcycle and bicycle requirements for specific land uses / developments are contained in Schedule 1 to this chapter of the DCP.</li> <li>• All car parking, motorcycle and bicycle requirements must be fully provided on-site.</li> <li>• Where development proposals contain uses that fall into a number of different land</li> </ul>	<p>Refer to Appendix P</p> <p style="text-align: right;">✓</p>

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<p><b>and Delivery / Servicing Vehicle Requirements</b></p> <p><i>use categories the parking requirements will be calculated by adding up the quantum of car parking, motorcycle and bicycle required for each land use component. Where a formula in the table results in fractions, numbers are to be rounded up to the nearest whole number. If a number of uses are present on the same development site the rounding off is to take place after the requirements for all uses have been summed together.</i></p> <ul style="list-style-type: none"> <li><i>• Requirements relating to staff parking refer to the maximum number of staff concurrently present on the site at any time.</i></li> <li><i>• In the circumstances where the car parking and / or other requirements are not defined by this chapter in the DCP for a particular land use, a detailed Car Parking and Traffic Impact Assessment Study will be required to be prepared for the proposed development.</i></li> <li><i>• The car parking component of the study must include:</i> <ol style="list-style-type: none"> <li><i>a) A detailed car parking survey of similar development located in localities which demonstrate similar traffic and parking demand characteristics;</i></li> <li><i>b) Assessment of the current traffic flow conditions in the local road network and performance of key intersections in the locality;</i></li> <li><i>c) Assessment of existing on-street car parking and whether the locality is experiencing traffic and on-street parking congestion issues;</i></li> <li><i>d) Anticipated traffic generation rate for the development;</i></li> <li><i>e) Assessment as to likely impact of the development on traffic flows and traffic safety within the local road network and the demand for on-street parking in the future as a result of the proposed development; and</i></li> <li><i>f) Assessment of the on-site car parking requirements based on the detailed car parking survey of other similar developments and localities.</i></li> </ol> </li> </ul>		
<p><b>7.2 Disabled access parking</b></p> <ul style="list-style-type: none"> <li><i>• Disabled access and parking facilities are to be provided in accordance with AS 2890.1, Building Code of Australia and the Commonwealth Disability Discrimination Act 1992. The car parking rates for accessible car parking spaces are contained in Schedule 2 below (Table D3.5 of the BCA).</i></li> <li><i>• Each disabled person's parking space must be designed in accordance with the minimum dimensions as contained in the AS/NZS 2890.1 – 1993. This shall be reflected on the relevant DA car parking layout plans. The disabled car parking spaces shall be clearly marked and signposted and located adjacent to the entrance exit with a minimum 2.5 metre head clearance in accordance with AS 2890.1.</i></li> <li><i>• The designated car parking spaces for people with a disability must be positioned directly adjacent to main lift lobby or access points servicing the development. In this</i></li> </ul>	Refer to Appendix P	✓

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	<p><i>regard, a continuous accessible path of travel must be provided to all levels within the subject building and all facilities in accordance with AS 1428.1 and the Access for People with a Disability chapter contained in Part E of this DCP.</i></p> <ul style="list-style-type: none"> <li><i>• The continuous accessible path of travel must be:</i> <ul style="list-style-type: none"> <li><i>a) From accessible parking spaces and passenger drop off points to entrances of buildings;</i></li> <li><i>b) To connect buildings, facilities and spaces that are on the same block or part of the same, complex, where topographically possible;</i></li> <li><i>c) To connect accessible entrances of a building to all accessible spaces and facilities within the building;</i></li> <li><i>d) To minimise distances travelled between accessible elements of buildings and facilities; and</i></li> <li><i>e) Provided between public domain areas to building entrances.</i></li> </ul> </li> <li><i>• A continuous path of travel should be the most commonly used and direct path of travel. If for any reason this is not possible, clear signage indicating an alternative route must be provided.</i></li> <li><i>• The designated car parking spaces for people with a disability must be appropriately signposted and line marked. The details of such car parking spaces for people with a disability shall be reflected on the architectural plans submitted with the Development Application.</i></li> <li><i>• The main entry point to the building shall be in accordance with the current relevant Australian Standard 1428.1 - 2001 Design for Access and Mobility - Part 1 General Requirements for Access - Buildings. The proposed pedestrian ramps within the car parking areas shall incorporate gradients (with suitable landing intervals) in accordance with the current Australian Standard.</i></li> </ul>		
<p><b>7.3 Bicycle Parking/Storage Facilities and Shower and change facilities</b></p>	<ul style="list-style-type: none"> <li><i>• Developments are to be designed to provide suitable bicycle parking facilities. The provision of bicycle parking for a particular land use / development shall be in accordance with Schedule 1 below.</i></li> <li><i>• For commercial office / business premises and retail centres, suitable bicycle parking facilities should be provided for both tenants / workers as well as bicycle couriers.</i></li> <li><i>• Provision for access by vehicles and vehicle parking is not to compromise the equity and amenity of bicycle access and parking.</i></li> <li><i>• Bicycle parking is to be designed and constructed in accordance with AS 2890.3, Parking Facilities Part 3: Bicycle Parking Facilities OR Austroads: "Guide to Traffic Engineering Practice, Part 14: Bicycles (1995)".</i></li> <li><i>• Bicycle parking facilities are to be provided in accordance with AS 2890.3, Table 1.1</i></li> </ul>	<p>Refer to Appendix P</p>	<p>✓</p>

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<p><i>for all user classes exempting class 4.</i></p> <ul style="list-style-type: none"> <li>• <i>For all developments listed in Schedule 3 of SEPP (Infrastructure) 2007, the provision of shower and change facilities will also be required.</i></li> <li>• <i>Bicycle parking devices should be designed to enable the wheels and frame to be locked to the device without damaging the bicycle. The parking device should be easily accessible to / from a public road. The bicycle parking device should not encroach into any pedestrian thoroughfare but should be positioned in full public view, wherever practicable.</i></li> <li>• <i>The bicycle parking area should be designed to be protected from damage arising from the manoeuvring of motor vehicles and the opening of vehicle doors.</i></li> <li>• <i>The bicycle parking area is to be well lit by appropriate existing or new lighting as per AS 1680.2 Table E1 or higher, if required for monitoring of the car park and access points by closed circuit television (CCTV).</i></li> <li>• <i>The bicycle parking area should also be protected from the weather, as far as practicable.</i></li> </ul>		
<p><b>7.6 Car parking layout</b></p> <ul style="list-style-type: none"> <li>• <i>The parking dimensions, internal circulation, aisle widths, kerb splay corners, head clearance heights, ramp widths and grades of the car parking areas are to be in conformity with the current relevant Australian Standard AS2890.1 (2004). No sprinklers or other services shall encroach within the clear head clearance height requirement.</i></li> <li>• <i>The layout of all car parking areas shall be in strictly accordance with Australian Standard AS 2890 and the following additional requirements:</i> <ol style="list-style-type: none"> <li>a) <i>Parking areas must be designed so any vehicle which uses the area will be able to enter and leave the site in a forward direction without the need to make more than a three point turn.</i></li> <li>b) <i>Stacked parking may be permitted in the following circumstances:</i> <ol style="list-style-type: none"> <li>i) <i>The applicant must demonstrate that there is a need for stacked parking and that the provision of stacked parking will not adversely affect the safe, efficient and effective use of the site;</i></li> <li>ii) <i>No more than two cars are parked in a stacked arrangement, so that no more than one vehicle has to move to allow egress of another;</i></li> <li>iii) <i>Provision shall be made on site for shifting cars without the movement of vehicles onto public streets;</i></li> <li>iv) <i>Residential: only permitted where both spaces are utilised by the same dwelling and such spaces do not interfere with common manoeuvring areas; and</i></li> <li>v) <i>Business or Industrial: only permitted for staff spaces, provided the spaces are used by the occupants of one tenancy.</i></li> </ol> </li> </ol> </li> </ul>	<p>Refer to Appendix P</p>	<p>✓</p>

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<ul style="list-style-type: none"> <li>• <i>Small car spaces will only be permitted where the total quantum of required standard sized car parking spaces has already been provided. Small car parking spaces must be designed in accordance with AS 2890.1, Clause 2.4 – Design of Parking Modules</i></li> <li>• <i>Car parking areas should be designed to ensure that through traffic is excluded or appropriately managed.</i></li> <li>• <i>Pedestrian entrances / exits are to be separated from vehicular entry / exit points.</i></li> <li>• <i>Developments with high pedestrian movements throughout the car parking area(s) such as major retail shopping centres, commercial offices and major entertainment / recreational facilities must incorporate clear and convenient pedestrian routes. The pedestrian routes within the car parking areas must take into account pedestrian desire lines and minimise potential vehicular / pedestrian conflict points. Pedestrian routes must be well lit and sited to maximise pedestrian visibility.</i></li> <li>• <i>Car parking areas should incorporate traffic calming and pedestrian crossing facilities such as speed humps, raised thresholds, marked pedestrian crossing points and clear directional signage to pedestrian access points within the development. These must be provided within the car park in order to reduce speed and enhance pedestrian safety and accessibility in accordance with AS2890.1.</i></li> <li>• <i>Gradients of ramps and access driveways shall be provided in accordance with Australian Standard AS2890.1 (2004) - Off Street Car Parking.</i></li> <li>• <i>Wheel stops must be designed and installed in accordance with AS2890.1.</i></li> <li>• <i>The provision of suitable barriers, line-marking and painted signage delineating vehicular flow movements within the car parking areas is also required, in order to improve traffic circulation within the car parking area.</i></li> </ul>		
<p><b>7.7 Basement car parking</b></p> <ul style="list-style-type: none"> <li>• <i>A minimum 2.4 metre headroom height shall be provided throughout any basement car parking and traffic circulation area.</i></li> <li>• <i>A geotechnical and hydro-geological report (i.e. prepared by a suitably qualified engineer) may be required to be provided to Council, in order to address the issues of construction methodology and groundwater management for any proposed basement or sub-basement car parking area. The purpose of this report is to ensure that there is no ground settlement or movement, changes to groundwater level and / or adverse vibration impacts during construction which may result in an adverse impact upon any adjoining property or service infrastructure. The determination as to whether a geotechnical or hydro-geological report is necessary will be determined by Council at the pre-lodgement meeting or via written correspondence to Council requesting Council's written reply response (ie where a formal pre-lodgement meeting is not normally required for the development proposal as per the pre-lodgement meeting</i></li> </ul>	Refer to Appendix P	✓

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	<p>requirements in Part A of the DCP).</p> <ul style="list-style-type: none"> <li>• Additionally, full details showing how flood-proofing of the vehicular access, fire escape and any ventilation openings will be achieved.</li> <li>• Waste collection vehicles may enter building basements to collect waste and/or recyclables subject to the following requirements:                             <ul style="list-style-type: none"> <li>a) Compliance with Australian Standard AS 2890.2 Parking Facilities: Off-Street Commercial Vehicle Facilities;</li> <li>b) The height to the structural members and upper floor ceiling should allow for collection vehicle travel height/operational height, consistent with the type of vehicle nominated as the waste collection vehicle;</li> <li>c) Adequate provision of space clear of structural members or vehicle parking spaces to allow a typical three-point turn of collection vehicles or alternatively, provision should be made for a truck turn table within the basement car parking area; and</li> <li>d) The basement floor should be of industrial-type strength pavement and designed for a maximum wheel loading of seven tonnes per axle to accommodate garbage and recycling collection vehicles.</li> </ul> </li> <li>• Wheel stops are to be provided to all car parking spaces, in order to minimise vehicle accidents / damage and to prevent vehicle encroachment into public domain areas or landscaping.</li> </ul>		
<p><b>7.9 Allocation of car parking within a strata titled development</b></p>	<ul style="list-style-type: none"> <li>• Where strata subdivision of a development is proposed, car parking spaces shall be allocated to strata lots or common property within the strata plan in accordance with the development consent conditions and approved plans issued for the development.</li> <li>• In some instances the identification of car parking spaces for specific uses and/or tenancies/ units within developments may be appropriate.</li> </ul>	<p>Refer to Appendix P</p>	<p>✓</p>
<p><b>7.10 Public car parks</b></p>	<ul style="list-style-type: none"> <li>• The establishment and operation of a public carpark requires formal Council consent and may also require concurrence from the NSW Roads &amp; Traffic Authority, if the carpark triggers the threshold levels contained in Columns 2 or 3 in Schedule 3 of SEPP (Infrastructure) 2007. Additionally, the proposed operation of a public carpark also requires an Activity approval under Section 68 of the Local Government Act 1993. Therefore, a combined Development Application / Section 68 Activity Application may be lodged pursuant to the provisions of Section 78A (subsections 78A(2) &amp; (3)) of the Environmental Planning and Assessment Act 1979.</li> <li>• A “public car park” includes any proposed installation of boom gates within an existing car parking area.</li> <li>• The exact location of boom gates in a proposed public carpark is an important</li> </ul>	<p>Refer to Appendix P</p>	<p>✓</p>

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	<p><i>consideration to ensure adequate queuing lengths are available on-site, in order to minimise potential adverse queuing problems upon any public road.</i></p> <ul style="list-style-type: none"> <li>• <i>The actual design queue length for a particular carpark must be determined by the nature and size of the proposed land use serviced by the subject carpark and the likely parking demand and access requirements, during peak periods. The design of any boom gate and the minimum queue length required within the site must be in accordance with the requirements of AUSTRROADS.</i></li> <li>• <i>For developments which require the lodgement of a formal Car Parking and Traffic Impact Study, the study should help determine the desired location of any proposed boom gates / ticket booths and the minimum queue length required to satisfactorily service the development</i></li> </ul>		
<p><b>7.11 Electronic parking vacancy signs</b></p>	<ul style="list-style-type: none"> <li>• <i>For large retail shopping centres and major entertainment / recreation facility developments with separate or multi-level car parking areas, Council may require the provision of electronic parking vacancy signage at each entry to the car parking area or each carpark level, in order to minimise potential additional traffic flow movement impacts within the development and upon the surrounding road network arising from patrons having to access different car parking areas in the development, in endeavour to find a vacant car parking space.</i></li> </ul>	<p>Refer to Appendix P</p>	<p>✓</p>
<p><b>7.12 car parking &amp; access construction requirements</b></p>	<ul style="list-style-type: none"> <li>• <i>All car parking areas and internal roads must be constructed of a hard-standing all-weather material (ie concrete or asphalt bitumen), which must be maintained to the satisfaction of Council, at all times.</i></li> <li>• <i>The pavement construction shall be in accordance with the Subdivision Code and Council's Development Design and Construction Specifications requirements.</i></li> <li>• <i>For large industrial or commercial office developments or major retail shopping centres, car parking areas should be designed to include water sensitive urban design treatment measures, in order to encourage infiltration of stormwater run-off rather than direct discharge of stormwater run-off into the piped drainage system.</i></li> <li>• <i>Alternatively car parking areas may be sealed with an all-weather surface and high flows managed by detention storage and pollutants removed by suitably designed, installed and maintained devices (GPT, grass swales etc). Minimum trafficked area surface standards in this case are:</i></li> <li>• <i>Low parking turnover (&lt;50 movements) - flush seal (ie. two coat bitumen spray).</i></li> <li>• <i>High parking turnover (&gt;50 movements) - asphalt concrete.</i></li> </ul>	<p>Refer to Appendix P</p>	<p>✓</p>
<p><b>7.13 Directional signage for car parking areas</b></p>	<ul style="list-style-type: none"> <li>• <i>All car parking areas shall be provided with appropriate entry and exit advisory signage to direct vehicles into / from the carpark and to minimise potential vehicular conflicts. The details of the proposed entry / exit signage shall be reflected on the architectural plans submitted with the Development Application.</i></li> </ul>	<p>Refer to Appendix P</p>	<p>✓</p>

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<ul style="list-style-type: none"> <li>Where a one-way traffic circulation flow is proposed, all internal roads within car parking area shall be appropriately line marked with directional (arrow) signage to clearly indicate the direction of traffic circulation and to minimise potential vehicular conflicts. This requirement shall be reflected on the architectural plans (ie car parking layout plans) to be submitted with the Development Application.</li> </ul>			
<b>9.0 LOADING / UNLOADING FACILITIES AND SERVICE VEHICLE MANOEUVRING</b>			
<b>9.1 General</b>	<ul style="list-style-type: none"> <li>Site design must allocate adequate space for the loading, unloading, parking and manoeuvring of delivery and service vehicles within the subject property. Design of these areas shall comply with AS 2890.2.</li> <li>Table 1 provides a summary of the minimum loading dock requirements for specific land uses /developments.</li> <li>Schedule 1 identifies the various types of service vehicles to be catered for within the various development types. Special vehicles such as buses, garbage trucks and ambulances may have particular access, manoeuvring and operating conditions. The designer or applicant should refer to AS 2890.2 Off-street parking (Part 2: Commercial vehicle facilities) and Roads and Traffic Authority, 1993: "Guide to Traffic Generating Developments".</li> </ul>	Refer to Appendix P	✓
<b>9.2 Loading / Unloading and Manoeuvring Area Requirements</b>	<ul style="list-style-type: none"> <li>All small rigid trucks through to large rigid trucks and articulated heavy vehicles (semi-trailers) must be able to manoeuvre entirely on-site and enter and leave the site in a forward direction. All truck turning or manoeuvring areas must be separate from areas of normal pedestrian or vehicular traffic.</li> <li>All loading and unloading activities shall take place wholly within the loading bay, at all times. No loading or unloading activity shall take place within any car parking area, landscaping area, pedestrian footway or any public road reserve.</li> <li>The designated loading / unloading area shall be kept free for that purpose, at all times.</li> <li>Loading / unloading facilities shall be located so they are not visible from any adjoining residential area and do not transmit excessive noise onto any adjoining residential area.</li> <li>All loading dock facilities must guarantee satisfactory on-site manoeuvring areas for trucks in accordance with the Australian Standard AS 2890.2 Design Vehicular and Turning templates.</li> <li>Council will assess the adequacy of proposed manoeuvring areas provided for on-site truck manoeuvring with reference to the standard vehicle turning templates as per the Australian Standard AS 2890.2 Design Vehicular and Turning templates.</li> <li>All developments must be designed to ensure that the standard truck for each development as above mentioned in Schedule land Table 2 is able to complete a</li> </ul>	Refer to Appendix P	✓

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CLAUSE		TPG NSW COMMENT	COMPLIES
	<p>semi-circular turn on the site, in order to guarantee that all truck movements into / from the site are in a forward direction.</p> <ul style="list-style-type: none"> <li>• Truck turning circles shall not encroach upon any building, car parking space or landscaped area.</li> <li>• Access arrangements should be designed in accordance with the NSW Roads &amp; Traffic Authority’s Traffic Generating Guidelines and Australian Standard AS 2890.1 (2004). However, it is desirable that separate access arrangements be made available for standard passenger vehicles and trucks upon the development site, in order to minimise potential vehicular conflicts.</li> <li>• All internal two-way access roads shall have a minimum width of 7 metres. Lesser widths may be provided if the internal road system is designed to a single one-way circulation arrangement within the site including any loading dock facilities. Directional signage shall be shown on all internal roadways (where required) to facilitate the orderly movement of trucks and other vehicles within the site.</li> <li>• As per the provisions of C2.4 of the Building Code of Australia, emergency vehicular access must be provided from a public road. In this respect, the internal access road must have an unobstructed 6 metre width with no part of the building being more than 18 metres away from the access road. The minimum 6 metre wide access road shall be reserved for vehicular and pedestrian access only and not built upon or used for any other purpose.</li> <li>• Loading docks should also be positioned wherever possible, away from the street frontage. Where such facilities can only be provided to the street frontage, appropriate landscaping will be required in front of the loading facility to adequately screen the development.</li> <li>• All loading / unloading and manoeuvring areas should be located as far as practicable away from any abutting residential or other sensitive development. Where these activities are likely to result in loss of amenity in nearby residential areas, visual and acoustic screening approved by Council may be required to minimise the potential loss of amenity to adjoining residential or other sensitive development.</li> </ul>		
<p><b>9.3 Noise Impact Assessment associated with Loading / Unloading Facilities</b></p>	<ul style="list-style-type: none"> <li>• The submission of a noise impact assessment report may be required with a Development Application where loading dock facilities are proposed to be positioned in proximity to any adjoining noise sensitive land uses such as residential dwellings, Senior Living developments and educational establishments etc. This requirement will be at the discretion of Council.</li> <li>• The NSW Department of Environment and Climate Change’s ‘Environmental Criteria for Road Traffic Noise’ policy is to be used for the assessment of potential traffic noise impacts from the site.</li> </ul>	<p>Refer to Appendix L</p>	<p>✓</p>

COMPLIANCE TABLE – WOLLONGONG DEVELOPMENT CONTROL PLAN 2009 CHAPTER E3



CLAUSE	TPG NSW COMMENT	COMPLIES
<ul style="list-style-type: none"> <li>• The noise impact assessment report will be required to address the existing LA90 background &amp; LAeq ambient noise levels at the boundary to the nearest residential land uses during the daytime, evening and night-time periods. The noise impact assessment report must also address the predicted LA1 (maximum noise level) and LA10 average maximum noise level of the development, particularly in respect to the loading and unloading activities conducted within the loading dock facility of the development. The noise impact assessment report should also apply the NSW Department of Environment and Climate Change's 'Industrial Noise Policy' sleep intrusiveness noise criteria and the amenity criteria in determining the noise impact upon sensitive residential land uses. The policy prescribes a sleep disturbance criterion of LA1(1 minute) &lt; LA90(15 minutes) + 15DB(A).</li> <li>• Any noise impact assessment report shall also provide recommendations on acoustic attenuation measures required to be provided to improve the acoustic performance of the loading dock facility and / or other operational restrictions (i.e. restricted delivery times for delivery trucks), bearing in mind the nature and frequency of proposed truck deliveries to / from the site and the predicted noise impacts arising from loading / unloading activities</li> </ul>		
<b>10.0 PEDESTRIAN ACCESS</b>		
<ul style="list-style-type: none"> <li>• Developments are to be designed to support access for pedestrians and disabled persons to and within the site.</li> <li>• Footpaths are to be provided for pedestrians to move from adjacent streets and footpaths onto the site and to destinations within the site. Particular attention is to be given to the movement of pedestrians to and from public transport stops, bicycle parking areas and disabled parking areas. Depending on the expected volumes of pedestrian traffic, weather protection for key pedestrian movement corridors should be integrated into the building design</li> <li>• Provision for access by vehicles and vehicle parking is not to compromise the equity and amenity of pedestrian access.</li> <li>• Pedestrian facilities are to be designed in accordance with AUSTRROADS "Guide to traffic Engineering Practice, Part 13: Pedestrians (1995)".</li> </ul>	Refer to Appendix P	✓
<b>11.0 SAFETY &amp; SECURITY (CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN) MEASURES FOR CAR PARKING AREAS</b>		
<ul style="list-style-type: none"> <li>• The soffit of the roof slab, all walls and all columns of any basement car parking area in addition to the interior of all lift foyer areas, fire exits and other staircases must be painted in a white finish, in order to improve the visibility throughout the car park and to minimise potential 'dark spots'.</li> <li>• The exit fire stairs should also be wide and open, in order to improve visual</li> </ul>	Refer to Appendix O	✓

COMPLIANCE TABLE – WOLLONGONG DEVELOPMENT CONTROL PLAN 2009 CHAPTER E3



CLAUSE		TPG NSW COMMENT	COMPLIES
	<p><i>surveillance into these areas from the car parking and traffic circulation areas within the facility.</i></p> <ul style="list-style-type: none"> <li>• <i>The car parking area should also be designed to prevent blind corners and to maximise visibility and sightlines for both persons in vehicles and pedestrians.</i></li> <li>• <i>All car parking spaces should be visible to approaching vehicles and not 'hidden'.</i></li> <li>• <i>All pedestrian areas should follow pedestrian desire lines and be well lit.</i></li> <li>• <i>The lighting of car parking areas must be in accordance with AS 1680 and lighting levels must be in accordance with AS 1680.2 Table E1 or higher if required for monitoring of the car park and access points by closed circuit television (CCTV).</i></li> <li>• <i>All emergency lighting and exit lights are to be provided with "vandal – resistant" fittings suitable for use in an unsupervised car park.</i></li> </ul>		
<p><b>13.0 STORMWATER DRAINAGE / WATER SENSITIVE URBAN DESIGN</b></p>			
	<ul style="list-style-type: none"> <li>• <i>Refer to the Stormwater Management chapter contained in Part E of this DCP for stormwater drainage and on-site stormwater detention requirements for off-street car parking and access areas.</i></li> <li>• <i>For certain developments, the Water Sensitive Urban Design treatment measures may also be required for car parking and access areas in accordance with the requirements of the Water Sensitive Urban Design chapter in Part E of the DCP.</i></li> </ul>	<p>Refer to Appendix I</p>	<p>✓</p>