

The Glades, Byford Local Structure Plan Amendment No.11 – Cardup Brook Precinct – Schedule of Modifications			
No.	Section	Modification	Justification
1.	Document – Various	Modify all references to Detailed Area Plans (DAPs) to Local Development Plans (LDPs).	To align with the current planning framework terminology.
2.	Part 1 Section 5.1	Move the Local Development Plan criteria contained in section 5.1 Residential Zone to Section 6.8 Local Development Plan.	For clarity and to move requirements to the specific Local Development Plan section of Part 1. This approach is consistent with other Local Structure Plans.
3.	Part 1 Section 5.1	Modify Section 5.1 to include the following: <i>‘The provisions, standards and requirements of this Zone are in accordance with those applicable to the same zone in the Scheme, except where varied by a Local Development Plan. For land zone Residential on the Structure Plan Map, subdivision and development shall generally be in accordance with the adopted Structure Plan.</i>	To remove the requirements for a Local Development Plan to the Local Development Plan Section within Part 1.
4.	Part 1 Section 5.1.	Amend Section 5.1 to the following: 5.1.1 Densities: <i>The Structure Plan map identifies broad residential density ranges that apply to specific areas within the Structure Plan area. A Density Plan is to be submitted at the time of subdivision to the WAPC for approval. The Density Plan is to be consistent with the Structure Plan density code ranges.</i>	To ensure that at subdivision stage a specific density code is applied to subdivided lots as the Structure Plan amendment provides for density code ranges.
5.	Part 1 Section 5.1.	Amend Section 5.1 to the following: 5.1.2 Locational Criteria <i>The allocation of residential densities shall be in accordance with the following locational criteria:</i>	The section has been modified to specify the allocation of the R40 density code. The criteria for the allocation of the R40 density is recommended to be modified to apply to consistently to street blocks or along streets to ensure a consistent streetscape outcome can be achieved. The 100m walkable catchment is considered appropriate to ensure that the R40 density code is allocated to lots adjacent or

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		<p>a) <i>R40-R60 shall apply as shown on the Structure Plan map in areas of high amenity including areas abutting Public Open Space and higher order streets.</i></p> <p>b) <i>The R40 density code may apply to ‘Residential’ zoned lots where a consistent R-Code is applied per street block or along streets, and where one or more of the following applies:</i></p> <ul style="list-style-type: none"> <i>i. The lot is located within a 100m walkable catchment of an area of public open space, excluding the area identified as R15 abutting the Cardup Brook Foreshore Reserve.</i> <i>ii. The lot is located within a 100m walkable catchment of a planned local centre; or</i> <i>iii. The lot is located within a 100m walkable catchment of a planned Primary or High School.</i> <p>c) <i>The R15 density code shall apply to lots as shown on the structure plan map where fronting the Cardup Brook foreshore reserve and associated Public Open Space.</i></p>	<p>in close proximity to public open space, a local centre or school.</p> <p>To include that R15 code shall apply as indicated on the Structure Plan Map to ensure the sensitive interface between the densities of the Cardup Brook North and Cardup Brook South is achieved to preserve the larger rural style lot amenity of the lots to the South of the Brook. Also, to ensure that there is not a large intensification of urban development on the fringe of the REW 30m buffer, in an effort to reduce the localised disturbance to the natural environment.</p>
6.	Part 1 Section 5.4	<p>Modify the list of appropriate land uses:</p> <p>Remove fast food outlet from the appropriate land uses for Mixed Use.</p>	<p>Fast food outlets premises are not appropriate land uses for the mixed-use zone. Land uses are to not be detrimental to the amenity of the area, or to the health, welfare and safety of its residents.</p>
7.	Part 1 Section 5.5 Service Commercial (new section).	<p>Include a new section – 5.5 Service Commercial. Include the following provisions:</p> <p><i>All development within the service commercial area shall be subject to and address the following matters:</i></p> <ul style="list-style-type: none"> <i>a. Development siting and orientation to minimise adverse impacts to residential amenity.</i> 	<p>To include the new land use listed included within the Amendment.</p> <p>To ensure that the interface of the service commercial area interfaces sensitively to preserve amenity to the surrounding residential areas.</p>

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		<p>b. <i>Development scale and bulk to be sensitive to surrounding residential built form.</i></p> <p>c. <i>Development interface treatments to protect visual amenity to ensure an appropriate transition of development and land uses.</i></p> <p>d. <i>Appropriate landscaping and screening being applied at the development interface to provide a sensitive transition.</i></p>	
8.	Part 1 Section 6	<p>Add following provision to state:</p> <p><i>‘The following technical reports/strategies are to be prepared and submitted as part of a subdivision application or as a condition of subdivision approval as recommended by the local government (where applicable):’</i></p>	To specify that relevant technical documents may be required to be provided as part of the subdivision application to inform the assessment of the subdivision.
9.	Part 1 Section 6	<p>Include the additional following technical reports/strategies:</p> <ul style="list-style-type: none"> • Geotechnical Report • Fauna Management and Relocation Plan 	<p>To include that a Geotechnical Report will be required at subdivision stage.</p> <p>To include that a Fauna Management and Relocation Plan may be required at subdivision stage given the fauna habitat within and surrounding the site as indicated by the Environmental Assessment and Management Strategy.</p> <p>To include that a Landscape and Vegetation Management Plan is required at the subdivision stage where applicable.</p>
10.	Part 1 Section 6.5	<p>Modify the provision under 6.5 to include:</p> <p><i>‘A Landscape Management Plan is to be prepared as a requirement of a condition of subdivision or development approval for any land abutting the Multiple Use Corridor or Village Centre and land zoned Service Commercial to provide adequate natural screening to sensitive residential land uses it may abut (as shown on Figure 1). The extent of the Landscape Management Plan will be at the</i></p>	To ensure that a Landscape Management Plan is prepared that addresses land zoned ‘Service Commercial’ to ensure sensitive integration and interface between land zoned ‘Service Commercial’ and ‘Residential’.

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		<i>discretion of the Local Government. The Landscape Management Plan (if necessary), shall consider matters of fire management.'</i>	
11.	Part 1, Section 6.6	Include a new provision which states: <i>'A Bushfire Management Plan is required to be provided at subdivision stage.'</i>	In accordance with State Planning Policy 3.7 Planning in Bushfire Prone Areas.
12.	Part 1, Section 6.7	Modify the provision under 6.7 to include: <i>'A Noise Management Plan is to be prepared as a requirement of a condition of subdivision or development approval for land within proximity to the Tonkin Highway reservation, Orton Road and the railway to the east of the LSP area (as shown on Figure 1). The plan will identify lots affected by traffic noise from Tonkin Highway and outline the relevant noise mitigation measures to be implemented.'</i>	To ensure that the Noise Management Plan takes into consideration other major transportation corridors that may generate traffic noise that requires further study and possible mitigation measures. In accordance with State Planning Policy 5.4 Road and Rail Noise.
13.	Part 1, Section 6.8	Modify the Provision under 6.8 to include: <i>'Local Development Plans are to be prepared as a requirement of a condition of subdivision for proposed lots or lots that abut road reserves which accommodate existing significant vegetation worthy of retention, not affected by necessary subdivision works'.</i> <i>As a minimum, Local Development Plans Shall be required for the following:</i> a) <i>Rear loaded or laneway lots;</i> b) <i>Lots with dual frontages;</i> c) <i>Lots immediately abutting public open space or foreshore areas;</i> d) <i>Lots with frontage to, or abutting Regional Roads, other Regional Roads or Railway Reservations; and</i> e) <i>Lots with frontage to Abernethy and Orton Road.</i>	Local Development Plans are required to be prepared to address a number of requirements for lot design. Modification is to specify that LDP's are only to be prepared for constrained lots for the instances listed in the modification.

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		f) <i>Lot requiring noise attenuation in accordance with State Planning Policy 5.4 Road and Rail Noise (SPP5.4).</i>	
14.	Part 1 – New Section	<p>Include a new section ‘Noise Management’ which states the following:</p> <p><i>‘A noise wall is required to be constructed along the boundary of the development interface in accordance with the Noise Management Plan prior to subdivision and development.’</i></p> <p><i>‘Quiet house design requirements shall apply as required by the Noise Management Plan.’</i></p>	To ensure that a noise wall required by the Noise Management Plan is constructed prior to subdivision and development. To ensure that quiet house design requirements are applied in accordance with the noise management plan.
15.	Part 1 – New Section	<p>Include a new section ‘Future Subdivision’ which states the following:</p> <p><i>‘All indicative subdivision layouts shown in this Local Structure Plan and associated appendices are for conceptual purposes only and are subject to further investigation and detailed design at subdivision stage.’</i></p>	To clearly state that indicative subdivision designs are only conceptual and subject to detailed design.
16.	Part 2 Section 5.2.4 – Cardup Brook	<p>Modify the text under section 5.2.4 to state:</p> <p><i>‘Cardup Brook is a mapped Resource Enhancement wetland and Bush Forever site (partially). Resource Enhancement wetlands typically (though depending on condition) require retention and are to be protected by a 30-metre land use buffer. There are also restrictions on locating drainage infrastructure within the 30m REW buffer and on the ability for directing stormwater flows directly into such wetlands’.</i></p>	To ensure the integrity of the Cardup Brook is maintained.
17.	Part 2 Section 6.4.1	<p>Update Section 6.4.1 to include the Locational Criteria listed below for the appropriate distribution of residential densities.</p> <p><i>‘The allocation of residential densities shall be in accordance with the following locational criteria:</i></p>	To ensure consistency between Part 1 and Part 2 regarding the Locational Criteria for the distribution of residential densities.

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		<ol style="list-style-type: none"> 1. <i>R40-R60 shall apply as shown on the Structure Plan map in areas of high amenity including areas abutting Public Open Space and higher order streets.</i> 2. <i>The R40 density code may apply to 'Residential' zoned lots where a consistent R-Code is applied per street block or along streets, and where one or more of the following applies:</i> <ol style="list-style-type: none"> i. <i>The lot is located within a 100m walkable catchment of an area of public open space, excluding the area identified as R15 abutting the Cardup Brook Foreshore Reserve.</i> ii. <i>The lot is located within a 100m walkable catchment of a planned local centre; or</i> iii. <i>The lot is located within a 100m walkable catchment of a planned Primary or High School.</i> 3. <i>The R15 density code shall apply to lots as shown on the structure plan map where fronting the Cardup Brook foreshore reserve and associated Public Open Space'.</i> 	
18.	Part 2 Section 6.4.1 Residential/Various – Lot Yield	<p>Update the estimated lot yield to reflect the updated allocation of residential densities throughout the Amendment area.</p> <p>Update to reflect the modification number 4 and 5 with revised lot densities.</p>	To ensure lot yield is accurate to reflect required residential densities.
19.	Part 2 Section 6.4.1.1 – Low Residential Densities	Include the allocation of Residential R15 lots abutting the Cardup Brook Foreshore Reserve at the southern boundary of the structure plan.	To ensure the sensitive interface between the densities of the Cardup Brook North and Cardup Brook South is achieved to preserve the larger rural style lot amenity of the lots to the South of the Brook. Also, to ensure that there is not a large intensification of urban development on the fringe of the REW 30m buffer, in an effort to reduce the

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			severe localised disturbance to the natural environment.
20.	Part 2 Section 6.4.4 – Mixed Use	<p>Updated the mixed-use section to reflect the rationalisation of the mixed-use sites north and south of Orton Road.</p> <p>Amend the text of Section 6.4.4 to state:</p> <p><i>‘A significant proportion of Mixed-Use development is located along Orton Road at three strategic sites at the intersections of Kokoda Boulevard, Doley Road and Lawrence Way to service the needs of the surrounding community. It is considered that a ‘Mixed Use’ designation allows for residential development density of R80 and provides a commercial function to service the daily and weekly needs of the surrounding community. The land use permissibility for the Mixed-Use zone is outlined in Part 1 of this Structure Plan’</i></p>	The Structure Plan amendment has resulted in a rationalisation of the ‘Mixed Use’ sites. This modification ensures that the rationalisation is included in the Structure Plan document.
21.	Part 2 Section 6 New Section.	<p>Include a new section ‘Service Commercial’ which states the following:</p> <p><i>‘A significant proportion of Service Commercial development is located along Orton Road within close proximity to Tonkin Highway. The Byford Structure Plan 2005 (as amended) identified much of this location as being appropriate for Mixed Business development, however given the lesser traffic volumes now anticipated on Orton Road (refer Section 8), it is considered that a ‘Service Commercial’ designation that permits commercial/showroom development, is more appropriate.</i></p> <p><i>The ‘Service Commercial’ precinct is to integrate with the surrounding residential development sensitively for the protection of amenity. Design provisions for the interface between ‘Service Commercial and ‘Residential’ is outlined in Part 1 of this Structure Plan.</i></p>	To ensure that the Structure Plan includes the new land use of ‘Service Commercial’ shown in the LSP Amendment No.11.

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22.	Part 2 Section 6.4.7 Public Open Space/Various POS Schedule	Update the POS Schedule to reflect the updated POS distribution of the Amendment area. The modification is to include updates to the total amount of restricted and unrestricted POS provided.	To ensure the POS schedule is accurate and reflects the correct amount of POS within the LSP, to meet the 10% POS requirement of Liveable Neighbourhoods.
23.	Part 2 Section 7.5.2 – Streetscape	Specify the landscaping requirements and management of the interface between the noise wall and the streetscape.	To ensure an appropriate streetscape interface can be achieved.
24.	Part 2 Section 8.2 – Strategic Transport Issues	Modify Section 8.2 to remove reference and associated text explaining that Orton Road is not to connect through to South Western Highway. Ensure Section 8.2 makes reference to Orton Road connecting through to South Western Highway.	To ensure Orton Road is explained to connect to South Western Highway to align with the approved Byford DSP and the gazetted Amendment 208.
25.	Part 2 Section 8.2 – Figure 19	Modify Figure 19 to ensure Orton Road is shown with an arrow to connect to South Western Highway.	To align with the approved Byford DSP and the gazetted Amendment 208.
26.	Part 2 Section 8.4.3 – Orton Road	Update Section 8.4.3 – Orton Road with the following: <i>‘As discussed in Section 8.2, it is intended that Orton Road will connect through to the South-West Highway. Accordingly, it is to provide a broader district level function and is intended that Orton Road will now function as an Integrator B between Tonkin Highway and the South Western Highway.</i> <i>The complete road construction is to be to the Standard of Integrator B standard according to Liveable Neighbourhoods, including intersection treatments, traffic control devices where required and shared paths. Land is required for a 30-metre-wide road reserve, with additional land being required where necessary for channelisation and/or roundabout construction at intersections.</i> <i>Orton Road is to include an at-grade rail crossing east of Soldiers Road before the connection to South Western Highway. It is</i>	To ensure Orton Road is explained to connect to South Western Highway to align with the approved Byford DSP and the gazetted Amendment 208.

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		<p><i>important to note that the construction of the at-grade crossing is subject to agreement between the Road Manager and Rail Infrastructure Manager. The Local Government is responsible to manage communications between all stakeholders, obtain the required approvals and arrange for an Australian Level Crossing Assessment Model (ALCAM) Report and a Rail Safety Report to be Undertaken.</i></p> <p><i>The Local Structure Plan proposes to utilise the existing road reserve wherever possible, and the final upgrade will require coordination with the adjacent landowners to the north (approximately 5m widening either side of the existing reservation).</i></p> <p><i>It is anticipated that Orton Road will require an 8-10m drainage swale, and this is proposed to be located within a central median (see Figure 21) aligning with water sensitive urban design measures’.</i></p>	
27.	Map and Document and Appendices	Modify the Structure Plan Map to show Orton Road with an arrow connecting through to South Western Highway, consisted with the approved Byford DSP.	To ensure the Structure Plan Map aligns with the Byford DSP and the gazetted Local Planning Scheme No.2 - Amendment 208.
28.	Map and Document and Appendices	<p>Modify the Structure Plan Map to:</p> <p>Identify an area to accommodate a row of lots as Residential R15 abutting the Cardup Brook Foreshore Reserve at the southern boundary of the structure plan.</p>	To ensure the sensitive interface between the densities of the Cardup Brook North and Cardup Brook South is achieved to preserve the larger rural style lot amenity of the lots to the South of the Brook. Also, to ensure that there is not a large intensification of urban development on the fringe of the REW 30m buffer, in an effort to reduce the severe localised disturbance to the natural environment.

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29.	Map and Document and Appendices – Movement Network	<p>Modify the Structure Plan Map to:</p> <p>Modify the intersection of Orton Road and Tourmaline Boulevard (west of Kokoda Boulevard) to be a four-way roundabout controlled intersection.</p>	<p>The four-way roundabout is the preferred solution as it ensures that there is limited disruption to traffic flows along Orton Road and lower impact on turning movements on Orton Road. A controlled roundabout intersection creates less impact on lower order streets within the residential areas and maintains permeable traffic flows. It also results in traffic turning movements from Orton Road into the Cardup Brook Precinct not being transferred down Orton Road to become congested at Kokoda Boulevard. It allows for a more comprehensive distribution of traffic turning into the Cardup Brook Precinct to minimise traffic congestion.</p>
30.	Map and Document and Appendices – POS	<p>Update the Structure Plan map to show the correct distribution of POS within the Amendment area.</p> <p>Update is to reflect the updates to the UWMP.</p>	<p>To address the concerns identified by the Shire.</p>
31.	LSP Map – Water Corporation Service Corridor	<p>Modify the Amendment map to show the Water Corporation Service Corridor as white, not having the designation of Residential R20 – R40.</p> <p>The modification is to make the service corridor consistent to what is shown north of Orton Road.</p>	<p>To ensure consistency between what is shown north of Orton Road and the Cardup Brook Precinct in relation to the identification of the Water Corporation Service Corridor.</p>
32.	Urban Water Management Plan	<p>Update the Urban Water Management Plan (UWMP) to the satisfaction of the Shire of Serpentine Jarrahdale.</p> <p>The update to the UWMP is to include:</p> <ul style="list-style-type: none"> • Securing of a groundwater allocation and license for the District Open Space. • To demonstrate that drainage infrastructure within the REW 30m buffer does not pose an additional maintenance or asset 	<p>To address the concerns identified by the Shire.</p>

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		burden on the Shire versus if such were located wholly outside of the buffer.	
33.	Foreshore Management Plan	<p>The Foreshore Management Plan developed in 2008 is required to be updated for the northern bank of the Cardup Brook. The plan is to be updated to coincide with the new Cardup Brook Precinct land use layout, and include the proposed drainage basins, bushfire access way and interface between the Brook and residential development.</p> <p>The Foreshore Management Plan is to be updated with further detailed design work, to demonstrate how any basin does not represent a great maintenance burden on the Shire, and will not exacerbate or frustrate bushfire planning approaches.</p>	To address the concerns identified by the Shire.
34.	Bushfire Management Plan	Update the Bushfire Management Plan to the satisfaction of the Department of Fire and Emergency Services and the Shire of Serpentine Jarrahdale.	To address the concerns raised in the submission from the Department of Fire and Emergency Services and to address the bushfire risk within the structure plan area.
35.	Traffic Noise Assessment	<p>Update the Traffic Noise Assessment (TNA) to the satisfaction of the Shire of Serpentine Jarrahdale.</p> <ol style="list-style-type: none"> 1. The TNA is required to be updated to include modelling to justify that a 2.4m wall will achieve outdoor living area noise targets. 2. The TNA is to be updated to demonstrate the noise impact from Soldiers Road on adjacent residential development and recommend the necessary noise mitigation measures as required. 	To address the concerns identified by the Shire.
36.	Traffic Report	<p>Update the Traffic Report to the satisfaction of the Shire of Serpentine Jarrahdale.</p> <p>This update is to include any additional information required to be included for Orton Road being extended to connect to the South</p>	To address the concerns identified by the Shire and align with the Byford DSP and gazetted Amendment 208.

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		Western Highway and the increased traffic generated by the connection.	
37.	Traffic Report	<p>Modification to the Traffic Report include the amendment to the following road reserves:</p> <ul style="list-style-type: none"> • Lawrence Way and Warrington Road – road reserves to be 20m • Kokoda Boulevard extension to be 22.0m. • On street parking bays to be installed adjacent to the proposed DOS site and along POS and the Brook. • All other roads (Access C/D) are to have a 15.4m road reserve. 	To ensure that the extensions of existing road reserves into the Cardup Brook Precinct are consistent widths with what has been developed north of Orton Road.
38.	Traffic Report	<p>Section 14.2 of the Traffic Report to be amended to state:</p> <p><i>‘The movement network is to cater for a path network for community centers, parks, DOS and schools.’</i></p>	To address the concerns identified by the Shire and to ensure that the movement network caters sufficiently for path networks throughout the Structure Plan.