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CALDERWOOD URBAN DEVELOPMENT PROJECT

PREFERRED PROJECT REPORT

Response to Department of Planning, Council and Agency Submissions

Delfin Lend Lease

August 2010

ITEM No.	TOPIC	PROPONENT RESPONSE
	DEPARTMENT OF PLANNING (letter dated 15 July 2010)	
	ZONING AND PLANNING CONTROLS	
DOP 01	The draft SEPP should be more consistent with the Standard Instrument LEP and practice notes and avoid duplicating provisions from other instruments such as the Infrastructure SEPP.	Noted. A series of amendments have been made to the land use zones applying to the site to remove unnecessary duplication. Refer to the Preferred Project Report (PPR) Section 3 and Appendix H
DOP 02	Alternative zones, such as E3, should be considered for the land between Macquarie Rivulet and Illawarra Highway which will ensure appropriate management of the floodplain and sympathetic development.	The quantum of development proposed between the Macquarie Rivulet and the Illawarra Highway is considered to be appropriate and sympathetic to its context: <ul style="list-style-type: none"> • it helps to provide additional housing product to market; • it connects Calderwood to the existing urban footprint of Albion Park, its facilities and services; • it takes account of the physical impact of the Albion Park Bypass / Tripoli Way Extension; and • it does not create an unacceptable offsite flood impact. Refer to the PPR Sections 2.3; 2.6; 2.8; and 3.5 and to Appendix C; D; F; and H
DOP 03	Riparian corridors and environmental significant habitat areas should be zoned either E2 Environmental Conservation or E3 Environmental Management depending on the environmental values. The RE1 zone may be used where they serve a public purpose, however plans for the ongoing management of these areas should be prepared if this zone is to be used.	Noted. A series of amendments have been made to the land use zones applying to the site: <ul style="list-style-type: none"> • The two main riparian corridors (Macquarie Rivulet and Marshall Mount Creek) and significant environmental habitat areas (including Johnstons Spur) are to be zoned E2 Environmental Conservation; and • Other riparian corridors and habitat areas are to be zoned E3 Environmental Management; and • The RE1 zone is limited to areas where it serves a public purpose. Refer to the PPR Sections 3.3 and 3.4 and Appendix H
DOP 04	The proposed density of 10 dwellings per hectare for the E3 zone (1 dwelling for 40 ha is currently permitted in the equivalent 7(n) zone) is not adequately justified. A lower density to achieve large-lot style residential development should be considered to better reflect the environmental significance of the zone.	Noted The proposed density of development for the E3 zone (excluding riparian corridors and Environmental Reserves) has been amended to better reflect the environmental significance of the zone Refer to the PPR Section 3.6 and Appendix H
	PLANNING AGREEMENTS	
	State infrastructure contributions	
DOP 05	A land release clause is proposed in the SEPP that requires satisfactory arrangements to be made for State infrastructure before subdivision can be approved including the Stage 1 Project Application.	Noted.
DOP 06	The proposed road works contributions in Schedule 1 of the Outline Planning Agreement (Appendix DD) includes intersection upgrades on the Illawarra Highway needed to manage the direct impacts of development and does not clearly specify any regional road upgrades that are proposed.	The regional road upgrades are identified in the EAR Appendix T Concept Plan Transport Accessibility Study and Transport Management and Accessibility Plan (TMAP) . The approach proposed by DLL on the detailed Planning Agreement discussions reflect the approach that such discussions should not, in accordance with sound planning principles, prejudge the assessment process but proceed in parallel with it. The fundamental purpose of an Outline Planning Agreement has been misunderstood - the requisite contributions cannot be determined in advance of the determination of the scope of the Project. DLL has written to the Department on 31 st July 2010 with a formal proposal to enter into a VPA for the Project including details of specific road upgrades.

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DOP 07	A better approach would be to set a monetary contribution per lot in the VPA with the option to negotiate works-in-kind agreements with the RTA.	Refer response to DOP 06 above and to the PPR Section 4.2.4.
	Local infrastructure contributions	
DOP 08	Detailed cost estimates should be provided for the construction/establishment and on-going maintenance of proposed local infrastructure.	Refer to the PPR Section 4.2.3 and Appendix K
DOP 09	Alternative options for ownership and funding of on-going maintenance for open space areas, riparian corridors and environmental areas should be considered and evaluated.	Refer to the PPR Section 4.2.1 and Appendix I
	URBAN DESIGN	
DOP 10	The proposal should clearly articulate which housing typologies (Table 3 in Appendix BB) apply to each of the proposed residential character areas (Figure 44 in the Environmental Assessment).	Noted. The Development Control Strategy has been revised to achieve this objective. Refer to the PPR Sections 2.7 and 5 and revised DCS at Appendix G
DOP 11	The principle of locating denser housing forms (ie lots smaller than 300m ²) around the town/village centre and public open space is generally supported. Concern is raised about applying this to land within 200m of proposed bus stops as bus routes can vary over time.	Noted. The proposal has been revised to reduce the number of locations where denser housing is actively promoted. Refer to the PPR Sections 2.7; 3.6; and 5 and revised DCS at Appendix G
DOP 12	Low density forms of development should be provided at the western edge of the site in the "Country Residential" and "Bushland Edge" areas (Figure 44 of the EA) to provide an appropriate transition to the agricultural areas to the west. Consideration should be given to appropriate development controls to achieve this and minimise impacts and potential land use conflicts on adjoining rural uses.	Noted. The proposal has been revised to achieve this objective. Refer to the PPR Sections 2.7; 3.6; and 5 and revised DCS at Appendix G
DOP 13	More consistent front setbacks should be proposed to ensure uniform streetscapes are achieved where a variety of housing types are possible.	<p>In Calderwood, the proposed setbacks for all residential allotments above 200sqm reflect the DoP's NSW Housing Code SEPP controls and the new draft Small Lot Code (released for public exhibition on 5 July 2010). The development controls for the Calderwood project have been prepared to facilitate widespread application of complying development and housing codes in line with Federal and State Government objectives.</p> <p>Setbacks for residential lots under 200sqm are not covered by the NSW Housing Code or draft Small Lot Code. At Calderwood, small lots under 200sqm may only be created in two distinct areas: on R1 zoned land, in a revised, limited number of locations (refer to the PPR Section 3.6 and revised DCS at Appendix G); and on B4 zoned land:</p> <ul style="list-style-type: none"> • On R1 zoned land, in the limited number of locations where lots under 200sqm are permitted, a 3m front setback is required. This is consistent with the minimum front setback for a lot of 200sqm as set out in the new draft Small Lot Code. • On B4 zoned land, a more urban setting is expected and <i>minimum</i> front setbacks of 0 metres are proposed. It is a common requirement for DLL projects in NSW and other states to have a 0 metre minimum front setback in town and village centres. This is considered to be acceptable and necessary to help create a distinctive, urban "sense of place". It also reflects the fact that many of the housing forms in town and village centres are part of mixed use developments with a variety of uses on the ground floor and residential uses above and/or adjoining.
DOP 14	Private open space adjoining front yards is not supported and should be located to the rear of the dwelling and increase to at least 20% of the site area to ensure adequate amenity for the future residents.	The DoP's request does not reflect the NSW Housing Code or new draft Small Lot Code (July 2010). The Calderwood Development Control Strategy (DCS) has however been amended to better reflect the DoP's NSW Housing Code and the new draft Small Lot Code released after the lodgement of the EAR. This has resulted in the DCS controls including of a minimum "landscape" requirement as well as a minimum "POS" requirement to avoid unnecessary confusion during implementation. Refer to the PPR Section 2.7 and revised DCS at Appendix G

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	FLOODING, DRAINAGE AND STORMWATER	
DOP 15	The Department is concerned that the impact on downstream properties has not been fully considered, especially those properties that rely on the flows from smaller streams for their agricultural use.	<p>The impact on downstream properties has been fully considered, consistent with DGRs – refer EAR Appendix R.</p> <p>The issue of offsite flood impact is addressed in further detail in the Preferred Project Report – refer to the PPR Section 2.3 and Appendix D</p> <p>With specific regard to agricultural use, it is noted that a review of NSW Government databases shows that there are approximately 40 groundwater bores within a 2 km radius of the site. This information, combined with anecdotal comments made to Cardno by the farmers, suggests the dominant supply of water for agricultural purposes is via groundwater, not surface water. The Calderwood development will have negligible impact on the supply of groundwater to these bores.</p>
DOP 16	In addition the Department has engaged SKM to undertake a peer review of the flood studies. There may be further issues to be addressed that arise as a result of these further studies.	Noted.
	TRANSPORT AND ACCESSIBILITY	
DOP 17	The proposed Concept Plan requires a significant number of upgrades to the local and regional road network. Further information regarding the staging of the concept plan and the impact on the road network is required including:	Refer to the PPR Sections 2.6; and 4.2 and Appendices J and K
DOP 18	Consideration of the impact of the current and future network limitations on the developable yield, timing and sequencing. This should include a staging plan that demonstrates the sequence that each stage of the will be developed and what upgrades are necessary to support each stage.	Refer to the PPR Sections 2.6; and 4.2 and Appendices J and K
DOP 19	The Concept Plan proposes 4 intersections with the Illawarra Highway. Further information is required regarding anticipated traffic flows at these intersections, how this is addressed in the proposed intersection design and an assessment of the impact on the Illawarra Highway (prior to and after the completion of the Albion Park Bypass and Tripoli Way extension).	<p>The RTA has advised on 16th July 2010, subsequent to its initial submission, that it has reconsidered the proposal for intersections on the Illawarra Highway and does not object to them subject to a number of standard conditions. The Preferred Project Report contains a detailed response to the issues raised by implementation of the Albion Park Bypass / Tripoli Way Extension – refer to the PPR Section 2.6 and Appendix F.</p> <p>RTA conditions to be dealt with in Statement of Commitments for the Stage 1 PA. Refer Statement of Commitments</p>
DOP 20	The Department is expecting further modelling analysis from the RTA which will assess the staging of infrastructure requirements. In addition the Department has engaged ARUP to undertake a peer review of the TMAP. There may be further issues to be addressed that arise as a result of these further studies.	Noted
	EUROPEAN HERITAGE	
DoP 21	Assessment of the potential heritage significance of Farm (337 North Macquarie Road), Oakvale (317 Calderwood Road), Parkview (340-400 North Marshall Mount Road) and Bushgrove (248-268 North Macquarie Road) identified in the Draft Shellharbour Community Based Heritage Study 2005 (revised 2009).	It is understood that Shellharbour Council has a draft heritage study but that it is not publicly available. It is not possible to comment on the items specified as the draft report and its contents have not been sighted by Delfin Lend Lease or its Heritage consultant. Further these items were not made know to Delfin Lend Lease or its Heritage consultant during discussions with Council.
DoP 22	Provide clarification on the proposed treatment of the curtilage around the cemetery boundary, including whether the open space will be on public or private land, and who will be responsible for maintaining this land.	<p>The Landscape and Open Space Master Plan (p39) clearly identifies the cemetery being retained within the Local Park(L6), not being replaced by a park as follows: <i>“...surrounding the the existing Marshall Mount Methodist Cemetery which is to be conserved. The open space will provide a sympathetic cartilage to the cemetery...”</i> Refer EA Appendix CC.</p> <p>It is proposed that the park surrounding the cemetery be maintained by Council. Refer to the PPR Section 2.9</p>

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DOP 23	APZs should be shown along the boundary between the E2 and E3 zoned land in Johnson's Spur should housing be proposed within the E3 land.	Noted and agreed. The proposal has been revised to achieve this objective. Refer to the PPR Section2.10 and revised Concept Plan drawings at Appendix L
DOP 24	APZs located in riparian corridors may have implications for the management of these corridors. Details should be provided to demonstrate that the management of the APZs in the riparian corridors will be consistent with other management plans.	Noted and agreed. APZs adjoin, but are located outside of, the main riparian corridors.

ITEM No.	TOPIC	PROPONENT RESPONSE
	SHELLHARBOUR COUNCIL (letter dated 11 June 2010)	
	OVERVIEW OF COUNCIL'S POSITION	
SCC 001	At page 2 of Council's submission the following statement is made: <i>"Council acknowledges that Delfin Lend Lease (DLL) has addressed the Director General's Requirements for the Concept Plan and Stage 1 project Application for the Calderwood Urban Development Project and included a set of Draft Statement of Commitments".</i>	This statement is agreed. Is noted that this statement is in direct conflict with statements in a number of other sections of Council's submission. It is also noted that the Department of Planning has determined that the documentation has met the Director General's Requirements via the Test of Adequacy.
SCC0 02	At page 2 of its submission, Council also states that Council does not consider that the Environmental Assessment has demonstrated that the Project is appropriate or in the public interest and as such, the application should not be approved.	This statement is not agreed. DLL notes that: <ul style="list-style-type: none"> • Council resolved on 26th September 2006 to carry out an assessment of Calderwood under its Comprehensive LEP process and that Council reaffirmed this decision at a meeting on 12th June 2007 – the views presently expressed by Council are inconsistent with those resolutions; • On 7th June 2010 the Department of Planning issued a letter of formal advice to Shellharbour Council on the status of Calderwood, a copy of which has been provided to Delfin lend Lease and which is attached to this document. In summary the letter states that: <ul style="list-style-type: none"> ○ The review of the proposed West Dapto Release Area by the NSW Growth Centres Commission assessed the impact of the early release of Calderwood and concluded that, consistent with Government policy, there may be merit in the early release of Calderwood thereby achieving a higher overall dwelling production rate and delivering a mix of affordable housing by releasing as much land to market as quickly as possible. ○ Having regard to the above, and information submitted by Delfin Lend Lease, the Minister for Planning formed the opinion that the proposed development constitutes a potential State Significant Site and authorised submission of a Concept Plan for the site. (It is noted that the information submitted by Delfin Lend Lease to Government included a detailed Gateway Justification Report, which comprehensively addressed the public interest) and Preliminary Environmental Assessment Report for the Project. • The Environmental Assessment Report and supporting studies passed the Test of Adequacy in accordance with the Director General's Requirements; • The Project has been subject of appropriate consideration by the Commonwealth and a determination made that no further environmental assessment is required under the Commonwealth legislation; and • The proposed Project implementation and delivery framework seeks to utilise all recent Planning Reform initiatives and efficiencies and industry best practice, an initiative being actively encouraged by Federal and State Governments. •
SCC 003	Council raises 10 specific issues in the "Overview of Council's Position". Each of these is addressed in the detailed responses below. Council also stated that the proposal will potentially have major impacts on the drafting of Shellharbour Comprehensive LEP 2010.	Detailed responses are provided below to each issue raised by Council in the relevant sections below. As far as the impact on the Comprehensive LEP 2010 is concerned, the Calderwood Project has been prepared in accordance with the LEP template and is generally in accordance with existing Council DCPs. Where there is an inconsistency this has been identified in the documentation.

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	COUNCIL ASSESSMENT	
	1 Alignment with Regional Land Use Planning	
SCC 004	<p>Council states that it would appear that the State Government has identified that the rezoning of Calderwood is unnecessary in the short to medium term to satisfy regional housing demands.</p> <p>Council quotes recently released Illawarra Urban Development Update and Explanatory Note and associated Government Press Releases to support this view.</p> <p>Council states that from a Shellharbour perspective, development as proposed by DLL is not required for another 25 years and only partially needed in another 15 years as IRS targets for Shellharbour to 2031 are 8700 dwellings. Council states that Shellharbour can currently supply 5,000 dwellings in large scale developments that are already zoned and serviced with the remainder from infill development.</p>	<p>This statement is not supported by Government advice. The Department of Planning wrote to Shellharbour Council on 7th June 2010 specifically addressing this issue.</p> <p>The recent comments by Government reinforce the need to ensure Projects are available that can:</p> <ul style="list-style-type: none"> • Contribute to annual dwelling production; • Provide housing diversity, choice and affordability; and • Address implementation and delivery constraints. <p>Delfin Lend Lease has updated the relevant elements of Section 2 (Strategic Justification) of the EA to take account of the Recent Illawarra Urban Development Update and Explanatory Note and associated Government Press Releases. Refer to the Preferred Project Report (PPR) Section 2.1 and Appendix C.</p> <p>The position taken by Council is not agreed and is not supported by the facts about the current status of the Projects listed in the New Illawarra Urban Development Programme Update located in the Shellharbour LGA which are:</p> <ul style="list-style-type: none"> • Shell Cove (potential 1845 Dwellings): Shellharbour Council has publicly acknowledged that global economic factors are the main reason for failure to deliver the centre piece of this Project (the marina) which will facilitate delivery of much of the balance of dwellings. This Project is presently incapable of delivery of the programmed lots. • Tullimbar (potential 1700 Dwellings): This Project has been in production since 2005. It opened in late 2006 with 20 completed homes. At the time of this Report a total of 31 homes have been built and another 10 are under construction. In effect this Project is not meeting market and is delivering 10 homes per year. • Shellharbour City Centre (potential 1,000 dwellings): There is no development proposal, no master plan and no production scheduled in the New Illawarra Urban Development Programme for this area. <p>The Illawarra Urban Development Programme Update Greenfield Dwelling Forecast (page 8) specifically identifies Calderwood as providing 700 dwellings in the 5 year period covered by the forecast, being 2008/09 to 2012/13. This document confirms the need for Calderwood to produce land and housing in order for Regional Strategy Dwelling targets to be met.</p>
	Viability of WDRA; Impact on WDRA	
SCC 005	<p>Council states that the claim that Calderwood can be developed and serviced independently from West Dapto has not been fully tested. Council states that much of the servicing and infrastructure requirements for Calderwood rely on substantial works being carried out in the West Dapto Release Area and that DLL is only proposing to partially contribute to the funding of these works.</p>	<p>This statement is not agreed. The Calderwood proposal has an independent and separate servicing strategy. Appendix Y to the EAR - Utility Services Study for Concept Plan Application (Cardno) explains the utility services delivery strategy. Appendix G to the EAR - Infrastructure, Services and Facilities Implementation and Delivery Proposal (DLL) details the methods for delivery of all requirements for the Project. Appropriate consultation has been undertaken with utility and service authorities in the preparation of the Strategy.</p> <p>Refer also to the PPR Section 2.1 and Appendix C.</p>

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SCC 006	Council states that if Calderwood is approved and does jeopardise the rollout of West Dapto, then infrastructure that was expected to be provided from the north will have to be substituted from the south which is or is almost at capacity, such as water, sewer and road infrastructure. Alternatively even though approved and rezoned, Calderwood would be unable to proceed to any great extent because of poor infrastructure accessibility.	<p>This statement is not agreed.</p> <p>The basic premise that Calderwood jeopardises West Dapto is incorrect. The implementation challenges at West Dapto are well documented and exist irrespective of other initiatives.</p> <p>Refer also to response to Item SCC 005.</p> <p>Council's statement that utilities and infrastructure is at or is almost at capacity is inconsistent with statements at item 12 of Council's submission.</p>
SCC 007	Council states that Calderwood is not a substitute for West Dapto in providing for overall regional housing needs. Council states that releasing Calderwood prematurely may jeopardise this priority release area and put further pressure on the Shellharbour LGA.	<p>Agreed that Calderwood is not a substitute for West Dapto and is not proposed as such. The statement that releasing Calderwood prematurely may jeopardise West Dapto is not agreed.</p> <p>Refer also to responses to Items SCC 004, SCC 005 and SCC 006.</p>
	2 Economic Impacts	
SCC 008	Council acknowledges that it has not undertaken an assessment of PWC's Economic Impact Assessment of the Project. However, Council then states that the economic benefits appear to be inequitably measured in PWC's assessment and that neither DLL nor PWC have tried to quantify "cost to government".	<p>Council's statement about the inequitable measure of economic measures is not agreed and is, by Council's own acknowledgement, not supported by analysis. It is noted that despite the acknowledgement that Council has not undertaken an assessment of the Economic Impact Analysis (EIA), Council has concluded that the Project is "...economically unsustainable...". Refer also to response at Item SCC 002 above and Item SCC 164 below.</p> <p>The EIA has been prepared in accordance with NSW Treasury Guidelines which identifies the EIA as an accepted method for quantifying the direct and indirect economic impacts at a local and regional level – refer EA Appendix H Economic Impacts of the Proposed Calderwood Urban Development Project (PricewaterhouseCoopers).</p>
	3 Financial / Resource Implications for Council	
SCC 009	<p>Council estimates that it will incur future total costs of \$7 million per annum including \$1.5 million for ongoing maintenance of the open space components of the Project. Council estimates that income from future rates will be approximately \$5 million.</p> <p>Council states that there are limited opportunities to recover the difference and notes the difficulties caused by the rate pegging policy in this respect.</p>	<p>Council's estimates have not been provided to the Department of Planning for its assessment or to DLL, so a detailed response to this issue is not possible. DLL has provided a comprehensive response to this matter including an analysis of future open space ownership and management arrangements. Refer response to Items DOP 08 and 09 above and to the PPR Section 4.2.4</p> <p>DLL notes that the recent announcements from State Government regarding s.94 and the amendments to Council rate pegging which may remove or reduce the "difficulty" identified by Council.</p> <p>Refer also to responses to Items SCC027, SCC043</p>
	4 Proposed Voluntary Planning Agreement (VPA)	
SCC 010	Council states that the proposed Voluntary Planning Agreement has insufficient information and disadvantages Council.	<p>Reference to the Outline Planning Agreement (EA Appendix DD Outline of Proposed Planning Agreements) shows this statement to be inaccurate. It is also inconsistent with other statements in the Council submission. Council has stated in several instances in its submission that there is insufficient information on the proposed VPA, yet on that basis Council has formed the view that it is disadvantaged by the proposed Agreement.</p> <p>There is no basis upon which the conclusions expressed in Council's submission regarding the proposed Voluntary Planning Agreement can be drawn. The fundamental purpose of an Outline Planning Agreement has been misunderstood - the requisite contributions cannot be determined in advance of the determination of the scope of the Project.</p>

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		<p>However, consistent with the State Significant Site Study and Director General's Requirements, DLL submitted the Outline Planning Agreements in order to "...demonstrate the means by which local and regional developer contributions are secured in respect of the site..."</p> <p>DLL submitted a number of requests to Council to discuss the proposed Planning Agreement detail during its assessment but Council did not take up these opportunities to progress the detail of the Agreements.</p> <p>The approach proposed by DLL on the detailed Planning Agreement discussions reflect the approach that such discussions should not, in accordance with sound planning principles, prejudge the assessment process but proceed in parallel with it.</p> <p>This approach is consistent with the NSW Government Draft Development Contributions Guidelines 2009.</p> <p>DLL has proposed alternative Contributions Strategies in the event that Council maintains the position that it does not wish to enter into a VPA – Refer to the PPR Section 4</p>
SCC 011	<p>Council states that at this point in time, there is insufficient information for Council to form a conclusive opinion as to the appropriateness of the proponent's cost estimates, nor forecast and cost Council's long term asset management obligations.</p> <p>Council states that there are data gaps and inconsistencies in the submitted documentation and further states that most of the documentation does not adequately address the DGRs.</p>	<p>Council statements are not agreed. It is not possible to comment on the "data gaps and inconsistencies" identified by Council as no specific information has been provided to the DoP or DLL</p> <p>Current estimates of costs are available for the specific works or works of similar scale and scope. Consistent with standard commercial practice these can be discussed with Council on a commercial in confidence basis to protect the future commercial position of respective parties in the procurement process.</p> <p>Council has acknowledged that the DGRs have been addressed – refer Item SCC 001 and 010 above.</p>
SCC 012	<p>Council states that the way in which infrastructure will be provided and funded needs to be determined prior to approval of the Concept Plan.</p> <p>Council considers that there has not been sufficient discussion to either support or oppose what currently exists in the Outline Planning Agreement, nor determine whether it is adequate or appropriate.</p>	<p>DLL agrees with this statement and notes that it has submitted a number of requests to Council to discuss the proposed Planning Agreement detail during its assessment but Council did not take up these opportunities to progress the detail of the Agreements.</p> <p>Council's acknowledgement that it has not formed a view on whether or not to enter into a VPA is welcomed but is inconsistent with others made in Council's submission. Refer Items SCC 010 and SCC 011 above.</p>
SCC 013	<p>Council states that DLL is not proposing to contribute to the provision and expansion of city wide facilities, which Council provides under its developer contributions policy.</p> <p>Council states that citywide facilities are not discussed in terms of likely demand generated by the development, and at different scales, but rather in terms of the legalities about whether the development should contribute to such infrastructure.</p> <p>Council states that its current Section 94 Plan requires a precinct contribution as well as a citywide contribution where a nexus is identified. Council states that a nexus is identified with a number of existing facilities.</p>	<p>Reference to the Outline Planning Agreement (EA Appendix DD) shows that these statements are inaccurate. The Purpose and Objective of the Outline Planning Agreement, are entirely consistent with the DGRs and includes the following:</p> <ul style="list-style-type: none"> The purpose of the Outline Planning Agreement is as described in Section 1.1 of the document is to "...describe the intended approach to the delivery of the contributions for the ...Project..." Section 1.1 of the Outline Planning Agreement states that "...Following exhibition of the Project, the Planning Agreement will be prepared in consultation with Council..." Section 5.1 Objectives of the Outline Planning Agreement, specifically Item 5 states that one of the Objectives of the Planning Agreement is "...Ensuring that the existing community is not required to inappropriately fund infrastructure, facilities and service required to accommodate the impact of the development..." <p>DLL would expect its contributions to be consistent with Government policy and legislation. Refer also to Items SCC 010, 011 and 012 above.</p>

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	4.1 Proposed (VPA) – Schedule 1; Regional Transport Works	
SCC 014	Council states that the proposed Council apportionments of the necessary road upgrades (which have not been costed) appear unreasonable and have not been justified.	<p>This statement is not correct. The works have been costed and the cost estimates are available for discussion and review with Council in the context of the VPA (or equivalent contributions regime) negotiations. The Draft Interim Guidelines on TMAPS indicates that the agreed package of works “<i>may be funded from a variety of sources, including Section 94 developer contributions, negotiated contributions, Council and Government capital works programs and operating budgets.</i>”</p> <p>The technical apportionments have been determined based on the proportion of additional trips and where these trips originate from/end (i.e. new growth areas including Calderwood and other growth including infill and external growth) in accordance with the methodology outlined in the TMAP document – refer EA Appendix T Concept Plan Transport Accessibility Study and Transport Management and Accessibility Plan (TMAP) Sections 1.6, 5, 6, 7, 10 and 11.</p> <p>Trips associated with government have not been identified as local (Council) or State but simply government. These technical apportionments to government would only be for additional trips that have an origin and a destination outside of new growth areas (i.e. infill growth or external growth).</p> <p>DLL notes that the Department of Planning engaged independent technical advice on the matter of apportionment. A meeting with the DoP to discuss this issue and provide further clarification was held on July 2010.</p> <p>Refer also to Items SCC 010 above and SCC 015 and SCC 016 below.</p>
SCC 015	<p>Council states that:</p> <ul style="list-style-type: none"> Proposed road works have not been costed, just apportioned; The apportionment method used is generally described, but actual calculations, assumptions or justifications are not provided; Apportionments do not clearly apportion between Wollongong and Shellharbour Councils; and It is unclear which level of Government is expected to fund the Government Cost Apportion for Regional and State funding Road Classifications. 	<p>These statements are not correct:</p> <ul style="list-style-type: none"> The works have been costed and the cost estimates are available for discussion with Council in the context of the VPA (or equivalent contributions regime) negotiations; The apportionments have been determined in accordance with the methodology outlined in the TMAP – refer EA Appendix T Concept Plan Transport Accessibility Study and Transport Management and Accessibility Plan (TMAP) Sections 1.6, 5, 6, 7, 10 and 11. [NOTE: The detailed calculations are complex: they included assessment of the apportionment for 34 improvements under 8 scenarios (AM and PM for 2016, 2021, 2031 and 2036). This required running a select link analysis on each of the 8 scenarios for numerous links. Detailed spreadsheets were then developed to determine the apportionment based on the principles outlined in the methodology. Apportionments between Wollongong and Shellharbour Councils could be calculated but would require additional analysis; and Funding of the Government Cost Apportion for Regional and State funding Road Classifications would be consistent with existing practice. It is expected that this would be consistent with, and would have been the basis of, the State Infrastructure Contribution (SIC). <p>Refer also responses to Items SCC 14 and SCC16 and to the PPR Section 2.6; 4.2 and Appendices J and K</p>
SCC 016	Council states that assumptions must have been made by DLL about other undeveloped land in the area that may benefit from the road works and therefore should contribute to their funding if development were permitted and was carried out.	<p>This statement is not correct. The area of influence and other regional growth planning assumptions were specifically agreed at a consultation meeting with the RTA and Department of Planning. In a letter from the RTA (dated 10 November 2009) the following comments were provided by the RTA in relation to the above:</p> <ul style="list-style-type: none"> “The RTA does not object to the proponent proposed study area as provided to the RTA in the meeting held on 2 November 2009.” This refers to the proposed area of influence

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	Council states that this is presumptuous and may come with the expectation that Council will fund these apportionments until the lands are developed and Council is repaid.	<ul style="list-style-type: none"> • <i>“The future development assumptions should be consistent with the figures in the attached land use input table which were provided to the RTA by the Department of Planning.”</i> This refers to a set of land use planning assumptions provided to DLL for comparison. A detailed discussion of these land use assumptions and consistency with this document is provided in Appendix T Concept Plan Transport Accessibility Study and Transport Management and Accessibility Plan (TMAP) to the EA, specifically Section 5.2.1. <p>Furthermore the area of influence and planning assumptions were also presented to Wollongong and Shellharbour Council’s for comment. No formal comments in relation to these were provided.</p> <p>Refer Appendix T Concept Plan Transport Accessibility Study and Transport Management and Accessibility Plan (TMAP) to the EA, specifically Section 5.2.1 and Appendices 1c, 1d, 5a, 5b and 5c to that Report.</p> <p>Refer also responses to Items SCC 014 and SCC 016.</p>
SCC 17	Council lists extracts from Tables detailing Technical Intersection and Road Upgrades and states that the contention that Council will fund these apportionments is unacceptable and of major importance to Council as the proponent proposes to include the road works and associated apportionments in the VPA.	<p>This statement is not agreed and requires clarification. The extracts quoted by Council contain the following:</p> <ul style="list-style-type: none"> • 6 intersection upgrades are noted, 5 of which occur on state roads; • 12 road upgrades are noted, 3 are within the Calderwood area and 5 are on state roads; • The 1 remaining intersection upgrade on a local road and 3 of the 4 remaining road upgrades on local roads (outside of Calderwood) relate to the Tripoli Way upgrade; and • There is 1 remaining upgrade on a local road outside of Calderwood (Calderwood Road), and this is proposed to be 98% funded by Calderwood. <p>It is our understanding that it is the RTA responsibility to fund upgrades to works on state roads and the impacts from new development will be funded by developer SIC contributions.</p> <p>Furthermore, Tripoli Way has already been identified as being required prior to this application. In relation to the Albion Park Traffic Study Final Report, May 2006 (prepared for Shellharbour City Council by Maunsell Australia Pty Ltd):</p> <ul style="list-style-type: none"> • The report does not clearly state the land use assumptions included, however it states that it uses <i>“previous work undertaken by SMEC ‘Future Road Needs in Albion Park’ (2000), using the latest land-use and traffic forecasts from Council’s TRACKS model.”</i> Given the age of this work it is unlikely that this would include Calderwood. • With regard to Tripoli Way extension, the report states that: <i>“The timing of the construction of the full Tripoli Way Extension primarily depends on the rate of growth of Tullimbar Village. Its construction can be deferred to about 2018 by the implementation of peak hour clearways on Tongarra Road and improvements to the Terry Street/Illawarra Highway intersection. By this time, planning for the F6 should be more definite. The F6 would complement and magnify the benefits to be provided by the construction of the Tripoli Way extension.”</i> • It would appear from this that the major benefit from Tripoli Way is amenity in the town centre, achieved by shifting through traffic away from Tongarra Road. The construction of the F6 would assist this shift as it will direct traffic along Tripoli Way. There is no mention of Calderwood, which is a larger project than Tullimbar.

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		<ul style="list-style-type: none"> The report also includes the following statement: <i>“Whilst Council is currently opposed to urban development within Calderwood Valley it is necessary to examine the potential implications of alternative arterial road strategies identified by development proponents, using the assumption that development could occur in Calderwood Valley by 2030”</i> – i.e. the study has not factored in any development at Calderwood. The report basically indicates that Tripoli Way should be fully constructed by the time the F6 is built. If the F6 is not built by 2020, Stages 1 and 2 of Tripoli Way are required to minimise traffic growth impacts along Tongarra Road. It would appear Calderwood is not assumed to occur until 2030 and therefore not a contributing factor to the need for the extension. Based on this, it can be assumed that the construction of Tripoli Way is justified based on traffic growth not related to Calderwood. However, the timing of its construction will be influenced by the pace at which Calderwood develops – i.e. placing additional loading onto the road network compared to a ‘no-build’ scenario. <p>The Calderwood development presents the opportunity to contribute significantly to the Tripoli Way Extension, potentially saving Council and other developers from bearing the full responsibility for funding.</p> <p>The Calderwood project has been amended to incorporate the Tripoli Way Extension. Refer to the PPR Section 2.6 and Appendix F</p>
SCC0 18	<p>In addition, the TMAP and VPA are written in a manner whereby it is assumed that the necessary road works will be funded and constructed as required in order for the development to proceed, with the proponent contributing as they see appropriate.</p> <p>Council contends that the provision of this infrastructure should be a precondition that must be met before the development proceeds, or before “tipping points” eventuate.</p>	<p>This statement is not agreed. The timing for works has not been assumed based on funding or works programs; it is based on potential need for the upgrades. This has been determined through modelling of the 2031 scenario with Calderwood and assumed agreed regional planning assumptions (including new growth areas, infill and external growth). Then 5 year incremental models (2016, 2021 and 2026) were run to determine staging of the works. This assumes ramping up of development both at Calderwood and other growth areas. This is a standard approach to undertaking this sort of study and is consistent with the TMAP Guidelines.</p> <p>The latter statement is not agreed. The proposal is based on assumptions (in relation to land use growth and major road infrastructure upgrades) and a methodology that was outlined to all agencies (Wollongong and Shellharbour Councils, DoP, NSW Transport and RTA) through the consultation meetings. The development of Calderwood will be dealt with through individual project applications (PA) and the contributions will be as per the set of principles outlined in the VPA (or equivalent contributions regime).</p> <p>DLL has written to the Department on 31st July 2010 with a formal proposal to enter into a VPA for the Project including details of specific road upgrades.</p> <p>Refer also to detailed responses to SCC Items 014, 015, 016 and 0017 above.</p>
	4.2 Proposed VPA – Schedule 2; Human Services	
SCC 019	Council states that it is supportive of the principle of a co-located Multi-purpose Community Centre and Library but there are fundamental shortcomings with what is included in the VPA.	<p>It is not possible to comment on the “fundamental shortcomings” as Council does not identify what they are.</p> <p>The approach proposed by DLL on the detail of the Voluntary Planning Agreement (or equivalent contributions regime) is detailed in Items SCC 010, 011, 012 and 013 above.</p>

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SCC 020	Council states that further detail is required in terms of determining what the appropriate level of infrastructure is for the Project.	The approach proposed by DLL on the detail of the Voluntary Planning Agreement (or equivalent contributions regime) is detailed Items SCC 010, 011, 012 and 013 above. Refer to the PPR Section 4 and Appendix K
SCC 021	Council states that it is not in a position to comment on the “notional value” given to the Multi-purpose Community Centre and Library as there is little information provided on what is included in the proponent’s costings, nor has a design been provided. Council also states that little detail has been provided with regard to operation and handover of the facility, therefore it is difficult for council to estimate when operational costs will be incurred.	<p>The approach proposed by DLL on the detail of the Voluntary Planning Agreement (or equivalent contributions regime) is detailed Items SCC 010, 011, 012 and 013 above. Refer to the PPR Section 4 and Appendix K</p> <p>It is inappropriate to design such a facility several years in advance of when it is needed. The process for determining the scope of the facility, its function and features should be included in the Planning Agreement.</p>
SCC 022	Council states that there are obvious inconsistencies between the cost estimates of Council and the proponent for the Temporary Community Centre. Council queries the notional value on a per square metre rate for the centre. Council also queries what happens to the building in the long term and states that the size of the facility is deficient.	<p>DLL agrees that 32 m2 is insufficient for a stand-alone temporary community centre facility. DLL’s experience is that a 120 to 150sqm space which contains one large meeting room for community gatherings, plus two smaller meeting rooms (one generally used exclusively by baby health nurse in new release areas), office for Worker, kitchenette, storage, toilets, is more appropriate.</p> <p>DLL would welcome further discussion with Council on the location, size scope and costings of the facility.</p> <p>Refer to the PPR Section 4 and Appendix K</p>
SCC 023	Council states that it is concerned about the timeframe over which the Community Development Worker will be funded and states that there is a need for transition to the new (permanent) community centre.	<p>The approach proposed by DLL on the detail of the Voluntary Planning Agreement (or equivalent contributions regime) is detailed Items SCC 010, 011, 012 and 013 above. Refer to the PPR Section 4 and Appendix K.</p> <p>DLL would welcome further discussions with Council on this matter. Refer to the PPR Section 4 and Appendix K.</p>
SCC 024	Council states that the proposal does not provide or consider the ongoing resourcing of the facilities provided in the VPA.	<p>The approach proposed by DLL on the detail of the Voluntary Planning Agreement (or equivalent contributions regime) is detailed Items SCC 010, 011, 012 and 013 above.</p> <p>DLL would welcome further discussions with Council on this matter. Refer to the PPR Section 4 and Appendix K.</p>
SCC 025	Council states that the Director Generals’ Requirements identify that the proponent should address “Details of open space and community facilities, (and) ongoing maintenance...”. Council states that this has not been addressed in the Concept Plan or Stage 1 Applications.	<p>The approach proposed by DLL on the detail of the Voluntary Planning Agreement (or equivalent contributions regime) is detailed Items SCC 010, 011, 012 and 013 above. Refer to the PPR Section 4 and Appendix K.</p> <p>DLL would welcome further discussions with Council on this matter.</p>
SCC 026	Council states that cross-boundary use of facilities has not been addressed in the outline VPA and is concerned that Council will be responsible for the ongoing provision and a management of facilities that are provided to service 2 LGAs.	<p>Whilst noting Council’s concern, it is important to recognise that Delfin Lend Lease has taken a project-wide view of facilities and has based their location on how they might best service the community. Refer to the PPR Section 4 and Appendix K</p> <p>A project-wide perspective has the advantage of minimising duplication of resources that might otherwise be required if one were to provide facilities purely on the basis of LGA boundaries and the resident population within each LGA. This is a standard “best practice” in major master planned communities that straddle LGA boundaries.</p>
	4.3 Proposed VPA – Schedule 3; Open Space	
SCC 027	<p>Council states that:</p> <ul style="list-style-type: none"> The capital cost estimates for open space provided by the proponent is unsupported and lacks detail; The total maximum value per local park is shown as \$150,000; GHD has reviewed the capital cost estimates and their preliminary findings suggest the amount has been significantly underestimated. 	<p>The approach proposed by DLL on the detail of the Voluntary Planning Agreement (or equivalent contributions regime) is detailed Items SCC 010, 011, 012 and 013 above. DLL would welcome further discussions with Council on this matter.</p> <p>DLL has detailed costings for the delivery of parks of the scale at numerous Projects and would welcome the opportunity to discuss the detail of these with Council. The GHD report has not been provided to the Department of Planning for its assessment or to DLL, so further comment is not possible. Refer also to responses under Items SCC009 and SCC043.</p> <p>Refer to the PPR Section 4 and Appendix K</p>

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SCC 028	<p>Council states that:</p> <ul style="list-style-type: none"> Timeframes for handover to Council and ongoing maintenance costs are not provided; More information is required for Council to assess the impacts of these; and From face value, Council is not supportive of the large areas of open space which are to be dedicated to Council under the proposed VPA. 	<p>DLL agrees with the statement that more discussions are required on the Voluntary Planning Agreement and notes that it submitted a number of requests to Council to discuss the proposed Planning Agreement detail during its assessment but Council did not take these opportunities to progress the detail of the Agreements.</p> <p>The approach proposed by DLL on the detail of the Voluntary Planning Agreement (or equivalent contributions regime) is detailed Items SCC 010, 011, 012 and 013 above. DLL would welcome further discussions with Council on this matter. Refer also to the PPR Section 4.2.4</p>
	4.4 Proposed VPA – Schedule 4; Water Cycle Management	
SCC 029	<p>Council states that the contributions do not provide any certainty in terms of items, value estimates, and timeframes.</p>	<p>DLL agrees in part with this statement and notes that it submitted a number of requests to Council to discuss the proposed Planning Agreement detail during its assessment but Council did not take these opportunities to progress the detail of the Agreements.</p> <p>The approach proposed by DLL on the detail of the Voluntary Planning Agreement (or equivalent contributions regime) is detailed Items SCC 010, 011, 012 and 013 above. DLL would welcome further discussions with Council on this matter.</p>
SCC 030	<p>Council states that under normal subdivision processes, infrastructure such as drainage, wetland and detention basin design and delivery is negotiated with Council and provided as a condition of consent and;</p> <ul style="list-style-type: none"> is not considered as part of Council’s development contribution policy as the nexus between the need for these facilities is directly related to the new development; and the provision of the basic stormwater facilities in a VPA may give rise to the ability of the proponent to “offset” the costs of providing these facilities with other facilities in the plan, eg: the Community Centre. 	<p>DLL agrees with this statement in part. DLL’s experience is that in some instances, Councils have asked for this detail to also be included in a VPA, particularly where a level of amenity is to be delivered with these facilities.</p> <p>DLL does not agree that a situation can arise where items detailed in Voluntary Planning Agreements Schedules that are part of the normal sub division process can be offset against other facilities in the Agreement without the specific mutual agreement of the parties.</p> <p>DLL believes that the provision of suitable community facilities is an important element of community building and does not support the extreme offset scenario described by Council.</p>
	5 Public/Social Impact	
SCC 031	<p>Council states that it has found that the project application has not adequately addressed the Director General’s Requirements, and a number of negative social issues remain to be fully assessed including public transport, physical and social isolation and the relative negative impacts of an isolated car reliant commuter suburb, employment accessibility, and housing affordability and diversity.</p>	<p>This statement is not agreed. Refer response at Item SCC 01 above and PPR Section 2.2</p> <p>It is also noted that the Department of Planning has determined that the documentation has met the Director General’s Requirements via the Test of Adequacy.</p> <p>These issues referred to by Council have all been recognised and named as potential negative social impacts in the assessment and the manner in which these impacts will be addressed to minimise negative outcomes have been identified – refer EA Appendix AA – Social and Community Planning Assessment.</p>
SCC 032	<p>Council states that the proponent has not provided sound evidential basis for the assessment of need for services, facilities and demographic projections, and rather has assumed demand through assumptions or normative standards and no justification has been provided for average household size, the basis on which the demographic forecasts are arrived at, and therefore population forecasts are speculative.</p>	<p>DLL notes that the EA Appendix AA – Social and Community Planning Assessment applies the standards Council had proposed in its “Open Space and Community Facilities Needs Study and Design Guidelines” as they are the standards Council is using for its own planning of community facilities and open space, and are the standards Council asked us to use when we met with them – refer record of meeting of 30 November 2009 with Council.</p> <p>DLL notes that the demographic projections have been based on average household size for different types of dwellings in Shellharbour LGA based on the 2006 census. Average household size in Shellharbour has then been applied to the dwelling mix proposed for Calderwood. The methodology is both transparent and a standard methodology for population forecasting, based on “evidence” from the last census and is clearly identified in the Social and community Assessment. Refer to the PPR Section 4.2.2</p>

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SCC 033	<p>Council states that its consultant (JSA) has conducted demographic research that indicates that the Project could yield a population between 7% and 14% higher than the DLL estimate.</p> <p>Council states that it appears that the socio economic estimations and population forecasts are not reliable and do not allow for valid estimations of the required services and facilities for the new community.</p>	<p>The outcome of the assessment has not been provided to the Department of Planning for its assessment or to DLL for comment.</p> <p>Refer response at Items SCC 030 and 031 above.</p>
SCC 034	Council states that the provision of health services and facilities, educational services and housing services also appear to be overlooked.	This statement is not agreed. Refer EA Appendix AA – Social and Community Planning Assessment where clear evidence is provided of consultation with the NSW Department of Education and Training, HSW Health (South East Sydney and Illawarra Health Service) NSW Department of Premier and Cabinet Regional Co-ordinator, NSW Department of Human Services – Community Services, NSW Department of Human Services – Aging, Disability and Home Care (DADHC). It is unclear what housing services specifically refer to.
SCC 035	Council states that several agencies and community organisations have not been consulted and the level of community consultation with the wider Shellharbour and Illawarra communities has also been deficient and there is considerable risk that the community has not had the capacity to respond to the proposal.	<p>This statement is incorrect in terms of the scope of the community consultation and the opportunity for comment on the proposal.</p> <p>Consultation was undertaken with all relevant State Government human service agencies (including those nominated in the DGRs) and Council and their requirements have been included in our assessment. Refer EA (Section 1.1.4), and numerous Appendices C, K, M, N P, Q, R, T, V, W, Y, Z, AA and HH.</p> <p>There were ample opportunities to comment on the proposal. Invitations were sent to all relevant local community organisations and groups to contribute their views at the Community Information and Feedback Session and several attended and did so. The claim that the level of community consultation was deficient cannot be justified – opportunities for consultation were widely advertised through invitations, letterbox drops and press ads for both Community Information and Feedback Session and web-based consultation. The fact that community participation rates were fairly low can be attributed to the lack of interest in the community, rather than to the consultation process. The community was given the opportunity to respond and largely chose not to. DLL notes the opportunity to comment on the proposal was extensive. It is also noted that the DOP extended the timeframe for comment by one month.</p>
SCC 036	Council states that Calderwood will be geographically isolated and limit resident access to employment and other services and facilities. Council also states that evidence has not been provided by the proponent about how the barriers to accessing alternative transport means (eg; public transport) will be overcome, nor has the proponent addressed nor mitigated the cumulative impacts of high car dependency.	This statement is not agreed. It lacks any supporting analysis and fails to recognise the planning horizons involved in the Project. Refer EA Sections 2.7 and 4.4 and Appendix T Concept Plan Transport Accessibility Study and Transport Management and Accessibility Plan (TMAP) to the EA, specifically Sections 3, 8 and 9.
SCC 037	Council states that there is no empirical assessment of how many jobs Calderwood residents will need in the long term, the types of jobs these may be and what ratio of these could feasibly located within Calderwood. Whether there will be sufficient job potential (volume and variety) within reasonable commuting distance is poorly addressed.	Empirical assessment is not possible to deliver at the Concept Plan stage of a Project. Employment capacity and economic development have been considered and land use allocations have been made. Refer EA Sections 2.4, 2.7, 4.4 and 6, Appendix I – Calderwood Employment Update and Appendix T Concept Plan Transport Accessibility Study and Transport Management and Accessibility Plan (TMAP) to the EA, specifically Sections 3, 8 and 9.
SCC 038	Council states that the potential negative impact of the development on existing revitalisation projects in the locality surrounding the development site is also an issue of concern. Council states that there is concern that the Calderwood development will compromise the objectives of the “Destination Albion Park” Project and other unnamed Projects through increased traffic congestion and increased commercial retail competition.	This statement lacks any supporting analysis, fails to recognise the planning horizons involved in the Project and the economic and other benefits described in detail in the EA.
SCC 039	Council states that further assessment is required to adequately assess and mitigate potential negative socio-economic impacts of the development.	Refer responses to Items SCC 030 to 037 inclusive above.

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	6 Social Infrastructure	
SCC 040	Council states that, notwithstanding that the proponent has adequately considered the importance of open space, recreation facilities and community facilities for building social cohesion and encouraging healthy and safe communities, the likely demand or need for a range of community and recreational infrastructure has not been adequately considered.	The normative standards adopted in Council's Open Space and Community Facilities Needs Study and Design Guidelines have been applied. Refer response to SCC Item 031 above.
SCC 041	<p>Council states that while the amounts may be in line with Council's standards, there appears to be a number of gaps in the Social and Community Planning Assessment.</p> <p>Council states that the assessment of demand appears to be based on assumptions or normative standards, without further consideration of:</p> <ul style="list-style-type: none"> • The likely demographic composition of the new community; • More detail on the timing and staging of development; • A complete listing of services to be provided within the new development; and • A better understanding of the capacity of existing facilities and services. 	<p>It is agreed that Council's standards have been met or exceeded.</p> <p>This statement is not agreed. Refer responses to Items SCC 030 to 038 inclusive above.</p>
SCC 042	Council states that there is currently no commitment from the proponent to contribute to social infrastructure outside of the development area.	This statement is not agreed. Refer response to Item SCC 013.
	6.1 Open Space	
SCC 043	<p>Council states that there is a high level of open space proposed that slightly exceeds, although generally meets Council's standards. Council states that there are significantly high levels of Environmental Reserve, Riparian and Drainage Land in addition to designated passive and active open space.</p> <p>Council states that there will be significant impacts on Council's capacity to maintain and manage these.</p> <p>Council states that there is a significant lack of assessment of the potential maintenance requirements for open space.</p>	<p>It is agreed that there is a high level of open space that slightly exceeds, although generally meets, Council's standards. The normative standards adopted in Council's Open Space and Community Facilities Needs Study and Design Guidelines have been applied. Refer EA Appendix AA and Appendix CC.</p> <p>Regarding maintenance and management requirements, refer to Items DOP 06, DOP 07, SCC 009 and SCC027 above.</p> <p>The approach proposed by DLL on the detail of the Voluntary Planning Agreement (or equivalent contributions regime), including for open space, is detailed Items SCC 010, 011, 012 and 013 above. DLL would welcome further discussions with Council on this matter.</p> <p>This matter has also been further addressed in the Preferred Project Report. Refer to the PPR Section 4.2 and Appendix K</p>
SCC 044	<p>Council states that the proponent does not provide sufficient information to determine whether Council's Open Space requirements for accessibility to residential areas.</p> <p>Council states that its analysis indicates that there is an oversupply in the northern area and an undersupply in the south west of the site.</p> <p>Council states that further information is required to determine if the Open Space Master Plan meets Council's access standards.</p>	<p>As noted above it is agreed that Council's standards have been met or exceeded.</p> <p>DLL agrees in part with this statement and notes that it submitted a number of requests to Council to discuss the proposed Planning Agreement detail during its assessment but Council did not take these opportunities to progress the detail of the Agreements.</p> <p>The normative standards adopted in Council's Open Space and Community Facilities Needs Study and Design Guidelines have been applied. Refer EA Appendix AA and Appendix CC.</p>
SCC 045	Council states that Local Parks should be reduced from 0.3 hectares to 0.2 hectares to align with Council's revised minimum size requirements.	<p>The normative standards adopted in Council's Open Space and Community Facilities Needs Study and Design Guidelines have been applied. Refer EA Appendix AA and Appendix CC.</p> <p>A revised minimum size requirement can be accommodated. Refer to the PPR Sections 4.2.2; and 4.2.3 and Appendix K that confirms:</p>

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		<ul style="list-style-type: none"> the reduced minimum size standard for Local Parks; revised Open Space schedules to reflect the new minimum standard; and a commitment to prepare an addendum to the Landscape and Open Space Master Plan (refer EA Appendix CC) and other relevant documentation (refer to the PPR Section 4.2.4).
SCC 046	Council states that it will consider play opportunity alternatives such as landscape design play spaces and integrated play opportunities.	Noted.
SCC 047	Council states that the proposed sport field provision is deficient and that this is justified by DLL by identifying existing facilities in the Region. Council states that no contribution is proposed to facilities outside the development. Council request more detail on what sports will be catered for and states that it wishes to be involved in the assessment.	<p>This statement appears to contradict other statements made by Council that “there is a high level of open space proposed that slightly exceeds, although generally meets Council’s standards”. Refer Item SCC043 above.</p> <p>Further, the Landscape and Open Space Master Plan (refer EA Appendix CC) identifies that the 21 hectares of “Active Recreation” required under the normative standard comprises both playing fields (15.98 ha) and a network of active recreational pathways for walking / cycling (4.43ha) designed to meet Council’s own identified trends. However, additional sports field provision can be accommodated in the Concept Plan if required by Council. DLL would welcome further discussions with Council on this matter and on the detail of what sports will be catered for via a Voluntary planning Agreement.</p> <p>The approach proposed by DLL on the detail of the Voluntary Planning Agreement (or equivalent contributions regime) is detailed Items SCC 010, 011, 012 and 013 above.</p> <p>Refer also to the PPR Section 4.2</p>
	6.2 Community Facilities	
SCC 048	<p>Council states that the proposal for a Multi-Purpose Community Centre co-located with a library is supported but notes that there may be an underestimation of the sizing of the library space.</p> <p>Council states that little detail has been provided with regard to operation and handover of the facility, internal fit out, services that will be required and the implications for Council’s internal departments.</p>	<p>Refer responses to Items SCC 010, 011, 019 and 021 above.</p> <p>Refer to the PPR Section 4.2.4</p>
SCC049	Council states that it is concerned with the timing of the provision of the permanent Community Centre given the size of the Temporary Centre. Council states that it considers that a stand alone Temporary Facility is required. Council states that no detail is provided on whether library services will be included in the temporary space.	<p>DLL agrees that 32 m2 is insufficient for a stand alone facility. DLL’s experience is that a 120 to 150sqm space which contains one large meeting room for community gatherings, plus two smaller meeting rooms (one generally used exclusively by baby health nurse in new release areas), office for Worker, kitchenette, storage, toilets, is more appropriate.</p> <p>DLL would welcome further discussion with Council on the location, size scope and costings of the facility.</p> <p>Refer to the PPR Section 4.2 and Appendix K</p>
	7 Housing Supply and Demand	
SCC 050	Council restates the view at Item 1 above that Calderwood is not required to provide additional housing supply in the Shellharbour LGA.	Refer Items SCC 01 and 04 above and to the PPR Section 2.1 and Appendix C.
SCC 051	Council states that the application does not take into consideration the relatively slow uptake of existing release areas in Shellharbour LGA such as Shell Cove and Tullimbar.	<p>This statement is not agreed as the matter has been addressed – refer EA Section 2.2.4 and Appendix E Illawarra Land and Housing Supply Report.</p> <p>Also, refer Item SCC 004 above and to the PPR Section 2.1 and Appendix C</p>

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SCC 052	<p>Council states that:</p> <ul style="list-style-type: none"> the proposed housing mix does not make reference to the existing household types in the surrounding area and what dwelling types best suit them; and the housing types in the mix are not described in terms of floor areas or number of bedrooms, but only occupancy rates. 	<p>This statement is not agreed as the matter has been addressed – refer EA -Appendices E Illawarra Land and Housing Supply Report and AA Social and Community Planning Assessment. Also, refer Item SCC 004 above.</p> <p>Council's comment about the very slow take up of existing release areas (Item SCC 50 above) would indicate the current supply offerings are not a sound guide: they appear to take little account of market capacity, housing choice or affordability.</p> <p>Refer to the PPR Section 2.1 and Appendix C.</p>
SCC 053	<p>Council states that there is no assessment of housing affordability and that while some indicative prices have been put forward for dwellings there is no assessment regarding those for whom the dwellings will be affordable.</p>	<p>This statement is not agreed as the matter has been addressed – refer EA Section 2.1 and Appendix E Illawarra Land and Housing Supply Report.</p> <p>Refer also to the PPR Section 2.1 and Appendix C.</p>
SCC 054	<p>Council states that:</p> <ul style="list-style-type: none"> there is no actual proposal for formal affordable housing; it does not appear that Housing NSW were consulted in preparation of the submission ; and consideration should be given to the proponent entering into a planning agreement/joint venture with a suitable party for provision of affordable housing. 	<p>Agreed that there is no proposal for affordable housing and this is not required under the DGRs.</p> <p>It is noted that there is no current contributions policy that supports Council's proposition on affordable housing. Further, there is no requirement for such a contribution under the Affordable Housing (Rental) SEPP nor is it permitted to be a requirement under the EP&A Act.</p>
SCC 055	<p>Council states that there is nothing in the application on where adaptable housing for ageing in place will be provided or how the Development Control Strategy will result in adaptable housing being designed and constructed.</p>	<p>Delfin Lend Lease actively supports "adaptable" housing. The Federal Government's Liveable Housing Design Guidelines is considered to be current Best Practice. The new guidelines are designed to adapt to the needs of residents as their lifestyles change. To meet the minimum standard under the new guidelines, homes need to feature easy access to the property, easy ability to move around and the ability for cost-effective adaptation.</p> <p>The new guidelines are voluntary. The Development Control Strategy for Calderwood does not preclude their application anywhere on site.</p> <p>It is noted that the Hon Bill Shorten, Parliamentary Secretary for Disabilities, launched the new guidelines for 'liveable' housing standards for the aged and disabled at Rochford Place Retirement Village on 13 July 2010, part of the Delfin Lend Lease Ropes Crossing project.</p>
SCC 056	<p>Council states that third parties have advised that the assessment of the housing needs for Aboriginal people provides little evidence of assessment of housing needs.</p>	<p>DLL is unable to comment on third party reports.</p>
	8 Visual Impact and Physical Context	
SCC 057	<p>Council states that community surveys in 2004 and 2007 resulted in the following issues being rating "very high or were important today and in 10-15 years time":</p> <ul style="list-style-type: none"> retention of a quality natural environment rural and farming land is important in the landscape preventing over development; and environmental protection 	<p>The relevance of this study and its conclusions is questioned: it was prepared with little or no reference to the fact that Calderwood is identified for development on the MDP; and it predates the IRS which nominates Calderwood as a potential supply source for residential land.</p>
SCC 058	<p>Council states that a rural lands study in 2004 for the Rural LEP 2004 identified the site as generally having "very high visual management priority" and "very high current visual status with some areas of high current visual status". The study identified that preservation of the landscape is required.</p>	<p>Refer Item SCC 056 above.</p>
SCC 059	<p>Council states that the application will create a significant visual impact on the rural scenic amenity of the western portion of the LGA.</p>	<p>This statement is not agreed. This issue is addressed in the EAR documentation and specifically in the Visual Impact Assessment (VIA). The VIA meets the requirements of the DGRs and identifies the visual impact of the proposed development when viewed from a wide variety of locations. The Concept Plan has taken the VIA into consideration when identifying locations for development.</p>

ITEM No.	TOPIC	PROPONENT RESPONSE
		Refer EA Sections 3.18, 6, 7.15, Appendix A – Concept Plan drawings, Appendix X – Visual and Landscape Assessment and Appendix CC – Landscape and Open Space Master Plan.
SCC 060	Council states that <i>“some impacts have been mitigated in the design of the development area”</i> .	Noted.
SCC 061	Council states that the entire site will incur significant changes, modifying the rural character and amenity of the locality.	Noted. Greenfield developments (eg West Dapto, Tullimbar, Shell Cove) can incur significant change and modify the existing character of an area.
SCC 062	Council states that the strategies identified by DLL to minimise the visual impact: <ul style="list-style-type: none"> are only urban design ‘principles’ whose application is not necessarily ensured; and do not completely link to actual land use controls. 	Not agreed. The identified strategies are reflected in the proposed Concept Plan through zoning, the ESL layer, the Landscape and Open Space Master Plan, the street pattern the cycle path strategy etc and are incorporated throughout the various sections of the proposed DCS – Refer EA Sections 4, 6, and Appendix BB – Development Control Strategy. In addition, the Development Control Strategy has been amended to strengthen the application of urban design principles during project implementation. Refer to the PPR Section 2.7; 3.6; and 5 and revised DCS at Appendix G
SCC 063	Council states that the lower and upper slopes of Johnston’s Spur are visible from Mount Warrigal and Lake Illawarra (east), Albion Park (south) and the Escarpment (eg the Illawarra Fly).	This issue is addressed in the EAR documentation and specifically in the Visual Impact Assessment. The VIA meets the requirements of the DGRs and identifies the visual impact of the proposed development when viewed from a wide variety of locations. Refer EA Sections 3.18, 6, 7.15, Appendix A – Concept Plan drawings, Appendix X – Visual and Landscape Assessment and Appendix CC
SCC 064	The Council states that the lower slope areas of Johnston Spur are proposed development areas.	Noted
SCC 065	Council states that Tullimbar is at the western gateway to the LGA for people travelling from the [Southern] Highlands to the region and so plays an extremely important role in the perception people have of the LGA.	Noted. Calderwood will form a new western gateway to the LGA. As a result, it is important for the project to acknowledge this and provide an appropriate treatment commensurate with its role. With specific regard to the south western corner of the Calderwood project, the Development Control Strategy has been amended to generally limit development in that location to larger residential allotments and to recognise the location’s role as a “new gateway” into the LGA. Refer to the PPR Section 2.7 and revised DCS at Appendix G and revised Statement of Commitments # 18-20
SCC 066	Council states the Concept Plan includes minimal buffers between the urban development areas and surrounding rural uses.	The Development Control Strategy has been amended to address the issue of “buffers” between the urban development areas and areas of rural fringe. Refer to the PPR Section 2.7 and revised DCS at Appendix G and revised Statement of Commitments # 18-20
SCC 067	Council states that the western end of the site starts at North Macquarie Road and parts of the land have to potential to be developed into lots of 125sqm (Parkland Nodes) as well as the construction of residential flat buildings.	Noted. Refer to the response provided under Item SCC 065 above.
SCC 068	Council states that the westward extension of the urban area to North Macquarie Rd is “totally inappropriate” and is out of context with the surrounding rural landscape. These uses are “unsympathetic” to the rural character and have a potentially detrimental impact on the entry to the LGA	Not agreed. Refer responses at Items SCC 063, 064 and 065 above.
SCC 069	Council states that a change of character from predominantly rural to predominantly urban with a very abrupt transition significantly alters the visual status and subsequent impression received as motorists pass through the area.	Not agreed. Refer responses at Items SCC 063, 064 and 065 above.
SCC 070	Council states that the uses are contrary to one of the issues raised by NSW I&I, which requested the proponent to <i>“consider suitable design and future use arrangements to mitigate impacts including placement of other than urban use adjoining agricultural”</i> .	Not agreed. The Concept Plan proposes significant areas of RE1 Public Recreation (open space) and E2 / E3 (riparian corridors) that adjoin other non urban lands and will mitigate impacts. In addition, many of the lands zoned R1 would require APZs and/or other setbacks (eg road reservations with tree planting, WSUD elements etc) where they adjoin other non urban lands, creating suitable design and future use arrangements to mitigate impacts. Refer EA Sections 3.18, 6, 7.15, Appendix A – Concept Plan drawings, Appendix X – Visual and Landscape Assessment and Appendix CC – Landscape and Open Space Master Plan. Refer also to the PPR Section 2.7 and revised DCS at Appendix G

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SCC 071	Council states that the application proposes “two major fill pods to enable residential development” adjoining the Illawarra Highway, between Broughton Avenue and Yellow Rock Road. This fill is “up to” 3m above existing ground level.	Noted.
SCC 072	Council state the new residential areas north of the Illawarra Highway will be “significantly elevated above the existing road level to avoid flood risk”.	<p>New residential areas north of the Illawarra Highway would be elevated to the same level as the proposed Albion Park Bypass / Tripoli Way Extension. Refer to the PPR Section 2.6 and Appendix F</p> <p>Further, all residential areas in Calderwood are elevated above the PMF. However, sections of the Illawarra Highway are currently below the PMF making it prone to flooding and accentuating the difference in height levels. Refer to the PPR Section 2.3 and Appendix D</p>
SCC 073	<p>Council states that the “altered” visual impact is difficult to determine without:</p> <ul style="list-style-type: none"> • Sketches / photomontages of the development showing the fill pods and detailing maximum fill depth and slope grade; • Typical building envelopes of the development on the fill pods (in accordance with the proponents DCP and height map); • How the areas between the fill pods are to be treated; and • Interface design treatments between the mixed use lots and adjoining lands (eg proposed 18m high buildings adjoining agricultural zoned land). 	<p>Not agreed. Sufficient information was provided in both the EAR documentation and the Stage 1 Project Application to assess the impact of development:</p> <ul style="list-style-type: none"> • This information is provided in the Stage 1 PA; • This information can be ascertained easily from the information provided; • This information is provided with the Stage 1 PA; • “Interface design” can be dealt with at the relevant DA stage. It is assumed to relate to building treatment and issues of building interface which are able to be identified when there is a specific building(s) to be assessed. <p>Notwithstanding the above, DLL propose amending the maximum height for all lands adjoining the Illawarra Highway, from 18m to 9m, regardless of zoning. Refer to the PPR Section 3.5 and revised Maximum Height Map in Appendix H</p>
	9 Land Acquisitions	
SCC 074	Council state they are at risk of having to acquire the land that is proposed to be rezoned for a public purpose (drainage [SP2] and public recreation [RE1]) as shown on the Land Acquisition Map.	<p>DLL notes Council’s concerns and considers there are alternative land ownership options and would welcome further discussions with the DoP on this matter. This issue is addressed in greater detail in the Preferred Project report - Refer to the PPR Section 4.2 and Appendix I</p> <p>Further, the Calderwood proposal has been amended and it is proposed that the SP2-d zone be a combination of E2 and E3 zones. Refer to the PPR Section 3.3 and revised Zoning Plan in Appendix H</p>
SCC 075	Council state that the State Government does not need Council’s approval to identify Council as the acquisition authority. As a result, Council could end up being required to acquire the land shown, even if the development is not carried out.	Refer response at Item SCC 074 above and to the PPR Sections 3.3; 3.4; and 4.2 and Appendix I
SCC 076	Council recommends that “in order to minimise Council’s exposure to financial risk”, the land proposed for transfer to Council should be zoned “so that it does not exclusively reserve it for a public purpose and potentially trigger acquisition proceedings”. This could be as simple as permitting land uses such as SCC 75 drainage and recreation areas in the adjoining zones and applying these zones more broadly.	Refer response at Item SCC 074 above and to the PPR Sections 3.3; and 3.4
SCC 077	Council state “it should be noted that there are other lands proposed to be dedicated to Council” that do not appear on the Land Acquisition Map, eg Johnstons Spur	Refer response at Item SCC 074 above and to the PPR Sections 3.3 and 3.4
	10 Land Use, Urban Design and Development Control Strategy	
SCC 078	Council understands the DoP is considering legislation that would see the transfer of Major Developments from the SEPP to local planning instruments.	DLL understands that the legislation in question refers to a transition from Major Project SEPP to the new comprehensive LEPs under the standard LEP template. It is not the intention of the proposed legislation to implement a transfer from Major Project SEPP to existing LEPs that do not accord with the LEP template.

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SCC 079	Council states it is extremely important that there is a seamless transition from the Major Projects SEPP to Shellharbour's planning instruments, including zones and land uses compatible with those used elsewhere in the LGA. The current proposal does not achieve this.	The Calderwood project has been prepared in accordance with LEP template and other relevant legislation and guidelines. This provides for a seamless transition into Council's future Comprehensive LEP, but this cannot be confirmed as Council's document is in the early stages of preparation and has not been made available. Notwithstanding, the LEP template permits site specific elements / requirements to be identified in a Comprehensive LEP.
	10.1 Land Uses	
	10.1.1 Residential zones	
SCC 080	<p>Council state the R1 General Residential zoning is the only residential zone proposed. This has the advantage that it is broad-based and allows some flexibility for subdivision and development.</p> <p>However, it does not provide the appropriate means to ensure [higher] densities are close to the town centre and lower densities nearer to the fringe of the site (eg the applications permit 125 – 350sqm lots and detached integrated housing near E2 and E3 zones).</p> <p>The broad zone also permits the mandatory use of some uses considered unsuitable for the site, such a Residential Flat Buildings.</p>	<p>Noted – although it is important to recognise that other forms of residential development are also permissible / not prohibited in other zones on site, eg B4 and E3.</p> <p>The imperative of providing a quality development that reflects its physical setting is understood by Delfin Lend Lease, as is providing a wide mix of development to meet the broadest market. Increased residential density is considered appropriate wherever there are relevant services and facilities to meet the needs of the residential population (ie town centre, village centre, around parklands, close to bus stops). Notwithstanding, the Calderwood proposal has been amended to address the issue of the rural fringe and to reduce the number of locations where smaller dwellings are promoted.</p> <p>Refer to the PPR Sections 2.7; 3.6; and 5 and revised DCS at Appendix G.</p>
	10.1.2 Mixed Use zones	
SCC 081	Council state the applicant is proposing to use the B4 Mixed Use zone in the town and village centres and some areas fronting the Illawarra Highway.	Noted and agreed.
SCC 082	The zone permits a number of uses suitable for urban centres (including commercial, residential and industrial). However, the mixed use character identified for the town and village centres has the potential to cause "land use conflict through uncoordinated development" given the proposed zones large size and lack of suitable development control structure (eg residential near industrial and no minimum lot size). The use of this zone is therefore excessive.	The Calderwood project has been prepared in accordance with LEP Template. The B4 land use zone promotes an appropriate mix on land uses for a town and village centre (as per LEP Practice Note 06 002). It is not considered to have been used "to excess".
SCC 083	The proposed B4 land fronting the Illawarra Highway appears designed to pull trade away from Sophia St (Albion Park) and the proposed centre in Tullimbar.	<p>This statement is not agreed. There is no justification provided for this conclusion.</p> <p>Notwithstanding, DLL propose amending the zoning of the land fronting the Illawarra Highway at the main entry point (ie opposite Yellow Rock Road) from B4 to R1.</p> <p>Refer to the PPR Section 2.8; and 3.5 and revised Zoning Plan in Appendix H</p>
SCC 084	This is particularly relevant to the site located in the south east corner that has no connectivity to the rest of the Stage 1 development or the study area. This zone is not appropriate, nor is the 18m height limit.	<p>This statement is not agreed. The Calderwood project is an extension of the existing urban footprint of Albion Park and this specific element of the site adjoins existing residential allotments.</p> <p>Notwithstanding, DLL propose amending the maximum height for all lands fronting the Illawarra Highway, from 18m to 9m, regardless of zoning.</p> <p>Refer to the PPR Section 3.5 and revised Maximum Height Map in Appendix H</p>
	10.1.3 Environmental zones	
SCC 085	Council state the applicant is proposing a mix of E2 Environmental Conservation and E3 Environmental Management zones. It appears Council will be required to own the E2 zones (allows minimal development) and some of the E3 zones (allows development that is sympathetic to the environmental qualities of the site).	Refer to the PPR Section 4.2 and Appendices I and K where open space ownership options are discussed and evaluated in accordance with DOP letter dated 15 th July 2010.

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SCC 086	Council has not indicated, nor does it currently foresee the capacity or ability to have ownership of such lands, which include the bulk of Johnstons Spur.	DLL notes Council's concerns and considers there are alternative land ownership options and would welcome further discussions with the DoP on this matter. Refer to the PPR Section 4.2 and Appendices I and K where open space ownership options are discussed and evaluated in accordance with DOP letter dated 15 th July 2010.
SCC 087	The Council agrees these lands hold environmental value, but believe there are other ownership options that should be explored	Refer response at Item SCC 086 above . Refer to the PPR Section 4.2 and Appendices I and K where open space ownership options are discussed and evaluated in accordance with DOP letter dated 15 th July 2010.
	10.1.4 Special Infrastructure zones	
SCC 088	Council state that two proposed SP2 uses are proposed: <ul style="list-style-type: none"> SP2-d – land proposed to be dedicated to Council for purposes of drainage as part of the subdivision works; and SP2-e – land for an electricity substation. Council state that neither zone is recognised in the Standard LEP Instrument set by the State Government, nor recognised in the Infrastructure SEPP (2007). Therefore these zones are considered unjustified and unnecessary.	The SP2 zone is included in the standard LEP template and Infrastructure SEPP. The suffixes of “d” and “e” were simply employed to differentiate between the lands required for drainage (“d”) and the lands required for an electrical substation (“e”). Notwithstanding, DLL propose amending the SP2-d zone to a combination of E2 and E3 zones. Refer to the PPR Section 3.3 and revised Zoning Plan in Appendix H
	10.1.5 Public Recreation	
SCC 089	Council state there is “a significant amount of RE1 – Public Recreation zoned land which is to be transferred to Council. Much of these lands are low lying pastoral and riparian areas which are predominantly flood prone and unsuitable for residential uses. Council would prefer not to have all of this land transferred to it, due mainly to the excessive maintenance costs, and a suitable alternative use should be explored.	Refer to the PPR Section 4.2 and Appendices I and K where open space ownership options are discussed and evaluated in accordance with DOP letter dated 15 th July 2010.
	10.1.6 Building Height	
SCC 090	Council state that building height is the vertical distance between the ground level (existing) at any point to the highest point of the building.	The Calderwood project defines building height is the vertical distance between the ground level (finished) to the highest point of the roof (but excluding architectural elements).
SCC 091	The applications indicate that some of the residential lots in Stage 1 will have about 3m of fill and the site of the sales office about 3.5m of fill. This is considered to be inappropriate and unsympathetic to the visual landscape.	Not agreed. Refer SCC Items 056 to 072 inclusive above .
SCC 092	The maximum height of 18m for the village centre and mixed use site that abuts the Illawarra Highway in Stage 1 is not appropriate in this locality.	Not agreed. This statement is not supported by fact. Other similar developments suggest the proposed height limit is appropriate: <ul style="list-style-type: none"> Shell Cove - 28m maximum height (13m standard) Tullimbar Village Centre – Hotel DA measures 17.8m in height Shellharbour Town Centre – 19m maximum height (13m standard) West Dapto Release Area stages 1 and 2 – 30m maximum height in B3 (town centre) zone and 20m maximum height in B2 (village centre) zone [NOTE: the proposed village centre adjoins rural land] Rouse Hill Regional Centre – 28m maximum height Oran Park Town Centre – 19m maximum height

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		<p>An 18m height limit is considered appropriate for both the town and village centres – both zoned B4.</p> <p>Notwithstanding, DLL propose amending the maximum height for all lands fronting the Illawarra Highway from 18m to 9.5m. Refer to the PPR Section 2.7 and revised Maximum Height Map in Appendix H and SCC 084 above.</p>
SCC 093	<p>Council state it is difficult to clearly assess the impacts of these heights given no sketches or photomontages of the development have been included showing (but not limited to):</p> <ul style="list-style-type: none"> the fill pods (detailing maximum fill depth and slope grade) ; typical building envelopes of development on the fill pods (in accordance with the DCS and height map); how the areas between the fill pods are proposed to be treated; and interface design treatments between mixed use lots and adjoining lands (agricultural and residential). 	<p>Not agreed. Refer SCC Items 56 to 72 inclusive above.</p> <p>Regarding building height on land fronting the Illawarra Highway, refer to responses provided under Items SCC 084 and 092 above</p>
	10.1.7 Minimum Lot sizes	
SCC 094	Council state that a 300sqm minimum lot size is proposed for all land zoned R1. The lot sizes (together with the zoning) do not reflect larger lots nearer the edges of the development site and the bushland areas.	<p>The lot size controls and zoning permit a variety of housing options across the site to meet the various needs of the market and address issues of affordability. Smaller lots have an important role to play in this equation and are not necessarily inappropriate on all of the “edges” of the development - especially those adjoining lands already identified on the MDP.</p> <p>Notwithstanding, the Calderwood project has been amended to address the issue of lot sizes adjoining the rural fringe and bushland areas. Refer to the PPR Sections 2.7; and 5; and revised DCS in Appendix G</p>
SCC 095	This potentially gives no buffer between the residential lands and agricultural and bushland areas.	Refer Item SCC 094 above
SCC 096	The application is seeking a clause in the SEPP to permit a departure from the Minimum Lot Size map to allow lots less than 300sqm in all areas identified as Parkland Nodes. This is not acceptable as some of these nodes are relatively isolated and not close to town centres.	<p>Smaller lots have an important role to play in the equation of housing choice. They benefit from being close to services and facilities such as parklands and bus services and the do not always need to be located in town and village centres.</p> <p>Notwithstanding, the Calderwood project has been amended to address the issue of lot sizes adjoining the rural fringe and bushland areas. Refer to the PPR Sections 2.7; and 5; and revised DCS at Appendix G</p> <p>Refer also Item SCC 094 above.</p>
SCC 097	All B4 land does not have a minimum lot size	The Calderwood project has been prepared consistent with the standard LEP template and other Part 3A applications.
SCC 098	With regard to the E3 zone, potentially the overall density could be ignored by the proponent, as there is no control in place on the Minimum Lot Size Map.	DLL propose amending the density control as it applies to the E3 zone to remove any ambiguity. Refer to the PPR Section 3.6 and revised Minimum Lot Size Map in Appendix H
	10.2 Urban Design	
SCC 099	Council state the application includes a set of urban design principles. Council supports principles such as walkability, active street frontages and grid pattern street design.	Noted.
SCC 100	Council notes however that there appears to be a number of principles that are not actively regulated through the controls that the proponent provides (refer section 10.3 below)	<p>Not agreed. The principles are considered to be inherent throughout the DCS document. Notwithstanding, the Development Control Strategy has been amended to address this issue. Refer to the PPR Section 2.7 and revised DCS at Appendix G</p> <p>Refer also Item SCC 103 below.</p>

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	10.3 Development Control Strategy	
SCC 101	Council notes that under the Major Development SEPP, the proponent is not required to abide by Council's DCPs and policies. The proponent has therefore provided a Development Control Strategy (DCS) which acts to replace Council's DCP for ongoing development of the site.	Noted.
SCC 102	Council has a number of concerns about the lack of detail and lack of consistency between the DCS and Council's own DCPs. Council recognised that a comprehensive DCP is currently being prepared to replace individual DCPs, however, it is likely to maintain the majority of DCP provisions.	Not agreed. Generally, the DCS accepts the existing Council standards for most items. Council's Comprehensive DCP is currently being prepared. However, it is not yet a public document and has not been made available to DLL for reference.
SCC 103	Council states that the proposed DCS is generally deficient as a tool for designing and assessing development. The use of building and siting guidelines enforced under developer covenants is not supported.	This statement is not supported by the evidence. The approach outlined in the EAR documentation is considered to be standard "best practice" for DLL projects across NSW and elsewhere. This approach is not considered to be "deficient", rather it promotes a form of 'code assessment', specific to the geography and character of a given location. It reflects latest Federal and State policies for increased code assessable development that delivers quality outcomes in an efficient manner, reduces the need for DAs, but permits merit assessment where necessary. DLL supports the application of the NSW Housing Code at Calderwood and expects that the proposed code for smaller lots will also prove suitable. The process proposed by DLL reflects this policy.
SCC 104	Council states that the principles of urban design do not clearly correlate with the controls in the DCS. Examples are: <ul style="list-style-type: none"> The proponent claims a range of housing options are to be made available, however the controls do not confirm how these will be provided; There are minimal details about how opportunities for integration of public art into the public domain are to be achieved; There are minimal details about how landscape treatment of streets will distinguish between public and private spaces and different street hierarchies and the mechanism to ensure this happens. 	This statement appears to misunderstand the role of the DCS: <ul style="list-style-type: none"> Housing options arise out of subdivision and integrated housing DAs responding to market demand. Broad housing choice will be offered at Calderwood to attract as wide a purchasing market as practical; Public art will be integrated via a public domain strategy (Refer to the PPR revised Statement of Commitment # 21 and Appendix K where public art is included in local contribution schedules) Not agreed. These are provided with the Stage 1 PA.
SCC 105	Council states that ensuring there are accurate and appropriate controls is important for Council as it will potentially be undertaking ongoing development assessment. Further consultation is necessary to develop the detail required in the DCS.	Generally, the DCS accepts the existing Council standards for most items. Where they depart, the standards are used in other developments in NSW where ongoing development assessment does not appear to suffer unduly. Notwithstanding, the Development Control Strategy has been amended to address some of the issues raised. Refer to the PPR Section 2.7 and revised DCS at Appendix G
	11 Transport and Accessibility	
SCC 106	Council states that: <ul style="list-style-type: none"> it has significant concerns about the delivery of the proposed road upgrades given the majority are beyond the proponent's control and require state agency funding and approval; the proposed road upgrades are therefore subject to state budgetary constraints in addition to any additional local government and other developer contributions; and it is therefore impossible for the proponent or DoP to guarantee that any will be delivered. 	This statement is not agreed. The RTA has stated, in a letter dated 15 th June 2010 to the Department of Planning, that the Government is currently considering the preparation of an Illawarra State Infrastructure Contributions Plan (SIC) to cover the land releases of West Dapto, Tallawarra and Calderwood and that the apportionments are outlined in a letter dated 15 October 2009 to DOP. The Department of Planning has confirmed this. Therefore it is assumed that the SIC will be utilised to provide appropriate level(s) of state infrastructure and Calderwood will contribute to these as will all other development in the region.

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		DLL has written to the Department on 31 st July 2010 with a formal proposal to enter into a VPA for the Project including details of specific road upgrades.
SCC 107	Council states that information is not provided on how the upgrades will be triggered in relation to traffic volume threshold or housing lot production rates.	This statement is not agreed. Refer response to Item SCC 18 above.
SCC 108	Council states that it cannot determine how the road upgrades will be implemented without a detailed, practical delivery or staging programme for the nominated upgrades.	This is the objective of the VPA agreements. Refer response to Items SCC 10, 11 and 12 above.
SCC 109	Council states that there is inconsistency between Concept Plan and Stage 1 in respect to future connection to Tripoli Way.	Noted. DLL proposes an amendment to the Concept Plan and Stage 1 PA to accommodate a potential future Albion Park Bypass and Tripoli Way Extension. Refer to the PPR Section 2.6 revised Concept Plan in Appendix L and revised Statement of Commitments # 13-17.
SCC 110	Council disputes the mode shift of 10% is achievable given the geographical isolation of Calderwood from the existing employment, community, commercial, and retail services in the Shellharbour and Wollongong Local Government Areas.	This statement is not agreed. The methods for achieving mode split shift are detailed in Appendix T to the EA Concept Plan Transport Accessibility Study and Transport Management and Accessibility Plan, specifically Sections 8 and 9 . Further Appendix 3A to Appendix T provides examples of transport demand management at existing DLL projects. Furthermore the mode shift targets were discussed at all agency consultation meetings. Transport NSW advised that the TMAP should focus on how to achieve a 15% mode share target.
SCC 111	Council recommends that a more stringent requirement of how 30% modal shift away from private vehicles be set as a demonstrated achievable outcome should the development be approved by DoP.	This statement is not agreed. It has no policy basis – refer Appendix T to the EA Concept Plan Transport Accessibility Study and Transport Management and Accessibility Plan, specifically Section 2.2.1 and Appendix 1c . The State Plan has ‘revitalised’ mode share targets of 15% (non –car based for JTW) to Wollongong CBD. It is unrealistic to assume Calderwood could achieve a better non-car based mode share than Wollongong CBD.
	12 Flood Management	
SCC 112	Council states that it considers: <ul style="list-style-type: none"> that the risk of flooding on the proposed development and the impact on adjoining lands has been underestimated; the actual level of risk is unable to be determined given that the proponent has selected an inappropriate scale for of 1:15000 for the flood study and flood risk management study and presented these in A3 and A4 format; and the impacts have not been assessed far enough up stream or down stream from the site. 	These statements are inaccurate and are not agreed. Risk is the product of probability and consequence. The Flood Study provides detailed, calibrated results for the <u>probability</u> of floods (i.e. 1% AEP etc) and also clearly defines the <u>consequences</u> (i.e. flood hazard, property affectation etc). Flood risk has therefore been determined in accordance with the FPDM (2005) and is not under-estimated. Refer EA Appendix R (Rienco) . Maps were provided in high-resolution digital format to allow Council to zoom in and review flood levels in considerable detail. Impacts have been assessed between the site and Lake Illawarra. The model clearly extends beyond the area of impact upstream. Refer to Refer EA Appendix R - Floodplain Risk Management Study (Appendix C) .
SCC 113	Council states that it considers that certain Director General’s Requirements have not been met.	This statement is inconsistent with Council’s statement at Item SCC 01 above and is not agreed. Refer response at Item SCC 001.
SCC 114	Council states that the flood study shows a deviation from previous flood studies in respect to Design Peak Discharges at Calderwood road and that this would have a major impact on the assessment of the floodplain.	The previous studies referred to were completed some time ago (i.e. 1986) and were not calibrated, and did not extend to include areas of the floodplain where large diversions of flow were known to exist. These diversions have been included in our calibrated model and as such flow behaviour has been modelled correctly. Refer EA Appendix R (Rienco) .
SCC 115	Council: <ul style="list-style-type: none"> recommends that the flood study be 3rd party peer reviewed; and states that it does not have the software or existing model to undertake this review. 	The flood model used for Calderwood is predominantly the same flood model used on the recent Albion Park Business Park development. This model was 3 rd party peer reviewed at the time and Council was satisfied with its integrity. The need for a further peer review seems excessive considering the previous approvals given by Council and DECCW to this flood model.

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		However it is noted that the Department has sought independent assistance with the assessment of the flood study. This issue is addressed in detail in the Preferred Project report – refer PPR Section 2.3 and Appendix D
SCC 116	Council states that the assessment of flood risk for the site has not been conducted in accordance with the NSW Flood Prone and Policy as set out in the Floodplain Development Manual 2005.	This statement is not agreed. The NSW Government's Flood Prone Land policy does not prescribe any assessment procedure for assessing flood risk, however the methodologies used are consistent with all current major flood studies and associated policies and planning directions which are detailed in the EA Appendix R (Rienco) .
SCC 117	Council states that the extent of flooding due to this proposal has not been shown because of model assumptions.	This statement is not agreed. All model assumptions are clearly published in the EA Appendix R Sections 4 & 5 (Rienco) , which are dedicated to describing all model assumptions. The extent of flooding has been shown in the EA Appendix R – Rienco - Appendices F and G .
SCC 118	Council states that part of Stage 1 is isolated in the 1% AEP with the 2 access roads submerged.	Council has no standard or allowance for acceptable 'isolation'.
SCC 119	Council states that a mandatory requirement for all bridges to have flood free access during the 1 in 100 year event.	Agreed. This is what is proposed.
SCC 120	<p>Council states that:</p> <ul style="list-style-type: none"> the submitted Floodplain risk Management report (volumes 1 and 2) provides almost no detail on how the Calderwood proposal can comply with Council's floodplain risk Management DCP; there is no information on how the objectives, or the performance criteria of Council's Floodplain risk Management DCP, have been met as required by the DGR; there is no data on how the development controls listed in Schedule 1 of Council's DCP can be satisfied; and the application has failed to address the objectives and performance criteria of the DCP. 	<p>This statement is incorrect and is not agreed. The DGR's require the Flood Mitigation Study to <i>be conducted in accordance with the NSW Government's Flood Prone Land Policy as set out in the Floodplain Development Manual 2005</i>. This is what has been undertaken. The DGR's also require DLL to <i>consider Shellharbour Council's Floodplain Risk Management DCP and justify any departure</i>. Where the DCP is inconsistent with the FPDM, the principles of the FPDM have been used and these instances are documented in the EA Appendix R Chapters 4 and 5 (Floodplain Risk Management Study). In all other instances the DCP is consistent with the FPDM and therefore the assessment meets the requirements of the DCP.</p> <p>It is an aim and objective of SCC's DCP to <i>deal equitably and consistently with applications for development on land affected by potential floods, in accordance with the principles contained in the Floodplain Development Manual</i>. This assessment is entirely consistent with recent Regional Project proposals.</p> <p>However it is noted that the Department has sought independent assistance with the assessment of the flood study. This issue is addressed in detail in the Preferred Project report – refer PPR Section 2.3 and Appendix D</p>
SCC 121	<p>Council states that;</p> <ul style="list-style-type: none"> the proposal has impacts on adjoining properties both upstream and downstream of the development site; and cumulative impacts of continued filling of the floodplain have not been assessed. 	<p>The process for determining acceptable impacts is regionally consistent with that adopted in other land release area and is entirely consistent with what has been approved previously by DECCW.</p> <p>The cumulative impacts of filling are clearly discussed in the EA - Appendix R Section 5.2 (Floodplain Risk Management Study).</p>
	13 Water Infrastructure	
SCC 122	Council states that the initial stages of the Project will rely on spare capacity provided by the Tullimbar Project and should not be "borrowed".	This statement is not agreed. The servicing strategy is consistent with Sydney Water's Growth Services Plan and makes best use of Sydney Water's assets, particularly given Council's acknowledgement of the slow take up rate of Tullimbar – refer Item SCC 004 above .
	14 Biodiversity and Riparian Corridors	
	14 .1 Environmentally Sensitive Lands and Riparian Corridors	
SCC 123	Council states the application intends to transfer large tracts of environmentally sensitive land and riparian lands to Council, much of which will need to be rehabilitated. However the proposal is ambiguous in relation to the condition of the rehabilitated areas prior to handover	Noted. Some riparian corridors will benefit from rehabilitation, but many can remain in their current vegetated state – especially the two main creeks where the ESL layer confirms their current status.

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		It is not agreed that the proposal is ambiguous about the condition at handover. The principles are articulated in the EA Appendix CC – Landscape and Open Space Master Plan .
SCC 124	Council notes VMPs will be prepared for all works within land identified as Environmentally Significant or Core Riparian. The Flora and Fauna assessment states <i>“Delfin will rehabilitate these areas to a suitable condition prior to handover, details of which will be part of the Statement of Commitments”</i> . However, the draft SoC provides no details on this important issue.	The VMPs are the relevant process in which the specific level of rehabilitation is identified in accordance with the principles articulated in the EA Appendix CC – Landscape and Open Space Master Plan . Notwithstanding, DLL note Council’s suggestion and propose a Statement of Commitment to remove any ambiguity. Refer revised Statement of Commitments # 35 .
SCC 125	Council states that it does not have the resources (staff and financial) to commit to implement the actions detailed in the VMPs after they have been handed over. Council states that even if these areas are brought up to a “suitable condition” prior to handover there will still be extensive maintenance costs for Council. <ul style="list-style-type: none"> • Weed management • Bush regeneration • Asset protection zone maintenance Council states that the above are ongoing issues that require regular attention and will place an unacceptable cost burden on Council over the long term.	DLL has provided a comprehensive response to this matter including an analysis of future open space ownership and management arrangements. Refer response to Items DOP 08 and 09 above and to the PPR Section 4.2 DLL notes that the recent announcements from State Government regarding s.94 and the amendments to Council rate pegging which may remove or reduce the “difficulty” identified by Council.
SCC 126	Greenspace Management Options in the Flora and Fauna report clearly show that a Torrens title (biobanking site) Model is the preferred ownership model followed by a Community Scheme Model. The Council Reserve Model is the least effective of the six models discussed due to the difficult issue of supply of management funding and also the high degree of public access that will result. Council With such a contention, it is unclear why almost the entire amount of undevelopable land, including ESL and riparian corridors is proposed to be handed to Council	These statements are not agreed. The options identified in the Flora and Fauna Assessment are not listed in order of preference and the table has been misinterpreted: an item marked “red” does not necessarily equal one item marked “green”, or vice versa and value judgements need to be applied. By way of example, public ownership may be valued as a significantly more important “principle” than the issue of “aesthetics” or “development potential”. Notwithstanding, whilst public ownership is DLL’s preferred option, there are other ownership options for the riparian corridors and other “undevelopable” land. Refer to the PPR Section 4.2 and Appendix I
SCC 127	Council state it is concerned with the inconsistency between the relevant sections of the EAR and the Stage 1 PA. For example, Stream Segment 24 – there are differences between the Strahler drainage line location compared with the “ground truth” water course. Figures 4 and 5 of the Stage 1 PA show it in one location and in Figure 6 it is shown in another location. In Figure 15 it is no longer shown as it has been covered by a residential area even though it is not one of the stream segments identified as being removed in the report.	The difference between a presupposed corridor (ie RCMS / Strahler), an existing corridor (ie ground truthed) and a proposed corridor (ie retained / relocated / Strahler) for Stream Segment 24 appears to have been misunderstood and misinterpreted. Stream Segment 24 (a First Order Stream under the Strahler system) is identified for relocation into a WSUD swale within a significant road reserve as a result of development. Refer Stage 1 PA
	14 .2 Biodiversity	
SCC 128	Council considers that the proponent has inadequately assessed the full impact of the development proposal on the flora and fauna of the area.	This statement is not agreed. The EAR documentation and the Flora Fauna Assessment provide a comprehensive assessment of the full impact of the development. Refer EA Sections 3.10, 3.11, 4.17, 7.5, 7.7, and Appendices P and Q. Also, the statement is inconsistent with Council’s statement at Item SCC 001 above. Further, DLL notes that this comprehensive assessment was submitted to the Australian Government for determination under the EPBC Act. On 30 th March 2010 the Commonwealth decided that the proposed action (the Project) is not a controlled action under the Act and it does not require further assessment before it can proceed.
SCC 129	The Southern Bass Fishing Club has indicated there is a major population of platypus in Macquarie Rivulet and that Wollongong University has conducted extensive research on this issue. They also indicated that the threatened Australian Grayling occurs in Macquarie Rivulet.	The integrated approach to water cycle management will improve the waterways of Macquarie Rivulet. Refer EA Appendix N – Water Cycle Management Study .

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	These species have not been considered in the Flora and Fauna assessment. A thorough investigation must be carried out to determine the extent of presence, environmental significance and potential impacts on these species	<p>It is noted that major structures over the Macquarie Rivulet would need to be constructed according to required standards and have reference to the relevant guidelines. Refer also to Item DII 027 above and to revised Statement of Commitments # 39 and 40</p> <p>The Flora and Fauna Assessment provides a thorough assessment of the impact of the Calderwood project site. Refer Item SCC 128 above and EA Appendix Q. On 30th March 2010 the Commonwealth decided that the proposed action (the Project) is not a controlled action under the Act and it does not require further assessment before it can proceed.</p>
SCC 130	The Flora and Fauna report states that an area of scattered remnant Coastal Grassy Red Gum Forest requires further survey prior to any works commencing on site. However, the draft Statement of Commitments does not include that undertaking.	This is already covered in an existing Statement of Commitment. Refer Statement of Commitments # 37.
	15 Waste Management	
SCC 131	Council is concerned that the waste that will be generated from the development will place additional pressure on Council's waste facility at Dunmore. Landfill space at this facility is rapidly diminishing and the additional waste created by more people living and working in Calderwood will only serve to increase the rate at which it is filled.	<p>Not relevant.</p> <p>Notwithstanding, DLL supports active waste management and waste minimisation and proposes a Statement of Commitment to actively target this issue during construction. Refer revised Statement of Commitments # 22.</p>
SCC 132	This is of particular importance given that the proposed development is not needed in order for Council to achieve its dwelling targets under the IRS.	Not agreed. Refer response to Item SCC 004 above.
SCC 133	In addition, the proponent does not intend to contribute towards upgrading or increasing the capacity of this facility.	DLL does not intend to contribute towards Council's waste management facility. This claim by Council is clearly outside the parameters of s.94 of the EP&A Act.
	16 Agricultural Impacts	
SCC 134	<p>Council notes the proponent has undertaken an Agricultural Land Study as part of the EAR. Council states that:</p> <ul style="list-style-type: none"> large parts of the site are identified as Class 2 Agricultural lands, defined by NSW Department of Agriculture as "arable land having very good capability for agriculture. Minor to moderate constraints to sustained high levels of production are present"; the land is also identified in the IREP No.1 as having Prime Crop and Pasture Potential; and the IRS (p36) identifies parts of Shellharbour as being strategically important for long term food production that is close to markets. 	<p>These statements are not agreed. As demonstrated in the EA – Section 2 and Appendix F – Illawarra Regional Strategy Sustainability Criteria, and confirmed by the Department of Planning on 7th June 2010, Calderwood is consistent with the Regional Strategy. The Strategy states with regards to agricultural land as follows::</p> <ul style="list-style-type: none"> "the Regional Strategy will promote the economic, food production and community values of existing agricultural lands and protect them from inappropriate urban expansion (other than that identified under this Strategy or in accordance with the Sustainability Criteria) [our emphasis]..." (p36); and "New residential (other than those identified in Chapter 6 Housing and Settlement) [our emphasis] or rural residential zones will only be supported where they meet the Sustainability Criteria (Appendix 1)..." (p37). <p>The Calderwood project is identified for development in the IRS and in Chapter 6 in accordance with the above.</p>
SCC 135	<p>Council states that the ALS:</p> <ul style="list-style-type: none"> makes reference to the land being identified for future urban use in the MDP. The ALS has been prepared on the basis that the land is to be used for urban purposes and that the Calderwood project is required to meet regional dwelling shortfalls (p2): has downplayed the importance of the development site in relation to its primary production value as well as the financial viability of existing landholdings and production practices due to the presumption that the land has been identified for future urban use: has stated that the Calderwood site does not include any regionally significant areas of food production. The Study however does not clearly explain or source this claim; and 	<p>These statements are not agreed. Refer EA Sections 2.5, 3.6, and Appendices F and K.</p> <p>Refer also response to Item SCC 134 above.</p>

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	<ul style="list-style-type: none"> has not made an assessment of the site in terms of its regional significance for food production, especially given its close proximity to Sydney. Proximity to markets, climate change and issues such as “food miles” and “food security” are now increasingly important planning considerations for how land with a Class 2 Agricultural classification is used now and in the future. 	
SCC 136	Council states that the Concept Plan application does not appear to consider suitable design to mitigate the impacts on adjoining agricultural uses.	Refer response to Item SCC 095 above.
SCC 137	Due to the importance of the agricultural capability of these lands, a thorough assessment of the lands within the subject area must be undertaken to determine the areas primary production value as well as the financial viability of existing holdings and production practices.	Refer response to Item SCC 135 above.
SCC 138	It is also recommended the Department of Industry and Investment provide comment on the application	Noted.
	17 Cultural Heritage (Aboriginal and European)	
SCC 139	Council states the proponent has carried out assessments of both Aboriginal and European Cultural Heritage. Council states that both assessments lack important detail and it is considered by Council that further investigations need to be undertaken. This is particularly the case with Aboriginal educational significance as outlined in 17.1.2 below	Refer response to Item SCC 001 above.
	17.1 Aboriginal Culture and Heritage	
SCC 140	Council acknowledges that Calderwood is a Major Development and as such the statutory requirements under s.87 and s.90 of the NPW Act are not required. However s.91 of the Act still applies and is triggered upon the discovery of any Aboriginal objects or places. It is worth noting that s.91 requires any individual with knowledge of an Aboriginal artefact to notify the DG of DECC.	Noted
SCC 141	It is evident from the ACH assessment contained in the Concept Plan application that the proposed development site contains a number of archaeological sites. The Field Assessment identified specific surface archaeological sites, however several additional areas have been identified where surface artefacts are not visible but could be buried in soils (Potential Archaeological Deposits - PADs). These areas require further assessment and careful management as the proposed development site has been identified as having cultural significance to the local Aboriginal people.	Noted. All identified PADS areas are already covered by a specific Statement of Commitments. Refer EA Section 8.
	17.1.1 Conservation Protocols	
SCC 142	Council state several recommendations for conservation protocols are contained in the ACH Assessment. Council notes these are not considered in the Stage 1 application and that it and subsequent applications must as a minimum adhere to these recommendations. There seems to be a section omitted from the Stage 1 application relating to the conservation protocols.	Noted. This issue is addressed in the Stage 1 PPR, lodged under separate cover.
SCC 143	The Statement of Commitments for the Stage 1 application states the intention to obtain a s.90 permit for the removal of two known artefacts and the salvage through and relocation of other known or likely sites. There is no supporting material to support this approach in the Stage 1 application documents	Refer response to Item SCC 142 above
	17.1.2 Educational Significance	
SCC 144	Council and the Aboriginal Advisory Committee make the following comments on the Education Potential section of the assessment	Noted.
SCC 145	The assessment states the “educational value of a site to the general public is the most important. The education potential must be linked to something that can add to the public’s knowledge of the Aboriginal past of a particular area”	Noted.

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SCC 146	Based on the above, it is considered by the assessment <i>“that the archaeological potential is neither tangible nor accessible to a public audience and would be unlikely to excite considerable interest”</i> . Therefore the educational value is considered to be low to moderate.	Noted.
SCC 147	It is understood scientific assessment and methodologies and the interpretation of the methodologies applied may not take into account the importance of Aboriginal cultural heritage and spiritual link with historical and traditional association of the land for Aboriginal people. This narrow concept of what constitutes Education dissociates Aboriginal people from their heritage.	The EAR documentation and supporting studies were prepared in consultation with the DoP and relevant Agencies. With specific regard to Aboriginal heritage, the proposed study methodology was discussed and agreed at a meeting with DECCW / DoP. Refer EA Appendix V – Aboriginal Archaeological and Cultural Heritage Assessment and EA Appendix HH – Agency Consultation Summary . The resulting assessment is the result of that agreed process which in turn has been “broadly supported” by DECCW (refer Items DECCW 066 – 070 inclusive below). It is noted that Council intend taking up their broader concern with the DoP.
SCC 148	The WNDAC and ILALC have both explained the cultural significance of the proposed development site. The WNDAC has provided not only the anecdotal feedback but also evidence based research of the cultural significance of the proposed development site. This is supported by members of Council’s AAC.	Noted.
SCC 149	The major reason for not including direct evidence in writing is that Traditional Owners and Custodians see it as their duty, often having specific obligations, to protect particular places, objects and sacred sites, but not providing such material. This is further supported by the ILALC’s specific reference to certain sections of the Assessment not being made public.	Noted.
SCC 150	Therefore it is stressed that while the Educational significance of the proposed development site <i>“may not excite considerable interest to a public audience”</i> , this is certainly not the case for the local Aboriginal community.	Noted. Refer Item SCC 147 above .
SCC 151	This matter will be taken up by Council with the DoP in an appropriate forum.	Noted. Refer Item SCC 147 above .
	17.2 European Heritage	
SCC 152	Council state the proponent has identified one item of European heritage within the Shellharbour LGA portion of the site – Marshall Mount Methodist Cemetery on Calderwood Road.	Noted. The cemetery is the only registered item of European heritage significance on site.
SCC 153	Council states that the Concept Plan reports are inconsistent in that the heritage assessment acknowledges the significance of the cemetery and the need for careful urban design surrounding it. However, the cemetery is also mentioned in the LOSM wherein it is proposed to be a 3,000sqm local park, or incorporated into the private open space of adjoining property owners. It is worth noting that the existing holding containing the cemetery is 4,000sqm.	This statement is not agreed and not supported by the facts. The Landscape and Open Space Master Plan (p39) clearly identify the cemetery being retained within the Local Park(L6), not being replaced by a park as follows: <i>“...surrounding the existing Marshall Mount Methodist Cemetery which is to be conserved. The open space will provide a sympathetic cartilage to the cemetery...”</i> Refer EA Appendix CC .
SCC 154	The site is currently owned by the Uniting Church. A more detailed conservation management plan for the cemetery is required to determine appropriate ownership, care and usage.	The importance of the cemetery is acknowledged in the EAR documentation and Concept Plan. Refer EA Section 7.9 and Appendix U – European Heritage Assessment . Notwithstanding, DLL propose a Statement of Commitment to remove any ambiguity over the issue of the detailed design of development around the Marshall Mount Methodist cemetery. Refer to the PPR Section 2.9 and revised Statement of Commitments # 62-63
SCC 155	Council submits that there are a number of other heritage items proposed by Council in the broader Concept plan area. These are items that have been identified in the Draft Shellharbour Community Based Heritage Study (SCBHS) that was undertaken in 2005 and reviewed in 2009.	Refer response to Item SCC 152 above. It is understood that Shellharbour Council has a draft heritage study but that it is not publicly available. It is not possible to comment on the items specified as the draft report and its contents have not been sighted by Delfin Lend Lease or its Heritage consultant. Further these items were not made know to Delfin Lend Lease or its Heritage consultant during discussions with Council. Refer also response to Item DOP 21 above .

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SCC 156	Items identified in this study are proposed to be listed in Shellharbour's Comprehensive LEP which is scheduled to be gazetted by the end June 2011.	It is noted that Council's Comprehensive LEP has not yet been made public, even in draft form, despite the formal program for preparation and gazettal. Council has informed DLL that gazettal is unlikely to occur on schedule.
SCC 157	In the Stage 1 application the proponent states that there are no items of European Heritage affected by the development proposal. The Draft SCBHS 2005 (revised 2009) identifies three items of local heritage significance in the study area. The proponent should be required to prepare a heritage assessment of each of these items if development approval is granted by the Minister.	Refer to Item SCC 155 above .
	Retail Hierarchy (pp 4-5)	
SCC 158	Council states that the proposal provides for excessive amounts of retail floor space and will undermine the retail hierarchy for the remainder of the city and the wider region.	Not agreed. The Retail Assessment lodged with the EAR documentation clearly identifies that the Calderwood project will not undermine the retail hierarchy of the region. Refer EA Sections 2.4 and Appendix J – Assessment of Retail Floor Space Potential .
SCC 159	Council states that the proponent contends that c31,500 sqm of retail floor space will be required within the development site. This floor space estimate does not include non retail tenants such as offices, banks, doctors, post offices, real estate agents and the like.	Noted and agreed. The Assessment of Retail Floor Space Potential concludes that c31,500 sqm of retail floor space will be required within the Calderwood site as a whole and at the point of completion. This will be implemented over time (ie over c20 years time) on a staged basis, as the market demands.
SCC 160	Council states that to put this into context, the whole Shellharbour City Centre (excluding the bulky goods precinct) currently has c45,000 sqm of total developed retail floor space. Again this figure does not include non retail tenants	The statement is not agreed. The figures quoted by Council are not comparable. It should be noted that the figure of "c45,000 sqm" identified for Shellharbour City Centre: <ul style="list-style-type: none"> excludes a significant volume of floorspace occupied by bulky goods, whereas the figure for Calderwood (c31,500 sqm) includes a small element of bulky goods to service the local population; excludes the current proposal to expand the Shellharbour City Centre by a further c25,000+sqm of retail floorspace (making the centre c75,000sqm is area – excluding bulky goods); represents a floorspace figure as of 2010; and does not represent the likely extent of retail floorspace in 20+ years time (whereas the c31,500 sqm proposed for Calderwood does).
SCC 161	Council states that the proponent's floor space requirements are based on the presumption of a population increase of 22,000 people which takes in a larger urban development area than the land which is the subject of the major project applications. A more appropriate population increase would be 10,000 to 12,000 people.	Not agreed. The Assessment of Retail Floor Space Potential lodged with the EAR documentation takes into consideration the development potential of lands identified on the MDP. This is considered to be an appropriate level of strategic long term planning for a Concept Plan. It will result in a coordinated approach to the implementation of services and facilities in a small number of viable centres that service the local population and immediate surrounds. It is noted that the projected population is inconsistent with Council's statement at Item SCC 033 above .
SCC 162	Council states that it has undertaken an analysis (based upon the proponents 22,000 population estimate) which indicated that 23,000 sqm is an appropriate amount of retail floor space with an absolute maximum of 26,000 sqm. However, this would effectively halve to c 12,000 to 13,000 sqm for the requirements of the estimated population in the DLL project area. Councils assessment indicates the proposal: <ul style="list-style-type: none"> Ignores timing considerations and that the opening of a centre too early will result in oversupply and likely adverse impacts on the surrounding centres such as Tullimbar Town Centre and Albion Park; Exaggerates the variables such as incomes and per capita floor space in arriving at a retail scenario for Calderwood; 	The outcome of the assessment has not been provided to the Department of Planning for its assessment or to DLL for comment. This statement is not agreed for the following reasons: <ul style="list-style-type: none"> "Timing considerations" are best left to the market to determine, where all of the financial risk is placed. This is consistent with current and emerging Government policy on retail floorspace development. The variables are not "exaggerated", rather they identify a reasonable range of indices of the existing and proposed population in a defined catchment area. The indices are based upon significant professional experience and local knowledge;

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	<ul style="list-style-type: none"> Suggests the provision of a discount department store that it likely to have a trade influence beyond the Calderwood population; and Is contrary to Council's Commercial / Retail Strategy 	<ul style="list-style-type: none"> The specific opportunity identified by Council is minor in size and would service the local population, thereby reducing travel demand; and The strategy in question makes no reference to Calderwood; it appears to have therefore been concluded that the proposal is contrary to the strategy.
	"If approved..." requests by SCC (pp 1)	
SCC 163	Council state that the General Manager be delegated the authority to prepare a "without prejudice" submission to the DoP outlining matters and issues that Council would seek to have addressed if the Minister for Planning approves one or both of the Major Project applications. This submission is to contain draft conditions of approval and performance criteria that Council would expect to be met.	The PPR is the appropriate statutory process to respond to issues raised during public exhibition.
	CONCLUSION TO COUNCIL SUMISSION	
SCC 164	Council's submission to the Department concludes that Council "...considers the proposal by Delfin Lend Lease is economically, environmentally and socially unsustainable as proposed and not in the public interest, especially in relation to Council, the community of Shellharbour, and the region as a whole..."	<p>This conclusion is rejected by Delfin Lend Lease. Development of Master Planned Urban Communities is a core Lend Lease operation through Delfin Lend Lease. At present Delfin Lend Lease has 26 Projects trading in 10 major population centres across Australia. These include numerous award winning Projects on the full range of sustainability criteria.</p> <p>The EAR provides comprehensive responses to the Director General's Requirements and State Significant Site Study/Major Projects SEPP Requirements. Section 2 of the EAR specifically addressed Sustainability Criteria in the terms expressed by Council. The public interest and local and regional benefits are stated clearly and comprehensively. By way of example, Council acknowledges that Council has not undertaken an economic appraisal of the Project (refer Item SCC 009 above); Council's conclusion on this basis alone is flawed and incorrect.</p> <p>It is further noted that the conclusion is inconsistent with previous Council resolutions and other references to support the Calderwood Project, specifically Council resolutions in September 2006 and May 2007 and as further reported in August 2007 (in the context of consideration of the Albion Park Traffic Study) .</p>

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	WOLLONGONG COUNCIL (letter dated 9 June 2010)	
	Alignment with Regional Land Use Planning; Viability of WDRA; Impact on WDRA	
WCC 01	<p>Council states that:</p> <ul style="list-style-type: none"> in Council's view, the early release of the Calderwood Project would be inconsistent with both the Illawarra Regional Strategy as well as the New Illawarra Urban Development Programme; approval of Calderwood is considered unnecessary at this stage as other (named) release areas will provide sufficient residential lot production to meet the NSW Government's lot production benchmarks. 	<p>This statement is not agreed – refer EA Executive Summary B, Section 2, Appendices C, E and F. Also, this statement is not supported by recent Government advice. The Department of Planning wrote to Shellharbour Council on 7th June 2010 specifically addressing this concern.</p> <p>The Update Report – Consistency with the Illawarra Regional Strategy prepared by DLL and attached to the Preferred Project Report (PPR) at Appendix C provides a detailed response to these concerns. Refer also to PPR Section 2.1</p>
WCC 02	<p>Council states that:</p> <ul style="list-style-type: none"> it is concerned that the early release of the Calderwood residential release area will result in the fragmentation of infrastructure services, particularly since it appears the Calderwood development is reliant upon taking away reticulated water and sewerage supply services from other existing approved residential release areas, at least in the short to medium term; early release of the Calderwood Project will result in two development fronts and implies that this will impact Council's ability to effectively fund the progressive delivery of infrastructure within the WDRA. 	<p>This statement is not correct. Appendix Y to the EAR - Utility Services Study for Concept Plan Application (Cardno) explains the utility services delivery strategy. Appendix G to the EAR - Infrastructure, Services and Facilities Implementation and Delivery Proposal (DLL) details the methods for delivery of all requirements for the Project.</p> <p>Calderwood is not proposed as a substitute for West Dapto. The Environmental Assessment - Section 2.2 and Appendix E - Illawarra Housing and Land Supply articulate the need for all Release Areas to be in production to meet land supply targets.</p> <p>The Illawarra Regional Strategy (p 21) states that development is required on each of the five stages of West Dapto Release Area on multiple development fronts to achieve its required production levels. Council's stated concerns are inconsistent with the Regional Strategy.</p> <p>Refer also to PPR Section 2.1 and Appendix C</p>
WCC 03	<p>Council notes:</p> <ul style="list-style-type: none"> that it has received a \$26 million interest free loan from the NSW Government to fund roadworks associated with the WDRA and that the conditions of the loan requires all associated infrastructure works are completed within 18 months and the loan is repaid within 10 years; and the \$26m funding commitment is only a part of Council's overall \$756 million local infrastructure plan for the WDRA. 	<p>The relevance of the subsidy to Council by Government to the consideration of the Calderwood Project is questioned and the reasons for raising it as an issue are unclear.</p> <p>The Update Report – Consistency with the Illawarra Regional Strategy prepared by DLL and attached to the Preferred Project Report at Appendix C provides a detailed response to the challenges associated with Council's s94 Plan for the WDRA.</p>
WCC 04	Council states that if Calderwood is approved too early, it is concerned that this will also lead to the fragmentation and inefficient delivery of reticulated water and sewerage infrastructure.	<p>This statement is not correct. Appendix Y to the EAR - Utility Services Study for Concept Plan Application (Cardno) explains the utility services delivery strategy. Appendix G to the EAR - Infrastructure, Services and Facilities Implementation and Delivery Proposal (DLL) details the methods for delivery of all requirements for the Project.</p>
WCC 05	Council's view is that the Calderwood proposal not be supported at this time but be reconsidered in the future as part of the on-going monitoring of the Illawarra Urban development Programme by the Department (of Planning).	Refer to earlier response at Items WCC 01, 02 and 03 above .
	Adverse impact on the local and regional road network and deficiencies in the proposed Voluntary Planning Agreement (VPA)	DLL notes that the Department of Planning engaged independent technical advice on the matter of apportionment. A meeting with the DOP to discuss this issue and provide further clarification was held on July 2010.

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WCC 06	<p>Council states that its view is that the proposed residential development in Calderwood will cause significant traffic generation impacts upon the local road network within the Wollongong LGA, noting:</p> <ul style="list-style-type: none"> that the Project relies on direct access into the Southern part o the Wollongong LGA; and Areas of Wollongong represent key employment areas for residents of the Calderwood development. 	<p>This statement is not correct. Appendix T Concept Plan Transport Accessibility Study and Transport Management and Accessibility Plan (TMAP) to the EA defines the area of influence and other regional growth planning assumptions which were specifically agreed at a consultation meeting with the RTA and Department of Planning. In a letter from the RTA (dated 10 November 2009) the following comments were provided by the RTA in relation to the above:</p> <ul style="list-style-type: none"> <i>“The RTA does not object to the proponent proposed study area as provided to the RTA in the meeting held on 2 November 2009.”</i> This refers to the proposed area of influence <i>“The future development assumptions should be consistent with the figures in the attached land use input table which were provided to the RTA by the Department of Planning.”</i> This refers to a set of land use planning assumptions provided to DLL for comparison. A detailed discussion of these land use assumptions and consistency with this document is provided in Appendix T Concept Plan Transport Accessibility Study and Transport Management and Accessibility Plan (TMAP) to the EA, specifically Section 5.2.1. <p>Furthermore the area of influence and planning assumptions were also presented to Wollongong Council for comment. No formal comments in relation to these were provided.</p> <p>The project does not rely on direct access to the Southern part of the Wollongong LGA. The connection to Marshall Mount Road has been included as it provides a good alternate access and does not sever this community from the north. The majority of traffic to from Calderwood goes to the south via Calderwood Road or the North-South arterial.</p> <p>There are extensive self-containment opportunities in Calderwood, with local employment and other facilities. This also provides increased employment opportunities for the residents of Wollongong LGA. Refer to PPR Sections 2.2 and 2.6</p>
WCC 07	<p>Council states that it is concerned that the proposal largely depends on the provision of the F6 extension from Yallah to Oak Flats by 2021.</p>	<p>This statement is not correct. The F6 extension is a regional need irrespective of Calderwood. Modelling showed the need for the upgrade without Calderwood. It is reasonable to assume the F6 extension will be in place by 2031 and was discussed at all agency consultations and was a requirement to model the extension in the DGRS.</p> <p>As a major piece of state road infrastructure it would be funded through the SIC if the state government deems it is required. As such Calderwood will contribute to the cost through the SIC.</p> <p>These matters are comprehensively addressed in the EA - Appendix T Concept Plan Transport Accessibility Study and Transport Management and Accessibility Plan (TMAP). Refer also to PPR Section 2.6</p>
WCC 08	<p>Council states that the Transport Management and Accessibility Plan (TMAP) prepared by Cardno and dated February 2010 at Appendix T of the Environmental Assessment report provides only limited modelling and analysis.</p>	<p>This statement is not agreed and strenuously denied.</p> <p>The regional 2006 WOLSH TRACKS model was used as s base for the modelling. This model covers the whole of the Wollongong and Shellharbour LGAs. An area of influence was agreed with relevant agencies to consider the detailed impacts of the development and covered all the routes specified in the DGRs as follows: “Network modelling for impacts on Illawarra Highway, Princes Highway/Southern Freeway, Tongarra Road, Marshall Mount Road, Yallah Road and the future Southern Freeway corridor between Yallah and Oak Flats.”</p>

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		<p>Furthermore in a letter from the RTA (dated 10 November 2009) it was stated “The RTA does not object to the proponent proposed study area as provided to the RTA in the meeting held on 2 November 2009.” – this refers to the proposed area of influence.</p> <p>The modelling was very extensive and covered all the issues considered relevant based on DGRs and consultation with agencies. The model outputs were assessed using mid-block level of service assessment criteria and the intersections modelled in SIDRA. A vast range of model scenarios were tested. The detailed modelling is not in the TMAP but can be provided if required.</p> <p>Refer also to responses to Items WCC 06, 07 and 08 above and to PPR Section 2.6</p>
WCC 09	<p>Council states that the traffic modelling in the TMAP adopts a “first in best dressed” approach, whereby the Calderwood development is modelled at the same time as Stages 1 and 2 of the WDRA. The traffic modelling does not include the full development of West Dapto and specifically excludes Stages 3 and 4 of in the WDRA.</p>	<p>This statement is not correct. The area of influence and planning assumptions were specifically agreed at a consultation meeting with the RTA and Department of Planning. The WDRA Stage 1 and 2 were included in the model (full development by 2031) and Stage 3 & 4 was assumed to occur post 2031. This is consistent with advice provided by the RTA and DoP.</p> <p>In a letter from the RTA (dated 10 November 2009) it was stated that “The future development assumptions should be consistent with the figures in the attached land use input table which were provided to the RTA by the Department of Planning.” - this refers to a set of land use planning assumptions provided to DLL for comparison. A detailed discussion of these land use assumptions and consistency with this document is provided in EA Appendix T to the EA, specifically Section 5.2.1 and Appendices 1c, 1d and 5 to that Report. The DoP planning assumptions assumed no stage 3 WDRA in 2021 and noted that Stage 3 was not assumed until late in the timeframe (2021 to 2036) and even then only at a rate of 50 lots per annum.</p> <p>Refer also to responses to Items WCC 06, 07 and 08 above and to PPR Section 2.6</p>
WCC 10	<p>Council states that it is concerned about the impacts of the Project on Marshall Mount Road and Yallah Road, the timing of the works and the scope of contributions to the works.</p> <p>Council states that, in Council’s view the proponent should be responsible for the full upgrading of the local road network such as Marshall Mount Road and Yallah Road, if the Calderwood Project is advanced in front of Stages 3 and 4 of the WDRA.</p>	<p>This statement is not agreed. The link to Marshall Mount Road is not essential but provides a logical alternate route to the north not only for Calderwood residents. The increase in traffic is notable because it is such a low base but volumes will not require the road to be widened to a four lane road a two-lane undivided road with sealed shoulders will suffice.</p> <p>The West Dapto Master Plan identifies both Marshall Mount Road and Yallah Road as part of the primary movement structure. Such road connections are particularly required to form the principal road connections between the Yallah/Marshall Mount areas, planned to accommodate 900 dwellings at full development (which was modelled in the 2031 model), and the strategic road network. Marshall Mount and Yallah Roads are currently rural roads and upgrades would be necessary to bring them to a reasonable urban standard given the intensification in traffic movements associated with the planned urbanisation of the surrounding land uses.</p> <p>In addition, the modelling investigations also revealed that Marshall Mount Road did accommodate an amount of traffic inappropriate for its 6.0 metre wide unsealed and line-marked condition. Therefore upgrade of both Marshall Mount Road and Yallah Road to two-lane two-way (i.e. one lane in either direction) with minimum lane widths of 3.5 metres and appropriate width sealed shoulders was recommended.</p>

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		<p>Sub regional planning undertaken to date and structure planning has also identified the need to upgrade the inadequacies of the existing road infrastructure (narrow two way road widths providing no delineation, minimal road signage and shoulders) to provide access for the planned land use changes. It is considered that fundamentally for the development of the Yallah Marshall Mount Environmental Precinct an upgrade of these roads to provide adequately sized and delineated traffic lanes with appropriate edge treatments and road side hazard protective measures would need to be implemented.</p> <p>Traffic from the CUDP whilst not fundamentally requiring use of these roads (subject to the provision of additional road capacity through the F6 Freeway extension and Tripoli Way upgrades) could also potentially make use of the upgraded road network as a local access route between the CUDP and both Dapto and northbound connection to the F6 Freeway Extension.</p> <p>It is noted that traffic from the West Dapto Release Area will impact the Calderwood upgrades and contributions should be made from the WDRA accordingly.</p> <p>Refer also to the PPR Sections 2.6; 4.2 and Appendices J and K</p>
WCC 11	Council states that it has concerns that the traffic volumes and nature of traffic functionality along Marshall Mount Road will considerably limit the ability to create a "village" character in the Yallah-Marshall Mount future land release area.	<p>It is noted that no formal development proposal exists for this area. It has been assumed that there will be 900 dwellings in the Marshall Mount/Yallah development area. Refer Item WCC 06 above.</p> <p>As noted in Item WCC 10 above, access to Calderwood can be provided from the south only (subject to the provision of additional road capacity through the F6 Freeway extension and Tripoli Way upgrades). The traffic to from Calderwood as well as some small amount of through traffic will add to the viability of the village providing passing trade.</p>
WCC 12	Council states that it does not want to compromise its planned delivery of road infrastructure within the WDRA and recommends that the Calderwood project be deferred until at least stages 3 and 4 of the WDRA are released for development.	<p>This statement is not agreed – refer EA Executive Summary B, Section 2, Appendices C, E and F. Also, this statement is not supported by recent Government advice. The Department of Planning wrote to Shellharbour Council on 7th June 2010 specifically addressing this concern.</p> <p>The Update Report – Consistency with the Illawarra Regional Strategy prepared by DLL and attached to the Preferred Project Report at Appendix C provides a detailed response to these concerns. Refer response to Item WCC 01 above.</p>
WCC 13	Council states that the proposed Voluntary Planning Agreement fails to clearly identify what monetary contributions or works in kind arrangements are proposed for the upgrading of each of the roads and key intersections within the Wollongong LGA.	<p>Reference to the Outline Planning Agreement (EA Appendix DD Outline of Proposed Planning Agreements) shows this statement to be inaccurate.</p> <p>The fundamental purpose of an Outline Planning Agreement has been misunderstood - the requisite contributions cannot be determined in advance of the determination of the scope of the Project. However, consistent with the State Significant Site Study and Director General's Requirements, DLL submitted the Outline Planning Agreements in order to <i>"...demonstrate the means by which local and regional developer contributions are secured in respect of the site..."</i></p> <p>The approach proposed by DLL on the detailed Planning Agreement discussions reflect the approach that such discussions should not, in accordance with sound planning principles, prejudice the assessment process but proceed in parallel with it.</p>

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		This approach is consistent with the NSW Government Draft Development Contributions Guidelines 2009. Refer also to the PPR Section 4.2 and Appendices J and K
WCC 14	Council requests that should the Minister for Planning approve the concept plan now, appropriate negotiations take place between DLL, Council and the Department for a revised VPA which provides for the full upgrading of both Marshall Mount road and Yallah Road to a minimum two way four lane road carriageway standard.	As noted previously (and in the TMAP) the road will function satisfactorily as a two-lane two-way (i.e. one lane in either direction) with minimum lane widths of 3.5 metres and appropriate width sealed shoulders. Refer to the PPR Section 4.2
WCC 15	Council requests that future negotiations on the proposed VPA between DLL and Council require detailed evidence to be submitted on the proposed embellishment works for each active and passive park and cost estimates for maintaining the facilities within each park.	Agreed, noting that an important advantage of using a Voluntary Planning Agreement to secure contributions is that it can provide the scope and flexibility for this type of process combined with certainty of outcome and timing. Refer to the PPR Section 4.2
	Inconsistency with the retail hierarchy strategy in the Illawarra Regional Strategy 2006-2031 and Council's DCP 2009	
WCC 16	Council restates, at length, the main conclusions of the EA Appendix J - <i>Assessment of Retail Floor Space Potential</i> and summarises the objectives of Council's retail and business centre hierarchy strategy.	Council's comments are related to the Wollongong LGA and have limited application to Calderwood. Council's strategy concerns servicing urban development and land release within its own LGA. The Calderwood proposal responds to the DGRs which requires the demonstration of how community needs will be met. Refer EA, Sections 2.4 and Appendix J Assessment of Retail Floor Space Potential. Refer also to the PPR Section 2.8
WCC 17	Council states that the 48,000m2 town centre proposed in the DLL Calderwood project is inconsistent with Council's retail hierarchy strategy objectives, particularly objectives (a), (c), (d), (e), (f), (g) and (i) and will adversely affect Council's retail and business hierarchy strategy.	There is no evidence or analysis upon which this conclusion can be reached and the statement is not agreed. In particular, the comments: <ul style="list-style-type: none"> are not relevant as neither the proposed town or village centre are in the Wollongong LGA; are not relevant as Calderwood is not 'out of centre', rather it will provide two new centres serving the resident population; identify the Calderwood town centre as erroneously comprising 48,000 sqm (the retail assessment clearly identifies the centre will comprise c25,000 sqm upon completion) and then base all conclusions on this flawed figure; and do not reflect current and emerging Government policy on the role of retail in a competitive market. <p>It is noted that, given Council's position on the strategic need for Calderwood, it would be fair to conclude that council has not considered that Calderwood would be an influence on its retail and business centre hierarchy strategy. Further Calderwood town and village centres will reinforce their own character, role and function. Refer EA, Sections 2.4 and Appendix J Assessment of Retail Floor Space Potential. Refer also to the PPR Section 2.8</p>
WCC 18	Council states that if the Calderwood project is approved, the proposed 48,000m2 town centre is likely to adversely affect the role and performance of a number of existing retail and business centres within Wollongong City Council LGA, in particular, the Dapto Major Regional Centre (Sub-regional Centre) and Unanderra Major Town Centre given the proposed size of the Calderwood town centre as well as the range of goods and services proposed within the centre. Similarly, the Calderwood town centre is also likely to pose direct adverse impacts upon the role and performance of the Shellharbour Square Major Regional Centre and is likely to severely prejudice the long term viability of the Albion Park Major Town Centre given the amount and type of retail and business floors pace proposed within the Calderwood town centre.	This statement is not agreed. Council's conclusions are based upon an erroneous figure of a "48,000 sqm town centre" and should be regarded in this light. The Retail Assessment report identifies the Calderwood development will result in the following: <ul style="list-style-type: none"> A town centre comprising c25,000 sqm - upon completion in c20 years time; The project as a whole comprising c31,500 sqm - upon completion in c20 years time; and An additional c17,000 sqm of floorspace being generated and located outside of the project, in other centres. <p>The Retail Assessment report also concludes that existing centres (including Shellharbour) will benefit from additional trade as a result of the Calderwood proposal - refer EA Appendix J Assessment of Retail Floor Space potential</p>

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		<p>Council has produced no factual evidence of Calderwood posing a direct adverse impact on the role and performance of any existing centres.</p> <p>Refer also to the PPR Section 2.8</p>
WCC 19	<p>Council states that the proposed Calderwood town centre will also severely jeopardise the role and viability of the 15,000m2 Bong Bong Town Centre and the 7,500m2 Darkes Road village centre, which are planned for Stages 1 and 2 of West Dapto Release Area, as per WLEP (West Dapto) 2010. Council states that in this respect, Council's adopted retail and business centres strategy sets out the general characteristics for retail / business centres throughout the LGA and that in this regard, the Dapto Regional Centre is characterised as containing 40,000 - 80,000m2 and is intended to serve a population of up to 100,000 people.</p>	<p>This statement is not agreed. The Retail Assessment takes into account the potential development of WDRA - refer EA Appendix J Assessment of Retail Floor Space potential.</p> <p>Refer also to the PPR Section 2.8</p>
WCC 20	<p>Council states that a Regional Centre generally contains at least one (1) discount department store (DDS) and one (1) to two (2) full-line supermarkets together with higher order retailing and a range of non-retail services including cinemas, community facilities, commercial office space and professional / specialist services serving the sub-regional population.</p>	<p>Noted. The Regional Shopping Centres built and/or managed by Lend Lease are at the upper end of the figures suggested in Council's Strategy and comprise additional room for future expansion beyond. Regional Shopping Centres also comprise at least one Department Store.</p>
WCC 21	<p>Council states that under Council's adopted hierarchy strategy, a major town centre (eg Unanderra) has a total retail floorspace between 20,000m2 and 40,000m2 and serves a population of up to 50,000 people.</p>	<p>Noted.</p>
WCC 22	<p>Council states that based on Council's retail and business hierarchy strategy and the Department of Planning's Illawarra Regional Strategy, the proposed 48,000m2 Calderwood town centre would actually be classified as a major regional centre like the Dapto Major Regional Centre given its intended floor space and the range of retail and non-retail services proposed.</p> <p>However, the intended population of Calderwood is in the order of 22,000 residents at final completion, which is well below either the required population for a Major Regional Centre.</p>	<p>Not agreed. Refer responses to Items WCC 17 and 18 above.</p> <p>Refer also to the PPR Section 2.8</p>
WCC 23	<p>Council states that in Council's view, if Calderwood was approved in the future for medium to long term release (> 5 years time), the retail and business floorspace should be restricted to less than 20,000m2. This would ensure the centre remains consistent with the retail and business floorspace limitations for other similar existing and planned Town centres.</p> <p>Council states that the centre should also be restricted to only contain 1 -2 full-line supermarkets with only lower order retailing which directly serves the daily needs of the resident population of Calderwood. Higher order retailing such as any discount department store, mini-major store, clothing retailing etc should remain within the higher order regional centres like Dapto and Shellharbour Square and the major town centres such as Unanderra and Albion Park (emerging).</p>	<p>Not agreed. The Retail Assessment stands on its merit and Council's suggested alternate is an arbitrary ceiling without supporting evidence or analysis. It is also noted that restricting retail floorspace in the way suggested by WCC does not reflect current and emerging Government policy.</p> <p>A new town and village centre are proposed and these are important components of the TMAP Proposed Travel Demand Management Measures – refer EA Appendix T Section 9 and Appendix 3A.</p> <p>Refer also to the PPR Section 2.8</p>
WCC 24	<p>Council states that if the current Calderwood town centre proposal was permitted in its current form, it would potentially undermine these existing centres. This in turn would jeopardise the long term retail and business centre hierarchy strategy for the Illawarra Region, as set by the NSW State Government, through the Illawarra Planning Strategy 2006-2031.</p>	<p>Not agreed. Refer responses to Items WCC 16 to 23 inclusive above and to the PPR Section 4.2.</p> <p>Also, Council does not provide the evidence or analysis to support this conclusion. The Calderwood town and village centres would be additions to the centres identified in the IRS rather than jeopardise the strategy. In addition, restricting retail floorspace in the way suggested by WCC does not reflect current and emerging Government policy.</p>
WCC 25	<p>Council states that under Council's Standard Template Wollongong Local Environmental Plan 2009, major town centres and town centres are zoned B2 Local Centre.</p>	<p>Not agreed. The Calderwood project is consistent with the standard LEP template.</p>

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	Similarly, the planned Bong Bong Town Centre is zoned B2 Local Centre, under Wollongong Local Environmental Plan (West Dapto) 2010.	
WCC 26	Council states that the B4 Mixed Use zones in both Councils' Standard Template LEPs provide for a range of mixed land use opportunities, including shop top housing but play a support role to adjoining B3 Commercial Core zones.	Noted. Refer above.
WCC 27	Council states that when the Calderwood release area is necessary, it is considered that the main part of the Calderwood Town Centre should be reduced in size to limit the retail and business floorspace of the centre to only 20,000m2 and it be rezoned to B2 Local Centre and B4 Mixed Use. However, the future B4 Mixed Use zone component should only provide a support role, rather than a potential competing role to the adjoining B2 Local Centre zoned land within the centre or any other existing town centre.	Not agreed. Regarding size and volume of floorspace refer to responses to Items WCC 16 to 23 inclusive above Regarding zoning, the Calderwood project is consistent with the standard LEP template.
WCC 28	It is also noted that proposed size of the Calderwood Town Centre is based on the findings of the Duane Location "Assessment of Retail Floor Space Potential" report. However, this report lacks credibility since it appears to relate to a previous company study for the northern region of Canberra, in Australian Capital Territory (see section 3.5 on page 35).	This statement is rejected. This is clearly a single typing error in the Report.
WCC 29	Council states that in its opinion the report also fails to conclusively prove the full likely 'trade area' of the centre as well as to what the centre's true retail impact will be upon existing and planned business centres, within both Wollongong City and Shellharbour City LGAs.	Not agreed. Council provides no justification for this conclusion. The trade area and likely retail impact of development at Calderwood are outlined in detail in the Retail Assessment. Refer EA Appendix J - Assessment of Retail Floor Space potential.
	Impact upon the Illawarra Lowlands Grassy Woodland Endangered Ecological Community	
WCC 30	Council states that the report by Ecological at Appendix E in the Environmental Assessment indicates that the proposed Calderwood project "...will result in the loss of 30.17 ha of Illawarra Lowlands Grassy Woodland and that this represents 44% of the community found on the site, however only 1.2 ha is considered in good condition..." Council states that the Environmental Assessment report has failed to identify four (4) patches of the <i>Illawarra Lowlands Grassy Woodland EEC</i> within the eastern portion of the site, as previously mapped by the NSW National Parks and Wildlife Service in 2002.	This statement is rejected. All patches of remnant woodland are assessed, in detail, in the Flora and Fauna Assessment – refer EA Appendix Q . Refer also to the PPR Section 2.5
WCC 31	The Illawarra Lowlands Grassy Woodland EEC contains <i>Pterostylis gibbosa</i> (Illawarra Greenhood Orchid) which is an endangered flora species under both the NSW Threatened <i>Species Conservation (TSC) Act</i> 1995 and the Commonwealth <i>Environmental Protection and Biodiversity Conservation (EPBC) Act</i> 1999. <i>Pterostylis gibbosa</i> is listed as 2E (Endangered and inadequately conserved) on the Rare or Threatened Australian Plants (RoTAP) listing.	Noted The Illawarra Greenhood Orchid is specifically identified for further targeted assessment in the Statement of Commitments. Refer also to the PPR Section 2.5
WCC 32	<i>Pterostylis gibbosa</i> is a cryptic orchid species which can only be generally identified during the flowering period in late spring -summer.	Noted. Refer response to WCC Item 31 above.
WCC 33	The Final Determination for <i>Pterostylis gibbosa</i> (Illawarra Greenhood Orchid) indicates that clearing of native vegetation for residential development is a key threatening process and given the relatively small numbers of the Orchid, it is also at risk of extinction through environmental changes. It is noted that the NPWS have an Approved Recovery Plan for <i>Pterostylis gibbosa</i> (Illawarra Greenhood Orchid) dated September 2002.	Noted. Refer response to WCC Item 31 above.
WCC 34	The objectives of the Recovery Plan for <i>Pterostylis gibbosa</i> (Illawarra Greenhood Orchid) are: <ul style="list-style-type: none"> • 'To ensure all known <i>P. gibbosa</i> population occurring on public and private lands are protected and managed for conservation (Reservation / Conservation status of populations); • To minimise the risk of <i>P. gibbosa</i> populations from declining in the longer term through the development and implementation of appropriate threat and habitat management practices at all known sites (Threat and Abatement); 	All of the objectives are noted.

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	<ul style="list-style-type: none"> To establish the full extent of the distribution of <i>P. gibbosa</i> (Survey); To ensure the management of <i>P. gibbosa</i> habitat is adaptive to the outcomes of research and monitoring and is informed by essential aspects of the biology and ecology of the species (Research / Monitoring); and To raise awareness among the broader community about the conservation status of <i>P. gibbosa</i>. " 	
WCC 35	The TSC Act requires that public authorities (including the Director -General of the National Parks and Wildlife Service) to take appropriate action available to them in order to implement those measures included in approved recovery plan for which they are responsible. In addition, the TSC Act requires that a government agency must not undertake actions inconsistent with an approved recovery plan. Therefore, Transgrid, Sydney Water will be required to consider the impacts of any Part 5 matter.	Noted.
WCC 36	It is considered that <i>Pterostylis gibbosa</i> is most likely to exist within the small isolated patches of Illawarra Lowlands Grassy Woodland EEC within the eastern portion of the site.	Noted. Refer response to WCC Item 31 above.
WCC 37	Therefore, additional survey work is warranted for both the Illawarra Lowlands Grassy Woodland EEC and <i>Pterostylis gibbosa</i> (Illawarra Greenhood Orchid), in order to verify the full extent of the species distribution and to determine what proportion of land should be set aside within the site, for the long term protection and preservation of these species.	Refer Item WCC 31 above . Any specific mitigation measures will be determined following this additional assessment and can inform the implementation of the Concept Plan accordingly. Refer amended Statement of Commitments # 37
	Protection of a green belt buffer separation between West Dapto Release Area and Calderwood Valley and the protection of the high scenic quality of the Calderwood Valley	
WCC 38	Council states that the DLL Calderwood Concept plan proposes residential development on the upslope areas and main ridgeline area, near Marshall Mount Road (ie within Wollongong City LGA). Council considers that the main ridgeline and upslope areas within the Wollongong LGA of the site should be specifically retained as a green belt, in order to visually separate the West Dapto Release Area from Calderwood Valley. This would ensure that WDRA and Calderwood Valley are visually distinct rather than seen as one continuous urban sprawl between the two areas.	<p>The Calderwood project results in a balanced outcome between development and sustainable land management. The disaggregation of various land uses within the Calderwood project is considered appropriate given the attributes and context of the site - refer Environmental Assessment, Concept Plan and Appendix A Concept Plan Drawings.</p> <p>It is noted that the Calderwood project is partially located in the Wollongong LGA adjacent to the proposed WDRA Stage 5 but following a separate determination pathway. Planning for WDRA Stage 5 may present WCC with an opportunity to investigate options for a "green belt" in that Precinct should Council (and the relevant landowners) consider this to be both necessary and desirable.</p> <p>Notwithstanding, DLL has reassessed the development potential of the fringes of the Calderwood project and revised the DCS accordingly. Refer to the PPR and amended DCS at Appendix G</p>
WCC 39	The retention of a green belt on the main ridgeline and up slopes of the site will also ensure that the Marshall Mount village retains its village character and atmosphere.	<p>Marshall Mount village is located outside of the Calderwood project area. It is noted that no formal development proposal exists for this area. However when a development proposal is prepared it may present WCC with an opportunity to investigate options for a "green belt" around Marshall Mount village should Council (and the relevant landowners) consider this to be a necessary and desirable outcome.</p> <p>Alternatively, Marshall Mount Creek could provide a suitable green belt between the Calderwood Valley and the West Dapto Release area:</p> <ul style="list-style-type: none"> the Calderwood project already proposes a significant band of green belt land adjoining the creek comprising open grassland and riparian habitat; the creek is already the boundary between Wollongong and Shellharbour LGAs; and the creek is also the boundary between the WDRA MDP boundary and the Calderwood Valley MDP boundary.

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		Notwithstanding, DLL has reassessed the development potential of the fringes of the Calderwood project and revised the DCS accordingly. Refer to the PPR and amended DCS at Appendix G
WCC 40	Council provides a summary of past studies on the Illawarra Escarpment including the Commission of Inquiry, WCC Illawarra Escarpment Strategic Management Plan, and the 'Illawarra Escarpment Land Use Review Strategy. Council uses these reports to conclude, in isolation of other more recent policy that Calderwood has "...a limited visual absorptive capacity..."	This statement is not agreed. Calderwood is identified for urban development in the Illawarra Regional Strategy and the Illawarra Urban Development Programme each of which post dates the documentation referred to by Council. The Project meets the Illawarra Regional Strategy Sustainability criteria – refer EA Section 2 and Appendix F .
WCC 41	The DLL project also proposes a 132kV overhead feeder electricity transmission line to be run from the Dapto bulky supply zone sub-station along Yallah Road and then southwards along Marshall Mount Road to the site. The proposed electricity transmission line will result in an unacceptable adverse visual impact upon Marshall Mount village.	With regard to the proposed 132kV lead-in conductors it is noted that: <ul style="list-style-type: none"> the proposed route uses the public road reserves of Yallah Road and Marshall Mt Road (rather than private landholdings) leading to TransGrid's Dapto Bulk Supply Point, north of Yallah Road; The final location of the line is subject to detailed investigation and design by Integral Energy; Yallah Road and Marshall Mt Road both have existing timber poles and overhead conductors for distribution to existing properties; The proposed line may be located above ground or underground at the discretion of Integral Energy; and The status of the "planned" Marshall Vale township is unknown. No development proposal, rezoning application or master plan has been made available to the general public upon which to make any considered opinion. Notwithstanding, the proposed 132kV line will provide the Marshall Vale area with infrastructure that is likely to be required for its future development, also linking into the Dapto Bulk Supply Point, north of Yallah Road.
WCC 42	Marshall Mount village contains a number of heritage listed buildings and is situated on a visually prominent ridgeline. The erection of high voltage electricity transmission lines through the Marshall Mount village is considered totally inappropriate and will significantly affect the streetscape amenity and character of the village.	Refer to Item WCC 41 above .
WCC 43	This may also prejudice Council's long term planning for the village. In this regard, Council is currently working with landowners in the Marshall Mount area as part of its long term planning for stages 3 & 4 in WDRA. This includes the protection of historic Marshall Mount village buildings and possibly creating the village as a hub for arts and crafts, similar to the South Coast villages of Mogo and Central Tilba. Any high voltage electricity lines within the village will also adversely affect the high scenic environmental quality of the locality.	Refer to Item WCC 41 above .
WCC 44	Council also understands that the majority of landowners within Marshall Mount -Marshall Vale locality, strongly object to the proposed electricity transmission line being run through their properties to prematurely service the DLL Calderwood project.	Refer to Item WCC 41 above .
WCC 45	Therefore, if the Calderwood Concept Plan is approved in advance of the planned delivery of electricity infrastructure, Integral Energy will be forced to pursue compulsory land acquisition procedures, through the Land Acquisition (Just Terms Compensation) Act 1991, in order to obtain necessary easements for the proposed transmission line.	Not agreed. There is no justification for this conclusion. Refer to Item WCC 41 above .
WCC 46	It is Council's view that this outcome is unacceptable and alternatives for the provision of electricity infrastructure should be investigated should the DLL Calderwood proposal be approved.	Refer to Item WCC 41 above .
WCC 47	Council states that it would be happy to participate in a joint meeting between the Department, Shellharbour City Council and relevant infrastructure service providers to discuss relevant issues in greater detail.	DLL looks forward to the opportunity to explain its infrastructure strategy to Council. Necessary consultation with other Authorities has occurred, and continues to occur, as required.

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	DECCW (letter dated 11 June 2010)	
DECCW 01	Floodplain Management – Concept Plan	Overview Comment: DLL notes that the Department of Planning has obtained independent advice to assist with the assessment of the Water Cycle Management (Flooding, Drainage, Stormwater Management) aspects of the proposal. DLL has co-operated to the maximum possible extent with the independent assessor.
DECCW 02	<p>DECCW states that it is unclear why a flood frequency analysis has not been undertaken.</p> <p>DECCW states that there is no comparison of flood flow and level information to that published in the Albion Park Flood Study – Water Resources Commission (WRC) 1986.</p>	<p>This statement is incorrect. Refer EAR Section 3.1.12 and Appendices N and R respectively.</p> <p>DECCW is well aware that, consistent with recent Regional Project proposals, a Flood Frequency Analysis incorporating WRC 1986 has not been undertaken because of the substantial errors and lack of reliability of the WRC 86 study as determined by WRF 1996</p> <p>The reasons for not pursuing a flood frequency analysis and not comparing our results with the WRC 86 report findings are interlinked. After the 1984 floods a committee was formed drawing its members from the various regional Councils and agencies as well as some consultants, to review and consider the lessons learnt in February 1984 and to build a reference catchment for future guidance of hydrologic modellers. Macquarie Rivulet was chosen for that purpose.</p> <p>In reviewing available data and the results of several different models constructed by committee members it became readily apparent that the rating curve for the Sunnybank gauge on Macquarie Rivulet was substantially in error at high flow. Further investigation revealed that the station had only been gauged to a small fraction of a 1% flow and the rating curve extrapolated based on a very simplistic assumed bed slope and roughness normal depth basis. The committee subsequently arranged for the valley upstream and downstream of the gauge to be surveyed and a HEC2 model was then constructed and used to re-create a rating curve for this station. This work and the revised rating curve are detailed in the report subsequently published by the committee (refer WRF 1996).</p> <p>In summary this work demonstrated that the <u>earlier rating curve was substantially overestimating flows at high discharge. As a consequence, any flood frequency analysis based on the gauges stage records and rating curve (as in the WRC 86 Flood Study Report) could not and should not be relied upon.</u> Given these facts we did not therefore pursue a flood frequency analysis or attempt to compare our findings with those of the WRC 86 Study. Notwithstanding, excellent independent correlation of flow with the Sunnybank gauge records for June 1991 was obtained using the revised rating curve and this same flow produced excellent correlation with recorded flood levels at both the gauge and at many points around the catchment. We seldom see such well correlated model results and have therefore a very high level of confidence in the results obtained from our models.</p> <p>It should also be noted that current DECCW officers were part of the flood committee and are therefore well aware of this issue.</p>
DECCW 03	DECCW states that it is unclear why the study has used a catchment lag parameter of 1.3 rather than 1.0 which provided a better replication of the recorded 1984 flood levels in the nearby Mullet Creek catchment, noting that a higher catchment lag parameter factor has the potential to underestimate design flood flows.	The methodology for the use of the catchment lag parameter is documented. Refer EAR Section 3.1.12 and Appendices N and R respectively.

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		<p>The methodology for the use of the catchment lag parameter is documented Refer EA Appendix R (Rienco Section 4.2.7)</p> <p>The value of C=1 adopted in the Mullet creek study does not fit the data obtained from a wide range of gauged national stations. Mullet Creek does not have any rated flow data and as such calibration involves joint calibration of the hydrologic lag and hydraulic roughness parameters. It is possible to obtain a good fit to recorded data within a quite wide range of lag and roughness as a high flow/low roughness model will produce similar fit as a low flow/high roughness model. Such joint calibration of parameters should not be compared with the correlation and confidence obtained when model flows are independently calibrated to recorded flows as in the national datasets forming the basis of our recommendations for the Lag parameter.</p> <p>A value of C=1 is not an appropriate or sensible value for this parameter because it does not fit the data obtained from a wide range of gauged national stations.</p>
DECCW 04	DECCW states that the flood mapping does not appear to extend to Lake Illawarra (ie downstream boundary condition)	The comment is irrelevant as the assessment demonstrates that flood impact mitigation can be managed within the boundaries of the site, and that the proposal will not contribute to any cumulative impact in terms of flood extent or levels within the catchment. The maps have thus been 'trimmed' to the extent of flood related impacts only. Nevertheless, the entire catchment has been modelled - Refer EA Appendix R (Rienco)
DECCW 05	DECCW states that floodways have not been identified in maps in the report.	<p>This statement is not agreed and is inconsistent with the requirements of the FPDM, <u>as there is no procedure for determining floodways</u>, given that quantification of floodways remains an extremely subjective process taking any form of reproducibility (refer Rigby & Roso 2008, Rigby 2007). As a planning control their use is therefore of little value and was not pursued in the reports, nor was it a DGR. Until the FPDM provides more deliberate guidelines for floodway quantification, floodways cannot be identified against a sensible baseline.</p> <p>The hydraulic hazard mapping does provide guidance on areas of high flow velocity and/or depth and is reproducible. This procedure is well documented and advocated by the FPDM.</p>
DECCW 06	DECCW states that it considers that the above issues would assist the DoP in satisfying itself over the adequacy of the flood study and suitability of the model for development impact assessment.	This comment is not agreed. All information required to satisfy the DGRs has been provided. Refer also response at DECCW 01 above.
DECCW 07	DECCW notes that A "Floodplain Risk Management Study" has been prepared but states that it is unclear why the Environmental Assessment is not supported by a "Floodplain Risk Management Assessment" as required in the DGRs.	The methodology and approach to addressing the DGRs was documented and agreed at a meeting with DoP and DECCW on 20 th October 2009 refer EA Appendix HH . Refer also response at DECCW 01 above.
DECCW 08	DECCW questions the technical veracity of the CFR Report and considers that clarity on a number of aspects of the both the development proposal and the CFR Report require further clarity, including:	<p>The premise that the CFR and Rienco Reports lack technical veracity is strenuously rejected.</p> <p>The Floodplain Mitigation Strategy for the project is a holistic merit based assessment of floodplain mitigation options in accordance with the Flood Plain Development Manual 2005. The methodology and approach to addressing the DGRs was documented and agreed at a meeting with DoP and DECCW on 20th October 2009 EA Appendix HH. Refer also response at DECCW 01 above.</p>
DECCW 09	<ul style="list-style-type: none"> The process by which Flood Planning Levels have been estimated including an appropriate freeboard. 	This process has been explained and an entire section of Appendix R to the EA - Floodplain Risk Management Study (Section 5.5) has been dedicated to describing the process of the determination of the FPL. In fact, Section 5.5 is titled 'Determination of the Flood Planning Level'. In accordance with the Floodplain Development Manual and s.117 Direction 4.3 the 1% AEP flood level (incorporating climate change) plus 500 mm freeboard has been adopted as the Flood Planning Level for the project.

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		It is noted this is consistent with DECCW's own proposal for the West Dapto development and other land release areas in the Illawarra.
DECCW 10	<ul style="list-style-type: none"> The process by which the potential impacts of climate change on flood planning levels have been addressed. 	<p>This process is explained clearly via two entire sections of the Appendix R to the EA - Floodplain Risk Management Study, Section 5.4 'Climate Change' and Section 5.5 'Determination of the Flood Planning Level'. A medium climate sensitivity has been assumed, i.e. a sensitivity corresponding to a global warming of 2.6 degrees for a doubling of CO2 from 280 ppm to 560 ppm (CSIRO, 2007). This scenario assumes a:</p> <ul style="list-style-type: none"> 7.5% decrease in annual rainfall by 2070; 20% increase in rainfall intensity; 9% increase in annual evap-transpiration; and Fall in the average number of wet days per year from 73.7 to 33. <p>All stormwater and flood impact modelling for both analysis of existing conditions and assessment of the impacts has taken into account this climate change scenario.</p>
DECCW 11	<ul style="list-style-type: none"> Pre and post development impacts. It is noted that mapping does not extend downstream of the site where there is significant flood prone development likely to be adversely affected by reductions of flood storage areas due to landfill and increased runoff due to urbanisation. 	This statement is incorrect. The mapping covers the full extent of impacts. Refer EA Appendix R (Rienco).
DECCW 12	<ul style="list-style-type: none"> Strategies to manage the impact of the proposed filling of the Southern Macquarie Rivulet floodway as it is likely to increase flooding on the Illawarra Highway, Cooback Creek and Tullimbar. 	This statement is not supportable. The Stage 1 Project Application Report (Sections 3.4.1 and 3.4.2) clearly describes the design framework and parameters to ensure that flooding was not made worse across the Illawarra Highway or at Tullimbar.
DECCW 13	<ul style="list-style-type: none"> The proposed volumes, depths and levels of floodplain filling (and excavation) and the inclusion of pre and post cross sections, fill and excavation volumes would be useful in CFR (2010). 	The information supplied is commensurate with the level of detail required in a Concept Plan.
DECCW 14	<ul style="list-style-type: none"> The identification of staging requirements of landfill and excavation so as to avoid potential adverse impacts on flooding during construction. 	<p>It is agreed that any staging of earthworks within the approved earthworks strategy will require careful management and to demonstrate no unacceptable interim flooding impacts external to the site boundary.</p> <p>Soil and water management during construction is addressed in the EA Appendix N Water Cycle Management.</p>
DECCW 15	<ul style="list-style-type: none"> Whether the proposed excavation includes wholesale clearing and/or modifications to the creek channel and riparian land. 	The Flood Mitigation Plan has been developed based on modelling that assumes potential revegetation may occur within the existing riparian corridors within nominated locations as shown on Figure 53 of the EAR. Selective planting of carefully selected vegetation species may occur within the locations identified on Figure 53 of the EAR subject to demonstration that no adverse impact on flood levels results.
DECCW 16	<ul style="list-style-type: none"> The impacts of filling and/or excavation on flood flows, velocities and sheer stresses are likely to be significant in areas where floodways are blocked and major flows are constricted and diverted to new conveyance areas. 	This statement has no relevance to the Calderwood Project given the modelling and integrated development outcomes proposed for the Calderwood project.
DECCW 17	<ul style="list-style-type: none"> The changes to parameters in the flood model for pre and post development, particularly hydraulic roughness. It is therefore unclear as to whether the filling will require a hydraulically clear (ie smooth) creek channel and floodway to off-set the hydraulic impacts of the proposed filling on flood behaviour. 	Changes to the model's hydraulic roughness are clearly tabulated and described in the Appendix R to the EA - Floodplain Risk Management Study (Section 5.5) .
DECCW 18	<ul style="list-style-type: none"> The environmental impacts associated with floodplain excavation including geomorphic stability, ecological, water quality, Aboriginal heritage, ground water and acid sulphate soils. 	A detailed and comprehensive environmental assessment has been undertaken for the project in accordance with the DGRs and State Significant Site Study requirements.
DECCW 19	<ul style="list-style-type: none"> The cumulative impact of filling on flood behaviour in local floodplains and Lake Illawarra. DECCW notes that the Albion Park Business Park (immediately downstream) also involves considerable floodplain filling with associated impacts. 	Cumulative impacts have been assessed in the EA, specifically Appendix R - Section 5.2 of the Floodplain Risk Management Study . The Albion Park Business Park is not directly downstream; it is located on a separate tributary of Macquarie Rivulet (Fraser's Creek).

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DECCW 20	<ul style="list-style-type: none"> The final fill levels and estimated number of dwellings on filled areas is not clear. 	The proposed levels are shown on the engineering drawings accompanying the application (Refer EA Appendix R) , however final levels will be determined at the detailed design stage as part of the Construction Certificate Application. Site preparation works for all types of dwellings include cut and fill, therefore most dwellings in any subdivision will have a component of fill across the allotment.
DECCW 21	<ul style="list-style-type: none"> The potential risks to human life associated with future development on filled land has not been assessed including flooding in events greater than the design event, evacuation and flood access. Careful consideration needs to be given by the approval authority to the full range of flood events up to the Probable Maximum Flood (PMF), when assessing the risk associated with human occupation of the floodplain, particularly residential development on filled floodplains when design levels will be exceeded. 	<p>The Floodplain Mitigation Strategy for the project is centred around a holistic merit based assessment of floodplain mitigation options in accordance with the Flood Plain Development Manual 2005.</p> <p>All new bridge decks will be located above the 1% AEP flood level and will allow uninterrupted road traffic throughout the development (and beyond) during events up to an including the 1% AEP flood.</p> <p>The flood modelling extends to the maximum possible flood, the PMF event Refer EA Appendix R (Rienco) Refer also response at DECCW 01 above.</p>
DECCW 22	<ul style="list-style-type: none"> Strategies to manage increased runoff on downstream flooding and the location of flood detention storages if required. 	The information supplied is commensurate with the level of detail required in a Concept Plan.
DECCW 23	DECCW states that given the above, the current report/s leaves doubt over flooding issues affecting this development proposal. DECCW further states that it appears that there are significant potential risk associated with this development proposal, particularly as it relates to the adequacy of the flood study to define flood behaviour, assess impacts and potential risks to life.	This statement is not agreed and is strenuously rejected. It has no basis in fact and is not supported by critical or detailed analysis. Refer also response at DECCW 01 above.
DECCW 24	DECCW states that it would be prudent for the approval authority to be appropriately satisfied over the veracity of the information addressing issues relating to flood risk and that in this regard, The DoP may wish to seek an independent peer review of the adequacy of the flood study, estimated design flood events, assessment of impacts and risks associated with this development proposal in its current form.	<p>DECCW was consulted on the methodology and approach to the conduct of the flood study at a meeting with the Department of Planning on 20th October 2009 - EA Appendix HH. The Agenda and Record of Meeting which were agreed by DECCW are included in the relevant EAR Appendices. The studies meet all the requirements DECCW advised at the meeting, as well as their publications on flood related developments (i.e. FPDm).</p> <p>Notwithstanding, DLL has reassessed the development potential of the fringes of the Calderwood project and revised the DCS accordingly. Refer to the PPR and amended DCS at Appendix G</p> <p>Notwithstanding, DLL has reassessed the development potential of the fringes of the Calderwood project and revised the DCS accordingly. Refer to the PPR and amended DCS at Appendix G Refer also response at DECCW 01 above.</p>
DECCW 25	DECCW states that the comments from both Councils on flooding and consistency with local flood information and planning controls should also be sought and considered.	Councils have been consulted and made formal submissions on the Project. Shellharbour Council comments regarding Flooding have been addressed in this Report. Wollongong Council's submission on the Project is silent on the matter. Refer also response at DECCW 01 above.
DECCW 26	DECCW states that it is anticipated that flood risk management would be less of an issue, should the development proposal avoid filling of floodways and high hazard floodplain areas.	<p>This statement is inconsistent with the Floodplain Development Manual, which promotes <i>'the use of a merit approach which balances social, economic, environmental and flood risk parameters to determine whether particular development or use of the floodplain is appropriate and sustainable. In this way the policy avoids the unnecessary sterilisation of flood prone land.....'</i></p> <p>The Floodplain Mitigation Strategy for the project is centred around a holistic merit based assessment of floodplain mitigation options in accordance with the Flood Plain Development Manual 2005. DECCW was consulted on the methodology and approach to the conduct of the flood study at a meeting with the Department of Planning on 20th October 2009 - EA Appendix HH. Refer also response at DECCW 01 above.</p>
DECCW 27	DECCW states that it recommends that the flood risk management issues and strategy is resolved and fully satisfied by DoP prior to any approval.	The comprehensive assessment work to date satisfies this recommendation. Refer also response at DECCW 01 above.

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DECCW 28	Flood Plain Management - Stage 1 Project Application	The Stage I PA is addressed in detail in the Stage 1 PPR, lodged under separate cover
DECCW 29	DECCW states that it notes that the Stage 1 application is largely located on the Macquarie Rivulet floodplain and under existing conditions, much of this area is a floodway proposed to be filled with all post development flows expected to pass under the proposed Macquarie Rivulet bridge. DECCW states that it is a concern that the implications of flooding, particularly on the safety of people but also on damages [sic], has not been considered when floods exceed the design capacity of the bridge or when the capacity of the bridge waterway is reduced due to blockage or sedimentation. DECCW recommends that DoP carefully considers the implications of the full range of possible floods up to the probable maximum flood, particularly with regard to potential risks to life. This should also include potential damage to buildings/property and structural requirements for dwellings as evacuation may not be possible in a flash flood environment with no warning.	<p>This statement is incorrect. The implications of flooding beyond the 1 in 100 year flood have been taken into account - EA, specifically Appendix R – Appendix c of the Floodplain Risk Management Study.</p> <p>Refer also response at DECCW 01 above.</p> <p>The Stage I PA is addressed in detail in the Stage 1 PPR, lodged under separate cover</p>
DECCW 30	<p>DECCW states that it also considers a need for DoP to carefully consider the hydraulic-geomorphic implications of the proposed constriction of the waterway area of the Macquarie Rivulet floodway.</p> <p>DECCW states that a significant constriction of the floodway is likely to cause an increase in the velocities and shear stresses when flows equal or exceed proposed fill levels which may lead to significant erosion of the creek channel and floodway area when natural channel stability thresholds are exceeded.</p> <p>DECCW states that not considering and managing this issue now may lead to the loss of private/public assets, loss of natural stream biophysical functions or the need to retrofit large scale engineering works into the future. DECCW states that the issue and associated liabilities could be considered in further detail as part of an independent peer review process.</p>	<p>These have been addressed in the EA Appendix M - Geomorphic Study. The Concept Plan engineering plans clearly show areas that are high-lighted for future stabilisation works, commensurate with the level of detail of a Concept Plan.</p> <p>Refer also response at DECCW 01 above.</p> <p>The Stage I PA is addressed in detail in the Stage 1 PPR, lodged under separate cover</p>
	SSS Listing	
	Zone E2	
DECCW 31	<p>DECCW states that in principle, DECCW supports the use of an E2 zone to protect areas of high ecological value. However, with respect to this proposal, DECCW raises concern with the range of uses permitted within the zone as a number are inconsistent with the key objective of the zone which is "to protect, manage and restore areas of high ecological, scientific, cultural and aesthetic values" and DoPs LEP Practice Note (Environment Protection Zones).</p> <p>DECCW states that incompatible uses include drainage, earthworks, electricity transmission or distribution networks, flood mitigation works, sewerage systems, stormwater management systems, telecommunications facilities and water supply systems. DECCW recommends the proposed additional permitted uses be reviewed and all inappropriate uses removed from the land use table to ensure the E2 zone will provide long term protection of the high conservation values</p> <p>If the inappropriate uses are not removed not to remove the inappropriate uses, then a more appropriate zone should be applied to reflect the proposed uses.</p>	<p>Noted but not agreed. The uses proposed are not inconsistent with the standard LEP template or Infrastructure SEPP and are considered to be commensurate with their E2 zoning.</p> <p>Notwithstanding, DLL proposes some amendments to the permissible uses in the E2 zone to remove any ambiguity. Refer to the PPR Section 3.3 and Appendix H.</p>
DECCW 32	DECCW notes that under the SEPP Amendment it is proposed to apply an E2 zone across most of Johnston's Spur and to two reserves which contain Illawarra Lowlands Grassy Woodland Endangered Ecological Community (EEC).	DECCW's statement about the proposed SEPP amendment is confirmed.

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	Much of the remaining remnants of Illawarra Lowlands Grassy Woodland EEC and River Flat Eucalypt Forest EEC within the site <i>are</i> proposed to be zoned E3, SP2-d or R1. DECCW is concerned that SP2-d and R1 zonings do not provide long term protection to the significant biodiversity values of these remnants. This approach is inconsistent with Section 7 of the <i>Illawarra Regional Strategy</i> (IRS) (DoP, 2006).	It is not agreed that the zonings do not provide long term protection to the land or that the approach proposed by DLL is inconsistent with the IRS. The Calderwood project provides a balance between development and sustainable land management. The current zonings and the ESL layer are considered an appropriate level of protection to the sites biodiversity values.
DECCW 33	In this regard, DECCW recommends that all EEC remnants In moderate disturbance (8) and high disturbance regenerating (C) condition be zoned E2 and scattered trees, thinned canopy (TX) condition be zoned E3.	Not agreed. The Calderwood project provides a balance between development and sustainable land management. The current zonings and the ESL layer are considered an appropriate level of protection to the sites biodiversity values.
DECCW 34	On a particular matter, the EA clearly identifies Johnstone's Spur as having high conservation values with Figures 23 and 24 depicting Johnstone Spur as a conservation area. However, the zoning map depicts the riparian corridors within Johnstone's Spur as having a SP2-d local drainage zone.	Noted and agreed. For reasons of consistency, all riparian corridors across the Calderwood project are zoned SP2-d. Notwithstanding, DLL proposes amendments to the SP2-d zoning. Refer to the PPR Section 3.3 and revised Zoning Plan in Appendix H
DECCW 35	DECCW states that the proposed SP2-d zoning does not reflect the high conservation values attributed to Johnston's Spur in the EA and will not provide appropriate long term protection of the conservation values. DECCW strongly recommends that the corridors within Johnston's Spur be zoned E2.	All riparian corridors serve a drainage function (some also serve an ecological function) and the SP2 zone reflects this and permits drainage to be managed on site accordingly. The ESL layer provides additional protection to existing vegetation of value, including that at Johnstons Spur and the two main corridors where the majority of ESL lands are located. It is noted that DECCW does not consider the land is of sufficiently high conservation value to take ownership of the land – refer EA Appendix HH . Notwithstanding, DLL proposes amendments to the SP2-d zoning. Refer to the PPR Section 3.3 and revised Zoning Plan in Appendix H
	Zone E3	
DECCW 36	DECCW states that the proposed E3 Environmental Management <i>zone</i> permits a number of inappropriate uses that are inconsistent with the zone objectives and DoPs LEP Practice Note. Incompatible uses include electricity generating works, electricity transmission or distribution networks, sewerage systems, stormwater management systems, telecommunications facilities and water supply systems.	Not agreed. The uses proposed are not inconsistent with the standard LEP template or Infrastructure SEPP and are considered to be commensurate with their E3 zoning. In addition, the proposed uses may help facilitate development of an appropriate scale and impact on some of these lands. Notwithstanding, DLL proposes some amendments to the permissible uses in the E2 zone to remove any ambiguity. Refer to the PPR Section 3.7 and Appendix H .
DECCW 37	DECCW recommends the additional proposed uses be reviewed and all inappropriate uses be removed. If the Inappropriate uses <i>are</i> not removed, then a more appropriate zone should be applied.	Refer to Item DECCW 36 above .
DECCW 38	As detailed above, DECCW recommends the proposed zoning over scattered trees, thinned canopy (TX) remnants of Illawarra Lowlands Grassy Woodland EEC and River Flat Eucalypt Forest EEC, as identified in the Concept Plan EA, be reviewed in order to provide greater protection to these high conservation value remnants. In this regard, DECCW recommends these remnants be zoned E3.	Not agreed. The Calderwood project provides a balance between development and sustainable land management. The current zoning and ESL layers are considered an appropriate level of protection. It is standard practice for DLL to assess the merit of retaining individual trees or stands of trees at the detailed design stage. Notwithstanding, DLL will provide further guidance on this issue to remove any ambiguity. Refer to the PPR Section 2.5 and revised Statement of Commitments # 37
DECCW 39	DECCW notes the EA states 'that no minimum lot size is proposed for the E3 zone and that a maximum density of 10 dwellings per hectare is proposed for those areas of E3 zoned land that are to be retained in private ownership.	Noted.

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		<p>It should also be recognised that four of the seven areas zoned E3 are also identified in the Landscape and Open Space Master Plan as “Environmental Reserves” and it is intended that these be handed over to the relevant Council as public open space. Refer EA Appendix CC.</p> <p>In addition, five of the seven areas zoned E3 have significant ESL coverage, providing an additional layer of protection. Refer EA – Figure 65. Notwithstanding, DLL proposes amending the minimum lot size to address this issue and remove any ambiguity for those areas of E3 zoned land to be retained in private ownership. Refer to the PPR Section 3.6 and revised Minimum Lot Size Plan at Appendix H</p>
DECCW 40	DECCW has concerns regarding the proposed density of dwellings in the E3 zone land. In particular, whether the environmental values will be retained and protected at the proposed dwelling density.	Refer to Item DECCW 39 above.
DECCW 41	It is recommended that the proposed dwelling density for E3 zones be reviewed to ensure that the values within the E3 areas will be conserved and protected. An E4 zone would seem a more appropriate zoning for this type and density of development.	Refer to Item DECCW 39 above.
	SP2 Infrastructure Zone	
DECCW 42	DECCW states that the State Significant Site (SSS) listing and Concept Plan EA propose to zone riparian corridors throughout the subject site SP2 Infrastructure under the SEPP Amendment. It is DECCW's view that an SP2-d zoning will not protect important geomorphic and biodiversity values in these riparian areas.	<p>Not agreed. This statement is not supported by latest State Government land releases in the Sydney Metropolitan Growth Centres (specifically the Riverstone and Alex Avenue precincts) where riparian corridors have been zoned SP2.</p> <p>At Calderwood the ESL layer provides a further layer of protection for existing vegetation of value in the riparian corridors.</p> <p>Notwithstanding, DLL proposes amendments to the SP2-d zoning. Refer to the PPR Section 3.3 and revised Zoning Plan in Appendix H.</p>
DECCW 43	DECCW states that it is therefore recommended that the proposed zoning of riparian lands be reviewed with a view to applying a zone that provides for development of a type and scale commensurate with the sensitivity of riparian areas. Infrastructure should preferably be located in service corridors outside riparian areas with high biodiversity values.	Not agreed. This statement is not supported by latest State Government advice (eg the DoP's own draft Discussion Paper on Riparian Corridors in urban release areas) where dual use of riparian corridors is proposed wherever practical, including the siting of suitable infrastructure. Refer to the PPR Section 3.3
	ESL Overlay	
DECCW 44	DECCW states that the SSS and Concept Plan report Indicates that in addition to E2 and E3 land use zones, it is proposed to protect conservation values via an Environmental Sensitive Lands layer. DECCW is concerned the proposed overlay provision does not provide sufficient protection for the identified lands.	<p>Not agreed. The ESL layer is being used on DLL and other projects in NSW to provide an additional level of protection to existing site attributes.</p> <p>Refer to the PPR Section 3.8</p>
DECCW 45	DECCW recommends using the model biodiversity clause in the <i>Practice Note for using spatial information in Local Environmental Plans to protect and manage Environmentally Sensitive Areas</i> prepared by DECCW with the Department of Primary Industries and Department of Water and Energy (Attachment 2). The recently gazetted Wollongong City Council comprehensive LEP contains a similar clause to the biodiversity clause contained in practice note.	Not agreed. The proposal put forward at Calderwood replicates an existing clause on one of DLLs NSW projects were it is achieving its aims.
	Future land ownership and management	
DECCW 46	DECCW states that the SSS and Concept Plan report proposes the transfer all E2, SP2 and RE1 land as well as some E3 land to Shellharbour Council, despite no evidence of any agreement that they have agreed to accept the land. The report also states that Delfin Lend Lease will rehabilitate these areas to a "suitable condition prior to handover".	Noted. The approach proposed by DLL on the detailed Planning Agreement discussions reflect the approach that such discussions should not, in accordance with sound planning principles, prejudice the assessment process but proceed in parallel with it. This approach is consistent with the NSW Government Draft Development Contributions Guidelines 2009.

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	However, there are also no details regarding the level of rehabilitation works proposed or funding mechanisms for ongoing maintenance of the land. It is essential that suitable arrangements for ownership and ongoing long term management are established to ensure the significant conservation values are retained and protected in perpetuity.	<p>The EA Appendix CC – Landscape and Open Space Master Plan details principles and strategies for delivery of open space including environmental reserves</p> <p>It is also noted that there are alternative options for future ownership and management should the Councils determine that ownership is not their preferred course of action.</p> <p>It is acknowledged that the DECCW has formally stated that despite the “significant conservation values” on site, it has no interest in owning or maintaining any of these lands – refer EA Appendix HH.</p>
	Impacts on Threatened Species, Populations or their habitats	
	Concept Plan	
DECCW 47	DECCW states that its review of the Concept Plan EA suggests it has not addressed the Director General's Requirements (DGRs) issued on 10 June 2009 which require the impact of the development on <i>Chorizema parviflorum</i> and <i>Lespedeza juncea</i> subsp. <i>sericea</i> endangered populations and their habitats and compensatory measures be addressed. The following provides detailed comments on threatened species issues and compliance with the relevant threatened species guidelines.	<p>This statement is rejected. In the meeting with DECCW / DoP on 20th October 2009 the proposed study methodology was clearly outlined; refer EA Appendix HH. The resulting Flora and Fauna Assessment (refer EA - Attachment Q Flora and Fauna Assessment) reflects that methodology and meets the DGRs.</p> <p>The Flora and Fauna Assessment specifically address the impact of the development on <i>Chorizema parviflorum</i> and <i>Lespedeza juncea</i> subsp. <i>sericea</i> endangered populations and their habitats. The study concludes that it is unlikely that the species occurs on site. As such, no compensatory measures are necessary. Refer to the PPR Section 2.5</p>
DECCW 48	DECCW states that the Concept Plan EA identifies that the subject site is likely to, or has the potential to, provide habitat for 22 threatened fauna species, including the Swift Parrot and a variety of microchiropteran bat species. Despite the potential for threatened fauna species or their habitats to occur within the subject site, no targeted threatened fauna surveys have been undertaken in the Concept Plan EA.	Not agreed. This issue is addressed in the Preferred Project Report. Refer to the PPR Section 2.5
DECCW 49	DECCW states that the Concept Plan EA also identifies four threatened flora species likely or potentially likely to occur within the subject site, specifically White-flowered Wax Plant (<i>Cynanchum elegans</i>), Illawarra Socketwood (<i>Daphnandra</i> sp. Illawarra), Illawarra Greenhood (<i>Pterostylis gibbosa</i>) and Illawarra Zieria (<i>Zieria granulata</i>). The Concept Plan EA indicates that a targeted field survey for these threatened flora species was undertaken on the site in October 2009, however the location and survey effort per stratification unit employed during this targeted field survey has not been documented.	Not agreed. This issue is addressed in the Preferred Project Report. Refer to the PPR Section 2.5
DECCW 50	DECCW notes that the draft Statement of Commitments for the Concept Plan EA states that a 'detailed survey will be carried out for the Illawarra Greenhood (<i>Pterostylis gibbosa</i>) prior to any works commencing within potential habitat.'	Noted and agreed. Refer to the PPR Section 2.5 and revised Statement of Commitments # 37.
DECCW 51	DECCW states that a preliminary review of data available to DECCW has shown that the <i>Chorizema parviflorum</i> and <i>Lespedeza juncea</i> subsp. <i>sericea</i> endangered populations under the <i>Threatened Species Conservation Act 1995</i> (NSW) are known to occur within the vicinity of the subject site. The DGRs require the EA to address the impact of the development on <i>Chorizema parviflorum</i> and <i>Lespedeza juncea</i> subsp. <i>sericea</i> endangered populations and their habitats, having regard to the draft <i>Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities</i> (DECCW, 2004). This information has not been provided.	Not agreed. Refer response to Item DECCW 47 above.
DECCW 52	DECCW is unable to assess or evaluate the magnitude, extent and significance of any direct or indirect impacts of the Concept Plan on threatened species, populations, or their habitats given:	This statement is incorrect and is strenuously rejected. There is no basis upon which this conclusion can be drawn. The EA – Appendix Q Flora and Fauna Assessment specifically addresses the issues listed below.

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		Further, DLL notes that this comprehensive assessment was submitted to the Australian government for determination under the EPBC Act. On 30 th March 2010 the Commonwealth decided that the proposed action (the Project) is not a controlled action under the Act and it does not require further assessment before it can proceed.
DECCW 53	<ul style="list-style-type: none"> no targeted surveys have been undertaken for threatened fauna or their habitats, 	Refer response to Item DECCW 52 above.
DECCW 54	<ul style="list-style-type: none"> no surveys have been undertaken for <i>Chorizema parviflorum</i> and <i>Lespedeza juncea</i> subsp. <i>sericea</i> endangered populations or their habitats, and 	Refer response to Item DECCW 52 above.
DECCW 54	<ul style="list-style-type: none"> it is unclear whether targeted flora surveys have been undertaken in accordance with the draft <i>Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities</i> (DECCW, 2004). 	Refer response to Item DECCW 52 above.
DECCW 54	In conclusion, DECCW is significantly concerned about how threatened species have been addressed in this proposal.	Refer response to Item DECCW 52 above.
	Stage 1 Project Application	The Stage 1 PA is addressed in the Stage 1 PPR, lodged under separate cover
DECCW 55	DECCW states that no assessment of Impacts arising from the Project Application components on threatened species, populations, endangered ecological communities or their habitats has been provided in the Project Plan EA.	<p>This statement is not agreed and not supported by the facts: the Stage 1 Project Application clearly refers the reader to the Concept Plan EAR documentation and supporting studies. It is incorrect for DECCW to suggest that no assessment of impacts has been provided.</p> <p>This issue is covered in the Stage 1 PPR, lodged under separate cover</p>
DECCW 56	DECCW states that instead, all consideration and assessment has been deferred to the Concept Plan EA. DECCW is therefore unable to assess or evaluate the magnitude, extent and significance of any direct or indirect impacts of the Project Application EA on threatened biodiversity.	There is no basis upon which this conclusion can be drawn: all of the relevant information is available and placed on public exhibition. This is covered in the Stage 1 PPR, lodged under separate cover
DECCW 57	DECCW notes that the draft Statement of Commitments for the Project Application EA contains no provision for further consideration or assessment of impacts arising from the Project Application components on threatened species, populations, endangered ecological communities or their habitats.	<p>Noted.</p> <p>This is covered in the Stage 1 PPR, lodged under separate cover</p>
	Assessment of Impacts on Threatened Biodiversity	
DECCW 58	DECCW states that to satisfy Step 2 the draft <i>Guideline for Threatened Species Assessment</i> (2005), targeted threatened species surveys should be conducted across the study area in accordance with the draft <i>Threatened Biodiversity Survey and Assessment: Guidelines (or Developments and Activities)</i> (DECCW, 2004).	This statement is rejected. In the meeting with DECCW / DoP on 20 th October 2009 the proposed study methodology was clearly outlined; refer EA Appendix HH . The resulting Flora and Fauna Assessment (refer EA - Attachment Q Flora and Fauna Assessment) reflects that methodology and meets the DGRs.
DECCW 59	DECCW states that the study area means the area directly affected by the proposal and any additional areas which are likely to be affected by the proposal, either directly or indirectly. The study area should extend as far as is necessary to take all potential Impacts into account, and include road easements, asset protection zones, water, sewage, electricity and telecommunication infrastructure.	<p>This statement is not agreed. The study area covered by the assessment is considered to be both comprehensive and appropriate. The study methodology was agreed in discussions with the DECCW and DoP. Refer response to Item DECCW 58 above.</p> <p>Applications for utilities such as water, sewage, electricity and telecommunication infrastructure will be the subject of separate applications and assessment processes by third parties and which do not form part of the Calderwood Project applications. The DECCW is mistaken to suggest they should form part of this assessment process and their potential impacts be taken into account.</p>
DECCW 60	DECCW states that in order to satisfy Step 3 of the draft <i>Guideline for Threatened Species Assessment</i> , likely impacts should be assessed, evaluated and reported on in the EAs to evaluate the magnitude, extent and significance of any direct or indirect impacts of the proposal on threatened species, populations, ecological communities, or their habitats.	Refer to response to Item DECCW 58 above.

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DECCW 61	DECCW states that the proponent should then identify actions that will be taken to avoid or mitigate any impacts of the proposal on threatened species, populations, ecological communities, or their habitats. The EAs should contain justification of the preferred option and include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.	Noted. Refer to response to Item DECCW 58 above.
DECCW 62	DECCW states that the Concept Plan EA indicates that 8.17 hectares of Illawarra Lowlands Grassy Woodland EEC and 3.36 hectares of River Flat Eucalypt Forest EEC on the subject site is likely to be removed. The Stage 1 Project Application indicates that 2.36 hectares of River Flat Eucalypt Forest EEC is likely to be removed.	Noted.
DECCW 61	DECCW states that compensatory measures should only be considered where impacts cannot be avoided or mitigated accordance with principles contained within draft <i>Guideline for Threatened Species Assessment</i> , however, DECCW notes that compensatory measures <i>have</i> not been proposed in the EAs.	The Calderwood project results in a balanced outcome between development and sustainable land management. The Flora and Fauna Assessment identifies that over 90% of existing vegetation of value is retained on site and protected via various land use zones and an ESL layer. Refer EA Section 6.10. Further, DLL notes that this comprehensive assessment was submitted to the Australian government for determination under the EPBC Act. On 30 th March 2010 the Commonwealth decided that the proposed action (the Project) is not a controlled action under the Act and it does not require further assessment under EPBC before it can proceed.
DECCW 62	DECCW states that any proposed offsetting measures should be developed in accordance with the <i>Principles for the Use of Biodiversity Offsets in NSW</i> in consultation with the DECCW.	No offsetting measures are proposed at Calderwood.
DECCW 63	The EAs needs to clearly state whether it meets each of the key thresholds set out in Step 5 of the draft <i>Guideline for Threatened Species Assessment</i> .	The study area covered by the assessment is considered to be both comprehensive and appropriate. The study methodology was agreed in discussions with the DECCW and DoP. Refer response to Item DECCW 52 above.
	Acid Sulfate Soils	
DECCW 64	DECCW states that it has reviewed the Acid Sulfate Soils (ASS) Assessment report prepared by Douglas Partners for the Concept Plan EA and concurs with the conclusion by Douglas Partners that despite the presence of ASS on the site, ASS will only be a moderate constraint to development, and can be appropriately managed with good engineering practice. DECCW also notes that maximum excavation depths for any development involving excavation are yet to be identified, and that further assessment of potential ASS will be undertaken to the proposed excavation depths and included in the context of an Acid Sulfate Soil Management Plan	Noted and agreed. This is already addressed in the Statement of Commitments. However, to remove any ambiguity, the commitment has been revised. Refer to the PPR Section 2.5 and revised Statement of Commitments # 37.
DECCW 65	DECCW states that it should however be noted that DECCW's review is offered with the reservation that Drawing 6 in Appendix A, which was supposed to show the locations of the ASS test pits, was inadvertently not included in the report.	Noted. These plans were inadvertently omitted from the original application and subsequently forwarded to the DoP for information. The plans do not change the conclusions of the report.
	Aboriginal Cultural Heritage	
DECCW 66	DECCW states that the management recommendations in relation to ACH are broadly supported. It is noted that most of the study area has been subject to moderate to high levels of disturbance and that the focus for test and salvage excavations on four sites/PADs that are less disturbed. DECCW supports this approach.	Noted.
DECCW 67	DECCW also notes that ground surface visibility was poor throughout the study area and that two properties (342 Calderwood Road & 269 North Macquarie Road) were not accessible at the time of survey. DECCW recommends that both of these properties are surveyed by an archaeologist and representatives from the local Aboriginal community prior to any impacts to these properties as a result of future developments. Any management recommendations in relation to Aboriginal Cultural Heritage for these properties should be implemented prior to development taking place.	Noted and agreed. The Statement of Commitments already addresses this issue. Refer Statement of Commitments # 49-56

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DECCW 68	DECCW recommends that particular attention is paid to the long term management of Johnstons Spur, as this represents the least disturbed area of the site and may also provide opportunities for tangible cultural heritage outcomes.	Noted and agreed. However, it is noted that both DECCW and Shellharbour Council are unwilling to own Johnstons Spur, regardless of its inherent ecological and archaeological values. This matter is further addressed in the Preferred Project Report. Refer to the PPR Section 4.2 and Appendix I
DECCW 69	DECCW states that the Calderwood Urban Development Area is of cultural significance to the local Aboriginal community and the community should be consulted throughout the life of the development in relation to the management of cultural values.	Noted.
DECCW 70	DECCW states that further consideration should be given to the proposal for collection and re-location of known Aboriginal objects and that DECCW does not support the re-location of Aboriginal objects within the Site. Instead, DECCW recommends that objects are lodged with the Australian Museum.	Noted. DLL proposes additional consultation on this matter with DECCW prior to construction. Refer to the PPR Section 2.9 and revised Statement of Commitments # 49-56
	Concept Plan	
DECCW 71	DECCW states that it notes that table 2.1 Existing Development Constraints under Aboriginal Heritage includes a comment that " <i>a s.90 permit will be obtained from DECCW before any construction works commence on site</i> ". As the DOP is aware, s.90 applications are not required for Part 3A applications.	Noted.
	Stage1 Project Application	This is covered in the Stage 1 PPR, lodged under separate cover
DECCW 72	DECCW seeks clarification of the type of material to be used for fill as it may trigger licensing requirements under the Protection of the Environment Act, 1997.	It is proposed that fill material will be VENM.

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	DEPARTMENT OF INDUSTRY AND INVESTMENT (letter dated 9 June 2010)	
	Agriculture Comments	
DII 01	The Department of Industry and Investment states that the Illawarra Regional Strategy (IRS) identifies the area of Calderwood as an area for additional future expansion for housing " <i>if demand for additional regional housing supply arises because of population growth in the region is beyond projections of the Illawarra Regional Strategy or regional lot supplies are lower than required</i> ". Under the IRS the first test to satisfy is whether additional housing supply is required because it is beyond the original IRS projections.	Noted – this has been addressed in the EA Executive Summary B, Section 2, Appendices C, E and F. Also, the Department of Planning wrote to Shellharbour Council on 7 th June 2010 specifically addressing this issue. Delfin Lend Lease has updated the relevant elements of Section 2 (Strategic Justification) of the EA to take account of the Recent Illawarra Urban Development Update and Explanatory Note and associated Government Press Releases and this is at Appendix C to the Preferred Project Report (PPR) and in the PPR Section 2.1.
DII 02	The Department of Industry and Investment states the developer has submitted information in the environmental assessment report for Calderwood (Concept) that demand is higher than projected under the Illawarra Strategy. Industry & Investment NSW cannot comment on the correctness of the projected housing supply situation. That is a matter that needs to be fully considered by the NSW Department of Planning.	Refer to response at Item DII 01 above.
DII 03	The Department of Industry and Investment states that if additional housing supply is required, there is also a need to meet the second test, which is to satisfy development criteria in Appendix 1 to the IRS, which requires the development to "demonstrate that it (the proposed urban land use) is the most efficient and sustainable use of land by avoiding identified significant agricultural land".	These statements are not agreed. As demonstrated in the EA – Section 2 and Appendix F – Illawarra Regional Strategy Sustainability Criteria , and confirmed by the Department of Planning on 7 th June 2010, Calderwood is consistent with the Regional Strategy. The Strategy states with regards to agricultural land as follows:: <ul style="list-style-type: none"> • "<i>the Regional Strategy will promote the economic, food production and community values of existing agricultural lands and protect them from inappropriate urban expansion (other than that identified under this Strategy or in accordance with the Sustainability Criteria)</i> [our emphasis]..." (p36); and • "<i>New residential (other than those identified in Chapter 6 Housing and Settlement)</i> [our emphasis] or rural residential zones will only be supported where they meet the Sustainability Criteria (Appendix 1)..." (p37). <p>The Calderwood project is identified for development in the IRS and in Chapter 6 in accordance with the above.</p>
	Current Land Uses	
DII 04	The Department of Industry and Investment states that the impact of the proposal will be significant and will remove approximately 680ha of agricultural land in total from its current and productive potential, approximately 280ha of which is prime agricultural land.	This statement is incorrect and is not supported by analysis. Table 2 (p7) of the EA Appendix K - Agricultural Lands Study (ALS) shows that 580ha (rather than 680ha quoted by I&I NSW) are used for marginal agricultural use. Further, this figure represents a total for the various <i>landholdings</i> and excludes those parts of the landholdings that are encumbered with remnant woodlands and riparian corridors etc where productive agricultural use does not take place. Refer to the PPR Section 2.1
DII 05	The Department of Industry and Investment states the Calderwood development will be on land classified as classes 2 to 5 under the Agricultural Land Classification Map for the Illawarra region. Approximately 40% of the site is classified as classes 2 and 3 which is [sic] considered to be prime agricultural land. The Department of Industry and Investment states that: <ul style="list-style-type: none"> • Class 2 is "arable lands having a very good capability for agriculture. Minor to moderate constraints to sustained high levels of production are present." 	Noted. Refer to response to item DII 03 above.

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	<ul style="list-style-type: none"> Class 3 is "Lands well suited to pasture improvement and associated pasture management practices. These lands may be cultivated for an occasional crop depending on the nature of the constraint." Class 2 and 3 lands are limited in the Illawarra and South Coast Region of NSW. Class 2 in particular is very limited. It is found in small pockets around rivers or creeks where alluvial soil has been deposited. 	
	The Rural Lands Study	
DII 06	The Department of Industry and Investment states that the Rural Lands Study (Appendix K) of the environmental assessment report for Calderwood (Concept) has not recognised the values of the current agricultural land uses or productive potential of the agricultural land in the Calderwood area. The Department of Industry and Investment states that it does not agree with a number of statements in the study, as outlined below.	This statement is not agreed. The EA – Appendix K Agricultural Land Study (ALS) describes accurately and in great detail the values of the site and takes account of the regional context of the site.
DII 07	<ul style="list-style-type: none"> The Study considers the agricultural activities undertaken in the Calderwood area to be limited and insignificant. However table 2 in the Rural Lands Study (page 7) shows that there is more than 680ha of land in farming, both extensive and intensive. 	This statement is incorrect. The EA – Appendix K Agricultural Land Study Table 2 (p7) shows that 580ha (rather than 680 ha as quoted) are used for productive agricultural use. Further, this figure represents a total for the various <i>landholdings</i> and excludes those parts of the landholdings that are encumbered with remnant woodlands and riparian corridors where productive agricultural use does not take place.
DII 08	<ul style="list-style-type: none"> The Study considers that Calderwood is within the "Potential Area of Influence" of existing urban development which will ultimately transform land from rural to urban. In the study the "potential area of influence" is considered to be an area of land that is proximal to existing urban development. Using that argument, any rural land could be justifiably developed as long as it had some proximity to urban development, regardless of the lands quality or production potential. 	Not agreed. The issue of "Potential Area of Influence" is considered relevant, especially in the context of Calderwood having been on the MDP for over 20 years.
DII 09	<ul style="list-style-type: none"> The Study states that "no livestock and crop production activities occur within the (Calderwood) site." Clearly, however, cattle are agisted and dairy cows are grazed in the valley, and although no cropping is undertaken, silage is produced for livestock feed. 	Noted.
DII 10	<ul style="list-style-type: none"> The Study states that "there are no impacts on primary production values or regionally significant areas of food production anticipated as a result of the project". I&I NSW considers that the removal of dairies, livestock farms, intensive horticultural activities and market garden is significant. Those agricultural activities comprise over 680ha of land, 280ha of which is prime land. 	<p>This statement is clearly made without reference to the regional context, specifically the Shoalhaven and Wingecarribee, where c90% of regional grazing and crop activity is located. The ALS concludes that there is limited agricultural productivity in the locality and that there would be nil to minimal impact on primary production values and practices if the site were to be developed. The regional context supports this conclusion.</p> <p>It should be noted, the Calderwood site does not comprise any intensive horticultural activities or market gardens as suggested by I&I NSW, and the figure of 680ha is incorrect – refer response to Item DII 04 above.</p>
DII 11	The Department of Industry and Investment states that the Study has not addressed or mentioned the issue of food resource lands as identified in the IRS. The IRS has identified a large area of Calderwood as a Rural and Natural Resource Area (R&NRA). The R&NRA is "rural and agricultural lands that provide important economic, environmental, social and cultural benefits to the region and have value as a food producing resource to be protected for the long term".	<p>The IRS states the following:</p> <ul style="list-style-type: none"> "the Regional Strategy will promote the economic, food production and community values of existing agricultural lands and protect them from inappropriate urban expansion (other than that identified under this Strategy or in accordance with the Sustainability Criteria) [our emphasis]..." (p36); and "New residential (other than those identified in Chapter 6 Housing and Settlement) [our emphasis] or rural residential zones will only be supported where they meet the Sustainability Criteria (Appendix 1)..." (p37). <p>The Calderwood project is identified for development in the IRS and in Chapter 6 in accordance with the above.</p>
DII 12	The Department of Industry and Investment states that it considers that there are fundamental flaws in the Rural Lands Study Report that have lead the author to conclude that there are no or minimal impacts on agricultural lands in the Calderwood valley.	The conclusion that there are fundamental flaws in the Agricultural Land Study is strenuously rejected. Refer detailed responses to Items DII 04 to 011 inclusive above.

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	The proposed development will have significant impacts on agricultural activities and resources into the longer term.	
	Fisheries Comments	
DII 13	The Department of Industry and Investment states that the Calderwood development encompasses or adjoins both Marshall Mount Creek and Macquarie Rivulet and is upstream of Lake Illawarra. As a result the Calderwood development represents a very significant risk to aquatic habitats in all three waterways and the commercial and recreational fisheries within the lake.	This statement is not agreed and is not supported by any analysis or facts. The EA and supporting studies comprehensively examine and assess environmental impacts particularly Appendices F, G, H, K, L, M, N, O, P, Q, R, S and W.
DII 14	The Department of Industry and Investment states that Macquarie Rivulet is within the natural range of, and could potentially provide habitat for, Australian Grayling (<i>Prototroctes mareana</i>) which is listed as a vulnerable species under the provisions of the <i>Environment Protection and Biodiversity Conservation Act</i> (Cwth). It is also a protected species under the provisions of the <i>Fisheries Management Act 1994</i> .	Noted.
DII 15	The Department of Industry and Investment states that the risk to aquatic habitats in the creeks, and commercial and recreational fisheries in Lake Illawarra arises from the threat of sediment and nutrient input into the waterways from stormwater runoff from areas undergoing urbanisation and subsequently. Given the long development period characteristic of new urban developments, erosion and sediment control will be an ongoing challenge for several decades.	This statement is not correct and is not agreed. The EA Section 4.11 – and Appendix N – Water Cycle Management Study details the water sensitive urban design measures to apply to the Project, including during construction.
DII 16	The Department of Industry and Investment states that the risk exists both during the subdivision phase, the dwelling construction phase and the occupation phase. The risk during the subdivision phase may be somewhat easier to manage since there is generally only one constructing authority and the works are usually generally completed within a couple of years. By contrast, the dwelling construction phase can extend over a 15 to 25 year period with different contractors operating over hundreds of discrete sites. Ensuring that high quality erosion and sediment controls are implemented at all building sites until such time as urbanisation is complete, is a very considerable challenge.	Noted. Refer response to Item DII 15 above.
DII 17	The Department of Industry and Investment states that the comprehensive protection of riparian zones indicated in the concept plan as well as the proposed adoption of various Water Sensitive Urban Design (WSUD) elements (Gross Pollutant Traps, sedimentation ponds etc) will help ameliorate the impacts provided they are fully implemented.	Noted. Refer response to Item DII 15 above.
DII 18	The Department of Industry and Investment states that it is acknowledged that the water quality monitoring undertaken by Cardno indicates that significant water quality improvements are possible by comparison with the existing situation. This conclusion only holds true if the fundamental assumption of full and complete implementation of best management practice water quality protection measures during the development phase and subsequently is actually achieved.	Noted. Refer response to Item DII 15 above. Refer also to new Statement of Commitment # 47
DII 19	The Department of Industry and Investment states that the proposal to develop and implement a comprehensive Soil and Water Management Plan is supported. However, periodic independent auditing of the implementation of this Plan will be required to ensure that all necessary measures are implemented initially and continue to be implemented and maintained over time.	This statement is noted. The appropriate mechanism for implementation of development controls is through the consent process and inclusive of matters permissible under the EP&A Act.
	Water Quality Impacts	
	Recommended Conditions	
DII 20	The Department of Industry and Investment states that a Soil and Water Management Plan should be developed in consultation with I&I NSW (Fisheries). The Plan is to include:	This statement is not correct and is not agreed. The EA Section 4.11 – and Appendix N – Water Cycle Management Study details the water sensitive urban design measures to apply to the Project, including during construction.

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DII 21	<ul style="list-style-type: none"> An objective to have a Neutral or Beneficial Effect upon water quality in Marshall Mount Creek, Macquarie Rivulet and Lake Illawarra during the subdivision phase, the dwelling construction phase and subsequently during the occupation phase. 	Refer response to Item DII 20 above.
DII 22	<ul style="list-style-type: none"> Objectives for water quality (frequency of observations below specified thresholds for all relevant parameters) of flows leaving the development site. 	Refer response to Item DII 20 above.
DII 23	<ul style="list-style-type: none"> Arrangements for regular periodic and event based water quality monitoring throughout the construction period with particular emphasis on monitoring during larger rainfall events when sediment export is most likely. 	Refer response to Item DII 20 above.
DII 24	<ul style="list-style-type: none"> Arrangements for ensuring compliance with the Soil and Water Management Plan (comprising both education and enforcement of breaches) by constructing agents and contractors operating on the site. 	Refer response to Item DII 20 above.
DII 25	<ul style="list-style-type: none"> Arrangements for regular independent auditing of the implementation and maintenance of erosion and sediment control measures throughout the whole construction period. 	Refer response to Item DII 20 above.
DII 26	<ul style="list-style-type: none"> Regular periodic reporting of outcomes of audits and water quality monitoring to Shellharbour City Council and relevant State Agencies including the Lake Illawarra Authority and I&I NSW (Fisheries). 	Refer response to Item DII 20 above.
	Design of new structures	
DII 27	The Department of Industry and Investment states that the Concept Plan indicates several new road crossings of waterways as well as a large number of stormwater detention basins/wetlands. All of these structures have the potential to obstruct fish passage within waterways. The number of road crossings over the 2 major creeks (Marshall Mount and Macquarie Rivulet) needs to be minimised. Where crossings are unavoidable, they need to be designed to conform to the Department's Fish Passage Guidelines.	The Calderwood project is designed around the urban design principles of walkability and accessibility. Crossings are proposed in a variety of locations that allow people to link between places and facilities and help foster a cohesive community. This includes a series of crossings over major and minor riparian corridors. Regarding the two major creeks, it is important to note that Marshall Mount Creek flows only intermittently and in times of flood. Crossings will be designed in accordance with required standards. Refer to the PPR Section 2.4 and revised Statement of Commitments # 39-40
DII 28	The Department of Industry and Investment states that the outlets to the stormwater detention basins/wetlands also need to be designed to facilitate colonisation by native fish species. It is important to ensure that the spillway/outlet of detention basins is designed to enable colonisation by native fish species such as gudgeons, eels and galaxias to move upstream from Marshall Mount Creek and Macquarie Rivulet during high flow events. These native species will occupy the habitat and prevent colonisation of basins by exotic species (particularly those dumped from aquariums by local residents) as well as help control mosquito populations in the basins (and thereby enhance the "liveability" of the neighbourhood).	Noted. Refer response at Item DII 27 above. Refer also to new Statement of Commitment # 39-40
DII 29	The Department of Industry and Investment states that in this regard, spillways/outlets must not be pipes or vertical or steep concrete walls because fish have great difficulty getting past such structures. Spillways/outlets should be designed and constructed as sloped, rocky riffles that fish can easily ascend. Similarly, the installation of services such as water, sewage and gas pipelines across waterways can be problematic for water quality and fish passage particularly where trenching across the waterway is required.	Noted. Wherever feasible the installation of services such as water, sewage and gas pipelines will be combined with other vehicular crossings. Refer also to new Statement of Commitment # 31
	Department of Industry and Investment Recommended Conditions	
DII 30	<ul style="list-style-type: none"> That all waterway crossings (both permanent and temporary) be designed and constructed in accordance with the Fish Passage Guidelines - Why do fish need to cross the road? Fish passage requirements for waterway crossings (NSW Fisheries 2003)). 	Refer to item DII 27 above Refer also to the PPR Section 2.4 and revised Statement of Commitments # 39-40

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DII 31	<ul style="list-style-type: none"> That designs for stormwater detention basins (specifically the outlet structures) be developed in consultation with I&I NSW (Fisheries) to ensure that fish passage and fish habitat requirements are taken in to account. 	Noted. Refer Item DII 30 above
DII 32	<ul style="list-style-type: none"> That a plan for the installation of services (water, sewage, gas) pipelines across waterways be developed in consultation with I&I NSW (Fisheries) to ensure that fish passage and fish habitat requirements are taken in to account. 	Noted. Refer Item DII 30 above
	Minerals Comments	
DII 33	The Department of Industry and Investment states that the subject area is located within current petroleum exploration licence (PEL) 2 held by AGL Operations Pty Ltd and PEL 469 held by Leichhardt Resources Pty Ltd. Access for exploration should be maintained over as much of the area as possible.	Noted. The identified exploration licences cover a significant geographical area. The geographic extent of PEL469 (Shoalhaven Project) covers parts of Calderwood, together with parts of West Dapto, Shell Cove, Tullimbar, Albion Park and Tallawarra. This adjoins PEL 2 which also covers a significant geographical area.

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	ROADS AND TRAFFIC AUTHORITY (Letters dated 15 Jun 2010 and 16 July 2010)	
	Regional Transport	
RTA 01	The RTA states that it has undertaken a strategic assessment of the road network to ascertain the likely impacts of the proposed combined land releases of West Dapto, Tallawarra and Calderwood.	<p>The outcome of the strategic assessment has not been provided to DLL. The methodology, inputs and land use assumptions for the transport modelling undertaken by Cardno on behalf of DLL were agreed at a consultation meeting with the RTA and Department of Planning and in correspondence.</p> <p>A letter dated 30 Sep 2009 was sent to the RTA by Cardno on behalf of DLL seeking input from the RTA in relation to an agreed set of base arterial road network improvements to be included in the future road network for modelling up to 2036. No advice on this matter was formally received.</p> <p>The set of land use planning assumptions, base road network improvements and area of influence was provided to the RTA for comment at a consultation meeting. In a letter from the RTA (dated 10 November 2009) the following comments were provided by the RTA in relation to the above:</p> <ul style="list-style-type: none"> • <i>“The RTA does not object to the proponent proposed study area as provided to the RTA in the meeting held on 2 November 2009.”</i> – this refers to the proposed area of influence • <i>“The future development assumptions should be consistent with the figures in the attached land use input table which were provided to the RTA by the Department of Planning.”</i> - this refers to a set of land use planning assumptions provided to DLL for comparison. A detailed discussion of these land use assumptions and consistency with this document is provided in Appendix T to the EA, specifically Section 5.2.1. <p>The modelling undertaken was done so with the best information available to Cardno/DLL at the time it was undertaken.</p> <p>Refer EA Appendix T to the EA, specifically Section 5.2.1 and Appendices 1c, 1d and 5 to that Report.</p>
RTA 02	The RTA states that its assessment identified that the proposed land releases of West Dapto, Tallawarra and Calderwood would have a significant impact on the classified road network that could not be accommodated by road infrastructure improvements unless a significant mode shift in the order of 15 – 20% was achieved.	The outcome of the strategic assessment has not been provided to DLL. .
RTA 03	The RTA states that it strongly supports any measures to increase the use of public transport and decrease dependency on private vehicles and considers it unrealistic that 15 – 20% mode shift could be achieved noting existing mode share in the region is in the order of 5%.	<p>A mode shift of 10% was assumed in the modelling to achieve a total non-car mode share of 15%.</p> <p>A mode shift of 15-20% has not been considered.</p>
RTA 04	The RTA notes that the proponent has suggested it will be able to achieve a 10% mode shift towards public transport through a suite of measures and supports a number of the measures proposed but based on the type of development proposed doubts that the 10% mode shift will be achieved.	<p>This statement is not agreed.</p> <p>The methods for achieving mode shift are detailed in Appendix T to the EA, specifically Sections 8 and 9. Further Appendix 3A to that Report provides examples of transport Demand management at 3 existing DLL projects.</p>
RTA 04	The RTA states that in its pre-lodgement advice the RTA emphasised the need to support any mode shift assumptions with data from existing developments and further states that this has not been provided.	<p>This statement is not agreed.</p> <p>The methods for achieving mode shift are detailed in Appendix T to the EA, specifically Sections 8 and 9.</p>

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		Further Appendix 3A to that Report provides examples of transport Demand management at 3 existing DLL projects.
RTA 05	The RTA states that it has not undertaken any modelling to determine likely staging of infrastructure upgrades but has concerns that development of Calderwood could significantly alter timing of infrastructure upgrades on the classified state road network. In particular, development at Calderwood would bring forward the need for the Albion Park bypass, its connection at the F6 and associated interchanges.	It is noted that the RTA acknowledges that it has no modelling to support its concerns. Calderwood represents approximately 12% of the new Illawarra land supply requirements over a 25 to 30 year period. The impact of Calderwood as a land supply has been assessed.
RTA 06	The RTA refers to Cabinet in Confidence correspondence dated 15 October 2009 as a reason that it cannot support the scale of the land release as currently proposed.	The correspondence referred to has not been sighted by DLL, however DLL notes that the RTA has formed a view on the Project in advance of lodgement of the documentation either for Test of Adequacy or Exhibition or Assessment.
RTA 07	The RTA states that it estimates the total cost of the road infrastructure upgrades on the classified State road network to be in the order of \$613 million and that upgrades to classified regional road network is in the order of \$100 million. The RTA states that if Calderwood is approved the total cost of the road upgrades required in the area to accommodate land releases and general growth is likely to be in order of \$700 million.	The outcome of the strategic assessment has not been provided to DLL.
RTA 08	The RTA states that the Government is currently considering the preparation of an Illawarra State Infrastructure Contributions Plan (SIC) to cover the land releases of West Dapto, Tallawarra and Calderwood and that the apportionments are outlined in a letter dated 15 October 2009. The RTA states that the estimates prepared for the SIC do not include upgrades to classified regional roads.	The outcome of the strategic assessment has not been provided to DLL.
RTA 09	The RTA states that it has highlighted to the Department of Planning the importance of ensuring that suitable planning mechanisms were <i>[sic]</i> in place to ensure that future upgrades to the classified regional road network occur in a timely manner.	Delfin Lend Lease has submitted an Outline Planning Agreement for the provision of Transport and Education Infrastructure, consistent with current State Government policy – refer EA Section 5 and Appendices G and DD . The technical basis for the apportionment is provided in the TMAP and will be refined through the VPA (or equivalent contributions regime). However, the RTA has stated, in a letter dated 15 th June 2010 to the Department of Planning, that the Government is currently considering the preparation of an Illawarra State Infrastructure Contributions Plan (SIC) to cover the land releases of West Dapto, Tallawarra and Calderwood and that the apportionments are outlined in a letter dated 15 October 2009 to DOP. The Department of Planning has confirmed this. Therefore it is assumed that the SIC will be utilised to provide appropriate level(s) of state infrastructure and Calderwood will contribute to these as will all other development in the region. DLL has written to the Department on 31 st July 2010 with a formal proposal to enter into a VPA for the Project including details of specific road upgrades.
	Regional Land Use Planning	
RTA 10	The RTA notes the status of Calderwood in the Illawarra Regional Strategy as being required should the growth of the Region increase beyond projections or land supply not satisfy housing demand. The RTA notes that on this basis the Illawarra Regional Strategy implies Calderwood should only proceed if West Dapto cannot satisfy the demand and seeks clarification from the Department of Planning on this issue.	Refer The Environmental Assessment - Section 2.2 and Appendix E - Illawarra Housing and Land Supply . Also, the Department of Planning has provided the necessary clarification in a letter dated 7 th June 2010 to Shellharbour Council.

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		<p>Delfin Lend Lease has updated the relevant elements of Section 2 (Strategic Justification) of the EA to take account of the Recent Illawarra Urban Development Update and Explanatory Note and associated Government Press Releases and this is at Appendix C to the Preferred Project Report (PPR).</p> <p>The Illawarra Urban Development Programme Update Greenfield Dwelling Forecast (page 8) specifically identifies Calderwood as providing 700 dwellings in the 5 year period covered by the forecast, being 2008/09 to 2012/13. This document confirms the need for Calderwood to produce land and housing in order for Regional Strategy Dwelling targets to be met.</p>
	Proposed Direct Connections to classified State road network	
RTA 11	<p>The RTA states that the need for the roundabout at Yellow Rock Road has not been demonstrated and that it has not been demonstrated that the additional traffic cannot be accommodated by a fourth leg at the existing roundabout at Tullimbar.</p> <p>Note: The RTA has subsequently advised, on 16th July 2010, subsequent to its initial submission, that it has reconsidered the proposal for intersections on the Illawarra Highway and does not object to them subject to a number of standard conditions.</p>	<p>It is considered that the need has been demonstrated.</p> <p>An assessment of the traffic operation of the Illawarra Highway/Yellow Rock Road intersection showed:</p> <ul style="list-style-type: none"> • Stage 1 Calderwood showed that a four-way give-way control could work with only minimal delays experienced by all approaches/movements. The give way assessment assumed a short (50m) right turn bay from Illawarra Highway (westbound) into Yellow Rock Road (north). All other approaches were assumed to be one-lane. • When tested with a roundabout (all single lane approaches, with single lane circulation) there was no significant improvement in performance. • In 2031 with CUDP the give-way (as above) fails based on extensive delays for traffic on the northern approach to the intersection – no significant delays on the Illawarra Highway traffic were observed. • When tested with a roundabout (as above 2031 with Calderwood) the intersection performance improved. <p>Hence from a traffic operational perspective a four-way give-way could work for Stage 1 and the roundabout will be required by 2031. However in the Stage 1 assessment report the following comment in relation to justification of the roundabout was provided:</p> <p><i>“It is proposed to provide the principal vehicular access to the site by constructing a four arm roundabout intersection at the location of the current Illawarra Highway / Yellow Rock Road intersection. The benefits of providing a roundabout intersection to provide the primary access to the development site at this location are considered to be:</i></p> <ul style="list-style-type: none"> > <i>The proposed roundabout will be located at an existing intersection on the Illawarra Highway. Drivers travelling along the Highway will already have expectations of potential turning traffic at this location.</i> > <i>A roundabout intersection will provide a consistent intersection treatment along this portion of the Illawarra Highway (at Broughton Avenue) to avoid motorist confusion in travelling through successive different intersection types.</i> > <i>The Tullimbar development opposite the CUDP provides a smaller residential yield than that contemplated for CUDP. However, the Tullimbar development has recently achieved the provision of a roundabout intersection to provide site access.</i>

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		<p>> Roundabouts have a good safety performance and can assist in reducing through traffic speeds to a level more appropriate to the extension of the urban environment which the CUDP will create.</p> <p>> A roundabout treatment will minimize delays and queues to side road entering traffic.</p> <p>A secondary point of access will be provided by the addition of a northern arm to the existing Illawarra Highway / Broughton Avenue roundabout. This secondary access will enable bus and cyclist permeability thorough the southeastern portion of the development."</p> <p>Furthermore this location is flood free, compared to the existing Tullimbar roundabout, and therefore would be a significant regional evacuation route once Calderwood is fully implemented.</p>
RTA 12	The RTA request clarification of the access arrangements on the Illawarra Highway west of the junction with Yellow Rock Road.	The RTA has advised on 16 th July 2010, subsequent to its initial submission, that it has reconsidered the proposal for intersections on the Illawarra Highway and does not object to them subject to a number of standard conditions.
RTA 13	The RTA states that any direct connections would need to be fully funded by the developer and not considered as contributions associated with the SIC.	DLL has written to the Department on 31 st July 2010 with a formal proposal to enter into a VPA for the Project including details of specific road upgrades.

ITEM No.	TOPIC	PROPONENT RESPONSE
	RTA (Letter dated 16 July 2010)	
RTA 14	RTA is unable to make an informed comment on the likely impacts of the Stage 1 Project Application on the surrounding road network. Once the above issues are addressed the RTA will recommence its detailed assessment. Electronic copies of all modelling needs to be provided to the RTA.	Electronic copies of the modelling have been provided to the RTA by Cardno.
RTA 15	The RTA has reconsidered the proposed roundabout at the intersection of the Illawarra Highway and Yellow Rock Road. In this regard, if the Minister of Planning determines to approve the Stage 1 Project Application, the RTA would not object to the developer constructing a roundabout at this location on the following conditions.	Noted
RTA 16	The RTA has no objections to the proposed fourth leg at the Illawarra Highway and Broughton Avenue. If the Minister of Planning determines to approve the Stage 1 Project Application, the RTA would not object to the developer constructing a roundabout at this location on the following conditions.	DLL has written to the Department on 31 st July 2010 with a formal proposal to enter into a VPA for the Project including details of specific road upgrades. Refer to the PPR Section 4.2 and Appendix J
RTA 17	If the Minister of Planning determines to approve the Stage 1 Project Application, the proposed development should be designed such that road traffic noise from the Illawarra Highway is mitigated by durable materials.	DLL has written to the Department on 31 st July 2010 with a formal proposal to enter into a VPA for the Project including details of specific road upgrades. Refer to the PPR Section 4.2 and Appendix J
RTA 18	The RTA has considered the option of developing the northern part of the Calderwood Land Release first. RTA would not support developing the northern part of Calderwood in Stage 1 until the Local road network is upgraded to an appropriate level.	Noted and agreed.

ITEM No.	TOPIC	PROPONENT RESPONSE
	KIAMA COUNCIL (Letter dated 8 June 2010)	
	Infrastructure	
KCC 01	<p>Council states that the development will split infrastructure funding for the Illawarra and potentially make infrastructure development across the region uneconomic by releasing too many development fronts to ensure economic funding of water, sewer, electricity and road infrastructure.</p> <p>Council states that it therefore objects to the release of Calderwood at this time as it is important to ensure economic provision of infrastructure on already committed development fronts at West Dapto and Tallawarra.</p>	<p>This statement is not correct. This proposal has an independent private sector led servicing strategy. Appendix Y to the EAR - Utility Services Study for Concept Plan Application (Cardno) explains the utility services delivery strategy. Appendix G to the EAR - Infrastructure, Services and Facilities Implementation and Delivery Proposal (DLL) details the methods for delivery of all requirements for the Project.</p> <p>Calderwood is not proposed as a substitute for West Dapto. The Environmental Assessment - Section 2.2 and Appendix E - Illawarra Housing and Land Supply articulates the need for all Release Areas to be in production to meet land supply targets.</p> <p>Refer to the PPR Section 2.1 and Appendix C</p>
	Land Release	
KCC 02	<p>Council states that there is already sufficient land released at West Dapto, Tallawarra, Tullimbar, Flinders, Shell Cove, Cedar Grove and Elambra to meet the required demand for Greenfield lots.</p> <p>Council also states that Calderwood should be retained for future release when infrastructure has moved towards this location due to the release of other lands in West Dapto and therefore objects to the release of Calderwood at this stage and recommends that Calderwood is considered at a future date.</p>	<p>Refer The Environmental Assessment - Section 2.2 and Appendix E - Illawarra Housing and Land Supply.</p> <p>Also, the Department of Planning has provided the necessary clarification in a letter dated 7th June 2010 to Shellharbour Council.</p> <p>Delfin Lend Lease has updated the relevant elements of Section 2 (Strategic Justification) of the EA to take account of the Recent Illawarra Urban Development Update and Explanatory Note and associated Government Press Releases and this is at Appendix C to the Preferred Project Report (PPR).</p> <p>The Illawarra Urban Development Programme Update Greenfield Dwelling Forecast (page 8) specifically identifies Calderwood as providing 700 dwellings in the 5 year period covered by the forecast, being 2008/09 to 2012/13. This document confirms the need for Calderwood to produce land and housing in order for Regional Strategy Dwelling targets to be met. Refer to the PPR Section 2.1 and Appendix C</p>
	Loss of Agricultural Land	
KCC 03	<p>Council states that Stage 1 of the proposed Calderwood Estate has a significant proportion of residential development identified within the existing quarry (sic) rivulet floodplain. Kiama Council has a strongly held position that high quality agricultural land close to urban development should be retained as a land resource for food production.</p> <p>Council also states that this position is now a high priority given projected climate change impacts, the impacts of predicted "peak oil" and the projected urban development of high quality agricultural land in both the north-west and south-west sectors of Sydney.</p> <p>The retention of agricultural land in both the Sydney and the Illawarra regional context should have a high priority for future food production potential.</p>	<p>These statements are not agreed. As demonstrated in the EA – Section 2 and Appendix F – Illawarra Regional Strategy Sustainability Criteria, and confirmed by the Department of Planning on 7th June 2010, Calderwood is consistent with the Regional Strategy. The Strategy states with regards to agricultural land as follows::</p> <ul style="list-style-type: none"> • <i>"the Regional Strategy will promote the economic, food production and community values of existing agricultural lands and protect them from inappropriate urban expansion (other than that identified under this Strategy or in accordance with the Sustainability Criteria) [our emphasis]..." (p36); and</i> • <i>"New residential (other than those identified in Chapter 6 Housing and Settlement) [our emphasis] or rural residential zones will only be supported where they meet the Sustainability Criteria (Appendix 1)..." (p37).</i> <p>The Calderwood project is identified for development in the IRS and in Chapter 6 in accordance with the above. Refer to the PPR Section 2.1 and Appendix C</p>

ITEM No.	TOPIC	PROPONENT RESPONSE
	Stage 1 Development	This is covered in the Stage 1 PPR, lodged under separate cover
KCC 04	Council states that it objects to the Stage 1 residential construction within the Macquarie Rivulet floodplain.	<p>This statement is not agreed. It is inconsistent with the Floodplain <u>Development</u> Manual, which promotes <i>“the use of a merit approach which balances social, economic, environmental and flood risk parameters to determine whether particular development or use of the floodplain is appropriate and sustainable. In this way the policy avoids the unnecessary sterilisation of flood prone land.....”</i></p> <p>Appendices N and R to the EA - The Water Cycle Management Study, Flood Study and Floodplain Risk Management Study have been prepared in accordance with the Floodplain Development Manual.</p>
	Biodiversity / Vegetation Management	
KCC 05	<p>Council states that the Yallah Calderwood area contains identified habitat and biodiversity corridors which are regionally important. These corridors are identified in a number of documents including:</p> <ul style="list-style-type: none"> • Illawarra Regional Strategy as a regional habitat corridor with the Strategy making the following comment: <i>“These corridors could potentially be enhanced to offset the loss of biodiversity that may occur through development elsewhere in the region. The planning of the new West Dapto new release area provides a particular opportunity to enhance the protection of the best remaining vegetation corridor between the escarpment and the coastal plain between Marshall Mount and Yallah”</i> • The draft Regional Biodiversity Strategy identifies the Yallah corridor and Johnstons Spur both of which adjoin the Calderwood Valley as important biodiversity corridors. <i>“This corridor represents the main opportunity in the Illawarra for conservation of the largest remnants of Illawarra Grassy Woodlands. This community is endemic to the Illawarra and has been severely depleted.”</i> • Southern Rivers CMA Catchment Action Plan and Draft Illawarra Sub-Regional Plan have identified the east west linkages between the escarpment, Lake Illawarra and the coast as requiring strengthening including the Yallah/Marshall Mount corridor. <p>Council states that the proposed Calderwood Estate Concept Plan while identifying the need to provide for habitat and biodiversity corridors, has only addressed this in token terms and they [sic] have primarily ignored the strengthening of the Marshall Mount / Yallah corridor in favour of corridors along the Marshall Mount Creek and Macquarie Rivulet</p>	<p>These statements are not agreed. As demonstrated in the EA, particularly Section 4, the Concept Plan delivers a balanced outcome between development and sustainable land management and provides a structure plan that addresses the manner in which site wide environmental issues and relationships including conservation, use and management of riparian corridors, and associate issues have been resolved. In particular, it:</p> <ul style="list-style-type: none"> • It protects all existing vegetation of value through land use zoning (for example E2 and E3 zones for Johnstons Spur and other remnant woodlands) and the ESL layer; and • It connects Johnstons Spur to the two main riparian corridors (Marshall Mount Creek and Macquarie Rivulet) via a series of green links that follow riparian corridors and incorporate existing vegetation of value (ie within the ESL layer).
KCC 06	Council states that while these two corridor locations are supported to achieve part of the Biodiversity Strategy and Regional Strategy outcomes, the detail identified in documentation indicates that these corridors are not proposed to be replanted or strengthened.	<p>This statement is incorrect.</p> <p>The EA Section 6 – Major Development SEPP Amendment Proposal and Appendix CC – Landscape and Open Space Masterplan provide clear evidence that these corridors will be retained and strengthened. Specifically:</p> <ul style="list-style-type: none"> • The areas referred to are proposed to be zoned RE1 and SP2-d. The RE1 lands are contiguous with the main riparian corridors (zoned SP2-d); • The RE1 lands are generally flood affected and mostly devoid of built form (except for suitable infrastructure). The RE1 lands provide an effective riparian “buffer” to the Marshall Mount Creek and Macquarie Rivulet; and

ITEM No.	TOPIC	PROPONENT RESPONSE
		<ul style="list-style-type: none"> They are generally open grasslands, together with some district and local parks. Where relevant, they may be planted with native grasses and other suitable native species (ie those that do not increase flood affectation or increase the width of APZs) to provide for broad "riparian" outcomes.
KCC 07	Council states that given Council's already stated concerns about the filling of flood plains Council considers that any Structure Plan for the Calderwood area should ensure enhancement of the Macquarie Rivulet, Marshall Mount Creek and Yallah/Marshall Mount ridgeline habitat and biodiversity corridors.	As demonstrated in the EA, particularly Section 4 , the Concept Plan delivers a balanced outcome between development and sustainable land management and provides a structure plan that addresses the manner in which site wide environmental issues and relationships including conservation, use and management of riparian corridors, and associated issues have been resolved.
	Riparian corridor / infrastructure zoning	
KCC 08	Council states that these corridors should be zoned appropriately for their habitat and biodiversity value. They should not be zoned SP2(d) Drainage as proposed in the suggested zoning plan.	<p>This statement is not agreed. The proposed zoning recognises that riparian corridors have a drainage function and a potential ecological function. Where vegetation of value currently exists, this is protected via the ESL layer. Both main riparian corridors have significant ESL coverage, reflecting their ecological value. The proposed zoning also reflects current State Government policy where in the Sydney Growth Centres (specifically Riverstone and Alex Avenue precincts) riparian corridors are often zoned SP2.</p> <p>Notwithstanding, DLL proposes amending the SP2-d zone. Refer to the PPR Section 3.2 and revised Zoning Plan at Appendix H</p>
KCC 09	Council states that these corridors are required to ensure that regional vegetation and biodiversity have the capacity to adapt to future projected climate change impacts at the local climate and biodiversity level.	Noted. The issue of climate change has been addressed in the EAR documentation specifically at Section 3.1.12.
KCC 10	<ul style="list-style-type: none"> The placement of residential development within the floodplain in Stage 1 of the proposed Calderwood Estate between the Illawarra Highway and Macquarie Rivulet has the potential to limit regional transport linkages from Port Kembla and the Illawarra to the tablelands and Canberra. 	DLL proposes amending the Concept Plan to take greater account of the proposed Albion Park Bypass / Tripoli Way Extension. Refer to the PPR Section 2.6, Appendix F and revised Concept Plan in Appendix L
KCC 11	<ul style="list-style-type: none"> There is an inland port identified within the Wingecarribee Shire area between Moss Vale and Berrima which will need significant transport access to and from the port of Port Kembla and the Illawarra generally. 	Noted. Refer response to Item KCC 10 above.
KCC 12	<ul style="list-style-type: none"> Residential development between the Illawarra Highway and Macquarie Rivulet should therefore be removed to ensure the future security of regional transport opportunities which allow the bypassing of the Albion Park town centre by both regional traffic and traffic from the Calderwood Estate. 	This statement is not agreed. Refer response to Item KCC 10 above.
KCC 13	<ul style="list-style-type: none"> The amenity and safety of the Albion Park town centre would be significantly adversely affected if Albion Park bypass opportunities are removed as a result of the placement of residential development within the Macquarie Rivulet floodplain. 	Noted. Refer response to Item KCC 10 above.
	General Conclusion	
KCC 14	Council states that from a regional perspective Council considers that the issues raised above identify significant concerns that warrant the deferral of the Calderwood area at this time in favour of a focus on existing land releases within the Illawarra.	This statement is not agreed. Refer response to Items KCC 01 and KCC 02 above.
	Requested Approval Conditions	
	However should the Minister and the Department of Planning determine that Calderwood should proceed then:	
KCC 15	<ul style="list-style-type: none"> Stage 1 should be modified to remove residential land within the Macquarie Rivulet floodplain to retain the food production land resource and the capacity to provide for regional transport corridors bypassing Albion Park. 	This statement is not agreed. Refer to response at Item KCC 04 and KCC 10 above.

ITEM No.	TOPIC	PROPONENT RESPONSE
KCC 16	<ul style="list-style-type: none"> The Structure Plan should be modified to ensure that the Macquarie Rivulet, Marshall Mount Creek and Marshall Mount habitat and biodiversity corridors are strengthened in accordance with the Illawarra Regional Strategy, Illawarra Biodiversity Strategy and Southern Rivers CMA Catchment Action Plan and Illawarra Sub-Regional Plan. 	<p>This statement is not agreed. The EA Section 6 – Major Development SEPP Amendment Proposal and Appendix CC – Landscape and Open Space Masterplan provide clear evidence that these corridors will be retained and strengthened. Specifically:</p> <ul style="list-style-type: none"> The areas referred to are proposed to be zoned E2 and Re1. The RE1 lands are contiguous with the main riparian corridors zoned E2); The RE1 lands are generally flood affected and mostly devoid of built form (except for suitable infrastructure). The RE1 lands provide an effective riparian “buffer” to the Marshall Mount Creek and Macquarie Rivulet; and They are generally open grasslands, together with some district and local parks. Where relevant, they may be planted with native grasses and other suitable native species (ie those that do not increase flood affectation or increase the width of APZs) to provide for broad “riparian” outcomes. <p>Notwithstanding, DLL proposes amending the SP2-d zone. Refer to the PPR Section 3.3 and revised Zoning Plan in Appendix H</p>
KCC 17	<ul style="list-style-type: none"> The zoning of the habitat and biodiversity corridors is [sic] appropriate for the achievement of these biodiversity objectives not the SP2(d) Drainage zone proposed by the applicant. 	<p>The proposed zoning recognises that riparian corridors have a drainage function and a potential ecological function. Where vegetation of value currently exists, this is protected via the ESL layer. Both main riparian corridors have significant ESL coverage, reflecting their ecological value. The proposed zoning also reflects current State Government policy where in the Sydney Growth Centres (specifically Riverstone and Alex Avenue precincts) riparian corridors are often zoned SP2.</p> <p>Notwithstanding, DLL proposes amending the SP2-d zone. Refer to the PPR Section 3.3 and revised Zoning Plan in Appendix H</p>

ITEM No.	TOPIC	PROPONENT RESPONSE
	CATCHMENT MANAGEMENT AUTHORITY (letter dated 11 June 2010)	
CMA 01	<p>The Southern Rivers Catchment Management Authority (Southern Rivers CMA) states that it is a consent authority under the Native Vegetation Act 2003 (NVA) and that the Native Vegetation Act primarily applies to rural and rural residential land.</p> <p>The Catchment Management Authority acknowledges that the NVA does not apply to the proposal and quotes extensively from the Act.</p>	It is noted that all comments about the NVA do not apply to the proposal.
CMA 02	<p>The Catchment Management Authority states that the 'maintain or improve' principle, which underpins the Native Vegetation Act, is also reflected in the <i>Illawarra Regional Strategy</i> (DoP 2007). Southern Rivers CMA strongly encourages the Department of Planning to require further commitment from the development proponent in upholding the 'maintain or improve' principle and protecting native vegetation values.</p>	<p>It is noted that this statement is not relevant as the NVA (and therefore the 'maintain and improve' principle) does not apply to Part 3A developments. However it is also noted that the EA Section 6 – Major Development SEPP Amendment Proposal and Appendix CC – Landscape and Open Space Master Plan provide clear evidence that these corridors will be retained and strengthened. Specifically:</p> <ul style="list-style-type: none"> • The areas referred to are proposed to be zoned RE1 and SP2-d. The RE1 lands are contiguous with the main riparian corridors (zoned SP2-d); • The RE1 lands are generally flood affected and mostly devoid of built form (except for suitable infrastructure). The RE1 lands provide an effective riparian "buffer" to the Marshall Mount Creek and Macquarie Rivulet; and • They are generally open grasslands, together with some district and local parks. Where relevant, they may be planted with native grasses and other suitable native species (ie those that do not increase flood affectation or increase the width of APZs) to provide for broad "riparian" outcomes.
	Yallah-Calderwood and Johnstons Spur corridors	
CMA 03	<p>The Catchment Management Authority states that the proposal impinges upon and further threatens the well recognised Johnstons Spur corridor and parts of the Yallah-Calderwood corridor which serve important ecological functions within the Illawarra landscape. These form a critical link between the escarpment to sea for flora and fauna. The corridors have been identified by several strategic planning documents confirming their significance since 2002. Some of these include the <i>Illawarra Bioregional Assessment</i> (NPWS 2002), <i>Illawarra Escarpment Strategic Management Plan</i> (WCC 2007), <i>Illawarra Regional Strategy</i> (DoP 2007) and more recently the draft <i>Illawarra NRM Action Plan</i> (SRCMA 2010) and the draft <i>Illawarra Biodiversity Strategy</i> (WCC 2010).</p>	<p>This statement is not agreed and not supported by the facts:</p> <ul style="list-style-type: none"> • The Calderwood project results in a balanced outcome between development and sustainable land management; • Johnstons Spur is protected through E2 and E3 zoning and by the ESL layer; and • Johnstons Spur is connected to the two main riparian corridors (Marshall Mount Creek and Macquarie Rivulet) via a series of green links that follow riparian corridors and incorporate existing vegetation of value (ie within the ESL layer); <p>The EA Section 6 – Major Development SEPP Amendment Proposal and Appendix CC – Landscape and Open Space Master Plan provide clear evidence that these corridors will be retained and strengthened. Specifically, the areas referred to are proposed to be zoned RE1 and SP2-d. The RE1 lands are contiguous with the main riparian corridors (zoned SP2-d). Notwithstanding, DLL proposes amending the SP2-d zone. Refer to the PPR Section 3.3 and revised Zoning Plan in Appendix H.</p>
CMA 04	<p>The Catchment Management Authority states that Mills and Associates (2000) noted that Johnstons Spur was a core conservation area due to its extensive area of dry foothills forests, including Illawarra Lowlands Grassy Woodland and dry rainforest communities; habitat for several forest dwelling threatened fauna species and habitat for many regionally significant flora and fauna species.</p>	<p>Refer response at Item CMA 03 above.</p> <p>Also, the EA and Appendix Q Flora and Fauna Assessment address the issue of habitat retention in great detail.</p>

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CMA 05	Southern Rivers CMA recommends that the existing patches of remnant vegetation on ridge lines are enhanced to support the ecological function of the Johnstons Spur and Yallah-Calderwood corridors.	Noted. DLL consider this is already the case and the EAR documentation and specifically the Appendix Q Flora and Fauna Assessment address this issue in detail: Johnstons Spur and other patches of remnant vegetation are protected through E2 and E3 zoning and by the ESL layer.
	Riparian corridor / infrastructure zoning	
CMA 06	It is proposed to zone the riparian corridors throughout the development site as SP2 Infrastructure. The zoning allows activities intended to cover a wide range of physical and human infrastructure uses such as transport and utilities. This zoning does not recognise the value of the riparian zones ecological function, significant vegetation communities and the important role they play within the corridors mentioned above.	Not agreed. The proposed zoning recognises that riparian corridors have a drainage function and a potential ecological function. Where vegetation of value currently exists, this is protected via the ESL layer. Both main riparian corridors have significant ESL coverage, reflecting their ecological value. The proposed zoning also reflects current State Government policy where in the Sydney Growth Centres (specifically Riverstone and Alex Avenue precincts) riparian corridors are often zoned SP2 Notwithstanding, DLL proposes amending the SP2-d zone. Refer to the PPR Section 3.3 and revised Zoning Plan in Appendix H.
CMA 07	The Southern Rivers CMA states that it recognises that there is an environmentally sensitive lands layer proposed to try to accommodate these issues, however the Southern Rivers CMA are of the opinion this is a misleading use of the zone. A more suitable zoning from the outset should be selected to accommodate the primary objective and role this zone plays in the landscape. This is also inconsistent with the [soon to be gazetted] draft <i>West Dapto LEP</i> (2007) which has riparian corridors zoned E3.	Not agreed. The current SP2 zone and ESL layer offer both protection and balance. Notwithstanding, DLL proposes amending the SP2-d zone. Refer to the PPR Section 3.3 and revised Zoning Plan in Appendix H.
	Loss of Agricultural Land	
CMA 08	The Catchment Management Authority states that the Illawarra region has fertile soils and a generally reliable rainfall pattern. Loss of agricultural land for food production by urban expansion is an issue acknowledged by <i>The Illawarra Regional Strategy</i> (DoP, 2007) and the draft <i>Illawarra NRM Action Plan</i> (SRCMA 2010).	These statements are not agreed. As demonstrated in the EA – Section 2 and Appendix F – Illawarra Regional Strategy Sustainability Criteria , and confirmed by the Department of Planning on 7 th June 2010, Calderwood is consistent with the Regional Strategy. The Strategy states with regards to agricultural land as follows: <ul style="list-style-type: none"> “the Regional Strategy will promote the economic, food production and community values of existing agricultural lands and protect them from inappropriate urban expansion (other than that identified under this Strategy or in accordance with the Sustainability Criteria) [our emphasis]...” (p36); and “New residential (other than those identified in Chapter 6 Housing and Settlement) [our emphasis] or rural residential zones will only be supported where they meet the Sustainability Criteria (Appendix 1)...” (p37). The Calderwood project is identified for development in the IRS and in Chapter 6 in accordance with the above.
CMA 09	In the context of climate change and future population needs the land is highly valuable, particularly the alluvial plains and lower slopes of Johnsons Spur. The Southern Rivers CMA recommends that the loss of high value agricultural lands is minimised.	Refer response to Item CMA 08 above.

ITEM No.	TOPIC	PROPONENT RESPONSE
	LAKE ILLAWARRA AUTHORITY (letter dated 11 June 2010)	
	Flooding / Water Quality	
LIA 01	The Lake Illawarra Authority notes that the Project will lead to adverse impacts on the catchment of Lake Illawarra from the proposed development especially during times of flood.	This statement is strenuously rejected. The LIA has not demonstrated that it has undertaken genuine analysis of the proposal.
LIA 02	The Lake Illawarra Authority states that there will be considerable additional pressure placed on Lake Illawarra over the next 25 years with the release of urban areas at West Dapto and Tallawarra.	Noted.
LIA 03	The Lake Illawarra Authority states that considerable consultation was undertaken before the relevant LEPs which guide these future developments were approved.	Noted.
LIA 04	An approval under Part 3A of a further release in Calderwood Valley with future development proposed over a lengthy timeframe will compound the expected pressures on Lake Illawarra.	<p>This statement is incorrect. There are no flood related impacts to Lake Illawarra.</p> <p>For the Concept Plan, these are clearly documented in the EA – Appendix N Water Cycle Management Study, Section 5. Full results of this modeling are contained in Appendix C of the same report.</p> <p>For the Stage 1 Project Application and the related water quality impacts, these are clearly documented in Section 3.8 of the Stage 1 Project Application Design Report. Full results of this modeling are contained in Appendix B of the same report.</p>
LIA 05	The Lake Illawarra Authority states that on-going protection of Lake Illawarra should be ensured by strict conditions and development controls such as a comprehensive LEP.	Noted.
LIA 06	The Lake Illawarra Authority states that it objects to the application on the basis that there are no clear long term controls to ensure the protection of the water quality and ecosystems of Lake Illawarra. The Lake Illawarra Authority states that It is unclear as to how the developer proposes to manage these impacts. The LIA also states that it is concerned about the poor water quality of catchment runoff into Lake Illawarra and considers that the Department of Planning should only support actions which lead to improvements in the overall environment of the lake.	This statement is not correct and is not agreed. The EA Section 4.11 – and Appendix N – Water Cycle Management Study detail the water sensitive urban design measures to apply to the Project, including during construction.
LIA 07	The Lake Illawarra Authority states that it objects to the approval of Stage 1 of the Calderwood Concept Plan being approved without adequate development conditions that will ensure the protection of catchment inputs into Lake Illawarra. The use of the cut and fill strategy on the floodplain as proposed is not considered an environmentally efficient way of achieving future urban land development.	This statement is not correct and is not agreed. The EA Section 4.11 – and Appendix N – Water Cycle Management Study detail the water sensitive urban design measures to apply to the Project, including during construction.
LIA 08	The Lake Illawarra Authority states that the Growth Centres Commission report for the West Dapto Review considered that this method (cut and fill) should be abandoned. There will be significant risk that if cut and fill is allowed then sediment loads will increase on downstream waterways and flooding will be exacerbated in surrounding and downstream properties.	<p>This statement is not correct and not supported by the facts:</p> <ul style="list-style-type: none"> First, the Growth Centres Commission report for the West Dapto Review considered that the proposed cut and fill regime for the WDRA was inefficient due to the numerous landholdings involved and lack of any proposed, coordinated management regime. Neither of these issues occur at Calderwood; Second, sediment loads can be managed via standard conditions of consent ; and Third, the flood studies show that the proposed cut and fill will not exacerbate flooding of downstream waterways.

ITEM No.	TOPIC	PROPONENT RESPONSE
LIA 09	<p>The Lake Illawarra Authority states that it supports the principles of Ecologically Sustainable Development, the retention of appropriate widths for riparian corridors, the establishment of an environmental corridor that links the Illawarra Escarpment to Lake Illawarra and good future development containing water sensitive urban design.</p> <p>The Lake Illawarra Authority states that if approval of the Calderwood Concept Plan is granted there should be adequate conditions placed on the development to achieve these outcomes and protect Lake Illawarra.</p>	<p>Noted.</p> <p>Sustainability measures which address these concerns are detailed in the EA Sections 2.7, 4.4 and 6.</p>

ITEM No.	TOPIC	PROPONENT RESPONSE
	RURAL FIRE SERVICE (letter dated 4 May 2010)	
RFS 001	This RFS response applies to the Stage 1 residential subdivision within the Calderwood Urban Development Project.	The issues identified by the RFS are covered in the Stage 1 PPR, lodged under separate cover
RFS 002	It is noted that although land covered by the Urban Development Project is identified as bush fire prone, the area affected by Stage 1 is not identified.	Noted and agreed. There is no bush fire prone land within the Stage 1 area.
RFS 003	The information provided indicates an area along the Macquarie Rivulet and in the south eastern corner of the Stage 1 area to be revegetated. As indicated in the letter dated 26 February 2010 from Ecological Australia, if this area is to be enhanced and revegetated then an Asset Protection Zone (APZ) will be required.	Noted. The requirement for an APZ is considered likely given the proposed level of revegetation of the Macquarie Rivulet and surrounding land.
RFS 004	The APZ detailed in the consultants report are based on Planning for Bush Fire Protection 2006 (PBFP 2006). It should be noted that recent changes have occurred to PBFP 2006 as a result of the introduction of AS3959 – Construction of Buildings in Bush Fire Prone Areas 2009 on 1 May 2010. This may result in greater APZ and/or construction requirements than those identified in the Bushfire Protection Assessment and will be dependent on the extent of revegetation to occur. Based on the above the NSW Rural Fire Service provides the following advice regarding bush fire protection measures for the proposed development.	Noted
RFS 005	1. Asset protection zones in accordance with PBFP 2006.	Noted and agreed
RFS 006	2. Public roads are to comply with section 4.1.3 of PBFP 2006.	Noted and agreed
RFS 007	3. Water, electricity and gas are to comply with sections 4.1.3 and 4.2.7 of PBFP 2006.	Noted and agreed
RFS 008	4. Construction of future dwellings in accordance with Appendix 3 of PBFP 2006 and AS3959 – Construction of Buildings in Bush Fire Prone Areas 2009.	Noted and agreed
RFS 009	5. Landscaping and property maintenance within the site is to comply with the principles of Appendix 5 of PBFP 2006.	Noted and agreed

ITEM No.	TOPIC	PROPONENT RESPONSE
	NSW OFFICE OF WATER (letter dated 15 June 2010)	
NOW 01	<p>The NOW has major concerns with the proposal as presented in the State Significant Site (SSS) and Concept Plan Environmental Assessment (EA) report and relevant documentation. The NOW's key issues of concern are in relation to:</p> <ul style="list-style-type: none"> the protection and enhancement of watercourses as stable, natural systems. the protection and enhancement of riparian land the protection of groundwater and groundwater dependent ecosystems 	These issues are addressed in detail below.
NOW 02	Please note, the NOW has not provided recommended Conditions of Approval in this submission but could do so once further information is provided on the key issues and the NOW's recommended amendments are incorporated into the project proposal as outlined in Attachment A	This is not accepted by the proponent as it could significantly delay implementation. The PPR is the appropriate statutory process to respond to issues raised during public exhibition. If NSW Office of Water has a series of further recommended Conditions in addition to those provided in Appendix A then they should be identified now so they can be reviewed by the proponent and incorporated into the PPR.
	Floodplain reshaping (cut and fill)	
NOW 03	The NOW states that there is insufficient information in the EA documentation to demonstrate that the watercourses will be stable and that natural solutions to these watercourses can be achieved following the proposed modifications to the landform.	Not agreed. The Calderwood project is based wholly around working with the constraints of the current 2010 catchment conditions (rather than pre-European settlement conditions) and to improve upon these. If Macquarie Rivulet is 'unstable' the adopted strategy would be to work with this constraint and design an appropriate solution, not to embark on fixing catchment wide issues that are a result of current or historic land clearing practices. Refer to the PPR Section 2.3
NOW 04	The NOW states that the Geomorphic Assessment does not adequately assess the impact of the proposed filling and excavation and needs to be related to the Project site and not somewhere else (ie: the existing Albion Park site) and assess the impacts of the proposed cut and fill.	<p>This statement is not agreed and is inaccurate.</p> <p>The EA Appendix M Geomorphic Assessment comprises 47 pages of assessment and figures relating to the Project. Six pages relate which was provided as a relevant "Case Study" as all of the triggers for geomorphic impacts have already occurred in the catchment over the last 50 years with very little of the geomorphic impact mitigation measures that are proposed for Calderwood.</p> <p>As such, we consider it prudent to provide the Albion Park example as it is an existing, real-life, physical example of unmitigated urban development within the Macquarie Rivulet catchment. The geomorphic assessment is therefore entirely site specific and uses real life comparators to assess potential impacts, rather than industry guidelines or subjective statements.</p> <p>Refer to the PPR Section 2.3</p>
NOW 05	The NOW states that the DOP needs to be satisfied that the proposal will not result in adverse impacts. The NOW considers it important that the proponent adequately demonstrate that there will be no adverse impacts before approval can be provided.	<p>Noted.</p> <p>Flood related impacts have been fully assessed in the EA Appendix R Section 5.1 of the Floodplain Risk Management Study. This procedure is regionally consistent and is the same procedure devised by DECCW for the West Dapto flood related impact assessment.</p>
NOW 06	NOW states that the Flood Mitigation Plan shows the proposed cut and fill areas stop at the boundary of the project site. Details are required on the potential impacts of the cut and fill upstream and downstream of the site and how the cut and fill areas are going to be merged with the adjacent land both upstream and downstream of the site.	<p>Concept engineering plans clearly show how the batters and earthworks match fully into the existing environment. These plans are consistent with the level of detail required at the Concept Plan stage.</p> <p>Refer EA Appendix R – Floodplain Risk Management Study.</p>

ITEM No.	TOPIC	PROPONENT RESPONSE
NOW 07	The NOW states that the proposed floodplain filling is likely to cause an increase in the velocities and shear stresses. The excavated areas may cause the streams to change course (by avulsion) and affect the landowners downstream of the site.	Not agreed. The flood model lodged with the EAR document meets and generally exceeds the requirements of the DGRs and is considered a suitable and acceptable solution. Refer EA Appendix R – Floodplain Risk Management Study.
	The NOW states that details are required on:	
NOW 08	<ul style="list-style-type: none"> The impacts of the proposed reshaping on groundwater flow and creek base behaviour 	The modelling provided to date meets and generally exceeds the requirements of the DGR's. The requested information is not required to meet the DGRs and is considered "extreme". DLL's consultants (Cardno) has not been asked for such information in its 35 year history of assessing flood impact.
NOW 09	<ul style="list-style-type: none"> The extent that the watercourses may be required to be modified and enlarged 	Refer response at Item NOW 6 above.
NOW 10	<ul style="list-style-type: none"> The proposed areas, depths of excavation and potential impacts associated with the excavation 	Refer response at Item NOW 6 above.
NOW 11	<ul style="list-style-type: none"> The proposed depths, volumes and levels of filling and the potential impacts associated with the filling 	Refer response at Item NOW 6 above.
NOW 12	<ul style="list-style-type: none"> The pre and post velocities and shear stresses for the full range of hydraulic events and whether any change exceeds the natural stability thresholds 	The modelling provided to date meets and generally exceeds the requirements of the DGR's. The requested information is not required to meet the DGRs and is an extreme requirement not seen by DLL's consultants (Cardno) in its 35 year history.
NOW 13	<ul style="list-style-type: none"> Safeguard measures to prevent the fill from increasing the velocities and shear stresses 	Natural solutions are readily achievable, as clearly demonstrated on existing DLL projects throughout Australia (and the neighbouring Tullimbar project). Such details will be resolved at detailed design. Refer Stage 1 PA Appendix D and the PPR Appendix E
NOW 14	<ul style="list-style-type: none"> Safeguard measures to prevent the excavated areas from causing the streams to change course and affecting the landowners downstream 	Refer response at Item NOW 13 above.
NOW 15	<ul style="list-style-type: none"> Whether vegetation will be sufficient to stabilise the watercourses. If the watercourses can't be stabilised by vegetation it needs to be demonstrated how the watercourses can be stabilised. 	Refer response at Item NOW 13 above.
NOW 16	The NOW states that it is not supportive of hard engineering solutions to stabilise the watercourses and recommends stable, natural solutions along the watercourses. Details are required to demonstrate that natural solutions can be achieved.	Refer response at Item NOW 13 above and also to the PPR Section 2.4 and Appendix E.
NOW 17	The NOW states that it also needs to be demonstrated that the proposed alterations to the land form will not diminish the riparian connectivity function along the watercourses including the Macquarie Rivulet and Marshall Mount Creek.	This has already been demonstrated: riparian connectivity will be enhanced by the Calderwood proposal as a result of comprehensive zoning, landscaping and land management proposals across 700 hectares of land, especially the Macquarie Rivulet and Marshall Mount Creek. Refer EA Sections 4.2, 4.6, 4.7, 4.8, 4.11, 4.12 and 6.5.
	Riparian Land	
NOW 18	The NOW seeks clarification from the DOP on the status of the Illawarra Regional Strategy and whether the riparian actions/outcomes in the Strategy have any status? The riparian actions / outcomes of the DOP's Illawarra Regional Strategy outlines that the Riparian Corridor Management Study (RCMS) should be used as the assessment approach when planning new urban areas.	In the meeting with DECCW / NOW in October 2009 it was stated that the proponent would undertake a ground truthing exercise for all riparian corridors on site and justify departures from both the DWE (DECCW) Guideline and the RCMS. Refer EA – Appendix HH. The resulting riparian corridor network at Calderwood is the result of that agreed process. Refer EA Section 4.6 and Appendix P – Riparian Consistency Report. Refer also to the PPR Section 2.4
NOW 19	The NOW states that the Environmental Assessment (EA) indicates the watercourses have been classified according to the Strahler categorisation systems consistent with the guidelines published under the Water Management Act. The NOW notes that the riparian corridors as presented in the EA are neither consistent with the RCMS mapping for the site or the DWE (February 2008) Guideline.	Refer response at Item NOW 18 above.

ITEM No.	TOPIC	PROPONENT RESPONSE
NOW 20	The NOW states that if the strategic riparian actions / outcomes of the DOP's Illawarra Regional Strategy are not supported by DOP (ie in accordance with the RCMS), and the DWE (February 2008) Guideline is to be applied to the site, it is important that the DWE Guideline is applied correctly and it is recommended that the project proposal is amended so that the riparian outcomes are consistent with the guideline.	Refer response at Item NOW 18 above.
NOW 21	The NOW states that the DECCW/NOW has a lead role in the State Plan in relation to achieving riverine targets and there is imperative need for DOP assistance via the land use / development process (including Part 3A Major Projects) for DECCW/NOW to achieve its important State Plan riverine targets.	Noted.
NOW 22	The NOW states that the EA report only makes reference to the provision for a Core Riparian Zone (CRZ) but does not include a Vegetated Buffer (VB). Under the DWE Guideline, 1st order, 2nd order, 3rd order and greater watercourses comprise two distinct zones namely; a Core Riparian zone (CRZ) and a Vegetated Buffer (VB). The NOW does not support the proposed removal of the VB and requires 10m wide vegetated buffers to be provided on each side of the CRZ.	<p>This statement is not supported by DLL or by emerging State Government advice (eg the DoP's own draft Discussion Paper on Riparian Corridors in urban release areas) where dual use of riparian corridors is promoted, reduced riparian widths are proposed and additional vegetated buffers (VBs) are removed.</p> <p>Further, this does not appear to constitute an assessment on "merit" (as per the DWE Guidelines dated February 2008). It is noted that the DWE Guideline suggests a CRZ of between 20m-40m for 3rd order streams.</p> <p>Refer to the PPR Section 2.4 and Appendix E</p>
NOW 23	The NOW states that the EA report indicates the Concept Plan proposes to reduce the riparian widths on the site when compared with the DWE Guideline. A minimum CRZ of 48 metres total width is proposed along 2 nd order streams (ie 24 m either side of the creek) but it does not provide a 10m wide VB. In accordance with the DWE Guideline, a minimum CRZ of 20 metres plus a 10m wide VB either side of the creek is recommended along 2nd order streams (ie 30 m either side of the creek and not 24 m). Delfin's approach to remove the protective VB reduces the total riparian width along the 2 nd order streams and is not supported.	Not agreed. Refer response at NOW item 22 above and to the PPR Section 2.1 and Appendix C.
NOW 24	<p>The NOW states that the Concept Plan also proposes a minimum CRZ of 24 metres total width to 1st order streams (ie a riparian width of 12 m either side of the creek) but it does not provide a 10m wide VB. When compared to the DWE Guideline, Delfin's approach reduces the total riparian widths along 1st order streams. In accordance with the DWE Guideline, for 1st order streams which:</p> <ul style="list-style-type: none"> flow intermittently - it is recommended a minimum CRZ of 10 metres plus a 10m wide VB is provided either side of the creek (ie 20 m wide riparian area needs to be established either side of the creek and not 12 m). flow permanently - it is recommended a minimum CRZ of 20 metres plus a 10 m wide VB is recommended either side of the creek (ie 30 m wide riparian area needs to be established either side of the creek and not 12 m). 	<p>Not agreed. Refer response at NOW item 22 above. The riparian corridors proposed at Calderwood are considered to provide an appropriate width commensurate with their function and the requirement to achieve a balanced outcome between development and sustainable land management.</p> <p>Refer to the PPR Section 2.1 and Appendix C</p>
NOW 25	The NOW states that if the DWE Guideline is to be applied correctly to the site, the DOP will need to be satisfied as to whether the 1st order watercourses are intermittent or flow permanently to determine the appropriate riparian width in accordance with the guideline for 1st order streams. Section 4.6 of the SSS and Concept Plan EA report (page 113) proposes to assign a minimum total CRZ width of 92 metres (46 m either side) to Marshall Mount Creek and Macquarie Rivulet but provides no VB. In applying the DWE Guideline, Marshall Mount Creek and Macquarie Rivulet are greater than 3rd order watercourses.	<p>In the meeting with DECCW / NOW on 20 October 2009 it was stated that the proponent would undertake a ground truthing exercise for all riparian corridors on site and justify departures from both the DWE (DECCW) Guideline and the RCMS. Refer EA – Appendix HH. The resulting riparian corridor network at Calderwood is the result of that agreed process. Refer EA Section 4.6 and Appendix P – Riparian Consistency Report.</p> <p>Refer to the PPR Section 2.4 and Appendix E</p>

ITEM No.	TOPIC	PROPONENT RESPONSE
NOW 26	The NOW states that Marshall Mount Creek and Macquarie Rivulet provide important riparian corridor linkages and it is strongly recommended that the minimum CRZ width be no less than 40 m (measured from top of bank) plus there should be a 10m wide VB either side of these creeks (which equates to a minimum riparian width of 50 m either side and not 46 m as proposed). The proposed reduction of the total riparian corridor width along Marshall Mount Creek and Macquarie Rivulet should not be supported by DOP.	Not agreed. Refer response at Item NOW 22, NOW 24 and NOW 25 above. The RE1 lands adjoining the main riparian corridors provide an effective riparian “buffer” to the Marshall Mount Creek and Macquarie Rivulet that is far in excess of the 10m “vegetated buffer” proposed by NOW. Refer EA Section 4.6 and Appendix P – Riparian Consistency Report. Refer to the PPR Section 2.4 and Appendix E
NOW 27	The NOW considers Reach 4 and 5 to be one of the key waterways on the site. Reach 4 and 5 provides an important environmental corridor connection between Johnston's Spur and Marshall Mount Creek. While Reach 5 may only be a 1st order stream and Reach 4 a 2nd order stream, it is recommended that DOP consider a wider width be provided to achieve an environmental corridor function for Reach 4 and 5.	Not agreed. Refer EA Sections 3.10, 7.7 and Appendix P Riparian Consistency Report. The various “green” corridors between Johnstons Spur and the two main riparian corridors are numerous and varied in typology, topography, vegetation and width. The two main “green” corridors are sufficiently wide to provide an environmental link and to protect the areas of acknowledged importance (as identified in the ESL layer). Refer to the PPR Section 2.4 and Appendix E
NOW 28	THE NOW states that the EA only proposes a riparian width of 24 m either side of the watercourse but it is recommended a minimum width of 50 m is provided either side of the watercourse (measured from top of bank) to achieve an environmental corridor function.	Not agreed. Refer to the PPR Section 2.4
NOW 29	The NOW states that it is concerned by many of the statements that are made in relation to riparian corridors in the EA report and the Riparian Consistency Report. The statements are confusing and not accurate. Section 3.10 of the SSS and Concept Plan EA report states “the Guidelines published by DECCW under the Water Management Act are based on the methodology developed under the RCMS”. This is not correct. The guidelines are not based on the categorisation of watercourses. The DWE (February 2008) Guideline is based on stream order / the intermittent/perennial nature of a watercourse and merit.	The Calderwood project results in a balanced outcome between development and sustainable land management and expects to be assessed on “merit” (as per the DWE Guidelines dated February 2008) as opposed to an absolute adherence to widths which appear not to take other site issues into consideration. Refer to the PPR Section 2.4 and Appendix E
NOW 30	The NOW states that it does not support Delfin's proposed reduction of the riparian widths or the proposed removal of watercourses on the site, particularly the proposed reduction in width along Reach 3, Reach 4 and 5, Reach 6, Reach 9 and 10, or the proposed removal of Reach 11 and 12 and Reach 13.	Not agreed. The proposal does not “remove” watercourses from the site. Rather it undertook an appropriate ground truthing exercise (as is undertaken for all other site attributes - eg threatened species, Aboriginal archaeology) to confirm the existence, or otherwise, of each assumed watercourse. As a result of this ground truthing exercise, some “watercourses” were found not to exist, others were found to be in different locations than those mapped and others were increased in corridor width when compared with the DWE Guideline and/or the RCMS. Some first order streams may be relocated into WSUD swales as a result of development, but none are removed as suggested by NOW.
NOW 31	The NOW states that figure 21 (conservation significance) shows there is primary vegetation significance along Reach 3, Reach 4 and 5, Reach 6, Reach 9 and 10 and along the upstream section of Reach 13. The NOW recommends that representative concept plans and cross sections are prepared for these watercourses and riparian areas.	The proposed zoning and ESL layer provide a sufficient level of protection for vegetation of value and the EAR provides sufficient information upon which the DoP can make a determination. No further “representative concept plans” or “cross sections” are considered necessary. Refer to the EA Sections 4.7, 4.8, 6.5 and 6.10 and EA Appendix O - Flora and Fauna Assessment.
NOW 32	NOW states that Section 4.6 of the SSS and Concept Plan EA report indicates that in addition to the CRZs significant areas of land located immediately adjacent to the riparian corridors are proposed for the provision of public open space and will contribute to achieving riparian outcomes. Clarification is required on how these areas will contribute to achieving riparian outcomes? Are these areas proposed to be planted with local native trees, shrubs and groundcover species? The long term environmental robustness of riparian outcomes is built into the widths. Any additional encroachment of the development / formal structures into the riparian footprint will diminish the long term robustness of the riparian land.	The areas referred to are proposed to be zoned RE1 Public recreation. The RE1 lands are contiguous with the main riparian corridors (previously zoned SP2-d now proposed to be zoned E2 / E3). The RE1 lands are generally flood affected and mostly devoid of built form (except for suitable infrastructure). The RE1 lands provide an effective riparian “buffer” to the Marshall Mount Creek and Macquarie Rivulet. They are generally open grasslands, together with some district and local parks. Where relevant, the RE1 lands (and SP2 lands) may be planted with native grasses and other suitable native species (ie those that do not increase flood affectation or increase the width of APZs) to provide for broad “riparian” outcomes, balanced against the development needs of the site.

ITEM No.	TOPIC	PROPONENT RESPONSE
	Pedestrian and cycle network	
NOW 33	Section 4.6 of the SSS and Concept Plan EA report indicates it is proposed to provide a network of pedestrian and cycle pathways within the CRZs and Section 4.10.2 seeks Concept approval to allow for pedestrian and cycle pathways within the Riparian Corridor Network (page 124). It is not appropriate to remove existing native riparian vegetation and/or prevent the rehabilitation of riparian vegetation for the locating of pathways.	<p>This statement is not supported by DLL or by emerging State Government advice (eg the DoP's own draft Discussion Paper on Riparian Corridors in urban release areas) where dual use of riparian corridors is promoted, reduced riparian widths are proposed and additional vegetated buffers are removed.</p> <p>The proposed zoning and ESL layer protects existing vegetation of value (riparian and non riparian) from being removed without due consideration of impact and significance.</p> <p>The riparian corridors proposed at Calderwood are considered to provide an appropriate width commensurate with their function and the requirement to achieve a balanced outcome between development, public access and sustainable land management.</p> <p>Refer to the PPR Section 2.4 and Appendix E</p>
NOW 34	The NOW supports a robust outcome for riparian land in the first instance and does not support the blanket locating of pathways in riparian land, as the locating of such uses in riparian land compromises the objectives and functions of riparian land.	Refer response at Item NOW 33 above.
NOW 35	The NOW supports the locating of pathways in the APZs. In accordance with the DWE Guideline, the APZs need to be located outside the riparian areas (ie outside the CRZ and the VB).	Refer response at Item NOW 33 above.
	Water cycle Management	
NOW 36	The NOW states that Figure 52 in the SSS and Concept Plan EA report (page 129) shows it is proposed to locate waterbodies both in-line and within riparian land and seeks details on the proposed basins and how they are to be designed and constructed.	Concept engineering plans clearly show this information. These plans are consistent with the level of detail required at the Concept Plan stage. Further details are to be lodged with the relevant subdivision plans.
NOW 37	The NOW states that the locating of water cycle management structures online and within riparian land is not supported in principle and that stormwater is an urban impact and needs to be dealt with within the urban zone and should not be transferred to the riparian environmental footprint. The NOW further states that this principle has been endorsed by COIs and stormwater structures need to be located outside the riparian areas.	Refer response at Item NOW 33 above.
NOW 38	The NOW states that Reach 4 and 5 provides an important environmental corridor connection between Johnston's Spur and Marshall Mount Creek and the proposed locating of waterbodies along this watercourse should not be supported.	Refer response at Item NOW 33 above.
	Flood mitigation plan	
NOW 39	The NOW states that the Flood Mitigation Plan shows it is proposed regrade a portion of the riparian land along Macquarie Rivulet. It is also proposed to increase the elevation immediately adjacent to the riparian land adjacent to Macquarie Rivulet, Marshall Mount Creek and Reach 4.	Noted
NOW 40	The NOW states that Section 7.5 of the SSS and Concept Plan EA report outlines it is assumed that all vegetation within areas that are proposed for land re-shaping as part of the Flood Mitigation Plan is removed. The NOW seeks clarification as to how this aligns with riparian actions / outcomes of the Illawarra Regional Strategy?	Refer response at Item NOW 33 above. Riparian corridors will be revegetated where appropriate and enhanced on a staged basis as the project is implemented. They may be planted with native grasses and other suitable native species (ie those that do not increase flood affectation or increase the width of APZs) to provide for riparian vegetation outcomes.
NOW 41	The NOW restates that the potential impacts associated with the floodplain reshaping (excavation and filling) on the stability of the watercourses, groundwater and the protection and rehabilitation of riparian land has not been adequately assessed in the EA.	Not agreed. Refer to the PPR Section 2.4

ITEM No.	TOPIC	PROPONENT RESPONSE
NOW 42	The NOW states that it is concerned by statements included in the SSS and Concept Plan EA report in relation to the Flood Mitigation Plan and the rehabilitation of riparian areas. For example, Section 4.12 of the SSS and Concept Plan EA report indicates that the Flood Mitigation Plan has been developed based on modelling that assumes potential revegetation may occur within existing riparian corridors within nominated locations (page 130).	Noted.
NOW 43	The NOW states that If the DOP is not supporting riparian outcomes in accordance with the Illawarra Regional Strategy (ie in accordance with the RCMS), the "nominated locations" should be in accordance with the minimum riparian widths outlined in the DWE Guideline.	Refer response to Item NOW 29 above and to the PPR Section 2.4 and Appendix E
NOW 44	The NOW states that Section 7.6 of the EA report also indicates that <i>"the Flood Mitigation Plan identifies areas within the riparian network where vegetation roughness may be increased through selective planting of select species within CRZs where it can be demonstrated that no adverse impacts on flood levels will result "</i> . The NOW also states that selective planting of carefully selected vegetation species" is not acceptable and should not be supported by DOP. The riparian areas should be rehabilitated to emulate the local community at a density that would occur naturally and the modelling should be based on this.	Refer response to Item NOW 43 above and to the PPR Section 2.4 and Appendix E
	Biodiversity	
NOW 46	The NOW states that Section 7.5 of the SSS and Concept Plan EA report (page 189) recommends Vegetation Management Plans be prepared within the Riparian Corridor Network generally in accordance with the latest DECCW guidelines. As noted above the riparian approach as presented in the EA report documentation is neither consistent with the DWE (DECCW) Guidelines or the RCMS and should not be supported.	Refer response at Item NOW 29 above.
NOW 47	The NOW states that the EA notes that the proposed ongoing ownership plan for the site is to handover all E2, SP2 and RE1 zoned land to council (page 188). The NOW supports the proposed dedication of riparian land to Shellharbour and Wollongong Councils but clarification is required as to whether the councils have agreed to this?	NOW support for public ownership is noted. Refer to the PPR Section 4.2 and Appendix I.
NOW 48	The NOW states that the EA notes that "DLL will rehabilitate these areas to a suitable condition prior to handover" (page 188). Details are required on the level of rehabilitation to be undertaken by Delfin. It is important the riparian areas are rehabilitated to emulate the local vegetation community and that the riparian vegetation is well established before the hand over (ie the riparian vegetation should be maintained by Delfin for an adequate period).	This is addressed in the EA – Appendix CC Landscape and Open Space Master Plan (which sets out the proposals for "corridor land") and the landscape assessment lodged with the Stage 1 Project Application. The revegetation and enhancement of riparian corridors will take place on a staged basis as the project is implemented. They may be planted with native grasses and other suitable native species (ie those that do not increase flood affectation or increase the width of APZs) to provide for riparian vegetation outcomes.
NOW 49	The NOW also states that any creek restoration works must be stable (eg ensure the structural stability of a watercourse during flood events) before the handover so as to reduce maintenance costs to council. Details are required on the proposed maintenance periods and funding for the long term maintenance and management of the watercourses and riparian areas.	Noted. These details are a matter for negotiation with the relevant Council.
	Riparian Corridor Network	
NOW 50	The NOW states that Section 7.7 of the SSS and Concept Plan EA report (page 196) states existing watercourses have been classified according to the Strahler categorisation systems consistent with the guidelines published under the WM Act. As noted above the riparian areas as presented in the EA documentation is neither consistent with the DWE (DECCW) Guideline or the RCMS and is not supported.	Refer response at Item NOW 29 above. Further, this statement is not supported by DLL or by emerging State Government advice (eg the DoP's own draft Discussion Paper on Riparian Corridors in urban release areas) where dual use of riparian corridors is promoted, reduced riparian widths are proposed and additional vegetated buffers are removed.

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	<p>The NOW also states that the Conclusion incorrectly states that the majority of differences between the RCMS and Strahler based methodologies when applied to the Project require increases in riparian corridor widths.</p> <p>As noted above the DWE Guideline/ Strahler approach has not been applied correctly to the site by Delfin. Delfin's approach has not included a vegetated buffer and has reduced the riparian widths which are of concern particularly in relation to the more important watercourses on the site.</p>	<p>Further, this does not appear to constitute an assessment on "merit" (as per the DWE Guidelines dated February 2008). Refer to the PPR Section 3.3 and Appendix H</p>
	<p>E2 Zone – Environmental Conservation</p>	
NOW 51	<p>The NOW states that the former DWE recommended in its key issues and assessment requirements submission (dated 19 May 2009) that the watercourses and riparian land on the site 'be zoned using an appropriate Standard Instrument zone - E2-Environmental Conservation.</p>	<p>This statement is not supported by latest State Government land releases in the Sydney Metropolitan Growth Centres (Riverstone and Alex Avenue) where riparian corridors have been zoned SP2-d.</p> <p>Notwithstanding, DLL proposes amending the SP2 zone as it applies to riparian corridors. Refer to the PPR Section 3.3 and revised Zoning Plan in Appendix H.</p>
NOW 52	<p>The NOW states that it supports the use of the E2 zone to protect riparian areas but reiterates DWE's advice that to be effective, the range of permissible uses in the E2 zone should be restricted to those uses that will not impact on the values and functionality of riparian land.</p>	<p>This statement is not supported by DLL or by emerging State Government advice (eg the DoP's own draft Discussion Paper on Riparian Corridors in urban release areas) where dual use of riparian corridors is proposed wherever practical, including the siting of suitable infrastructure. Further, the uses proposed are not inconsistent with the standard LEP template or Infrastructure SEPP and are considered to be commensurate with their E2 zoning.</p> <p>Notwithstanding, DLL proposes amending the SP2 zone as it applies to riparian corridors and amendments to the permissible uses within each land use zone to remove any ambiguity. Refer to the PPR Section 3.3; revised Zoning Plan and Land Use Table in Appendix H; and revised Statement of Commitment # 31</p>
NOW 53	<p>The NOW states that the SSS and Concept Plan EA report (page 154) outlines additional uses that are proposed to be permitted with consent under the E2 zone which are not consistent with the <i>Environmental Protection Zones - LEP Practice Note</i> (PB 09-002) (DoP, 2009) or compatible with the objectives of the E2 zone to protect, manage and restore areas of high ecological value and are not appropriate in protecting and enhancing riparian land.</p>	<p>Refer response at Item NOW 52 above.</p>
NOW 54	<p>The NOW recommends the proposed inappropriate additional uses (such as electricity transmission or distribution networks, kiosks, recreation areas, roads (with the exception of crossings), sewerage systems, stormwater management systems, telecommunication facilities, waterbodies and water supply systems) are removed to ensure the E2 zone provides adequate protection of riparian land.</p>	<p>Refer response at Item NOW 52 above.</p>
	<p>SP2 Infrastructure Zone</p>	
NOW 55	<p>The NOW states that Section 4.6 of the SSS and Concept Plan EA report indicates that all riparian corridors are proposed to be zoned SP2 Local drainage under the SEPP amendment and while Section 7.5 indicates that the Environmentally Significant Lands (ESL) layer will provide an additional layer of protection to the vegetation within this zone, it is noted that it only applies to some of the riparian land that needs to be protected.</p>	<p>This is explained in the documentation:</p> <ul style="list-style-type: none"> • All riparian corridors provide a drainage function; • The ESL layer covers all existing vegetation of value (refer to the Flora and Fauna Assessment) • Many of the lesser order riparian corridors are devoid of significant vegetation that is why the ESL layer does not apply. <p>Riparian corridors will be revegetated and enhanced on a staged basis as the project is implemented and where flood affectation permits and there is no significant increase in APZ requirements. Notwithstanding, DLL proposes amending to the SP2 zone as it applies to riparian corridors. Refer to the PPR Section 3.3 and revised Zoning Plan in Appendix H.</p>

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NOW 56	The NOW states that it is concerned that the SP2 zone provides no provision for the protection and enhancement of watercourses, riparian areas, groundwater and groundwater dependent ecosystems. The objectives of the SP2 zone are to provide for infrastructure and related uses and are incompatible with the values and function of riparian land.	<p>Not agreed. Riparian corridors provide a drainage function and may contain valuable ecology. They are protected via zoning and the ESL layer. The revegetation and enhancement of riparian corridors will take place on a staged basis as the project is implemented and where flood affectation permits and there is no significant increase in APZ requirements. DLL note that this balanced approach received EPBC sign-off from the Commonwealth Government in March 2010.</p> <p>Notwithstanding, DLL proposes amending the SP2 zone as it applies to riparian corridors. Refer to the PPR Section 3.3 and revised Zoning Plan in Appendix H.</p>
NOW 57	The NOW states that the proposed permitted uses in this zone consistent with the protection and enhancement of riparian land (such as electricity transmission or distribution networks, kiosks, recreation areas, recreation facilities (outdoor), roads (with the exception of crossings), sewerage systems, stormwater management systems, telecommunication facilities, water supply systems and waterbodies).	<p>This statement is not supported by DLL or by emerging State Government advice (eg the DoP's own draft Discussion Paper on Riparian Corridors in urban release areas) where dual use of riparian corridors is proposed wherever practical, including the siting of suitable infrastructure. The ESL layer provides additional protection so that proposed development needs to be assessed against the significance of its impact on existing vegetation of value.</p> <p>Notwithstanding, DLL proposes amending the SP2 zone as it applies to riparian corridors. Refer to the PPR Section 3.3 and revised Zoning Plan in Appendix H.</p>
NOW 58	The NOW states that it should be noted that the DWE Guidelines outline there should be no infrastructure such as roads, drainage, stormwater structures, services etc within the CRZ or VB.	<p>This statement is not supported by DLL or by emerging State Government advice (eg the DoP's own draft Discussion Paper on Riparian Corridors in urban release areas) where dual use of riparian corridors is proposed wherever practical, including the siting of suitable infrastructure within the CRZ.</p> <p>DLL note that the DWE Guidelines also state that proposals will be treated on their merits. The NOW appear to have taken an approach that does not consider the other elements of the proposal and the need to achieve a balanced outcome.</p>
NOW 59	The NOW states that the DOP has an important role in ensuring appropriate protection is afforded to watercourses, riparian land, groundwater and groundwater dependent ecosystems. The NOW recommends a more appropriate zone (such as E2 - Environmental Conservation) is used to zone riparian land and the permitted uses under the E2 zone are limited to those consistent with the <i>Environmental Protection Zones - LEP Practice Note</i> (DoP, 2009) (please see comments above).	<p>This statement is not supported by latest State Government land releases in the Sydney Metropolitan Growth Centres (specifically Riverstone and Alex Avenue precincts) where riparian corridors have been zoned SP2.</p> <p>Notwithstanding, DLL proposes amending the SP2 zone as it applies to riparian corridors. Refer to the PPR Section 3.3 and revised Zoning Plan in Appendix H.</p>
NOW 60	<p>The Now states that if watercourses and riparian land are to be zoned as SP2, objectives need to be included under this zone for:</p> <ul style="list-style-type: none"> the protection and enhancement of watercourses as stable natural systems the protection and enhancement of riparian land to emulate the local vegetation community the preservation of the stream baseflows, groundwater dependent ecosystems, groundwater flow and quality 	<ul style="list-style-type: none"> Noted. The Calderwood project already achieves this via zoning and ESL layers. Noted – with the exception of the phrase “riparian land” as experience suggests this is open to very wide interpretation and provides insufficient certainty during implementation. Noted. The Calderwood project already achieves this. <p>The information provided with the EAR clearly suggests that water quality will be maintained or improved as a result of development. Refer EA Appendix N – Watercycle Management Study (Appendix C and D)</p> <p>Notwithstanding, DLL proposes amending the SP2 zone as it applies to riparian corridors. Refer to the PPR Section 3.3 and revised Zoning Plan in Appendix H.</p>
	RE1 Zone – Public Recreation	
NOW 61	The NOW states that Section 6.5 of the SSS and Concept Plan EA report indicates that although the RE1 land does not form part of the riparian corridor it will contribute to achieving riparian outcomes. The NOW recommends clarification is sought on how these areas will contribute to achieving riparian outcomes?	The RE1 lands are contiguous with the main riparian corridors. The RE1 lands are generally flood affected and mostly devoid of built form (except pathways and other suitable public domain infrastructure).

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		The RE1 lands are generally open grasslands, together with some district and local parks. Where relevant, they may be planted with native grasses and other suitable native species (ie those that do not increase flood affectation or increase the width of APZs) to provide for broad “riparian” outcomes.
NOW 62	The NOW queries whether there areas within the RE1 zone that are proposed to be planted with local native trees, shrubs and groundcover species? If so these areas needs to be clearly identified and the Statement of Commitments need to identify that these areas are to be vegetated	The RE1 lands may be planted with native grasses and other suitable native species (ie those that do not increase flood affectation or increase the width of APZs). This is addressed in the EA Appendix CC - Landscape and Open Space Master Plan (which sets out the proposals for “corridor land”) and the landscape assessment lodged with the Stage 1 Project Application (refer Stage 1 PA). Refer to the PPR Section 2.4
	Environmentally Sensitive Lands	
NOW 63	The NOW recommends the following amendments be made to the draft clause developed by ELA:	
	Objectives	
NOW 64	<ul style="list-style-type: none"> to identify environmentally significant land, and 	
NOW 65	<ul style="list-style-type: none"> to maintain biodiversity, and 	
NOW 66	<ul style="list-style-type: none"> to retain and enhance the stable natural functions of waterways and riparian land corridors and 	Not agreed. The suggested words add nothing of substance as all waterways are captured under the term “riparian corridors”.
NOW 67	<ul style="list-style-type: none"> to provide for controlled pedestrian and bicycle access to, and sensitively integrated fire trails on, adjacent to such land, and 	This statement is not supported by latest State Government advice (eg the DoP’s own draft Discussion Paper on Riparian Corridors in urban release areas) where dual use of riparian corridors is proposed wherever practical.
NOW 68	<ul style="list-style-type: none"> to protect items of Aboriginal heritage significance. 	
	Controls	
NOW 69	Before granting consent, Development consent must not be granted on land to which this clause applies, unless the consent authority must be is satisfied that:	Not agreed. This suggestion reverses the wording from a “presumption in favour” of granting consent subject to a series of criteria and amends it into a “presumption against”.
NOW 70	<ul style="list-style-type: none"> the development meets the objectives of this clause 	Noted
NOW 71	<ul style="list-style-type: none"> the development would be sited, designed and managed to avoid any potential adverse environmental impact 	Not agreed. This additional clause creates a policy tautology: if the consent authority is satisfied that the impact of the development is “acceptable”, then development should be implemented according to the controls that exist generally for the site. To require “acceptable” development to then be “ <i>sited, designed and managed to avoid any potential adverse environmental impact</i> ” would make the earlier assessment worthless. This requirement should only be required if the impact of the proposed development is found to be “unacceptable”.
NOW 72	<ul style="list-style-type: none"> the development would substantially retain existing native vegetation, and 	Noted
NOW 73	<ul style="list-style-type: none"> the development would not adversely affect to a significant extent: 	Not agreed. The original proposal permits a reasonable level of flexibility to reach a balanced outcome and allow limited but specific works – eg crossings over riparian corridors – where the significance of the impact would be assessed in its context.
NOW 74	<ul style="list-style-type: none"> the ecological value of the existing vegetation, or 	
NOW 75	<ul style="list-style-type: none"> native fauna 	
NOW 75	<ul style="list-style-type: none"> existing native riparian vegetation or the rehabilitation of riparian land 	Not agreed.

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		The suggested words are too limiting, bearing in mind the “presumption against” suggestion above. In addition, the words would potentially limit the dual use of riparian corridors (refer DoP’s own draft Discussion Paper on Riparian Corridors in urban release areas).
NOW 76	<ul style="list-style-type: none"> where a potential adverse impact cannot be avoided: 	Not agreed. This additional clause creates a policy tautology. Refer above.
NOW 77	(i) the development is sited, designed and managed to minimise any potential adverse environmental impact,	Refer above
NOW 78	(ii) the development incorporates effective measures to minimise or off-set any potential adverse impact	Refer above
NOW 79	Before granting consent, Development consent must not be granted on land to which this clause applies, unless the consent authority must has considered whether;	Not agreed. This suggestion reverses the wording from a “presumption in favour” of granting consent subject to a series of criteria and amends it into a “presumption against”.
NOW 80	<ul style="list-style-type: none"> the locality has high biological diversity 	
NOW 81	<ul style="list-style-type: none"> the locality contains: 	
NOW 82	<ul style="list-style-type: none"> <ul style="list-style-type: none"> a disjunct population of native species or a species that is near the limit of its geographical range, or 	
NOW 83	<ul style="list-style-type: none"> <ul style="list-style-type: none"> the land contains riparian land or retains native riparian vegetation, or 	Not agreed. The suggested words are repetitious, limit the potential for dual use of riparian corridors and add little substance.
NOW 84	<ul style="list-style-type: none"> <ul style="list-style-type: none"> vegetation associated with wetlands, and 	
NOW 85	<ul style="list-style-type: none"> the land has connective importance as, or as part of, a corridor of native vegetation forming a connection that allows for the potential passage of species of flora or fauna between two or more areas of native vegetation, and 	
NOW 86	<ul style="list-style-type: none"> the vegetation is adequately represented on land in the genera/locality, and 	
NOW 87	<ul style="list-style-type: none"> the land is important as a site along a migratory route for wildlife, and 	
NOW 88	<ul style="list-style-type: none"> the land functions as an important drought refuge for wildlife, and clearing of the land would be likely to contribute significantly to: 	
NOW 89	<ul style="list-style-type: none"> <ul style="list-style-type: none"> soil erosion, or 	
NOW 90	<ul style="list-style-type: none"> <ul style="list-style-type: none"> salinisation of soil or water, or 	
NOW 91	<ul style="list-style-type: none"> <ul style="list-style-type: none"> acidification of soil, or 	
NOW 92	<ul style="list-style-type: none"> <ul style="list-style-type: none"> landslip, or 	
NOW 93	<ul style="list-style-type: none"> <ul style="list-style-type: none"> deterioration in the quality of surface or ground water or groundwater dependent ecosystems, or 	Not agreed. This suggestion sets an unreasonable benchmark to monitor and enforce.
NOW 94	<ul style="list-style-type: none"> <ul style="list-style-type: none"> increased flooding, or 	
NOW 95	<ul style="list-style-type: none"> there is any need to conserve all or some of the native vegetation because: 	
NOW 96	<ul style="list-style-type: none"> <ul style="list-style-type: none"> of its unusually good condition or its significance as a sample of its type, or 	
NOW 97	<ul style="list-style-type: none"> <ul style="list-style-type: none"> the development will increase the perimeter of the native vegetation, and so the ratio of the boundary to the area of the native vegetation, making it more vulnerable to negative impacts, or 	
NOW 98	<ul style="list-style-type: none"> <ul style="list-style-type: none"> there is an archaeological site that has Aboriginal heritage significance on the land. 	

ITEM No.	TOPIC	PROPONENT RESPONSE
	Groundwater	
NOW 99	The NOW states that it is concerned by the potential impact of the proposed reshaping of the floodplain for flood mitigation management on the local groundwater conditions. The NOW states that bulk earthworks should not result in unacceptable impacts on groundwater or groundwater dependent systems. The NOW states that it does not consider that this matter has been adequately addressed in the EA.	This matter has been addressed in the EA Appendix S - Groundwater Assessment Refer also to the PPR Section 2.3 and Statement of Commitment # 69
NOW 100	The NOW states that it does not consider that it is satisfactory that the detailed assessments are undertaken at the time of the relevant Development Applications and that the details of the proposed excavation depths needs to be provided and the impact of bulk earthworks on groundwater needs to be assessed prior to any approval of the Concept Plan layout.	Noted, however the Concept Plan proposal is consistent with standard development approval and implementation processes. Refer also to Statement of Commitment # 69
NOW 101	The NOW states that the drainage and stormwater management needs to be assessed and resolved prior to any approval of the Concept Plan layout to ensure the proposed measures and the areas proposed to locate the controls are adequate (ie: appropriate locations and adequate space have been set aside on the site to locate the surface water controls).	Concept engineering plans clearly show this information. These plans are consistent with the level of detail required at the Concept Plan stage.
NOW 102	The NOW states that any stormwater and detention treatment facilities will need to [sic] be designed prevent interception/connection with the groundwater table and that construction of the stormwater detention and treatment ponds must be: <ul style="list-style-type: none"> • Located above the groundwater table; • Any stormwater discharge needs to have a neutral or beneficial impact on groundwater quality • Lined with an impervious layer to avoid any hydraulic connection between the detention/treatment ponds and the underlying groundwater table if the invert of the basin is situated beneath the watertable. 	This requirement is not supported. Both Tullimbar, and the downstream Hayward's Bay, have wetlands and stormwater treatment / detention facilities that intersect the groundwater table. Tullimbar has won a NSW Stormwater Industry Award for its stormwater related environmental outcomes, and the Hayward's Bay wetland has won a National Stormwater Industry Award for its treatment of surface water and ground water. Intersection of groundwater in wetlands should not be determined at this stage, given the positive outcomes such infrastructure has clearly had elsewhere within the region.
	Draft Statement of Commitments	
	Ecology and riparian	
NOW 103	The NOW does not support the first dot point statement of commitment on page 221. The NOW does not support the riparian corridors shown on the Riparian Corridor Network of the Concept Plan for the reasons outlined above.	This statement is not supported by latest and emerging State Government advice (eg the DoP's own draft Discussion Paper on Riparian Corridors in urban release areas).
	Groundwater	
NOW 104	The NOW states that it does not support the first dot point statement of commitment on page 223. The NOW does not support that detailed groundwater assessments relating to cuts greater than 2m in depth are undertaken at relevant development application stage and that these should be undertaken prior to approval of any Concept Plan.	Noted, however the Concept Plan proposal is consistent with standard development approval and implementation processes.
NOW 105	The NOW states that it does not support the second dot point statement of commitment on page 223. The NOW does not support that detailed groundwater assessments relating to drainage and stormwater management controls are undertaken at relevant development application stage and that these should be undertaken prior to approval of any Concept Plan.	Noted, however the Concept Plan proposal is consistent with standard development approval and implementation processes.

ITEM No.	TOPIC	PROPONENT RESPONSE
	DEPARTMENT OF EDUCATION AND TRAINING (letter dated 31 May 2010)	
DET 01	The DET states that it has no objection to Calderwood being listed as State Significant Site in Schedule 3 of the Major Development SEPP.	Noted.
DET 02	The DET states that the advice submitted in the Elton Assessment (EA Appendix AA) is consistent with consultations in October 2009.	Noted.
DET 03	The DET states that with respect to the identification of the need for government school sites to be located within the Calderwood urban release area it is assumed that the intended VPA will be consistent with, or in the spirit of, the DOP SIC Planning Circular PS 08-017, whereby the developer will provide 50% (increasing to 75% from 1mJuly 2011) of the cost (or equivalent works-in-lind0 towards land for education.	Agreed. DLL has written to the Department on 31 st July 2010 with a formal proposal to enter into a VPA for the Project including the land for education purposes in accordance with Item DET 04 below . .
DET 04	The DET has indicated a need for 2 primary schools (each requiring 2 ha), a secondary school (6 ha) and potentially a special needs unit (1 ha associated with mainstream school).	Noted. The Concept Plan provides for these schools. Refer also to the PPR Appendix H for indicative preferred locations of schools.
DET 05	The DET states that it is appropriate to designate school sites in areas close to town or village centres and with an opportunity to share facilities	Noted and agreed.

ITEM No.	TOPIC	PROPONENT RESPONSE
	TRANSPORT NSW (letter dated 28 June 2010)	
MOT 01	Transport NSW states that it is currently preparing the Illawarra Regional transport Strategy and that the proposal provides the opportunity to contribute to the achievement of the Strategy's objective of integrating land use and transport in the region.	Noted.
MOT 02	The proposal should demonstrate how it will contribute to the achievement of State Plan targets for commute trips and cycling, including the target set for Wollongong CBD.	Refer EA Appendix T Concept Plan Transport Accessibility Study and Transport Management and Accessibility Plan (TMAP) Section 9 and Appendix 3A.
MOT 03	Transport NSW states that while the measures canvassed in the TMAP are considered appropriate, public transport provision should be included as a requirement in the final Statement of Commitments or conditions of consent to be negotiated with the proponent. In this regard, the conditions of consent should include a reference to the implementation of the TMAP measures.	Noted.
MOT 04	Transport NSW states that the proposal needs to specifically address the integration of the Stage 1 site with the existing bus network.	Noted.
MOT 05	Transport NSW also states that if the proposal is approved, it is requested that the proponent initiate discussions with Transport NSW as part of the initial project activities on how integration can be achieved.	Noted and agreed.
MOT 06	Transport NSW notes the concerns raised by the Roads and Traffic Authority about the cost implications for the Government of the proposal and its consistency with the Illawarra Regional Strategy, requests DOP to address the issues raised in RTA's submission and Transport NSW would appreciate being involved in discussions about these issues, particularly in the context of ongoing planning work being undertaken for West Dapto and surrounding urban release areas.	Refer to the PPR Section 4.2 and Appendix J and K.

ITEM No.	TOPIC	PROPONENT RESPONSE
	HUMAN SERVICES (Housing NSW) (letter dated 27 June 2010)	
HS 01	Housing NSW states that affordable housing initiatives are not detailed in the Environmental Assessment and Concept Plan, other than as a reference to delivering a 'range of dwelling types'.	Measure to address housing affordability initiatives are discussed in the EAR Section 2.1 and Appendix E to the EAR Illawarra Land and Housing Supply.
HS 02	Housing NSW recommends that a mix of tenure options be available, including housing for purchase and for rental, and that a proportion of the housing to be supplied in the development be in the form of adaptable and accessible housing in order to meet the future needs of the community.	<p>Noted. Delfin Lend Lease actively supports "adaptable" housing. The Federal Government's <i>Liveable Housing Design Guidelines</i> is considered to be current Best Practice. The new guidelines are designed to adapt to the needs of residents as their lifestyles change. To meet the minimum standard under the new guidelines, homes need to feature easy access to the property, easy ability to move around and the ability for cost-effective adaptation. The new guidelines are voluntary. The Development Control Strategy for Calderwood does not preclude their application anywhere on site.</p> <p>It is noted that the Hon Bill Shorten, Parliamentary Secretary for Disabilities, launched the new guidelines for 'liveable' housing standards for the aged and disabled at Rochford Place Retirement Village on 13 July 2010, part of the Delfin Lend Lease Ropes Crossing project.</p>
HS 03	Housing NSW states that its view is that the most effective way of ensuring that affordable housing is delivered in the Calderwood development is to encourage or require affordable housing contributions in the form of land or monetary contributions. A contribution would be particularly justified given that the project proponent is seeking a rezoning which will lead to a considerable increase in land value and development yield.	<p>There is no proposal for affordable housing and this is not required under the DGRs. It is noted that there is no current contributions policy that supports Council's proposition on affordable housing. Further, there is no requirement for such a contribution under the Affordable Housing (Rental) SEPP nor is it permitted to be a requirement under the EP&A Act.</p> <p>DLL considers that there are more effective ways to deliver housing affordability, specifically initiatives such as the Commonwealth Housing Affordability Fund.</p>
HS 04	Housing NSW recommends that an affordable housing contribution be negotiated in a planning agreement between Delfin Lend Lease and the Wollongong and Shellharbour Councils.	<p>Refer Response to Item HS 03 above.</p> <p>Housing NSW may wish to pursue this approach with Wollongong and Shellharbour Councils for implementation at their respective urban development Projects at West Dapto and Shell Cove. At this time Shellharbour Council has resolved not to enter into a Voluntary Planning Agreement for the provision of infrastructure, facilities and services for the Project.</p>
HS 05	Housing NSW recommends adding detailed affordable housing considerations to Director General's Requirements.	This is a matter for Housing NSW and the Department to address.
HS 06	Housing NSW notes that State Significant Site developments and Part 3A Major Projects often represent important opportunities for the NSW Government to work toward achieving the objective of the National Affordable Housing Agreement that all Australians have access to affordable, safe and sustainable housing.	This is a matter for Housing NSW and the Department to address.
HS 08	Housing NSW would welcome the opportunity to work with the Department of Planning and Delfin Lend Lease on more detailed planning proposals and affordable housing options for this site.	Noted.