

5 May 2020

Mr Brendon Roberts
Acting Director Regional Assessments
Department of Planning, Industry and Environment
By email: brendon.roberts@planning.nsw.gov.au

Dear Mr Roberts,

ADDENDUM RTS – CALDERWOOD CONCEPT PLAN (MP09-0082 MOD 4)

We write in response to the Department of Planning, Industry and Environment's (DPIE) request for further information dated 28 February 2020 regarding modification No. 4 to the Calderwood Concept Plan (MP09-0082). For ease of reference we have replicated the key issues identified in Attachment A of the DPIE letter. Also provided at **Attachment D** of this letter is a table providing a response to the submissions received in respect of the RTS that was lodged in May 2019.

Density

1. *As residential development is permitted within the B4 mixed use zone within the Town and Village Centres, please provide further justification on the allocation of residential dwellings within these centres to meet the intended character and function of the retail centres.*

The future character of all the different precincts within the Calderwood Development are shown within the Urban Design Report. This shows the likely dwelling types and dwelling density to be located within each stage, including the Town Centre Core, Town Centre South Residential and Town Centre East Residential Precincts. The allocation of dwellings and densities is provided on page 20 of the design report at **Attachment A**.

The Town Centre core will contain the highest level of density containing dwellings such as shoptop housing. The dwellings located around the town centre core will comprise a potential mix of terraces, semi-detached and detached homes and these will be generally medium density areas which will transition to standard residential at the edges to integrate with the surrounding precincts, such as Town Centre south.

It is noted that the Town Centre and surrounds are an appropriate place to provide additional density due to the relatively constraint free nature of the site and the close proximity to services including schools and the community centre, retail and public transport. Further, no change to the density or other planning controls such as height are required to accommodate the additional density. Increasing housing supply in the town centre enables more diverse housing that supports urban containment and will add to the vitality of the Town Centre precinct.

The Approved Concept Plan does not pre-determine how the approximately 4,800 residential dwellings / residential density is to be distributed within the CUDP nor the specifics of lot yield and size by precinct or location. Rather, distribution of the overall dwelling yield is guided by the permitted residential accommodation types and minimum lot sizes permitted under the State Significant Precincts SEPP (which permits lots ranging in size from 0m² to 300m² across much of the site).

The proposed modification does not seek to change this approach, which is still considered to provide the most appropriate planning framework for the subdivision and development to continue on a staged basis over a 15+ year time frame.

Lendlease commissioned Urbis to undertake an economic and retail needs assessment report for the Town Centre south precinct to accompany a local development application. This assessment report demonstrates that there are economic benefits in consolidating all the retail and commercial space within the Town Centre Core and that there is unlikely to be any significant demand for retail or commercial space outside of the nominated Town and Village

Centres. The proposed modifications do not seek to reduce the overall amount of employment floorspace within the broader development, but rather seeks to consolidate it to one area where it is likely to be more economically viable. This is a common approach taken in many greenfield developments of this size.

2. *Given the proposal involves an increase in the number of dwellings from 4,800 to 6,000, and the B4 mixed use zone allows residential development, please indicate how the dwellings will be apportioned across the site to demonstrate compliance with the total number of dwellings.*

The apportionment of dwellings across the precinct is further detailed in the Urban Design report provided at **Attachment A**. Please refer to the indicative layout plan and dwelling distribution table on page 20 of the urban design report.

3. *The Department requests confirmation that the proposed increase in dwellings, and in particular the intensification around the retail centres, will be accommodated in such a way to be integrated into the scale and density of the already approved surrounding areas and be sensitively integrated into any open space or natural areas (such as riparian corridors).*

The dwelling density and character will be the product of both the Urban Design Report and the Development Control Strategy (DCS). The Urban Design Report outlines the density ranges to be provided in each precinct and the types of dwellings that are expected to be delivered.

The DCS provides another layout of control as it describes the different character areas and contains planning and design principles for each character area which will need to be complied with. Further to this, the Concept Plan establishes the riparian zones and the setbacks that are required to be provided when carrying out development on the site. A riparian corridor with a width of 92 metres is to be provided to Marshall Mount Creek and the Macquarie Rivulet as shown in the riparian corridor network concept plan.

The aerial image at **Figure 1** demonstrates that Lendlease is aware of the responsibility of sensitively integrating the new development with the riparian areas. The layout allows public access along the edge of the riparian corridor and houses are setback from the riparian zones.

4. *The Department notes concerns raised by Shellharbour City Council and Wollongong City Council in relation to the term 'principal dwelling' (in that secondary dwellings are not counted towards the 6,000 dwelling total). Please clarify whether the term 'principal dwelling' is still applicable to the proposal and whether secondary dwellings are proposed to count towards this maximum.*

Lendlease no longer wishes to pursue the addition of the term 'principal dwelling' and secondary dwellings will now be included in the overall total number of dwellings being 6,000. The relevant amendments to the conditions of consent have been removed from the revised conditions provided at **Attachment C**.



Figure 1 – Aerial Image of the Early Stages of Calderwood
Source: NearMap March 2020

Flood Impacts

Clearly assess any flooding impacts of the proposal on the surrounding area (external to the Calderwood concept approval site) and if required how these will be mitigated, paying particular attention to any external flooding impacts greater than 0.3m in the PMF event.

JPW has assessed the flood impacts of the proposed development (Section 8.2.4 Appendix F of the RTS). The report confirms that *'there are no impacts upstream or downstream of the Calderwood Urban Development Project (CUDP), with the exception of a small local increase just downstream of the site in Marshall Mount Creek. This local increase, shown on Figure 8.03, is consistent with the impact documented in the original Concept Plan'*. Further the report confirms that during the PMF event, there are no impacts greater than 300 mm external to CUDP which is consistent with the accepted impacts agreed by the Land and Environment Court process (Figure 8.08).'

The above flood assessment was peer reviewed by Cardno who prepared the original flood impact assessment for the Concept Plan. Cardno, in a statement contained at Appendix G of the RTS, confirms that the impact of flooding on the development with the proposed modification is consistent with the concept plan as the proposed lots will be constructed above the flood planning level and access will be available up to the PMF. Cardno also confirmed that the impact of the development on flooding upstream and downstream of the development is also consistent with the conditions of approval in the concept plan.

Transport and Accessibility

1. *The Department notes the further issues raised by both Councils and agencies regarding traffic modelling. Please confirm that the traffic modelling and survey data used is supported by Transport for NSW (TfNSW).*

Section 4.1 of the Traffic and Transport Report (T&TR) prepared by Cardno (Appendix I of the RTS) outlines the traffic modelling methodology used to assess the impacts of the proposed development on the local road network. The assessment is based on updated infrastructure, residential and employment land use forecasts using the APRB/WOSLH model to forecast future traffic volumes on the road network. It is an assessment based on strategic (WOLSH) and operational (Aimsun) traffic models with a dynamic traffic assignment method. The methodology is consistent with the approved 2010 TMAP which also used the WOLSH TRACKS model. As agreed with RMS, Cardno adopted the same WOLSH model and Aimsun model versions as those developed by RMS as part of the Albion Park Rail Bypass project, which correspond to the most up to date and accurate traffic models available for the region.

It is noted that neither RMS nor Transport for NSW raised any issue with the model used for the traffic assessment.

2. *Noting the proposed uplift and the potential for secondary dwellings, please confirm whether Calderwood Road would function adequately as two-lane road or would need to be upgraded to four lanes (as originally proposed in the modification).*

It is no longer proposed to exclude secondary dwellings from the 6,000 dwelling total. Section 4.3 of the Traffic and Transport Report prepared by Cardno contains an assessment of the additional traffic volume on the road network, generated by the additional 1,200 dwellings proposed. The assessment demonstrates that Calderwood Road can accommodate the additional traffic generated if it remains a two lane road and that widening the road to four lanes is not required. Further correspondence on this issue is provided at **Attachment G**.

3. *Please provide further information demonstrating that the future roads intended for bus services are consistent with Section 4.1 of the Guidelines for Public Transport Capable Infrastructure in Greenfield Sites (TfNSW, 2018).*

The TfNSW “Guidelines for Public Transport Capable Infrastructure in Greenfield Sites” specify a minimum parking lane width of 3m to allow for bus stops and to allow the bus to move out of the through lane. Section 1 and Table 1 of the DCS outlines the different widths of the various roads to be delivered in Calderwood. It is noted that major collector roads that will accommodate bus routes, will have parking lanes which will be widened from 2.5m to 3m in localised sections where bus stops are to be provided to enable cars to pass stopped buses. This meets the intention of the TfNSW guidelines but also ensures that roads are not widened unnecessarily. The benefit of the proposed design is that more landscaped space can be provided thereby improving the amenity of the street and reducing the heat island effect.

Public domain/open space

1. *Please provide further consideration and justification in relation to the proposed additional open space provision, and in particular its ability to adequately service the proposed increase in residential density. In doing so, clarify the quantum of public open per head of estimated population as approved and as proposed, and clarify and justify the locations where the additional open space is proposed.*

The benchmark standards used to previously define the approved Calderwood Concept Plan open space system, have also been used to define the proposed open space network as follows:

- 2.83 hectares of open space per 1,000 persons projected population to define the required total quantum of open space;
- 400m walking distance for all residents to a local park or city wide open space to ensure that proposed open space is located to service the projected population adequately in all development areas;
- Categorisation of that total projected quantum as either “active” or “passive” open space; and
- Categorisation of that total projected quantum as either Citywide, District or Local parks.

Additional residential density is projected primarily within and around the Calderwood Development Town Centre. The main parks within this **800m zone** are the Town Centre Citywide Park, the main Sports fields S1 located in Shellharbour Council, the Wollongong Council District Park D1 and new proposed Sports field S2, as well as six local parks, numbered L1-L6 in the approved Calderwood Concept Plan.

- Town Centre Citywide Park remains as 2Ha in size.
- Sports field S1 is proposed to increase from 15.84Ha to 21.0592Ha. An increase of 33%.
- Wollongong Council District Park D1 remains as 1Ha in size.
- The proposed Sports field S2 is a new park at almost 1Ha in size that directly adjoins District Park 1 to service the active needs of new residents in the Wollongong LGA portion of the Calderwood development. It provides for a more equitable distribution of active recreational open space across the Calderwood development.
- The co-located District Park 1 and new sports fields therefore provide close to 2ha of active and passive open space, and is of an adequate size and form to support a number of active sports facilities.
- Local Parks L1- L3 are located in Wollongong LGA and L4 - L6 are located in the Shellharbour LGA and approved at a minimum of 3,000m² in the Concept Plan. However, in the Shellharbour VPA, the local parks are approved at a minimum of 2,000m² each resulting in a total of 1.5Ha of local parks. MOD4 proposed Local Parks L1-L6 are each proposed to increase in area to a combined total of 2.497Ha, an increase of some 70%.
- 400m walking distance for all residents in this catchment to an open space as described above is proposed to ensure that proposed open space is located to service the projected population adequately in all development areas. The development precinct in and around the Town Centre is generally of flat topography, providing for a well-connected and more readily accessible open space network of variety and interest and use. Refer to attached open space distribution plan and walking distances (**Attachment F**).

2. *Please provide further details around the useability of the proposed Sports Fields S2 for active recreational purposes and what facilities would be provided within this park.*

We note that Wollongong has accepted the proposed open space and has not raised any objection to the proposed location or designation as active use.

Proposed Sports field S2 is an additional 0.9039 hectare active recreation open space located within the Wollongong LGA north of Marshall Mount Creek, in close proximity to the main sub-arterial access road Escarpment Drive, that is most suitable for an active playing field or similar outdoor recreation. Proposed Sports field S2 is co-located directly adjacent to the approved 1 hectare District Park, which will incorporate predominantly passive recreational embellishment. This will result in a 1.9039 hectare minimum District Level Park and Sports field, proposed to include items such as picnic nodes with park shelters, barbecues, children's playground, cycle and pedestrian trails linked to the proposed trail network, feature tree planting for shade and habitat, and general landscaping including turf and garden beds. The active portion of the combined District Park is of an adequate size and form to support a number of active sports facilities. For the most popular sports in the Illawarra region, the 0.9Ha area can accommodate either 12 netball courts, touch football fields, or a single junior rugby league or soccer field.

The revised *Public Domain Report* and Open Space Plan prepared by Taylor Brammer (31 May 2019) provides further detail on the quantum, distribution and characteristics of the open space network.

Additionally, indigenous heritage values and European heritage features, as well as natural features such as riparian corridors, drainage lines, significant retained vegetation and bushland, and required built infrastructure such as stormwater management basins, have all been considered as part of the distribution, size and proposed use of the parks in the proposed open space network. A Calderwood Valley Landscape Masterplan (LMP) was produced jointly by Lendlease and Shellharbour City Council as a condition of the VPA between the two entities. The LMP outlines these design principles and joint objectives in detail.

In addition, the above quantitative measures, the quality of the open space is just as important as the size and location of the open space. In this regard Lendlease recognises that the provision of high quality open space is key to developing a quality neighbourhood and has to date spent \$1.4-1.5M per Ha of open space. (\$300K for 2000m² local park, \$4.9M for 3.1Ha District Park D4, and \$1.6M for District Park D3).

3. *Further justification is also requested on the proposed deletion of the notation to Condition C12(b).*

It is no longer proposed to delete this notation. Please refer to the revised conditions of consent at **Attachment B**.

Development Control Strategy

The Department notes that C26 dwelling typology does not include the allotment type ('Apartment') in the heading within Appendix C of the proposed Development Control Strategy. Please include this for completeness.

Appendix C has been updated. Please refer to **Attachment C** for a consolidated revised version of the DCS. This also includes an update to Section 1 in respect of the referencing in the road typologies table as requested by Shellharbour Council.

Biodiversity

The Biodiversity Conservation Act 2016 has come into effect since the concept plan approval. The Department of the Environment and Energy should be consulted to determine whether the proposal constitutes a Controlled Action.

Lendlease is aware of its responsibilities and requirements under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). It is noted that this is a Commonwealth jurisdiction and that it is not a matter for consideration in the assessment of this application.

The *Biodiversity Conservation Act 2016* will be a matter for consideration by the relevant Councils during the assessment of the detailed applications for each stage. These applications will be accompanied by a BDAR.

Contributions/Voluntary Planning Agreement (VPAs)

The Department understands that negotiations are ongoing with Shellharbour City Council and the Department (on behalf of the Minister for Planning and Public Spaces) regarding VPAs applicable to the development site. The Department requests an update on the progress of these negotiations?

A revised letter of offer has been prepared by Lendlease and has been issued to Shellharbour Council and DPIE under separate cover. It is requested that DPIE impose a condition of consent which requires Lendlease to demonstrate that suitable arrangements are in place for contributions prior to the issue of a subdivision certificate for the 4,801st lot.

Green Star Rating

Further information is required to demonstrate how the future town centre and employment precincts, can achieve the proposed 5/6-star green rating and deliver appropriate sustainability outcomes.

Calderwood Valley – 6 Star Green Star Community Rating Summary & Commitments.

The Calderwood Development has satisfied and exceeded the minimum evidence-based requirements for accreditation by the Green Building Council of Australia (GBCA), in each of the required categories of Governance, Design, Liveability, Economic Prosperity, Environment & Innovation to achieve a 6 Star Green Star rating. The award of 6 Star Green Star is classified as world leadership.

Lendlease as master developer, is responsible for imbedding these sustainability leadership strategies within all development stages, including the Calderwood Development Town Centre retail and commercial precincts. Whether the Town Centre is delivered by Lendlease, or in partnership with a third party or series of smaller third parties, sustainability imperatives defined in the Concept Plan approval will be required to be achieved. Lendlease has committed to the base infrastructure to support a sustainable Town Centre precinct. Some of the GBCA commitments are as follows:

- Lendlease as part of its national agreement with Opticom, are delivering “fibre to the home” NBN therefore facilitating high quality digital infrastructure to support home offices, local businesses, schools, local councils and corporations.
- Public transport will be adapted as appropriate to service the needs of the community as it develops.
- LED lighting will be used in all public areas and street lighting to assist in the reduction of greenhouse gas emissions.
- A range of alternative water sources will be implemented to responsibly manage the quantum of potable water delivered in open spaces and commercial and residential buildings.
- Ultra Low power flood digital sensors will be installed to inform better planning decisions for future developments, improve emergency response times and minimise damage to assets.
- Smart digital infrastructure will be designed to benefit the community through decreasing water consumption, increasing safety and hygiene levels of public facilities and monitoring public spaces.
- 60% of waste from construction and demolition has and will be reused or recycled.
- Future water sensitive urban design and hydraulic modelling will cater for reduced peak discharge.

- A number of green initiatives to determine best practice in reducing heat island effect will be implemented and monitored in the Town Centre. These include: non-typical road surfaces and footpath materials, increased tree planting densities and cool parking solutions.

We trust the above provides the further information required by the Department to undertake its assessment of the Mod 4 application. Should you require any further information please do not hesitate to contact me on the details over the page.

Yours sincerely,



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Attachment A – Revised Urban Design Report prepared by RPS
Attachment B – Revised Conditions of Consent and Statements of Commitments
Attachment C – Revised DCS prepared by Ethos/Lendlease
Attachment D – Table of submissions and responses
Attachment E – Response to TfNSW prepared by Cardno
Attachment F – Open Space Distribution and areas
Attachment G – Cardno letter on Calderwood Road