



Assessment of Contributions Plan
Austral and Leppington North

Liverpool City Council

Final Report

July 2023

Local Government >>

Acknowledgment of Country

IPART acknowledges the Traditional Custodians of the lands where we work and live. We pay respect to Elders both past and present.

We recognise the unique cultural and spiritual relationship and celebrate the contributions of First Nations peoples.

Tribunal Members

The Tribunal members for this review are:

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The Independent Pricing and Regulatory Tribunal

IPART's independence is underpinned by an Act of Parliament. Further information on IPART can be obtained from [IPART's website](#).

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1 Executive Summary

New development is essential to provide housing for NSW's growing population and more commercial, retail, and industrial space for employment. When development occurs, local councils need to provide additional infrastructure to support both the development and the new community– for example, new roads, stormwater management and open spaces. In NSW, councils can require developers to contribute to the cost of providing that infrastructure. Contributions plans set out the local infrastructure required to meet the demand from new development, and the contributions a council can levy on developers to fund the necessary land and works.^a

Currently, a contributions plan that propose a level of contributions above a threshold of \$30,000 per lot or dwelling in identified greenfield areas and \$20,000 per dwelling in other areas must be submitted to IPART for review. This is to ensure it complies with the Essential Works List (EWL) and other criteria set out in the Infrastructure Contributions Practice Note (2019 Practice Note) published by the Department of Planning and Environment (DPE).

Liverpool City Council (the council) submitted the *Austral and Leppington North Contributions Plan* (ALN contributions plan) to IPART for assessment in April, 2021. The council is seeking to levy development contributions above the \$30,000 cap per lot/dwelling. We have concluded that the ALN contributions plan complies with the criteria in the Practice Note, subject to 7 recommendations. Figure 1.1 summarises our assessment.

IPART's role is to assess whether costs in the contributions plan are reasonable and have nexus (a link between the items in the plan and projected demand). We do not approve the infrastructure in the plan. We have concerns about some aspects of the ALN contributions plan that are outlined in this report.

Figure 1.2 summarises the timeline for this review.

Figure 1.1 Summary of our assessment of the ALN contributions plan

| Essential Works List As per 3.2 of the practice note | Nexus Connection with new population | Reasonable cost | Reasonable timetable | Consultation | IPART considers relevant |
|---|---|---|---|---|---|
|  |  |  |  |  |  |
| Demonstrated Evidence Provided | Demonstrated Evidence Provided | Demonstrated Subject to recommendation | Demonstrated Evidence Provided | Demonstrated Evidence Provided | Demonstrated Subject to recommendation |

^a Section 7.11 of the *Environment Planning and Assessment Act 1979* allows councils to levy contributions towards the cost of providing local infrastructure.

Figure 1.2 Review timeline for ALN contributions plan



2 Introduction

IPART must review the ALN contributions plan and provide its assessment to the Minister for Planning and Public Spaces (Minister). The Minister (or the Minister's nominee) may request the council to make changes to the plan. After the council makes any changes and adopts the plan, the council can levy the uncapped contributions amount.

We assessed the ALN contributions plan against the Department of Planning and Environment's (DPE) [Practice Note](#) criteria:

1. Public amenities and services in the plan are on the **Essential Works List** as identified within the Practice Note.
2. Public amenities and services are reasonable in terms of **nexus** (i.e. there is a connection between the development and demand created).
3. Development contribution is based on a **reasonable estimate of the cost** of the public amenities and services.
4. Public amenities and services can be provided within a **reasonable timeframe**.
5. Development contribution is based on a **reasonable apportionment** between:
 - a. existing and new demand for the public amenities and services, and
 - b. different types of development that generate new demand for the public amenities and services (e.g. different types of residential development such as detached dwellings and multi-unit dwellings, and different land uses such as residential, commercial, and industrial).
6. Council has conducted appropriate **community liaison** and publicity in preparing the contributions plan.
7. **Other matters** IPART considers relevant.¹

Our assessment involved reviewing the contributions plan and supporting documentation, including the works schedule, strategic studies, consultant reports, and correspondence with the council. For more details on our assessment approach, please see our [Information Paper](#).

The remaining sections of this report provide background on the ALN contributions plan, our assessment of the plan, final recommendations, and final recommended contributions rates.

Recommendations

- | | | |
|----|--|----|
| 1. | The stormwater strategy should be comprehensively reviewed within two years of the contributions plan becoming an 'IPART reviewed contributions plan' to consider: | 17 |
| | a. Safety and performance viability of the stormwater strategy | 17 |
| | b. Changes to design standards | 17 |
| | c. Concerns raised during IPART's consultation process | 17 |
| | d. Actual performance data of infrastructure already delivered. | 17 |
| 2. | Adjustments to the strategy should be made based on the findings of the review. | 17 |

3. The LVI should only apply to the value of land not yet purchased, at the time the contributions plan is adopted. Any future reviews of the plan should revise the value of land not yet purchased to be indexed by the LVI. 31
4. Liverpool Council should comprehensively review all works costs in the ALN contributions plan within the next 2 years. The review should include: 32
 - a. any changes to assumptions or strategies within the plan 32
 - b. actual costs of delivering land and works within or near the precinct (where available) 32
 - c. site-specific estimates, recent benchmarks or other relevant sources. 32
5. Following the review of the ALN contributions plan, Liverpool Council should submit the plan to IPART for assessment within 3 years from the date that this plan becomes an "IPART reviewed contributions plan" within the meaning of the Minister's 2019 Direction. 32
6. Liverpool Council should explore the recommended options to increase open space provision to meet industry standards and internal benchmarks prior to future resubmission of the plan to IPART. 37
7. Liverpool Council should amend its '**monetary contributions rate**' table currently in section 1.2.1 of the ALN contributions plan in line with Table 4.20 in IPART's final report. 41

3 The Austral and Leppington North Contributions Plan

The ALN contributions plan seeks to levy funds to support the development by setting out the transport, open space, stormwater, and community infrastructure requirements over the next 2 decades.

We have assessed the ALN contributions plan against the criteria listed in the document titled *Practice Note Local Infrastructure Contributions, Department of Planning and Environment, January 2019*, (Practice Note). We found the ALN contributions plan meets the criteria listed in the practice note but have made 7 recommendations. See our [Information Paper](#) for more detail on our assessment approach.

The Austral and Leppington North Precinct (ALN Precinct) contains 1,175 hectares of Net Developable Area (NDA) within the South West Sydney Growth Area. The ALN Precinct will accommodate a projected population of around 58,000.

Figure 3.1 Map of ALN Contributions Plan Precinct



Source : Liverpool City Council, Liverpool CP 2021 – Austral and Leppington – Draft IPART Submission, Figure 2.1

The council originally adopted the Liverpool Contributions Plan in 2014. This enabled Liverpool Council to commence collecting contributions up to the \$30,000 cap which applies in the area. Amended versions were adopted in May 2015 and June 2020. A further change was made in 2021 to reflect changes in State Government policy and legislation that apply to the plan.

Development in the ALN Precinct is expected to occur over 20 years. Development within the ALN precinct commenced in 2015.

3.1 Overview of our assessment findings

We have assessed that the ALN contributions plan contains works which are consistent with the Essential Works List (EWL). Our analysis is that nexus (a link between the items in the plan and projected demand) is established for the infrastructure in the ALN contributions plan. The ALN contributions plan outlines a reasonable timeframe to deliver infrastructure over the next 20 years as the development progresses.

Overall, costs across stormwater, transport and open space works are based on a reasonable estimate of costs but are likely to be low.

We recommended several measures to improve the estimates of infrastructure costs. In particular:

- We consider that the cost estimates of infrastructure delivery may be further refined with actual data as development progresses and site-specific information becomes available. The council should comprehensively review costs and underlying assumptions, in particular, for the stormwater strategy. The council should resubmit the contributions plan to IPART within the next 3 years. To achieve this timeframe the council will need to commence its review of stormwater strategy and works cost within 1-2 years.
- In its review the council should also examine options to increase open space provision.

3.2 Summary of ALN Contributions Plan Provisions

The infrastructure covered by the plan will support development within the area including:

- The construction of over 16,000 new dwellings
- Commercial, light industrial, business parks, human services, and entertainment areas
- A town centre in Austral with approximately 42,000m² of retail floor space.
- Three neighbourhood centres with additional retail floor space of approximately 10,000m².
- 4 primary schools and 2 high schools.
- 66 hectares of light industrial and bulky goods land for local jobs and services.
- A new TAFE college and regional Integrated primary health care centre.
- Regional level community and cultural facilities.

The ALN contributions plan seeks to meet the needs of the future and current residents and workers of these precincts for transport, stormwater, open space infrastructure and land for community facilities. The ALN contributions plan will deliver:

- new town centres for Austral and Leppington.
- 120 hectares of open space including 42 local parks, 11 district parks, 9 local sports fields and 1 district sports field
- 12.6 km of new or upgraded roads and associated infrastructure for pedestrian movement
- stormwater infrastructure that will ensure that major rain and flood events are managed effectively.

Development in the ALN Precinct is expected to occur over 20 years. Development within the precinct commenced in 2015 and recent correspondence from council indicates at least 15% of the area has obtained development approval to date.

3.3 Summary of costs in ALN Contributions Plan

The total value of land, works, and plan administration included within the ALN contributions plan is approximately \$1.01 billion (\$Mar2021). This comprises:

- \$492.09 million (48.9%) for land acquisition
- \$506.7 million (50.35%) for works
- \$7.6 million (0.76%) for plan administration.

Table 3.1 summarises the costs in the plan by infrastructure category.

Table 3.1 Costs in the ALN contributions plan (\$ millions, \$Mar2021)

| Infrastructure category | Land | Works | Administration | Total |
|-------------------------|--------------|--------------|----------------|----------------|
| Transport | 26.4 | 87.6 | - | 114 |
| Stormwater management | 144.2 | 290.5 | - | 434.7 |
| Open space | 314.1 | 128.6 | - | 442.7 |
| Community facilities | 7.4 | - | - | 7.4 |
| Plan administration | - | - | 7.6 | 7.6 |
| Total | 492.1 | 506.7 | 7.6 | 1,006.4 |

Source: Liverpool City Council, *Draft ALN contributions plan (2021) (ALN contributions plan 2021)*.

We found that the council's presentation of monetary contributions rates in the ALN contributions plan is likely to make it difficult for stakeholders to understand what contributions rate will apply for different dwelling types. This issue is discussed further in section 4.10.1 where we have made recommendations to correct minor errors and improve the clarity and transparency of the monetary contributions table.

3.4 Indicative contributions

Each development within the ALN Precinct will need to apply the formulae and rates within the contributions plan to determine the contributions applicable to the specific development. Rates are calculated based on the assumed occupancy of the development type as well as the Net Developable Area of the land on which the development occurs.

We have calculated indicative contribution rates for example developments to help stakeholders understand and compare likely monetary contribution rates for different types of development within the ALN contributions plan (see Table 3.2). We found that the council's presentation of monetary contributions rates in the ALN contributions plan is likely to make it difficult for stakeholders to understand what contributions rate will apply for different dwelling types. This issue is discussed further in section 4.10.1 where we have made recommendations to correct minor errors and improve the clarity and transparency of the monetary contributions table.

Table 3.2 Indicative residential contributions per lot and dwelling sizes

| | | | Residential dwelling house | Semi-detached townhouse | Secondary dwelling | Seniors living | Commercial office building |
|-------------------------|----------------|------------------|----------------------------|-------------------------|--------------------|-----------------|----------------------------|
| | | | 600 | 250 | (N/A) a | 150 | 3,000 |
| | | | 3.4 | 2.6 | 1.80 | 1.5 | N/A |
| Contribution components | Unit of charge | Per person rate* | | | | | |
| Transport residential | per person | \$1,922** | \$6,535 | \$4,997 | \$3,460 | \$2,883 | n/a |
| Transport commercial | NDA | \$93,740 | n/a | n/a | n/a | n/a | \$28,122 |
| Stormwater | NDA | \$357,327 | \$21,440 | \$536 | - | \$5,360 | \$107,198 |
| Open Space | per person | \$8,038 | \$27,329 | \$20,899 | \$14,468 | \$12,057 | n/a |
| Community services | per person | \$134 | \$456 | \$348 | \$241 | \$201 | n/a |
| Plan administration | NDA | \$6,248 | \$375 | \$156 | - | \$94 | \$1,874 |
| Total | | | \$56,134 | \$26,937 | \$18,169 | \$20,595 | \$137,195 |

a. Note that the secondary dwelling calculation does not include an NDA as it is assumed for this example that the primary residence included either a residential dwelling credit or a contribution already paid

*From "Monetary Contributions Rate Table 1.2.1" on page 2 of the contributions plan.

**Rate incorrectly calculated in the contributions plan; correct calculations are in section 4.10.1.

Source: Liverpool City Council, [Liverpool Contributions Plan 2021 – Austral and Leppington North Precincts](#) and IPART Example Calculations

4 Assessment of ALN

This section provides our assessment of ALN contributions plan from the council. It includes our assessment of each criterion, by works category, issues relating across all categories, and our recommendations.

4.1 Overview

We assessed the ALN contribution plan against criteria in the Department of Planning and Environment's (DPE's) [Practice Note](#). For more details on our assessment approach, please see our [Information Paper](#).

We found that the ALN contribution plan meets some of the Practice Note criteria. In Table 4.1 we summarise our assessment of each infrastructure category and issues relating across all categories.

Table 4.1 Summary of our assessment

| Criteria | Stormwater | Transport | Open space | Land | Plan administration |
|----------------------|---|---|---|--------------|---------------------|
| Essential works list | Demonstrated | Demonstrated | Demonstrated | Demonstrated | Demonstrated |
| Nexus | Demonstrated | Demonstrated | Demonstrated | Demonstrated | Demonstrated |
| Reasonable cost | Demonstrated IPART recommendation | Demonstrated IPART recommendation | Demonstrated IPART recommendation | Demonstrated | Demonstrated |
| Apportionment | Demonstrated | Demonstrated | Demonstrated | Demonstrated | Demonstrated |
| Timing | Demonstrated | Demonstrated | Demonstrated | Demonstrated | Demonstrated |
| Consultation | Demonstrated | Demonstrated | Demonstrated | Demonstrated | Demonstrated |
| Other matters | IPART recommendation | Not relevant | | | |

4.2 Essential Works List

4.2.1 Stormwater

The preliminary stormwater strategy for ALN contributions plan was initially prepared by the engineering consultancy Cardno on behalf of DPE in 2011 and provided a high-level strategy for the management of rainwater and stormwater as part of a larger planning process.² prior to rezoning of the area by the state government. The plan sought to design controls for the management of stormwater quality and quantity.

In 2019, the council engaged a consultant (SMEC) to provide detailed designs for the concept drainage system provided by Cardno. During the detailed design process the council's consultant identified several constraints to delivering the concept design solution (known as a traditional 'end of pipe' solution).^b

In its submission to our draft report the council stated that these constraints included stormwater quality treatment outcomes, safety and maintenance issues with basin design and a topography which resulted in insufficient hydraulic conditions to enable operation of some basins.³

To address the constraints identified by its consultant the council decided to change its stormwater strategy to a hybrid solution, supplementing end-of-pipe infrastructure with streetscape controls. The council opted for this hybrid approach as it requires less land to be acquired compared to the end-of-pipe solution, given the topography of the area.

The council did so based on the finding that the topography of the area required the acquisition of more land for a traditional end of pipe solution than the hybrid option and Liverpool City Council's preference not to acquire more land.

SMEC provided higher cost estimates than the Cardno plan, by adjusting the planned infrastructure to avoid acquiring more land.

The ALN contributions plan includes \$290.5 million of stormwater infrastructure costs comprising:

- 21 gross pollutant traps
- 15 bioretention facilities
- 1 sedimentation pond
- a network of 86 piped sections
- 8 creek culverts
- 1,519 streetscape raingardens (including trees).⁴

Table 4.2 Stormwater management land and works in ALN contributions plan (\$millions, \$Mar 2021)

| Item | Total cost |
|---|------------|
| Land Acquisition | 144 |
| Streetscape Raingardens (including trees) | 64 |
| Drainage Systems with 1% AEP Basins | 103 |
| Drainage Systems with 50% AEP Basins | 98 |
| Drainage Systems without Basins | 14 |
| Creek Culverts | 10 |
| Total | 434 |

Note: Totals may not add due to rounding.

Source: Liverpool CP2021 – *Austral and Leppington North Works Schedule – March 2021*.

^b End-of-pipe solutions refers to stormwater management systems that gather untreated stormwater from many locations and treats it at a centralised location before discharge into a waterway. SMECs model has added multiple streetscape treatment nodes to this design paradigm.

The items included in ALN's stormwater management costs include drainage systems with accompanying basins, gross pollutant traps, sedimentation ponds, pipes, creek culverts and streetscape raingardens. Land acquisition costs are also included. The purpose of each stormwater works item included within the ALN contributions plan is for stormwater management. We conclude that these items are consistent with the Essential Works List criteria identified by the Practice Note.

4.2.2 Transport

The transport infrastructure set out in the ALN contributions plan will deliver transportation services for residents, businesses, and visitors in the area. This includes provision for new or upgraded roads to accommodate the increased traffic movements of the proposed development. The local transport infrastructure to be delivered under the ALN contributions plan are:

- 12.5 km of new or improved collector roads
- 1,200 new street trees
- 19 creek crossings
- 11 pedestrian bridges
- around 10 roundabouts and 1 signalised intersection
- 42 bus shelters
- 50 street level pedestrian crossings.⁵

The land and works for these roads are proposed to cost \$114 million, or 11% of the total ALN contributions plan cost. Land purchases account for \$26 million, and \$88 million for road works and construction.

AECOM's *Austral and Leppington North Precincts Transport Assessment August 2011* also identified major upgrades to arterial roads to accommodate the increased traffic generated by the higher population. We note that these upgrades have not been included in the ALN contributions plan as the NSW state government has agreed to pay for upgrades to major arterial roads.⁶

Table 4.3 Transport management land and works in ALN contributions plan (\$millions, \$Mar21)

| Item | Total cost |
|-----------------------------------|------------|
| Land Acquisition | 26.4 |
| Local Roads | 15.6 |
| Collector Roads | 25.1 |
| Street Trees | 0.24 |
| Pedestrian Crossings | 1.49 |
| Road Segments Over Creek Culverts | 33.6 |
| Intersections | 3 |
| Pedestrian Refuge Crossings | 1.7 |
| Bus Shelters | 1.2 |
| Construction Contingency | 4.7 |
| Total | 114 |

Source: Liverpool City Council, *Liverpool CP 2021 – Austral and Leppington – Draft IPART Submission*, and IPART analysis.

The items proposed in the ALN contributions plan include roads, intersections, bridges, roundabouts pedestrian crossings, street trees and bus shelters. We have determined that the transport infrastructure proposed in the ALN contributions plan meets the description in the 2019 Practice Note of "land and facilities for transport". These items are all consistent with the Essential Works List outlined in part 3.2 of the Practice Note and the examples (i.e. road works, traffic management and pedestrian and cyclist facilities) and does not include carparking. Therefore, the transport infrastructure satisfies the Essential Works List criteria.

4.2.3 Open space

The ALN contributions plan proposes to provide 120 hectares of open space for an estimated future population of around 58,000 residents. The items to be provided, either through construction of new areas or upgrades of existing areas include:

- 46 local parks
- 11 district parks
- 5 local sportsgrounds
- 1 district sportsground.

Table 4.4 Open space management land and works in ALN contributions plan (\$millions, \$Mar2021)

| Item | Total cost |
|---------------------------------------|------------|
| Open space land costs | 314 |
| Local park embellishment | 36 |
| District park embellishment | 40 |
| Local sporting field embellishment | 37 |
| District sporting field embellishment | 9 |
| Construction contingency | 7 |
| Total | 443 |

Note: Total may not add due to rounding.

Source: Liverpool CP2021 – Austral and Leppington North Works Schedule – March 2021

The items included in the ALN contributions plan include park, sports grounds, and dual use riparian corridor embellishment. Included in the embellishment are playgrounds, picnic facilities, pathways and park furniture. These items all fall under the category of essential works for open space embellishment and are necessary to improve quality and quantity of open space for future residents.

4.2.4 Plan administration

Plan preparation and administration costs are on the Essential Works List. The Practice Note states:

"Plan administration costs are those costs directly associated with the preparation and administration of the contributions plan. These costs represent the costs to a Council of project managing the plan in much the same way as the project management costs are incorporated into the cost estimates for individual infrastructure items within a plan."

Plan administration costs may include:

- Background studies, concept plans and cost estimates that are required to prepare the plan.
- Project management costs for preparing and implementing the plan (e.g. plan coordinators).⁷

4.3 Other relevant matters

We engaged a civil engineering consultancy J Wyndham Prince (JWP) to review the stormwater works schedules in the plan and advise whether the costs in the list were reasonable and whether nexus had been established. JWP's conclusions are outlined at Attachment A.

JWP conducted a cost review of the items within the works schedule and a technical review of the stormwater concept and detailed design studies.

JWP reported its findings that the proposed hybrid stormwater solution may be inadequate to effectively meet the council's safety and environmental standards.⁸ These include:

- The raingardens proposed in the strategy are unlikely to meet appropriate street drainage design safety standards published in 2020.⁹

- More pipes and pits in the street network are likely required to ensure gutter flow widths that comply with council safety standards.¹⁰
- Increased streetscape control capacity including additional raingardens would be needed to ensure flow depth and velocity are safe for pedestrians and vehicles during a 1% AEP storm event.¹¹

Other concerns with the council's hybrid stormwater strategy include:

- Maintenance costs of street gardens are greater than an end of pipe solution, and increased streetscape capacity would further increase the ongoing maintenance cost
- Streetscape gardens can substitute the need for some gross pollutant traps if the catchments can be limited to ensure manageable maintenance frequencies.
- Costs of delivering stormwater management works in the Sydney market have increased since 2021
- A cost benefit analysis of the hybrid stormwater strategy and alternative options should be completed.¹²

We presented these findings to the council during our meeting in May 2022 and followed up with correspondence in July and December 2022.

The council considered the views of JWP but disagreed, arguing its proposed approach was appropriate for stormwater management in the Precincts. The council prepared a response dated 9 December 2022 outlining its view that:

- SMEC's analysis found that an entirely end-of-pipe solution is not viable given the topography of the area.
- Kerb inlets and underground pipes will be placed between raingarden intersections to manage runoff and overflow. This supplements the raingarden system and will allow it to accommodate 20% AEP events.
- All residential and commercial area stormwater systems (excluding RE1, SP2 drainage and C4) will be designed to meet the requirements of a 1% AEP event.
- The council has a requirement the 1% AEP flood depth over the street is limited to 200mm and velocity depth to 0.4 m²/s. This meets council standards to avoid vehicles being swept away during a 1% AEP event.¹³

Concerns about the stormwater strategy were also raised by Vantage property in its submission to the Draft Report. Vantage Property considers that the revised stormwater strategy does not achieve a significant improvement in stormwater quality nor a reduction in costs.¹⁴ Vantage Property stated that the new strategy requires a total increase in costs of \$105m from the 2014 contribution strategy, with an increase to the contribution rate of \$6,500 per new dwelling.¹⁵ Vantage Property argues without a cost benefit analysis between both regimes, the costs cannot be demonstrated to be reasonable.¹⁶

In an attachment to its submission, Vantage provided analysis by Infrastructure and Development Consulting (IDC) on the stormwater management plan. IDC stated it had recently finalised construction of the first subdivision in the ALN precinct (Vantage groups Austral Estate Stages 3 & 4) using streetscape raingardens and has gained insight into the challenges and costs. IDC considered that Council's revised strategy was not appropriate because:

- it was inefficient to use numerous small basins instead of fewer larger ones
- there are extra costs that associated with constructing raingardens
- there is a high maintenance cost of using many small raingardens because:
 - there are no pre-treatment pollutant traps
 - raingardens will become clogged with sediment easily
 - it is expensive to spread the maintenance load over so many small, spread-out facilities.¹⁷

The council should review its stormwater strategy

Councils are responsible for determining whether designs meet performance and safety standards, and this is not a focus of IPART's assessments of contributions plans. We consider that the council has conducted options analysis and identified a preferred solution to reasonably deal with constraints and information at the time of preparing the plan.

However, there are differing industry opinions on the merits of the proposed stormwater solutions. Informed by the view of our consultants, the council and its consultant's response and the concerns expressed by a local developer, we consider that the council should conduct a review of its stormwater strategy to ensure it remains appropriate for managing the stormwater needs of the precinct into the future, and the costs in the plan remain cost reflective.

We consider that the review should take place as soon as possible and within the next 2 years. This is to ensure that the most appropriate stormwater strategy is confirmed as soon as possible


The future review of the ALN contributions plan should re-examine the assumptions of the strategy, changes to safety and design standards and the concerns raised by stakeholders. It should also incorporate any actual performance data of infrastructure delivered. The council can then test the viability of its chosen strategy and make changes, if required, as soon as possible.


Safety standards are primarily an issue for the council's considerations. However, any change of strategy driven by safety, performance, or other drivers, are likely to have cost implications for the delivery of the stormwater system and IPART would examine any cost implications of a revised strategy in a future review of the stormwater works component of the ALN contributions plan.

We note the council's concerns that this will impose a significant resourcing demand on the council.¹⁸ However given the concerns expressed by industry experts and developers within the area, we consider a review of the stormwater strategy should be a high priority for the council. This review should assess that the performance is consistent with up to date design standards, and will perform as expected, and any changes to the strategy are costed and recovered from development, according to the 'impactor pays' principle. Delaying this work increases the likelihood that ratepayers of the council will be required to fund any additional costs.

We note that plan administration costs incurred because of the review may be included within a future review of the plan.

Recommendations

1.  The stormwater strategy should be comprehensively reviewed within two years of the contributions plan becoming an 'IPART reviewed contributions plan' to consider:
 - a. Safety and performance viability of the stormwater strategy
 - b. Changes to design standards
 - c. Concerns raised during IPART's consultation process
 - d. Actual performance data of infrastructure already delivered.

2.  Adjustments to the strategy should be made based on the findings of the review.

4.4 Nexus

4.4.1 Stormwater

The ALN Precincts' detailed concept design and stormwater management plans were prepared by SMEC. The stormwater infrastructure proposed in the detailed concept designs is designed to prevent flooding in the region and ensure post development stormwater quality is adequately managed. The infrastructure was designed on the results of hydrological and hydraulic modelling to determine stormwater runoff in pre and post development scenarios. The studies confirm increased runoff will be generated by the additional impervious surfaces introduced by the development. They recommend infrastructure to be constructed to manage this additional runoff. We therefore consider that these plans establish nexus for stormwater infrastructure listed in the ALN contributions plan. Our consultants, JWP, confirmed this conclusion.¹⁹

Biofiltration street tree provisions

In our Draft Report we noted an apparent double counting of the cost of trees in both the per metre cost of roads and as its own line item. The council has since clarified that the trees noted as their own item are part of the self-watering raingarden basin systems proposed in its stormwater strategy. As such, we do not recommend that these costs be removed from the ALN contributions plan.

Table 4.5 shows the technical studies for stormwater works.

Table 4.5 Technical studies for stormwater works in the ALN contributions plan

| Author | Title | Date |
|--------|---|---------------|
| Cardno | Austral & Leppington North Precincts Water Cycle Management WSUD Report WCM and WSUD Report | April 2011 |
| SMEC | Austral and Leppington North Design of Water Management Infrastructure Detailed Concept Design Report | March 2019 |
| SMEC | Development of Streetscape Raingarden Master Plan for Austral and Leppington North | February 2021 |

4.4.2 Transport

Significant expansion of local roads and transport infrastructure is required to provide access for the future residents of the Precincts. AECOM's report *Austral and Leppington North Transport Assessment* identified the major transport items included for the expansion of roads and transport infrastructure in the ALN contributions plan. This assessment was supplemented by a Post Exhibition Addendum to the report in July 2012, which made minor adjustments based on community feedback. We assess that these documents establish nexus for the transport infrastructure items included in the ALN contributions plan. The works are located entirely within the ALN contributions plan area, except for one road which has been partially costed to the Rossmore Precinct^c to reflect this.

Our review of the ALN contributions plan transport infrastructure identified an additional 8 intersection controls (including 7 roundabouts and 1 signalised)^d not identified in AECOM's *Post Exhibition Transport Report (Addendum)*. The total cost of these intersection controls within the plan is estimated at \$2.6M.

In its submission to the Draft Report, Vantage Property, a local developer, sought clarification from the council about the demand for additional intersection upgrades that were included beyond those identified in AECOM's 2012 report.²⁰ While not opposed to additional transport infrastructure, Vantage Property sought additional justification or validation of the need for intersection updates, rather than relying on its experience and local knowledge of the area.

The council has justified the inclusion of these items saying that AECOM's study provided a broad overview for the Precincts and these allowances have been made based on the council's experience and staff local knowledge of the needs of the area.²¹

We consider that the council's experience and local knowledge of the area is an appropriate justification for the inclusion of additional traffic infrastructure.

^c Half of the cost of road BR12 has been allocated to the Rossmore Precinct based on an estimate that half of anticipated demand is generated from that Precinct.

^d This refers to items IN5-IN11 and PC1 in the Works Schedule

Provision of cycling pathway

The adopted ALN contributions plan states:

*"A comprehensive bicycle network is proposed for both the Austral and Leppington North Precincts, which will link the centres, schools, transport nodes and various residential neighbourhoods with key strategic routes and onward destinations."*²²

In our Draft Report we noted that no allowance was directly made in the schedule of works spreadsheet for shared paths or cycle paths. The council has since confirmed with us that the cycle pathways will be provisioned in future and that road lengths in the current plan have been made to accommodate the necessary space.

It has therefore chosen to retain references to cycle pathways in the ALN contributions plan and we consider this approach is reasonable.

We conclude that nexus has been established for all transport works within the ALN contributions plan.

Table 4.6 shows the technical studies for transport works.

Table 4.6 Technical studies for transport works in the ALN contributions plan

| Author | Title | Date |
|--------|---|-------------|
| AECOM | Austral and Leppington North Precincts Transport Assessment | August 2011 |
| AECOM | Post Exhibition Transport Report (Addendum). | July 2012 |

4.4.3 Open space

Elton Consulting's *Social Infrastructure and Open Space Assessment* of the Precincts examined open space needs based on the projected demographics of the ALN Precincts (see Table 4.7). The infrastructure requirements are based on council standards and consultation with the DPE. The study by Elton Consulting identified a need for district level parks and sportsgrounds in addition to local open space due to the large population projected for the ALN Precinct. This study establishes nexus for the open space infrastructure in the ALN contributions plan.

Table 4.7 ALN contributions plan open space nexus studies

| Author | Title | Date |
|------------------|---|-------------|
| Elton Consulting | Social Infrastructure and Open Space Assessment | August 2011 |

4.4.4 Land

For the delivery of stormwater works, SMEC's Development Master Plan identified that the area within the ALN contributions plan consists mainly of flat topography. This limits the hydraulic capacity to convey stormwater flows that reduce the risk of flood. The council adopted its current strategy involving streetscape raingardens to circumvent this issue. The amount of land required for stormwater works fell from the 103 hectares initially indicated by Cardno in 2011 in the ILP to 73 hectares in the adopted 2021 plan.²³ SMEC's strategy reduces the need to acquire more land but leads to higher maintenance costs in the long-term. The council has accepted this cost trade-off. The lower provision of land in the ALN contributions plan compared to the ILP's 103 hectares recommendation is reasonable, considering the council's adopted strategy.

AECOM's transport study concluded that 5.2 hectares of land is required for new and upgraded infrastructure.²⁴ The ALN contributions plan includes 5.6 hectares to be acquired, representing a reasonable alignment between the contribution plan and the conclusions of the transport study.²⁵ Council GIS data shows all items are wholly within the contribution plan area with the exception of the BR12 Kemps Creek Gurner Road upgrade, where half of the work costs have been allocated to Rossmore Precinct.

The plan includes 120 hectares of open space, 106 hectares of which is yet to be acquired. This is lower than the benchmark rate of 2.84 hectares per 1000 people of the Liverpool Council which would require 154 hectares to meet the projected population requirements and Elton's *Demographic and Social Infrastructure Assessment* which recommended 135 hectares.²⁶ This will be expanded upon further in Section 7. Council GIS data shows all items are within the contribution plan area.

The levels of land to be acquired in the contribution plan are consistent with the provisions recommended by the council's studies, except in the case of open space where provision is lower.

4.4.5 Plan administration

Plan preparation and administration activities are necessary for the facilitation of the development, and we have concluded that nexus has been demonstrated for these costs.

4.5 Reasonable Cost

The Practice Note requires contributions plans to demonstrate:

"the proposed development contribution is based on a reasonable estimate of the cost of the proposed public amenities and public services,"

In this report we present our assessment of whether the council has made a reasonable estimate of costs for each item on the Essential Works List.

We consider that ensuring a contributions plan includes a *reasonable* cost estimate of essential land and works increases the likelihood that the '*impactor pays*' principle is conserved. This means that the new development will pay for the services they require. It minimises the chance that general ratepayers of the local government area will need to pay for the services in the new area, while at the same time ensuring that developers do not pay too much for the services delivered.

All estimates have a level of uncertainty associated with them. Estimates may be incorrect for many reasons including using a method that prioritises simplicity over accuracy, using general rather than site-specific information, incomplete information at the time of the estimate, or unexpected events. Estimates can also become less accurate over time. A reasonable estimate is one that falls within a reasonable band of uncertainty. That is, one that is close to the actual cost of delivering infrastructure but may be higher or lower.

Across stormwater, open space and transport works we found that the council's estimates were consistently lower than those calculated by IPART using either our benchmarks or the advice of consultants. IPART's estimates range from 10% to 61% higher than the estimates included by the council in the ALN contributions plan.

Our view is that the council's approach to estimating costs is reasonable but likely to be low. We consider that in the early stages of a project, such as for the current stage of the ALN contributions plan, the band of reasonable uncertainty is wider than the later stages of a project when more recent and detailed information on design, circumstances and construction rates is available.

4.5.1 Stakeholder views on reasonable costs

In response to our draft recommendation that the council review its costs within 2 years, Vantage Property was concerned a review of all work costs within the next 2 years will create further uncertainty for developers as rates may change.²⁷ It also noted inconsistency between the assessment of the neighbouring Camden Growth Area contribution plan.²⁸ Our key objective is to ensure contribution rates are cost reflective. While we seek consistency where relevant, our assessments are informed by relevant information at the time of the assessment including changes to design standards and economic conditions.

Vantage Property's position was that the council should undertake a re-costing of infrastructure now and make the findings available for public comment before finalising the contribution plan.²⁹ Alternatively, they requested that IPART remove the recommendation and maintain the standard approach to indexation of costs.³⁰ We consider that the proposed level of contributions in the plan will be reasonable and will not over-recover for services. We consider that costs across all major infrastructure categories of the ALN contributions plan are more likely to be underestimated than overestimated. We have provided recommendations on how the council should review its costs soon (1 - 2 years) and achieve a greater level of certainty on the rate of contributions included in the plan. This includes carefully monitoring the actual costs of infrastructure delivery within the precinct and using this information within a future review.

Vantage Property also requested IPART direct the council to amend the contribution plan to include appropriate savings and transitional arrangements to ensure development applications that have been lodged but not yet determined are not subject to an increase in contributions.³¹ Moreover, Vantage also submitted that IPART and the Planning Minister should provide a specific direction to phase in the implementation of revised costs over 3 years.³²

We note that IPART's role does not extend to implementation of the plan. We consider that contributions rates should be cost reflective and based on a reasonable estimate of costs to provide appropriate signals about the actual cost of development and facilitate efficient development. We do not consider the current capped rate of \$30,000 per residential lot, or an amount below the recommended rate, to be reflective of the actual cost of development.

The council was supportive of a comprehensive review of all work costs in its submission to our Draft Report, but noted that until real time and actual cost data is available, indexation will continue.³³ The council seeks an option from the Minister to allow council to make adjustments to the current draft CP with real and actual cost of items when they have been delivered.³⁴ The council is concerned that without real and actual cost adjustments on works/land completed, there is a risk of costs not being recouped and passed onto rate payers.³⁵

The council also expressed concern about the recommended plan review within 3 years. The council stressed that as these items have been supported and given the timeframe of a recommended review in 3 years and another Ministerial approval, the development approval prior to the next review will likely to have occurred, risking a major financial unfunded gap to council.³⁶ If development rates continue, then there is little to no way to recoup costs without a future levy on rates.³⁷ It also noted that since the lodgement of the draft plan, significant increases to land values and building costs have occurred. It seeks to update the plan with real / actual costs data.³⁸ We have not been provided with these costs and therefore have not reviewed them. We therefore do not recommend any actual costs be substituted in the plan. We do consider that actual costs are used to inform future updates of the plan.

We understand that the legislative framework governing local infrastructure plans does not allow the council to amend the cost of works or land acquisition values (other than a CPI increase of those costs or values) within the schedules without an IPART review. Therefore, changing any assumption or strategy underlying the plan would require a new plan and assessment by IPART.

IPART's function is to ensure that there is a reasonable cost estimate for the council's contribution plan, the purpose of which is to ensure that developers, commercial landowners, and residents pay for the services they require.

4.5.2 Stormwater

IPART understands that the stormwater strategy was created to adequately provision stormwater infrastructure without needing to acquire more land. We note costs of the plan are comparatively high, both in total and on a per hectare basis. This reflects the Precincts' relatively small net developable area (NDA) available for stormwater works and the high proposed cost for the implementation of the hybrid raingarden strategy. Land acquisition costs are \$144 million, and the total cost of stormwater land and works in ALN is \$434 million.

The council also expressed concern about a decrease in the supply of housing that would result if further land acquisition was required.³⁹ The council has performed adequate options analysis and has accepted that maintenance costs for its proposed strategy will be higher than under an entirely end-of-pipe solution.⁴⁰

SMEC prepared a memo responding to the concerns raised by IPART and JWP. This memo indicated that maintenance costs under the current plan would be around \$2 million more expensive per year when compared with an entirely end-of-pipe solution. However, an end-of-pipe solution would require at least \$39 million of additional land be acquired.⁴¹ The council has chosen to absorb this higher maintenance cost, citing the high upfront capital costs of land acquisition and the desire to avoid a reduction in housing supply.⁴²

JWP and SMEC disagree on stormwater management costs

SMEC produced the council's stormwater cost estimates. JWP's (our consultant's) analysis indicated that costs in the proposed stormwater plan are underestimated by about 62%.⁴³ The primary factor JWP identified was SMEC's analysis of raingarden costs using a Melbourne-based price of \$1,000 per m². JWP consider that a more appropriate cost can be found in the 2020 *Western Sydney Engineering Design Manual*, recommending a cost of \$1,400-1,500 per m² based on Blacktown's most recent infrastructure programs.⁴⁴ JWP's report calculated Council's construction costs are underestimated by \$179 million. A comparison of the cost estimates provided by both SMEC and JWP are listed in Table 4.8 below.

Table 4.8 Council stormwater cost estimates compared with JWP estimates (\$millions, \$Mar2021)

| Item | Council Cost Estimate | JWP Cost Estimate |
|--------------------------------------|-----------------------|-------------------|
| Streetscape Raingardens | 64 | 165 |
| Drainage Systems with 1% AEP Basins | 103 | 134 |
| Drainage Systems with 50% AEP Basins | 98 | 130 |
| Drainage Systems without Basins | 14 | 25 |
| Creek Culverts | 10 | 16 |
| Total | 290 | 470 |

Note: SMEC's Memo addressed that its costs were underestimated in various areas, but did not provide exact new estimates for most items. The costs proposed in the original plan have therefore been used for consistency.

Note: Totals may not add due to rounding.

In its submission to the Draft Report, Vantage Property raised concerns the revised stormwater strategy does not achieve a significant improvement in stormwater quality nor a reduction in costs.⁴⁵ Vantage Property stated that the new strategy requires a total increase in costs of \$105m from the 2014 contribution strategy, with an increase to the contribution rate of \$6,500 per new dwelling.⁴⁶ Vantage Property argues without a cost benefit analysis between both regimes, the costs cannot be demonstrated to be reasonable.⁴⁷

In an attachment to its submission, Vantage contracted Infrastructure and Development Consulting (IDC) to provide more analysis on the stormwater management plan. IDC stated it had recently finalised construction of the first subdivision in the ALN precinct (Vantage groups Austral Estate Stages 3 & 4) using streetscape raingardens and has gained insight into the challenges and costs. IDC considered that the council's revised strategy was not appropriate because:

- it was inefficient to use numerous small basins instead of fewer larger ones
- there are extra costs that associated with constructing raingardens
- there is a high maintenance cost of using many small raingardens because:
 - there are no pre-treatment pollutant traps
 - raingardens will become clogged with sediment easily
 - it is expensive to spread the maintenance load over so many small, spread-out facilities.⁴⁸

The original stormwater plan created by Cardno was a high level plan, with council and SMEC deciding that the plan was not feasible to implement because of:

- high cost of land needed to expand end of pipe treatment
- insufficient stormwater quality outcomes
- basins having insufficient gradients
- safety and maintenance issues.⁴⁹

SMEC and the council discussed other solutions such as using wetlands or engineered solutions but considered these were not feasible, therefore, the council opted for a hybrid solution.⁵⁰

IPART's role is to assess whether the costs of the plan are within reasonable estimates. We consider the stormwater infrastructure costs presented within the ALN contributions plan are reasonable. However, we consider it likely that the council's estimates are more likely to be lower than higher than its actual costs. If this is the case, the council may be setting developer contributions lower than needed to reflect the actual infrastructure costs of meeting the needs of residents and businesses. If this were to be material enough, the council may be forced to fund land and works from general revenue, resulting in a higher burden on ratepayers in future to recover the shortfall.

We recommend the council review costs in the near future.

The council has noted that the ALN contributions plan will be implemented over the course of 2 decades and that this will present multiple opportunities for re-evaluation of costs. We note that once the construction of the stormwater system has commenced, council will have the opportunity to analyse actual cost data to improve its estimates.

We see no material benefit to further delay the implementation of the ALN contributions plan to refine cost estimates at this point.

We consider it likely that costs will increase in the future. As with other works items, we expect the council will improve its estimates with actual data as it becomes available as the works within the contribution plan are delivered, in particular costs associated with the stormwater management plan. We consider that after a review of the stormwater strategy is complete, and it has collected actual costs of approximately 2 years of delivery, the council will have better information to refine the cost estimates.

4.5.3 Transport

The methodology used to calculate transport costs in the ALN contributions plan involved estimating base rates by type of transport works on a square meter basis, and extrapolating this to different roads and areas for each of the type of works. At an early stage of the ALN contributions plan we consider that this methodology will produce a reasonable estimate. However, we note that our estimates are generally higher than those presented by the ALN contributions plan. We estimate transport works costs at \$100 million, whereas council estimates \$91 million when adjusting to June 2022 CPI. This is a difference of around 10%. Table 4.9 (below) outlines the differences between IPART's benchmark estimates and those in the contributions plan.

Table 4.9 Council transport cost estimates compared with IPART benchmarks (\$millions, \$Jun2022)

| Item | ALN contributions plan Cost Estimate | IPART Benchmark Estimates |
|------------------------------------|--------------------------------------|---------------------------|
| Local Roads (New and Upgraded) | 18 | 20 |
| Collector Roads (New and Upgraded) | 28 | 35 |
| Street Tree Planting | <1 | N/A (See below) |
| Pedestrian Crossings | 2 | 7 |
| Intersections | 4 | 1 |
| Pedestrian Refuge | 2 | 1 |
| Bus Shelters | 1 | 1 |
| Culverts ^a | 36 | 37 |
| Total | 91 | 101 |

a. The unique nature and cost calculations for culverts in the ALN contributions plan make them difficult to calculate with IPART benchmarks.

Note: Totals may not add due to rounding.

Source: Liverpool City Council, Austral and Leppington North Works Schedule – March 2021, IPART *Local Infrastructure Benchmark Costs* and IPART analysis.

Table 4.10 Example costs for transport works in the ALN CP (\$Jun22)

| Item no. | Description of works | Cost |
|----------|---|-----------|
| CR26 | Upgrade road full width (150m) | \$577,291 |
| PB1 | Example Pedestrian Crossing (Road at DC20) | \$108,463 |
| IN5 | Example Roundabout (Gurners Ave/Fourth Ave) | \$174,708 |

Source: Liverpool City Council, Austral and Leppington North, *Draft Liverpool CP 2021 – Austral and Leppington North – Works Schedule – March 2021*.

The potential sources of difference between the cost estimates are the following:

- The time passed since the cost estimates and supporting assumptions were initially produced in July 2011.
- Differences in the methodology (with benchmarking being a less detailed approach to estimating costs).

The council should review costs in future

Although we have concluded that the cost estimates are reasonable, our view is they are more likely lower than the actual costs the council will incur. A low-cost estimate in a contributions plan risks under-collecting contributions which could lead to the under provision of transport items for future residents or an increase in costs to all rate payers.

We consider that the implementation of the ALN contributions plan over 2 decades will allow costs to be examined and adjusted as the infrastructure is delivered. We recommend that the council conduct a comprehensive re-examination of costs in the next 12-24 months and resubmit the plan to IPART for review within three years.

4.5.4 Open space

The cost of open space works in the ALN contributions plan is \$129 million (25% of total works costs). Total open space provision costs are \$442 million to provide the facilities to serve a significant increase in population projected in the Precincts.

Table 4.11 Open space works costs in ALN contributions plan (\$millions, \$Mar2021)

| Item code ^a | Infrastructure item | Costs in ALN contributions plan |
|------------------------|---|---------------------------------|
| LP2-LP66 | Local Passive Open Space Embellishment | 36 |
| DP2-DP12 | District Local Open Space Embellishment | 40 |
| LS1-LS9 | Local Sporting Fields Embellishment | 37 |
| DS1 | District Sporting Field Embellishment | 9 |
| | Contingency | 6 |
| | Total | 129 |

^a These are the item codes in the Works Schedule for local parks, district parks, local sportsgrounds, and district sportsgrounds

Note: Totals may not add due to rounding.

Source: Liverpool CP2021 – Austral and Leppington North Works Schedule – March 2021

The council's methodologies are reasonable

The council have based their open space cost estimates in the ALN contributions plan on cost per sqm basis. Costs for groundworks, planting, turf, paving and walkways/cycleways, and individual item costs for furniture and playgrounds have been calculated at a per sqm rate. This rate has then been taken and used to estimate open space infrastructure costs based on the projected area need for each item.^e

The estimates then use these rates to determine embellishment costs for each open space location. A document of indicative costs was prepared by Elton Consulting in 2011. This calculated open space embellishment costs are based on the following:

- Data from the Australian Construction Handbook (Rawlinson's Edition 29, 2011)

^e For instance, groundworks cost \$14.3/m² and are required for 100% of the land for delivery of a local park, therefore a 3,500/m² (median sized) local park would require \$50,120 of groundworks.

- Cost experience from Blacktown Council's contributions plan in Alex Avenue and Riverstone Precincts
- Information provided by Liverpool and Camden Councils on previous projects.

These costs were then further revised by WT Partnership (WTP) who created a Cost Review document in 2012. In calculating open space embellishment, the Council has chosen to use figures from both documents and a small number of costs were derived from internal or Camden Council experience. Numbers from both WTP and Elton have been used to calculate open space costs, although in most instances the differences are marginal.

This is a reasonable approach considering the early stage of the ALN contributions plan, but in future the plan should be updated with actual costs obtained from implementation of the ALN contributions plan, quotes, or quantity surveyor reports.

Open space works estimates are reasonable but likely low

In our analysis of open space embellishment cost estimates we have prepared a representative cross-section of the works to compare to our 2014 benchmarks. Below are two tables which compare the cost of several local and district parks to estimates prepared by IPART.

Table 4.12 Example Local passive space embellishment costs in ALN contributions plan (\$millions, \$Jun2022)

| Item Code | ALN contributions plan Cost Estimate | IPART Benchmark Estimates |
|-----------|--------------------------------------|---------------------------|
| LP2 | 2.0 | 3.9 |
| LP12 | 1.5 | 1.9 |
| LP22 | 1.6 | 3.7 |

Source: Liverpool CP2021 – Austral and Leppington North Works Schedule – March 2021, IPART *Local Infrastructure Benchmark Costs* and IPART analysis

Table 4.13 Example District passive space embellishment costs in ALN contributions plan (\$millions, \$Jun2022)

| Item Code | ALN contributions plan Cost Estimate | IPART Benchmark Estimates |
|-----------|--------------------------------------|---------------------------|
| DP2 | 4.6 | 8.5 |
| DP5 | 2.9 | 5.8 |
| DP10 | 11.4 | 19.1 |

Source: Liverpool CP2021 – Austral and Leppington North Works Schedule – March 2021, IPART *Local Infrastructure Benchmark Costs* and IPART analysis

Compared to IPART benchmarks, the council's estimates for the items in Table 4.12 and

Source: Liverpool CP2021 – Austral and Leppington North Works Schedule – March 2021, IPART *Local Infrastructure Benchmark Costs* and IPART analysis

Table 4.13 are low. The risk of low-cost estimates is that the ALN contributions plan will not raise sufficient funds to deliver open space embellishments, or the existing ratepayers will be required to provide the funds to fund adequate open space provision and base level embellishments.

Table 4.14 District passive space embellishment costs in ALN contributions plan (\$millions, \$Jun2022)

| Item | ALN contributions plan Cost Estimate | IPART Benchmark |
|-----------------------------------|--------------------------------------|--------------------------------|
| District Open Space Embellishment | 7.7 | 11.7 |
| District Park Furniture | 0.1 | 0.1 |
| District Park Picnic Facilities | 0.1 | 0.1 |
| District Park Outdoor Courts | 0.1 | 0.2 |
| District Park Playground | 0.4 | 0.4 |
| District Park Parking | 0.2 | 0.6 |
| On Costs | 2.3 (27% of works) | - |
| Congestion | - | 1.9 (15% for light congestion) |
| Demolition Costs | 0.1 | 0.2 |
| Contingency | 0.6 (7% of works) | 3.0 (20% of works) |
| Total | 13.0 | 18.2 |

Note: Totals may not add due to rounding.

Source: Liverpool CP2021 – Austral and Leppington North Draft IPART Submission – Apr 2021 (D21/8533)], IPART [Local Infrastructure Benchmark Costs](#) and IPART analysis

Overall, we found the council has likely underestimated costs of open space embellishment in ALN when compared to IPART benchmarks. IPART's analysis also applies a larger portion for the contingencies.

Where costs are further from our estimates, such as parking and local and district park embellishment, we consider there is a risk that the ALN contributions plan will not deliver on these items for the residents of the Precincts. This would result in either reduced liveability in the ALN precinct for residents or a future increased cost to ratepayers to meet the shortfall.

Liverpool Council should re-examine costs

As with the other elements of the ALN contributions plan we have assessed, we recommend the council revise cost estimates for any future review. This issue may be a result of a high level estimating approach of cost per square metre, rather than individual cost estimates for each park and sports field. Quantity Surveying reports or quotes on detailed concept designs would provide more accurate cost estimates.

As detailed design information, quotations and actual data obtained from site-specific completed infrastructure projects become available, they will provide a better approach to estimating costs. We therefore conclude that open space costs are reasonable, although likely low. These should be re-examined in a future review of the ALN contributions plan as it is implemented.

4.5.5 Land

The council requires significant amounts of land to accommodate the works of the ALN contributions plan. The works will require 186.3 hectares, representing 16% of the available NDA for the Precincts. Land valuation costs are the same across all contribution plan items and therefore addressed collectively by our assessment. The ALN contributions plan includes \$492.09 million for land acquisition, which represents 48.9% of total costs.

Land costs in ALN contributions plan represent the total cost of acquiring land for open space, transport, stormwater management and community facilities (including land value, conveyancing costs, compensation etc).

Table 4.15 Land costs in contribution plan (\$millions, \$Mar2021)

| Category | Total area (ha) | Total cost |
|--------------------|-----------------|------------|
| Transport | 6 | 26 |
| Stormwater | 73 | 144 |
| Open space | 107 | 314 |
| Community services | 1 | 7 |
| Total | 186 | 492 |

Note: Totals may not add due to rounding.

Source: Liverpool Contributions Plan 2021 – Austral and Leppington North Precincts IPART's Information Paper on assessing land costs.

Table 4.16 Example costs for land in the ALN CP (\$Mar2021)

| Item no. | Description of land | Cost |
|----------|--------------------------------------|---------|
| LP2 | Land to be acquired for LP2 (1.61ha) | \$6.3m |
| DP2 | Land to be acquired for DP2 (3.65ha) | \$4m |
| LS1 | Land to be acquired for LS1 (5.7ha) | \$23.7m |
| DS1 | Land to be acquired for DS1 (9.1ha) | \$27.6m |

Source: Liverpool City Council, Austral and Leppington Nth, works schedule spreadsheet.

Table 4.17 Land costs per m² in CP18 (\$/m², \$Jul2019)

| Underlying zoning | Average value |
|-------------------------------|---------------|
| R2 Low Density Residential | 340 |
| R3 Medium Density Residential | 430 |
| B5 Business Development | 450 |
| B1 Neighbourhood Centre | 400 |
| E4 Environmental Living | 135 |
| E2 Environment Conservation | 35 |
| RU6 Transition | 65 |

Source: Civic MJD Land Valuation Report

Land cost valuations and methodology are reasonable

The market values in Table 4.17 were determined by MJ Davis based on examining recent property purchases in the area and an analysis of local conditions. The costs have been indexed to the council's Land Value Index (LVI), an index which measures the underlying changes in land values over time. Liverpool City Council publishes a quarterly update to this LVI. This approach is consistent with other areas of the Liverpool LGA in the past.

The council has applied an allowance for heads of compensation (types of compensation required for each property) under the *Land Acquisition (Just Terms Compensation) Act 1991*. The median costs per m² are broad estimates for the budgeting of the contribution plan. Value assessments involving two evaluating professional parties will be conducted for individual properties being acquired later.

The LVI should only apply to future land purchases

The council proposes to apply the LVI to index the monetary contributions rates for Works Schedule items that relate to land as set out in Part 5 of the ALN contributions plan.

This is the contributions rate calculated using the land cost shown within the works schedules of the ALN contributions plan as 'future land acquisition'.⁵¹


The council proposes indexing the amount twice, the first time to the approval date of consent, and then to the consent amount until the date of payment.

Consistent with the council's proposed approach, we consider that the LVI should only be applied to the land contributions rates based on costs of land *not yet acquired*. It is unreasonable to apply the LVI to the land contributions rates based on costs of land already acquired, since the value of those acquisitions have already been settled. Any land costs already incurred should be inflated by the ABS issued Consumer Price Index, consistent with the regulation.⁵²

This is most simply achieved by applying the LVI to the land contributions rates based on cost of land not yet acquired listed in the plan's works schedule. However, the council can only update the works schedule costs when it submits the plan to IPART for review, which usually occurs every few years. We acknowledge that this will result in delayed reallocation of future and previous land acquisitions and therefore the indexation of land costs and potential over-recovery of contributions rates for land.

This is because where a parcel of land has been acquired in between reviews, indexation with LVI, which is typically higher than CPI, will apply for the remainder of the review period. We consider this is reasonable as it achieves a balance between cost-reflectivity and simplicity and consistency with the regulations. This is because contributions plans are long-term planning documents which establish costs and revenues over several decades and there is some uncertainty about the exact timing of cashflows. We do not consider the administrative effort and cost of the council submitting annual updates to IPART for review is proportionate to the benefit of improved cost reflectivity and accuracy. Further, the regulations do not allow councils to make these types of amendments to a plan without a review by IPART.

Recommendations

3.  The LVI should only apply to the value of land not yet purchased, at the time the contributions plan is adopted. Any future reviews of the plan should revise the value of land not yet purchased to be indexed by the LVI.

Land acquisition cost allowance is reasonable

The council has applied a 12% land acquisition allowance for heads of compensation under the *Land Acquisition (Just Terms Compensation) Act 1991*. This is the same allowance included in the July 2016 Valuation Report for the Camden Growth Areas contributions plan (CGA-CP). This allowance is in place as the council does not yet know which properties it will need to compulsorily acquire and subsequently which additional costs it will incur as part of compensation.

IPART prefers that compensation costs in contribution plans be based on fixed costs rather than a percentage of market value. This is because reasons for compensation usually comprise costs per property, while market values can fluctuate significantly over time. At this stage it is not known how many properties will need to be acquired. In the future with more information available, the council should provide a cost per property. We consider the 12% allowance reasonable at this time as it is informed by the opinion of an external professional land evaluator and recent experience in neighbouring LGAs.

We consider the underlying methodologies used by the council to be reasonable for determining land value. Professional valuations that are pegged to an appropriate LVI have been used and land values estimates are more recent than those used for most of the contribution plan's work costs. We therefore consider that the estimates are likely to reflect accurate values and have concluded that land costs in the ALN contributions plan are reasonable.

Land costs should be regularly reviewed

We note that the valuation data is 3 years old and changes in land values since 2019 may have a material impact on future land costs. Because land value estimates are more recent than those used for works costs and an appropriate LVI has been adopted as an index, we have concluded that the estimates for land are reasonable. Therefore, we consider the risk of under-recovery in this area to be low. Land values can change quickly over time and should be regularly reviewed. The council should monitor actual land acquisition costs as compared to the estimates and use this information to increase the reliability of the land valuation estimates. We recommend the council review its baseline land valuations every 3-4 years.



The Valuer General of NSW responded to our Draft Report and in its submission expressed a view that indexing land values with a CPI would risk producing inaccurate values for contributions.⁵³

4.5.6 Plan administration

The ALN contributions plan includes costs of \$7.6 million for plan administration, which is 1.5% of the total cost of works in the plan. This allowance is consistent with IPART's recommended benchmark rate for plan administration.

We therefore consider \$7.6 million in plan admin costs in the ALN contributions plan to be reasonable. We note however, that total plan administration costs could increase in future reviews of the ALN contributions plan, for example if the works cost was to increase.

Recommendations

4.  Liverpool Council should comprehensively review all works costs in the ALN contributions plan within the next 2 years. The review should include:
 - a. any changes to assumptions or strategies within the plan
 - b. actual costs of delivering land and works within or near the precinct (where available)
 - c. site-specific estimates, recent benchmarks, or other relevant sources.
5.  Following the review of the ALN contributions plan, Liverpool Council should submit the plan to IPART for assessment within 3 years from the date that this plan becomes an "IPART reviewed contributions plan" within the meaning of the Minister's 2019 Direction.

4.6 Apportionment

4.6.1 Stormwater

Costs have been 100% apportioned to new development of the ALN contributions plan area. We consider this is appropriate as the upgrades to the stormwater system have demonstrated nexus to the development. The upgrades are required to adequately manage the increased stormwater quantity that will be generated from the post development changes in land uses. It's also required to adequately manage the quality of stormwater to be discharged to local water courses. Between the new development types, costs have been apportioned 93% to residential developments and 7% to non-residential. This reflects the ratio of NDA being apportioned for residential and commercial purposes.

Existing residents and nearby areas are unlikely to impact the need for the works, we therefore consider the ALN contributions plan's apportionment reasonable.

4.6.2 Transport

Upgrades and expansion of the current transport network will be necessary to accommodate the new residents of the ALN area. Costs have been apportioned 93% to residential development and 7% to non-residential, reflecting the percentage of NDA being apportioned to dwellings and for commercial activities. The costs of transport related expenses in the ALN contributions plan have been ascribed entirely to the ALN contributions plan, with one exception. Half of the costs of the BR12 Kemps Creek Gurner Road upgrade have been apportioned to the Rossmore Precinct. This road will serve the residents of Rossmore and is partially located in the Precinct. We consider the apportionment in the rest of the ALN contributions plan reasonable.

4.6.3 Open space

Contributions for open space in the ALN contributions plan have been levied entirely on new developments and exclusively to residential development. The contributions rates are based on a per person demand. The council has assumed that demand for open space is generated only by the residential development in the Precinct. We consider this approach is reasonable given the nature of the embellishment proposed.

4.6.4 Plan administration

Contributions payments for plan administration are apportioned entirely to new developments. Costs have been apportioned 93% to residential development and 7% to non-residential, reflecting the percentage of NDA being apportioned to dwellings and for commercial activities. In general, the size of a development will be proportional to administration costs. This approach reflects the work involved in delivering the level of infrastructure created based on residential and non-residential development size. We consider this approach reasonable for calculating contributions to administration of planned infrastructure in the ALN contributions plan.

4.7 Timing of infrastructure delivery

The council has provided varying priority levels for the delivery of infrastructure. Stormwater infrastructure is to be delivered as land is developed. Open space and transport items have been given varying priority levels, ranging from when the local area is developed to some items to be delivered coinciding with other relevant items.

A 20-year timeframe is assumed for the delivery of infrastructure in the ALN contributions plan area. The council intends to monitor the plan, which will allow for review and adjustment of population projections, and the works schedule, as required. A more specific timeframe on the delivery of items can be delivered as the ALN contributions plan progresses. We consider that the council's timing of infrastructure is reasonable at this stage.

4.7.1 Stormwater

Stormwater works are to be delivered at the same time as development; priority will be based on the pace of development in each area. We consider this a reasonable approach to stormwater infrastructure delivery timeframe.

4.7.2 Transport

The council has established differing levels of priority for the delivery of transport infrastructure, with roads to be developed as needed. Construction of roads has been prioritised to coincide with development, with lower priorities being directly related to the construction of relevant nearby infrastructure such as parks. This is a reasonable approach considering the early stage of the ALN contributions plan and its implementation timeline over 2 decades.

4.7.3 Open space

The council has proposed to deliver open space in line with local development of each area. It has stated that it will not commence work on the district sportsground until the population approaches capacity. We consider that the delivery timeframe of infrastructure is reasonable.

4.7.4 Land

The council intends to acquire land for the ALN contributions plan in line with development and local infrastructure needs over the next 2 decades. We consider this approach reasonable.

4.7.5 Plan administration

The timely delivery of works and land has been established in previous sections of this report. An allowance for plan administration is required over the approximately 20-year life of the plan to enable timely delivery of land and works.

4.8 Consultation

IPART must assess if council has conducted appropriate community liaison and publicity in preparing the ALN contributions plan.

The council exhibited the current draft of the ALN contributions plan from 18 March to 14 April 2020. Submissions relating to the plan were mostly provided by various property developers including:

- Infrastructure and Development Consulting on behalf of Vantage Property
- Vantage Property
- Crownland Developments

Most public agencies did not provide objections and instead were limited to general comments and considerations. DPE's Environment, Energy and Science Group (EES) also noted an objection.

Table 4.18 Exhibition submissions and Council responses

| Stakeholder | Comment | Council response |
|---------------------|--|--|
| Utility firms | Sites owned to be acquired by utility companies should be rezoned to SP2 Infrastructure | Plan amended for utility company sites to be zoned as SP2 |
| EES | Council did not provide a Biodiversity Consistency Report with their exhibition | The Biodiversity Consistency Report was provided to the EES |
| Property developers | Roundabouts and pedestrian crossings, which were not identified by the traffic study have been included in the contribution plan | The AECOM study is a high level layout for roads while Council staff identified a need for these items at the local and Precinct level. |
| | The required filtration area for residential uses was very similar to the commercial and industrial area (usually it is considerably lower). | Raingardens are to be located at intersections, as such there will be fewer in commercial and industrial areas. As such, residential catchments would have to make up for the lower filtration of commercial areas |
| | Will raingardens require retrofitting in existing developments? | No, raingardens will be built in new development areas of the contribution plan. |
| | A handful of developers objected to the proposal to introduce streetscape raingardens, preferring a traditional end-of-pipe solution | SMEC's studies identified considerable topographic difficulties with an end-of-pipe solution. Streetscape raingardens minimise the need for additional land acquisition as a solution. |

Source: IPART Application ALN CP April 2021 p37. [D21/8532]

4.9 Any other matters

The DPE Practice Note allows IPART to consider whether the plan complies with other matters IPART considers relevant. This chapter identifies two other issues we consider relevant which are:

- the provision of open space within the plan
- assessment of the ALN contributions plan against EPA regulations and requirements.

4.9.1 Provision of open space

The provision of open space in the ALN contributions plan is low at 2.08 ha per 1,000 people. Many of the council's own internal benchmarks for open space have not been met, as shown in Table 4.19 below.

Table 4.19 ALN contributions plan compared with Liverpool open space guidelines

| Guideline | Quantity in ALN contributions plan |
|---|---|
| 2.83 ha space per 1,000 people | 1.94 ha per 1,000 people |
| Minimum local park size = 2,000m ² | 41 of 46 local parks > 2,000m ² |
| Local park to be within 5 minute walk of most residents | Likely achieved for majority of 46 parks |
| District parks to be minimum size of 3 ha | 5 of 11 parks >3 ha |
| One district park per 5 or 10K people | 5,007 people per district park |
| Local sporting field >4ha | 3 of 4 fields >4h |
| One local sports field per 10K people | 13,769 people per local sports field |
| District sports field >6ha | District sports field is 9ha |
| One district sports field per 60K people | 1 district sports field for 55,078 people (est. future pop. ALN Precinct) |

Source: Liverpool City Council *RECREATION, OPEN SPACE AND SPORTS STRATEGY 2018-2028*, *Liverpool CP2021 – Austral and Leppington North Draft IPART Submission – Apr 2021* and *IPART Analysis Tribunal Briefing - ALN CP draft decisions - 21 December 2022*

Our comparison of guideline rates of open space against that proposed under the ALN plan indicates that the proposed level of open space provision under the ALN contributions plan is low. A lack of open space means decreased liveability for residents of the Precincts, and reduced accessibility and connectivity to local parks. These are most pronounced in the South-West and North-East areas of the ALN Precinct. The provision of guideline levels of open space can be challenging for many contribution plans. The council has noted the challenges of providing open space.⁵⁴

In its submission to the Draft Report, the council acknowledged that the projected number of residents will increase in the ALN Precinct.⁵⁵ To consider additional space, the council will have to complete independent technical studies as well as revise open space provision in response to existing shortages and density being higher than planned.⁵⁶

The council stated it had recently completed the Leppington Town Hall Centre Planning proposal, highlighting the need for additional open space and submitted it to DPE for consideration.⁵⁷ The council has also stated that local space in ALN will be supplemented by access to the Western Sydney Parklands directly next to the Precincts. The council has discussed options to further increase residents' access to open space, these include:

- Further embellish or purchase additional open space in the ALN contributions plan boundaries within nexus parameters.
- Continue discussions with local schools for use of open space outside school hours or during the holiday period.
- Continue dialogue with Camden Council regarding shared access to open space.
- Provide additional pathways and bridges to allow better access to open space inside and outside of the contribution plan boundaries. This is especially relevant for the North-East and South-West areas to address accessibility.

We note there are opportunities to further consider improving the provision of open space and access in the ALN contributions plan in a future review of the plan.

Recommendations

6. Liverpool Council should explore the recommended options to increase open space provision to meet industry standards and internal benchmarks prior to future resubmission of the plan to IPART.

4.10 Minor errors in the calculation of monetary contribution rates

We have also identified minor errors in the calculation of monetary contribution rates presented in the table in section 1.2.1 of the ALN contributions plan. These are in the order of 0.3% for one category of population-based charges for the 'Roads' category of infrastructure. We have recommended changes to this table to correct the error in the plan prior to adoption. This is discussed further below.

4.10.1 Assessment against the EPA regulations and requirements

We have determined that ALN contributions plan contains most of the information required by Clause 212 of the *Environmental Planning and Assessment Regulation 2021* (EPA). This clause requires the inclusion of certain information in a contributions plan for the purpose of establishing scope and location.

We have reviewed the plan to assess whether the council has included contribution rates for different types of development as per clause 212(1)(e) of the EP&A Regulation. Section 1.2.1 of the ALN contributions plan presents monetary contribution rates for residential and non-residential development. In addition to the error in the roads category of population-based charges we consider the way this information is presented is likely to make it difficult for stakeholders to understand what contributions rate will apply to all development types. This is because the table does not present all types of residential development.

We have prepared a revised table, both correcting the errors, and presenting other categories of residential development.

We have included all the categories of development as presented in Table 4.20 of the ALN contributions plan and the assumed occupancies for each development type.

This will better indicate the rates to be paid for more types of residential development including categories such as apartments, units, flats, secondary dwellings, and retirement living.

We have also recommended relabelling 'Roads' to 'Transport' to better reflect the range of infrastructure items included under this category, and improve consistency with the language of the Essential Works List.

We recommended different headings and additional notes for the population and Net Developable Area based rates to improve clarity of which rates apply to which development types.

Recommended changes to the existing Monetary Contributions Rate table are denoted in red underlined text. To ensure transparency and consistency for stakeholders, we recommend the council calculate and present its contributions rates in line with Table 4.20 in this report (see below).

Table 4.20 Recommended amendments to Monetary contributions table (chapter 1.2.1 of the ALN contributions plan)

| Essential Infrastructure | | Population based residential rates (\$ / lot or residential dwelling by development type) | | | | | | NDA based residential and non-residential rates |
|--------------------------|--|--|--|--|---|--|--|---|
| Item | Item cost apportioned to Austral and Leppington North Development | \$ per additional person | For subdivided lots, detached dwelling, detached dual occupancy (each dwelling) Assumed occupancy 3.4 persons* | For Semi- detached town house, terrace, attached dual occupancy (each dwelling) Assumed occupancy 2.6 persons* | For flat, unit, apartment, secondary dwellings Assumed occupancy 1.8 persons* | Seniors living dwellings Assumed occupancy 1.5 persons)* | In all other residential accommodation Assumed occupancy 2.6 persons* | \$ per hectare of equivalent NDA* |
| Open Space | | | | | | | | |
| Land | \$314,141,561 | \$5,704 | \$19,392 | \$14,829 | \$10,266 | \$8555 | \$14,829 | Not applicable to commercial development. See population calculations for residential developments |
| Works | \$128,559,170 | \$2,334 | \$7,936 | \$6,069 | \$4,201 | \$3501 | \$6,069 | |
| Subtotal | \$442,700,731 | \$8,038 | \$27,328 | \$20,898 | \$14,468 | \$12,057 | \$20,898 | |
| Community facilities | | | | | | | | |
| Land | \$7,359,828 | \$134 | \$454 | \$347 | \$241 | \$200 | \$347 | Not applicable to commercial development See population calculations for residential developments |
| Subtotal | \$7,359,828 | \$134 | \$454 | \$347 | \$241 | \$200 | \$347 | |
| <u>Transport</u> | | | | | | | | |
| Land | \$26,394,265 | \$445 | \$1,512 | \$1,156 | \$801 | \$667 | \$1,156 | \$21,697** |
| Works | \$87,641,540 | \$1,477 | \$5,021 | \$3,840 | \$2,658 | \$2,215 | \$3,850 | \$72,043** |
| Subtotal | \$114,035,805 | \$1,922 | \$6,534 | \$4,996 | \$3,459 | \$2,883 | \$4,996 | \$93,740** |
| <u>Stormwater</u> | | | | | | | | |
| Land | \$144,195,081 | | | | | | | \$118,532 |
| Works | \$290,496,427 | | | | | | | \$238,795 |
| Subtotal | \$434,691,508 | | | | | | | \$357,327 |
| Plan administration | | | | | | | | |

| | | | |
|--------------|------------------------|--|---------|
| Allowance | \$7,600,457 | Residential development pays drainage and plan administration contributions calculated on an NDA basis | \$6,248 |
| Subtotal | \$7,600,457 | | \$6,248 |
| TOTAL | \$1,006,388,329 | | |

* [Assumed occupancy rates are as per table 3.4 of this plan. Equivalent NDA of the development is approximately 1,217 ha as per section 3.3.2 and the associated footnote \(p 24\) of this plan. Figures may differ due to rounding.](#)

** NDA rates for roads apply to non-residential development only

As discussed in section 3, we have also calculated indicative contributions rates for typical dwellings to help stakeholders compare likely contribution rates.

Recommendations

7. Liverpool Council should amend its '**monetary contributions rate**' table currently in section 1.2.1 of the ALN contributions plan in line with Table 4.20 in IPART's final report.

A summary of our assessment of ALN contributions plan against the EPA clause 212 is provided in Table 4.21.

Table 4.21 Assessment against EPA regulations and requirements

| Subclause | Requirement | Location in contribution plan |
|-----------|--|---|
| 1(a) | Purpose of the plan. | Section 2.4 |
| 1(b) | Land to which the plan applies. | Section 2.3 |
| 1(c) | The relationship between the expected types of development in the area to which the plan applies and the demand for additional public amenities and services to meet that development. | Sections 3.1, 3.2, 3.3 & 3.4 |
| 1(d) | The formulas to be used for determining the section 7.11 contributions required for different categories of public amenities and services. | Sections 4.2.2, 4.3.2, 4.4.2, 4.5.2 & 4.6.2 |
| 1(e) | The section 7.11 contribution rates for different types of development, as specified in a schedule in the plan. | Section 1.2.1 |
| 1(f) | A map showing the specific public amenities and services proposed to be provided by the council, | Section 5. Infrastructure location map is available separately. |
| 1(g) | a works schedule that contains an estimate of their cost and staging (whether by reference to dates or thresholds). | Section 2.11.3 |
| 1(h) | If the plan authorises monetary section 7.11 contributions or section 7.12 levies paid for different purposes to be pooled and applied progressively for those purposes, the priorities for the expenditure of the contributions or levies, particularised by reference to the works schedule. | Sections 2.13 & 5. |
| 2(b) | If a contributions plan authorises the imposition of a development levy condition, the plan must contain the method, if any, of adjusting the proposed cost of carrying out the development, after being determined by the consent authority, to reflect quarterly or annual variations to readily accessible index figures adopted by the plan between the day of the determination and the day by which the levy must be paid. | Section 2.8.5 |
| 3 | A contributions plan must contain information about the council's policy about the following— (a) the timing of the payment of monetary development contributions, (b) development levies, (c) the imposition of development contribution conditions or development levy conditions that allow deferred or periodic payment. | Section 2.9.1, 2.7 and 2.9.3 |

| Subclause | Requirement | Location in contribution plan |
|-----------|--|-------------------------------|
| 4 | A contributions plan that provides for the imposition of development contribution conditions or development levy conditions in relation to the issue of a complying development certificate must provide that monetary payments in accordance with the conditions must be made before the commencement of the building work or subdivision work authorised by the certificate | Section 2.13 |
| 5 | In determining the section 7.11 contribution rates or section 7.12 levy percentages for different types of development, the council must take into consideration the conditions that may be imposed under section 4.17 (6)(b) of the Act or section 97 (1)(b) of the Local Government Act 1993. | Section 2.7 |
| 6 | A contributions plan may authorise monetary development contributions or development levies paid for different purposes to be pooled and applied progressively for the different purposes only if the council is satisfied that the pooling and progressive application will not unreasonably prejudice the carrying into effect, within a reasonable time, of the purposes for which the money was originally paid. | Section 5.3 |

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- ¹ Department of Planning and Environment, [Practice Note – Local Infrastructure Contributions](#), January 2019, pp 14-16
- ² Cardno *WCM and WSUD Report* April 2011, p.3-8
- ³ Liverpool City Council, [submission to IPART's Draft Assessment of Austral Leppington North Contributions Plan for Liverpool City Council](#), 13 June 2023, p 5
- ⁴ JWP, *Review of Stormwater Works – Nexus and Costs–Final Report*, July 2023 p 27-40.
- ⁵ Liverpool City Council, [Liverpool Contributions Plan 2021 – Austral and Leppington North Precincts](#), April 2021,
- ⁶ Liverpool City Council, [Liverpool Contributions Plan 2021 – Austral and Leppington North Precincts](#), April 2021, p.58
- ⁷ Department of Planning and Environment, [Practice Note – Local Infrastructure Contributions](#), January 2019, p 16.
- ⁸ JWP, *Review of Stormwater Works – Nexus and Costs–Final Report*, July 2023 p 23-24.
- ⁹ JWP, *Review of Stormwater Works – Nexus and Costs–Final Report*, July 2023 p 20.
- ¹⁰ JWP, *Review of Stormwater Works – Nexus and Costs–Final Report*, July 2023 p 23-25.
- ¹¹ JWP, *Review of Stormwater Works – Nexus and Costs–Final Report*, July 2023 p 23-25.
- ¹² JWP, *Review of Stormwater Works – Nexus and Costs–Final Report*, July 2023 p 26.
- ¹³ Liverpool City Council, *IPART RFI – Liverpool City Council - Austral Leppington North Contribution Plan*, December 2022 p 2.
- ¹⁴ Vantage Property, [submission on IPART's Draft Assessment of Austral Leppington North Contributions Plan for Liverpool City Council](#), 5 June 2023, p 3.
- ¹⁵ Vantage Property, [submission on IPART's Draft Assessment of Austral Leppington North Contributions Plan for Liverpool City Council](#), 5 June 2023, p 4.
- ¹⁶ Vantage Property, [submission on IPART's Draft Assessment of Austral Leppington North Contributions Plan for Liverpool City Council](#), 5 June 2023, p 4.
- ¹⁷ Vantage Property & IDC, [submission on IPART's Draft Assessment of Austral Leppington North Contributions Plan for Liverpool City Council](#), Attachment A, 5 June 2023, p 1.
- ¹⁸ Liverpool City Council, [submission on IPART's Draft Assessment of Austral Leppington North Contributions Plan for Liverpool City Council](#), 13 June 2023, p2
- ¹⁹ JWP, *Review of Stormwater Works - Nexus and Costs -FINAL REPORT* July 2023 p.22
- ²⁰ Vantage Property, [submission on IPART's Draft Assessment of Austral Leppington North Contributions Plan for Liverpool City Council](#), 5 June 2023, p 6.
- ²¹ Liverpool City Council, [Application for assessment - ALN Precincts](#), April 2021, p 36.
- ²² Liverpool City Council, [Liverpool Contributions Plan 2021 – Austral and Leppington North Precincts](#), p 57.
- ²³ Liverpool City Council, [Liverpool Contributions Plan 2021 – Austral and Leppington North Precincts](#), p 69.
- ²⁴ AECOM, [ALN Precinct Master Plan Road Cost Estimate](#), July 2011, p3-10
- ²⁵ Liverpool City Council, [Liverpool Contributions Plan 2021 – Austral and Leppington North Precincts](#), p.74.
- ²⁶ Elton Consulting, *Demographics and Social Infrastructure Assessment*, August 2011, p.77
- ²⁷ Vantage Property, [submission on IPART's Draft Assessment of Austral Leppington North Contributions Plan for Liverpool City Council](#), 5 June 2023, p 8.
- ²⁸ Vantage Property, [submission on IPART's Draft Assessment of Austral Leppington North Contributions Plan for Liverpool City Council](#), 5 June 2023, p 8.
- ²⁹ Vantage Property, [submission on IPART's Draft Assessment of Austral Leppington North Contributions Plan for Liverpool City Council](#), 5 June 2023, p 8.
- ³⁰ Vantage Property, [submission on IPART's Draft Assessment of Austral Leppington North Contributions Plan for Liverpool City Council](#), 5 June 2023, p 8.
- ³¹ Vantage Property, [submission on IPART's Draft Assessment of Austral Leppington North Contributions Plan for Liverpool City Council](#), 5 June 2023, p 9.
- ³² Vantage Property, [submission on IPART's Draft Assessment of Austral Leppington North Contributions Plan for Liverpool City Council](#), 5 June 2023, p 9.
- ³³ Liverpool City Council, [submission on IPART's Draft Assessment of Austral Leppington North Contributions Plan for Liverpool City Council](#), 13 June 2023, pp 1-2.
- ³⁴ Liverpool City Council, [submission on IPART's Draft Assessment of Austral Leppington North Contributions Plan for Liverpool City Council](#), 13 June 2023, p 3.
- ³⁵ Liverpool City Council, [submission on IPART's Draft Assessment of Austral Leppington North Contributions Plan for Liverpool City Council](#), 13 June 2023, pp 2-3.
- ³⁶ SMEC, [Memorandum Responding to IPART Queries](#), September 2022, p 5³⁷ SMEC, [Memorandum Responding to IPART Queries](#), September 2022, p 5³⁸ Liverpool City Council, [submission on IPART's Draft Assessment of Austral Leppington North Contributions Plan for Liverpool City Council](#), 13 June 2023, p 6
- ³⁹ SMEC, [Memorandum Responding to IPART Queries](#), September 2022, pp 4-5.
- ⁴⁰ SMEC, [Memorandum Responding to IPART Queries](#), September 2022, p 4.
- ⁴¹ SMEC, [Memorandum Responding to IPART Queries](#), September 2022, p 5.
- ⁴² SMEC, [Memorandum Responding to IPART Queries](#), September 2022, p 6.
- ⁴³ JWP, *Review of Stormwater Works – Nexus and Costs–Final Report*, July 2023, p 5.
- ⁴⁴ JWP, *Review of Stormwater Works – Nexus and Costs–Final Report*, July 2023 p 21.
- ⁴⁵ Vantage Property, [submission on IPART's Draft Assessment of Austral Leppington North Contributions Plan for Liverpool City Council](#), 5 June 2023, p 3.
- ⁴⁶ Vantage Property, [submission on IPART's Draft Assessment of Austral Leppington North Contributions Plan for Liverpool City Council](#), 5 June 2023, p 4.
- ⁴⁷ Vantage Property, [submission on IPART's Draft Assessment of Austral Leppington North Contributions Plan for Liverpool City Council](#), 5 June 2023, p 4.

-
- ⁴⁸ Vantage Property & IDC, [submission on IPART's Draft Assessment of Austral Leppington North Contributions Plan for Liverpool City Council](#), Attachment A, 5 June 2023, p 1.
- ⁴⁹ Liverpool City Council, [submission on IPART's Draft Assessment of Austral Leppington North Contributions Plan for Liverpool City Council](#), 13 June 2023, p 5.
- ⁵⁰ Liverpool City Council, [submission on IPART's Draft Assessment of Austral Leppington North Contributions Plan for Liverpool City Council](#), 13 June 2023, p 5.
- ⁵¹ Liverpool City Council, [Liverpool Contributions Plan 2021 – Austral and Leppington North Precincts](#), April 2021, p17 and pp 64-79.
- ⁵² *Environmental Planning and Assessment Regulation, 2021*, cl 207
- ⁵³ Valuer General, [submission on IPART's Draft Assessment of Austral Leppington North Contributions Plan for Liverpool City Council](#), 5 June 2023, p 1.
- ⁵⁴ Email, 2022 01 10 *Council Response on Open Space*
- ⁵⁵ Liverpool City Council, [submission on IPART's Draft Assessment of Austral Leppington North Contributions Plan for Liverpool City Council](#), 13 June 2023, p 4.
- ⁵⁶ Liverpool City Council, [submission on IPART's Draft Assessment of Austral Leppington North Contributions Plan for Liverpool City Council](#), 13 June 2023, p 4.
- ⁵⁷ Liverpool City Council, [submission on IPART's Draft Assessment of Austral Leppington North Contributions Plan for Liverpool City Council](#), 13 June 2023, p 4.