



Assessment of Contributions Plan 17 – Castle Hill North

The Hills Shire Council

**Final Report
Local Government**

November 2019

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Local Government Committee Members

The Committee members for this review are:

Ms Deborah Cope, Chair

Ms Nicola Gibson

Ms Fiona Towers

Enquiries regarding this document should be directed to a staff member:

Joyce Tapper (02) 9290 8464

Julia Williams (02) 9290 8457

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1 Executive summary

The Hills Shire Council (the council) has submitted its draft *Contributions Plan No.17 – Castle Hill North* (CP17) for IPART’s assessment because the contributions for most types of residential development exceed the \$20,000 per lot/dwelling review threshold which applies to the Castle Hill North precinct under the Minister for Planning’s *Local infrastructure Contributions Further Amendment Direction 2018* (issued on 18 December 2018).¹

CP17 will apply to the redevelopment of the Castle Hill North Precinct, which is within the Sydney Metro Priority Urban Renewal Corridor. This is the first time we have assessed CP17.

We have completed this assessment in accordance with the *Local Infrastructure Contributions Practice Note*, January 2019 (the Practice Note).²

We released our Draft Report for consultation in September 2019 and received four submissions, one from the council and three from residents in Glenhaven who oppose the location of playing fields at Holland Reserve.³ After considering the submissions and additional information provided by the council, we have maintained the same findings and recommendations for all criteria. However, we have changed the calculation of contingency allowances to be a percentage of the sum of base costs and allowances for project management and design for some items in open space.⁴

This Final Report sets out our findings and recommendations to the Minister on the amendments required to ensure the plan reflects the reasonable costs of providing the necessary local infrastructure to accommodate the development of the precinct.

We have provided our assessment to the Minister and the Minister will advise the council of any changes that must be made. Once the council has made any changes required by the Minister, CP17 will become an ‘IPART reviewed plan’ and the council can levy contributions in accordance with the adopted plan.

1.1 Changes will improve the accuracy of costs in the plan

Our assessment found that the cost of works in CP17 should be reduced to reflect the reasonable costs the council would incur to provide local infrastructure to meet the demand for public amenities and services generated by development in the Castle Hill North Precinct. We recommend amendments that would decrease the total cost of land, works and

¹ Ministerial Direction, cl 6 (2).

² See Department of Planning and Environment (DPE), *Local Infrastructure Contributions Practice Note*, January 2019 (Practice Note). We have also assessed whether CP17 contains information required by the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation).

³ For example, M.Zenere, submission to IPART Draft Report, 18 October 2019 [W19/2248]; Anonymous, submission to IPART Draft Report, 8 October 2019; Anonymous, submission to IPART Draft Report, 18 October 2019.

⁴ This applies to earth works and retaining walls (which are part of the Holland Reserve site readiness costs).

administration in the plan, from \$79,022,910 to \$70,022,859 (\$2018-19). This equates to a decrease of 11.4% relative to the plan submitted to us by the council.

We have also recommended that the council make some minor changes to modelling assumptions in its financial model. These recommendations do not impact the total cost of land, works and plan administration in CP17, however they further reduce the residential contribution rates.

CP17 is a new contributions plan, under which the council has not yet acquired land nor commenced any works. We are aware of two areas of further work that may impact the scope and cost of transport and stormwater infrastructure in the precinct. We have therefore recommended that the council review CP17 within the first three years of development. This will enable the council to respond to changes in the planning assumptions that inform the provision of local infrastructure and to ensure the plan reflects the scope and reasonable cost of infrastructure required to meet the needs of the development.

We have not recommended a change to the plan but note that being an infill development, the council had limited options for providing open space within the precinct to meet the needs of new residents. It considered various options for providing open space outside the precinct and consulted the community on these options. We found that while the provision of active open space outside the precinct is not ideal, the council has established nexus for the open space in the plan and has satisfied the consultation requirements.

1.2 Overview of findings and recommendations

We found that most aspects of the plan meet the assessment criteria in the Practice Note.

Criterion 1: Essential works

We are required to assess whether the infrastructure included in CP17 is on the essential works list outlined in the Practice Note.

We found that all land, works and administration costs in CP17 are on the essential works list. We also found that road upgrade works in the schedule of open space embellishment are more appropriately classified as transport infrastructure and we recommend the council transfer the costs to the transport category in the works schedule for CP17.

Criterion 2: Nexus

We are required to assess whether there is nexus between the demand arising from the new development and the public amenities and services to be provided under the plan. Nexus ensures that the infrastructure included in the contributions plan is sufficient to meet, but not exceed, the need generated by the increase in demand from the new development.

We found that nexus has been established for all land and works in the plan. Our assessment of nexus included consideration of the council's approach to providing additional playing fields outside the precinct given the challenges of limited space and potentially prohibitive land costs within the precinct.

Criterion 3: Reasonable cost

We are required to assess whether the contribution rates in the plan are based on reasonable estimates of the cost of the proposed land and works. This includes assessing how the costs of each item of infrastructure are derived and the method applied to calculate the contribution rates and escalate them over time.

Cost of works

We found that the costs of works in the plan are mostly reasonable. The council has relied heavily on IPART benchmark costs⁵ for stormwater and open space costs and we consider this is reasonable given the early stage of planning for the precinct. However, we have recommended that the council remove additional design and project management allowances and/or reduce the contingency allowance for some items.

We engaged transport consultants, Axxess Advisory (Axxess), to review the cost of transport works in the plan. Axxess recommended site-specific adjustments to the unit rates and allowances for transport works, which we have adopted in our recommendations. Our recommended adjustments to transport and stormwater works and open space embellishment would reduce works costs by \$8.40 million (or 12.6%). The largest cost reduction relates to road upgrades, to reflect more reasonable cost estimates for utility service relocations.

Cost of land

All land costs in the plan are for partial site acquisitions for road widening. We found the council's approach to estimating the cost of land is reasonable. However, the valuation advice the council uses was provided at the peak of the residential property market, and the average land values are too high for the base period of the plan.

We have recommended a 4.1% reduction in land costs to reflect the fall in the residential property market between June 2017 (the date of the council's valuation advice) and June 2018 (the base period of the plan).

Cost of administering the plan

To estimate plan preparation and administration costs, the council uses IPART's benchmark of an allowance equivalent to 1.5% of the cost of works in the plan.⁶ We found that 1.5% of the reasonable cost of works is a reasonable estimate of the costs of plan administration over the life of the plan.

The council's financial model

The council uses a nominal Net Present Value (NPV) model to calculate contribution rates in CP17. We examined the council's modelling approach and the assumptions it has made in the model for CP17. We found that the council's approach to estimating the present value of future costs and revenues is reasonable, except:

⁵ These are costs from IPART's *Local Infrastructure Benchmark Costs – Final Report*, April 2014 (IPART's Benchmark Report).

⁶ IPART's Benchmark Report, p 60.

- ▼ The base period of the plan is 2018-19 and the cost of works are estimated in \$2018-19. However, the base period of the model is 2017-18. This leads to an error in the calculation of contributions rates.
- ▼ The council applies administration costs over 15 years, and should instead apply administration costs over the expected life of the plan (20 years).
- ▼ The council's calculation of cost escalation factors for land and works costs does not properly account for compounding growth.
- ▼ Using more recent index values in the sample used to derive cost escalation factors would better represent trends in the residential property market.

We recommend the council address each of these issues.

Criterion 4: Timeframe for the delivery of infrastructure

We are required to assess whether the public amenities and public services in the plan can be provided within a reasonable timeframe. We assessed this criterion in relation to the council's assumptions about the timing of development and timeframe for delivery of infrastructure in its NPV model. We found that the council has used a reasonable approach to determine the proposed timing, but there are a couple of minor issues in how it has applied the approach.

We have recommended that the council make changes to its financial model to address these issues.

Criterion 5: Apportionment

We are required to assess whether the contribution rates are based on a reasonable apportionment of costs. We found that the method of apportioning the costs of all infrastructure categories on a per person basis is reasonable. We also identified a small error in the council's apportionment of the cost of an intersection to development in Castle Hill North and have recommended that this error is corrected.

Criterion 6: Community consultation

We are required to assess whether the council has conducted appropriate community liaison and publicity in preparing the contributions plan. The council publicly exhibited the plan on two occasions. We consider on both occasions the consultation process complied with the statutory requirements.⁷

For the proposed additional playing fields at Holland Reserve, the council demonstrated that it considered all the issues raised in submissions from stakeholders. The council considered the concerns did not warrant selecting a new location for the additional playing fields, and that issues such as environmental impacts, amenity, noise and light pollution would be matters addressed in the development approval process, and in the design and management of the reserve.⁸

⁷ Clause 28 of the EP&A Regulation.

⁸ The Hills Shire Council, Business Paper, Meeting of 26 March 2019, pp 57-69.

Criterion 7: Other matters

We are required to assess whether the plan complies with other matters we consider relevant.

We considered the need for timely review of the plan. The council has neither acquired land nor commenced any works for local infrastructure in the precinct. There are two pieces of work being undertaken that may impact the scope and cost of transport and stormwater infrastructure in the plan. Regular review of the plan would allow the council to use more up-to-date information and refine the designs and cost estimates for infrastructure, thereby reducing the uncertainties in the current draft of the plan. We recommend the council do this within the next three years.

1.3 Impact of our recommendations

We have made 12 recommendations as a result of our assessment of CP17. Most recommendations would affect the total cost of land, works and plan administration.

Our recommendation for the council to make changes to the assumptions in its financial model would only have an impact on the contributions rates.

Our recommendation for the council to review the plan within the next three years and every three to five years thereafter, will ensure the plan is updated when the council has a better understanding of the scope and cost of the proposed infrastructure.

Overall, we estimate that the reasonable cost of land, works and administration in CP17 is \$70,022,859, compared with the council's proposed \$79,022,910. Our recommendations to reduce the total costs in CP17 would also reduce the contributions rates in the plan.

1.3.1 Our recommendations result in a decrease in the costs of land, works and plan administration

We are recommending adjustments that would result in a decrease in the cost of land, works and plan administration of \$9,000,051 (11.4%), comprising:

- ▼ A reduction of \$4,475,511 for transport works in the plan. This reflects adjustments to the unit rates, and allowances for project management, design and contingency as recommended by transport consultant, Axess. This is offset by re-categorising the cost of some roads (\$3,397,957) so that they appear as transport works rather than open space works.
- ▼ A reduction of \$842,621 for stormwater infrastructure in the plan. This reflects a combination of:
 - the removal of the additional allowances for project management and design and applying a 30% contingency allowance to benchmark costs, and
 - lower benchmark costs for stormwater pits.
- ▼ A reduction of \$3,081,438 for open space infrastructure in the plan. This reflects updated costs as provided by the council, and our recommended adjustments to the allowances for project management, design and contingency.

-
- ▼ A reduction of \$474,488 in land costs. This reflects the 4.1% fall in the residential property market between June 2017 (the date of the council's valuation advice) and June 2018 (the base period of the plan).
 - ▼ A reduction of \$125,994 for plan administration, reflecting recalculation of plan administration costs based on 1.5% of the revised (reasonable) costs of works.

We have also recommended that road upgrade works included in the Holland Reserve costs in open space should be categorised as transport infrastructure works. This results in a transfer of \$3,397,957 from open space embellishment to transport works.

Our recommended adjustments to works, land and plan administration costs are summarised in Table 1.1.

Table 1.1 Summary of recommendations – CP17 land, works and plan administration (\$2018-19)

	Cost in plan (\$)	IPART recommended adjustment (\$)	IPART assessed reasonable cost (\$)
Transport works	44,478,786		
Re-categorise road works in open space		3,397,957	
Revise the cost of transport works as follows:			
Roundabouts		141,491	
Signalised intersection (McMullen Avenue/Old Northern Road)		-10,523	
Road upgrades at Holland Reserve		-383,486	
Road upgrades		-3,963,918	
Pedestrian bridges		202,871	
Reduce costs apportioned to CP17 for McMullen Avenue/Old Northern Road intersection		-461,946	
Sub-total		-1,077,555	43,401,231
Stormwater management	6,592,651		
For stormwater pipes – remove allowances for project management and design and apply a contingency allowance to benchmark costs only		-771,869	
For stormwater pits – use IPART benchmark costs		-70,752	
Sub-total		-842,621	5,750,030
Open space embellishment	15,358,549		
Re-categorise road works in open space		-3,397,957	
For local open space – remove allowances for project management and design, and apply a 20% contingency allowance		-497,880	
For Holland Reserve (embellishment) – remove allowances for project management and design and apply a 20% contingency allowance.		-1,100,636	
For Holland Reserve (site-readiness) – reflect up-to-date costs for the biodiversity offset and telecommunication towers relocation and remove all allowances for these items. For earthworks and retaining walls, calculate contingency based on the sum of base costs, project management and design.		-1,482,922	
Sub-total		-6,479,394	8,879,155
Plan administration	996,450		
Reduce administration costs to be 1.5% of the revised cost of works		-125,994	870,456
Land costs	11,596,475		
Reduce the cost of land in the plan by 4.1%		-474,488	11,121,987
Total land, works and administration	79,022,910	-9,000,051	70,022,859

1.3.2 Our recommendations would reduce contribution rates

As outlined in section 1.3.1, most of our recommendations affect the total cost of land, works and plan administration in the plan. Our recommendation for the council to make changes to the financial model only affects contribution rates. Therefore, the impact on contribution rates (a reduction of 17.4%) is different from the impact on total costs (a reduction of 11.4%).

Our estimates of the impact of our recommendations on contribution rates is shown in Table 1.2 (per person, by infrastructure category)⁹ and Table 1.3 (dwelling type).

Table 1.2 Per person contributions by infrastructure category (\$2018-19)

Infrastructure category	Residential per person contributions in CP17 (\$)	IPART-adjusted residential per person contributions (\$)	Difference (%)
Transport	10,365	9,288	-10.4
Stormwater management	1,187	1,010	-14.9
Open space	2,768	1,527	-44.8
Plan administration	169	142	-15.7
Total	14,488	11,966	-17.4

Source: The Hills Shire Council, *Contributions Plan 17 Castle Hill North*, March 2019 (CP17) and IPART analysis.

Table 1.3 Indicative contributions by dwelling type (\$2018-19)

Multi-unit housing	Occupancy rate per dwelling	Indicative contribution in CP17 (\$)	IPART-adjusted contribution (\$)	Difference (\$)	Difference (%)
1 bedroom	1.7	24,629	20,342	-4,287	-17.4
2 bedroom	1.8	26,078	21,539	-4,539	-17.4
3 bedroom	2.5	36,219	29,915	-6,304	-17.4
4 bedroom	3.1	44,912	37,095	-7,817	-17.4
Dwelling houses	3.2	46,361	38,291	-8,069	-17.4

Source: CP17 and IPART analysis.

1.4 List of recommendations

Transport

- 1 Transfer the cost of road upgrades for the Holland Reserve playing fields site from the open space category to the transport infrastructure category. 23
- 2 Reduce the cost of transport works by \$4,013,565, comprising: 29
 - An increase in the cost of roundabouts of \$141,491, reflecting increases in base costs and allowances for project management and design.

⁹ We have not estimated the impact of amending the proposed timing of expenditure for relevant works items because we have insufficient information to do so.

- An increase in the cost of pedestrian bridges of \$202,871, reflecting increases in allowances for project management and design.
 - A reduction in the cost of a signalised intersection (McMullen Avenue/Old Northern Road) of \$10,523, reflecting lower base costs and contingency.
 - A reduction in the cost of road upgrades at Holland Reserve of \$383,486, reflecting lower base costs and lower allowances for project management, design and contingency.
 - A reduction in the cost of road upgrades within the precinct of \$3,963,918, reflecting lower base costs and lower allowances for contingency.
- 3 Apportion 17% (not 24%) of the cost of the McMullen Avenue/Old Northern Road signalised intersection to CP17. We estimate this would reduce the cost of transport works by \$461,946. 33

Stormwater management

- 4 For stormwater pipes, remove duplicate allowances for project management (7.5%) and design (7.5%) and apply a contingency allowance (30%) to the benchmark costs. We estimate this would reduce the cost of stormwater management works by \$771,869. 39
- 5 For stormwater pits, use IPART benchmark costs to estimate the costs of stormwater pits (for various sized pipes), remove additional allowances for project management (7.5%) and design (7.5%), and apply a contingency allowance (30%) to the benchmark costs. We estimate this would reduce the cost of stormwater management works by \$70,752. 39

Open space

- 6 For local open space embellishment costs, remove the additional allowances for project management and design, and apply a 20% contingency allowance only, which would reduce the costs by an estimated \$497,880. 56
- 7 For Holland Reserve embellishment costs, remove the additional allowances for project management and design and apply a 20% contingency allowance only, which would reduce the costs by an estimated \$1,100,636. 56
- 8 Revise the estimates for Holland Reserve site-readiness to reflect: 56
- The most up-to-date advice from UBM Ecological Consultants about the cost of the **biodiversity offset** and removal of all allowances
 - The most up-to-date advice from the service providers about the cost for the relocation of the **telecommunication towers** and removal of all allowances
 - Application of a 20% contingency allowance to the sum of base costs, project management and design allowances for the remaining items
- This would reduce the cost by an estimated \$1,482,922.

Plan administration

- 9 Calculate the cost of plan administration for CP17 based on 1.5% of the adjusted cost of works. This would reduce the cost of plan administration by an estimated \$125,994. 61

Cross-category considerations (cost of land, modelling assumptions and timing)

- 10 Reduce the total cost of land in the plan by 4.1%, in line with the fall in the ABS Residential Property Price Index for Established Houses between June 2017 and June 2018, which we estimate would reduce the cost by \$474,488. 64
- 11 Make the following changes to the financial model used to calculate contribution rates: 65
- Change the base period in the model to 2018-19
 - Amend the proposed timing of expenditure for some works items
 - Apply administration costs evenly over the expected life of the plan (20 years), instead of 15 years
 - Recalculate all escalation factors using the most recent data from the ABS and a compound annual average growth rate formula instead of a simple average formula.

Other matters

- 12 Review the plan within three years to include updated information on planning assumptions, and the scope and cost of works in the plan, including obtaining site-specific costs where relevant. 72

2 Context and approach for this assessment

We commenced our assessment of CP17 in April 2019. This is the first time we have assessed CP17. To provide context for our assessment, the sections below outline:

- ▼ What contributions plans are
- ▼ Why the council submitted CP17 for assessment
- ▼ The aim of our assessment
- ▼ Our approach and consultation process for assessment, and
- ▼ What will happen next.

2.1 What are contributions plans?

In NSW, local councils are primarily responsible for providing local or community infrastructure required to meet the additional demand for services and facilities generated by the new development in their local government area. Councils can levy developers for local infrastructure contributions to fund the costs of providing this infrastructure.

However, to do so, a council must prepare a contributions plan which sets out:

- ▼ The local infrastructure required to meet the demand associated with development in a specific area
- ▼ The estimated cost of the land, works and administration required to provide this infrastructure
- ▼ The contribution rates for different types of development which the council proposes to levy on developers.¹⁰

2.2 Why has the council submitted its plan to IPART?

IPART assesses contributions plans from councils that propose to levy contributions above \$30,000 per residential lot or dwelling in identified greenfield areas and \$20,000 per residential lot or dwelling in other areas.¹¹

An IPART-reviewed contributions plan entitles the council to levy:

- ▼ For specified transition areas, up to a capped amount (currently \$45,000 in greenfield areas and \$35,000 elsewhere) and apply for Local Infrastructure Growth Scheme (LIGS) funding for the amount of any contribution which is above the cap.

¹⁰ A consent authority may impose a condition under section 7.11 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) only if it is in accordance with a contributions plan (section 7.13). The EP&A Regulation makes provisions for or with respect to the preparation and approval of contributions plans, including the format, structure and subject-matter of plans.

¹¹ Minister for Planning, *Environmental Planning and Assessment (Local Infrastructure Contributions) Direction 2012*, 21 August 2012, as amended (Ministerial Direction).

- ▼ For other areas, the full contribution amount.

The council has submitted the draft plan for IPART's assessment because the contributions for most types of residential development exceed the \$20,000 per lot/dwelling review threshold which applies under the Minister's *Local Infrastructure Contributions Further Amendment Direction 2018* (issued on 18 December 2018).

The council is not entitled to apply for LIGS funding for local infrastructure in CP17. Accordingly, when CP17 becomes an IPART-reviewed plan, the council will be able to levy developers the full amount of contributions under the plan.

2.3 What is the aim of our assessment?

Broadly, our assessments are intended to bring greater transparency and accountability to setting local development contributions. More specifically, in conducting the assessment and making our recommendations, we aim to ensure the plan reflects the reasonable costs of providing necessary local infrastructure to support the new development.

If costs in the plan are too high (ie, higher than the reasonable costs of infrastructure with a nexus to the development), developers may pay too much for local infrastructure. On the other hand, if costs in the plan are too low (ie, lower than the reasonable costs of infrastructure with a nexus to the development), then the new development would effectively be subsidised by the council's ratepayers.

Contributions that reflect the reasonable costs of local infrastructure provision are important for reasons of both efficiency and equity. They are necessary to:

- ▼ Signal the costs of developing different areas. This in turn, can assist in ensuring that development occurs where it should (ie, where the benefits of the development are greater than its costs).
- ▼ Ensure that other parties (such as a council's ratepayers) do not have to fund any shortfall between the actual costs of providing local infrastructure and the revenue received from development contributions.

In the context of CP17, our assessment recognises that the precinct is only in the early stages of development and that detailed design and cost estimates for most infrastructure items are not yet available.

2.4 What approach did we use for this assessment?

In assessing CP17 we considered:

- ▼ The criteria set out in the *Local Infrastructure Contributions Practice Note* (Practice Note) issued by DPIE.¹²
- ▼ Information and further advice from the council and DPIE on various aspects of the plan.
- ▼ The council's and other stakeholders' submissions to our Draft Report.

2.4.1 We considered the assessment criteria in the Practice Note

IPART's assessment functions for local infrastructure contributions plans are based on terms of reference issued by the Premier under section 9 of the *Independent Pricing and Regulatory Tribunal Act 1992* (see Appendix A).

As required by these terms of reference, we have assessed CP17 in accordance with the criteria set out in the Practice Note. The criteria require us to assess whether:

1. The public amenities and public services in the plan are on the essential works list.
2. The proposed public amenities and public services are reasonable in terms of nexus.¹³
3. The proposed development contribution is based on a reasonable estimate of the cost of the proposed public amenities and public services.
4. The proposed public amenities and public services can be provided within a reasonable timeframe.
5. The proposed development contribution is based on a reasonable apportionment of costs.
6. The council has conducted appropriate community liaison and publicity in preparing the contributions plan.
7. The plan complies with other matters we consider relevant.

We also assessed whether the plan contains the information required by Clause 27 of the *Environmental Planning and Assessment Regulation 2000*. A summary of our assessment of CP17 against these requirements is provided in Appendix B.

¹² Department of Planning and Environment, *Practice Note - Local infrastructure Contributions*, January 2019. The January 2019 Practice Note replaces the January 2018 *Practice Note - Local infrastructure Contributions*. The 2019 revision clarifies the timing of when a council can adopt a contributions plan (particularly where the draft plan proposes a rate above the maximum cap amount in the Direction). The assessment criteria for our review remain the same.

¹³ Nexus ensures that there is a connection between the land and facilities in a contributions plan and the demand for them arising from the new development.

2.4.2 We consulted with council and DPIE

During our assessment we sought further information from the council to explain how it determined the infrastructure which it has included in the plan and its estimated costs. We also met with council officers who provided an overview of the plan and guided us on a site visit of the precinct. Further, we consulted with DPIE on relevant planning and land-zoning matters.

2.4.3 We engaged a consultant to assist with our assessment

To assist with our assessment of CP17, we engaged Axxess to review the reasonable costs of transport works, including the reasonableness of the allowances for project management, design and contingency. We used the advice to inform our assessment of transport works in CP17 against Criterion 3 Reasonable Cost.

2.4.4 We consulted on our Draft Report

We published a Draft Report on our assessment on 20 September 2019 and invited interested parties to make written submissions for a four week period, by 18 October 2019.

We received four submissions, including a submission from the council. A list of submissions to our Draft Report is at Appendix C. We address issues raised in submissions that are relevant to our assessment in this Final Report.

Our Draft Report and stakeholder submissions are available on our website (www.ipart.nsw.gov.au).

2.5 What happens next?

We have delivered our Final Report to the Minister for Planning and Public Spaces and the council, as required by the Ministerial Direction.

The Minister will consider our assessment and, if appropriate, request the council to amend the contributions plan. Once the council has made any amendments requested by the Minister, the plan becomes an IPART-reviewed plan and the council may levy contributions in accordance with the adopted plan.

3 Overview of plan

The council drafted CP17 in response to the proposed rezoning of the Castle Hill North Precinct, which identifies higher density development outcomes given the precinct's proximity to the Castle Hill Station and town centre. The precinct is within the Sydney Metro Northwest Priority Urban Renewal Corridor.

This chapter provides information about the plan that has been submitted to IPART, including the cost of infrastructure and contribution rates, and the proposed development to which the adopted plan will apply.

3.1 Status of CP17

The council first exhibited the draft plan between 17 August 2017 and 15 September 2017. Following amendments to the post-exhibition contributions plan, the council re-exhibited the plan between 11 December 2018 and 1 February 2019. The council has not yet adopted the plan. We commenced our assessment of the plan on 7 May 2019.

When the council exhibited the draft contributions plan in August 2017, it also placed on public exhibition three other documents relating to the council's planning proposal to facilitate high density development around the Castle Hill Railway Station:

- ▼ Draft *Development Control Plan* (DCP) 2012 (Part D Section 18 – Castle Hill North)
- ▼ Draft amendments to DCP 2012 (Part C Section 1 – Parking)
- ▼ Draft *Castle Hill North Public Domain Plan*.¹⁴

3.2 Land and development in the Castle Hill North Precinct

CP17 applies to land in the Castle Hill North Precinct, shown within the red boundary in Figure 3.1. This land has been identified for rezoning to allow higher density development outcomes due to the precinct's proximity to Castle Hill Station and the town centre.¹⁵

¹⁴ The Hills Shire Council, Business Paper, Meeting of 27 November 2018, pp 19-30 and 50-57.

¹⁵ The station is on the Sydney Metro line which opened in May 2019.

Figure 3.1 Land to which CP17 applies



Source: The Hills Shire Council, Business Paper, Meeting of 27 November 2018, p 21.

A Gateway Determination for the planning proposal was issued by DPIE on 2 November 2016.¹⁶ Delegation for making the Local Environmental Plan (LEP) was issued to the council under this Gateway Determination.

In November 2018 the council resolved for the planning proposal to be forwarded to DPIE for finalisation because of outstanding public authority objections from Roads and Maritime Services (RMS) and Transport for NSW (TfNSW). DPIE has established a Project Coordination Group (PCG) with the council, RMS and TfNSW to resolve an outstanding objection from RMS and TfNSW.¹⁷ The PCG will undertake additional transport studies for Castle Hill North and surrounding precincts to quantify the cumulative impact of growth from planning proposals on the regional road and transport network. DPIE expects these studies will be completed by July 2020.¹⁸

The proposed development is primarily residential and the council expects that the precinct will accommodate a population of 6,045 people in approximately 3,283 dwellings. The council explained that the small amount of additional non-residential development is not likely to have a material impact on the demand for local infrastructure. Therefore, the plan does not apply to non-residential development.¹⁹

¹⁶ Gateway Determination: Planning proposal to amend *The Hills Local Environmental Plan 2012 – Castle Hill North Precinct* (PP_2016_THILL_002_00), 2 November 2016.

¹⁷ RMS/TfNSW objected to the proposed intersection upgrade and road realignment at McMullen Avenue/ Old Northern Road and Brisbane Road related to its potential negative impact on regional traffic flow in the area.

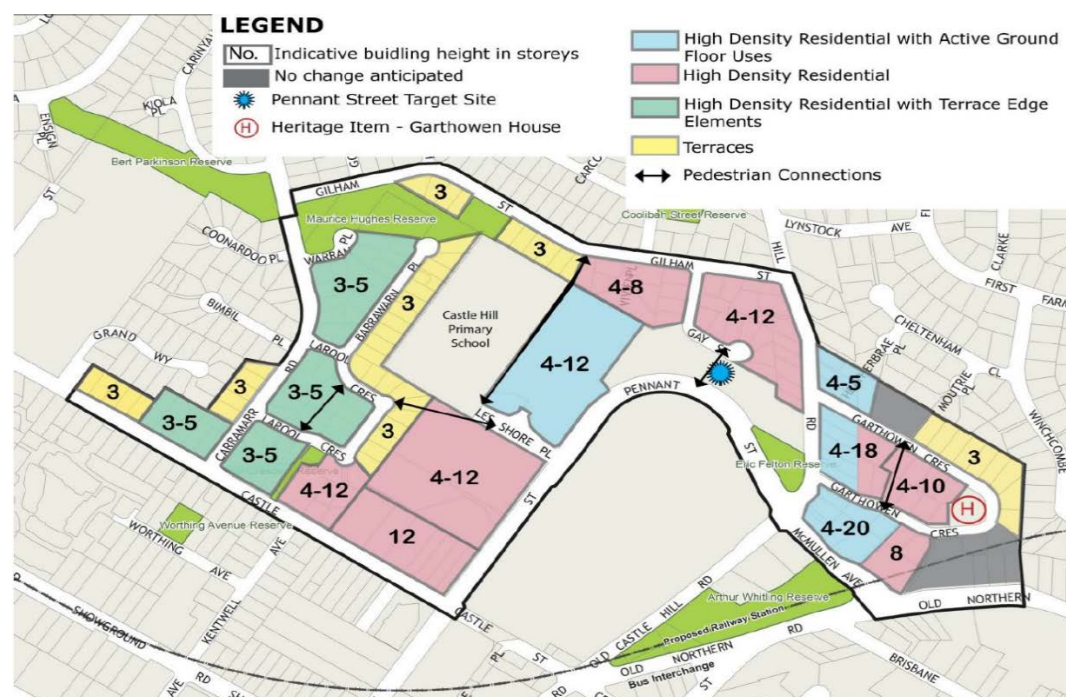
¹⁸ Information from DPIE, 7 November 2019.

¹⁹ The Hills Shire Council, Application to IPART, April 2019, p 18.

Existing development includes freestanding houses on land holdings of approximately 700 square metres. To facilitate more intensive development, developers will need to amalgamate sites into larger lots.²⁰

Figure 3.2 is the Castle Hill North Structure Plan showing the anticipated mix of land uses when the precinct is redeveloped. The council expects redevelopment will occur over 20 years.²¹

Figure 3.2 Castle Hill North Structure Plan (CP17)



Source: The Hills Shire Council, *Development Control Plan (DCP) 2012*, Post Exhibition Draft – November 2018, p 10.

3.3 Cost of land and works

The total cost of land, works and plan administration is \$79.02 million (\$2018-19), comprising:

- ▼ \$11.60 million (15%) for the acquisition of land for local infrastructure
- ▼ \$66.43 million (84%) for local infrastructure works
- ▼ \$1.00 million (1%) for plan preparation and administration.²²

The plan does not contain any land for stormwater management, open space or community services. This is mainly due to the urban context and the proposed use of existing publicly-owned land for new or upgraded local infrastructure.

Table 3.1 provides a breakdown of costs in CP17 by infrastructure category.

²⁰ The Hills Shire Council, *Castle Hill North Precinct Plan*, November 2015.

²¹ CP17, p 11.

²² The Hills Shire Council, CP17, Works Schedule.

Table 3.1 Cost of land and works in the plan (\$2018-19)

Infrastructure category	Land (\$)	Works (\$)	Administration (\$)	Total (\$)
Transport	11,596,475	44,478,786		56,075,261
Stormwater		6,592,651		6,592,651
Open space		15,358,549		15,358,549
Administration			996,450	996,450
Total	11,596,475	66,429,986	996,450	79,022,910

Source: The Hills Shire Council, CP17, Works Schedule, p 36.

3.4 Contribution rates in CP17

The council uses a NPV approach to calculate the contribution rates in CP17. Contributions are calculated on a per person basis, with the council's proposed base contribution rates set out in Table 3.2. Non-residential development will not be levied contributions for local infrastructure.

The plan contains provisions to index the contribution rates by 2.5% each year.²³

Table 3.2 Contributions in CP17 (\$2018-19)

Category	\$ per person
Transport	10,365
Stormwater	1,187
Open Space	2,809
Administration	169
Total	14,529

Source: The Hills Shire Council, CP17 – Section 1.1.2 Contribution by Category – Per person, p 2.

3.4.1 Indicative residential contributions

Indicative contributions for residential developments are based on the council's assumed occupancy rates for various sized dwellings. Table 3.3 lists the indicative contributions for the different sized lots and dwellings, as set out in CP17.

²³ CP17, pp 9-10.

Table 3.3 Indicative residential contributions per lot and dwelling (\$2018-19)

Type of residential development	Number of dwellings	Occupancy rate per dwelling	Indicative contribution (\$)
Residential flat buildings (apartments)			
1 bedroom	856	1.7	24,700
2 bedroom	1,884	1.8	26,153
3 bedroom	685	2.5	36,323
Townhouses, terraces and other forms of multi-unit housing			
3 bedroom	75	2.5	36,323
4 bedroom	75	3.1	45,041
Dwelling/lot			46,494

Source: The Hills Shire Council, CP17, Table 1, pp 2,14.

3.4.2 Credits and exemptions

In accordance with the plan, contributions will be levied on any residential development that will increase the population over and above the existing population (approximately 934 people), and which will create a demand for the provision of local infrastructure. A credit will be made available for any existing lot with an approved dwelling that existed on or before the adoption of the contributions plan, but not to existing vacant parcels.²⁴

²⁴ CP17, p 8.

4 Transport

The total cost of transport infrastructure in CP17 is \$56.08 million (71.0% of total costs), comprising:

- ▼ \$11.60 million for land (100.0% of the total cost of *land*)
- ▼ \$44.48 million for works (67.0% of the total cost of *works*).

Our assessment is that:

- ▼ **Criterion 1: Essential works** – all land and transport works are consistent with the essential works list; and works for road upgrades for Holland Reserve playing fields in open space should be categorised as transport works, rather than open space embellishment.
- ▼ **Criterion 2: Nexus** – there is nexus between the land and works in the plan and development in the Castle Hill North Precinct.
- ▼ **Criterion 3: Reasonable cost** – the council's approach to estimating the cost of transport works in the plan is generally reasonable, however, we recommend adjustments to some of the unit rates for sub-cost items used to estimate base costs. We also recommend site-specific estimates for the allowances for project management, design and contingency.
- ▼ **Criterion 5: Apportionment** – the council's approach to apportioning transport costs to residential development on a per person basis is reasonable. For the apportionment of the costs of the McMullen Avenue/Old Northern Road signalised intersection to CP17, there was a calculation error in the allocation of costs to this plan.

Based on our findings, we recommend adjustments to the plan we estimate would reduce the cost of transport works costs by \$1,077,555 (2.4%).

Our findings and recommendations are summarised in Table 4.1 below.

Table 4.1 IPART-recommended adjustments for transport (\$2018-19)

Criterion	Finding	Recommendation	Land (\$)	Works (\$)
Total costs in plan			11,596,475	44,478,786
Essential works	All works are on the essential works list	Move costs for road infrastructure in open space from open space works to transport works		3,397,957
Nexus	Nexus is established for the land and works in the plan			
Reasonable cost – Land	The cost of land is mostly reasonable, except that:			
	Land costs are based on valuation advice provided at the peak of the residential property market (June 2017). Consequently, the values are likely too high for the base period of the plan (2017-18)	Reduce the cost of land in the plan by 4.1%	-474,488	
Reasonable cost – Works	The total cost of transport works is mostly reasonable, except:			
▼ Roundabouts	Adjustments should be made for all infrastructure categories to reflect more reasonable site-specific base costs and allowances for project management, design and contingency	For all transport work revise base costs and allowances for project management, design and contingency, based on site-specific costings from Axxess Advisory		141,491
▼ Signalised intersection				-10,523
▼ Road upgrades at Holland Reserve				-383,486
▼ Road upgrades				-3,963,918
▼ Pedestrian bridges				202,871
Apportionment	Approach is reasonable except:			
▼ McMullen Avenue/Old Northern Road intersection	Apportionment of costs does not reflect the demand from Castle Hill North	Reduce the apportionment to CP17 from 24% to 17%		-461,946
Total IPART-recommended cost adjustment			-474,488	-1,077,555
Total IPART-assessed reasonable cost			11,121,987	43,401,231

4.1 Overview of transport works in CP17

Castle Hill North is an existing residential area with an established road network. The precinct has been designated a transit oriented development.²⁵ In this context, the transport works in CP17 include road and intersection upgrades to meet future demand and to ensure

²⁵ Defined as mixed use communities within walking distance of a transit node that provide a range of residential, commercial, open space and public facilities in a way that makes it convenient and attractive to walk, cycle or use public transport (The Hills Shire Council, Application to IPART, April 2019, p 12).

an acceptable level of access, safety and convenience for all street and road users within the Castle Hill North Precinct.²⁶

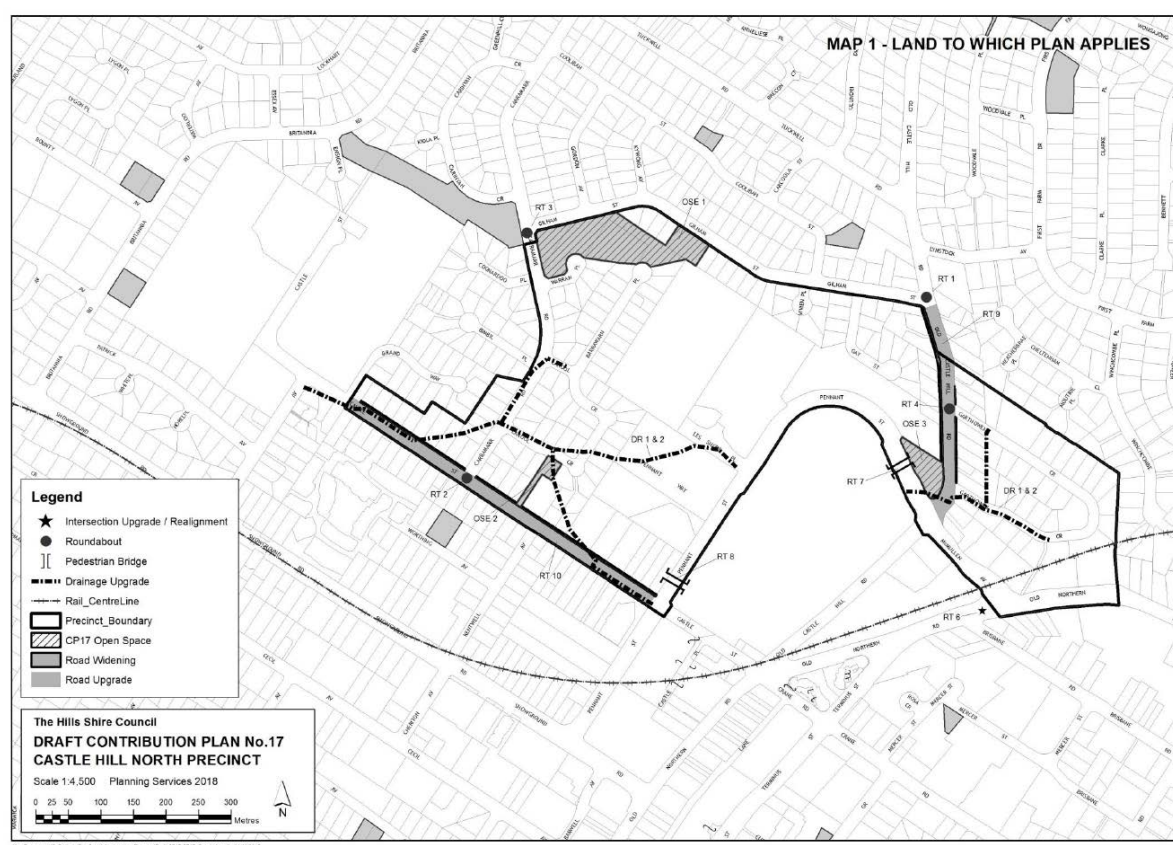
Table 4.2 shows the cost of transport works in the plan. Figure 4.1 shows the location of transport works in the plan.

Table 4.2 Transport works items in CP17 (\$2018-19)

Item	Cost (\$)
Roundabouts (including traffic management)	2,607,107
Signalised intersection (McMullen Avenue/Old Northern Road)	1,708,225
Road upgrades at Holland Reserve	3,397,957
Road upgrades (other)	34,735,761
Pedestrian bridges	5,427,693
Total	47,876,743

Source: The Hills Shire Council, CP17 Works Schedule.

Figure 4.1 Location of transport works in CP17



Source: The Hills Shire Council, *Contributions Plan No 17 Castle Hill North*, March 2019, p 39.

²⁶ CP17, p 21.

4.2 Criterion 1: Essential works

All land and works for transport in CP17 are consistent with the essential works list in the Practice Note. The works items are set out in Table 4.3.

We also found that road upgrades at Holland Reserve in the schedule of open space embellishment costs are more appropriately considered as transport infrastructure and the costs should be transferred to the transport category in the works schedule for CP17. This is consistent with the approach we adopted in our assessments of CP12 (2018) Balmoral Road and the Menangle Park Contributions Plan.²⁷

Consequently, the cost of the road upgrades should be re-allocated from open space embellishment to transport works, increasing the cost of transport infrastructure but reducing the cost of open space embellishment by the same amount.

Table 4.3 Transport works items in CP17

Items on the essential works list	
▼ Roundabouts	▼ Pedestrian bridges
▼ Signalised intersections	▼ Road upgrades

Recommendation

- 1 Transfer the cost of road upgrades for the Holland Reserve playing fields site from the open space category to the transport infrastructure category.

4.3 Criterion 2: Nexus

The council commissioned the technical studies listed in Table 4.4 to support the proposed transport items in the plan.

Table 4.4 Technical studies for transport works in CP17

Author	Title	Date
Gennaoui Consulting	<i>Capacity of Proposed Intersection of Old Northern Road with McMullen Ave & Brisbane Rd</i>	October 2010
Brown Consulting	<i>Traffic and Accessibility Study</i>	May 2014

The council engaged Gennaoui Consulting to assess the capacity of the intersection at McMullen Avenue/Old Northern Road before and after the proposed intersection upgrade. The study finds the upgrade would provide a much safer intersection that would operate at a satisfactory level of service during peak periods.²⁸ We consider that this study establishes nexus for the signalised intersection and road upgrades at McMullen Avenue/Old Northern Road. However, we note that the council has received a joint objection to the intersection

²⁷ See: IPART, *Assessment of Contributions Plan 12 – Balmoral Road Release Area – The Hills Shire Council-Final Report*, July 2019, p 22 and IPART, *Assessment of Menangle Park Contributions Plan – Campbelltown City Council-Final Report*, December 2018, p 21.

²⁸ Gennaoui Consulting, *Capacity of proposed intersection of Old Northern Road with McMullen Ave and Brisbane Rd*, October 2010, p 7.

upgrade from RMS/Transport for NSW (TfNSW) related to its potential impact on regional traffic flow in the area (outlined in section 4.3.4 below).

The council engaged Brown Consulting to conduct a comprehensive Traffic and Accessibility Study for the proposed residential development in Castle Hill North. The study estimates the traffic generated by the proposed residential development and identifies traffic management works needed to support the projected increase in traffic.²⁹ It establishes nexus for road upgrades in the plan.

The following items were not identified in the technical studies:

- ▼ Four roundabouts³⁰, costing \$2.61 million, which the council has included to calm traffic, to support the objectives of the precinct as a transport oriented development.
- ▼ A signalised intersection near Holland Reserve (Holland Road/Glenhaven Road). The intersection was included in response to concerns raised in submissions and public meetings related to safety with the increased traffic accessing Holland Reserve.
- ▼ Two pedestrian bridges, costing \$5.43 million, which the council has included to enhance the amenity of the pedestrian network, and to reduce impact on vehicle traffic. This also supports the objective for the precinct of transport oriented development.

We consider the council's explanations for these additional items (outlined below) establish nexus.

We also examined the land included in CP17 for transport purposes and found all land acquisitions correspond to transport works in the plan.

4.3.1 Inclusion of roundabouts is not supported by the technical study, but nexus is established

CP17 includes four roundabouts, costing \$2.61 million in total. The technical studies do not establish nexus for these roundabouts. Using 'level of service' as the key measure, the Traffic and Accessibility Study found that with the increased traffic from the proposed development, the intersections at which the council has included roundabouts will operate within their notional capacity.³¹

The council argues that 'environmental capacity' is a more appropriate measure of transport infrastructure demand as it considers the impact on pedestrians (eg, pedestrian risk, pedestrian crossing delay, noise and accessibility) rather the 'level of service', which focusses primarily on vehicular flows and delays.³²

The council notes that a key objective in planning for Castle Hill North has been the creation of a **transit oriented centre**,³³ with a high level of pedestrian amenity and walkability. The proposed transport works have been designed to achieve these objectives by managing traffic

²⁹ Brown Consulting, *Traffic and Accessibility Study*, May 2014, p 2.

³⁰ Including allowances for traffic management.

³¹ Brown Consulting, *Traffic and Accessibility Study*, May 2014, pp 58-59.

³² The Hills Shire Council, Application to IPART, Section 1.5.

³³ Defined as mixed use communities within walking distance of a transit node that provide a range of residential, commercial, open space and public facilities in a way that makes it convenient and attractive to walk, cycle or use public transport (The Hills Shire Council, Application to IPART, April 2019, p 12).

speeds, controlling intersections, providing formal pedestrian crossing points and increasing verge widths on key streets.³⁴ According to the council, the proposed roundabouts assist with the objectives of a transit oriented centre by:

- ▼ Allowing safe vehicle access through key intersections connecting the residential development with the surrounding collector road network
- ▼ Improving pedestrian access at the intersections with central median island treatments (required for roundabouts)
- ▼ Reducing traffic speeds at the intersections to acceptable limits.³⁵

The council's analysis of environmental capacity shows two of the proposed roundabouts are below their respective environmental capacities, however in the full development scenario the intersections are projected to be close to or greater than their environmental capacity. These intersections are the primary access points for most of the traffic from the residential development.³⁶

We note that under the AustRoads 2019 *Guide to Traffic Management Part 7 – Traffic management in Activity Centres* (Traffic Management Guidelines), traffic management in a transit oriented development or activity centre is primarily focussed on pedestrian movement rather than vehicle movement.³⁷

We consider the council's explanation for the inclusion of the roundabouts and the Traffic Management Guidelines establish nexus.

4.3.2 Nexus is established for a signalised intersection at Holland Reserve (Holland Rd/Glenhaven Rd)

To facilitate access to Holland Reserve, CP17 includes a signalised intersection and minor associated road works (see Figure 4.2). The council states that a signalised intersection is required to address increased traffic volumes on the local road network and to improve safety for vehicles and pedestrians accessing Holland Reserve.³⁸ It included the signalised intersection in response to concerns raised in submissions and at public meetings related to safety, in light of increased traffic accessing Holland Reserve.³⁹

We consider the council's explanation establishes nexus for the proposed signalised intersection and associated road works.

³⁴ The Hills Shire Council, Application to IPART, April 2019, Section 1.5.

³⁵ The Hills Shire Council, Application to IPART, April 2019, pp 8-9.

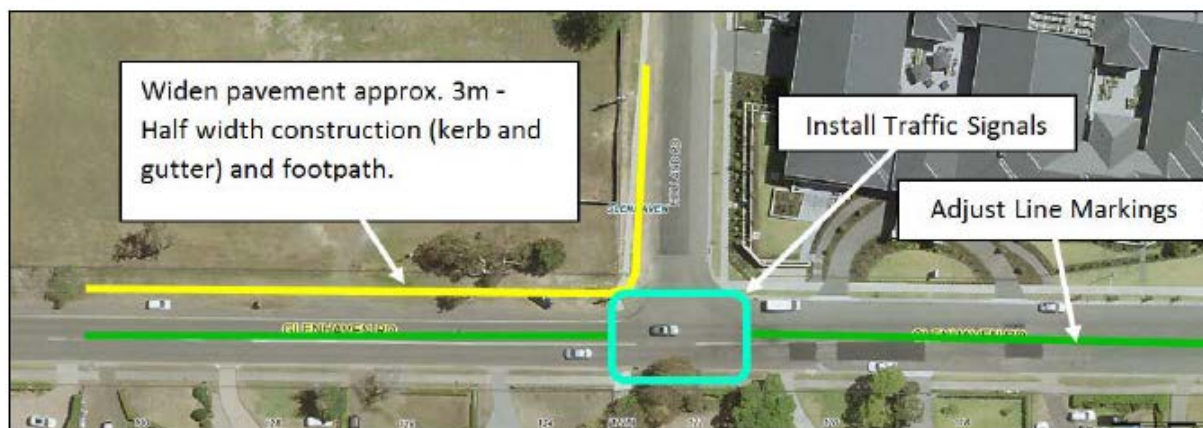
³⁶ The Hills Shire Council, Application to IPART, April 2019, pp 8-9.

³⁷ AustRoads, *Guide to Traffic Management Part 7 – Traffic Management in Activity Centres*, 2019, pp 1, 39, 42.

³⁸ The Hills Shire Council, *Contributions Plan No 17 Castle Hill North*, March 2019, p 18.

³⁹ The Hills Shire Council, Business Paper, Meeting of 26 March 2019, p 58.

Figure 4.2 Proposed signalised intersection at Holland Reserve (Holland Rd/Glenhaven Rd)



Source: The Hills Shire Council, Business Paper, Meeting of 26 March 2019, p 64.

4.3.3 RMS/TfNSW have objected to the signalised intersection and realignment of McMullen Avenue/Old Northern Road and Brisbane Road, but nexus is established

The Gennaoui Consulting report establishes nexus for the signalised intersection and road upgrades at the intersection of Old Northern Road with Brisbane Road and McMullen Avenue. However, the council received an objection to the intersection upgrade from RMS/TfNSW related to its potential negative impact on regional traffic flow in the area.

DPIE has established a Project Coordination Group (PCG) with the council, RMS and TfNSW to resolve the outstanding objection. To assist this resolution, the PCG will undertake additional transport studies for Castle Hill North and surrounding precincts to quantify the cumulative impact of growth from planning proposals on the regional road and transport network. DPIE expects these studies will be completed by July 2020.⁴⁰

The objection from RMS/TfNSW does not affect our assessment of nexus for transport infrastructure in the plan. The objection relates to the impact on regional traffic, which is not part of our assessment of CP17. However, the regional transport study may recommend changes to the existing transport works or may propose additional transport works. Any substantive changes would need to satisfy the nexus criterion and be addressed through amendments to the plan.

We are satisfied that nexus has been established for the signalised intersection and road upgrades, given the early stages of planning for the precinct. The council should make any changes required to reflect the findings of the regional transport study when it next reviews the plan. As discussed in section 8.5, we recommend the plan is reviewed within three years, when the council should have a better understanding of the scope of all transport works in the plan.

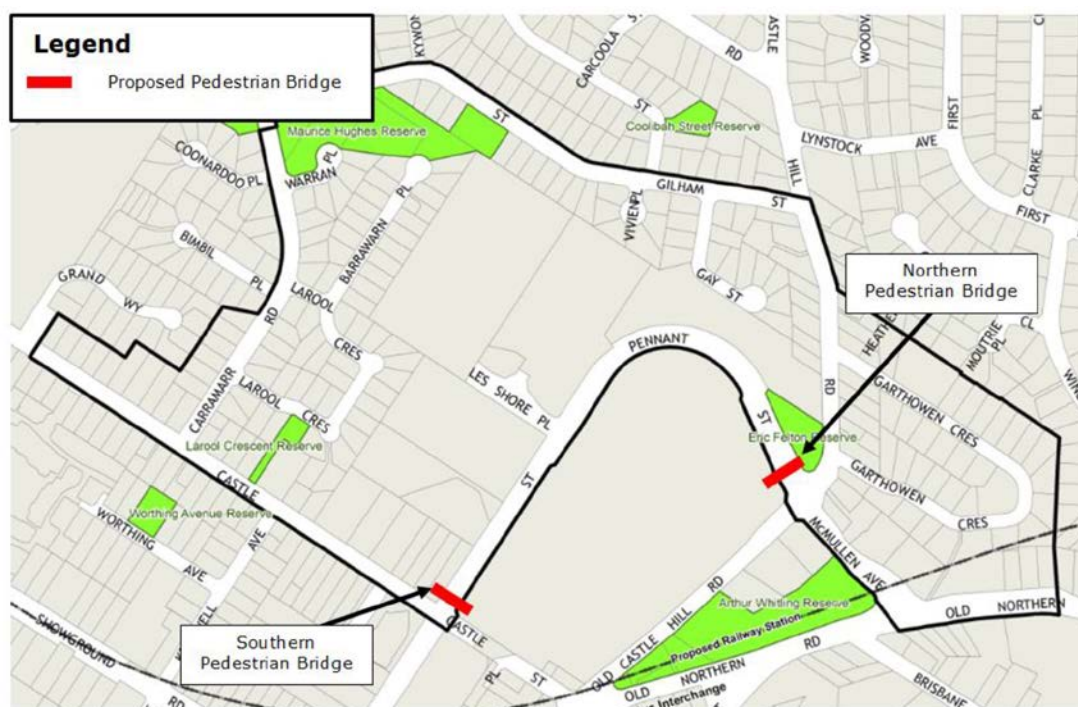
⁴⁰ Information from DPIE, 7 November 2019.

4.3.4 Inclusion of pedestrian bridges is not supported by the technical study, but nexus is established

CP17 includes two pedestrian bridges, costing \$5.43 million. As for roundabouts, the technical studies do not establish nexus for pedestrian bridges. Using the 'level of service' measure, the Traffic and Accessibility Study outlines that, under RMS standards, grade separated crossings require a minimum of 200 pedestrian crossing per hour, three times in a typical week. Surveys conducted as part of this study showed that the pedestrian volume does not reach 200 crossings per hour at any time during the day. The study recommended pedestrian movements be monitored in the future given the potential growth associated with the proposed development.⁴¹

Figure 4.3 shows the location of the proposed pedestrian bridges in the precinct. The council considers that being a transit oriented development, two pedestrian bridges are required to improve pedestrian safety and amenity between the residential development, the Castle Hill commercial area and Castle Hill Station. The pedestrian bridges would also minimise the impact on vehicle movements through the precinct by removing at-grade pedestrian crossings, which would interfere with traffic flow.⁴²

Figure 4.3 Location of pedestrian bridges in CP17



Source: The Hills Shire Council, Application to IPART, April 2019, p 13.

We note that the proposed pedestrian bridges are consistent with the Traffic Management Guidelines, which show that grade separated crossings are appropriate for primary and secondary arterial roads.⁴³ The proposed pedestrian bridges cross Pennant Street, which is classified as an arterial road. We also accept the council's view that the crossings would

⁴¹ Brown Consulting, *Traffic and Accessibility Study*, May 2014, p 54.

⁴² The Hills Shire Council, Application to IPART, April 2019, p 12.

⁴³ AustRoads, *Guide to Traffic Management Part 7 – Traffic Management in Activity Centres*, 2019.

improve pedestrian safety and amenity, consistent with the guidance for traffic management in activity centres.

We consider the council's explanation for inclusion of the pedestrian bridges establishes nexus.

4.4 Criterion 3: Reasonable cost

In this section, we assess whether the proposed development contributions are based on a reasonable estimate of the cost of the proposed transport infrastructure. The reasonable cost of land for transport works is discussed in Chapter 8.

In assessing the reasonableness of these costs, we have considered the council's approach to estimating costs and the assumptions it has used, including for project management, design and contingency allowances. At the time of preparing the plan, the council had not commenced construction of any works so there are no actual costs in the plan. Table 4.5 outlines the council's approaches to estimating the base costs for proposed works, and how it has applied additional allowances to base costs.

Table 4.5 The council's approaches to estimating transport works costs

Transport item	Costing approach	Additional allowances (%)		
		Project management	Design	Contingency
Roundabouts (including traffic management)	IPART benchmark cost	7.5	7.5	30
Signalised intersection (McMullen Avenue/Old Northern Road)	Site-specific cost estimate prepared by Diversi Consulting			
Road upgrades at Holland Reserve	Council estimate based on past projects			
Road upgrades	Council estimate based on similar/actual			
Pedestrian bridges	Based on similar/actual delivered by Beca			

Source: The Hills Shire Council, CP17 Works Schedule, Infrastructure Cost Information support.

Given the significant cost of transport works in the plan and lack of detailed site-specific costings to support the council's cost estimates for transport works, we engaged transport consultant Axess to assess whether the assumed rates and quantities the council uses to estimate the costs of transport infrastructure in the plan are reasonable. Axess undertook an independent, bottom-up approach to costing the transport infrastructure in the plan and recommended adjustments to the base costs and allowances for project management, design and contingency based on its review of the council's bill of quantities and available technical drawings.

Our recommendations are based on the consultant's advice received in August 2019 and October 2019. See the IPART website (<https://www.ipart.nsw.gov.au/CP17-Castle-Hill-North>) for copies of the advice.

Our assessment found that the costs of transport works are mostly reasonable, except that:

- ▼ The total cost of roundabouts and pedestrian bridges are too low, based on Axess's site-specific costings.
- ▼ The total cost of the signalised intersection (McMullen Avenue/Old Northern Road) is too high, based on Axess's site-specific costings.
- ▼ The total cost of road upgrades is too high, based on Axess's site-specific costings.

Our recommended adjustments are set out in Table 4.1.

Recommendation

- 2 Reduce the cost of transport works by \$4,013,565, comprising:
 - An increase in the cost of roundabouts of \$141,491, reflecting increases in base costs and allowances for project management and design.
 - An increase in the cost of pedestrian bridges of \$202,871, reflecting increases in allowances for project management and design.
 - A reduction in the cost of a signalised intersection (McMullen Avenue/Old Northern Road) of \$10,523, reflecting lower base costs and contingency.
 - A reduction in the cost of road upgrades at Holland Reserve of \$383,486, reflecting lower base costs and lower allowances for project management, design and contingency.
 - A reduction in the cost of road upgrades within the precinct of \$3,963,918, reflecting lower base costs and lower allowances for contingency.

4.4.1 Axess Advisory recommends adjustments to transport works costs

Transport works in the plan are substantial, representing 67.0% of the total plan works costs.⁴⁴ Our consultant, Axess, recommended adjustments to the base costs and allowances for project management, design and contingency, based on its review of the council's bill of quantities and technical drawings. It found that:

- ▼ The assumed quantities contained in the works schedule are reasonable, however, some of the unit rates applied to the various cost sub-items are not reasonable. Some of the unit rates are too low, while other unit rates are too high.
- ▼ Use of the IPART benchmark cost for the allowances for project management, design and contingency is reasonable. However, Axess proposes allowances for project management, design and contingency using a bottom-up, site-specific costing approach.⁴⁵

The net impact of Axess's recommendations is a reduction in transport works costs. Based on this advice, we recommend reducing transport works costs in the plan by \$4,013,565 (8.4%).

⁴⁴ The Hills Shire Council, *Contributions Plan No 17 Castle Hill North*, March 2019, p 2.

⁴⁵ Axess Advisory, *CP17 Castle Hill North Precinct Transport Infrastructure Cost Review (Final)*, 21 August 2019.

The council does not agree with the reductions in contingency allowances recommended by Axess because they are lower than the generic contingency allowance for transport works in the IPART Benchmark Report.⁴⁶

The IPART Benchmark Report provides a generic contingency allowance that reflects an average across projects. It is a percentage-based approach applied to the sum of base costs, project management and design allowances. Axess adopted a different approach in recommending reasonable allowances for transport works in CP17. It recommends lump sum, site-specific allowances that are specific to each infrastructure item and reflect the particular risks associated with construction. Our recommendations are based on the site-specific costings and allowances provided by Axess. This is consistent with our preference for accurate site-specific estimates over figures from the IPART Benchmark Report.⁴⁷

Table 4.6 IPART-recommended adjustments to transport works costs (\$2018-19)

Transport item	Council (\$)	IPART (\$)	Change (\$)
Roundabouts (including traffic management)	2,607,107	2,748,597	141,491
Signalised intersection (McMullen Ave/Old Northern Road) ^a	1,708,225	1,697,702	-10,523
Road upgrades			
Road upgrades at Holland Reserve	3,397,957	3,014,471	-383,486
Road upgrades	34,735,761	30,771,843	-3,963,918
Pedestrian bridges	5,427,693	5,630,564	202,871
Total	47,876,742	43,863,177	-4,013,565

^a This cost is based on the 24% apportionment factor proposed by the council.

Source: The Hills Shire Council, CP17 works schedule; Axess Advisory, *CP17 Castle Hill North Precinct Transport Infrastructure Cost Review (Final)*, 21 August 2019 and IPART analysis.

We recommend small increases in costs for roundabouts and pedestrian bridges

Roundabouts (including allowances for traffic management) and pedestrian bridges represent \$8.03 million, or 16.8% of total transport works costs in the plan.

Axess found that it is not reasonable to use the IPART benchmark costs for **roundabouts in a greenfield setting** to estimate the costs of roundabouts in an infill setting such as in CP17. Axess's site-specific cost estimate increases the cost of roundabouts. This is primarily due to the higher cost of constructing roundabouts in an existing urban area. Axess includes additional costs for the provision of stormwater infrastructure and for utility relocations.⁴⁸

Axess was unable to recommend a reasonable cost for **pedestrian bridges**, as no site-specific concept designs were available. The council estimates the costs of proposed bridges based on similar structures delivered in the Hills Shire area, which the consultant found were low.

⁴⁶ The Hills Shire Council, submission to IPART Draft Report, October 2019, p 2.

⁴⁷ See *IPART Information Paper – Guidance for contributions plans: Local Infrastructure Benchmark Costs*, 8 October 2018, www.ipart.nsw.gov.au.

⁴⁸ Axess Advisory, *CP17 Castle Hill North Precinct Transport Infrastructure Cost Review (Final)*, 21 August 2019, p 12.

In response to our Draft Report, the council proposed higher costs (\$10.9 million for two pedestrian bridges), based on other bridges it considers more closely reflect the structural features of the proposed bridges in CP17.⁴⁹ Axess reviewed the council's proposal and found that the updated costs are unreasonably high. Without site-specific concept designs, Axess was unable to recommend a reasonable cost.⁵⁰

For its next review of CP17, we encourage the council to obtain detailed, site-specific costings for the bridges. In the interim, we have maintained the base costs for pedestrian bridges as originally proposed in the exhibited contributions plan (\$3.6 million). We have increased the allowances from \$1.8 million to \$2.0 million based on Axess' advice. We consider this approach is reasonable given the early stage of planning for the precinct, and in light of our recommendation to review the plan in three years.

Our recommended small increase in costs for pedestrian bridges reflects advice from Axess for higher allowances for project management and design and lower allowances for contingency.⁵¹ The council agrees with our recommendation for higher allowances for project management and design, but disagrees with our recommendation for lower contingency allowances. This is because our recommended contingency allowances are lower than the generic transport contingency allowance in the IPART Benchmark Report. We maintain our recommendation from the Draft Report, which reflects contingency allowances that are specific⁵² to each infrastructure item and the particular risks associated with construction.

Our recommendations would increase the costs of roundabouts and pedestrian bridges by \$344,361.

We recommend a small reduction in costs for the McMullen Avenue/Old Northern Road signalised intersection

The council estimates that the cost of the signalised intersection at McMullen Avenue/Old Northern Road is \$4.76 million, of which 24.0% is apportioned to CP17. The council then adds allowances for project management, design and contingency (see Table 4.5), taking the amount in the plan to \$1.71 million. This represents 3.6% of the total transport costs in the plan.

The council engaged Diversi Consulting to provide a site-specific cost estimate. Axess reviewed the Diversi Consulting estimate and found the quantity estimates are reasonable, however it recommended some adjustments to the unit rates for various sub-cost items.⁵³ It also found that the contingency allowance had been double-counted. Axess used a bottom-up, site-specific costing approach to recommended a reasonable cost for this intersection.

We recommend the council reduce the cost of the signalised intersection allocated to CP17 by \$10,523, reflecting Axess's site-specific cost adjustments.

⁴⁹ The Hills Shire Council, submission to IPART Draft Report, 18 October 2019, pp 1-2.

⁵⁰ Axess Advisory, Advice on the cost of pedestrian bridges, 25 October 2019.

⁵¹ Axess Advisory, *CP17 Castle Hill North Precinct Transport Infrastructure Cost Review (Final)*, 21 August 2019, p 14.

⁵² Axess has estimated the allowances using a bottom-up site-specific approach, rather than the application of standard percentages to base costs.

⁵³ Axess Advisory, *CP17 Castle Hill North Precinct Transport Infrastructure Cost Review (Final)*, 21 August 2019 p 13.

The cost of road upgrades is too high, mainly due to high service relocation costs

Road upgrades represent \$38.13 million, or 79.6% of total transport works costs in the plan.

The council prepared its own estimates based on the costs of previous similar works. Axess reviewed the council's estimates and found that the unit rates applied to some sub-items were not reasonable and should be reduced. It recommended overall cost reductions for road upgrades, with the largest reductions being for relocation of utility services, including:

- ▼ For road upgrades at **Holland Reserve**, Axess recommended reducing service relocation costs by around \$110,000.⁵⁴
- ▼ For road upgrades at **Old Castle Hill Road**, the council estimated the cost of relocating services at \$5.0 million. Axess found this cost is too high and recommended reducing it by half, to \$2.5 million.⁵⁵
- ▼ For road upgrades at **Castle Street**, Axess recommended a small reduction to the total costs (\$226,950), reflecting lower base costs and lower allowances for contingency.

As noted above, the council disagrees with the contingency allowances proposed by Axess.⁵⁶

We maintain our recommendation that the council reduce the cost of road upgrades in the plan by \$4.3 million, reflecting Axess's site-specific cost adjustments.

4.5 Criterion 5: Apportionment

In assessing apportionment of transport costs in CP17, we have taken into account:

- ▼ The demand for infrastructure in the plan, arising from the expected development inside and outside the precinct
- ▼ The capacity of existing infrastructure and the needs of the existing population
- ▼ The demand generated by different types of development that will occur in the precinct.

The supporting transport technical studies and the council's analysis shows the proposed transport works in the plan are required to meet the demands of the Castle Hill North Precinct.

Within the precinct, the council apportions all transport works costs to residential development and it does so on a per person basis. The development in the Castle Hill North Precinct is primarily residential, and the council explained that the small amount of additional non-residential development is not likely to have a material impact on the demand for local infrastructure.

We consider the council's approach to apportioning transport costs to and within the plan is reasonable – with the exception of the share of costs of the McMullen Avenue/Old Northern Road signalised intersection allocated to CP17 (see below).

⁵⁴ Axess Advisory, *CP17 Castle Hill North Precinct Transport Infrastructure Cost Review (Final)*, 21 August 2019 p 16.

⁵⁵ Axess Advisory, *CP17 Castle Hill North Precinct Transport Infrastructure Cost Review (Final)*, 21 August 2019 p 8.

⁵⁶ The Hills Shire Council, submission to IPART Draft Report, October 2019, p 2.

Recommendation

- 3 Apportion 17% (not 24%) of the cost of the McMullen Avenue/Old Northern Road signalised intersection to CP17. We estimate this would reduce the cost of transport works by \$461,946.

4.5.1 The council's apportionment of costs outside the precinct is reasonable but should be adjusted for a calculation error

The cost of some transport works costs are only partially apportioned to CP17, as shown in Table 4.7.

Table 4.7 Transport works with partial apportionment of costs to CP17

Item No	Description	Location	Share to CP17 (%)
RT6	Signalised intersection	McMullen Avenue/Old Northern Road	24.0
Component of OSE4 ^a	Road upgrades for Holland Reserve (from open space)	Holland Reserve - Holland Road and Glenhaven Road	55.0

^a Transport works transferred from open space works schedule to the transport works schedule.

Source: The Hills Shire Council, CP17 Works Schedule.

McMullen Avenue/Old Northern Road signalised intersection

In determining the apportionment of costs for the McMullen Avenue/Old Northern Road signalised intersection to CP17, the council advised that it incorrectly calculated the increase in traffic over a 15-year timeframe rather than the 20-year timeframe of the plan. Calculating the apportionment over the 20-year time frame, the apportionment to CP17 should be 17.0%, not 24.0%.⁵⁷ We recommend the council apportion only 17% of costs for this intersection to CP17, reflecting its share of demand for the intersection over 20 years. We estimate this would reduce the cost of transport works in the plan by \$461,946.

Holland Reserve (intersection upgrade)

The council has allocated 55.0% of the cost of the proposed Holland Reserve playing-field upgrade to CP17, based on the demand arising from Castle Hill North. This is discussed in Chapter 6 on open space. The council also allocated 55.0% of the associated intersection upgrade to CP17. We consider this approach is reasonable because the demand for the intersection would likely be proportionate to the demand for the playing fields.

⁵⁷ Information from The Hills Shire Council, 6 June 2019.

5 Stormwater management

The total cost of stormwater management infrastructure in CP17 is \$6.59 million (8.3% of total costs). The plan does not include any land for stormwater management because the proposed stormwater works involve upgrades to assets on existing road reservations.

Our assessment is that:

- ▼ **Criterion 1: Essential works** - all stormwater management works in CP17 are consistent with the essential works list.
- ▼ **Criterion 2: Nexus** - there is nexus between works in the plan and development in the Castle Hill North Precinct.
- ▼ **Criterion 3: Reasonable cost** - the benchmark costs for stormwater **pipes** are reasonable; they are derived from a reasonable costing source. The base costs for stormwater **pits** are not reasonable; they are derived from an unreasonable costing source. The council's application of allowances for project management, design and contingency is not reasonable.
- ▼ **Criterion 5: Apportionment** - the council's approach to apportioning stormwater works to residential development on a per person basis is reasonable.

The council has completed preliminary analysis to support the proposed stormwater infrastructure in the plan and the cost estimates are based on the IPART benchmark costs. Given the early stages of planning for the precinct, we consider the use of the IPART benchmarks is reasonable.

Based on our findings, we recommend adjustments to the plan we estimate would reduce the cost of stormwater management works by \$842,621 (12.8% reduction in stormwater management works costs).

Our findings and recommendations are summarised in Table 5.1.

Table 5.1 IPART-recommended adjustments for stormwater management works (\$2018-19)

Criterion	Finding	Recommendation	Works (\$)
Total costs in plan			6,592,651
Essential works	All works are consistent with the essential works list		
Nexus	Nexus is established for the works in the plan		
Reasonable cost	Costs are reasonable except for:		
Stormwater pipes	<ul style="list-style-type: none"> Application of allowances for project management, design and contingency 	<ul style="list-style-type: none"> Remove allowances for project management and design Apply a 30% contingency allowance to the benchmark cost 	-771,869
Stormwater pits	<ul style="list-style-type: none"> The use of the actual cost of a similar project for stormwater pits. Application of allowances for project management, design and contingency 	<ul style="list-style-type: none"> Apply IPART benchmark costs Remove allowances for project management and design Apply a 30% contingency allowance to the benchmark cost 	-70,752
Apportionment	Approach is reasonable		
Total IPART-recommended cost adjustment			-842,621
Total IPART-assessed reasonable cost			5,750,030

5.1 Overview of stormwater management works in CP17

Castle Hill North is an existing residential area, with stormwater management infrastructure that was designed and constructed in the 1960s. The council proposes upgrades to the existing stormwater assets on existing road reservations, therefore no land acquisitions are required.⁵⁸

Currently, stormwater is managed in the precinct with overland flowpaths and stormwater assets that do not have the capacity to support higher density development. The council proposes upgrades and enlargements to the stormwater drainage system to ease the impacts of these overland flows on affected land and reduce hazards to future development. Table 5.2 shows the cost of stormwater upgrades in the plan.⁵⁹

⁵⁸ The Hills Shire Council, CP17, p 29.

⁵⁹ The Hills Shire Council, CP17, p 29.

Table 5.2 Cost of stormwater management works items in CP17 (\$2018-19)

Item	Cost (\$)
Stormwater pipe upgrades	5,917,659
Stormwater pit upgrades (43 pits)	674,993
Total	6,592,651

Note: These are the costs as included in the draft contributions plan. The council has since revised the number of stormwater pit and the basis of costs in the plan.

Source: The Hills Shire Council, *CP17 Works Schedule*.

Figures 5.1, 5.2 and 5.3 show the location of the stormwater works in the precinct. There is a partial overlap of land in Figures 5.2 and 5.3. The council also notes that the dots in the images are not reflective of the total number of pits required, as twin pipes are proposed in some locations, and these require two pits.⁶⁰

Figure 5.1 Location of stormwater management works (north-east of shopping centre)



Source: The Hills Shire Council, *CP17 Infrastructure Cost Support*.

⁶⁰ Information from The Hills Shire Council, 19 June 2019.

[illegible]

Figure 5.3 Location of stormwater management works (north-west of shopping centre)

Castle Hill North **IPART** 37

5.2 Criterion 1: Essential works

We found that all works for stormwater management in CP17 are consistent with the essential works list in the Practice Note. The works items in CP17 are set out in Table 5.3.

Table 5.3 Stormwater management works items in CP17

Items on the essential works list	
Stormwater pipes	Stormwater pits

5.3 Criterion 2: Nexus

Land in the Castle Hill North Precinct was developed in a 1960s subdivision across major overland flow paths. In this era, limited consideration was given to stormwater management. As a result, flooding of properties is likely when the catchment run-off from stormwater events exceeds the capacity of the piped drainage system.⁶¹

A number of overland flowpaths are present within the precinct. The council proposes upgrades and enlargements to the stormwater drainage system to ease the impacts of these overland flows on affected land and reduce hazards to future development.⁶²

The council notes that compliance with its Flood Controlled Land Development Control Plan, On-Site Stormwater Detention Policy and application of the principles of Water Sensitive Urban Design (WSUD) will facilitate further development in the precinct as envisaged by the precinct plan.⁶³

The council's preliminary modelling shows upgrades to the local stormwater pipe and stormwater pit network are required to reduce the impact of flooding on affected land within the precinct as a result of new development. These are required in the vicinity of Garthowen Crescent, Les Shore Place, Larool Crescent, Carramar Road and Castle Street.⁶⁴

As part of the planning for these stormwater management upgrades, the council intends to prepare a Stormwater Network Asset Upgrade Report. This will involve the preparation of a detailed flood investigation report and the development of detailed concept designs and plans for the upgrade of council owned stormwater assets within the precinct. The council has also advised that the Stormwater Master Plan for the Castle Hill North Precinct is currently in progress. The council also intends to commence master planning for the remainder of the Castle Hill Precinct in the near future. It is likely the finalisation of the stormwater planning for Castle Hill North will tie in with the work for the remainder of the precinct.⁶⁵

The council notes that the comprehensive stormwater management plan may inform future updates to the required infrastructure and costs within the plan. Any significant changes to

⁶¹ The Hills Shire Council, Application to IPART, April 2019, p 13.

⁶² The Hills Shire Council, Application to IPART, April 2019, p 13.

⁶³ The Hills Shire Council, Application to IPART, April 2019, p 13.

⁶⁴ The Hills Shire Council, Application to IPART, April 2019, p 13-14.

⁶⁵ Information from The Hills Shire Council, 19 June 2019.

the scope of infrastructure and cost estimates would necessitate a future amendment to the plan.⁶⁶

In response to our information request, the council advised that the correct number of stormwater pits required is 61, not 43 as identified in the exhibited plan. This is because twin pipes are proposed in some locations, and these require two pits.⁶⁷ We are satisfied that nexus has been established for the stormwater infrastructure in CP17 given the early stages of planning for the precinct.

5.4 Criterion 3: Reasonable costs

The council has not completed any stormwater works in the precinct, therefore the costs in the plan are based on estimates. The council has used a combination of 'unit rate' estimates based on IPART's 2014 Benchmark Report⁶⁸ and estimates based on actual costs of works delivered in the council area. These are shown in Table 5.4.

Table 5.4 The council's approaches for estimating stormwater management works

Transport item	Costing approach	Additional allowances (%)		
		Project management	Design	Contingency
Stormwater pipe upgrades	IPART benchmark cost	7.5	7.5	30
Stormwater pit upgrades	Unit rate based on actuals			

Source: The Hills Shire Council, *CP17 Works Schedule, Infrastructure Cost Information support*.

We found that:

- ▼ The use of the IPART benchmark costs to estimate the base costs for stormwater pipes is reasonable.
- ▼ The use of actual costs based on completed projects to estimate the base costs for stormwater pits is not reasonable, due to the council being unable to provide information to support the cost estimate.
- ▼ The application of allowances for project management, design and contingency is not reasonable.

Recommendations

- 4 For stormwater pipes, remove duplicate allowances for project management (7.5%) and design (7.5%) and apply a contingency allowance (30%) to the benchmark costs. We estimate this would reduce the cost of stormwater management works by \$771,869.
- 5 For stormwater pits, use IPART benchmark costs to estimate the costs of stormwater pits (for various sized pipes), remove additional allowances for project management (7.5%) and design (7.5%), and apply a contingency allowance (30%) to the benchmark costs. We estimate this would reduce the cost of stormwater management works by \$70,752.

⁶⁶ The Hills Shire Council, Application to IPART, April 2019, pp 13-14.

⁶⁷ The correct number of pits was based on modelling output from the council's DRAINS model, Information from The Hills Shire Council, 19 June 2019.

⁶⁸ IPART, *Local Infrastructure Benchmark Costs – Final Report*, April 2014.

5.4.1 Use of IPART benchmarks for estimating the cost of stormwater pipes is reasonable

The cost of stormwater pipes in CP17 is \$5.92 million (89.8% of total stormwater works costs).

The council has estimated the cost of the stormwater pipe upgrades based on the IPART benchmark costs for reinforced concrete pipes of different sizes (*item 2.6*). The council used IPART benchmark costs because it did not have a suitable site-specific or similar cost estimate. We consider the IPART benchmark cost is a reasonable costing source in this context.

The IPART benchmark costs include allowances for project management and design, so additional allowances for project management and design (15%) should be excluded. The contingency allowance (30%) should be calculated on the IPART benchmark cost only, as recommended in the IPART Benchmark Report.

The total reduction in stormwater pipe costs, reflecting the removal of project management (7.5%) and design allowances (7.5%) and application of a contingency allowance (30%) to the IPART benchmark costs only would be \$771,869 (12% of total stormwater management works costs in the plan).

5.4.2 Use of a unit rate based on a similar, recently completed project is not reasonable

The cost of stormwater pits in CP17 is \$0.67 million (10.2% of total stormwater works costs). The council derived this estimate assuming a total of 43 pits and a unit rate of \$10,500 per pit. It based the unit rate on the cost of recently completed projects. It used the same unit rate regardless of the proposed size of the stormwater pipe connected to each pit.

In response to our information request, the council was unable to provide any information to support the unit rate for the stormwater pits and suggested it may be more appropriate to use the IPART benchmark costs.⁶⁹ The council provided updated cost estimates (\$Jun2019) for stormwater pits based on the IPART benchmark costs. It also updated the number of required stormwater pits to 61 – an additional 18 pits. The IPART benchmark costs relate only to pits connecting to pipes up to a maximum diameter of 1200mm (*items 2.5.1-2.5.6*). For larger pits, the council used the rate for benchmark cost *sub-item 2.5.6* plus \$5 per millimetre for connecting pipe sizes greater than 1200mm.⁷⁰

We consider the council's revised costing approach is reasonable. However, we have indexed the IPART benchmark cost to \$2018-19, so that the cost estimates are consistent with the base year of the plan. Table 5.5 shows the IPART-recommended reasonable costs for stormwater pits. We have also applied a 30% contingency allowance to the IPART benchmark costs, consistent with the advice in the 2014 IPART Benchmark Report for projects at the strategic review stage.

⁶⁹ Information from The Hills Shire Council, 6 June 2019.

⁷⁰ Information from The Hills Shire Council, 19 June 2019.

Table 5.5 IPART recommended costs for stormwater pit upgrades (\$2018-19)

IPART benchmark cost	Items	Unit rate (\$)	No.	Base cost (\$)	Contingency (\$)	Total cost (\$)
Item no. 2.5.1	Precast Pit to suit 375mm pipe	4,232	7	29,627	8,888	38,515
Item no. 2.5.2	Precast Pit to suit 450mm	4,549	8	36,395	10,919	47,314
Item no. 2.5.3	Precast pit to suit 600mm pipe	5,185	6	31,113	9,334	40,447
Item no. 2.5.4	Precast pit to suit 900mm pipe	6,691	2	13,382	4,015	17,396
Item no. 2.5.5	Precast pit to suit 1050mm pipe	6,858	1	6,858	2,057	8,916
Item no. 2.5.6	Precast pit to suit 1200mm pipe	7,695	4	30,778	9,233	40,012
Council estimate	Precast pit to suit 1350mm pipe	8,520	6	51,119	15,336	66,455
Council estimate	Precast pit to suit 1500mm pipe	9,345	13	121,488	36,447	157,935
Council estimate	Precast pit to suit 1650mm pipe	10,171	12	122,047	36,614	158,662
Council estimate	Precast pit to suit 1800mm pipe	10,996	2	21,992	6,598	28,590
Total			61	464,800	139,440	604,240

Note: For pipe sizes greater than 1200mm, the council estimates the cost by using the cost for *item 2.5.6* and adding \$5 for each millimetre greater than the 1200mm.

Source: IPART's Benchmark Report, The Hills Shire Council, *CP17 Works Schedule*, Information from The Hills Shire Council, 19 June 2019.

Given the early stages of planning for the precinct, and the absence of site-specific cost information, we consider it is reasonable to use the IPART benchmark rate to estimate the cost of stormwater pits in the plan. The total reduction for stormwater pit upgrades would be \$70,752 (1% of stormwater management works costs in the plan).

5.5 Criterion 5: Apportionment

In assessing apportionment of stormwater costs in CP17, we have taken into account:

- ▼ The demand (or need) for infrastructure in the plan, arising from the expected development inside and outside the precinct
- ▼ The capacity of existing infrastructure and the needs of the existing population
- ▼ The demand generated by different types of development that will occur in the precinct.

The council's preliminary stormwater modelling shows the proposed stormwater upgrades in the plan are required to meet the demands of the Castle Hill North Precinct. Therefore, apportionment of 100% of the costs to the Castle Hill North Precinct is reasonable.

Development in the Castle Hill North Precinct will primarily be residential. The council explained that the small amount of additional non-residential development is not likely to have a material impact on the demand (or need) for local infrastructure. Therefore,

apportionment of costs to residential development in the Castle Hill North Precinct is reasonable.

The development within the precinct has a reasonably uniform land area, with most development being medium to high density residential apartments.⁷¹

All development in the Castle Hill North Precinct is required to comply with the council's:

- ▼ Flood Controlled Land Development Control Plan, and
- ▼ On-Site Stormwater Detention Policy.⁷²

The Flood Controlled Land Development Control Plan applies to land which is identified as a Flood Control Lot or Flood Controlled Land. The development controls aim to ensure the flood risk associated with development is minimised and not increased beyond the level acceptable to the community.⁷³

The On-Site Stormwater Detention Policy also applies equally to all development in the Castle Hill North Precinct. The council advised that its policy for on-site stormwater detention forms part of the council's Design Guidelines for Subdivision and Development. These Guidelines provide that on-site stormwater detention is required for all development in the Castle Hill North Precinct.⁷⁴

As development in the precinct is reasonably uniform on an area basis, and all developments are equally required to mitigate demand for stormwater management through onsite detention, we found the council's approach to apportioning stormwater management costs in the plan to residential development on a per person basis is reasonable.

⁷¹ The Hills Shire Council, *Castle Hill North Precinct Plan*, November 2015.

⁷² The Hills Shire Council, CP17, p 29.

⁷³ The Hills Shire Council, *Development Control Plan (DCP) 2012 - Part C Section 6 – Flood Controlled Land*, p 1.

⁷⁴ Information from The Hills Shire Council, 19 June 2019.

6 Open space

The total cost of open space works in CP17 is \$15.36 million (19.4% of total costs in the plan). There are no land costs for open space in the plan because the council is intending to use land it already owns, both within and outside of the precinct, to meet the demand for open space arising from the new development.

Following submissions from stakeholders when a draft of CP17 was first exhibited, the council revised its original proposal for additional playing fields to be located in Gilmour Close Reserve in Glenhaven, and selected the Holland Reserve site, also in Glenhaven, as the preferred location for active recreation facilities for residents of Castle Hill North.

The items of work for expanding the playing fields in Holland Reserve include road upgrades. Consistent with our approach in previous assessments, we consider such work should, more accurately, be attributed to the transport infrastructure category. This was discussed in Chapter 4.

Our assessment of the remaining open space works is that:

- ▼ **Criterion 1: Essential works** – embellishment in the plan is consistent with the essential works list, including the costs associated with making the proposed site for playing fields ready for embellishment.
- ▼ **Criterion 2: Nexus** – nexus is established between the open space embellishment in CP17 and development in Castle Hill North, including for a share of the playing fields and associated facilities to be located in Holland Reserve, which is outside Castle Hill North.
- ▼ **Criterion 4: Reasonable costs** – cost estimates for open space embellishment in local open space (parks) and Holland Reserve are reasonable. The allowances for project management, design and contingency applying to open space embellishment and site readiness costs in Holland Reserve are mostly not reasonable.
- ▼ **Criterion 5: Apportionment** – the council’s approach to apportioning open space costs on a per person basis is reasonable.

Based on our findings, we recommend \$3,397,957 of open space works be classified as transport works. We recommend that the cost of remaining open space works be reduced by \$3,081,438.

Our findings and recommended adjustments are summarised in Table 6.1 below.

Table 6.1 IPART-recommended adjustments for open space embellishment (\$2018-19)

Criterion	Finding	Recommendation	Works (\$)
Total cost in plan			15,358,549
Essential works	All open space works are consistent with the essential works list, however:		
	Road upgrades are transport infrastructure	Transfer costs to transport infrastructure works costs	-3,397,957
Nexus	Nexus is established for open space embellishment, including provision of playing fields in Holland Reserve		
Reasonable cost	Cost estimates are reasonable other than:		
Local open space (parks)	<ul style="list-style-type: none"> Applying project management, design and contingency allowances 	<ul style="list-style-type: none"> Remove allowances for project management and design Reduce contingency allowance from 30% to 20% 	-497,880
Holland Reserve (embellishment)	<ul style="list-style-type: none"> Applying project management, design and contingency allowances 	<ul style="list-style-type: none"> Remove allowances for project management and design Reduce contingency allowance from 30% to 20% 	-1,100,636
Holland Reserve (site readiness)	<ul style="list-style-type: none"> Estimates for biodiversity offset and telecommunication tower relocation Applying project management and design allowances to most items Applying a contingency allowance to the cost of the biodiversity offset credit and telecommunication tower relocation Applying a 30% contingency allowance for all other items 	<ul style="list-style-type: none"> Revise costs for biodiversity offset and telecommunication tower relocation Remove project management and design allowances from most items Remove the contingency allowance on the biodiversity offset credit and telecommunication towers relocation costs Reduce contingency allowance from 30% to 20% 	-1,482,923
Apportionment	Approach to apportionment is reasonable		
Total IPART-recommended cost adjustment			-6,479,394
Total IPART-assessed reasonable cost			8,879,155

6.1 Overview of open space in CP17

CP17 includes embellishment for two types of open space: local open space (parks) and district open space (playing fields, in Holland Reserve). There are no costs for acquiring land for open space as the council does not plan to purchase any land. It owns the three local parks. Holland Reserve is Crown land, but the council has responsibility for its upkeep and management.⁷⁵

6.1.1 Local open space

The cost of local open space embellishment is \$2.52 million. This amount is for upgraded facilities in three existing reserves in Castle Hill North (total area 1.87 hectares), as shown in Table 6.2. The location of the reserves in Castle Hill North is shown in Figure 6.1.

Table 6.2 Local open space in CP17 (\$2018-19)

Reserve	Area (m ²)	Cost of embellishment (\$)
Maurice Hughes Reserve	14,558	1,505,862
Larool Crescent Reserve	1,259	436,162
Eric Felton Reserve	2,879	581,129
Total	18,696	2,523,153

Source: The Hills Shire Council, *Contributions Plan No 17 Castle Hill North*, March 2019, p 17 and Works Schedule.

⁷⁵ Under recent changes to the *Crown Land Management Act 2016*, Crown lands such as Holland Reserve are to be managed under the *Local Government Act 1993* as though they are community land under the *Local Government Act 1993*. Information from The Hills Shire Council, 19 June 2019, Q 6.

Figure 6.1 Location of local parks in Castle Hill North



Source: The Hills Shire Council, *Contributions Plan No 17 Castle Hill North*, March 2019, p 4.

6.1.2 District open space

The district open space is located in Holland Reserve, Glenhaven, outside the Castle Hill North Precinct (approximately 4.5 km outside the precinct). The council proposes to increase the number of playing fields in this reserve from one to four, with a larger amenities building and more car parking. Figure 6.2 shows the Holland Reserve site, and Figure 6.3 is the council's concept plan for facilities on the site.

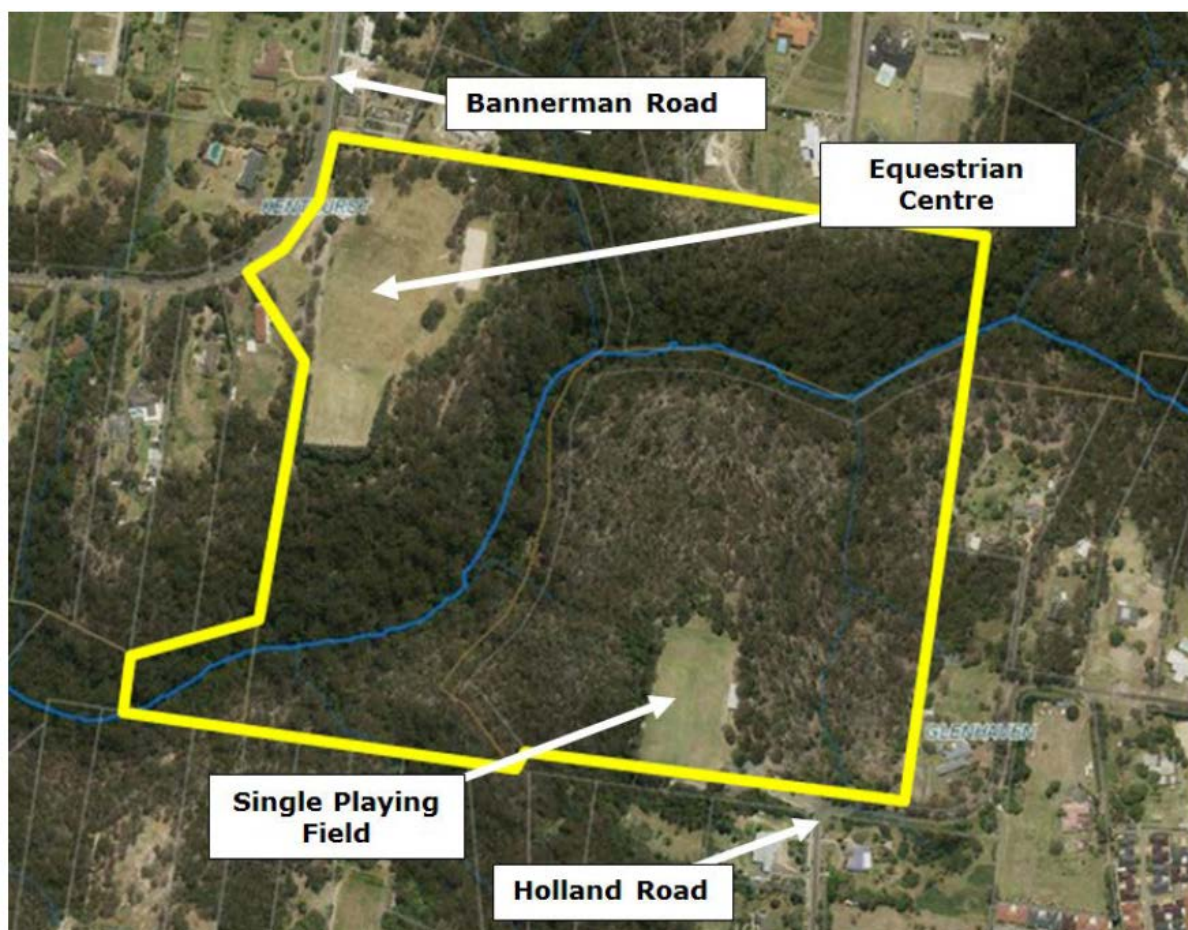
As well as facility costs for Holland Reserve, CP17 includes the cost of preparing the site for construction of playing fields, ie, for various earthworks, water management works, relocating two telecommunications towers and meeting statutory requirements (under the biodiversity offsets scheme) to remove environmentally sensitive bushland.⁷⁶

The council estimates that 1.6 of the three additional fields are needed to meet the needs of the future residents of Castle Hill North. Therefore, CP17 includes 55% (\$12.84 million) of the

⁷⁶ The cost of Holland Reserve in CP17 also includes the cost of road upgrades to facilitate safe access and egress to the reserve. We recommend these works be categorised as transport infrastructure. They are assessed with the other transport works in Chapter 4.

cost of upgrading Holland Reserve. The remaining capacity will be used to meet the needs for active recreation facilities generated by residential development elsewhere in the local government area.⁷⁷

Figure 6.2 Holland Reserve site



Source: The Hills Shire Council, Business Paper, Meeting of 25 July 2017, p 116.

⁷⁷ If further development occurs in the region, additional open space facilities may be required to meet demand. The 55% share represents the additional demand from development in CP17.

Figure 6.3 Holland Reserve – Proposed concept



Note: The blue dot represents water tanks for water re-use.

Source: The Hills Shire Council, Business Paper, Meeting of 27 November 2018, p 52.

6.2 Criterion 1: Essential works

The types of open space embellishment in CP17 are set out in Table 6.3. We found that all items of embellishment in CP17 are consistent with the essential works list.

Table 6.3 Open space embellishment in CP17

Local open space (including open space links)
Passive open space embellishment including cycleways and pedestrian pathways, paving, BBQs, planting, bins, cycle racks, drinking fountains, seating, tables, turfing, security lighting, softfall playground, fencing, playground equipment and shade structures, tree and shrub planting
Site preparation – demolition of existing structures and vegetation clearance
District open space
Playing fields and lighting, cricket pitches and practice nets, amenities building, car parking and lighting, pathways and fencing, irrigation, stormwater pits and pipes, park furniture, landscaping. Reuse water tanks and pumps, irrigation system, soil profile improvements
Site preparation – vegetation clearance
District open space (Holland Reserve) site readiness
<ul style="list-style-type: none">▼ Earthworks and retaining walls▼ Treatment of stormwater runoff to bushland▼ Relocation of communication towers▼ Compliance with statutory requirements associated with securing development approval, including biodiversity offsets and environmental impact statement (EIS)

Source: The Hills Shire Council, *Contributions Plan No 17 Castle Hill North*, March 2019, pp 18-20 and CP17 Cost Support information.

We investigated whether the works proposed for Holland Reserve to make the site ready for embellishment with active recreational facilities could be considered to be base level embellishment in accordance with the Practice Note. We sought clarification from the council about the works involved, and advice from DPIE.⁷⁸ Based on this advice, our view is that these works and expenditures are consistent with the essential works list, as they are necessary to make the site ready for embellishment as playing fields and associated facilities, which are consistent with the essential works list.

Consistent with our approach in assessments of other contributions plans, we find that the road upgrade works included in the Holland Reserve costs should be characterised as transport works and recommend their cost be transferred from open space embellishment to the transport infrastructure category. This is discussed in Chapter 4.

6.2.1 Site readiness works in Holland Reserve are base level embellishment

A major component of the cost of the district open space located on Holland Reserve relates to works to prepare the site for development as playing fields. There are four categories of works:

1. Earthworks and retaining walls
2. Treatment of stormwater runoff to bushland
3. Relocation of two telecommunication towers to alternative sites within the reserve
4. Compliance with statutory requirements to permit development of the site, including removal (under the biodiversity offsets scheme) of approximately three hectares of bushland and the completion of an environmental impact assessment.

⁷⁸ Information from DPIE, 18 June 2019.

Base level embellishment in the Practice Note is defined as works required to bring open space up to a level where the site is secure and suitable for passive or active recreation. The examples of base level embellishment provided in the Practice Note include site regrading and drainage and irrigation, which would usually be needed in order to deliver facilities for active recreational use. We consider the council's explanation for the inclusion of the four categories of works as base level embellishment is reasonable.

Earthworks, treatment of stormwater runoff and relocating telecommunication towers are base level embellishment

We consider the earthworks and treatment of stormwater runoff are works similar to site regrading and drainage and irrigation works, envisaged by the Practice Note.

The council has explained that relocation of two telecommunication towers⁷⁹ is necessary to allow the proposed configuration of the playing fields.⁸⁰ We agree with the council that these works are necessary to make the land fit for purpose.

The biodiversity offset costs are base level embellishment

The council has identified that its proposed development of Holland Reserve is likely to significantly affect the environment.⁸¹ Under the *Biodiversity Conservation Act 2016*, the council is required to secure a biodiversity offset credit to address the impacts of this development (see Box 6.1). The council has included the costs for the offset credits and complying with other regulatory requirements as part of the site-readiness costs for Holland Reserve.⁸² We agree with the council that these works are necessary to make the land fit for purpose.

⁷⁹ The towers are owned and managed by the service providers Telstra and Optus. The licences for these towers are with the NSW Government, which is the official owner of the site.

⁸⁰ Information from The Hills Shire Council, 6 June 2019.

⁸¹ UBM Ecological Consultants, Biodiversity Development Assessment report, Holland Reserve, Glenhaven, 3 October 2019, p i.

⁸² The Hills Shire Council, Business Paper, Meeting of 27 November 2018, p 53.

Box 6.1 Biodiversity offsets scheme

Under the *Biodiversity Conservation Act 2016*, the NSW Government introduced the Biodiversity Offsets Scheme. The scheme commenced in August 2017. It is a way of avoiding, minimising and offsetting the adverse impacts on biodiversity from new development, and to protect areas with ecologically sensitive flora and fauna.

The biodiversity offsets scheme works through the mechanism of biodiversity offset credits.

Developers and landholders who undertake development or clearing generate a credit obligation, which must be retired to offset their activity. Where a proposed development will have a significant impact on the environmental values of the land, a biodiversity assessment must be undertaken, and the consent authority will include the credit obligation (and any other actions required) in the conditions of consent when approving the development.

Developers can satisfy their obligations by either:

- ▼ funding biodiversity conservation that directly benefits the threatened species impacted by the development or it identifies and purchases the required ‘like for like’ credits in the market or
- ▼ transferring into the Biodiversity Conservation Fund the ‘required amount’, which is determined by the Biodiversity Conservation Trust in accordance with the Offsets Payment Calculator. This fund is managed by the NSW Biodiversity Conservation Trust.

Landholders who establish a biodiversity stewardship site on their land generate credits to sell to developers or landholders who require those credits, to securely offset activities at other sites.

Source: <https://www.environment.nsw.gov.au/biodiversity/offsetsscheme.htm>

6.3 Criterion 2: Nexus

Nexus relates both to the overall rate of provision of land for open space and recreation purposes as well as the number and types of facilities for active and passive recreation. Our assessment of nexus considers these two aspects separately.

We consider that nexus is demonstrated for the type and amount of open space in CP17 and note that:

- ▼ The total area of open space is low compared with the commonly used benchmark.
- ▼ Nexus is established for embellishing local parks more intensively for passive recreation, and for the number of playing fields for active recreation at Holland Reserve.
- ▼ In the circumstances, there is nexus for providing facilities for active recreation in Holland Reserve, a site that is approximately 4.5km from the Castle Hill North Precinct.

The council did not undertake a detailed study to assess the open space needs of the future residents of Castle Hill North. It recognised that facilities would be needed in addition to those existing in the precinct and that the cost of purchasing additional land within the precinct to provide additional facilities would be prohibitive. It therefore investigated a range of options to meet the additional demand for open space facilities arising from the new residential development.

6.3.1 There is nexus for local park embellishment

For **passive open space**, the plan includes facilities for the three existing local parks. These facilities include play equipment, picnic facilities, landscaping and seating to increase the range of activities for residents. These are typical of embellishments in local parks. We consider nexus is established for passive open space in the plan.

6.3.2 There is nexus for playing fields at Holland Reserve

For **active recreational facilities**, the council determined that an additional population of around 6,045 people in Castle Hill North would generate demand for 1.64 playing fields and 1 cricket oval.⁸³ This rate of provision is low compared with the rate of 1 field per 1,850 adopted in some contributions plans for greenfield areas that we have recently assessed.⁸⁴ No tennis or netball courts are proposed for Holland Reserve. The provision of associated facilities (carparking and an amenities building) is consistent with the usual provision for the number of playing fields in other contributions plans we have assessed.

We consider the council's strategy of apportioning a share of the costs of Holland Reserve to CP17, based on the demand created for active open space by the projected population of Castle Hill North, is reasonable in the circumstances. The council investigated a range of options and concluded that Holland Reserve is the most appropriate location for the playing fields for future Castle Hill North residents.

Our main consideration in determining if nexus is established for the facilities at Holland Reserve is whether the location is sufficiently proximate to the residents that are expected to use them. The distance from the Castle Hill North Precinct is greater than a measure for assessing access to out-of-area district facilities (2km).⁸⁵ However, we accept that there is no more suitable location, and therefore that the Holland Reserve location for playing fields satisfies the nexus criterion.

The council considers that Holland Reserve is the most appropriate location for new playing fields on the basis that:

- ▼ Potential amenity impacts could be minimised given the site is in a rural bushland setting, with adequate separation between the playing fields and adjoining uses.
- ▼ The site is located within reasonably close proximity to the Castle Hill Precinct.
- ▼ It would enable the council to increase the capacity of existing open space without the need to acquire new land, resulting in a substantially lower cost of provision per field than if urban land had to be acquired.
- ▼ Biodiversity impacts resulting from the expansion could be adequately offset.
- ▼ Car parking can be provided and improvements to the surrounding road network can be funded and delivered to improve vehicular and pedestrian access to the site.⁸⁶

⁸³ CP17 states the council used benchmarks in DPE's *Recreation and Open Space Planning Guidelines for Local Government*, although the guidelines do not specifically refer to a standard. This document was published in December 2010 but is no longer publicly available.

⁸⁴ See for example, Blacktown City Council's *Section 7.11 Contributions Plan No 24W – Schofields*, p 21.

⁸⁵ Referred to by the council in: The Hills Shire Council, Application to IPART, April 2019, p 18 (DPE, *Recreation and Open Space Planning Guidelines for Local Government*, December 2010, p 29).

⁸⁶ The Hills Shire Council, Business Paper, Meeting of 26 March 2019, p 58.

Even though considerable expenditure is required to make the site ready for playing fields, Holland Reserve is a cost-effective solution as the council is not required to acquire land. We note that with higher residential population densities in the station precincts along the Sydney Metro North West, all councils will face challenges in meeting future residents' needs for local open space.

Box 6.2 sets out how the council determined that playing fields to meet the needs of Castle Hill North residents should be located in Holland Reserve. The council investigated 21 options for locating the playing fields. More detail about the council's consultation process is included in Section 8.4.

In response to our Draft Report we received three submissions from residents in Glenhaven opposing the location of additional playing fields at Holland Reserve. These residents raised issues that had previously been raised with the council through its consultation processes, including

- ▼ Location of the playing fields outside the Castle Hill North Precinct
- ▼ Loss of rural amenity
- ▼ Disturbance to nature and wildlife
- ▼ Increased traffic and anti-social activities.⁸⁷

Other concerns relate to the council not adequately considering alternative locations for the playing fields and the inconsistency of this development with a recent decision made by the Sydney Central Planning Panel for the Glenhaven area.⁸⁸

We have considered the issues raised in submissions and found that while the provision of playing fields outside the precinct is not ideal, the council has established nexus. We note the proposed playing fields at Holland Reserve are consistent with the assigned uses of the land under the *Crown Land Management Act 2016*.⁸⁹ The Sydney Central Planning Panel decision relates to a higher density residential development on land zoned RU6 Transition, which involves different considerations from the proposed playing fields development at Holland Reserve.⁹⁰

⁸⁷ For example, M. Zenere submission to IPART Draft Report, p 1; and two anonymous submissions to IPART Draft Report, October 2019.

⁸⁸ Anonymous, submission to IPART Draft Report, 18 October 2019.

⁸⁹ The council has advised that the land use categories assigned to Holland Reserve are "sportsground" and "natural area": Information from The Hills Shire Council, 24 October 2019.

⁹⁰ See, https://www.planningpanels.nsw.gov.au/DevelopmentandPlanningRegister/tabid/62/ctl/view/mid/424/JRPP_ID/4397/language/en-US/Default.aspx, accessed 6 November 2019.

Box 6.2 The council's approach to selecting Holland Reserve

First draft of CP17 – Gilmour Close Reserve

CP17 proposed a district facility in Gilmour Close Reserve, Glenhaven, to accommodate demand from 16,000 new residents of the Castle Hill (north and south) and Cherrybrook precincts. Most of the land (10.01 hectares) is privately owned, zoned RU6 Transition, but with potential for a mix of low and medium density residential development. Embellishment was proposed to be four playing fields, four tennis courts and associated facilities. CP17 would be apportioned 38% of the \$57.3 million total cost of land and capital, based on projected populations of the precincts.

The council considered that Gilmour Close Reserve had fewer constraints, and that Holland Reserve was beyond an acceptable distance from the station precincts catchment.

Investigation of alternative sites

Feedback on exhibition of CP17 raised issues related to location, traffic, parking, impact on rural lifestyle and amenity, impact on property values and ecological impacts of the Gilmour Close playing fields. The council reviewed expected demand, current supply and potential locations for playing fields in the service catchment of the station precincts.

Detailed investigation of 21 alternative sites found most cost prohibitive or unsuitable due to issues such as location, geography and ecological constraints. Estimated costs per playing field were:

- ▼ \$30-40 million for options involving acquisition of urban land within a 2km catchment
- ▼ \$14-18 million for options involving the acquisition of rural land in Glenhaven and Dural, and
- ▼ \$7.60 million per playing field in Holland Reserve (as no land costs are required).

Revised draft of CP17 – Holland Reserve

Based on the investigation, the council adopted Holland Reserve as the preferred site, with 1.6 of the 3 extra playing fields (55% of capacity) to meet the needs of Castle Hill North residents. Additional costs would be incurred to upgrade roads for safer vehicular access, remove and offset approximately 3 hectares of bushland and relocate two telecommunication towers within the reserve.

The council gave detailed consideration to issues raised in submissions. Apart from including a signalised intersection to improve safety and access, the council considered that feedback did not warrant further amendment to CP17, or rejection of the proposed Holland Reserve site. The council committed to addressing parking and other amenity issues when planning the development.

Although the site is 4.5km from the Castle Hill Precinct (outside the 2km rule of thumb for playing fields), the council considered it to be within the precinct's service catchment and a reasonable distance to demonstrate sufficient nexus.

Sources: The Hills Shire Council, Business Paper, Meeting of 27 November 2018 and Business Paper, Meeting of 26 March 2019.

6.4 Criterion 3: Reasonable cost

The council has not completed any embellishment of open space in the precinct, therefore all costs in the plan are estimates. The council has used a combination of unit rate estimates based on IPART's Benchmark Report, and estimates based on an industry cost guide and costs from the council's asset system and recent council projects.

Table 6.4 outlines the council's approaches to estimating the base costs for proposed works in local parks and Holland Reserve, and how it has applied additional allowances to base costs.

Table 6.4 The council's approaches to estimating open space embellishment costs

Works	Costing approach	Additional allowances (%)		
		Project management	Design	Contingency
Local open space	IPART benchmarks	7.5	7.5	30
	Unit/item rates – council estimate from similar works (minor items)			
Holland Reserve - embellishment	IPART benchmarks			
	Unit/item rates and quantities – council estimate from similar works and asset system costs ^a			
Holland Reserve - site-readiness				
Earth works	Rawlinsons Construction Cost Guide			
Retaining walls	Rawlinsons Construction Cost Guide			
Bushland removal (biodiversity offset)	Consultant advice			
Telecommunication towers relocation	Advice from Telstra and Optus			

^a Items are water tanks, irrigation, cricket practice nets and soil improvements.

Source: CP17 Works Schedule, CP17 Cost Support Information, Information from The Hills Shire Council, 18 April 2019 and Information from The Hills Shire Council, 3 June 2019.

We found that:

- ▼ The council's approach to estimating base costs for **embellishment works** in local parks and Holland Reserve (ie, estimating quantities and applying unit rates based on IPART benchmark costs and costs from similar completed projects), is reasonable. However, the council double-counts project management and design allowances for costs that are based on IPART benchmarks and rates from similar works and applied a 30% contingency allowance, which is not reasonable.
- ▼ The council's approach to estimating the cost of the **site-readiness works** in Holland Reserve is mostly reasonable, although:
 - The costs of biodiversity offset and telecommunication towers relocation do not reflect the most recent advice from its consultant and the service providers

- The council's application of allowances for biodiversity offset and relocation of telecommunication towers is not reasonable
- The council's application of a 30% contingency allowance for remaining cost items is not reasonable.

Recommendations

- 6 For local open space embellishment costs, remove the additional allowances for project management and design, and apply a 20% contingency allowance only, which would reduce the costs by an estimated \$497,880.
- 7 For Holland Reserve embellishment costs, remove the additional allowances for project management and design and apply a 20% contingency allowance only, which would reduce the costs by an estimated \$1,100,636.
- 8 Revise the estimates for Holland Reserve site-readiness to reflect:
 - The most up-to-date advice from UBM Ecological Consultants about the cost of the **biodiversity offset** and removal of all allowances
 - The most up-to-date advice from the service providers about the cost for the relocation of the **telecommunication towers** and removal of all allowances
 - Application of a 20% contingency allowance to the sum of base costs, project management and design allowances for the remaining items

This would reduce the cost by an estimated \$1,482,922.

Our recommendations for criterion 3 would reduce the reasonable cost of open space embellishment in CP17 by an estimated \$3,081,438. Our calculations are based on applying the recommendations in order, ie first revising base or benchmark costs, then allowances for project management and design (for non-benchmark costs), and finally the contingency allowance.

6.4.1 We recommend reducing the allowances for open space embellishment

The council has used IPART's benchmark costs for most items of embellishment in both:

- ▼ Local parks (including footpaths, playground structures, park furniture, lighting and landscaping, demolition and site clearance)
- ▼ Holland Reserve (including playing fields, amenities building, lighting, fencing and playgrounds).⁹¹

The council has considered its experience with other contributions plans, and has found the IPART benchmark costs to be reasonably accurate.⁹²

We accept that using IPART's benchmark costs is reasonable in this instance, as no concept designs have been prepared which would support more detailed costing approaches. Our

⁹¹ We asked the council to provide further information to support the IPART benchmark cost for the clearance of vegetation. The council provided a written quote, which increases the cost by a small amount. Given the change in cost is not material, we do not recommend revising the costs [Information from The Hills Shire Council, 14 August 2019].

⁹² Information from The Hills Shire Council, 18 April 2019.

recent assessment of the council's plan CP12 (2018) for Balmoral Road Release Area confirms the council's experience that its use of IPART benchmark costs for the types of open space items in this plan results in estimates which are reasonably close to the actual cost of delivering the works.

For **project management and design** allowances, we consider the council's approach is not reasonable for cost estimates based on IPART benchmark costs or on similar completed projects. The allowances for project management and design are already accounted for in cost estimates based on IPART benchmark costs and for costs based on similar completed projects. We recommend removing the additional allowances for project management and design where costs are based on IPART benchmark costs or on similar completed projects.

For **contingency** allowances, we consider the council's approach is reasonable, however the rate applied is not reasonable. The council applies a contingency allowance of 30% to all items, whereas the IPART benchmark for works at the strategic design stage is 20%. We recommend the council applies a 20% contingency allowance to the benchmark costs. For the items based on Rawlinsons, the contingency allowance is applied to the sum of the base cost, project management and design allowances.

6.4.2 We recommend adjustments to the costs for site-readiness works at Holland Reserve

The cost in the plan for site-readiness works at Holland Reserve is \$3,859,642. Table 6.5 shows our recommended site-readiness works costs.

Table 6.5 IPART-recommended costs for Holland Reserve site-readiness works (\$2018-19)

Holland Reserve site-readiness	Base (\$)	Allowances (\$)			Total (\$)
		Project management	Design	Contingency	
Earth works	770,000	57,750	57,750	177,100	1,062,600
Retaining walls	326,700	24,503	24,503	75,141	450,846
Biodiversity offset	258,273	-	-	-	258,273
Relocation communication towers	605,000	-	-	-	605,000
Sub-total	1,959,973	82,253	82,253	252,241	2,376,719

Note: These costs reflect the 55% apportionment of costs to CP17.

Source: The Hills Shire Council, CP17 Works Schedule and IPART analysis.

Earthworks, retaining walls and treatment of stormwater run-off

The council has used unit rates drawn from costs of similar works, asset system costs and Rawlinsons Construction Cost Guide (Rawlinsons), and applied these to the estimated quantities for Holland Reserve. We consider these approaches are reasonable.

The council applies allowances for project management and design to the base costs of each item in Holland Reserve. As earthworks and retaining walls costs are based on Rawlinsons, we consider this is reasonable. For the remaining items, costs are based on the actual costs of similar items, where allowances for project management and design are already included.

We recommend the council remove project management and design allowances (except for earthworks and retaining walls) and apply a 20% contingency allowance to the sum of base costs, project management and design.

Biodiversity offsets

The base cost in the plan for the biodiversity offset (\$1.21 million) is 55% of the total cost (\$2.20 million) of obtaining biodiversity credits to offset the adverse impacts on biodiversity values associated with developing the Holland Reserve site for playing fields.⁹³

The cost is calculated using the staged Biodiversity Assessment Method (BAM) under the *Biodiversity Conservation Act 2016* by UBM Ecological Consultants (UBM). The preliminary estimate of \$2.20 million was based on the BAM Stage 1 investigation (UBM report, October 2018). The revised estimate of \$1.50 million (UBM report, December 2018) was based on the more targeted surveys in BAM Stage 2. The council provided an updated estimate for the cost of the biodiversity offset credit of \$0.47 million (UBM report, October 2019)⁹⁴ with its response to the Draft Report.

The council intends to update the costs in CP17 based on the final surveys and final estimate of the biodiversity offset cost before it makes any revisions to the plan as a result of IPART's review and the Minister's formal response.⁹⁵

The council has applied allowances for project management, design and contingency to the cost of biodiversity offsets, consistent with the generic allowances provided in the IPART Benchmark Report for open space embellishment. We consider this is not reasonable. Project management and design costs are included within the biodiversity offset cost. Contingency allowances account for costs which are not able to be determined at the time an estimate is prepared. The biodiversity cost of \$0.26 million (55% share) is the best estimate of the cost the council will incur in providing the additional playing fields at Holland Reserve.

The cost of biodiversity offsets (and relocation of telecommunication towers, outlined below) will be incurred by the council in lieu of the cost of acquiring additional land for open space. As land cost estimates do not include contingency allowances, we consider it is not reasonable to apply a contingency allowance to the equivalent cost estimate for biodiversity offsets and relocation of telecommunication towers in this plan.

In its response to the Draft Report, the council argues that a contingency allowance should apply to the cost of biodiversity offsets (and relocation of telecommunication towers) as the costs in the plan are estimates that may change to account for a range of possible factors.⁹⁶ We maintain our position that it is not reasonable to apply contingency allowances to the cost of biodiversity offsets and the relocation of telecommunication towers. The council has provided no evidence for the amount of the proposed contingency allowance. We note that

⁹³ See Section 6.5 for discussion of the apportionment of Holland Reserve costs to CP17.

⁹⁴ UBM advises that this estimate is a 'final draft' based on the draft layout for the site and limited information provided by the council. It notes that a Stage 2 investigation will require significant revision before the biodiversity offset credit can be finalised: UBM Ecological Consultants, *Biodiversity Development Assessment report, Holland Reserve, Glenhaven*, 3 October 2019, p 1.

⁹⁵ Information from The Hills Shire Council, 3 June 2019.

⁹⁶ The Hills Shire Council, submission to IPART Draft Report, October 2019, p 3.

the IPART benchmark allowances were not intended to be applied to this type of cost and further, that the cost of the biodiversity offsets appears to be trending downward.⁹⁷

We recommend that the council revises the base cost of the biodiversity offset in CP17 to the latest available estimate and remove allowances for project management, design and contingency. This would reduce the cost of the biodiversity offset from \$1.3 million to \$0.26 million (which is 55.0% of the updated cost estimate from UBM (\$0.47 million)).

Relocation of telecommunication towers

The plan includes 55.0% (\$411,125) of the total cost (\$747,500) of relocating two telecommunication towers.

The cost estimate was based on verbal advice from Telstra. We asked the council to obtain written advice from the service providers (Telstra and Optus) to substantiate the proposed costs. The written estimates provided to the council are higher than the base costs in the plan – a total of \$1,100,000 for both.⁹⁸ Apportioning 55.0% of the revised base costs to CP17 increases the base cost in the plan from \$275,000 to \$605,000. The council explained that any further revision to the cost would be incorporated in the plan when it is next amended.⁹⁹ We recommend that the council revise the base cost for the relocation of telecommunication towers based on the updated advice.

The estimates provided by the service providers are based on similar completed projects. Therefore, it is not reasonable to apply allowances for project management and design. As with biodiversity offsets, we also consider it is not reasonable for the council to apply a contingency allowance. We recommend the council remove these allowances.

We therefore recommend the council amend the total cost in the plan of relocating two telecommunication towers from \$411,125 to \$605,000, reflecting higher base costs and removing the additional allowances.

6.5 Criterion 5: Apportionment

Residential development in Castle Hill North is apportioned the full cost of local open space and 55% of costs for the district open space (Holland Reserve). Costs are apportioned to residential development within the precinct on a per person basis.

The council considers the local open space will serve only the needs of Castle Hill North residents. The share of the cost of providing an additional three playing fields in Holland Reserve is based on the council's assessment of the demand arising from the future residents of Castle Hill North. The council considered the 6,045 new residents would require 1.6 playing fields, and therefore CP17 should be apportioned 55.0% of the total cost of providing the three additional fields in Holland Reserve.

We consider this approach is reasonable.

⁹⁷ As advised by the council in the biodiversity development assessment reports in October 2018, December 2018 and October 2019.

⁹⁸ Information from The Hills Shire Council, 14 August 2019 and 23 July 2019.

⁹⁹ Information from The Hills Shire Council, 19 June 2019.

7 Plan administration

CP17 includes \$996,450 for plan preparation and administration. This amount is 1.5% of the cost of works in the plan, consistent with the benchmark we proposed in IPART's Benchmark Report.

Our assessment is that:

- ▼ **Criterion 1: Essential works** – plan preparation and administration costs are consistent with the essential works list.
- ▼ **Criterion 2: Nexus** – there is nexus between plan preparation and administration activities and development in the Castle Hill North Precinct.
- ▼ **Criterion 3: Reasonable cost** – we consider the council's approach of estimating plan preparation and administration costs as 1.5% of the cost of works in the plan is reasonable, subject to it being based on the IPART-adjusted cost of works.
- ▼ **Criterion 5: Apportionment** – the council's approach to apportioning plan administration costs to residential development on a per person basis is reasonable.

Based on our findings and recommendations to adjust the total cost of works in CP17, we estimate the cost of plan administration would reduce by \$125,994.

Our findings and recommendations for plan administration in CP17 are summarised in Table 7.1.

Table 7.1 IPART-recommended adjustments for plan administration (\$2018-19)

Criterion	Finding	Recommendation	Cost (\$)
Total cost in plan			996,450
Essential works	Plan administration is on the essential works list		
Nexus	Nexus is established		
Reasonable cost	Calculating costs using IPART's benchmark of 1.5% of works costs is reasonable	Reduce administration costs to be 1.5% of the revised cost of works	-125,994
Apportionment	Approach is reasonable		
Total IPART recommended cost adjustment			-125,994
Total IPART assessed reasonable cost			870,456

7.1 Criterion 1: Essential works

Plan preparation and administration costs are on the essential works list. The Practice Note explains:

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 that 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. the employment of someone to co-ordinate the plan).¹⁰⁰

7.2 Criterion 2: Nexus

We consider there is nexus between plan preparation and administration activities and the expected development in the Castle Hill North Precinct.

7.3 Criterion 3: Reasonable cost

CP17 includes a cost of \$996,450 for plan administration, which is 1.5% of the total cost of works in the plan. The amount of 1.5% is consistent with the benchmark we proposed in the IPART Benchmark Report, and we consider that in the context of CP17 it is a reasonable estimate.

Given that we have recommended the council revise the cost of works in each infrastructure category, we recommend the council calculate the cost of plan administration for CP17 based on 1.5% of the adjusted cost of works. We estimate this would reduce the cost of plan administration in CP17 by \$125,994.

Draft recommendation

- 9 Calculate the cost of plan administration for CP17 based on 1.5% of the adjusted cost of works. This would reduce the cost of plan administration by an estimated \$125,994.

7.4 Criterion 5: Apportionment

CP17 states that plan administration costs are to be apportioned on a per person basis to residential development in the Castle Hill North Precinct. We consider this approach is reasonable, as CP17 only applies to residential development in the Castle Hill North Precinct.

¹⁰⁰ DPIE, *Local infrastructure Contributions Practice Note*, January 2019, p 16.

8 Cross-category considerations

This chapter presents our assessment of criteria which apply across multiple infrastructure categories. It considers:

- ▼ Criterion 3: Reasonable cost (in relation to the cost of land and the council's financial model)
- ▼ Criterion 4: Timing of infrastructure delivery
- ▼ Criterion 6: Consultation
- ▼ Criterion 7: Other matters.

Our assessment found that the council's approach to estimating the cost of land in CP17 is reasonable, but the valuation advice it used was provided at the peak of the residential property market (June 2017). Consequently, the values are likely to be too high for the base period of the plan (2018-19) and we recommend the council reduce the total cost of land in the plan by 4.1%, in line with the fall in the Australian Bureau of Statistics (ABS) Residential Property Price Index for Established Houses between June 2017 and June 2018.

We examined the council's modelling approach and the assumptions it has made in the financial model for CP17. We found the council's approach to estimating the present value of future costs and revenue is reasonable except that:

- ▼ The base period of the plan is 2018-19 and the cost of works are estimated in 2018-19; whereas the base period of the model is 2017-18. This leads to an error in the calculation of contributions rates.
- ▼ The council applies administration costs over 15 years, and should instead apply administration costs over the expected life of the plan (20 years).
- ▼ The council's calculation of cost escalation factors for land and works costs does not properly account for compounding growth.
- ▼ Using more recent index values in the sample used to derive cost escalation factors would better represent trends in the residential property market.

We are recommending the council address each of these issues.

We found CP17 satisfies the consultation criterion (Criterion 6). We also identified one issue in regard to Criterion 7 (other matters), related to the timeframe for reviewing contributions plans. Given the council is likely to have a better understanding of the scope and cost of works for transport and stormwater on the completion of a regional transport study (which encompasses the Castle Hill North Precinct) and a comprehensive Stormwater Network Asset Upgrade Report, we recommend that the council update the plan within the next three years.

8.1 Criterion 3: Reasonable cost – land

CP17 includes \$11,596,475 for the cost of acquiring approximately 0.26 hectares of land for transport works. All land costs in the plan are for partial site acquisition associated with road widening within the precinct. Figure 8.1 highlights the location of land to be acquired in the precinct.

Figure 8.1 Location of road widening in Castle Hill North



Note: The red, blue and yellow lines represent the location of land acquisition for road widening. Land purchases associated with the top-most part of the red line that extends past the precinct boundary (thick black line) are not included in the plan.

Source: Civic MJD, *Glenhaven & Castle Hill North Precinct Contributions Plan – Analysed Land Values*, 12 June 2017, p 19.

The council has not yet acquired any land for local infrastructure to facilitate the further development in Castle Hill North. It has estimated the cost of land yet to be acquired by:

- ▼ Engaging a qualified valuer, Civic MJD, to provide advice on average market values (dollars per square metre) for categories of land in each precinct.¹⁰¹
- ▼ Applying the average values recommended by the valuer to the land in the plan based on its assumptions about the underlying zoning for each parcel of land.
- ▼ Adding an allowance of 1.5% to cover the amount that the council may have to pay in association with land acquisition costs, such as legal and conveyancing fees and survey fees.

Our assessment found that the council's general approach to estimating the cost of land in CP17 is reasonable, but the valuation advice it used was provided at the peak of the residential property market (June 2017). Consequently, the values are likely to be too high for the base period of the plan (2018-19).

¹⁰¹ Civic MJD, *Glenhaven & Castle Hill North Precinct Contributions Plan – Analysed Land Values*, 12 June 2017.

Recommendation

- 10 Reduce the total cost of land in the plan by 4.1%, in line with the fall in the ABS Residential Property Price Index for Established Houses between June 2017 and June 2018, which we estimate would reduce the cost by \$474,488.

8.1.1 The council engaged a valuer to provide advice on average values for each land value category

In June 2017, Civic MJD provided advice on the average market values for the different land zonings, building heights and floor space ratio allowances in the precinct.¹⁰²

The council's instructions to the valuer identified purchases of land for road widening as the likely intended use of the valuations and, as such, Civic MJD provided valuations that were as site-specific as possible, while taking into account the proposed land zonings in the precinct.

We consider the average market values recommended by the valuer are reasonable for the time the advice was issued. However, given the fall in the residential property market between June 2017 and the base period of the plan, we consider the council should adjust the average land values in line with the fall in the ABS Residential Property Price Index for Established Houses in Sydney. This recommendation is consistent with the council's treatment of works costs, where estimates are adjusted to the base period of the plan in line with changes in a representative index.

Our discussion on escalation factors in section 8.2.2 includes further analysis on changes in land values over the past couple of years.

8.2 Criterion 3: Reasonable cost (the council's financial model)

The council uses a net present value (NPV) approach to calculate the contributions rates. An NPV approach involves the use of a discounted cash flow model in which the contribution rates are calculated so that the present value of anticipated expenditure is equal to the present value of anticipated revenue.

The council's contributions models use nominal values. We accept that councils can use either real or nominal modelling approaches, provided their chosen approach uses realistic and observable changes in cost indexation. In the case of nominal models, they must also incorporate realistic assumptions of inflation.

In our Technical Paper, *Modelling local infrastructure contributions in a present value framework*, we have set out some guidelines, but most of the assumptions used are at the discretion of the councils.¹⁰³

We examined the council's modelling approach and the assumptions it has made in the model for CP17. We found that the council's approach to estimating the present value of future costs and revenues is reasonable, except:

¹⁰² Civic MJD, *Glenhaven & Castle Hill North Precinct Contributions Plan – Analysed Land Values*, 12 June 2017.

¹⁰³ IPART, *Modelling local infrastructure contributions in a present value framework*, August 2018, p 2.

- ▼ The base period of the plan is 2018-19 and the cost of works are estimated in \$2018-19, whereas the base period of the model is 2017-18. This leads to an error in the calculation of contributions rates.
- ▼ The council applies administration costs over 15 years, and should instead apply administration costs over the expected life of the plan (20 years).
- ▼ The council's calculation of cost escalation factors for land and works costs does not properly account for compounding growth.
- ▼ Using more recent index values in the sample used to derive cost escalation factors would better represent trends in the residential property market.

Recommendation

- 11 Make the following changes to the financial model used to calculate contribution rates:
- Change the base period in the model to 2018-19
 - Amend the proposed timing of expenditure for some works items
 - Apply administration costs evenly over the expected life of the plan (20 years), instead of 15 years
 - Recalculate all escalation factors using the most recent data from the ABS and a compound annual average growth rate formula instead of a simple average formula.

8.2.1 Base year of the plan/model

The base period is the year in which the council estimates the present value of costs and revenues to calculate the contribution rates.

For CP17, the base period of the plan and all works cost estimates is 2018-19, while the base period of the model is 2017-18. The council acknowledged that this is an error.¹⁰⁴ We recommend the base period of the financial model be changed from 2017-18 to 2018-19.

8.2.2 Future cash flows (revenues and expenditure)

A nominal NPV approach requires the council to make assumptions about:

- ▼ The timing of future expenditure and revenue receipts
- ▼ The increase in nominal costs over the forecast period
- ▼ The increase in nominal contributions rates (ie, revenue) over the forecast period
- ▼ The council's cost of debt or opportunity cost of capital (ie, the discount rate).

The council assumes the life of the plan is 20 years. The sections below outline the assumptions the council has used in its model for CP17.

¹⁰⁴ Information from The Hills Shire Council, 24 June 2019.

Timing of expenditure is intended to be based on the council's expected staging of infrastructure

The council explained that in constructing its NPV model, it bases the timing of expenditure on its forecast of when infrastructure and associated land acquisitions are required to facilitate an orderly development of the precinct. These forecasts take into account a range of factors including priorities of projects across contributions plans, availability of funding, other needs of the wider local government area, resourcing needs and capabilities, and land acquisition progress and delays.¹⁰⁵

In our analysis of the model we found that, for several works items, the council has instead based the timing of expenditure on the expected timing of development over the duration of the plan. We do not consider this is reasonable. For example, the council assumes that road upgrades will occur over the 20-years of the contributions plan. However, in practice, the road upgrades are likely to be concentrated in the early years of development.

In our Draft Report we recommended that the council adjust the assumed timing of expenditure for these items. In response, the council proposed amending the timing of expenditure for road upgrades by:

- ▼ Starting expenditure on road upgrades from 2022-23, after it has acquired the land for the works, rather than 2019-20.
- ▼ Investigating the expected timeframe for the delivery of transport works, which has resulted in road expenditure occurring over 10 years.¹⁰⁶

We consider the council's proposal to revise its approach is reasonable given the early stage of planning for the precinct. As development progresses, the council should update its expenditure forecasts to more accurately reflect the likely timing of expenditure.

The council assumes that administration costs will be spread evenly over the life of the plan. However, when the expected development timeframe changed between the first and second iterations of the plan (before submitting to IPART), the council did not update the treatment of administration costs in the model. The council acknowledged that this is an error.¹⁰⁷ We recommend that administration costs are spread evenly over the expected life of the plan (20 years), instead of 15 years. The council accepted this recommendation in its response to the Draft Report.¹⁰⁸

Timing of revenue is determined by the council's assumed development path

The model's assumptions of when the council receives future revenue are based on its expected profile of development over the duration of the plan. We refer to this as the 'development path'. We consider the council's assumptions are reasonable.

¹⁰⁵ The council provided this explanation in relation to its NPV model for CP12. We understand that it has taken the same approach for all its contributions plans: Information from The Hills Shire Council, 12 February 2018.

¹⁰⁶ The Hills Shire Council, submission to IPART Draft Report, 18 October 2019, p 2.

¹⁰⁷ Information from The Hills Shire Council, 24 June 2019.

¹⁰⁸ The Hills Shire Council, submission to IPART Draft report, 18 October 2019, p 4.

The council escalates the costs of land and works from 2018-19 onwards

The council derives escalation factors for all land and works costs by calculating average annual growth over a 15-year period (June 2003 to June 2018) of several representative ABS indices. For administration costs, the council assumes an escalation factor of 2.5%, which represents the midpoint of the Reserve Bank of Australia's inflation target of 2-3%.¹⁰⁹

We consider this approach is reasonable, except that:

- ▼ The escalation factors for land and works are calculated using a simple average. This method does not properly account for the effects of compounding on the time series.
- ▼ The council's calculations use the latest available data at the time it prepared the plan, but movement in the ABS Established House Price Index for Sydney since June 2018 suggests that the 15-year period may not be representative of the council's likely acquisition costs over the next few years.

Escalation factors do not properly account for compounding

The escalation factors for land and works costs are calculated using a simple average of four quarters of annual change in each respective index. This method does not properly account for the effects of compounding on the time series. In an increasing time series with variation between periods, a simple average will overestimate growth in the series.

The council should instead calculate compound annual average growth. This recommendation is consistent with recommendations in our recent assessment of the council's CP12 for the Balmoral Road Release Area.¹¹⁰

In response to the Draft Report, the council accepted our recommendation to use a compound annual average to calculate escalation factors for works costs, but does not agree that this method should be applied for escalating land costs. The council argues that land acquisition costs are more volatile than works costs, and that using the compound annual average growth rate formula does not adequately compensate for the volatility in land prices and the uncertainty in the timing of land acquisitions.¹¹¹

While the ABS Established House Price Index has been more volatile than the indexes used to escalate works costs, we do not consider it is reasonable to account for this volatility by using a simple average rather than calculating the compound annual average growth. The council's proposed method overstates the actual growth in the index over time.

¹⁰⁹ CP17, p 9.

¹¹⁰ IPART, *Assessment of Contributions Plan 12 – Balmoral Road Release Area – The Hills Shire Council*, Final Report, July 2019, p 57.

¹¹¹ The Hills Shire Council, submission to IPART Draft Report, 18 October 2019, pp 3-4.

Using more recent data in the cost escalation factors better represents trends in the residential property market

The council assumes nominal land costs in the plan will grow at 5.50% per annum, in line with the 15 year average growth rate of the ABS Established House Price Index for Sydney. However, the 15 year average growth of the index includes a decade long bull market and the period does not adequately capture the recent cyclicalities we have observed in Sydney's residential property market.¹¹²

According to data from the ABS, residential property prices in Sydney peaked in June 2017 and have since declined by 13.6% to March 2019. Data from CoreLogic shows a similar decline, with house prices in Sydney falling 10.9% over the 12 months to April 2019 and approximately 15% since the market's peak.¹¹³

Although there has not been as much of a change in the indexes the council uses to calculate the escalation factors for works costs, including more recent data would also improve the accuracy of these forecasts.

Our recommended cost escalation factors (15-year compound-average to March 2019) are compared to the council's assumption in Table 8.1). In its response to the Draft Report the council accepts using the latest available ABS data.¹¹⁴

Table 8.1 Cost escalation factors for land and works

Type of infrastructure	Index used	15-year simple-average to June 2018 (%) ^a	15-year compound-average to June 2018 (%)	15-year compound-average to March 2019 (%) ^b
Land acquisitions	ABS Established House Price Index – Sydney	5.50	5.22	3.93
Open space works	ABS PPI for non-residential building construction – New South Wales	3.41	3.36	2.85
Stormwater and transport works	ABS PPI for road and bridge construction – New South Wales	3.37	3.36	3.27

a These are the escalation factors used in the NPV models for CP17. They are based on the simple average method.

b These are the escalation factors we recommend.

Note: PPI = producer price index.

Source: ABS index values for the relevant indices and IPART calculations.

The council assumes a revenue escalation factor of 2.5%

The council uses a rate of 2.5% to escalate future revenues, which represents the midpoint of the Reserve Bank of Australia's inflation target of 2-3%. The future value of revenues are then discounted to present values using the discount rate in the model.

¹¹² The Hills Shire Council, Post Exhibition – CP17 NPV model.

¹¹³ Reserve Bank of Australia, *Statement of Monetary Policy*, Table 2.2 (data from CoreLogic, RBA), May 2019.

¹¹⁴ The Hills Shire Council, submission to IPART Draft Report, 18 October 2019, p 3.

We consider the council's method of escalating revenue and the use of a 2.5% factor is reasonable, and is consistent with the guidance in our Technical Paper.¹¹⁵

The council uses a discount rate of 4.1%

The council uses IPART's local government discount rate of 4.10% (published February 2019) to discount all the escalated cash flows to their present values at the base period. This is consistent with the recommendation in our Technical Paper to use the IPART calculated discount rate.¹¹⁶

When updating other assumptions discussed in the section of the report, the council should also use IPART's latest published discount rate (which was 3.7% for August 2019).¹¹⁷ In its response to the Draft Report, the council accepts using the latest available data.¹¹⁸

8.3 Criterion 4: Timing of infrastructure delivery

Criterion 4 of the Practice Note requires IPART to assess whether the proposed public amenities and services can be provided within a reasonable timeframe. In practice, we assess whether the proposed timing of infrastructure delivery appears realistic and gives stakeholders enough information for them to understand the council's priorities. We discuss the timeframe for the delivery of infrastructure in section 8.2.2 above because it is an important modelling assumption. As noted in that section, the council based the timing of some works expenditure on the expected development path. We do not consider this is reasonable.

8.4 Criterion 6: Consultation

We must assess whether the council has conducted appropriate community liaison and publicity in preparing the contributions plan.

The council publicly exhibited the plan on two occasions. We consider on both occasions the consultation process complied with the statutory requirements and has satisfied this criterion. The council undertook extensive consultation and demonstrated that it gave thorough and measured consideration to all issues raised in submission from stakeholders.

8.4.1 Consultation process

The council exhibited CP17 between:

- ▼ 17 August 2017 and 15 September 2017 for the first draft of the plan
- ▼ 11 December 2018 to 1 February 2019, a total of 30 days, exclusive of the Christmas/holiday period (20 December to 10 January) for the second draft of the plan.¹¹⁹

¹¹⁵ IPART, *Modelling local infrastructure contributions in a present value framework*, August 2018, p 11.

¹¹⁶ IPART, *Modelling local infrastructure contributions in a present value framework*, August 2018, p 5.

¹¹⁷ IPART, *Local government discount rate – Fact Sheet*, August 2019.

¹¹⁸ The Hills Shire Council, submission to IPART Draft Report, 18 October 2019.

¹¹⁹ The Hills Shire Council, Application to IPART, April 2019, pp 2-3.

In both instances, the council sent notification letters to public authorities and all landowners within the Castle Hill North Precinct as well as landowners in the vicinity of the proposed playing fields outside the precinct.

The council held meetings with local residents and interested parties and responded to phone enquiries about the draft proposal. It accepted submissions on the second draft of the plan even after the exhibition period closed so that all submissions received before finalisation of the report to council were considered by council officers.

8.4.2 Consideration of submissions and amendments to the plan

The main concerns in submissions were:

- ▼ Objections from TfNSW and RMS to the proposed traffic signals and realignment of the McMullen Avenue/Old Northern Road/Brisbane Road, and
- ▼ Objections from land owners in relation to the location of the playing fields as follows:
 - Gilmour Close playing fields (first draft)
 - Holland Reserve playing fields (second draft).

Submission from Transport for NSW (TfNSW) and Roads and Maritime Services (RMS)

TfNSW and RMS requested that the planning proposal not proceed until traffic modelling had been prepared by the council for the entire Castle Hill Precinct, and evidence provided that the realignment of the McMullen Avenue and Old Northern Road intersection will not adversely impact on performance of the regional road network.

The council acknowledged the need to consider precinct-wide traffic impacts. It considered the traffic analysis requested by TfNSW and RMS should have been completed as a State Government responsibility and it was not reasonable that the requirement (and costs) of further detailed modelling be passed on to the council or developers. It also considered that removing the realignment of McMullen Avenue from the draft CP17, as sought by TfNSW and RMS, was not warranted until the State Government provided sufficient evidence to justify its removal.¹²⁰

As noted in Chapter 4, DPIE is working with RMS/TfNSW and the council to resolve the outstanding objection. To assist this resolution, the council will undertake an additional regional transport study.

Submissions related to proposed playing fields

Landowners responded to the first exhibited plan with concerns about the location of playing fields at Gilmour Close. These concerns related to location, traffic, parking, impact on rural lifestyle and amenity, impact on property values and ecological impacts.¹²¹

¹²⁰ The Hills Shire Council, *Business Papers, Meeting of 27 November 2018*, pp 19 and 29-30.

¹²¹ The Hills Shire Council, *Business Papers, Meeting of 27 November 2018*, pp 50-54. Concerns included consideration of alternative sites, lack of consultation, proximity to Castle Hill, traffic congestion and parking (including safety), concern regarding acquisition value (availability of funds), relationship with the North Glenhaven Precinct, impact on rural lifestyle and amenity (lights and noise), impact on property values, impact on Glenhaven Rural Fire Service, antisocial behaviour, and topography and slope.

In response, council officers undertook an extensive investigation of alternative approaches to meet the demand for playing fields. Based on the investigation, in September 2018 the council resolved not to proceed with rezoning of the Gilmour Close site, in favour of expanding the alternative Holland Reserve site.

Accordingly, notwithstanding the constraints of Holland Reserve, the council considered it presented a good opportunity as the land is crown land and zoned for public open space and only the works cost would need to be included in CP17.¹²² The additional playing fields would partly service the recreational needs of future residential development expected within the Castle Hill and Cherrybrook Precincts that are yet to be master planned.

The council re-exhibited the plan following the change in the location of the playing fields.¹²³ Most of the submissions received related to the location of playing fields at Holland Reserve. The key issues raised in relation to the Holland Reserve proposal were traffic and access, parking, loss of rural aspect and amenity, loss of biodiversity, noise and light pollution, anti-social behaviour, impact on property values, proximity to source of demand, inadequate consideration of alternative locations and transparency of exhibition process. In the Business Paper for the council meeting on 26 March 2019, council officers presented a detailed analysis of each issue raised, and an explanation of the proposed response.¹²⁴

The council determined that issues and options raised in submissions for alternative locations did not warrant reconsidering the decision to provide playing fields for Castle Hill North residents in Holland Reserve. However, the council included an additional signalisation of the intersection of Holland Road and Glenhaven Road to address the concerns raised about the increased traffic movements entering and exiting Holland Road.

8.5 Criterion 7: Other matters

We are required to assess whether the plan complies with other matters we consider relevant. Our assessment of CP17 identified one other relevant matter: the need to update the contributions plan within three years.

Regular reviews of a contributions plan ensures that contribution rates in a plan most accurately reflect the council's actual costs in delivering the local infrastructure which is needed to meet the demand from the new development. In general, our preference is for councils to review their contributions plans every three to five years, depending on the stage and rate of development in the precinct to which plans apply.

In the case of CP17, the plan is a draft, and there are two areas where further work is being undertaken that may impact the scope and cost of infrastructure in the plan:

- ▼ A regional transport study (which encompasses the Castle Hill North Precinct). This may identify changes to transport works included in the plan.

¹²² Under recent changes to the *Crown Land Management Act*, Crown lands such as Holland Reserve are to be managed under the *Local Government Act 1993* as though they are community land under the *Local Government Act 1993*. Information from The Hills Shire Council, 19 June 2019, Q 6.

¹²³ Other amendments include updating transport costs for Castle Street and Old Castle Hill Road upgrades, and the removal of most public domain upgrades.

¹²⁴ The Hills Shire Council, *Business Papers, Meeting of 26 March 2019*, pp 62-71.

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- ▼ A comprehensive Stormwater Network Asset Upgrade Report, and the development of detailed concept designs and plans for the upgrade of council owned stormwater assets. This may change the scope and cost of stormwater infrastructure required in the plan.

Councils are not formally obliged to amend contributions plans within a certain timeframe. However, regular review of the plan as development proceeds would allow the council to use more up-to-date information and refine the designs and cost estimates for infrastructure, thereby reducing the uncertainties in the current draft of the plan. Accordingly, we recommend the council update the contributions plan within three years and every five years thereafter. Within three years, the council should have a better understanding of the scope and cost of transport and stormwater works on the completion of the above-mentioned studies. The council supports this recommendation and has indicated that it will prepare detailed designs and costings shortly after adopting the plan, which will inform future amendments to the plan.¹²⁵

Recommendation

- 12 Review the plan within three years to include updated information on planning assumptions, and the scope and cost of works in the plan, including obtaining site-specific costs where relevant.

¹²⁵ The Hills Shire Council, submission to IPART Draft Report, 18 October 2019, p 5.



Appendices



A Terms of reference

INDEPENDENT PRICING AND REGULATORY TRIBUNAL ACT 1992 TERMS OF REFERENCE

Reviewable Contributions Plans - *Environmental Planning and Assessment Act 1979*

I, GLADYS BEREJIKLIAN MP, Premier, under section 9 of the *Independent Pricing and Regulatory Tribunal Act 1992* approve provision, by the Independent Pricing and Regulatory Tribunal (**IPART**), of services to the Minister for Planning with respect to reviewing Reviewable Contributions Plans, in accordance with the following terms of reference.


Premier
Dated: 14/11/15

Background

The Environmental Planning and Assessment (Local Infrastructure Contributions) Direction 2012 contemplates that a Council may submit a Contributions Plan to IPART for review, where the Plan would (but for the Direction) authorise a contribution under section 7.11 of the EP&A Act that exceeds the maximum amount that the Direction allows to be imposed as a contribution in relation to residential development.

The Minister for Planning may also refer any contributions plan to IPART for review where the Minister considers there is merit in having an independent assessment.

Services

On and from the date that these terms of reference are issued to IPART, IPART is to review each Reviewable Contributions Plan submitted to it and provide the Minister for Planning and the relevant Council with a report on its review.

In providing the services, IPART must:

- (a) review the relevant Reviewable Contributions Plan in accordance with the assessment criteria set out in the Practice Note, including whether the public amenities and services to which the Contributions Plan relates are on the essential works list (if any) set out in the Practice Note;
- (b) consider, in its review of the Reviewable Contributions Plan, whether the estimate of the costs of providing those public amenities and services, as set out in the Plan, are reasonable;
- (c) publish a report of its review on its website; and

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- (d) provide a copy of the report to the Minister for Planning and the relevant Council.

Consultation

In conducting a review under these terms of reference, IPART must:

- (a) consult with the Department of Planning and Environment (NSW);
- (b) consult with the relevant Council and any other person IPART considers appropriate;
and
- (c) consider any criteria set out in the Practice Note (in addition to any other matters IPART considers relevant).

Definitions

Contributions Plan means a contributions plan or draft contributions plan prepared by the relevant Council for the purposes of imposing conditions under section 7.11 of the EP&A Act.

Council has the same meaning as it has in the *Local Government Act 1993*.

EP&A Act means the *Environmental Planning and Assessment Act 1979*.

Practice Note means the "Revised Local Development Contributions Practice Note: For the assessment of Local Contributions Plans by IPART" issued by the Department of Planning and Environment and dated January 2018, as amended or replaced from time to time.

Reviewable Contributions Plan means a Contributions Plan submitted to IPART as contemplated by the *Environmental Planning and Assessment (Local Infrastructure Contributions) Direction 2012* or referred to it by the Minister for Planning.

B Assessment against information requirements in the EP&A Regulation

Clause 27 of the *Environmental Planning and Assessment Regulation 2000* requires certain information to be included in a contributions plan. As part of our assessment we have checked that CP17 contains the information required by this clause of the Regulation. A summary of this analysis is provided in the table below.

Table B.1 Assessment against information requirements in the EP&A Regulation

Subclause		Location in CP17
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 & 3.5.
1(d)	The formulas to be used for determining the section 7.11 contributions required for different categories of public amenities and services.	Section 2.19
1(e)	The section 7.11 contribution rates for different types of development, as specified in a schedule in the plan.	Section 1 & Section 3.6
1(g)	The council's policy concerning the timing of the payment of monetary section 7.11 contributions, section 7.12 levies and the imposition of section 7.11 conditions or section 7.12 conditions that allow deferred or periodic payment.	Section 2.11 & Section 2.12
(h)	A map showing the specific public amenities and services proposed to be provided by the council, supported by a works schedule that contains an estimate of their cost and staging (whether by reference to dates or thresholds).	Section 4, Part D, Map 1 (map) & Section 3.6 (works schedule)
1(i)	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.	Section 2.18
1A	Despite subclause (1) (g), a contributions plan made after the commencement of this subclause that makes provision for the imposition of conditions under section 7.11 or 7.12 of the Act in relation to the issue of a complying development certificate must provide that the payment of monetary section 7.11 contributions and section 7.12 levies in accordance with those conditions is to be made before the commencement of any building work or subdivision work authorised by the certificate.	Section 2.13
2	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 <i>Local Government Act 1993</i> .	No such conditions mentioned in the plan.

Subclause	Location in CP17
3 A contributions plan must not contain a provision that authorises monetary section 7.11 contributions or section 7.12 levies paid for different purposes to be pooled and applied progressively for those purposes unless the council is satisfied that the pooling and progressive application of the money paid will not unreasonably prejudice the carrying into effect, within a reasonable time, of the purposes for which the money was originally paid.	Section 2.18

C List of submissions to our Draft Report

We received four submissions to our Draft Report, as listed in the table below. Our Draft Report and submissions are available on our website (www.ipart.nsw.gov.au).

Table C.1 Submissions to our assessment of CP17 Draft Report

No	Individual/ Entity	Date received
1	Individual - anonymous	8 October 2019
2	Individual – anonymous	18 October 2019
3	Individual – M. Zenere	18 October 2019
4	The Hills Shire Council	18 October 2019