IPART
New South Wales

Independent Pricing and Regulatory Tribunal

Assessment of The Hills Shire Council's Section 94 Contributions Plan No 15

Box Hill Precinct

Local Government — Assessment
December 2014

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1 Executive Summary

1.1 Introduction

The NSW Government has asked the Independent Pricing and Regulatory Tribunal (IPART) to review contributions plans that have been prepared by councils under section 94 of the *Environmental Planning and Assessment Act 1979* (EP&A Act), and which propose contributions rates above a capped amount (see Appendix C).

A contributions plan is a public document which sets out a council's policy for the assessment, collection, expenditure and administration of development contributions in a specified development area. The contributions plan identifies the relationship between the expected types of development and the demand for additional public amenities and services created by that development.

A council must prepare a contributions plan before it can impose a condition of development consent that the developer must contribute towards the cost of providing public amenities and services.

The Hills Shire Council (THSC) submitted *Contributions Plan No 15 – Box Hill Precinct* (CP15) to IPART for assessment in August 2014.[1] We estimate that the maximum indicative residential contribution payable under the contributions plan is around $91,013 per lot.[2] This is above the maximum contribution cap of $30,000 per lot set by the Government that applies to the contributions plan.[3]

The council submitted this plan for IPART to review so that it is in a position to seek alternative funding sources to fund the gap in development contributions for infrastructure costs in the plan. As a result, IPART is required to assess the contributions plan and report our findings to the Minister for Planning and the council (see Box 1.1).

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1 We have attached CP15 in Appendix B.

2 We have estimated the contributions rates on a per dwelling basis using CP15's contributions rates (which are expressed on a per hectare basis) and the dwelling yield assumptions for each dwelling type. This rate is for large lot subdivision dwellings in the Killarney Chain of Ponds Catchment. THSC applies a cap of 1,000m² of net developable area (NDA) in determining the contributions rate for large lot subdivisions. Source: *The Hills Shire Council, Contributions Plan No 15 – Box Hill Precinct*, August 2014 (CP15) and IPART calculations.

3 Minister for Planning and Infrastructure, *Environmental Planning and Assessment (Local Infrastructure Contributions) Direction 2012*, 21 August 2012, sch 2 cl 15.

Box 1.1 IPART's role in reviewing contributions plans

In 2010, the NSW Government introduced caps on the amount of section 94 development contributions that councils can collect. Unless the Minister for Planning exempts the development area,[a] councils can levy development contributions to a maximum of:

- $30,000 per dwelling or residential lot in greenfield areas
- $20,000 per dwelling or residential lot in all other areas.

The NSW Government also gave IPART the function of reviewing certain plans with contributions rates above the relevant cap. Our terms of reference are in Appendix C of this report.

The NSW Government provides funding for councils where the cost of delivering essential infrastructure is greater than the amount the council can collect from capped contributions. Councils can also apply for a special rate variation to meet the funding shortfall that results from the imposition of caps. Councils must have their plans reviewed by IPART to be eligible for government funding or to apply for a special rate variation.

Since October 2011, IPART has assessed six contributions plans from The Hills Shire Council and Blacktown City Council. Reports on these contributions plans were presented to the Minister for Planning and the councils, and are available on our website.

a The Minister for Planning exempted all developments where, as of August 2010, the amount of development that had already occurred exceeded 25% of the potential number of lots.

1.2 How does IPART assess a contributions plan?

IPART assesses plans in accordance with the criteria set out in the *Revised Local Development Contributions Practice Note: For the assessment of Local Contributions Plans by IPART*.[4] The criteria require us to assess whether:

- the public amenities and public services in the plan are on the essential works list
- the proposed public amenities and public services are reasonable in terms of nexus
- the proposed development contribution is based on a reasonable estimate of the cost of the proposed public amenities and public services
- the proposed public amenities and public services can be provided within a reasonable timeframe
- the proposed development contribution is based on a reasonable apportionment of costs

4 Department of Planning & Infrastructure, *Revised Local Development Contributions Practice Note: For the assessment of Local Contributions Plans by IPART*, February 2014 (Practice Note).

- the council has conducted appropriate community liaison and publicity in preparing the contributions plan
- the plan complies with other matters IPART considers relevant.

We have based our assessment of CP15 on information provided by the council and have consulted with the Department of Planning and Environment (DP&E) on specific matters relating to:

- the council's adoption of CP15 prior to submitting it to us for review
- the inclusion of some open space items as essential works
- the low rate of open space provision in the Precinct
- the land acquisition schedule for infrastructure in the contributions plan
- the infrastructure to be funded from State Infrastructure Contributions (SIC) rather than from local development contributions.

THSC adopted CP15 in July 2014, prior to submitting the plan to us for review. This is inconsistent with the 2014 Practice Note which asks councils to submit exhibited draft versions of plans to IPART for review before final adoption. However, there is no legal obligation for the plan to be submitted to IPART prior to adoption.[5]

Following our assessment, the Minister for Planning will consider our recommendations and may request the council to amend the contributions plan which has already been adopted. We note that the council made significant cost changes to infrastructure items which were not re-exhibited (around $100m or 32% more compared to the exhibited CP15), before adopting the final plan.

1.3 Overview of CP15

The Box Hill Precinct is located in the North West Growth Centre, in The Hills Shire local government area (LGA). The Precinct comprises around 975 hectares of land, of which 690.8 hectares is the net developable area (NDA). The NDA includes:

- 549.1 hectares of residential land, which is expected to accommodate 27,998 residents (in 9,431 dwellings).
- 141.8 hectares of non-residential land, which is expected to accommodate 17,765 jobs.

The council prepared CP15 for both the Box Hill and Box Hill Industrial Precincts. The contributions plan combines the two precincts and together, these

[5] The 2014 Practice Note states that, when a plan requires review by IPART, the council should submit a draft, exhibited version to IPART for review before it adopts the final plan (p 5).

precincts are referred to as the Box Hill Precinct (or the Precinct) throughout this report.

1.3.1 Land and works costs in CP15

The total cost of the plan is estimated to be around $411.1m, comprising 25.5% for land acquisition, 73.4% for the construction of facilities and 1.1% for plan preparation and administration (see Table 1.1).

Open space embellishment costs account for the highest costs in CP15 ($114.8m or 27.9%), followed by transport works costs ($109.0m or 26.5%). The costs in CP15 are expressed in 2013/2014 dollars.[6]

Table 1.1 CP15 - Total cost of land and facilities ($2013/14)

	Works	Land	Total
Transport	108,973,130	8,630,599	117,603,729
Stormwater	77,883,294	30,388,358	108,271,652
Open space	114,836,524	65,877,822	180,714,346
Administration costs			4,525,394
Total cost			**411,115,121**

Note: CP15 does not include land for community services.
Source: CP15, p 4 and IPART calculations.

1.3.2 Net Present Value model to determine contributions in CP15

THSC uses a Net Present Value (NPV) model to calculate development contributions in CP15. The NPV model accounts for the time difference between the costs the council incurs in constructing infrastructure and the receipt of developer of contributions. IPART has previously reviewed two contributions plans from THSC which also used an NPV methodology to calculate the contributions payable by developers.[7]

THSC's approach broadly reflects the recommendations of our 2012 Technical Paper on modelling development contributions.[8] Our preferred approach in the Technical Paper is for councils to use real values in its NPV Model. However, we recognise that THSC can use nominal values in its NPV model, provided the assumptions are reasonable.

6 All costs in this report are also expressed in 2013/14 dollars.
7 IPART, *Assessment of The Hills Shire Council's Contributions Plan No 13 – North Kellyville Precinct*, October 2011 and IPART, *Assessment of The Hills Shire Council's Contributions Plan No 12 – Balmoral Road Release Area*, October 2011.
8 IPART, *Modelling local development contributions - Selection of a discount rate for councils that use an NPV methodology* (Technical Paper), Final Technical Paper, September 2012.

We have assessed the assumptions in the NPV model under the reasonable cost criterion in section 3.3.8. Although the timeframe in the plan also affects the model, we have assessed this separately under section 3.4.

1.3.3 Contributions rates for residential development

Figure 1.1 shows the estimated contributions rates for different dwelling types in the Killarney Chain of Ponds Catchment in CP15.[9] We have estimated these contributions rates on a per dwelling basis using CP15's contributions rates (which are expressed on a per hectare basis) and the dwelling yield assumptions for each dwelling type.

Nearly all of the residential development will occur in this catchment. There is also a smaller Second Ponds Creek Catchment, which will contain mostly industrial development and a small amount of residential development.[10]

The contributions rates in the Killarney Chain of Ponds Catchment in CP15 are all above the assumed contributions cap of $30,000 per dwelling, except for high density dwellings and seniors housing. The contributions rate for the 635 high density flat dwellings is $15,169 per dwelling and for the 295 senior housing dwellings the rate is $16,548.

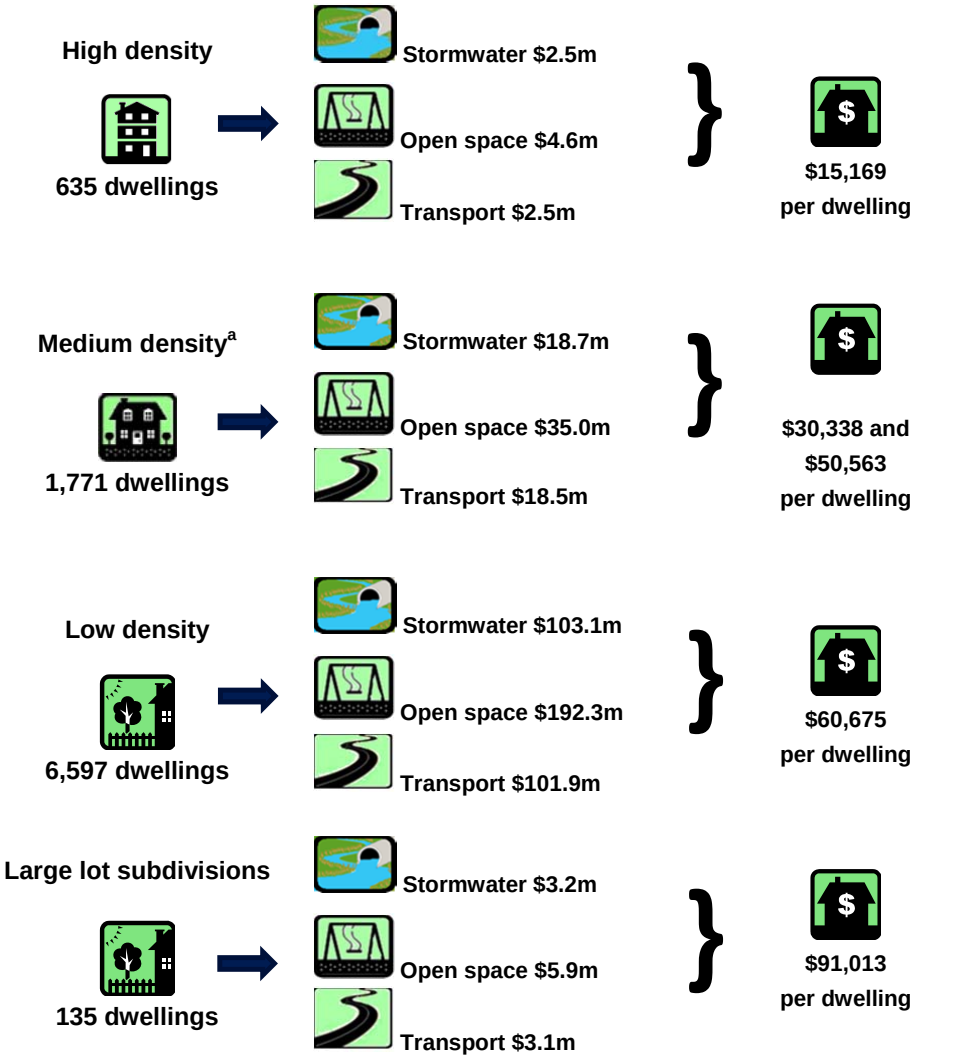
Most of the residential development will be low density (6,597 dwelling houses), with an estimated contributions rate payable of $60,675 per dwelling. The most significant infrastructure costs apportioned to these dwellings are open space ($192.3m), followed by stormwater ($103.1m) and transport ($101.9m).

For medium density development (1,771 dwellings), the contributions rate is $50,563 for integrated houses and $30,338 for multi-dwelling attached houses. The development for large lot subdivisions (135 dwellings) incurs the highest contributions rate of $91,013 per dwelling.

9 The Killarney Chain of Ponds Catchment (635.35 hectares) will contain the majority of the 9,431 dwellings in the Precinct. Second Ponds Creek Catchment covers an area of only 55.45 hectares. Source: CP15, pp 17 and 36.

10 The expected residential development in this catchment is 19 dwellings.

Figure 1.1 Proposed residential development in the Precinct, by dwelling type and infrastructure cost



[a] This includes integrated housing and multi-dwelling housing/attached housing dwellings.

Note: This figure is for illustrative purposes only and the infrastructure costs in the figure will not equal the total base cost of CP15. This is because the contributions rates and the value of the infrastructure are calculated using the Net Present Value model. We have not included the contributions rate for residential development in the Second Ponds Creek Catchment because there are only 19 dwellings in this catchment. The total dwelling count does not include seniors housing, which accounts for 295 dwellings in the Box Hill Precinct.

Source: IPART calculations based on CP15.

1.3.4 Contributions rates for non-residential development

Non-residential development accounts for 141.8 hectares or 20.5% of NDA in the Precinct.[11] Table 1.2 shows the indicative contributions rates for non-residential land. Non-residential developments do not pay contributions for open space infrastructure.

Table 1.2 Indicative non-residential contributions rates ($)

	Killarney Chain of Ponds	Second Ponds Creek
Per hectare of NDA	472,844	278,296

Source: CP15, p 5.

1.4 Summary of our assessment

Overall, we found most of the infrastructure included in the plan is reasonable. However, we found that the open space works for the indoor recreation centre are not on the Essential Works List. We also found that the miscellaneous 'sundry unmeasured items' included in the open space costs have not been reasonably defined given their magnitude, and double-count the contingency allowance for unforeseen risks. Our removal of these items from the cost of works in CP15 means that THSC cannot levy section 94 contributions for them. However, the council may choose to fund additional facilities from other funding sources.

We also found the cost estimates for transport and open space in CP15 should be revised because of THSC's decision to use some of the costs from IPART's final report on local infrastructure benchmark costs (IPART's Benchmark Report) when location-specific estimates are already available.[12] We consider that our advice to the NSW Government about benchmark costs should not replace site specific cost estimates when they are available.

For the NPV model, we found all of THSC's modelling assumptions to be reasonable in escalating costs and revenues in calculating the contributions rates. However, we recommend that the timeframe in CP15 should be reduced from 40 to 25 years based on the latest information from Sydney Water about its servicing strategy and the rate of development in nearby precincts.

For apportionment, we consider that most of the costs in CP15 are apportioned reasonably. However, we recommend that the cost of open space infrastructure be apportioned on a per person basis because demand for open space is population driven. This is more equitable than the current approach to apportion the costs based on the hectare of net developable area for open space infrastructure.

11 CP15, p 24.

12 IPART, *Local Infrastructure Benchmark Cost - Final Report*, April 2014, p 110.

We recommend that CP15 should be re-exhibited to provide stakeholders with the opportunity to comment on significant changes from the previous version exhibited in 2012. This should occur after THSC has considered our recommended amendments and any changes requested by the Minister.

IPART's assessment against each of the criteria is summarised in Table 1.3. The full list of our findings and recommendations is in Appendix A.

1.4.1 IPART's assessment of CP15

Table 1.3 Summary of IPART's assessment of CP15

Criteria	Assessment
1. Essential works	▾ All land and facilities are on the Essential Works List (EWL) except for works for the indoor recreation centre ($18.9m), which exceed the definition of base level open space embellishment. The land for the centre can remain in CP15. ▾ 'Sundry unmeasured items' ($5.2m) have not been reasonably defined given their magnitude, compared with other sundry items. We consider that their inclusion double-counts the contingency allowance for unforeseen site requirements. ▾ We also recommend that THSC reviews the need to include costs for the possible upgrade to a watercourse for Park 4 once it has detailed designs for the park, and remove it from the base cost ($0.5m) if it is not required.
2. Nexus	▾ There is reasonable nexus between all infrastructure items in CP15 and development in the Precinct. In particular, we found that: – The land (and associated acquisition costs) for two sections of Mount Carmel Road (BHRN01B and BHRN02A) will need to be included in CP15, as the capital works for these sections are already included. We recommend that DP&E, in consultation with THSC, updates the State Environmental Planning Policy (Growth Centres) maps for zoning and land acquisition for these two road sections. – There is a relatively low provision of passive open space in CP15. THSC has advised that there are likely to be dual-use opportunities for open space from existing drainage land in the Precinct. We consider that the good quality of open space, in terms of its location, standard and accessibility, helps mitigate the low rate of provision.
3. Reasonable costs	▾ Where THSC has used independent advice to support the costing of infrastructure and the valuation of land, we consider this approach to be reasonable. However, we recommend that THSC revise the following costs in CP15: – Around 3.4 ha of land for items BHPF03001 and BHPF03002 have been erroneously omitted. Their inclusion will increase the cost of open space land by $1.4m. – Some transport cost estimates based on IPART's Benchmark Report (apart from bus shelters) should be replaced with recent, site-specific estimates from the AECOM Report (January 2014). This will reduce costs by $16.3m. – The cost estimate of $60 per m^2 for the embellishment of 11.96 hectares of local parks (passive open space), currently valued at $7.2m, should be updated with a more recent cost estimate. We also note that this rate appears high compared to other recent cost

	estimates in the North West Growth Centre eg, the cost rate for passive open space in the Schofields Precinct is around \$52 per m^2. – The contingency allowances applied to most transport and open space base costs should be reduced from 30% and 20%, to 20% and 15%, respectively. The lower contingencies better reflect the reduced risk associated with the current designs and detailed cost estimates for the infrastructure. This will reduce costs by \$8.5m. – Administration costs should be allocated over 25 years, rather than 40 years, consistent with our recommendation for a shorter development timeframe. ▾ We found THSC's Net Present Value (NPV) model assumptions are reasonable and are generally consistent with our previous recommendations for CP12 (Balmoral Road) and CP13 (North Kellyville). We note that, unlike our preferred approach in the NPV Technical Paper, THSC used nominal values rather than real values. We also recommend that THSC consider using the PPI tailored to each works category rather than a single index (ABS PPI Non-Residential Building index) to escalate all works costs.
4. Reasonable timeframe	▾ We consider that THSC's proposed timing of land acquisition and works in CP15 is reasonable. It proposes to: – acquire all land for infrastructure by 2021/2022 – stage stormwater, transport and open space infrastructure delivery over 23 years (from 2016/2017). ▾ However, the most recent information available from Sydney Water and rates of development in nearby Precincts suggest that CP15's proposed timeframe of 40 years is too long. We recommend reducing the timeframe in CP15 to 25 years.
5. Reasonable apportionment	▾ THSC has apportioned all infrastructure costs based on a per hectare of NDA approach for residential and non-residential development. – We consider this is reasonable for transport and stormwater infrastructure, although we consider that apportioning transport costs to residential development based on a per person approach, rather than land area, is more equitable. – For open space infrastructure (and relevant administration costs), we recommend that the costs be apportioned on a per person basis because demand is population driven. ▾ We maintain our position in our assessment of CP13 (North Kellyville) that the apportionment of the Edwards Road bridge over Smalls Creek (between Box Hill and the North Kellyville Precincts) should have 64% of the capital and land costs apportioned to CP15.
6. Appropriate community liaison	▾ THSC exhibited the draft CP15 in August/September 2012 and responded to various issues raised in the four submissions it received. However, THSC has since made other significant amendments to CP15 before its adoption, which increased the total cost of CP15 by around \$100m. For this reason, we consider that THSC should re-exhibit CP15 once it has considered our recommendations in this report and the Minister's requests in response to our recommendations.
7. Other matters	▾ THSC adopted CP15 prior to submitting the plan to us for review. This is inconsistent with the 2014 Practice Note, which asks councils to submit exhibited draft versions of plans to IPART for review before final adoption. ▾ We recommend that, in future, councils should submit contributions plans to IPART prior to adopting them. This ensures that any IPART recommendations may be incorporated into the plan before the council starts collecting contributions based on the proposed costs and apportionment to ensure cost reflectiveness.

1.5 The impact of our recommendations

We consider the total reasonable cost of CP15 should be around $362.8m, which is around $48.3m (or 11.7%) less than the cost of the contributions plan submitted to IPART. The $48.3m adjustment comprises:

- the removal of $24.1m in the cost of works within open space costs for the indoor recreation centre and 'sundry unmeasured items'
- the reduction of $16.3m from the use of the AECOM Report's base cost estimates for some new main roads, road upgrades, and roundabouts rather than estimates from IPART's Benchmark Report
- the reduction of $8.5m in contingency allowances applied to transport and open space infrastructure items
- the increase of $1.4m to account for open space land acquisition costs which were omitted
- the reduction of $0.7m for administration costs because of the above cost reductions (as administration costs are based on 1.5% of capital costs) and a shorter timeframe in the NPV model.

Table 1.4 shows the net impact of our recommendations on the reasonable cost of essential works in CP15.

Table 1.4 Total cost of CP15 and IPART's assessment of the total reasonable cost of essential works for CP15 ($)

Component		Cost in CP15	Adjustments		IPART assessed reasonable cost
Transport	Land	8,630,599			8,630,599
	Facilities	108,973,130	-16,330,037	Revise costs using AECOM estimates	87,196,526
			-5,446,567	Reduce contingencies	
Stormwater	Land	30,388,358			30,388,358
	Facilities	77,883,294			77,883,294
Open space	Land	65,877,822	+1,408,535	Revise error for omitted land costs	67,286,357
	Embell.	114,836,524	-24,093,405	Remove 'sundry unmeasured items' and indoor rec. centre	87,648,040
			-3,095,078	Reduce contingencies	
Admin. costs		4,525,394	-734,476	Reduce cost for above items	3,790,918
Total		**411,115,121**	**-48,291,029**		**362,824,092**

Note: We have not quantified the impact of all of our recommendations (see section 1.5.2).

Source: CP15, p 4 and IPART calculations.

1.5.1 Impact on contributions rates

Table 1.5 shows the impact of our recommendations on the indicative residential contributions rates for the Killarney Chain of Ponds and the Second Ponds Creek catchments in CP15. In assessing the adjustments to the contributions rates, we have also taken into account our recommendations to change the apportionment of open space costs and the shorter time period for the NPV model.[13]

For all dwelling types, the contributions payable per lot would be lower if our recommended amendments are made to CP15, except for high density dwellings. We estimate that the rate for high density dwellings could increase by 8.7%. The increase is due to the apportionment of open space costs on a per person, rather than per hectare of NDA basis, which reduces the contributions for lower density development and increases the rates for higher density development.

[13] We assumed a hypothetical path for the new 25 year scenario which had the same general pattern of development as the original, but with development compressed over shorter timeframes.

Table 1.5 Impact of our recommendations on contributions rates in CP15

Dwelling type	CP15 indicative contributions rate	IPART's assessed adjustments	
	($)	($)	(%)
Killarney Chain of Ponds catchment			
Large lot	91,013	-31,312	-34.4
Low density	60,675	-13,627	-22.5
Integrated housing	50,563	-12,208	-24.1
Senior housing	16,548	-1,333	-8.1
Multi-dwelling/attached housing	30,338	-1,377	-4.5
High density	15,169	1,326	8.7
Second Ponds Creek catchment			
Low density	47,706	-12,060	-25.3
Senior housing	13,011	-905	-7.0

Note: We have based our estimates on the council's dwelling density and occupancy assumptions. There are only 18 low density dwellings and 1 senior housing dwelling in the Second Ponds Creek catchment.
Source: IPART calculations based on CP15.

For non-residential development, our recommendations would reduce the contributions rate by:

- $93,117 (or 19.7%) per hectare in the Killarney Chain of Ponds
- $69,622 (or 25.0%) per hectare in the Second Ponds Creek Catchment.

The contributions rates listed above for residential and non-residential land are indicative only and will depend on THSC's final infrastructure cost estimates, development yields and any changes made to the assumptions in the NPV model.

1.5.2 Other impacts not quantified

We have not quantified the impacts of some recommendations because they are not yet quantifiable. For example, there may be further cost changes arising from:

- the inclusion of some land for Mount Carmel Road (because the area to be included has not yet been quantified)[14]
- the updated cost estimates for passive open space embellishment (11.96 hectares of local parks)
- commercial arrangements for bus stops proposed to be undertaken in the Precinct.

[14] See section 3.3.2.

1.5.3 Re-exhibition of CP15

THSC exhibited CP15 in 2012 with a cost of around $311m. The council has since made significant changes to the plan, which increased the total cost by around $100m (or 32%) to $411m. We recommend THSC should re-exhibit CP15 because of the significant changes to the infrastructure costs. THSC should re-exhibit CP15 after considering this report's recommendations and requests made by the Minister for Planning.

Re-exhibition of CP15 will provide stakeholders with an opportunity to make comment on the changes made by THSC in the contributions plan. This may result in further changes to the total cost of CP15 and the contributions rates.

1.6 Structure of this report

The remainder of this report explains our assessment in more detail:

- Chapter 2 summarises CP15
- Chapter 3 explains our assessment of CP15 against the criteria in the Practice Note.

The appendices present our full set of findings and recommendations and provide the relevant supporting information for our assessment:

- Appendix A is a list of our findings and recommendations for each assessment criterion
- Appendix B is the *Contributions Plan No 15 – Box Hill Precinct* (August 2014)
- Appendix C is the Terms of Reference
- Appendix D is the assessment of CP15 against the information requirements in Clause 27 of the *Environmental Planning and Assessment Regulation 2000*
- Appendix E is the Glossary.

2 Summary of Contributions Plan No 15

The Hills Shire Council (THSC) prepared CP15 for the Box Hill and Box Hill Industrial Precincts. The contributions plan combines the two precincts and is referred to as the Box Hill Precinct (or the Precinct) throughout this report.

The Box Hill Precinct contains around 975 hectares of land and is located in the North West Growth Centre. The Precinct will contain a mixture of residential, commercial and industrial uses but the majority of development in the Precinct will be residential. The residential component of the Precinct is expected to accommodate 27,998 residents in 9,431 dwellings (located over 549.1 hectares of NDA).

The Precinct will also contain 141.8 hectares of non-residential NDA, comprising:

- 71.2 hectares of land zoned for business park and enterprise corridor uses
- 58.5 hectares of land zoned for industrial uses
- 12.1 hectares of land zoned for commercial uses.

The Precinct is expected to accommodate 17,765 jobs once it is fully developed.[15]

2.1 Status of the plan

THSC publicly exhibited CP15 between 7 August 2012 and 7 September 2012, and adopted the plan in July 2014 (almost two years later).[16] THSC made significant changes to the cost of CP15 between public exhibition and adoption.

THSC submitted the adopted post-exhibition version of its contributions plan to IPART for assessment in August 2014. Following our assessment, the Minister for Planning will consider our recommendations and may request the council to amend the contributions plan already adopted by THSC.[17]

15 CP15, p 24.

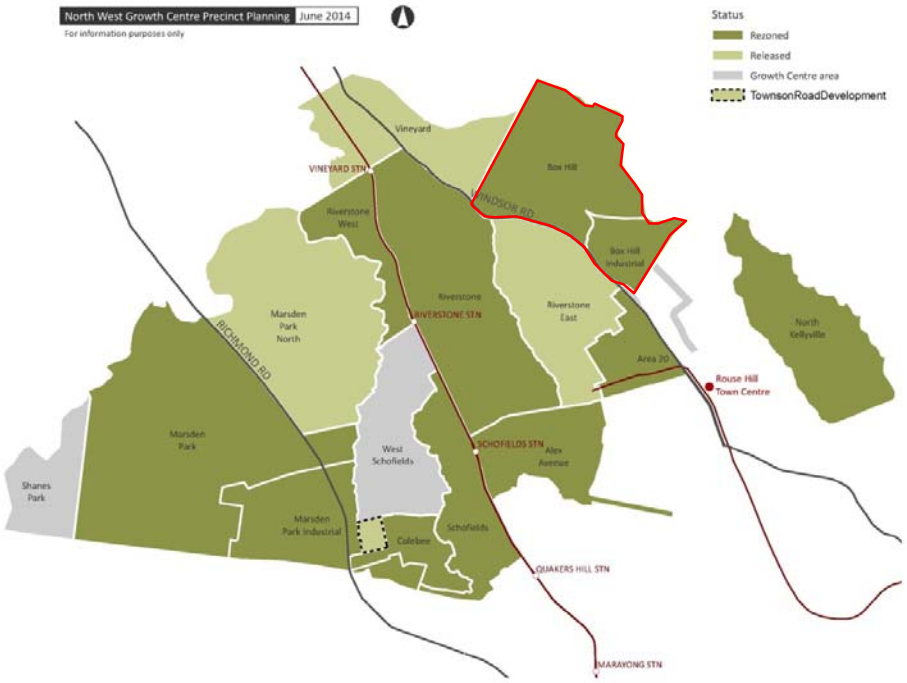
16 CP15 Application Form, p 2 and CP15, p 15.

17 Should the council accept the Minister's request, it would need to make a formal resolution to review the contributions plan and exhibit it again.

2.2 Box Hill Precinct

Box Hill Precinct is located within the North West Growth Centre (see Figure 2.1) within The Hills Shire local government area (LGA).

Figure 2.1 Location of Box Hill Precinct in the North West Growth Centre



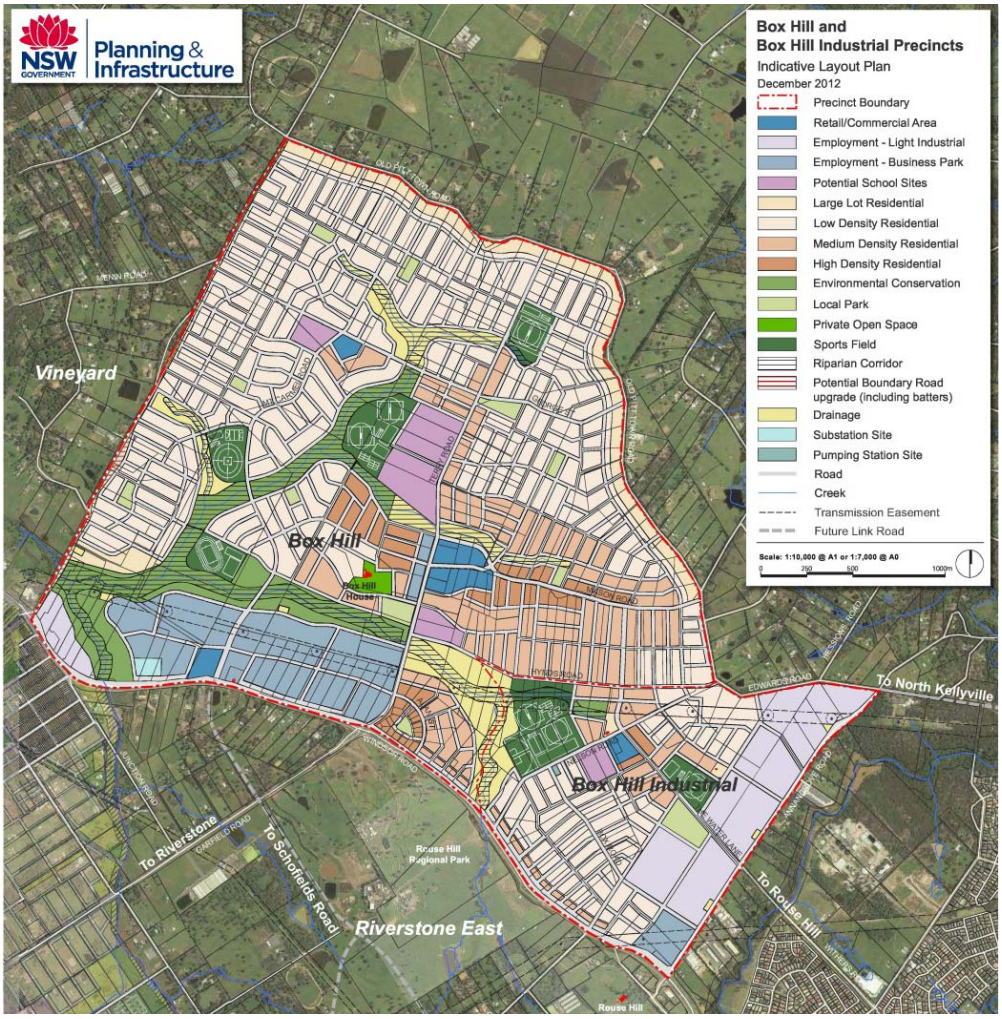
Source: Department of Planning and Infrastructure, *North West Growth Centre Precinct Planning Status Map*, June 2014.

2.3 Future development within the Precinct

The Indicative Layout Plan for the Box Hill Precinct shows the anticipated mix of land uses in the precinct (Figure 2.2). Residential-zoned land accounts for 79.5% of the developable area.[18] The remainder of the developable area will be for non-residential uses such as business parks, light industrial and commercial uses.

[18] CP15, pp 17 and 22.

Figure 2.2 Box Hill Precinct – Final Indicative Layout Plan



Source: Department of Planning and Infrastructure, *Box Hill and Box Hill Industrial Precincts Final Indicative Layout Plan*, December 2012.

Table 2.1 shows the land use mix for the Precinct based on the Final Indicative Layout Plan.

Table 2.1 Box Hill Precinct – Land use mix

Land use	Area (hectares)
Residential	610.3
Commercial/retail	14.4
Industrial	59.6
Business Park/enterprise corridor	73.9
Public recreation	58.5
Private recreation	2.7
Educational	24.4
Infrastructure	45.8
Conservation	59.7
Roads	25.8
Total	**975.1**

Source: Department of Planning and Infrastructure, *Box Hill and Box Hill Industrial Precinct Plan – Post-exhibitions Planning Report*, December 2012, p 9.

THSC estimates that it will take 40 years to fully develop the Precinct. The development timeframe is based on:

- the likely rollout of water and wastewater services
- the rate of development.[19]

2.4 Land and facilities in CP15

CP15 outlines the infrastructure that THSC will provide, including transport, stormwater and open space infrastructure. In assessing the plan, we have adopted standard terminology for the various categories of infrastructure (see Table 2.2).

Table 2.2 Terminology used in this report and CP15

Terminology used in this report	Terminology used in CP15
Transport	Transport and traffic
Stormwater	Water management
Open space	Open space
Administration costs	Administration

The total cost of land and facilities in CP15 is around $411.1m, including administration costs. A breakdown of these costs is provided in Table 2.3.

[19] The Hills Shire Council, *Council Business Papers – 22 July 2014*, pp 183 and 210.

Table 2.3 CP15 - Total costs ($2013/14)

	Works	Land	Total
Transport	108,973,130	8,630,599	117,603,729
Stormwater	77,883,294	30,388,358	108,271,652
Open space	114,836,524	65,877,822	180,714,346
Administration costs			4,525,394
Total cost			**411,115,121**

Source: CP15, p 4.

2.5 Contributions rates in CP15

All infrastructure categories in CP15 are levied on a per hectare basis. The contributions rates for each infrastructure category are calculated using a Net Present Value (NPV) model.[20]

The indicative contribution rates for the different types of residential development in the Precinct are shown in Table 2.4. Most of the residential development will be low density dwelling houses, which are significantly above the $30,000 contributions cap.

Table 2.4 Indicative contributions rates in CP15 ($)

Development type	Contributions rate
Killarney Chain of Ponds catchment	
Dwelling house	60,675
Integrated housing	50,563
Seniors housing	16,548
Multi-dwelling/attached housing	30,338
Residential flat building	15,169
Large lot subdivision	91,013
Second Ponds Creek catchment	
Dwelling house	47,706
Seniors housing	13,011

Note: The indicative contributions rates have been calculated by breaking down the residential contributions per hectare of NDA contained in CP15 by the average number of lots per hectare for different dwelling densities.

Source: IPART calculations based on CP15.

For non-residential development, the contributions rates are:

- $472,844 per hectare in the Killarney Chain of Ponds Catchment
- $278,296 per hectare in the Second Ponds Creek Catchment.

[20] CP15, pp 12-14 and 47.

The indicative contributions rates shown here will not be indexed each year. This is because they are calculated using a nominal NPV model where the underlying infrastructure costs are already escalated.

2.6 Responsibility for local infrastructure

Infrastructure in the Precinct will be provided by developers, Roads and Maritime Services (RMS), Sydney Water and the THSC:

- All local infrastructure (eg, subdivisional roads), which can be included in conditions attached to development consents, will be provided by developers.[21]
- Five major intersections along Windsor Road will be provided by RMS and these works are excluded from CP15.
- Sydney Water will provide water and wastewater infrastructure in the Precinct, and stormwater infrastructure for the Seconds Ponds Creek catchment.[22]
- The major local infrastructure in CP15 will be provided by THSC or as works-in-kind by developers, in accordance with the contributions plan (eg, collector and sub-arterial roads).[23]

There is no infrastructure for community facilities in CP15. THSC proposes to negotiate with developers through the development application process for the provision of community facilities.[24]

21 CP15, p 30.
22 CP15 Application Form, Criterion 4, p 1.
23 CP15, p 9.
24 The Hills Shire Council, Response to IPART queries, 1 October 2014, p 17.

3 Assessment of Contributions Plan No 15

We assessed THSC's application for a review of *Contributions Plan No 15 – Box Hill Precinct* (CP15) against the criteria in the Practice Note. We based our assessment on the contents of the plan, the council's application and supporting documentation, and responses to our information requests. This chapter summarises our assessment of the contributions plan against the criteria.

3.1 Criterion 1: Essential Works List

IPART Findings

1 All infrastructure items in CP15 are on the Essential Works List except for some open space infrastructure:

   – The works for the indoor recreation centre in Park 5, which exceeds the definition of base level embellishment.

   – The miscellaneous 'sundry measured items' for which the council has not provided enough evidence to support its inclusion.

Recommendations

1 THSC removes the works for the indoor recreation centre ($18,875,430), and 'sundry unmeasured items' for Parks 1 to 6 ($5,217,975) from the cost of essential works in CP15. This will reduce the cost of essential works in CP15 by $24,093,405.

2 THSC reviews the need to include $500,000 in the base cost for the 'possible watercourse' for Park 4 once it has prepared detailed designs. Should these works not be required, THSC remove the costs for the 'possible upgrading works to existing watercourse' in CP15.

We assessed whether the public amenities and services included in the contributions plan are on the Essential Works List (EWL) (see Box 3.1). CP15 contains works and land for transport, open space and stormwater infrastructure. No community facilities have been included in CP15.

Box 3.1 Essential Works List

The Essential Works List includes:

- land and facilities for transport (eg, road works, traffic management and pedestrian and cycle facilities), but not carparking
- land and facilities for stormwater management
- land for open space (eg, parks and sporting facilities), including base level embellishment (see below)
- land for community services (eg, childcare centres and libraries)
- the cost of plan preparation and administration.

For the purposes of assessing land for open space, base level embellishment may include:

- site regrading
- utilities servicing
- basic landscaping (turfing, asphalt[a] and other synthetic playing surfaces, planting, paths)
- drainage and irrigation
- basic park structures and equipment (park furniture, toilet facilities and changerooms, shade structures and play equipment)
- security lighting and local sportsfield floodlighting
- sportsfields, tennis courts, netball courts and basketball courts (outdoor only).

Base level embellishment does not include infrastructure such as skate parks and BMX tracks.

a Asphalt includes at-grade carparks to the extent that they service the recreation area only and does not include multi-storey carparks.

Source: Department of Planning & Environment, Practice Note, February 2014, pp 8-9.

Table 3.1 summarises our assessment of infrastructure in CP15 against the EWL.

Table 3.1 Summary of IPART's assessment of infrastructure in CP15 against the Essential Works List

Works category	Included on the Essential Works List	Not included on the Essential Works List
Transport	Road upgrades and new roads Signalised intersections Roundabouts Bridges Bus stops Cycleways All land for transport infrastructure	
Stormwater	Basins, with raingardens and drainage structures Culverts Gross pollutant traps All land for stormwater infrastructure	
Open space	Local parks District parks with playing fields, tennis courts, netball courts, amenities buildings and related base level embellishment. All land for open space infrastructure	Works for indoor recreation centre in Park 5 'Sundry unmeasured items' for all parks
Administration costs	Administration costs	

Our further analysis of certain open space items is outlined below.

3.1.1 Indoor recreation centre

This indoor recreation centre, which is included in open space works in CP15, does not meet the criteria for base level embellishment of open space (see Box 3.1). Base level embellishment is considered to be those works required to bring open space up to a level where the site is secure and suitable for passive and active recreation. It includes items such as basic park structures and outdoor sportsfields.

We consider the indoor recreation centre is a high level embellishment item that exceeds the definition of base level embellishment. THSC should remove the cost of the indoor recreation centre ($18.9m) from the cost of essential works in CP15.

However, the cost of land for the centre (already zoned for open space, identified in Park 5) is on the EWL.

3.1.2 Extension of amenities building for tennis facilities

The detailed costs, for open space, prepared by AECOM includes a 'tennis pro office' as an extension to the amenities building in Park 3. The EWL allows for basic park structures and amenities, including toilet facilities and change rooms. In CP15, the tennis pro office is designated for public amenities use and therefore, we consider it to be on the EWL.

3.1.3 'Sundry unmeasured items'

The base cost of open space embellishment includes $3.9m for 'sundry unmeasured items' under the miscellaneous category for Parks 1 to 6. This amounts to 4.8% of the base cost for these parks.

THSC advised that these particular costs refer to small items which may not have been measured because designs are still at a strategic level or were impractical to include in the itemised cost estimates.[25] The council provided some examples of costs which may be included eg, line markings, signs and boundary fencing. The council also gave an example that it may include unforeseen drainage works.[26]

The AECOM cost estimates for open space and transport include other small sundry costs under specific items eg, road infrastructure and Park 1 for open space both have sundries which are defined for specific purposes (eg, line marking). These sundries equal just 1.1% of the base cost estimates.

We consider that the 'sundry unmeasured items' under the miscellaneous category for Parks 1 to 6 have not been reasonably defined given the magnitude of the costs. We also consider that the use of these estimates for unforeseen drainage works double-counts the contingency allowance, which is already included to cover unforeseen events and site conditions. Therefore, we consider that it is unreasonable to include 'sundry unmeasured items' of $5.2m in the open space embellishment costs, and recommend that they be removed from the cost of works in CP15.[27]

25 The Hills Shire Council, Response to IPART queries, 28 October 2014, p 3.
26 The Hills Shire Council, Response to IPART queries, 28 October 2014, p 3
27 The $5.2m adjustment includes the $3.9m adjustment to the base cost, the contingency allowance (20%) and project management/design fees (15%)

3.1.4 Possible watercourse upgrade

The base cost of Park 4 includes $0.5m for a possible upgrade to an existing water course. AECOM identified that the watercourse may need to be upgraded but that this cannot be determined until detailed design work has been completed for Park 4.[28] We consider that, at this stage, the 'possible' upgrade to the watercourse can remain as essential works in CP15 because it is part of open space infrastructure. We recommend that the council revise these costs when detailed designs are complete, and remove this cost if the upgrade works are no longer necessary.

3.2 Criterion 2: Nexus

IPART must advise whether there is nexus between the demand arising from new development in the area to which the plan applies and the kinds of public amenities and public services identified in the plan. Nexus ensures that there is a connection between the infrastructure included in the contributions plan and increased demand for facilities generated by the anticipated development.

THSC used the technical studies listed in the Table 3.2 to assist in determining the types and quantity of public amenities and public services that are included in CP15. The council also provided us with additional information to explain the differences between the infrastructure in CP15 and the technical studies.

[28] AECOM, *Traffic Management and Open Space Strategic Design – Box Hill and Box Hill Industrial Precinct*, January 2014, Appendix C.1, p 30, and The Hills Shire Council, Response to IPART queries, 28 October 2014, p 3.

Table 3.2 Technical studies relied on by THSC to establish nexus in CP15

Essential works category	Reports
Transport	▾ GHD, *Box Hill and Box Hill Industrial Precincts – Transport and Access Study*, February 2011 ▾ AECOM, *Boundary Road Strategic Concept Design Study*, February 2013 ▾ AECOM, *Traffic Management and Open Design Strategic Design,* January 2014
Open space	▾ Urbis, *Demographics and Social Infrastructure Assessment: Box Hill and Box Hill Industrial Precincts*, February 2011 ▾ AECOM, *Traffic Management and Open Design Strategic Design*, January 2014
Stormwater	▾ J. Wyndham Price (JWP), *Box Hill/Box Hill Industrial Precinct Water Cycle Management Strategy Report*, February 2011 ▾ JWP, *Box Hill/Box Hill Industrial Precinct Water Cycle Management Post Exhibition Strategy Report*, June 2012 ▾ JWP, *Box Hill/Box Hill Industrial Precinct Water Cycle Management Post Re-exhibition Strategy Report*, November 2012

Source: CP15, p 65.

For transport and stormwater infrastructure, we consider that these supporting studies demonstrate reasonable nexus between the land and facilities in CP15 and the expected development in the Box Hill Precinct.

For open space, we found that there is reasonable nexus between the expected development and the open space land and embellishment. Although there is a low rate of provision compared with recommendations in the technical study, the good quality of the open space, in terms of its location, standard and accessibility, as well as passive open space opportunities, helps mitigate the low rate of provision.

3.2.1 Transport

IPART Finding

2 There is reasonable nexus between transport infrastructure items in CP15 and the expected development in the Box Hill Precinct.

Recommendations

3 THSC includes in CP15 the land acquisition costs (which have yet to be quantified) for the two sections of Mount Carmel Road (BHNR01B and BHNR02A), for which the capital costs are already included in CP15.

4 The Department of Planning & Environment, in consultation with THSC, updates the State Environmental Planning Policy (Growth Centres) zoning and land acquisition maps to include THSC as the acquisition authority for the land for BHNR01B and BHRN02A in Recommendation 3.

CP15 includes transport facilities and land for the main road network, intersection and roundabout works, and public transport locations. Specifically, the transport infrastructure in CP15 includes:

- five new main roads
- five proposed road upgrades
- four bridges
- 15 signalised intersections
- seven roundabouts
- 20 bus stops
- 12.2km of cycleways.[29]

In total, around 5.7 hectares of land will be acquired for new roads and widening of roads. The majority of transport infrastructure will be located within the Precinct, except for the Edwards Road bridge over Smalls Creek.[30]

CP15 excludes transport facilities and land for local roads (ie, subdivisional roads), asset relocation, water management devices, footpaths and street tree plantings. The provision of facilities and land for these items will be undertaken directly by developers as conditions of consent.[31]

Five major intersections along Windsor Road will be provided by the Roads and Maritime Services (RMS) and these works will not be included in CP15.

The capital cost for two sections of Mount Carmel Road (BHNR01B and BHNR02A) were included in CP15 after a submission by a local landowner raised that Mount Carmel Road is identified as a sub-arterial road.[32] However, the land acquisition costs for these two sections of Mount Carmel Road were not also included in CP15.

As there is a demonstrated nexus for these two sections of Mount Carmel Road, which is identified as a sub-arterial road, THSC should include the land for these road sections in CP15.

We note that THSC is not identified as the acquisition authority for these sections of land. We recommend that DP&E (in consultation with THSC) amend the *State Environmental Planning Policy (Sydney Region Growth Centres)* (Growth Centres SEPP) map so that the council is identified as the acquisition authority for these sections of land.

29 CP15, p 42.
30 CP15, pp 42 and 64.
31 CP15, p 30.
32 The Hills Shire Council, *Council Business Papers – 22 July 2014*, p 195.

Consistency with technical studies

We have analysed the transport infrastructure contained in CP15 against the technical studies, as well as additional information provided by THSC. We consider the transport infrastructure is broadly consistent with the technical studies and the needs of the development in the Precinct.

We identified some minor inconsistencies between the transport infrastructure included in CP15 and what was recommended in the technical studies. In particular, we sought more information concerning the intersection works at Windsor Road and Annangrove Road and upgrades to Annangrove Road and Boundary Road.

We consider that THSC has provided adequate explanation for these inconsistencies, including that:

- The signalised intersection at Windsor Road and Annangrove Road is required to service higher traffic levels.[33]
- The upgrades of Annangrove Road and Boundary Road are necessary to support the development requirements of the Precinct as the capacity of these roads will increase (for Boundary Road from four to seven lanes, and for Annangrove Road from two to four lanes).[34] The design and cost estimates for Boundary Road are based on the *Boundary Road Strategic Concept Design Study* prepared by AECOM in February 2013.[35]

3.2.2 Stormwater

IPART Finding

3 There is reasonable nexus between the stormwater infrastructure in CP15 and the expected development in the Box Hill Precinct.

CP15 divides the Box Hill Precinct into two catchments for stormwater infrastructure - Second Ponds Creek Catchment and Killarney Chain of Ponds Catchment. The stormwater infrastructure to be provided in the Precinct includes:

- nine basins, with integrated raingardens and drainage structures
- nine separate raingardens
- seven culvert crossings
- three gross pollutant traps.[36]

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33 The Hills Shire Council, Response to IPART queries, 1 October 2014, p 6.
34 GHD, *Box Hill and Box Hill Industrial Precinct – Transport and Access Study*, February 2011, pp 43 and 79.
35 AECOM, *Boundary Road Strategic Concept Design Study*, February 2013.
36 CP15, p 41.

The majority of land in the Second Chain of Ponds Catchment is located in the Rouse Hill Development Area where Sydney Water is responsible for stormwater management.[37] This has resulted in much lower stormwater infrastructure costs in this catchment than would otherwise have been the case if the council was responsible for stormwater management.

Consistency with technical studies

THSC adopted many of the recommendations from the JWP Studies, primarily the June 2012 version, for stormwater infrastructure for the Box Hill Precinct.

However, we identified some minor deviations for some designs and costs which required further clarification from the council.[38] For example, THSC provided additional information based on advice received from AECOM during the Precinct Planning process regarding updates to the proposed road network.[39] The AECOM advice showed the need for three culverts in the Precinct (identified as CR-E, CR-F and CR-G). These culverts are located adjacent to land zoned SP2 – Local Drainage.

We consider that the council has satisfactorily explained the minor deviations for stormwater infrastructure.

3.2.3 Open space

IPART Findings

4 There is reasonable nexus between the open space land and embellishment in CP15 and the expected development in the Box Hill Precinct. Although we consider that the total amount of open space is low, we note that the active open space provision meets the requirements identified in the studies and is accessible. There are likely to be other opportunities for passive open space in the Precinct in the future, particularly on drainage land.

5 THSC has incorrectly included Turnbull Reserve in calculating the rate of open space provision because it services the existing population of residents.

Recommendation

5 THSC omits Turnbull Reserve in calculating the rate of open space provision for the expected development in the Precinct.

37 JWP Study, June 2012, Appendix D.
38 The Hills Shire Council, Response to IPART queries, 1 October 2014, pp 15-16.
39 The Hills Shire Council, Response to IPART queries, 15 October 2014.

CP15 includes 59.4 hectares of active and passive open space in the Box Hill Precinct. In particular, the open space embellishment and land to be provided in the Precinct includes:

- 11.96 hectares of local parks
- six playing fields with a variety of active open space embellishment (identified as Parks 1 to 6).

A breakdown of the open space by item in CP15 is shown in **Error! Reference source not found.**.

Table 3.3 Open space provision in CP15 by item

Item	Description	Area (ha)
Local Parks	Local Park	11.96
BHPF01	Park 1 - South of Future Road (South Western Area)	5.17
BHPF02	Park 2 - West of Mt Carmel Road (Western Area)	5.76
BHPF03	Park 3 - Central Area	10.10
BHPF04	Park 4 - East of Terry Road (North Eastern Area)	5.80
BHPF05	Park 5 - District Park - West of Nelson Road (South Eastern Area)	15.60
BHPF06	Park 6 - North of The Water Lane (South Eastern Area)	5.00
Total		**59.39**

Source: CP15, p 42.

Existing open space in the Precinct

THSC indicated there is one existing local park in the Precinct - Turnbull Reserve. This local park covers around 0.7 hectares of land and services the existing population of 934 residents.[40]

We consider that THSC has incorrectly included this land in calculating the rate of open space provision for the expected population in CP15. As shown above, the correct amount of open space proposed for the expected residential development is around 59.4 ha rather than 59.6 ha (which includes Turnbull Reserve).[41]

We recommend that Turnbull Reserve should be excluded from calculating the rate of open space provision. This will reduce the proposed rate of provision from 2.13 hectares per 1,000 persons to 2.12 hectares per 1,000 persons.

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40 The Hills Shire Council, *Council Business Papers – 22 July 2014*, pp 194-195 and The Hills Shire Council, Response to IPART queries, 3 October 2014. The Urbis Study also identifies Turnbull Reserve as existing local open space in the Precinct (p 65).

41 We note that there is a discrepancy in accounting for the size of Turnbull Reserve. The council has increased the rate of open space provision by around 0.2 hectares to account for the inclusion of Turnbull Reserve. However, the actual size of Turnbull Reserve is around 0.7 hectares. Source: CP15, p 28.

Consistency with technical study

There is reasonable nexus between the expected needs of the Precinct and the amount of open space land in CP15. The expected population of the Box Hill Precinct in CP15 is 27,998, which is consistent with population estimates used in the Urbis Study (28,000).

The current rate of provision of 2.12 hectares per 1,000 residents in CP15 represents a low supply of open space compared with 2.83 hectares per 1,000 residents, which is often used as the standard benchmark rate of provision and was indicated in the technical study.[42] The amount of open space land was determined during the Precinct Planning process (which was undertaken by the Department of Planning and Environment) and therefore, the open space rate of provision cannot be easily altered (ie, it would involve rezoning land to RE1 – Public Recreation). THSC identified that there may be opportunities for passive open space within SP2 – Local Drainage zoned land. However, the availability and specific location of this land would not become evident until the Precinct develops.[43]

We estimate that, if 25% of the drainage land were to be used for passive open space, there would be an additional 11.1 hectares of open space land available.[44] This would increase the rate of provision to around 2.52 hectares per 1,000 residents.

We also note that land zoned for E2 - Environmental Conservation may provide passive open space opportunities in the future but this land is in private ownership and therefore cannot be considered in the calculating the rate of open space provision.[45]

Total planned open space provision

As already stated, we consider that the rate of provision (2.12 hectares per 1,000 persons) for the proposed residential development represents a relatively low supply of open space. However, other factors such as the good quality of the open space, in terms of its location, access and standard, are important in assessing the reasonableness of open space provision.

Open space is distributed quite evenly throughout the Precinct, with the majority of residential development being within 400 metres of open space. We consider that as open space in the Precinct is well located and accessible, this helps to counterbalance the low rate of provision.

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42 Urbis Study, p 81.

43 The Hills Shire Council, Response to IPART queries, 28 October 2014, p 4.

44 CP15 includes 44.27 hectares of land zoned as SP2 – Local Drainage.

45 The Hills Shire Council, Response to IPART queries, 1 October 2014, pp 22-23. The zoning of E2 – Environmental Conservation land was determined during the Precinct Planning process. We note that a major landowner in the Precinct raised concerns about the use of this land.

Playing court provision

CP15 includes 12 tennis courts and six netball or multi-purpose courts.[46] We consider there is sufficient nexus between the proposed number of playing courts and the expected development in the Precinct.

The rate of provision for tennis courts is broadly consistent with the technical study. The Urbis Study identified the need for 12 tennis courts within a sports facility.[47] Although CP15 includes four more multi-purpose/netball courts than the Urbis Study's recommendation,[48] we consider that the overall rate of provision (1 court per 1,555 residents) is reasonable and helps mitigate the low rate of provision for open space. This is based on our assessment of Blacktown City Council's *Draft Contributions Plan No 24 – Schofields Precinct,* where we supported the rate of provision for playing courts (tennis and netball) of around 1 court per 1,500 residents.

3.3 Criterion 3: Reasonable costs

IPART must advise whether the proposed development contributions are based on a *reasonable* estimate of the cost of the proposed public amenities and public services.

Reasonable costs may be based on estimates that have been provided by consultants or the council's experience. They should be comparable to the costs required to deliver similar land and facilities in other areas.

3.3.1 Summary of our assessment of costing approaches

THSC has used a number of resources to estimate capital costs, including IPART's Benchmark Report,[49] recent tender prices, and cost estimates contained in technical studies. THSC estimated land costs based on independent land valuers' advice.

Where THSC has used independent advice to cost infrastructure and value land, we consider this approach is reasonable. However, we have concerns with the selective use of costs from IPART's Benchmark Report in CP15 and some comments about the council's NPV model.

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46 CP15, p 28.

47 Urbis, *Box Hill and Box Hill Precincts Demographic and Social Infrastructure Assessment Study*, February 2011, pp 97-98.

48 Urbis, *Box Hill and Box Hill Precincts Demographic and Social Infrastructure Assessment Study*, February 2011, p 97.

49 IPART, *Local Infrastructure Benchmark Cost – Final Report*, April 2014. The NSW Government asked IPART to provide advice about benchmark costs for local infrastructure. The *Local Infrastructure Benchmark Cost – Final Report* was to form part of the package of reforms to the planning system. The benchmark report has not been endorsed by the NSW Government and is intended to be used as a guide only.

We consider that the recommendations and cost estimates contained in IPART's Benchmark Report should not replace detailed and site-specific cost estimates when these are available.

THSC has applied costs from IPART's Benchmark Report to some transport infrastructure items when it already had recent site-specific estimates from a quantity surveyor for most of the items. In one instance, THSC has chosen to use the cost of roundabouts from IPART's Benchmark Report, when the AECOM Report (2014) provides much more detailed and location-specific cost estimates. The council also applied the contingency allowances based on the highest risks for open space and transport infrastructure that were recommended in IPART's Benchmark Report.[50] We recommend that THSC amends these cost estimates in CP15.

CP15 is based on a Net Present Value (NPV) model which calculates development contributions. THSC uses a nominal approach in its NPV model, which involves using a nominal discount rate and forecasting inflation in costs and revenues over time (to calculate nominal cash flows). CP15's NPV model contains a number of assumptions which impact on the costs in the plan. These assumptions include how the plan calculates the nominal discount rate and how costs and revenues are forecast to nominal values. Our assessment of the assumptions in the NPV model is discussed in section 3.3.8.

3.3.2 Cost of land

IPART Finding

6 THSC's approach to costing land using an independent valuer is reasonable.

Recommendation

6 THSC corrects the amount of land to be acquired in CP15 (for items BHPF03001 and BHPF03002) from 54.84 to 58.24 hectares and increase the cost of open space land by $1,408,535, from $65,877,822 to $67,286,357.

The cost of land to be acquired in CP15 is estimated to be $104.9m or around 25.5% of the total cost of CP15.[51] The calculation of land costs are based on land value rates (on a $ per m^2 basis) from an independent land valuer.[52] The council has not yet acquired any of the land in the works schedule.

Apart from some existing council assets (ie, roads), all the land in CP15 is land still to be acquired.[53]

50 See section 3.3.6.
51 CP15, p 4.
52 CP15 Application Form, Criterion 3, p 3.
53 CP15 Works Schedule.

Transport land

CP15 includes 5.68 hectares for transport infrastructure. This includes land for new roads, road upgrades and intersection works.

THSC is responsible for the land acquisition of sections of Terry Road (BHRU01 and BHRU02A) and The Water Lane (BHRU08B and BHRU09), where the works are identified to be funded through the Special Infrastructure Contributions (SIC) collected by the State Government.[54] The land acquisition maps from the Growth Centres SEPP identify the council as the acquisition authority. The capital costs for these roads are not included in CP15 and will be funded through SIC.

As discussed under the nexus criterion in section 3.2.1, the capital cost for two sections of Mount Carmel Road (BHRN01B and BHRN02A) are included in CP15.[55] However, the land acquisition costs for these two sections are not included in CP15.[56] This is because the land acquisition map for the Growth Centres SEPP does not identify the council as the acquisition authority, and so THSC did not include the associated land costs for these two road sections.

We consider that the land acquisition costs for these road sections should be included in CP15 because the capital costs are already included, and it is more equitable for the land costs to also be funded through Section 94 contributions. We note that this will involve DP&E (in consultation with THSC) amending the Growth Centres SEPP map so that the council is identified as the acquisition authority for the land.

Stormwater land

CP15 includes 44.27 hectares of land to be acquired for stormwater infrastructure.[57] Based on the method of valuation, using advice from an independent land valuer, we consider the costs for land identified in CP15 are reasonable.

Open space land

CP15 includes 54.84 hectares of land to be acquired for open space.[58] However, the council has made an error in calculating the amount of land in its land acquisition schedule.

54 The Hills Shire Council, Response to IPART queries, 3 October 2014.
55 The Hills Shire Council, *Council Business Papers – 22 July 2014*, p 195.
56 We also note that the cost of land for these two sections have not yet been quanitifed.
57 CP15 Works Schedule.
58 CP15 Works Schedule.

THSC needs to increase the amount of land to be acquired for Park 3 by 3.40 hectares, from 54.84 to 58.24 hectares in CP15 (for items BHPF03001 and BHPF03002). This will increase the cost of open space land by $1,408,535, from $65,877,822 to $67,286,357.

Our assessment of land costs

We consider THSC's approach to costing land is reasonable. The use of an independent valuer is consistent with how land has previously been costed in CP12 (Balmoral Road) and CP13 (North Kellyville). This approach is also consistent with the recommendation in IPART's Benchmark Report for land value estimates to be based on a valuation by a registered valuer.[59]

3.3.3 Cost of transport infrastructure

IPART Finding

7 THSC's approach to estimating the cost of transport infrastructure is reasonable, except for the costs for some new main roads, road upgrades and roundabouts which are based on IPART's Benchmark Report. This is because the AECOM Report cost estimates for these items are more detailed and location-specific.

Recommendations

7 THSC uses the base cost estimates for the new main roads, road upgrades and roundabouts in CP15 recommended in the AECOM Report (January 2014) to ensure that the costs are based on site-specific considerations. This will reduce the cost of essential works in CP15 by $16,330,037.

8 THSC pursues opportunities for commercial arrangements for bus stops. If commercial arrangements are entered into, the council should review CP15 to remove the net cost of these bus stops from the plan.

THSC estimated costs for transport infrastructure in CP15 using a combination of methods including:

- AECOM's Report (January 2014)
- IPART's Benchmark Report
- THSC's tender base rates.

Cost assessment of new roads and road upgrades

THSC used the cost for a 4-lane sub-arterial road from IPART's Benchmark Report for all new roads and three of the five road upgrades for existing roads (BHRU02B, BHRU06B and BHRU08A).[60] THSC stated that it used the

[59] IPART, *Local Infrastructure Benchmark Costs – Final Report,* April 2014, p 78.
[60] CP15 Works Schedule.

benchmark costs rather than the costs in the AECOM report because AECOM excluded several important costs that the council risks bearing during construction (such as service and utility relocation and rock excavation).[61]

We do not consider it is reasonable for THSC to apply the benchmark costs to all of the new roads and three of the five road upgrades when there are more detailed cost estimates available in the AECOM Report.[62]

- The AECOM Report provides more detailed designs and cost estimates for two new roads and three road upgrades. These designs and cost estimates appear to take site-specific factors into account, whereas the costs from IPART's Benchmark Report represent a median cost across NSW.
- Whilst the AECOM Report excluded several costs, the IPART benchmark base costs for roads also excluded the same items on the basis that they were accounted for by the allowances for contingencies, design fees and other on-costs. For example:
  - Services relocation, rock excavation and removal of contaminated waste are not included in the base cost rate for the benchmark costs as it was considered that the contingency allowance should cover such risks.[63]
  - Authority fees and charges, council administration fees, archaeological investigations and professional fees are accounted for by the 15% allowance for project management and design fees.[64] This 15% allowance was previously excluded from the costs, but we have accounted for its inclusion in CP15, consistent with its application for other costs in the AECOM Report.

For these reasons, we recommend THSC should use the AECOM Report cost estimates instead of the benchmark costs for new roads and road upgrades. This will reduce the cost of essential works by $16,478,923.

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61 The Hills Shire Council, Fact check of IPART's draft report, 20 November 2014. The AECOM Report (p 3) excluded GST, professional fees, escalation of costs beyond January 2014, rock excavation, services relocations, removal of contaminated/hazardous waste, authority fees and charges, council administration costs, property and land acquisition, archaeological investigations and findings.

62 AECOM, *Traffic Management and Open Design Strategic Design*, January 2014, Appendix C.1, pp 3-4, 6-7 and 10.

63 Evans & Peck, *Response to IPART queries*, 20 November 2014 and IPART Benchmark Report, pp 114, 125 and 131.

64 For example, see *IPART Assessment of Blacktown City Council's Draft Section 94 Contributions Plan No 24 – Schofields Precinct*, p 44 and Blacktown City Council, *Application for assessment of a section 94 Development Contributions Plan, Blacktown City Council Section 94 Contributions Plan No 24 – Schofields Precinct*, 13 December 2013, pp 17-19.

Cost assessment of roundabouts

CP15 also applied the cost of roundabouts from IPART's Benchmark Report despite having more accurate cost estimates available in the AECOM Report. We recommend THSC should use the AECOM Report's cost estimates instead because:

- the AECOM Report's costs estimates provide more detailed designs
- the benchmark cost is based on a '4-leg roundabout with 2 approaching lanes', but five of the seven roundabouts in CP15 only have a '3-leg' design.

This will increase the cost of essential works by $148,886.

Cost assessment for the Boundary Road bridge

The cost of the Boundary Road bridge, identified as BR-BRU in CP15, is based on an estimate contained in the *Boundary Road Strategic Concept Design Study* (prepared by AECOM in February 2013). The study includes detailed design and cost estimates for the Boundary Road bridge and we consider the cost in CP15 is reasonable.

Cost assessment of the Boundary Road upgrade

THSC provided additional information that Boundary Road will be fully upgraded in conjunction with the Vineyard and Box Hill North Precincts. In the interim, THSC is upgrading and resurfacing Boundary Road to be consistent with the future planned road alignment.[65]

THSC applied a linear rate of $369.17 per metre based on its own experience in costing the Boundary Road upgrade. The road is approximately 2,750 metres in length, making the total cost of the upgrade $1,086,090. We consider the use of the council's own rate is reasonable.

THSC has not included a contingency allowance or project management and design fees in the cost for the Boundary Road upgrade. After further consultation with the council, we found that the cost for the Boundary Road upgrade has already factored in an allowance to cover the likely risks and on-costs. Therefore, we accept that it is reasonable to exclude the contingency allowance, project management and design fees from this item.

65 The Hills Shire Council, Response to IPART queries, 1 October 2014, p 7.

Cost assessment of the Annangrove Road upgrade

THSC has costed the Annangrove Road upgrade using preliminary in-house engineering advice. The cost of the Annangrove Road upgrade is apportioned equally between CP15 and *Contributions Plan No 11 – Annangrove Road Light Industry* (CP11).

The engineering advice provides a breakdown of the Annangrove Road upgrade by sub items and determines the cost using a "bottom up" approach (ie, building up the cost). We consider this approach is reasonable.

The cost estimate includes a 10% contingency allowance and also includes costs for service relocations. We also consider this reasonable.

Cost assessment of other transport infrastructure items

We also found THSC's approach to costing the remaining transport infrastructure items in CP15 is reasonable. This includes:

- all signalised intersections based on AECOM Report cost estimates
- bridges based on AECOM Report cost estimates
- the Edwards Road bridge over Smalls Creek based on the costs contained in CP13 (North Kellyville), which has 66% of capital costs apportioned to CP15 and 34% of capital costs and all land costs apportioned to CP13
- bus stops based on the cost from IPART's Benchmark Report (these provide reasonable estimates of the costs of these works where location-specific estimates are not available)
- cycleways based on the council's tender rates.

Possible commercial arrangements for bus stops

Commercial arrangements for bus stops are not guaranteed in the Precinct because THSC considers that advertising opportunities are limited. THSC noted that, in its experience, only bus shelters on prominent roads are likely to have commercial arrangements because of their advertising potential and revenue.[66]

THSC stated it would continue to pursue commercial arrangements for the provision of bus stops, but at this stage, it considers it reasonable to include the costs in CP15.

As no formal arrangements for the bus stops have been secured,[67] we consider this approach is reasonable. However, if commercial arrangements for bus stops are negotiated in the Precinct, the relevant costs in CP15 should be amended.

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66 The Hills Shire Council, Response to IPART queries, 1 October 2014, pp 17-18.
67 The Hills Shire Council, Response to IPART queries, 1 October 2014, pp 17-18.

3.3.4 Cost of stormwater infrastructure

IPART Finding

8 THSC's use of the JWP Study and updated AECOM cost estimates for stormwater infrastructure is reasonable.

Cost of stormwater infrastructure in CP15

CP15 includes around $77.9m in capital costs for stormwater infrastructure. The majority of stormwater infrastructure items are based on cost estimates from the JWP Study (June 2012). Stormwater infrastructure costs are split between the two catchments, with the Killarney Chain of Ponds Catchment containing $76.9m worth of works and the Second Ponds Creek Catchment containing $1.0m worth of works.

Cost assessment of stormwater infrastructure

We consider that THSC's approach to cost stormwater infrastructure, including the updated AECOM cost estimates applied to some raingardens and basins, is reasonable.

Although there were minor cost and design differences for some basins and raingardens between CP15 and the technical studies, THSC provided updated AECOM cost estimates to explain the differences.[68]

In particular, THSC identified that the three additional culverts (identified during the Precinct Planning process based on AECOM advice to update the proposed road network) were costed using the standard culvert cost from the JWP Study.[69] THSC has applied this cost estimate to each of the additional three culverts required in the Precinct.

We consider that the cost estimates used for the additional three culverts are reasonable.

3.3.5 Cost of open space embellishment

IPART Finding

9 THSC's use of the AECOM Report's cost estimates for Parks 1 to 6 is reasonable.

68 The Hills Shire Council, Response to IPART queries, 1 October 2014, pp 15-16.
69 The JWP Study costed four of the five recommended culverts at $1.63m each.

Recommendation

9 THSC prepares new cost estimates for the embellishment of 11.96 hectares of local parks (passive open space). The cost estimate should specify what is included in open space embellishment and be based upon a more recent estimate (eg, from current tender rates or quantity surveyor estimates).

Cost of open space embellishment in CP15

The costs for the six playing fields (identified as Parks 1 to 6 in CP15) are based on the cost estimates contained in the AECOM Report.[70] The AECOM Report provides detailed designs and costs by sub-items for Parks 1 to 6 in the Precinct.

The Precinct will also contain 11.96 hectares of local parks (passive open space). THSC applied a \$60 per m^2 rate to embellishing 11.96 hectares of local parks, which results in a cost estimate of \$7.2m in CP15. This rate does not specify what work will be included in open space embellishment and is based on the cost of five selected parks in the Rouse Hill/North Kellyville area from 2004, escalated to current prices.

Cost assessment of open space embellishment

For Parks 1 to 6 (containing active open space), THSC's use of the AECOM Report's cost estimates is reasonable. The AECOM Report provides detailed designs and inclusions for each of these parks. However, we consider that the contingency allowance applied to these parks is too high. This is discussed further in section 3.3.6.

For the remaining 11.96 ha of local parks, the council estimated the cost by applying a rate of the \$60 per m^2. Whilst this rate has been indexed in accordance with the recommended index in IPART's Benchmark Report, the rate is based on costs estimated in 2004. We also note that this rate appears high compared to other recent cost estimates in the North West Growth Centre. As an example, the cost of passive open space (local, linear and basin parks) for the Schofields Precinct is around \$52 per m^2.[71]

Therefore, we consider that it is more reasonable for the council to use more recent estimates eg, the latest tender rates or quantity surveyor reports. The new estimates should provide a better understanding of the inclusions (eg, park furniture, fencing and landscaping) that will be applied to the passive open space within the Precinct.[72]

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70 CP15 Works Schedule.

71 The \$52 rate is based on the latest estimates for open space submitted in June 2014. We have excluded the district park (which contains active open space) and upgrades to an existing reserve. We have also indexed the cost to the June 2013 quarter using the PPI for Non-Residential Building Construction for NSW.

72 We have not provided an estimate of the change in cost compared with the current approach to cost local parks.

3.3.6 Contingency allowances

IPART Findings

10 THSC's contingency allowances for transport and open space infrastructure of 30% and 20% respectively, which are based on IPART's recommended allowances for these categories at the Strategic Review project stage, do not align with the reduced risk suggested from the detailed designs and cost estimates in the technical studies.

11 The contingency allowance of 15% for stormwater infrastructure, based on cost estimates in the JWP Study (June 2012), is reasonable.

Recommendation

10 Given the reduced risk associated with the availability of detailed designs and cost estimates, THSC reduces the contingency allowances for:

- transport infrastructure from 30% to 20%
- open space infrastructure from 20% to 15%.

This will reduce the cost of essential works in CP15 by $5,446,567 for transport infrastructure and $3,095,078 for open space infrastructure.

Transport and open space

For open space infrastructure, THSC has applied a 20% contingency allowance to the base cost for embellishment. For transport infrastructure, THSC has added a 30% contingency to the base cost for the majority of transport infrastructure items.[73] These rates are based on the recommended contingency allowances for the Strategic Review stage from IPART's Benchmark Report.

We note that these rates are much higher than the exhibited CP15, which applied a 15% allowance for both infrastructure categories. We estimate that the use of IPART's Benchmark Report increased the total contingency allowance for transport and open space infrastructure by around $14.2m (from $22.6m to $36.8m).

The council's contingency allowances for open space and transport infrastructure are based on the risk levels from IPART's Benchmark Report. In that report, we recommended that councils at the Strategic Review stage should apply a 30% and 20% contingency allowance, for transport and open space infrastructure respectively to reflect the risk at the Strategic Review stage. We recommended that the contingency allowance be reduced to 20% and 15%, respectively once the

[73] This excludes the Boundary Road and Annangrove Road upgrades, and Edwards Road bridge over Smalls Creek. The base cost rate for the Boundary Road already includes the contingency allowance. The Annangrove Road upgrade includes a contingency allowance of 10%. The Edwards Road bridge includes a contingency allowance of 15%. Source: The Hills Shire Council, Response to IPART queries, 4 November 2014 and CP15 Works Schedule.

project had progressed to the Business Case stage. The lower contingency reflects the lower risk at the Business Case stage. Box 3.2 explains the basis for our recommended contingency allowances and the definitions of the relevant planning stages.

Box 3.2 Basis for IPART's recommended contingency allowances in the Local Infrastructure Benchmark Costs report

In IPART's Benchmark Report, we considered contingencies which would address the most likely outcomes at the Strategic Review and the Business Case stages. The stages were defined as follows:

- **Strategic Review stage:** Specified the general requirements for infrastructure and investigated options to achieve the desired outcome, for example, the size of a park and the associated embellishments to be provided to meet the needs of the development.
- **Business Case stage:** Undertaken detailed planning and design of a preferred option to the point where tenders could be called for its delivery. This includes:
  - detailed planning documents such as environmental approvals, land acquisition schedules and community consultation outcomes, for example, studies showing the exact land to be acquired and whether there are any site constraints in delivering the infrastructure
  - preliminary designs and quantity estimates for the infrastructure, for example, engineering drawings as well as a bill of quantities based on adjusted historical costs.

As the council progresses from the Strategic Review to the Business Case gateway, it will be able to transfer some of the risk provisions from the contingency allowance to the base cost estimate as those risks materialise. This ensures that the base costs do not 'double count' provisions for risk events that have been previously included in the contingency allowance for the infrastructure delivery.

After these two gateways, councils will have more accurate information to estimate infrastructure costs, and would be unlikely to use IPART's benchmark costs.

Source: IPART's Benchmark Report, pp 54-59.

In IPART's Benchmark Report, we also recommended that councils should carefully consider the stage of the planning process and the information that they have available to them. In particular, councils should:

- take account of the development phase and particular risks of the project
- target the most likely outcome
- avoid double-counting of risk events.[74]

[74] IPART, *Local Infrastructure Benchmark Cost – Final Report*, April 2014, p 59.

THSC advised IPART that it applied the contingency allowances at the Strategic Review stage because the designs it has prepared are of a preliminary and strategic nature only.[75]

However, we consider that there is evidence in the technical studies that THSC has moved beyond the Strategic Review stage for the transport and open space infrastructure categories. We note that the most recent AECOM Report commissioned for traffic management and open space infrastructure by THSC (January 2014) stated that AECOM was engaged to "further refine the design of essential infrastructure" and "provide the council with suitable graphic site plans and accompanying opinions of probable cost".[76] Further, the council has prepared detailed land acquisition schedules and quantity surveyor estimates of costs for each open space and transport infrastructure.

In addition, the council has not undertaken any specific risk assessment of the infrastructure and site requirements to warrant a higher contingency amount.

For these reasons we consider that the contingency allowances be reduced from 30% to 20% for transport infrastructure, and from 20% to 15% for open space infrastructure. This would reduce the cost of transport and open space infrastructure by $5.5m and $3.1m, respectively.[77]

Stormwater

The cost estimates contained in the JWP Studies assumed a 15% contingency allowance, and these are reflected in the total cost for stormwater items.

THSC has not applied another contingency allowance to stormwater infrastructure on top of the 15% contingency allowance assumed in the technical study. We consider this approach is reasonable as it is informed by site-specific assessments.

3.3.7 Administration costs

IPART Finding

12 The inclusion of administration costs in CP15, based on the allowance of 1.5% of capital works costs, is reasonable. However, we found the timing of administration costs extending beyond 2039 is not reasonable.

75 The Hills Shire Council, Response to IPART queries, 1 October 2014, pp 14-15.

76 AECOM, *Traffic Management & Open Space Strategic Design – Box Hill and Box Hill Industrial Precinct*, January 2014, p 6.

77 This reduction does not include the impact of reducing base costs from our recommendations to use AECOM costs.

Recommendation

11 THSC allocates administration costs over 25 years instead of 40 years, consistent with our recommendation to reduce the development timeframe in CP15 (Recommendation 12).

CP15 includes around $4.5m for plan administration costs, which is based on IPART's Benchmark Report recommendation of a 1.5% allowance of the value of capital works. We have recommended reductions to the capital costs in CP15, which will also reduce administration costs based on this methodology.

The estimated administration costs in CP15 are reasonable.

We recommend that THSC should allocate administration costs equally across the life of the contributions plan (before escalation). We also recommend a 25-year development timeframe (see section 3.4). This means that THSC should allocate its administration costs equally over 25 years, instead of the original 40 years.

3.3.8 The NPV model

IPART Finding

13 THSC's NPV model assumptions to determine the contributions in CP15 are reasonable, including the application of:

- the 20-day average of the 10-year NSW Treasury bond yield to determine the nominal discount rate
- the long term historical average of the ABS Established House Price Index (Sydney) to escalate land costs
- the long term historical average of the Producer Price Index (Non-Residential Building Construction) to escalate works costs
- the midpoint of the Reserve Bank of Australia's target range for CPI to escalate administration costs and revenues.

Recommendation

12 THSC considers forecasting the cost of works in CP15 using the industry-specific indices recommended in IPART's Benchmark Report:

- for transport and stormwater infrastructure, the ABS PPI (Road and Bridge Construction)
- for open space embellishment, the ABS PPI (Non-Residential Building Construction).

CP15 uses a Net Present Value (NPV) model to calculate development contributions. IPART has previously reviewed two contributions plans from THSC[78] which also used an NPV methodology to calculate the contributions payable by developers. The NPV model accounts for the time difference between the costs the council incurs in constructing infrastructure and the receipt of development contributions. The NPV model operates by discounting future receipts and payments to present values through use of an interest rate, known as a discount rate (Box 3.3).

Box 3.3 Formula for calculating the NPV of contributions rates under CP15

$$PV(Costs) = PV(\text{Re}venue)$$

$$PV(\cos ts) = N_1 * DC + \frac{N_2 * DC}{(1+r)} + ... + \frac{N_t * DC}{(1+r)^{t-1}}$$

Where: N (i) = No. of hectares in year (i)
DC = development contribution ($ in year 1 of CP)
r = discount rate (%)
t = time in years

Note: Our correction to (t-1) compared with "t" in CP15.

We note that the council has used nominal values in its NPV model. This is contrary to our preferred approach in our Technical Paper, which recommended using real values because it reduces complexity.[79] However, we recognise that the Technical Paper allows the use of nominal values, provided that the escalation rates are realistic and consistently applied.

78 IPART, *Assessment of The Hills Shire Council's Contributions Plan No 13*, October 2011. IPART, *Assessment of The Hills Shire Council's Contributions Plan No 12*, October 2011.

79 IPART, *Modelling local development contributions, Selection of a discount rate for councils that use an NPV methodology* (NPV Technical Paper), Final Technical Paper, September 2012, p 4.

3.3.9 Assumptions used in CP15's NPV model

The assumptions used in CP15's NPV model include the following:

- The use of a nominal discount rate of 4.5% based on the 20-day average of the 10-year NSW Treasury Corporation bond yield.
- The use of nominal estimates of costs and revenues instead of real estimates (nominal approach). This requires the use of escalation assumptions to forecast costs and revenues to nominal values before discounting them to present values. CP15's assumptions on forecasting costs and revenues are as follows:
  - Land costs are escalated based on the council's forecast of the ABS Established House Price Index (Sydney).
  - Works costs are escalated based on the council's forecast of the ABS Producer Price Index (PPI) (Non-residential Building Construction).
  - Administration costs and revenues are escalated using the midpoint of the Reserve Bank of Australia's target range for CPI.

3.3.10 Our assessment of the assumptions used in the NPV model

The nominal discount rate

In accordance with the recommendations in IPART's NPV Technical Paper, CP15 uses a 20-day average of the NSW Treasury 10-year bond yields as the basis of its discount rate (based on March 2014 data). We consider that NSW Treasury bonds remain the appropriate basis for the discount rate. We also consider that the calculation based on a 20-day average is reasonable because we recommended this approach in our technical paper. We note that this has produced a relatively conservative estimate for the nominal discount rate of 4.5%.

In early 2015, we are likely to review our recommendations in our technical paper regarding the selection of the discount rate and other aspects of the NPV modelling approach. We will undertake our review in consultation with stakeholders, including THSC.

Land acquisition costs

We consider that it is reasonable for THSC to use the ABS Established House Price Index (Sydney) to forecast land costs in the NPV model. In our past reviews of THSC's plans, we recommended that land costs be escalated using a land value index based on NSW Land and Property Information (LPI) land value

data.[80] However, we consider that without a readily available land value index, it is reasonable that CP15 escalates land costs using the ABS Established House Price Index (Sydney). This is because:

- movements in NSW Land and Property Information (LPI) land value data and the ABS Established House Price Index (Sydney) closely align with one another from 1999 to 2012
- it could be difficult for the council to construct a land value index based on NSW Land and Property Information (LPI) land value data.

In IPART's Benchmark Report, we recommended that a land value index be prepared by the NSW Valuer General, and if it becomes available, it be used by councils to escalate land acquisition costs.[81] At this stage, it remains uncertain as to whether such an index will be developed.

Works costs

CP15 uses a single Producer Price Index (ABS PPI Non-Residential Building Construction) to escalate all works costs. This is consistent with IPART's past assessments of THSC plans, which recommended using the ABS PPI to escalate works costs, although at the time, we were not specific on which PPI should be used.

However, IPART's Benchmark Report recommended the use of different indices tailored to each works category. The introduction of more specific indices would be more cost reflective than using a single index for all works costs, but would also introduce additional complexity in the model. We consider that the required changes in the model to accommodate the indices are relatively straightforward.

THSC indicated that it would prefer to use a single PPI because it is a less complex approach. They also noted that the use of a single PPI would increase the contributions (by 0.57%).[82]

We recommend that THSC should consider forecasting works in CP15 by the indices recommended in IPART's Benchmark Report (shown in Table 3.4). These indices capture cost movements for the relevant infrastructure category and better reflect changes in the cost of delivering infrastructure. They are also publicly available, transparent, are published quarterly, and can be easily obtained.[83]

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80 IPART, *Assessment of The Hills Shire Council's Contributions Plan No 12 – Balmoral Road Release Area,* October 2011, p 46 and IPART, *Assessment of The Hills Shire Council's Contributions Plan No 13 – North Kellyville Precinct,* October 2011, p 39.

81 IPART, *Local Infrastructure Benchmark Costs*, April 2014, p 85.

82 The Hills Shire Council, Fact check of IPART's draft report, 20 November 2014.

83 IPART, *Local Infrastructure Benchmark Costs, Final Report*, April 2014, p 69.

Table 3.4 Comparison of indices in CP15's NPV model and IPART's recommended indices in IPART's Benchmark Report

	CP15	Recommended Indices in IPART's Benchmark Report
Transport works	ABS PPI Non-Residential Building Construction (3.33% per annum)	ABS PPI Road and Bridge Construction Index (3.90% per annum)
Stormwater works	ABS PPI Non-Residential Building Construction (3.33% per annum)	ABS PPI Road and Bridge Construction Index (3.90% per annum)
Open space works	ABS PPI Non-Residential Building Construction (3.33% per annum)	ABS PPI Non-Residential Building Construction Index (3.33% per annum)

Source: CP15, p 45 and IPART's Benchmark Report, p 68.

Revenue

CP15 uses the midpoint of the Reserve Bank of Australia (RBA) target range for consumer price inflation (2.5%) for its revenue forecasts. We consider that this is a reasonable approach and it is consistent with our recommendation in CP12 (Balmoral Road) and CP13 (North Kellyville) to use the CPI (All Groups).[84]

CP15 accounts for increases in revenue in its forecasts, therefore contributions rates are not indexed each year. We consider this to be reasonable as doing so would double count revenue indexation.

Forecasting price changes

In CP15, THSC has forecast future changes in the indices based on historical average annual percentage changes in the indices. CP15 applies these average percentage changes to the relevant costs and revenues over the life of the plan. Table 3.5 shows the selection of indices and the forecast annual growth of the relevant indices.

Table 3.5 Forecast annual growth of indices in CP15

Index	Forecast annual growth
Land (ABS Established House Price Index)	2.9%
Capital (ABS PPI Non-Residential Building Construction Index)	3.3%
Administration Costs and Revenue (Midpoint of RBA target range)	2.5%

Note: For the PPI Non Residential index, THSC uses the 14-year average and for the Established House Price Index, THSC uses the 10year average. This reflects the historical data available for each index.52

Source: CP15 Financial Model.

84 IPART, *Assessment of The Hills Shire Council's Contributions Plan No 12 – Balmoral Road Release Area*, October 2011, p 46 and IPART, *Assessment of The Hills Shire Council's Contributions Plan No 13 – North Kellyville Precinct*, October 2011, p 39.

We found THSC's approach to forecasting costs and revenues based on long term historical averages to be simple and transparent, and in general, a reasonable method to forecast future price movements.

3.4 Criterion 4: Timing

IPART Finding

14 The 40-year development timeframe in CP15 is considerably longer than:

- the timing of the infrastructure delivery schedule for the Precinct (ie, by year 25)
- the development timeframes in other comparable precincts in the LGA (eg, Bella Vista and Kellyville/Rouse Hill where development was completed within 18 years)
- the forecast timeframes of 25 years used in the supporting technical studies (eg, Hill PDA Study, Urbis Study and AECOM Services Study).

Recommendation

13 THSC shortens the timeframe for CP15 from 40 years to 25 years.

IPART must advise whether the proposed public amenities and public services can be provided within a reasonable timeframe.

The timing of the proposed public amenities and services is important as it:

- determines the timing of the council's expenditure
- demonstrates that the council has the capacity to provide the public amenities and services
- demonstrates that the council can provide the public amenities and services to meet the demand for those services within a reasonable timeframe.

3.4.1 Timing of infrastructure delivery

Table 3.6 shows the proposed timing of land acquisitions and works for each infrastructure category in the Box Hill Precinct. THSC's strategy is to acquire the land for all infrastructure by 2021/22. It will commence the infrastructure works in 2016/17, with overlapping staging of infrastructure for stormwater, transport and open space. Embellishment for all open space will require the longest amount of time to complete – around 20 years from 2019/20 to 2039/40.

In 25 years (by 2038/39), all infrastructure works should have been completed in the Precinct. In the last 14 years of CP15 (to 2052/53), THSC has scheduled administration costs only to process revenue. Table 3.6 shows the timing of infrastructure delivery and land acquisition in CP15. **Error! Reference source**

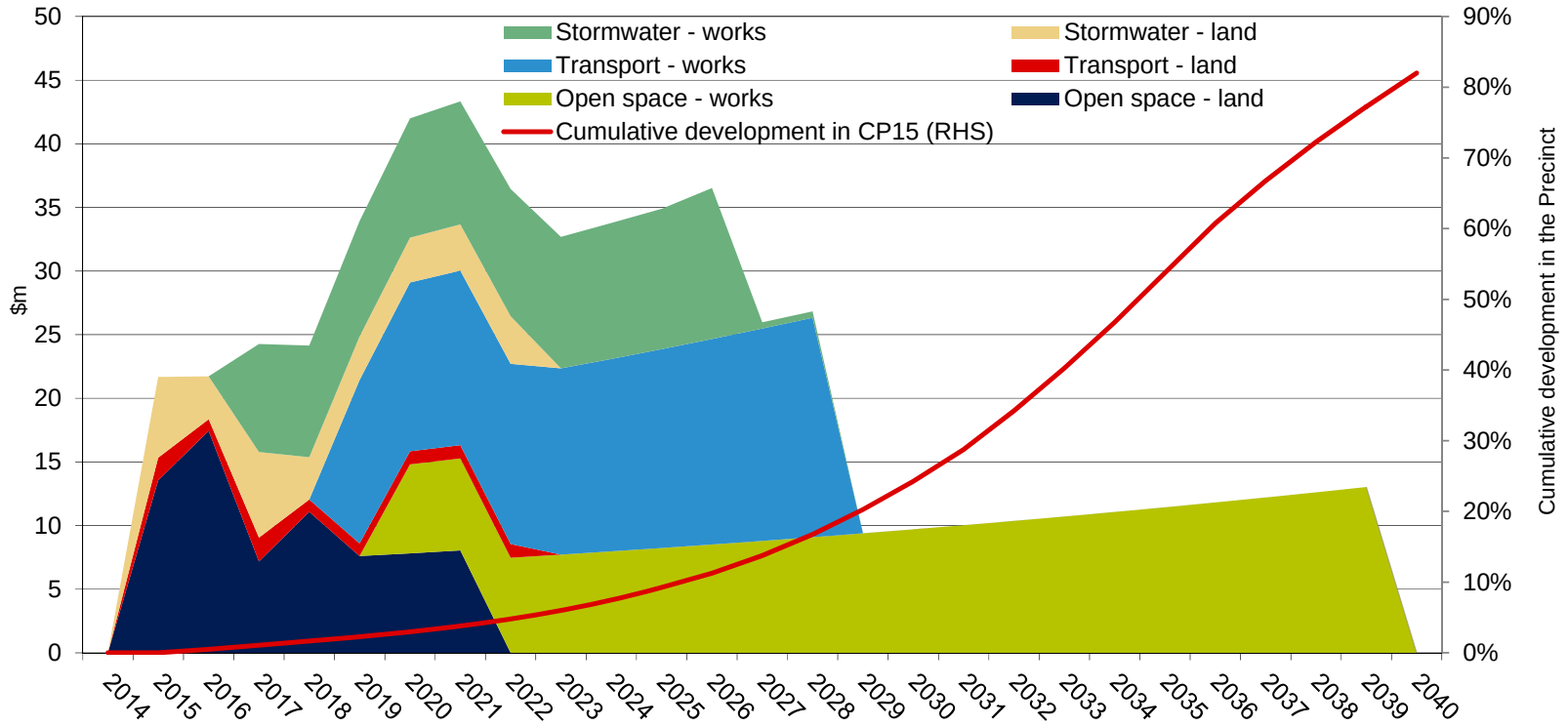
not found. charts the staging of infrastructure provision and the estimated rate of development.

Table 3.6 Expected timing of land acquisition and infrastructure delivery in CP15

Infrastructure category	Timing
Transport	THSC will acquire all of the land for transport infrastructure within the first eight years of development (by 2021/22). Transport infrastructure will be provided over ten years (from 2018/19 to 2027/28).
Open space	THSC will acquire all of the land for open space within the first seven years of development (by 2020/21). Open space infrastructure will be provided from 2019/20 to 2038/39.
Stormwater	THSC will acquire all of the land for stormwater infrastructure within the first eight years of development (by 2021/22). Stormwater infrastructure will be provided in the: ▾ KCP Catchment over 10 years from 2016/17 ▾ SPC Catchment over three years from 2025/26.

Note: THSC has assumed year 1 to be 2014/15 in its timeframe assumptions and modelling of contributions.
Source: CP15, p 45.

Figure 3.1 Proposed expenditure per year (2013/14 to 2039/40), by infrastructure category ($m) and development timeframe



Note: While this figure shows the infrastructure delivery and development until 2040/41, CP15 proposes development until 2052/53. Also, we have not included administration costs, which are allocated over 40 years from 2014/15 to 2052/53.

Data source: CP14, pp 15 and 44, and IPART calculations.

3.4.2 Development timeframe

The development path assumed in CP15 is over a 40-year timeframe . THSC identified that the 40-year timeframe in the Precinct is because of:

- the likely rollout of sewer and water services
- the estimated rate of development.[85]

3.4.3 Our assessment of THSC's approach to the timing of CP15

We found sufficient evidence to support a shorter timeframe for CP15 of 25 years rather than 40 years.

- The latest available information for servicing the Precinct from Sydney Water suggests that the rollout of water and wastewater services will occur earlier than originally anticipated.
- The development timeframes of comparable areas and the forecasts used in the technical studies also suggest that development can be reasonably expected to be completed within 25 years.

The likely rollout of water and sewer servicing

Sydney Water is responsible for the water and wastewater services in the Precinct. The majority of the Precinct is expected to be serviced with water and wastewater infrastructure by 2015, with the remainder of the Precinct to be serviced by 2025. Sydney Water's latest available water and wastewater servicing maps for the Precinct suggest progress as follows:

- Water servicing – indicatively, an estimated 8,000 dwellings are expected to be serviced with trunk water infrastructure in the Precinct by 2015. The remaining 1,500 dwellings are expected to be serviced between 2018 and 2025. Additional lead-in infrastructure will be required to be constructed by developers to connect their development to trunk infrastructure.
- Wastewater servicing – indicatively, an estimated 7,000 dwellings are expected to be serviced with trunk wastewater infrastructure by 2015. The remaining 2,500 dwellings are expected to be serviced by 2018. Additional lead-in infrastructure will be required to be constructed by developers to connect their development to trunk infrastructure.[86]

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85 The Hills Shire Council, *Council Business Papers – 22 July 2014*, p 183.

86 The servicing maps for the Box Hill Precinct were updated by Sydney Water in 2014 and will be published in December 2014. Source: Sydney Water, Response to IPART queries, 19 September and 17 November 2014.

Therefore, we consider that there are unlikely to be delays associated with the rollout of sewer and water servicing which support a timeframe for development beyond 25 years in the Box Hill Precinct.

The rate of development

CP15 noted that THSC had applied a development rate in CP15 consistent with two almost complete development areas of Bella Vista and Kellyville/Rouse Hill Precincts.[87]

During our assessment, THSC provided us with the development paths for the Bella Vista and Kellyville/Rouse Hill Precincts.[88] These paths show that development in these Precincts occurred within 18 years. This information supports our recommendation to shorten the development path from 40 years to 25 years.

The technical studies that inform the delivery of infrastructure in the Precinct also assumed a 25-year timeframe for the plan.

- The Urbis *Demographics and Social Infrastructure Assessment Study* (February 2011) assumed a population growth forecast over 25 years, from 2006 to 2031, for the Box Hill Precinct, based on the council's estimates.[89]
- The AECOM *Box Hill and Box Hill Industrial Infrastructure Services Assessment* (May 2011) assumed a 25-year development program, from 2014 to 2039, for utility infrastructure to be provided in the Precinct. It assumed that the Precinct will be developed at a relatively even rate.
- Hill PDA, *Box Hill Retail and Employment Study* (February 2011) assumed a timeframe of 22 years, from 2009 to 2031[90] (for employment forecasts and demand for non-residential land). The Hill PDA Study also assumed the Precinct would contain 28,000 residents by 2031.[91]

87 CP15, p 21.
88 The Hills Shire Council, Response to IPART queries, 1 October 2014.
89 Urbis Study, pp 25-26.
90 Hill PDA, *Box Hill Retail and Employment Assessment*, February 2011, p 59.
91 Hill PDA, *Box Hill Retail and Employment Assessment*, February 2011, p 55.

3.4.4 Is THSC's approach reasonable?

THSC advised that its selection of a 40-year timeframe was based on the original servicing strategy by Sydney Water.[92]

However, Sydney Water has advised that the number of lots that will be serviced by 2015 has increased significantly, compared with its original servicing strategy.[93]

We also found that CP15 does not align with the latest available evidence of development progress in nearby precincts or the assumptions in the technical studies.

Therefore, we recommend that CP15 be amended with a timeframe of 25 years. Consistent with our recommendation for a shorter timeframe, we also recommend that administration costs in CP15 be applied over 25 years instead of 40 years (see Recommendation 12).

3.4.5 What is the impact of a shorter timeframe?

We modelled the scenario where the development timeframe was shortened to 25 years against the original 40-year timeframe. We assumed that the path for the new 25-year scenario had the same general pattern of development as the original, but with development compressed over shorter timeframes. However, this is a hypothetical development path only. THSC would need to reconsider its assumptions for the development path if it shortened the timeframe in CP15 to 25 years.

We estimate that a 25-year timeframe, rather than a 40-year timeframe, would reduce the contributions rates on average by 12%, based on the other cost reductions we have recommended.[94]

92 The Hills Shire Council, Fact check of IPART's draft report, 20 November 2014.

93 AECOM's infrastructure services assessment (prepared during the precinct planning process) stated that Sydney Water's will only have 2,500 lots serviced with water and wastewater infrastructure by mid-2014. However, the latest information from Sydney Water showed around 7,000 to 8,000 lots will be serviced with water and wastewater infrastructure by 2015. Source: AECOM, *Box Hill and Box Hill Industrial Infrastructure Services Assessment*, May 2011, pp 13 and 15, and Sydney Water, Response to IPART queries, 19 September and 17 November 2014.

94 IPART calculations based on CP15 Financial Model.

3.5 Criterion 5: Apportionment

Apportionment refers to the share of the relevant costs of public amenities and services that is borne by the future development. The concept of apportionment is based on ensuring that developers pay only for the portion of demand that results from their new development. While nexus is about establishing a relationship between the development and demand for infrastructure, apportionment is about quantifying the extent of the relationship by ensuring that costs are shared appropriately between new and existing developments.

Apportionment should take into account and quantify:

- the demand generated by different types of development covered by a contributions plan, including residents in new dwellings, workers in new workplaces and visitors in tourist accommodation
- the capacity of existing infrastructure
- the proportional needs of the existing population, if any
- demand for infrastructure in the plan arising from existing or expected development outside the development area.

IPART must advise whether costs have been divided equitably between those who will benefit from the infrastructure. Costs can be apportioned between:

- existing demand and new demand
- different residential development densities
- residential and non-residential uses
- demand from development within and outside the precinct.

We found that most of the costs have been reasonably apportioned in CP15 to the expected development within the Box Hill Precinct. However, we consider that the apportionment of some costs should be revised:

- The cost of land for the bridge at Edwards Road over Smalls Creek should be apportioned on the same basis as the cost of works ie, 64% to CP15 and 36% to CP13 (North Kellyville).
- The cost of open space and related administration costs should be apportioned on a per person basis, as it is more equitable and reflects different demand for open space generated by different types of residential development.

3.5.1 How infrastructure costs in CP15 are apportioned

Table 3.7 summarises how infrastructure costs in CP15 are apportioned. This includes consideration of existing population and infrastructure needs, how it is apportioned amongst the new development and any infrastructure which is located offsite or apportioned to an offsite development area.

Table 3.7 How infrastructure costs in CP15 are apportioned

Infrastructure	Does it service the existing development?	How is it apportioned?	What is the apportionment catchment size?	Any offsite infrastructure or apportionment to offsite development area?
Transport	No	To all new development	90.8 ha	Yes, CP15 includes: ▾ Edwards Road bridge over Smalls Creek (shared with CP13 North Kellyville) ▾ Annangrove Road upgrade (shared with CP11 Annangrove Road Light Industry)
Stormwater	No	To all new development	Two separate catchments: ▾ Killarney Chain-of-Ponds (635.4 ha) ▾ Second Ponds Creek (55.5 ha)	No
Open space	No	To residential development only	549.1 ha	No
Administration	No	To all new development	690.8 ha	No

Source: CP15, pp 29, 32, 33, 36-38.

3.5.2 Exclusion of existing residential areas in the Box Hill Precinct

IPART Finding

15 THSC's approach to apportioning the cost of infrastructure in CP15 to new development only is reasonable.

THSC has not apportioned any costs in the plan to existing development in the Precinct (some 934 residents) and has granted a credit of 450m^2 to existing dwellings. This means that the developer can gain a credit against contributions payable when redeveloping existing sites (eg, subdivision).[95]

We consider that the exclusion of the existing developed areas in the apportionment calculations is reasonable. The infrastructure in the plan is based on the expected needs of future development in the Precinct and the technical studies have considered the existing demand and capacity of existing infrastructure in assessing new infrastructure requirements.

[95] CP15, pp 12 and 18.

3.5.3 Transport

IPART Findings

16 THSC's approach to apportioning the cost of transport infrastructure is reasonable.

17 THSC's approach to apportioning the capital costs of the bridge over Smalls Creek between with CP13 (North Kellyville) is reasonable. However, the council's approach to apportioning the land costs should be revised to be consistent with our recommendation for CP13 (North Kellyville).

Recommendation

14 THSC apportions 64% of capital and land costs for the Edwards Road bridge over Smalls Creek to CP15 and 36% to CP13 (North Kellyville).

The demand for transport infrastructure is driven by the expected residential (27,998 residents) and non-residential land (17,765 jobs) in the Precinct. Therefore, the costs for transport infrastructure are apportioned between both residential and non-residential development.

CP15 apportions transport infrastructure costs on a per hectare of net developable area (NDA) basis for both residential and non-residential land (ie, across 690.8 hectares).

There are two items which have been apportioned between the Box Hill Precinct and other Precincts:

- Annangrove Road upgrade (including a signalised intersection) at The Water Lane, with 50% of the capital costs apportioned to CP11
- the bridge at Edwards Road over Smalls Creek, with 34% of the cost of works apportioned to CP13 (North Kellyville).[96]

Assessment of transport infrastructure in the Precinct

We consider it is reasonable for transport infrastructure costs to be apportioned on a per hectare of NDA basis for both residential and non-residential land (ie, across 680.9 hectares of NDA in the Precinct).

The demand for transport infrastructure is driven by both residential and non-residential development. Therefore, it is reasonable for total transport costs to be first divided between these broad categories of development based on the respective shares of NDA in the Precinct.

[96] CP15, pp 32-33.

For consistency, the council has also apportioned transport costs to both non-residential and residential development based on the area of land to be developed. For non-residential land, we consider that this is the most practical apportionment approach. Apportionment based on the hectare of NDA ensures that the council will recover the costs of infrastructure from non-residential development in the Precinct. This is because the total NDA will not change. In contrast, the nature of non-residential development and the employment generated may change from what is originally anticipated.

However, an alternative to apportioning the transport costs for residential development on an NDA basis is to apportion the costs on a per person basis. The demand for transport infrastructure is largely driven by the population, so this may be considered a more equitable approach in accounting for variations in transport demand. As discussed in section 3.5.5, we have recommended that open space be apportioned on a per person basis to improve the equity of contributions rates among different densities of residential development. It also provides relative certainty to the council in recovering contributions from developments.

We acknowledge that the council has apportioned transport costs to residential development based on the area of land to be developed to be consistent with the approach for non-residential development. We understand that this is a common approach in contributions plans, including those reviewed by IPART. We also note that there is a relatively small difference in contributions rates between residential development types under either approach. Therefore, while we consider the population-based approach is more equitable, we found that the land area approach is also reasonable to apportion the cost of transport costs across the residential development.

Assessment of Edwards Road bridge over Smalls Creek

We consider that the apportionment of the Edwards Road bridge over Smalls Creek is reasonable. The apportionment is based on the relative share of the incoming residents between both Precincts.[97]

However, we note that the costs apportioned between CP13 (North Kellyville) and CP15 should be updated to reflect the latest population estimate for the Box Hill Precinct.[98] We recommend THSC apportion 64% of the cost of land and facilities for the Edwards Road bridge to CP15 and 36% to CP13 (North Kellyville). This is based on the expected incoming population for the Box Hill Precinct (27,998) and the North Kellyville Precinct (15,563).

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97 CP15, p 18 and 34.

98 The council apportioned 66% of the cost of the facilities for this bridge to CP15. This is based on the previous population estimate of 30,000 residents for the Box Hill Precinct that was used in CP13 (North Kellyville). Source: CP15 Works Schedule and The Hills Shire Council, *Contributions Plan No 13 – North Kellyville Precinct*, February 2010, p 34.

Assessment of Annangrove Road upgrade

The cost of the Annangrove Road upgrade is apportioned evenly between CP15 and *Contributions Plan No 11 – Annangrove Road Light Industrial Area* (CP11). THSC provided preliminary engineering advice on how the road upgrade was costed.[99]

This apportionment approach for the Annangrove Road upgrade has been contained in CP11 since it was prepared in 2003. The 50:50 approach reflects the fact that the population of both precincts will use the road as it directly bisects the Box Hill Precinct and the Annangrove Road Light Industrial Area.

We note that the relative amount of floor space for employment purposes is also split fairly evenly between the precincts with around 60% of floor space to CP15 and 40% to CP11.[100] However, a significant portion of the floor space in the Box Hill Precinct is located in the business park near Windsor Road and in the centre of the Precinct, such that workers are less likely to generate trips along this road. In contrast, employment land in the Annangrove Road Light Industrial area is concentrated along or near Annangrove Road.

For these reasons, we consider that the apportionment of 50% of the costs in CP15 is reasonable.

3.5.4 Stormwater

IPART Finding

18 THSC's approach to apportioning the cost of stormwater infrastructure is reasonable.

The need for stormwater infrastructure is driven by both residential and non-residential land uses. The Precinct is divided into two catchments (Figure 3.2) for stormwater infrastructure:

- Killarney Chain of Ponds Catchment (larger catchment – 635.35 hectares)
- Second Ponds Creek Catchment (smaller catchment – 55.45 hectares).[101]

THSC has split the Precinct into two catchments to apportion stormwater infrastructure costs. This is because modelling shows runoff in the Seconds Ponds Creek Catchment will be discharged and serviced offsite,[102] and will require a separate stormwater infrastructure network compared with the runoff to the Killarney Chain of Ponds Catchment.

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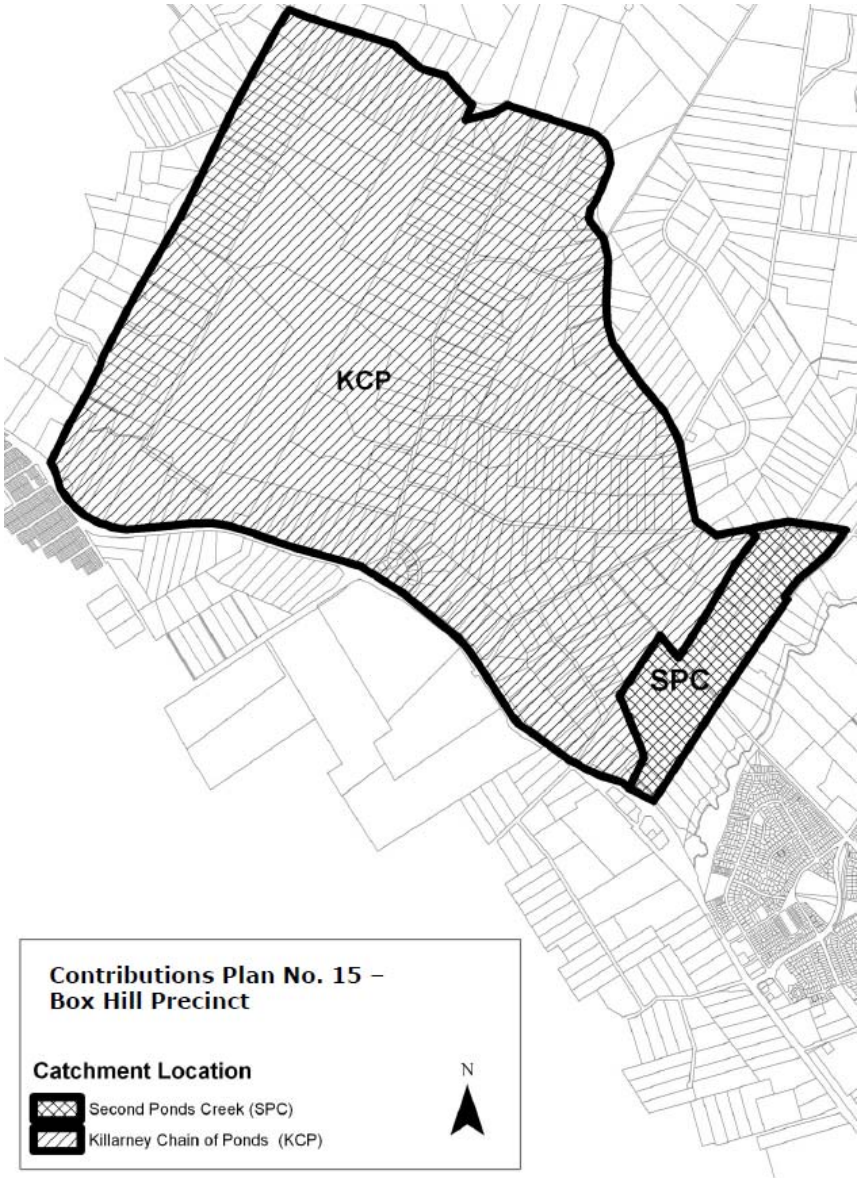
99 The Hills Shire Council, Response to IPART queries, 4 November 2014.

100 The total leasable floorspace area is 781,061m² in the Box Hill Precinct and 494,336m² in the Annangrove Light Industrial Area. Source: CP15, p 24 and CP11, p 19.

101 CP15, p 36.

102 JWP Study, June 2012, p 17.

Figure 3.2 Stormwater catchments in the Box Hill Precinct



Source: The Hills Shire Council, *Contributions Plan No 15 – Box Hill Precinct,* August 2014, p 49.

Assessment of stormwater infrastructure apportionment

The apportionment of stormwater costs for both residential and non-residential uses on a per hectare of NDA basis is reasonable. Stormwater infrastructure design is dictated by the size of the catchment area and therefore it is reasonable to apportion stormwater costs on a per hectare of NDA basis.

This approach is consistent with how stormwater costs have been apportioned in contributions plans previously reviewed by IPART and provides an equitable approach to levying contributions.

We also consider that the apportionment of stormwater costs in accordance with the two catchments is reasonable. The catchments reflect different stormwater infrastructure needs to accommodate the different water flows in the Precinct, as identified in the JWP Study.

3.5.5 Open space

IPART Finding

19 THSC's approach to apportioning the cost of open space on a per hectare of net developable area basis is not reasonable. We consider a more equitable approach is to apportion the cost of open space on a per person basis because demand for open space is population driven.

Recommendation

15 THSC apportions the cost of open space on a per person basis, rather than on a per hectare of NDA basis.

THSC apportioned the cost of open space on a per hectare of net developable area (NDA) basis to residential development in the Precinct.

THSC's apportioned the cost this way so income projections from future development are based on land area and will not be greatly affected by variations in development yield.[103] However, we do not consider that this represents an equitable approach to apportioning costs.

Assessment of open space infrastructure apportionment

Our assessment found that THSC's approach to apportioning the cost of open space is not reasonable.

THSC's approach does not take into account different residential densities which directly impact demand for the infrastructure. For example, a lot of 1,000m^2 with one low density dwelling will pay the same contributions as a 1,000m^2 high density residential development. The high density residential development will contain more dwellings, and therefore more people, than the low density dwelling, and will therefore create a higher demand for open space infrastructure. Therefore, this approach to levying contributions is inequitable.

[103] The Hills Shire Council, Response to IPART queries, 1 October 2014, p 21.

We recommend open space costs should be apportioned on a per person basis. This should be calculated by taking the total open space costs in CP15, and dividing it by the expected population for the Box Hill Precinct (27,998 people). This approach reflects an equitable approach that links demand created to the infrastructure costs.

3.5.6 Administration costs

IPART Finding

20 THSC's approach to apportioning administration costs on a per hectare of net developable area basis is reasonable, except for the administration costs of open space embellishment.

Recommendation

16 THSC apportions administration costs for open space embellishment on a per person basis.

CP15 apportions the cost of administration costs on a per hectare of net developable area (NDA) basis to residential and non-residential development.

Assessment of administration costs apportionment

We consider that THSC's approach is mostly reasonable, except for the administration costs for open space embellishment. As discussed above in section 3.5.5, we consider that the cost of open space should be apportioned on a per person basis. Consistent with this recommendation, we recommend that administration costs for open space embellishment should also be apportioned on a per person basis.

3.6 Criterion 6: Consultation

IPART Findings

21 THSC conducted appropriate community liaison and publicity in preparation of CP15 in 2012.

22 THSC made significant cost changes to CP15 prior to adoption, valued at approximately $100m or 32% of the original cost of the exhibited plan, without undertaking further consultation. THSC did not provide stakeholders with an opportunity to provide comment on most of the changes as reflected in the adopted version of CP15.

Recommendation

17 THSC re-exhibits CP15 to allow stakeholders the opportunity to make comment on the significant changes to infrastructure and costs. THSC should re-exhibit

CP15 after it has considered IPART's recommendations and any requests made by the Minister for Planning.

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

3.6.1 Draft Contributions Plan exhibition

The Draft Contributions Plan was exhibited from 7 August to 7 September 2012. THSC also wrote to 368 property owners to notify them about the exhibition of the contributions plan, which was available to view on the internet.[104]

During the exhibition period, THSC received four submissions, with three from the public and one from the Roads and Maritime Services (RMS).[105] The submissions raised a number of issues, including:

- the zoning changes that occurred during the Precinct Planning process
- what land is included in the NDA calculation for the Precinct
- the use of works-in-kind agreements
- the inclusion or exclusion of specific items from CP15.

THSC provided adequate feedback and incorporated comments from the submissions into CP15. This included clarifying that:

- two sections of Mount Carmel Road (BHRN01B and BHRN02) are classified as a sub-arterial road
- Windsor Road and Mount Carmel Road intersection (BHT02) will be funded by the RMS on the 'Location of Facilities' maps in CP15.[106]

3.6.2 Our assessment of THSC's consultation for CP15

THSC conducted appropriate community liaison and publicity in preparing the draft contributions plan in 2012. However, THSC made significant cost changes to infrastructure items in the adopted CP15 from the exhibited CP15 but did not give stakeholders an opportunity to provide feedback on the revised plan. In particular, the cost of open space embellishment and transport facilities has increased significantly by around $100m (or 32%) since the exhibition version.[107]

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104 CP15 Application Form, Criterion 6, p 1 and The Hills Shire Council, *Council Business Papers – 22 July 2014*, pp 185-186.
105 The Hills Shire Council, *Council Business Papers – 22 July 2014*, pp 186-193.
106 The Hills Shire Council, *Council Business Papers – 22 July 2014*, p 192.
107 The Hills Shire Council, *Council Business Papers – 22 July 2014*, p 203.

Generally, contributions plans should be re-exhibited where there are significant changes relating to:

- the cost of infrastructure in the plan
- changes to rates arising from applying a different apportionment methodology, or adjustment to development plans
- changes to land zonings and development occurring in the area.

We therefore recommend that THSC re-exhibit CP15 after it has considered IPART's recommendations and any requests made by the Minister for Planning. The re-exhibition of CP15 should be in accordance with legislative requirements.[108] This will provide stakeholders with an opportunity to make comment on these changes.

3.7 Criterion 7: Other matters

IPART Finding

23 CP15 was adopted and came into force prior to its submission to IPART for review. This is inconsistent with the Practice Note.

24 CP15 complies with the statutory information requirements and is generally consistent with Development Contributions Practice Note (2005).

Recommendation

18 In future, all councils should submit contributions plans to IPART prior to final adoption, consistent with the Practice Note.

3.7.1 Adoption of contributions plans prior to submission to IPART

THSC adopted CP15 in July 2014 prior to submitting the contributions plan to IPART for review.[109] The Practice Note for IPART's assessment of plans states that contributions plans should be submitted to IPART for review after public exhibition but before adoption.[110]

[108] The contributions plan should be re-exhibited having consideration for Clause 28 of the *Environmental Planning and Assessment Regulation 2000.*

[109] CP15 came into force on 5 August 2014. Source: CP15, p 15.

[110] Department of Planning & Infrastructure, *Revised Local Development Contributions Practice Note: For the assessment of Local Contributions Plans by IPART*, February 2014.

There is no legislative requirement for plans to be submitted to IPART prior to the council adopting them, and THSC advised that it was willing to take the risk in adopting the contributions plan so that it could process development applications.[111] Nonetheless, it is our preference that all future contributions plans that are submitted to IPART for review should be done so prior to adoption.[112]

This is because it allows the council to make any further changes to the contributions plan and to also incorporate those changes that may be requested by the Minister (from IPART recommendations), before it establishes the contributions rate payable by developers. Once a council adopts a contributions plan, it may then need to undertake a review of the plan to make changes requested by the Minister, depending on the nature of the changes. In this case, the council may need to make a new plan, consistent with the requirements under the *Environmental Planning & Assessment Regulation 2000*.[113] Therefore, we consider that it is more efficient for IPART to first review the plan, before it is adopted.

3.7.2 Works-in-kind arrangements

A submission to THSC during the exhibition period raised the issue of works-in-kind (WIK) arrangements. CP15 states:

> Where an applicant makes a written request and council in its absolute discretion determines that it is appropriate, an applicant may provide a material public benefit (commonly referred to as works-in-kind) in part, or full, satisfaction of a monetary contribution. Any written request must demonstrate that the works in kind are of equivalent or greater benefit to the community compared to what has been identified under this Contributions Plan.[114]

We consider that CP15 contains clear and transparent WIK arrangements. The WIK arrangements are consistent with arrangements that have been included in other contributions plans submitted by THSC to IPART for review.

Ultimately, WIK agreements are negotiated between the council and the developer. It is at the developer's discretion as to whether or not they wish to undertake works-in-kind and, it is at the council's discretion as to how it wishes to grant offsets in satisfaction of monetary contributions, consistent with the provisions of the contributions plan.

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111 The Hills Shire Council, Response to IPART queries, 1 October 2014, pp 1-2.

112 We note that councils have the option to enter into Voluntary Planning Agreements (VPAs) with developers to collect contributions in lieu of a section 94 contributions plan.

113 *EP&A Regulation 2000*, cl 32-33A.

114 CP15, p 9.

3.7.3 Other information presented in the contributions plan

Requirements for the contents of a contributions plan are found in:

- the EP&A Act which sets out the provisions for the making of contributions plans (section 94EA)
- the EP&A Regulation which lists the particulars that must be included in contributions plans (clause 27) (see Appendix D)
- the *Development Contributions Practice Notes (2005)*.

We found that the information provided in CP15 generally complies with the statutory requirements and is set out in a manner that is consistent with the guidelines in the 2005 Practice Notes (see Appendix D).[115]

[115] 2005 Practice Notes, pp 10-30.

Appendices

A List of Finding and Recommendations

Criterion 1: Essential Works

IPART Findings

1 All infrastructure items in CP15 are on the Essential Works List except for some open space infrastructure: 20

- The works for the indoor recreation centre in Park 5, which exceeds the definition of base level embellishment. 20
- The miscellaneous 'sundry measured items' for which the council has not provided enough evidence to support its inclusion. 20

Recommendations

1 THSC removes the works for the indoor recreation centre ($18,875,430), and 'sundry unmeasured items' for Parks 1 to 6 ($5,217,975) from the cost of essential works in CP15. This will reduce the cost of essential works in CP15 by $24,093,405. 20

2 THSC reviews the need to include $500,000 in the base cost for the 'possible watercourse' for Park 4 once it has prepared detailed designs. Should these works not be required, THSC remove the costs for the 'possible upgrading works to existing watercourse' in CP15. 20

Criterion 2: Nexus

IPART Findings

2 There is reasonable nexus between transport infrastructure items in CP15 and the expected development in the Box Hill Precinct. 25

3 There is reasonable nexus between the stormwater infrastructure in CP15 and the expected development in the Box Hill Precinct. 27

4 There is reasonable nexus between the open space land and embellishment in CP15 and the expected development in the Box Hill Precinct. Although we

consider that the total amount of open space is low, we note that the active open space provision meets the requirements identified in the studies and is accessible. There are likely to be other opportunities for passive open space in the Precinct in the future, particularly on drainage land. 28

5 THSC has incorrectly included Turnbull Reserve in calculating the rate of open space provision because it services the existing population of residents. 28

Recommendations

3 THSC includes in CP15 the land acquisition costs (which have yet to be quantified) for the two sections of Mount Carmel Road (BHNR01B and BHNR02A), for which the capital costs are already included in CP15. 25

4 The Department of Planning & Environment, in consultation with THSC, updates the State Environmental Planning Policy (Growth Centres) zoning and land acquisition maps to include THSC as the acquisition authority for the land for BHNR01B and BHRN02A in Recommendation 3. 25

5 THSC omits Turnbull Reserve in calculating the rate of open space provision for the expected development in the Precinct. 28

Criterion 3: Reasonable costs

IPART Findings

6 THSC's approach to costing land using an independent valuer is reasonable. 32

7 THSC's approach to estimating the cost of transport infrastructure is reasonable, except for the costs for some new main roads, road upgrades and roundabouts which are based on IPART's Benchmark Report. This is because the AECOM Report cost estimates for these items are more detailed and location-specific. 34

8 THSC's use of the JWP Study and updated AECOM cost estimates for stormwater infrastructure is reasonable. 38

9 THSC's use of the AECOM Report's cost estimates for Parks 1 to 6 is reasonable. 38

10 THSC's contingency allowances for transport and open space infrastructure of 30% and 20% respectively, which are based on IPART's recommended allowances for these categories at the Strategic Review project stage, do not align with the reduced risk suggested from the detailed designs and cost estimates in the technical studies. 40

11 The contingency allowance of 15% for stormwater infrastructure, based on cost estimates in the JWP Study (June 2012), is reasonable. 40

12 The inclusion of administration costs in CP15, based on the allowance of 1.5% of capital works costs, is reasonable. However, we found the timing of administration costs extending beyond 2039 is not reasonable. 42

13 THSC's NPV model assumptions to determine the contributions in CP15 are reasonable, including the application of: 43

- the 20-day average of the 10-year NSW Treasury bond yield to determine the nominal discount rate 43
- the long term historical average of the ABS Established House Price Index (Sydney) to escalate land costs 43
- the long term historical average of the Producer Price Index (Non-Residential Building Construction) to escalate works costs 43
- the midpoint of the Reserve Bank of Australia's target range for CPI to escalate administration costs and revenues. 43

Recommendations

6 THSC corrects the amount of land to be acquired in CP15 (for items BHPF03001 and BHPF03002) from 54.84 to 58.24 hectares and increase the cost of open space land by $1,408,535, from $65,877,822 to $67,286,357. 32

7 THSC uses the base cost estimates for the new main roads, road upgrades and roundabouts in CP15 recommended in the AECOM Report (January 2014) to ensure that the costs are based on site-specific considerations. This will reduce the cost of essential works in CP15 by $16,330,037. 34

8 THSC pursues opportunities for commercial arrangements for bus stops. If commercial arrangements are entered into, the council should review CP15 to remove the net cost of these bus stops from the plan. 34

9 THSC prepares new cost estimates for the embellishment of 11.96 hectares of local parks (passive open space). The cost estimate should specify what is included in open space embellishment and be based upon a more recent estimate (eg, from current tender rates or quantity surveyor estimates). 39

10 Given the reduced risk associated with the availability of detailed designs and cost estimates, THSC reduces the contingency allowances for: 40

- transport infrastructure from 30% to 20% 40
- open space infrastructure from 20% to 15%. 40

This will reduce the cost of essential works in CP15 by $5,446,567 for transport infrastructure and $3,095,078 for open space infrastructure. 40

11 THSC allocates administration costs over 25 years instead of 40 years, consistent with our recommendation to reduce the development timeframe in CP15 (Recommendation 12). 43

12 THSC considers forecasting the cost of works in CP15 using the industry-specific indices recommended in IPART's Benchmark Report: 43

- for transport and stormwater infrastructure, the ABS PPI (Road and Bridge Construction) 43
- for open space embellishment, the ABS PPI (Non-Residential Building Construction). 43

Criterion 4: Timing

IPART Finding

14 The 40-year development timeframe in CP15 is considerably longer than: 48

- the timing of the infrastructure delivery schedule for the Precinct (ie, by year 25) 48
- the development timeframes in other comparable precincts in the LGA (eg, Bella Vista and Kellyville/Rouse Hill where development was completed within 18 years) 48
- the forecast timeframes of 25 years used in the supporting technical studies (eg, Hill PDA Study, Urbis Study and AECOM Services Study). 48

15 THSC's approach to apportioning the cost of infrastructure in CP15 to new development only is reasonable. 55

Recommendation

13 THSC shortens the timeframe for CP15 from 40 years to 25 years. 48

Criterion 5: Apportionment

IPART Findings

16 THSC's approach to apportioning the cost of transport infrastructure is reasonable. 56

17 THSC's approach to apportioning the capital costs of the bridge over Smalls Creek between with CP13 (North Kellyville) is reasonable. However, the council's approach to apportioning the land costs should be revised to be consistent with our recommendation for CP13 (North Kellyville). 56

Criterion 7: Other Matters

IPART Findings

23 CP15 was adopted and came into force prior to its submission to IPART for review. This is inconsistent with the Practice Note. 63

24 CP15 complies with the statutory information requirements and is generally consistent with Development Contributions Practice Note (2005). 63

Recommendation

18 In future, all councils should submit contributions plans to IPART prior to final adoption, consistent with the Practice Note. 63

B Section 94 Contributions Plan No 15 – Box Hill Precinct

Contributions Plan No. 15

Box Hill Precinct

THE HILLS Sydney's Garden Shire

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August 2014

CONTENTS

TABLES

FIGURES

Amendment No.	Description	Date Amendment Came into Force

1 PART A: SUMMARY SCHEDULES

This Plan is The Hills Section 94 Contributions Plan (CP) No.15 – Box Hill Precinct.

The contributions received from this Plan will provide for both active and passive open space (pedestrian/cycle links, parks, playgrounds etc), road works, drainage, and administration costs.

The open space, road works and drainage to be provided will contribute towards satisfying the needs of the incoming population and workforce of the Box Hill Precinct. The adjusted net developable area available for development subject to the plan is 690.8 hectares and will provide approximately 9,431 dwellings and approximately 17,765 jobs.

The costs of required open space, road works, drainage and administrative tasks are summarised below.

Work Schedule: Cost per Category (base cost)

OPEN SPACE	AMOUNT $
Land	65,877,822
Works	114,836,524
SUB TOTAL	**180,714,346**

TRANSPORT AND TRAFFIC	AMOUNT $
Land	8,630,599
Works	108,973,130
SUB TOTAL	**117,603,729**

WATER MANAGEMENT – KILLARNEY CHAIN OF PONDS	AMOUNT $
Land	29,727,351
Works	76,931,961
SUB TOTAL	**106,659,312**

WATER MANAGEMENT – SECOND PONDS CREEK	AMOUNT $
Land	661,007
Works	951,333
SUB TOTAL	**1,612,340**

ADMINISTRATION	AMOUNT $
SUB TOTAL	**4,525,394**

TOTAL WORKS:	**411,115,121**

Development Timetable

It is anticipated that expenditure will occur on a pro-rata basis in accordance with the development path as outlined in Table below.

Year	% of Net Developable Area
5	1.1%
10	3.7%
15	9.0%
20	20.5%
25	32.5%
30	22.5%
35	7.5%
40	3.3%

Contributions by Category – Per Hectare of Net Developable Area

	Residential Development		Non-Residential Development	
Facility Type	$: Rate Ha SPC*	$: Rate Ha KCP*	$: Rate Ha SPC*	$: Rate Ha KCP*
Open Space Land	$171,741.06	$171,741.06	-	-
Open Space Capital	$265,547.85	$265,547.85	-	-
Transport Land	$17,722.48	$17,722.48	$17,722.48	$17,722.48
Transport Capital	$213,934.29	$213,934.29	$213,934.29	$213,934.29
Water Management Land (SPC)*	$17,421.19	-	$17,421.19	-
Water Management Capital (SPC)	$22,345.88	-	$22,345.88	-
Water Management Land (KCP)**	-	$66,370.66	-	$66,370.66
Water Management Capital (KCP)	-	$167,943.53	-	$167,943.53
Administration	$6,872.61	$6,872.61	$6,872.61	$6,872.61
TOTAL	**$715,585.36**	**$910,132.47**	**$278,296.45**	**$472,843.56**
2014/2015	**$733,474.99**	**$932,885.78**	**$285,253.86**	**$484,664.65**
2015/2016	**$751,811.87**	**$956,207.92**	**$292,385.21**	**$496,781.27**

* Second Ponds Creek Catchment

** Killarney Chain of Ponds Catchment

2 PART B: ADMINISTRATION AND OPERATION OF THE PLAN

INTRODUCTION

2.1 Section 94 Principles

Under Section 94 of the Environmental Planning and Assessment Act, 1979 ("EP&A Act") Council has the power to levy contributions from developers for public amenities and services required because of development.

The three general principles in applying Section 94 contributions are:

1. A contribution must be for, or relate to, a planning purpose;
2. A contribution must fairly and reasonably relate to the subject development; and
3. The contribution must be such that a reasonable planning authority, duly appreciating its statutory duties, could have properly imposed.

Under the provisions of Section 94, Council may either:

- require land to be dedicated free of cost;
- require money to be contributed for works or facilities to be provided in the future;
- require money to be contributed towards the cost of works or facilities already provided in anticipation of development;
- accept the provision of a material public benefit, or works in kind, in satisfaction of Section 94 requirements; or
- require or accept a combination of any of the above.

The ability to levy developers for the provision of essential public facilities and services is considerably important to The Hills Shire. This "user pays" approach can significantly reduce the financial burden of new urban development on existing Shire residents.

One of the fundamental responsibilities of any Council in imposing Section 94 contributions is to ensure that the contributions levied are reasonable. That is, the works and facilities to be provided must be a direct consequence of the development on which the contributions are levied. They must not unnecessarily inflate development costs. Therefore, contributions are limited to essential or base-line works and facilities considered necessary to sustain acceptable urban development.

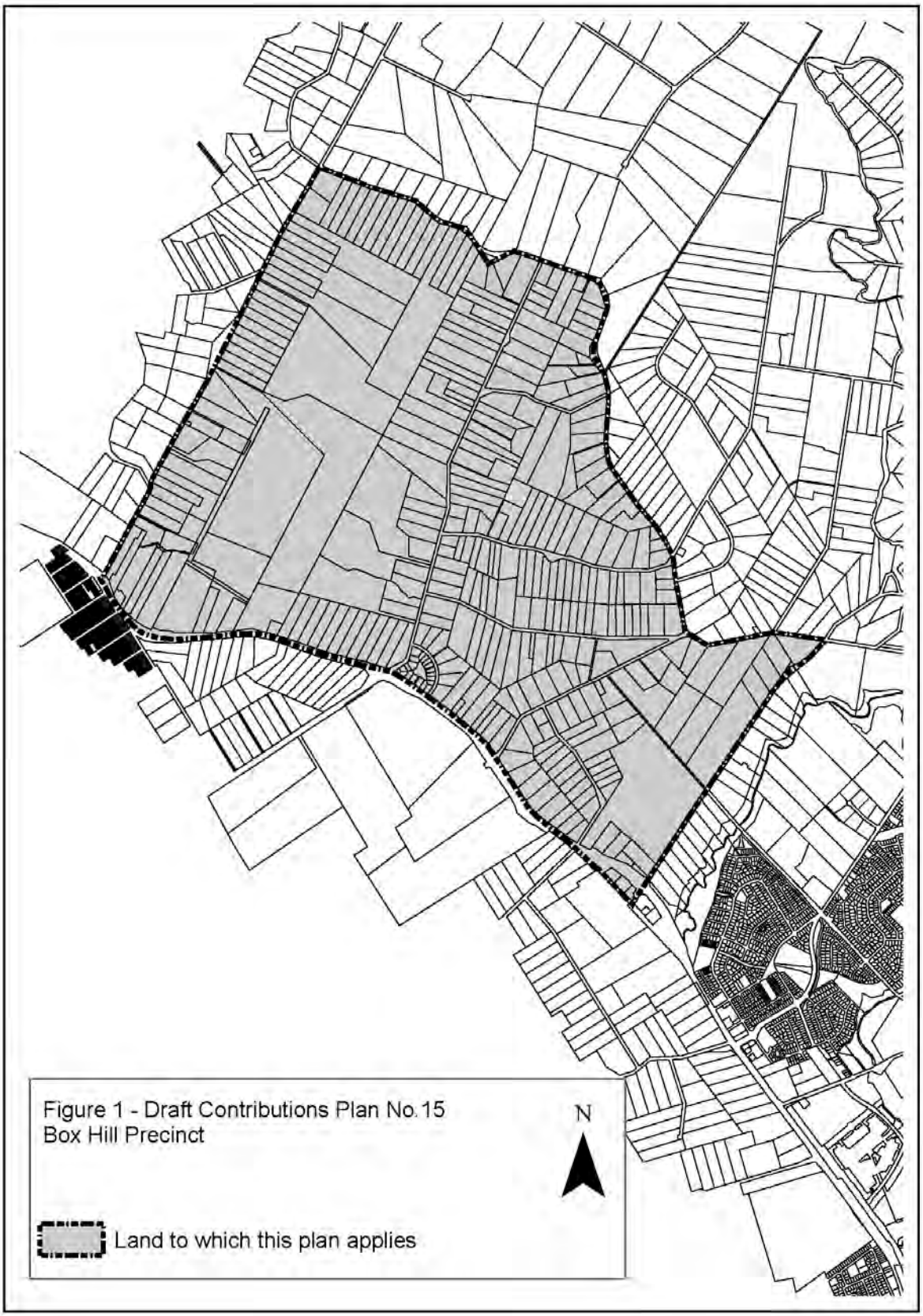
2.2 What is the Name of this Plan

This Contributions Plan is called 'Contributions Plan No.15 – Box Hill Precinct'.

2.3 Area to which this plan applies

This Contributions Plan applies to the Box Hill Precinct as shown on the Locality Map at Figure 1.

FIGURE 1: LAND TO WHICH THIS CONTRIBUTIONS PLAN APPLIES



2.4 What is the purpose of this Development Contributions Plan?

The purpose of this development contributions plan is to:

(a) authorise the council to impose conditions under section 94 (s94) of the *Environmental Planning and Assessment Act 1979* when granting consent to development on land to which this plan applies;

(b) provide an administrative framework under which specific public facilities strategies may be implemented and co-ordinated;

(c) outline the anticipated demand for public facilities and services arising from the development of the Box Hill Precinct;

(d) ensure that adequate public facilities are provided for as part of any new development in the Box Hill precinct;

(e) provide a comprehensive strategy for the assessment, collection, expenditure, accounting and review of development contributions in the Box Hill Precinct;

(f) ensure that the existing community is not burdened by the provision of public amenities and public services required as a result of future development; and

(g) enable the council to be both publicly and financially accountable in its assessment and administration of the development contributions plan.

2.5 Application of the Plan

When a development application is lodged and relates to land to which this plan applies, Council shall levy contributions on development in accordance with the provisions of this Plan.

A Contributions Plan becomes part of the development control process under the EP&A Act by virtue of Sections 80A and 94. The provisions of this plan are one of a number of considerations that are relevant when Council determines a development application in accordance with Section 80 of the Act.

2.6 Commencement of this Plan

This development contributions plan has been prepared pursuant to the provisions of s94 of the EP&A Act and Part 4 of the EP&A Regulation and takes effect from the date on which public notice was published, pursuant to clause 31(4) of the EP&A Regulation.

2.7 Relationship with other plans and policies

The development contributions plan supplements the provisions of the State Environmental Planning Policy (Sydney Region Growth Centres) 2006 (Appendix 11 – The Hills Growth Centre Precincts Plan) and any amendment or local environmental plan which it may supersede.

DEVELOPER CONTRIBUTIONS

2.8 Policies and Procedures on the Levying and Payment of Contributions

The following sections describe the policies and procedures involved in levying and payment of developer contributions under this plan including method/timing of payment, planning agreements, deferred/periodic payment, obligations of accredited certifies with respect to construction certificates/complying development, savings and transitional provisions, credits/offsets for works-in-kind, calculation of contributions rates and review and monitoring process of the plan.

2.9 Method of Payment

Council will accept Section 94 payments in one, or a combination, of the following ways:

Monetary Contribution

This is the most common method of payment. However, as discussed below, payment can be offset by providing a material public benefit that is identified in the Contributions Plan.

Material Public Benefit (Works-in-Kind)

Where an applicant makes a written request and Council in its absolute discretion determines that it is appropriate, an applicant may provide a material public benefit (commonly referred to as works-in-kind) in part, or full, satisfaction of a monetary contribution. Any written request must demonstrate that the works in kind are of equivalent or greater benefit to the community compared to what has been identified under this Contributions Plan. The proposed works in kind offset must be included in the conditions of consent or a S96 modification of the consent, to reflect the proposed offset.

The works must be included in the works schedule as set out in Section C. The cost of the work will be offset against the contribution required for the same facility category only. For example if the works relate to the embellishment of a local park the cost of the works would be offset against the required open space contribution. The amount of the offset will be as agreed by Council and will not exceed the cost allocation for the works included in the Contributions Plan.

In assessing such a request, Council will generally take into account the following:

- whether the proposed work in kind will be to a suitable standard for Council to eventually accept;
- finalisation of, or consistency with, the detailed design of the facilities;
- the submission of plans and cost estimates to Council of the proposed works to be undertaken by the applicant;
- whether the location, siting and design of the proposed works has regard to the Development Control Plans applying to the Box Hill Precinct and this Contributions Plan;
- the timing of completion and future recurrent costs including staffing and maintenance and future management (particularly if a work to a higher standard is proposed);
- Council may consider works to a higher standard than the Contributions Plan allowance, however no reimbursement of additional costs will be provided;

- the financial implications for cash flow and whether the proposed works pre-empt the future orderly implementation of the works as identified in the works schedule; and
- future dedication, handover and management arrangements.

Dedication of Land

Council will generally not accept the dedication of land (identified for public purposes under this plan) to offset the required monetary contribution. Rather the developer will be required to pay the full contribution relating to land acquisition. The value of land can then be negotiated separately between the applicant and Council, and a value formally agreed upon prior to payment. An appropriate condition may be included in any consent applying to land identified for public purposes to ensure that the land is transferred to Council. These consents would require satisfactory arrangements being made with Council's Manager – Special Property Projects.

2.10 Planning Agreements

In accordance with Section 93F(1) of the EP&A Act, a planning agreement is a voluntary agreement or arrangement between a planning authority and a developer under which the developer agrees to make contributions towards a public purpose. A planning agreement may wholly or partly exclude the application of Section 94 to the development that is subject of the agreement.

The provisions of Sections 93F to 93L of the EP& A Act and accompanying Regulation prescribe the contents, form, subject matter and procedures for making planning agreements. Any person seeking to enter into a planning agreement should in the first instance submit a proposal in writing to Council, documenting the planning benefits and how the proposal would address the demands created by development for new public infrastructure, amenities and services.

2.11 When must Contributions be paid?

Section 94 contributions must be paid in full, as follows:

- **Development Applications involving subdivision only**: Prior to the issue of a Subdivision Certificate.
- **Development Applications involving building work only** - where conditions of consent require the payment of a contribution: Prior to the issue of a Construction Certificate.
- **Combined Development Applications for Subdivision and Building Works:** Prior to the issue of a Construction Certificate. If individual construction certificates are submitted for each dwelling, payment is required in full for the total development or stage (as approved in accordance with Section 2.12 of this plan) prior to the issue of a construction certificate for the first dwelling.
- **Combined Development Applications for development and building works** - where conditions of consent require the payment of a contribution: Prior to the issue of a Construction Certificate.

2.12 Deferred or Periodic Payment

Council will only permit deferred or periodic payment where development is staged. The stages of development and relevant contribution payment for each stage must be clearly documented in the conditions of consent. In this regard a Section 96 modification of

consent is required if proposed staging of development is not reflected in the original consent.

For development which is staged, Section 94 contributions must be paid at the rate applicable at the time of subdivision or construction certificate, for at least the number of additional lots/dwellings for which subdivision or construction certificate release is sought.

For each stage, the calculation of the number of lots/dwellings for which contributions are payable will count any residue lot as a single lot.

For example:

Stage 1 20 residential lots and one residue lot are created from one original lot. Contributions would be payable for 20 lots (20 + 1 residue less 1 existing credit*).

Stage 2 20 residential lots are created from the residue lot. Contributions would be payable for 19 lots (20 lots less the one existing residue lot).

This method ensures that contributions are paid for the total number of additional lots created from an original lot/s. In the example, 40 lots are created from 1 existing lot and contributions are payable for 39 additional lots.

* Refer Section 2.16.

2.13 Construction certificates and the obligations of accredited certifiers

In accordance with Section 94EC of the EP&A Act and clause 146 of the EP&A Regulation, a certifying authority must not issue a construction certificate for building work or subdivision work under a development consent unless it has verified that each condition requiring the payment of monetary contributions has been satisfied.

In particular, the certifier must ensure that the applicant provides a receipt confirming that contributions have been fully paid and copies of such receipts must be included with copies of the certified plans provided to the Council in accordance with clause 142(2) of the EP&A Regulation. Failure to follow this procedure may render such a certificate invalid.

2.14 Complying development and the obligations of accredited certifiers

In accordance with Section 94EC of the EP&A Act accredited certifiers must impose a condition requiring monetary contributions in accordance with this Contributions Plan for the following development types:

- Dwelling houses on an allotment where no previous contribution under Section 94 has been made.

The conditions imposed must be consistent with Council's standard Section 94 consent conditions and be strictly in accordance with this Contributions Plan. It is the professional responsibility of the accredited certifiers to accurately calculate the contribution and to apply the Section 94 condition correctly.

2.15 Credit and Offsets for Works In Kind

There may be cases where an applicant carries out works in kind, which are included in the Schedule of Works in this Contributions Plan but the cost of which exceeds the contribution required for that facility category. In these situations the applicant will be reimbursed for the cost of the works that:-

- exceed the contribution due within that facility category, and
- have been approved by Council as being consistent with the contributions plan.

2.16 Credit for existing development

The payment of contributions is applicable to any development in Box Hill which will increase the population or development over and above that which existed on 5 August 2014 and which will create a demand for the provision of such infrastructure.

For the purposes of calculating contributions payable under this plan a credit will be made available for any existing lot with an approved dwelling that existed on or before 5 August 2014. For the purpose of this contributions plan, a credit of 450m^2 will apply for each existing dwelling.

However, any parcel that was vacant on or prior to 5 August 2014 which did not generate a demand for works or facilities of the type to be levied for under this plan, and for which no previous contribution under Section 94 of the EP&A Act has been made, shall upon subdivision or development for residential purposes be liable for the payment of contributions in accordance with this Contributions Plan.

In short, Section 94 credits will not apply to existing vacant parcels.

2.17 Savings and transitional arrangements

A development application which has been submitted prior to the adoption of this plan but not determined shall be determined in accordance with the provisions of the plan which applied at the date of determination of the application.

2.18 Pooling of contributions

This plan expressly authorises monetary s94 contributions paid for different purposes to be pooled and applied (progressively or otherwise) for those purposes. The priorities for the expenditure of the levies are shown in the works schedule.

2.19 Exemptions

The only exemptions allowed are those the subject of a direction from the Minister for Planning under Section 94E of the EP&A Act.

2.20 Calculation of Contributions

Net Present Value Method

The contribution formula has been arrived at having regard to the Development Contribution Practice Notes issued by the then Department Infrastructure Planning and Natural Resources (DIPNR) in July 2005. These notes provide Council with two options, either a calculation based on nominal values or a net present value (NPV) methodology.

To ensure that the value of contributions is not eroded over time, the proposed method of contribution calculation is based upon a NPV methodology. This approach is a standard financial accounting tool which discounts future cash flows to account for the fact that funds received or spent today are worth more than future funds.

Contributions Formula

The formula uses a discounted cash flow model, to calculate the contribution rate per person. The model covers a period of 40 years (life of the Contributions Plan). The following elements are used in this calculation:

Land Acquisition Index

The land acquisition indexation assumption is based upon an average of the annual percentage change in the Australian Bureau of Statistics Established House Price index for Sydney over the past 11 years from December 2002 to December 2013.

Capital Expenditure Index

The capital expenditure indexation assumption is based upon an average of the annual percentage change in the Australia Bureau of Statistics Producer Price Index for New South Wales over the past 15 years from December 1998 to December 2013.

Administrative Costs Index

Administrative costs will be indexed at 2.5% which represents the midpoint of the Reserve Bank of Australia's inflation target of 2-3%, on average over the cycle.

Indexed Expenditure

Total of Indexed land acquisition, capital or administrative costs.

Revenue Projections

Revenue will be indexed at 2.5% which represents the midpoint of the Reserve Bank of Australia's inflation target of 2-3%, on average over the cycle.

Cash Flow

A cash flow projection will be prepared using the above elements over the life of the Contributions Plan. The cash flow is the difference between the Indexed Expenditure and the Revenue Projections.

Discount Rate

The NSW Treasury Corporation 10-year bond rate (quoted as a percentage) as of March 2014 and sourced from the Reserve Bank of Australia. This is consistent with the recommendations within the Draft Technical Paper *Modelling Local Development Contributions (Selection of a discount rate for Councils that use an NPV methodology)* prepared by the Independent Pricing and Regulatory Tribunal.

Formula

The Contribution rate per hectare is determined on the basis that the NPV (Net Cash Flow) at the Discount Rate over the total life of the plan is neutral. This is calculated using the following formula for each facility category:

$$PV(Costs) = PV(\mathrm{Re}venue)$$

$$PV(\mathrm{cos}ts) = N_1 * DC + \frac{N_2 * DC}{(1+r)} + ... + \frac{N_t * DC}{(1+r)^t}$$

Where: N (i) = No. of hectares in year (i)
DC = development contribution ($ in year 1 of CP)
r = discount rate (%)
t = time in years

From the equation above:

PV (Costs) = PV [(No. of hectares) * (Development Contribution)]

Therefore:

PV (Development Contribution) = PV [(Costs) / (No. of hectares)]

The Contribution rate for residential or non-residential development is determined by the contribution rate per hectare (see Part C, Table 18).

A summary of the program of works by facility category is included in Part C, Table 17 and contains details of population and net developable area assumptions and indexation assumptions over the life of the plan. Contribution rates are set out in Part A – Summary Schedules.

Net Developable Area

The Net Developable Area is defined as the land occupied by development, including internal streets plus half the width of any adjoining access roads that provide vehicular access, but excluding public open space indicated on the Precinct Plan.

For the purpose of determining monetary contributions, the following land may be excluded from Net Developable Area:

- flood affected land, below the 1 in 100 year flood level;
- existing urban zoned land within the Growth Centres (unless subject to a change of land use zoning which allows for an intensification of use generating additional demand for regional infrastructure and services);
- land zoned as public recreation;
- land zoned as environmental conservation;
- land identified as public open space;
  (1) in either one of the three components of the Precinct Planning Package, being the SEPP, DCP or Section 94 Contribution Plan; or
  (2) which is accepted for dedication as open space by Council or the Growth Centres Commission;
- land set aside for publicly owned community facilities and/or community services provided under Section 94 of the EP&A Act;
- public schools and TAFE colleges;
- publicly owned health facilities;
- ambulance stations, fire stations & police stations;
- roads to be provided under the provision of Section 94 of the EP&A Act;
- major roads in the North West and South West Growth Centres included in the Schedules at Section 2 of the Practice Note;
- existing road to be included as part of the proposed road network;
- bus depots, bus transfer stations;
- rail corridors, rail stations & associated parking facilities;
- transport corridors;
- golf courses, but not associated structures such as club houses and the like. In some instances it may be appropriate to grant a time limited consent to ensure the golf course does not prevent the future urban development of the site; and
- areas for facilities provided by Sydney Water or Integral Energy.

2.21 Review and Monitoring Of Plan

This plan will be subject to regular review by Council in accordance with the provisions of the EP&A Regulation. The purpose of such a review is to ensure that:

- levels of public service and amenity provisions are consistent with likely population trends and community needs;
- contribution levels reflect changes to construction costs and land values;

- the work program can be amended if the rate of development differs from current expectations.

The contribution rates and works program for this plan have been formulated using information available at the time of writing. A number of variables will be monitored to facilitate the review process. Some of these are listed below:

- lot production and dwelling construction
- potential development remaining
- construction costs
- land costs
- projected development rate
- assumed occupancy rates
- anticipated population
- indexation assumptions.

The contribution rates will be reviewed by reference to the following specific indices:

- capital works and construction costs by the Australian Bureau of Statistics Producer Price Index.
- land acquisition costs by reference to the Australian Bureau of Statistics Established House Price index for Sydney.
- Revenue and administration costs by the Australian Bureau of Statistics All Groups CPI for Sydney.
- changes in the capital costs of various studies and activities required to support the strategies in the plan by reference to the actual costs incurred by council in obtaining these studies.

Any changes to the Contributions Plan, apart from minor typographical corrections, will be placed on public exhibition in accordance with the requirements of the EP&A Act and Regulation.

2.22 Contributions Register

A Contributions Register will also be maintained for this Contributions Plan in accordance with the *EP&A Regulation* and may be inspected on request. This Register will include:

- details of each consent for which a Section 94 condition has been imposed;
- the nature and extent of the contribution required by the condition for each facility category;
- the name of the Contributions Plan the condition was imposed under; and
- the date any contribution was received and its nature and extent.

At the end of the each financial year, the Council is required to make an annual statement within the yearly budget. This statement must include the following:

(a) Opening and closing balances of money held in the Section 94 Contributions Plan by the Council for the accounting period;

(b) Total amounts received by way of monetary contribution under this Plan;

(c) Total amount spent in accordance with this Plan; and

(d) Outstanding obligations of the Council to provide works for which contributions have been received.

2.23 When did this plan come into force?

This Plan came into force on 5 August 2014.

3 PART C: STRATEGY PLANS

3.1 Residential Development Nexus

3.1.1 Anticipated development: dwelling structure and population

This section sets out supporting information for the demographic assumptions pertaining to the future resident population of Box Hill. These assumptions have been derived by analysing five similar, but now almost fully developed areas, in The Hills Shire and with slight adjustments taking the averages for:

- dwelling profile or mix;
- occupancy rates for dwelling types;
- age structure; and
- anticipated family type.

The final demographic components are based on a profile which will apply when the area is fully developed.

3.1.2 Anticipated Dwelling Profile

Table 1 sets out the number of dwellings of each type located in five similar, almost fully developed and predominately residential areas in The Hills as at the 2006 Census. The earliest development in these five areas only commenced some 20 years ago.

TABLE 1: FIVE SIMILAR DEVELOPMENT AREAS: NUMBER OF DWELLINGS BY TYPE: 2006

Area	Separate House	Townhouses, villas	Flats	Senior Housing	Totals
Bella Vista	1,397	464	18	0	1,879
West Pennant Hills	5,603	282	101	215	6,201
Crestwood	2,805	405	21	0	3,231
Glenhaven	2,151	197	15	114	2,477
Kellyville/ Rouse Hill	13,659	848	51	0	14,558
TOTALS	***25,615***	***2,196***	***206***	***329***	***28,346***
% of Total Dwellings	***90.37%***	***7.75%***	***0.73%***	***1.16%***	***100%***

Based on the historical number of dwellings by type and estimated average lot sizes, Table 2 sets out the estimated dwelling yield when fully developed.

TABLE 2: BOX HILL PRECINCT - ESTIMATED DWELLINGS AND MIX AT FULL DEVELOPMENT

Dwelling Type	Average density (d/ha)	*Total net area (ha)*	% of total dwellings	*Dwellings*
Dwelling Houses	15	*439.8*	70%	*6597*
Integrated Housing	18	*52.3*	10%	*941*
Senior Housing	55	*5.4*	3%	*295*
Multi Dwelling Housing /Attached Housing	30	*27.7*	9%	*830*
Residential Flat Buildings	60	*10.6*	7%	*635*
Large Lot Subdivision	5	*13.5*	1%	*135*
TOTALS		***549.10***	100.00%	**9,431**

The anticipated dwelling mix in the Box Hill Precinct is generally consistent with Table 1, with single dwelling houses comprising 81% (Dwelling Houses, Large Lot and Integrated Housing) of all dwellings, multi dwelling housing 9%, residential flat buildings 7% and senior housing 3%. Whilst this outcome is generally consistent with the historical mix of housing developed, it provides for a greater variety of types and sizes of dwellings.

The key drivers for the provision of a mix of dwelling types include:

- increasing household diversity;
- relative affordability where larger dwellings are not affordable to a significant proportion of the market;
- the emerging market for smaller and higher density homes in niche developments such as those which are provided in the nearby suburbs of Rouse Hill, Kellyville and Beaumont Hills; and
- an ageing population seeking smaller homes and retirement housing options better suited to their lifestyle needs.

Notwithstanding these trends, the Box Hill Precinct will continue to attract predominantly younger couples and family households who are home owners looking to “trade up” to a house with greater amenity or size.

3.1.3 Dwelling Occupancy

Table 3 sets out the average occupancy rates for the four (4) different types of residential development based on historical analysis of the five (5) similar development areas in The Hills as at the 2006 Census.

TABLE 3: FIVE SIMILAR DEVELOPMENT AREAS: AVERAGE OCCUPANCY RATES, 2006

Dwelling Type	Average Occupancy Rates
Dwelling Houses	3.4
Integrated Housing Development	2.7
Senior Housing	1.3
Multi Unit Housing:	
1 Bedroom	1
2 Bedroom	1.7
3 Bedroom	2.4
4 bedroom	3.1

Source: Australian Bureau of Statistics, 2006 Census of Population and Housing.

3.1.4 Estimated population

Table 4 indicates the total estimated population at full development based on assumed dwelling yield and occupancy rates.

TABLE 4: ESTIMATED POPULATION BASED ON DWELLING MIX AND OCCUPANCY

Dwelling Type	Number of Estimated Dwellings	Average Occupancy Rate	Total Estimated Population
Dwelling Houses	6,597	3.4	22,428
Integrated Housing	941	2.7	2,541
Senior Housing	295	1.3	383
Multi Dwelling Housing/Attached Housing	830	2.55	2,114
Residential Flat Buildings	635	1.59	1,009
Large Lot Subdivision	135	3.4	457
TOTALS			28,932
Less existing residents			***934***
Expected additional population of the Box Hill Precinct			***27,998***

3.1.5 Age & sex structure

Table 5 sets out the total population occupied by each age category for the five similar development areas as at the 2006 Census.

TABLE 5: FIVE SIMILAR DEVELOPMENT AREAS: AGE & SEX STRUCTURE: NUMBERS OF PERSONS, 2006

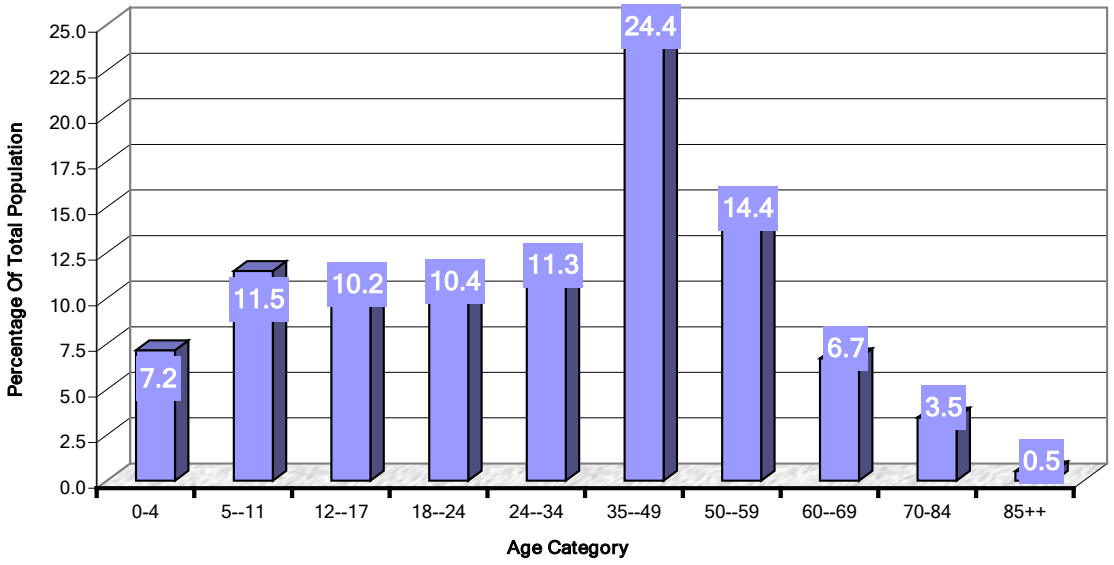
Area	Age Group									
	0-4	5-11	12-17	18-24	24-34	35-49	50-59	60-69	70-84	85+
Bella Vista	289	634	662	845	574	1,473	1,015	461	268	30
West Pennant Hills	721	1,565	1,809	2,032	1,301	3,642	3,072	1,402	657	163
Crestwood	544	1,205	1,211	1,326	953	2,653	1,770	785	427	60
Glenhaven	380	808	976	907	612	1,875	1,341	626	295	29
Kellyville/ Rouse Hill	3,957	5,259	3,761	3,442	5,855	10,424	4,659	2,258	1,205	149
TOTALS	***5,891***	***9,471***	***8,419***	***8,552***	***9,295***	***20,067***	***11,857***	***5,532***	***2,852***	***431***

Source: ABS, 2006, Baulkham Hills Expanded Community Profile

The graph at Figure 2 sets out the average percentage of the total population occupied by each age category for the five similar development areas.

FIGURE 2: AGE CATEGORY BY FIVE SIMILAR DEVELOPMENT AREAS

BAULKHAM HILLS, FIVE SIMILAR DEVELOPMENT AREAS, 2006. AVERAGE PERCENTAGE OF TOTAL POPULATION OCCUPIED BY EACH AGE CATEGORY



Source: ABS, 2006, Derived from Baulkham Hills Expanded Community Profile for the five areas

Based on the total estimated population and the percentages of the total population set out in Figure 2, Table 6 sets out the anticipated numbers of persons in each age group at full development.

TABLE 6: AGE STRUCTURE AT FULL DEVELOPMENT: NUMBER OF PERSONS

	Age Group									
	0-4	5-11	12-17	18-24	24-34	35-49	50-59	60-69	70-84	85+
Box Hill	2,016	3,220	2,856	2,912	3,164	6,832	4,004	1,876	980	140

Source: ABS, 2006, Baulkham Hills, derived from Expanded Community Profile

3.1.6 Anticipated family type

Table 7 sets out the numbers of households occupied by each family type as at the 2006 Census for the five similar development areas.

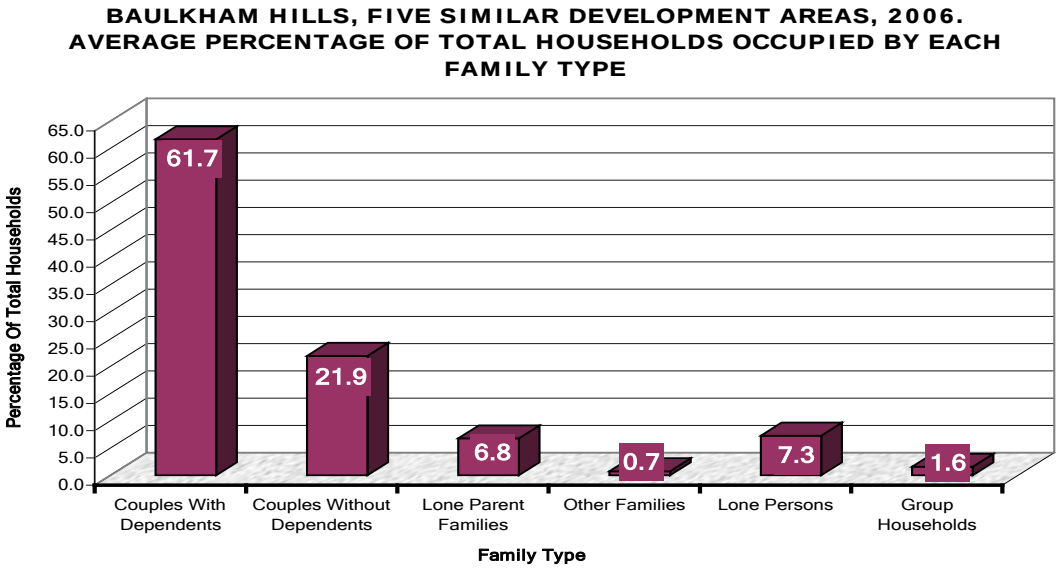
TABLE 7: FIVE SIMILAR DEVELOPMENT AREAS: NUMBER OF FAMILIES BY FAMILY TYPE, 2006

Area	Family Type					
	Couples With Dependents	Couples Without Dependents	Lone Parent Families	Other Families	Lone Persons	Group Households
Bella Vista	1,020	454	89	16	143	71
West Pennant Hills	3,569	1,211	400	61	439	40
Crestwood	1,873	699	204	12	246	72
Glenhaven	1,354	533	181	25	162	27
Kellyville/ Rouse Hill	8,661	2,960	937	86	956	208
TOTALS	***16,477***	***5,857***	***1,811***	***200***	***1,946***	***418***

Source: ABS, 2006, Baulkham Hills, Census of Population and Housing

Figure 3 sets out the average percentage of the total households occupied by each family type for the five similar development areas.

FIGURE 3: FAMILY TYPE BY FIVE SIMILAR DEVELOPMENT AREAS



Source: ABS, 2006, Baulkham Hills derived from Expanded Community Profile

Based on the total estimated number of households, the percentage of total households by family type provided in Table 8 sets out the anticipated numbers of households by family type at full development.

TABLE 8: BOX HILL: FAMILY TYPES AT FULL DEVELOPMENT: HOUSEHOLDS

Area	Family Type					
	Couples With Dependents	Couples Without Dependents	Lone Parent Families	Other Families	Lone Persons	Group Households
Box Hill	17,275	6,132	1,904	196	2,044	448

Source: ABS, 2006, Baulkham Hills, derived from Expanded Community Profile

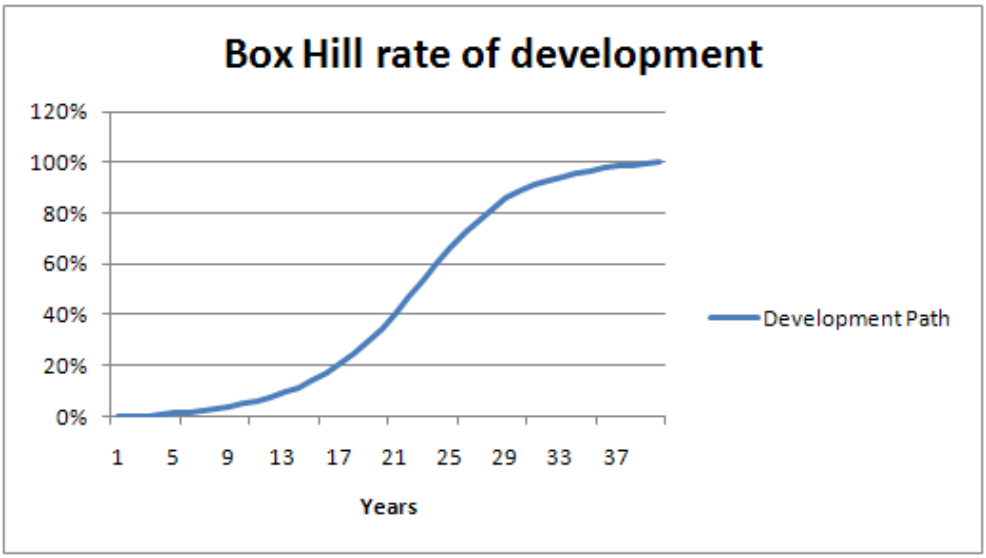
3.1.7 Timing of residential development

Urbis Pty Ltd have undertaken a residential market demand assessment as part of their Demographics and Social Infrastructure Report. The report identifies that the market for dwellings in Box Hill will predominantly come from a defined trade area that can support approximately 1390 sales of land per annum. Of this trade area, Box Hill is identified as potentially capturing 19% of the market. According to Urbis Pty Ltd, this would result in three potential development scenarios:

- Most likely – 207 dwellings PA
- Pessimistic – 121 dwellings PA
- Optimistic – 264 dwellings PA

The Contributions Plan applies a development rate consistent with two (2) existing almost complete development areas of Bella Vista and Kellyville Rouse Hill. For the purpose of simplicity, the same rate of development has been assumed for residential and non-residential development as shown in Figure 4 below:

FIGURE 4: BOX HILL DEVELOPMENT PERIOD



3.1.8 Total Net Development Area

This plan establishes the contribution rate on a per hectare basis. The total area of land available for development is 768.2ha. This value has been adjusted to account for a number of factors including existing roads, schools identified on the Box Hill Indicative Layout Plan which are not zoned, land owned by s94 exempt housing providers and land identified for large lot subdivision.

Table 9 below summarises the total net developable area available:

TABLE 9: TOTAL NET DEVELOPABLE AREA CALCULATIONS

Total Net Developable Area	**HA**
Area of Urban Land	768.20
Less:	
Existing Roads	17.18
Planned Schools Not Zoned	18.78
Land owned by S94 Exempt Housing Providers	15.31
Capped Large Lots	13.78
Existing Dwelling Entitlement	12.36
Total Net Area	**690.79**

3.2 Commercial Centres - Development Nexus

Appendix 11 of *State Environment Planning Policy (Sydney Region Growth Centres) 2006* provides for one (1) town centre and three (3) village centres. Provision for employment and industrial land is also made as discussed below:

Town centre and villages

The Box Hill Town Centre is located east of the intersection of Terry Road and Mason Road. Its central location is readily accessible to future residents, and will provide approximately 21,000m^2 of retail floorspace. The centre will have good public transport connections to Rouse Hill and Riverstone Stations.

Each of the village centres allows approximately 5,000m^2 of retail. A village at the Windsor Road Business Park will service the employment area and passing traffic along Windsor Road.

Employment

The Precinct Plan provides for over 140 hectares of employment land with the potential to generate approximately 17,700 jobs. The Precincts will have a mix of employment opportunities, centred around the Windsor Road Business Park and the Annangrove Road Light Industrial Area.

A B6 Enterprise Corridor zone is located west of the town centre to create an interface between the retail areas and adjoining high density residential areas. The Precinct Plan provides 58.5ha of land zoned for light industrial and 68.4ha of land zoned for business park.

The B7 Business Park Zones provides a range of office and light industrial uses and enables other land uses that provide facilities or services to meet the day to day needs of workers in the area. The IN2 Light Industrial Zone provides the opportunity to develop a wide range of light industrial, warehouse and related land uses.

3.2.1 Demand for retail floorspace

Hill PDA Consultants have prepared an assessment of demand for retail floorspace that is generated by households and workers within a defined trade area having regard to both escape expenditure and expenditure that potentially could be captured from outside the trade area. This method then converts expenditure from residents and workers in the trade area into demand for retail floorspace (square metres) by dividing the target retail turnovers by store type.

Demand for retail floorspace is derived from applying industry benchmark turnover rates to expenditure captured in Box Hill. The results are provided in the following table.

TABLE 10: FORECAST RETAIL FLOORSPACE DEMAND IN BOX HILL TO 2031

Retail Store Type	2009	2011	2016	2021	2026	2031
Estimated population*	1,247	1,409	2,012	5,810	17,654	33,088
Supermarkets & Grocery Stores	469	526	777	2,081	6,017	11,323
Specialty Food Stores	192	216	318	848	2,439	4,581
Fast-Food Stores	151	169	249	654	1,857	3,471
Restaurants, Hotels and Clubs	231	259	382	1,007	2,870	5,373
Department Stores	346	382	564	1,368	3,605	6,544
Clothing Stores	40	45	66	168	464	859
Bulky Goods Stores	166	185	273	695	1,922	3,556
Other Personal & Household Goods	232	259	382	1,001	2,835	5,296
Selected Personal Services	129	144	213	559	1,589	2,970
Total Retailing	**1,957**	**2,185**	**3,225**	**8,381**	**23,599**	**43,974**

*Estimated population within primary and secondary trade areas

3.2.2 Demand for Employment Land

Hill PDA Consultants have developed a proprietary model to forecast demand for employment land by converting job forecasts to land area requirements by industry type within a defined trade zone or sub region. The model applies a different trade zone to that used for the retail assessment and is instead based on Statistical Local Area of Baulkham Hills North, Blacktown and the Hawkesbury.

The forecast is based on NSW Transport Data Centre employment projections which are based on the detailed analysis of employment growth across the Sydney Greater Metropolitan Region by industry Type. The assessment has considered demand based on job containment and supply versus demand based on existing and planned employment areas within the locality.

The land area, floorspace and resulting job forecast for development in Box Hill as shown below:

TABLE 11: ESTIMATED EMPLOYMENT CALCULATIONS

Non Residential Land Use Type	Worker Density GLA / Worker	Internal Efficiency	Worker Density GFA / Worker	FSR	External Efficiency*	Jobs / Dev. Ha	Ha	No. of Jobs	GLA (sqm)
Business Park (Windsor Rd)	35	82.50%	42.4	1	77.50%	182.7	68.4	12,488	437,013
Business (Adjoin Town Centre)	31	82.50%	37.6	0.7	77.50%	144.4	2.8	404	12,532
Light Industrial	80	100.00%	80	0.65	77.50%	63	58.5	3,686	294,694
Town Centre	31	77.50%	40	0.5	77.50%	96.9	7.1	688	21,323
Village Centres	31	80.00%	38.8	0.5	77.50%	100	5.0	500	15,500
Total						**587**	**141.8**	**17,765**	**781,061**

The above estimates are identified by Hill PDA as below their recommended level of provision to achieve a target of 75% job containment.

3.2.3 Timing of non-residential development

Hill PDA Consultants have examined demand for occupied land area within the trade zone that includes the Statistical Local Areas of Baulkham Hills North, Blacktown North and the Hawkesbury. The assessment is based on a development period of 25 years assuming Box Hill is fully developed by this time. The report has not considered the likely development period due to the staging of services by Sydney Water.

For the purpose of this Contributions Plan, the timing of non-residential development is assumed to have the same profile as residential development as shown in Figure 4.

3.3 Rationale for New Facilities and Services

A key principle of Section 94 is to demonstrate a relationship between the anticipated development and the demand for additional open space, community facilities, drainage and road works in the Box Hill Precinct. The demonstration of a relationship between new development and such demand is a core requirement of a valid Contributions Plan.

The expected development and resulting population and employment workforce within the Box Hill Precinct will create an increased demand for various public facilities and services. Studies listed in Section 4 of this plan have identified that the expected development in the Box Hill Precinct will generate the following impacts on public services and public amenities:

- increased demand for local active and passive recreation facilities, such as playing fields, playgrounds, and bike paths;
- increased demand for facilities that will support safe and convenient travel such as new roads and public transport facilities; and
- increased demand for water cycle management facilities as a result of the extra stormwater runoff generated by impervious surfaces associated with urban development.

A range of facilities and services have been identified as being required to address the impacts of the expected development, including:

- traffic and transport management facilities
- water cycle management facilities
- open space and recreation facilities

The following section of the Contributions Plan identifies the nexus between the proposed urban release and the facilities or services listed above, specifies the appropriate level of apportionment (if any), and provides a brief description of the proposed works and their timing.

3.4 Open Space Facilities

3.4.1 Open Space Demand

The open space and recreation facilities required from the expected development of the Box Hill Precinct is documented within a study entitled "Demographics and Social Infrastructure Assessment: Box Hill and Box Hill Industrial Precincts" prepared by Urbis in February 2011 ("the Urbis Study").

The Urbis study indicates that there is strong demand for additional facilities in the Shire. In summary, recreational facilities are operating at or near capacity and there is an undersupply of active sports fields for sports such as Rugby League, Rugby Union, Touch Football and Soccer. There is also a need for the provision of increased open spaces suitable for use by families with young children, having particular regard for the need for adequate provision of shading, fencing and water services.

The Urbis study has recommended service provision based on a benchmark rate of provision rather than a 'needs based' approach more commonly applied in the Hills Shire. As such, the recommended level of provision is summarised in Table 12 below.

TABLE 12: URBIS RECOMMENDED LEVEL OF PROVISION

	Type	Recommended area (ha)
Passive	Formal Local Parks	8
	Informal space in linear parks, riparian zones or drainage easements	24
Active	Local sports fields (mix of soccer, union, league and AFL)	24
	District sports fields	6
	Hockey Field (additional to district sports fields)	3
	Netball / basketball	1
	Tennis Centre (district)	2
	Baseball / softball	1
	Children's playground	1.12
Total recommended area		**70.12**

3.4.2 Summary of the demand analysis of existing facilities

There are no existing facilities within the precinct or adjacent areas that will be able to meet the needs of the new population. However, district and regional level needs may be met in the surrounding area, particularly those within the Rouse Hill Regional Centre.

While there is a reasonable supply of open space in adjacent areas, overall there is a shortage of sports fields across the Shire and the Box Hill Precinct will not be able to rely on open space in the surrounding area.

3.4.3 Proposed Open Space and Recreation Facilities

The proposed provision of Open Space and Recreation Facilities is summarised in Table 13 below.

TABLE 13: BOX HILL OPEN SPACE PROVISION

Description	**Number Facility (fields)**	**Area (Ha)**
Local Parks	11	12.2
Sports Fields	5 (12)	31.8
District Facility	1 (6)	15.6
Tennis Centre	1 (12)	NA
Athletics Track	1	NA
Hockey Field	1	NA
Netball/Multi-Purpose Courts	10	NA
Total Area	59.6	
Forecast population	**Hectares per 1000 persons**	
27,998	2.13	

The total area of public open space to be provided via this Contribution Plan for the projected population of 27,998 persons is 59.6 hectares (excluding water management areas that may be suitable for some passive recreation). This equates to 2.13 ha per 1000 persons and represents a shortfall of approximately 11 hectares based on the Urbis recommendation.

While this is below the standard benchmark of 2.83 hectares of open space per 1000 people as contained with the Growth Centres Development Code and recommended by the Urbis Study, sufficient provision of active recreation is proposed for organised sport. Further, some water management areas within the precinct may be suitable for passive recreation.

The various categories of open space to be provided by this plan can be grouped as either playing fields or local parks. The function of these open space categories and a brief description of the proposed facilities are outlined below.

Playing fields

The Urbis study indicates that there is strong demand for additional facilities in the Shire with an undersupply of active sports fields for sports such as Rugby League, Rugby Union, Touch Football and Soccer.

A land area of 31.8 ha has been identified to meet the demand for active sports fields generated by the future residents of the Box Hill Precinct and will accommodate the following facilities:

- 1 District Park with 6 playing fields, 6 netball / multipurpose courts and a four-court indoor recreational complex to accommodate sporting activities including football, cricket, baseball, netball and indoor recreational activities. It is proposed that the District Park will also include public amenities, a district “all abilities” playground and embellishments such as carparking, pathways and planting; and
- 5 Parks with a total of 12 playing fields, 1 athletics track and a 12 court tennis facility to accommodate sporting activities including football, Australian rules, cricket, hockey, tennis and athletics. It is proposed that local parks will also include public amenities and embellishments such as playgrounds, carparking, pathways and planting.

Local Parks

The purpose of local parks is to provide informal play space and opportunities for supervised play within convenient walking distance from any given residence. A total of eleven local parks are to be provided within the Box Hill Precinct based on the criteria of local open space within 500m of residents (excluding those residents within 500m of a playing field or linear open space).

The total area of local parks identified to meet the demand for local open space generated by the future residents of the Box Hill Precinct is 12.2 ha. The local parks will generally include embellishments such as playground equipment, seating, pathways, lighting and landscaping to ensure access for all age groups within the community. To support this outcome, the Precinct Plan identifies the proposed character and embellishment of local open space (including linear open space) with provision for 28 playgrounds based on participation analysis and rate of provision consistent with existing suburbs within The Hills Shire.

The provision and distribution of open space has also taken into account:

- the Growth Centres Commission Community Open Space Standards;
- participation levels and broad community demands identified though the Recreation Strategy;
- barriers to pedestrian movement such as roads and creek lines;
- steepness of topography and difficulty of movement;
- road layout and pedestrian permeability;
- proximity to other open space areas such as playing fields (which include a local open space component);
- likely density of surrounding development; and
- drainage functions.

3.4.4 Apportionment

The need to provide the open space identified in this part of the plan is generated by the residential development of the Box Hill Precinct. It is therefore appropriate that residential development within the Box Hill Precinct be subject to the full cost of providing these open space facilities.

The Box Hill Residential and Industrial Precincts have a combined total net developable area of 690.8 hectares. To ensure that land zoned R2 for 2,000m^2 subdivision is not unfairly burdened, a net developable area cap of 1,000m^2 has been applied to these lands. This approach is consistent with that applied by the Special Infrastructure Contribution for land identified as Transitional Land.

3.4.5 Schedule of Works and Costs Estimates

A schedule of open space to be levied under this plan is included in Table 16 – Open Space Facilities. Each facility to be provided can be located by reference to Figure 6, Location of Facilities.

3.4.6 Contributions Formula

The method used to calculate the contributions rate for open space, capital works and open space land acquisition is set out in Section 2.20

The contribution rates for open space are set out in Table 18.

3.5 Transport Facilities

3.5.1 Transport Facilities Demand

A traffic and transport analysis titled "Box Hill and Box Hill Industrial Precincts – Transport and Access Study" was prepared by GHD in February 2011 ("Traffic Report"). This report establishes the need for major intersection works resulting from development of the Box Hill Precinct.

Works to be provided under this Contributions Plan include the construction of sub-arterial roads, bridge crossings, traffic signals, cycleways and bus shelters. The works are considered necessary to facilitate development, whilst ensuring an acceptable level of access, safety and convenience for all street and road users within the Box Hill Precinct.

Where roads included in this Plan intersect with roads that have been identified for construction or upgrading by the Department of Planning and Infrastructure using special infrastructure contributions, this Plan assumes that the cost of those intersections will be met by special infrastructure contributions.

A range of other transport management facilities will be required by Council to be undertaken directly by the developer as conditions of consent under section 80A(1)(f) of the EP&A Act, the demand for which is considered to be generated entirely by the proposed development.

Such facilities include:

- Local roads, asset relocation, water management devices, footpaths and street tree planting not addressed by this plan and located within or adjacent to proposed subdivisions; and
- Traffic management devices and treatments of local roads (both temporary and permanent) required to provide safe and convenient access to the development.

The roads within the Box Hill Precinct which provide access to allotments will be considered as part of the works associated with the individual development.

3.5.2 Summary of the demand analysis of existing facilities

The pre-urban road network within the Box Hill Precinct was largely developed to cater for rural traffic volumes only. The urbanisation of the area, however, will necessitate the establishment of an extensive traffic movement network, the majority of which will be upgraded to respond to the private development process.

3.5.3 Road Network Analysis

A strategic transport model has been prepared for Box Hill using NETANAL software to identify likely traffic volumes on the road network to ensure the appropriateness of the planned road hierarchy. Information extracted from the model for this purpose includes link flows to confirm the number of lanes required and whether road hierarchy assumptions and network density are appropriate.

The model results show that the majority of the proposed roads within the Precinct are likely to operate with acceptable mid-block levels of service. The following road links are included within the contributions plan:

- Upgrade of the Water Lane, Mason Road, Annangrove Road and Terry Road to provide a four lane sub-arterial road;
- New four-lane sub-arterial road connecting the Water Lane and Mason Road;
- New four-lane sub-arterial road linking Windsor Road and Old Pitt Town Road roughly midway between Terry Road and Boundary Road (Mount Carmel Road);

- New by-pass road around the Town Centre between Mason Road and Terry Road;
- Four bridge crossings;
- Fifteen signalised intersections within the internal road network;
- Seven roundabouts on the perimeter road network of Boundary Road and Old Pit Town Road;
- Bus shelters to support the public transport system; and
- Cycleways where they adjoin or are within public open space.

The following portions of the road links identified above will be funded through the NSW Government Special Infrastructure Contribution scheme rather than through contributions collected through this contributions plan:

- Upgrade of Terry Road between Windsor Road and Mason Road; and
- Upgrade of The Water Lane between Nelson Road and Annangrove Road.

3.5.4 Proposed Transport Facilities

Roads

Road classification within the precinct is based on morning and evening peak hour traffic and Average Annual Daily Traffic (AADT) flows in 2016. The strategic traffic model identifies that the Water Lane, Mason Road and Terry Road will require widening to two lanes in each direction to accommodate traffic growth from Box Hill within the next ten to twenty years.

A sub-arterial town centre perimeter road will be required to connect Mason Road and Terry Road north of the town centre to avoid pedestrian movements conflicting with high volumes of through traffic.

A new sub-arterial road (Mount Carmel Road) will be required to connect Windsor Road and Old Pitt Town Road roughly midway between Terry Road and Boundary Road.

Bridge Crossings

To support the planned future road network, the following bridge crossings are included in the contributions plan:

- Mount Carmel Road Bridge over Killarney Chain of Ponds;
- Terry Road Bridge over Killarney Chain of Ponds;
- Boundary Road Bridge (part of Boundary Road upgrade); and
- Bridge connection from Edwards Road to Stringer Road over Smalls Creek (see Section 3.5.5 below for details of apportionment between the Box Hill Industrial and Residential Precincts and North Kellyville Precinct).

Intersections

Intersection analysis was undertaken for major intersections into the precinct for the regional road network and key intersections within the precinct using SIDRA Intersection 3.0 software for the morning and afternoon peak hours. The analysis found that the majority of intersections within the precinct will operate at an acceptable level of service based on the following configuration:

- 17 new signalised intersections comprised of two travel lanes per direction (15 of which are through this contributions plan – BHT07 – BHT21);
- 4 upgraded intersections on the Windsor Road arterial network (1 of which is funded through this contributions plan – BHT06).

Only signalised intersections identified in Table 16 are to be funded from this plan.

Pedestrian Paths and Cycleways

Footpaths and cycle paths are proposed along sub-arterial roads and collector roads connecting major land uses within the precinct including the town centre, neighbourhood centres, school, parks and sports fields. The proposed cycle paths along the Water Lane, Mason Road and Terry Road will improve the conditions of the regional cycle route extending the Regional Green Link from Kellyville to North Kellyville and Rouse Hill. The majority of cycleway routes within the Box Hill Precinct will be provided by developers as required by the DCP, however the Contributions Plan provides for cycleways and crossings where they adjoin land reserved for a public purpose.

Bus Shelters

An important objective in the development of the Box Hill Precinct is to reduce car dependency through the provision of an efficient public transport system and pedestrian movement network. Bus shelters are best provided at a minimum of 400m spacing to maintain vehicle speed while providing sufficient access for passengers.

The future public transport network in the Box Hill Precinct will operate on the planned sub-arterial corridor of the Water Lane, Mason Road and Terry Road. A second route is also likely to operate on the collector road route of Edwards Road to Stringer Road within the North Kellyville Precinct. To support this network, twenty bus stops are proposed and have been located within reasonable walking distance of activity nodes and locations convenient to residents and future employees. Bus stop are only proposed on the collector road route where private delivery is generally not feasible having regard to advertising opportunities.

3.5.5 Apportionment

The need to provide the traffic facilities identified in this part of the plan is generated by both residential and non-residential development within the Box Hill Precinct. It is therefore appropriate that all development within the Box Hill Precinct be subject to the full cost of providing these traffic facilities.

The Box Hill Residential and Industrial Precincts have a combined total net developable area of 690.8 hectares. To ensure that land zoned R2 for 2,000m^2 subdivision is not unfairly burdened, a net developable area cap of 1,000m^2 has been applied to these lands. This approach is consistent with that applied by the Special Infrastructure Contribution for land identified as Transitional Land.

Precinct Level Apportionment

Per trip versus per hectare of net developable land

The determination of reasonable contribution rates for traffic facilities in section 94 contributions plans is often based on the number of vehicle trips generated by development. Apportionment to the different classes of development (that is, residential, commercial, employment, etc.) of the costs of facilities that are determined on a per trip basis is derived by calculating the degree to which the traffic generated by each land use class will use the different road links and intersections included in the contributions plan.

This Plan instead determines contributions for traffic and transport facilities on a net developable land basis. This essentially results in all developments making the same contribution (based on land area) toward facilities included in this Plan, regardless of the projected level of use of the facility by each development class.

The Plan however acknowledges that development of certain land in the Precincts will result in significantly less impacts upon the demand for facilities, and such impacts should be reflected in a lower contribution rate. This land is the land identified for large lot housing that is zoned R2 with a minimum lot size of 2,000m^2. The net developable

land area approach for determining contributions is considered reasonable for transport management works on the following grounds:

- The need for the works identified in this Plan is generated by the development of the Precincts as a whole. That is, the Precinct has been planned to accommodate services, facilities and employment locations to primarily meet the needs generated by the future residential population of the Precinct. In the circumstances, a levying approach that considers all developable land equally is not unreasonable.

- Significant uncertainty exists with respect to the servicing of land and future timing of development.

- The transport works included in this Plan include facilities for private vehicle trips and facilities for public transport, walking and cycling. The 'per vehicle trip' contribution approach is not robust enough to determine trip generation for trips attributable to travel modes other than the private vehicle.

- The net developable area approach is relatively easy to understand for the users of this Plan – the community and developers. It is also consistent with State Government policy for the collection of local infrastructure contributions in Greenfield release areas.

Northern Bridge Connection

The need to provide the bridge connection from Edwards Road to Stringer Road is established by the North Kellyville Contributions Plan No.13. As this route is expected to support future residents in Box Hill, the North Kellyville Transport and Traffic Assessment report identifies the need to construct the link to collector road standard. Should future modelling identify increased traffic beyond the environmental capacity of a collector road, the status of the link will be reviewed.

The bridge connection to the North Kellyville Precinct will support improved access to the Box Hill Industrial (weight limited) and Box Hill Residential Precincts. The longer term catchment is based on the residential populations of North Kellyville and Box Hill Precincts (of approximately 45,000 people).

The current population estimates of these two areas are as follows:

North Kellyville Precinct	15,563
Box Hill Precinct	28,932
Total	**44,495**

Therefore the proportion of land and capital costs of the northern bridge connection to the North Kellyville Precinct via Edwards Road to be levied on development within Box Hill is 66%. The balance will be attributable to the North Kellyville Precinct.

Annangrove Road Upgrade

The need for the upgrade of Annangrove Road to a Sub-Arterial Class 1 road is established by Contributions Plan No. 11 Annangrove Road Light Industry. This route will support future development within the Annangrove Road Light Industrial Area and the Box Hill and Box Hill Industrial Area. This plan will levy for 50% of the total cost of the

upgrade. The remaining 50% will be levied under Contributions Plan No. 11 Annangrove Road Light Industry.

3.5.6 Schedule of Works and Cost Estimates

A schedule of Transport Facilities to be levied under this plan is included in Table 16. Cost estimates are included for both acquisition and capital works. Each facility to be provided can be located by reference to Figure 6, Location of Facilities.

3.5.7 Contributions Formula

The formula used to calculate the contributions rate for traffic facility capital works and land acquisition is set out in Section 2.20.

The contribution rates for Traffic Facilities are set out in Table 18.

3.6 Water Cycle Management

3.6.1 Water Cycle Facilities Demand

The urbanisation of the Box Hill Precinct will require significant investment in a new, comprehensive water cycle management scheme to cater for the increase of impervious surfaces which affect the hydrological cycle.

J Wyndham Prince (JWP) have prepared a Water Cycle Management Strategy ("the WCMS Report") for the Box Hill Precinct to:

- minimise the impact of flooding;
- reduce the impacts of urbanisation on receiving streams, wetlands and groundwater;
- remove stormwater pollutants to improve overall storm water quality;
- mimic as close as possible the existing runoff behaviour for small storms;
- retain and enhance riparian and aquatic habitats;
- reduce potable water demand to conserve potable water supply; and
- recognise the importance of stormwater as a valuable resource.

The stormwater management strategy proposed for the release area focuses on minimising the impacts of the development on the total water cycle and maximising the environmental, social and economic benefits achievable by utilising responsible and sustainable stormwater management practices.

A critical consideration is the ecological sustainability of the Killarney Chain of Ponds and First Ponds Creeks riparian corridors through the site together with the identified riparian corridors within the Northern Tributary. To maintain stormwater quality at the required levels, a "treatment train" approach is proposed where various types of pollutants are removed by a number of devices acting in series.

The devices that have been selected to mitigate the expected pollutant loads, are landtake efficient; have relatively low maintenance requirements and will ensure the water quality that discharges into the First and Second Ponds Creeks meets the prescribed targets. Works to be provided under this Contributions Plan are:

- Eighteen rain gardens totalling 76400m^2 to manage the pollutant loads from the Precinct and located within public reserves and adjacent to riparian areas;
- Approximately 441,000m^3 of detention storage will be provided across nine detention basins, of which one basin will be co-located within sporting fields;
- Seven culverts associated with detention basin structures to facilitate important road crossings of natural waterways.

The above facilities are appropriately located with respect to topography and the stormwater requirements of the Precinct Plan.

The works are considered necessary to provide a publicly managed network of constructed wetlands that form part of a 'treatment train' approach to achieving the water quality targets set by the NSW Office of Environment and Heritage ('NSW OEH') (formerly known as the Department of Climate Change and Water). The Box Hill Water Cycle Management Strategy is based on a strategic level assessment of drainage and provides implementation guidance with respect to achieving the NSW OEH water quality targets. Due to the fragmented pattern of land ownership, this approach provides a flexible method of implementing Water Sensitive Urban Design at the development stage.

3.6.2 Summary of the demand analysis of existing facilities

The Box Hill Precinct is comprised of two major catchments known as Killarney Chain-of-Ponds and Second Ponds Creek Catchments. The Killarney Chain of Ponds has a net catchment area of approximately 635.35 hectares. The Second Ponds Creek Catchment has a net catchment area of 55.45 hectares.

3.6.3 Proposed Drainage Facilities

The NSW OEH has established in consultation with the Department of Planning and the Growth Centres Commission ('GCC'), water quality targets for the North West Growth Centre, including Box Hill. The water quality targets which form part of the Development Code published by the GCC in November 2006 are set out in Table 14 below.

TABLE 14: PERFORMANCE TARGETS AS SPECIFIED BY THE OFFICE OF ENVIRONMENT AND HERITAGE

	WATER QUALITY % reduction in pollutant loads				**ENVIRONMENTAL FLOWS** Stream erosion Index
	Gross Pollutants (>5mm)	Total Suspended Solids	Total Phosphorus	Total Nitrogen	(Post development duration of flows above 'stream forming flow') / (natural duration of flows above 'stream forming flow')[2]
Stormwater management objective	90	85	65	45	1 - 2
'Ideal' stormwater outcome	100	95	95	85	1

To address the above requirements, a Water Cycle Management Strategy has been prepared for Box Hill that recommends a 'treatment train' approach to stormwater management using a combination of treatment methods such as:

- rainwater tanks to collect and re-use roof runoff;
- water saving devices in all residential development;
- rain gardens, bio-retention and detention basins; and
- artificial wetlands to remove pollutants and to reduce peak flow rates.

Based on this approach, the treatment areas specified for each catchment are detailed in the Box Hill Precinct DCP.

Water quality and flow attenuation measures to be provided by Council within the Box Hill Precinct will take the form of rain gardens, detention basins and culvert crossings.

3.6.4 Apportionment

The water quality facilities are required to address the water quality and quantity targets contained within the Growth Centres Development Code as determined by the Office of Environment and Heritage (OEH). As it is not feasible to treat all sub-catchments, selected sub-catchments as detailed in the J Wyndham Prince Water Cycle Management Strategy achieve the overall targets for the Precinct.

The cost works within the Killarney Chain of Ponds Catchment and Second Ponds Creek Catchment have been separately defined. The location of these catchments is illustrated in Figure 5.

All development within each catchment will make a contribution towards the total cost of work to achieve the targets established by the NSW OEH.

The Box Hill Residential and Industrial Precincts have a combined total net developable area of 690.8 hectares. To ensure that land zoned R2 for 2,000m^2 subdivision is not unfairly burdened, a net developable area cap of 1,000m^2 has been applied to these lands. This approach is consistent with that applied by the Special Infrastructure Contribution for land identified as Transitional Land.

3.6.5 Schedule of Works and Cost Estimates

A schedule of Water Management Facilities to be levied under this plan is included in Table 16– Water Management Facilities. Cost estimates are included for both capital works and land acquisition. Each facility to be provided can be located by reference to Figure 6, Location of Facilities.

Land acquisition costs for water management facilities that also function as dual use playing fields are included in this part of the plan.

3.6.6 Contributions Formula

The formula used to calculate the contributions rate for Water Management Facilities – capital works and Water Management Facilities – land acquisition for residential development is set out in Section 2.20.

The contribution rates for Water Management Facilities are set out in Table 18. The Killarney Chain of Ponds and Second Ponds Creek catchments are shown in Figure 5 (Catchment Locations).

3.7 Plan Administration

3.7.1 Administration and Plan Preparation

The preparation, on-going review, and implementation of this Contributions Plan requires significant Council resources. This includes allocation of time from forward planning, services delivery and community development staff together with professional fees, to prepare and review the Contributions Plan.

Once the plan is in place, further staff time will be required to manage the contributions system which includes the calculation and recording of contribution payments as well as monitoring of development, population, works schedule expenditure and indexation assumptions. The costs associated with the preparation and administration of this plan will therefore be levied for under this Contributions Plan.

Table 15 sets out the administrative costs to be levied for under this Contributions Plan based on the benchmark rate recommended by the Independent Pricing and Regulatory Tribunal of 1.5% of the total value of works within a Contributions Plan.

TABLE 15: ADMINISTRATIVE COSTS, BOX HILL SECTION 94 PLAN

IPART Benchmark Rate	Total Value of Works	Administrative Costs
1.5%	$301,692,947.17	$4,525,394.21

The costs associated with these requirements are contained within the administration section of the Work Schedules.

3.7.2 Apportionment

All development will equally fund plan preparation and ongoing administration costs over the life of the plan.

The Box Hill Residential and Industrial Precincts have a combined total net developable area of 690.8 hectares. To ensure that land zoned R2 for 2,000m^2 subdivision is not unfairly burdened, a net developable area cap of 1,000m^2 has been applied to these lands. This approach is consistent with that applied by the Special Infrastructure Contribution for land identified as Transitional Land.

3.7.3 Schedule of Works and Cost Estimates

The specific administrative costs described above are detailed in Table 16 - Administration.

3.7.4 Contributions Formula

The formula used to calculate the contributions rate for administration costs is set out in Section 2.20.

The contribution rates for administration costs are set out in Table 18.

3.8 Work Schedules

The capital items in this works schedule have been costed by the following consultants:

- J. Wyndam Prince – Watercycle Management
- AECOM – Open Space Embellishment
- AECOM – Signalised Intersections and Bridges
- Independent Property Valuations – Land Value Rates for Land Acquisition

In addition, the benchmark rates contained within the Independent Pricing and Regulatory Tribunal's *Local Infrastructure Benchmark Costs – Final Report* (April 2014) was applied for the costing of Transport Facilities.

The implementation of the various facilities and services has been prioritised according to the particular needs of the incoming population and is linked to a population threshold. The ability to deliver a particular facility is largely dependent upon the rate of development within the Box Hill Precinct, and the corresponding receipt of contributions by Council.

Many facilities such as cycleways along roads, roundabouts, drainage links and local open space generally provide a local level of service. Accordingly these facilities will generally be implemented concurrent with the affected or adjoining subdivisions, subject to the receipt of sufficient contributions.

Overall, the population projections contained within this plan are based upon a 40 year time frame. It is intended that facilities identified within the works schedule to the Contributions Plan will be delivered within this time period. A summary of the program of works by facility category is included in Table 17 and contains development yield and indexation assumptions. Monitoring of the plan in accordance with Section 2.21 will allow for review and adjustment of population projections and the works schedule as required.

TABLE 16: WORKS SCHEDULES

Water Cycle Management Facilities - Capital					
Combined Basin and Raingarden Facilities					
Item No	**Item Identification**	**Description**	**Quantity**	**Unit**	**Council**
1	KC01, RGKCP06 (Portion of RGBH12)	Combined basin, raingardens and drainage structures	130,000	m^2	$14,195,950
2	KC02, RGKCP07 (Portion of RGBH12)	Combined basin, raingardens and drainage structures	91,000	m^2	$13,545,841
3	BH01A & RGBH08A	Combined basin, raingardens and drainage structures	27,000	m^2	$4,903,513
4	BH01B & RGBH07A	Combined basin, raingardens and drainage structures	25,000	m^2	$4,484,086
5	BH01C & RGBH07_8	Combined basin, raingardens and drainage structures	58,000	m^2	$5,567,258
6	BH02A & RGBH02A	Combined basin, raingardens and drainage structures	25,000	m^2	$4,012,181
7	BH02B & RGBH02B	Combined basin, raingardens and drainage structures	31,000	m^2	$3,335,268
8	BH03A & RGBH03A and RGBH03B	Combined basin, raingardens and drainage structures	15,000	m^2	$1,518,104
9	BH03B & RGBH03C and RGBH03D	Combined basin, raingardens and drainage structures	39,000	m^2	$7,086,361
Single Raingarden Facilities and Bridges					
10	RGBH10	Raingarden (in BHPF01)	5,000	m^2	$1,661,000
11	RGBH11	Raingarden (in BHLP08)	3,200	m^2	$1,135,000
12	RGBH04	Raingarden (in BHPF03)	4,700	m^2	$1,572,500
13	RGKCP01	Raingarden	1200	m^2	$442,500
14	RGKCP02 I	Raingarden	700	m^2	$323,500
15	RGKCP02 II	Raingarden	500	m^2	$360,900
16	RGSPC01	Raingarden	400	m^2	$225,833
17	RGSPC02	Raingarden	500	m^2	$302,500
18	RGSPC03	Raingarden	1000	m^2	$423,000
Culvert Crossings					
19	CR-A	Culvert Crossing A	1	Item	$1,634,000
20	CR-B	Culvert Crossing B	1	Item	$1,634,000
21	CR-C	Culvert Crossing C	1	Item	$1,634,000
22	CR-D	Culvert Crossing D	1	Item	$2,804,000
23	CR-E	Culvert Crossing E	1	Item	$1,634,000
24	CR-F	Culvert Crossing F	1	Item	$1,634,000
25	CR-G	Culvert Crossing G	1	Item	$1,634,000
Gross Pollutant trap					
26	BPC1	GPT - Bypass Catchment	1	Item	$85,000
27	BPC2	GPT - Bypass Catchment	1	Item	$35,000
28	BPC3	GPT - Bypass Catchment	1	Item	$60,000
Sub-Total					**$77,883,294**

Transport Management - Capital					
New Main Roads					
Item No	**Item Identification**	**Description**	**Quantity**	**Unit**	**Council**
29	BHNR01A	New Main Road - Mt Carmel Road - Windsor Road to Killarney Chain of Ponds	609	Linear Metre	$8,103,050
30	BHNR01B	New Main Road - Mt Carmel Road - Killarney Chain of Ponds to Mason Street	413	Linear Metre	$5,495,172
31	BHNR02A	New Main Road - Mt Carmel Road - Mason Road to Boundary Road "Link Road"	588	Linear Metre	$7,823,634
38	BHNR06A	New Main Road - The Water Lane - Hynds Road to Mason Road	440	Linear Metre	$5,854,420
42	BHNR09	New Main Road - Town Centre Road between Terry Road and Mason Road	452	Linear Metre	$6,014,086
Proposed Road Upgrades					
45	BHRU02B	Road Upgrade - Terry Road - Town Centre Road to Mason Road Bypass	165	Linear Metre	$2,195,408
52	BHRU06B	Road Upgrade - Mason Road - Town Centre Bypass to The Water Lane	673	Linear Metre	$8,954,602
54	BHRU08A	Road Upgrade - The Water Lane - Hynds Road to Nelson Road	240	Linear Metre	$3,193,320
61	Boundary Road	Road Upgrade - Boundary Road Resurface	2942	Linear Metre	$1,086,090
62	Annangrove Road Upgrade	Signalised Intersection with the Water Lane) (50%) - 50% CP11	2100	Linear Metre	$12,500,000
Bridges					
63	BR-2	Terry Road over Killarney Chain of Ponds	2,200	m^2	$6,771,500
64	BR-NKB01	Edwards Road over Smalls Creek (66%) - 34% CP13	1	Item	$2,606,086
65	BR-1	Mt Carmel Road Bridge over Killarney Chain of Ponds	2640	m^2	$7,951,800
66	BR-BRU	Boundary Road Upgrade	2750	m^2	$7,449,375
Signalised Intersections					
71	BHT06	Windsor Road / Annangrove Road	1	Item	$435,000
72	BHT07	Mt Carmel Road / Mason Road	1	Item	$1,322,038
73	BHT08	Mt Carmel Road / Boundary Road Link	1	Item	$1,360,100
74	BHT09	Mt Carmel Road / George Street	1	Item	$1,266,575
75	BHT10	Terry Road / Hynds Road	1	Item	$989,625
76	BHT11	Terry Road / Mason Road	1	Item	$1,742,900
77	BHT12	Terry Road / George Street	1	Item	$1,473,200
78	BHT13	Mason Road / The Water Lane	1	Item	$813,450
79	BHT14	Hynds Road / The Water Lane	1	Item	$1,329,650
80	BHT15	Nelson Road / The Water Lane	1	Item	$1,956,050
81	BHT17	Mt Carmel Road / Future Business Park Road	1	Item	$926,188
82	BHT18	Terry Road / Town Centre (High Street) Road	1	Item	$1,164,350
83	BHT19	Box Road / Nelson Road	1	Item	$764,513
84	BHT20	Guntawong Road / The Water Lane	1	Item	$863,475
85	BHT21	Guntawong Road / Box Road	1	Item	$1,029,500
Roundabouts					
86	BHR01	Hynds Road / Nelson Road / Edwards Road	1	Item	$429,536
87	BHR02	Mason Road / Old Pitt Town Road / Nelson Rd	1	Item	$429,536
88	BHR03	George Street / Old Pitt Town Road	1	Item	$429,536
89	BHR04	Terry Road / Old Pitt Town Road	1	Item	$429,536
90	BHR05	Mt Carmel Drive / Old Pitt Town Road	1	Item	$429,536
91	BHR06	Boundary Road / George Street	1	Item	$429,536
92	BHR07	Boundary Road / Boundary Road Link Road	1	Item	$429,536
Bus Stops					
93	N/A	Bus Stop	20	Item	$455,390
Cycleways					
94	Cycleways	Adjoining Open Space & Water Management	12,236	Linear Metre	$2,075,837
Sub-Total					**$108,973,130**

Open Space - Capital					
Item No	**Item Identification**	**Description**	**Quantity**	**Unit**	**Council**
Local Parks					
95	Local Parks	Local Park	11.96	Hectare	$7,176,000
Playing Fields					
96	BHPF01	Park 1 - South of Future Road (South Western Area)	51,700	m^2	$9,770,412
97	BHPF02	Park 2 - West of Mt Carmel Road (Western Area)	57,600	m^2	$9,579,875
98	BHPF03	Park 3 - Central Area	101,000	m^2	$20,061,529
99	BHPF04	Park 4 - East of Terry Road (North Eastern Area)	58,000	m^2	$12,546,976
100	BHPF05	Park 5 - District Park - West of Nelson Road (South Eastern Ar	156,000	m^2	$44,226,369
101	BHPF06	Park 6 - North of The Water Lane (South Eastern Area)	50,000	m^2	$11,475,363
Sub-Total					**$114,836,524**

Administration					
Item No	**Item Identification**	**Description**	**Quantity**	**Unit**	**Council**
107	Administration	Preparation, Review and On-going Implementation of Plan	$301,692,947.17	Total Cost	$4,525,394

Land acquisition					
Item No	**Category**	**Description**	**Quantity**	**Unit**	**Council**
102	Open Space	Open Space Land	55	Hectare	$65,877,822
103	Water Management (KCP)	Drainage Land	43.90	Hectare	$29,727,351
104	Water Management (SPC)	Drainage Land	0.37	Hectare	$661,007
105	New Roads	Traffic Land	3.21	Hectare	$4,050,800
106	Road Widening	Traffic Land	2.47	Hectare	$4,579,800
TOTAL LAND					**$104,896,779**

TABLE 17: SUMMARY OF WORKS PROGRAM BY FACILITY CATEGORY

Contributions Plan No. 15 - Box Hill Precinct

Summary of Works

Beginning of period	01-Jul-13	01-Jul-14	01-Jul-15	01-Jul-16	01-Jul-17	01-Jul-18	01-Jul-19	01-Jul-20	01-Jul-21	01-Jul-22	01-Jul-23	01-Jul-24	01-Jul-25	01-Jul-26
End of period	30-Jun-14	30-Jun-15	30-Jun-16	30-Jun-17	30-Jun-18	30-Jun-19	30-Jun-20	30-Jun-21	30-Jun-22	30-Jun-23	30-Jun-24	30-Jun-25	30-Jun-26	30-Jun-27
All Development	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**
Open Space Land	$0	-$13,557,005	-$17,436,861	-$7,176,667	-$11,076,654	-$7,598,220	-$7,818,193	-$8,044,535	$0	$0	$0	$0	$0	$0
Open Space Capital	$0	$0	$0	$0	$0	$0	-$6,989,891	-$7,222,826	-$7,463,523	-$7,712,241	-$7,969,248	-$8,234,819	-$8,509,240	-$8,792,807
Transport - Land	$0	-$1,776,092	-$913,756	-$1,880,419	-$967,429	-$995,437	-$1,024,255	-$1,053,908	-$1,084,419	$0	$0	$0	$0	$0
Transport Capital	$0	$0	$0	$0	$0	-$12,838,168	-$13,265,994	-$13,708,077	-$14,164,892	-$14,636,930	-$15,124,698	-$15,628,721	-$16,149,541	-$16,687,716
Water Management Land (SPC)	$0	-$226,714	-$233,278	-$240,031	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Water Management Capital (SPC)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	-$469,950	-$485,611
Administration	$0	-$118,937	-$121,910	-$124,958	-$128,082	-$131,284	-$134,566	-$137,930	-$141,378	-$144,913	-$148,536	-$152,249	-$156,055	-$159,957
Water Management Land (KCP)	$0	-$6,117,595	-$3,147,352	-$6,476,939	-$3,332,225	-$3,428,695	-$3,527,958	-$3,630,094	-$3,735,188	$0	$0	$0	$0	$0
Water Management Capital (KCP)	$0	$0	$0	-$8,488,227	-$8,771,093	-$9,063,385	-$9,365,418	-$9,677,516	-$10,000,015	-$10,333,260	-$10,677,611	-$11,033,437	-$11,401,121	$0
Total	**$0**	**-$15,678,748**	**-$18,705,804**	**-$9,422,075**	**-$12,172,165**	**-$21,563,109**	**-$29,232,899**	**-$30,167,275**	**-$22,854,212**	**-$22,494,084**	**-$23,242,482**	**-$24,015,789**	**-$25,284,787**	**-$26,126,091**
Total Net Developable Area	0	0	0	3	4	4	4	5	5	7	9	10	12	14
Projected population growth	0	0	0	140	154	168	182	196	210	280	350	420	490	560

Beginning of period	01-Jul-27	01-Jul-28	01-Jul-29	01-Jul-30	01-Jul-31	01-Jul-32	01-Jul-33	01-Jul-34	01-Jul-35	01-Jul-36	01-Jul-37	01-Jul-38	01-Jul-39	01-Jul-40
End of period	30-Jun-28	30-Jun-29	30-Jun-30	30-Jun-31	30-Jun-32	30-Jun-33	30-Jun-34	30-Jun-35	30-Jun-36	30-Jun-37	30-Jun-38	30-Jun-39	30-Jun-40	30-Jun-41
All Development	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**	**2036**	**2037**	**2038**	**2039**	**2040**
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Open Space Land	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Open Space Capital	-$9,085,823	-$9,388,603	-$9,701,474	-$10,024,771	-$10,358,841	-$10,704,044	-$11,060,751	-$11,429,345	-$11,810,223	-$12,203,793	-$12,610,478	-$13,030,716	$0	$0
Transport - Land	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Transport Capital	-$17,243,826	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Water Management Land (SPC)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Water Management Capital (SPC)	-$501,794	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Administration	-$163,955	-$168,054	-$172,256	-$176,562	-$180,976	-$185,501	-$190,138	-$194,892	-$199,764	-$204,758	-$209,877	-$215,124	-$220,502	-$226,014
Water Management Land (KCP)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Water Management Capital (KCP)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total	**-$26,995,398**	**-$9,556,657**	**-$9,873,729**	**-$10,201,333**	**-$10,539,817**	**-$10,889,545**	**-$11,250,889**	**-$11,624,237**	**-$12,009,987**	**-$12,408,550**	**-$12,820,355**	**-$13,245,840**	**-$220,502**	**-$226,014**
Total Net Developable Area	17	21	24	28	31	38	41	45	48	48	41	38	35	31
Projected population growth	700	840	980	1120	1260	1540	1680	1820	1960	1960	1680	1540	1400	1260

Beginning of period	01-Jul-41	01-Jul-42	01-Jul-43	01-Jul-44	01-Jul-45	01-Jul-46	01-Jul-47	01-Jul-48	01-Jul-49	01-Jul-50	01-Jul-51	01-Jul-52		
End of period	30-Jun-42	30-Jun-43	30-Jun-44	30-Jun-45	30-Jun-46	30-Jun-47	30-Jun-48	30-Jun-49	30-Jun-50	30-Jun-51	30-Jun-52	30-Jun-53		
All Development	**2041**	**2042**	**2043**	**2044**	**2045**	**2046**	**2047**	**2048**	**2049**	**2050**	**2051**	**2052**	**Total**	**Pv**
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Open Space Land	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	-$72,708,135	-$62,530,119
Open Space Capital	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	-$194,303,456	-$96,684,736
Transport - Land	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	-$9,695,714	-$8,117,715
Transport Capital	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	-$149,448,563	-$97,991,797
Water Management Land (SPC)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	-$700,024	-$640,910
Water Management Capital (SPC)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	-$1,457,356	-$822,085
Administration	-$231,665	-$237,456	-$243,393	-$249,478	-$255,715	-$262,107	-$268,660	-$275,377	-$282,261	-$289,318	-$296,551	-$303,964	-$7,705,070	-$3,147,973
Water Management Land (KCP)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	-$33,396,046	-$27,960,766
Water Management Capital (KCP)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	-$98,811,084	-$70,751,593
Total	**-$231,665**	**-$237,456**	**-$243,393**	**-$249,478**	**-$255,715**	**-$262,107**	**-$268,660**	**-$275,377**	**-$282,261**	**-$289,318**	**-$296,551**	**-$303,964**	**-$568,225,448**	**-$368,647,693**
Total Net Developable Area	28	24	14	12	10	9	7	7	5	3	3	3	0	0
Projected population growth	1120	980	560	490	420	350	280	280	210	140	140	140	0	0

Indexation Assumptions

Land Acquisition Index	2.90%	per annum
Capital Expenditure Index	3.33%	per annum
Administrative Costs Index	2.50%	per annum
Discount Rate	4.50%	per annum

Note. Refer to Section 2.20 of the Contributions Plan for source of indexation assumptions

TABLE 18: CONTRIBUTION RATE SCHEDULE

Contributions Plan No. 15 - Box Hill Precinct
Rates Schedule

Facility Category	Total Cost (PV)	Rate	Residential	All Development			
			Open Space	Administration	Water Management KCP	Water Management SPC	Traffic
			$/ha	$/ha	$/ha	$/ha	$/ha
Open Space Land	-$62,530,119.03	$171,741.06	$171,741.06				
Open Space Capital	-$96,684,736.46	$265,547.85	$265,547.85				
Transport - Land	-$8,117,715.12	$17,722.48					$17,722.48
Transport Capital	-$97,991,796.99	$213,934.29					$213,934.29
Water Management Land (SPC)	-$640,909.87	$17,421.19				$17,421.19	
Water Management Capital (SPC)	-$822,084.66	$22,345.88				$22,345.88	
Administration	-$3,147,972.60	$6,872.61		$6,872.61			
Water Management Land (KCP)	-$27,960,765.73	$66,370.66			$66,370.66		
Water Management Capital (KCP)	-$70,751,592.82	$167,943.53			$167,943.53		
Total	**-$368,647,693**	**$949,899.54**	**$437,288.91**	**$6,872.61**	**$234,314.18**	**$39,767.07**	**$231,656.77**
2014/2015**		$973,647.03	$448,221.13	$7,044.42	$240,172.04	$40,761.25	$237,448.19
2015/2016**		$997,988.20	$459,426.66	$7,220.53	$246,176.34	$41,780.28	$243,384.39
2016/2017**		$1,022,937.91	$470,912.32	$7,401.05	$252,330.74	$42,824.79	$249,469.00

** Contribution rate increased by CPI each financial year - (Refer to Section 2.20)

FIGURE 5: CATCHMENT LOCATIONS (SHEETS 1)

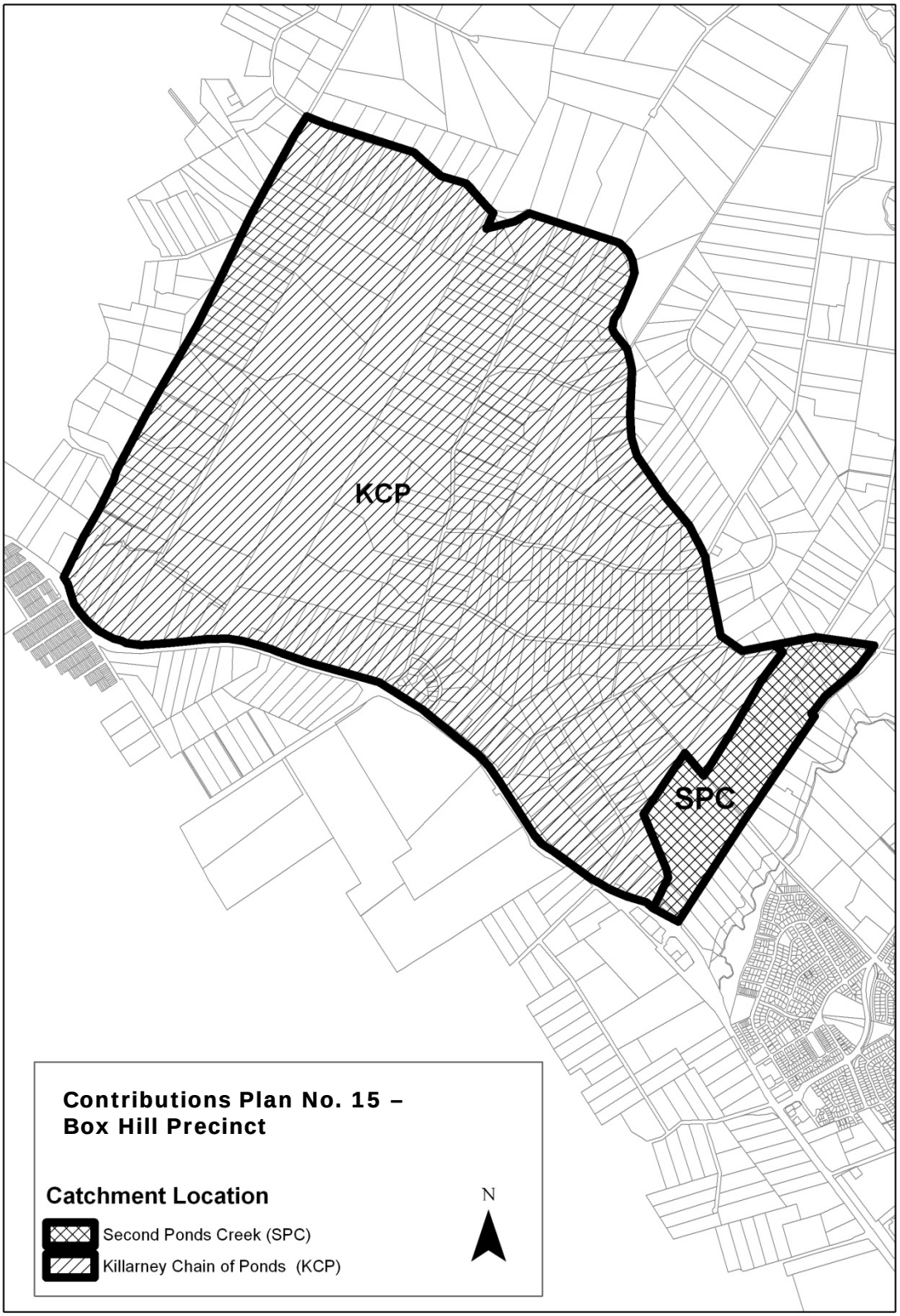
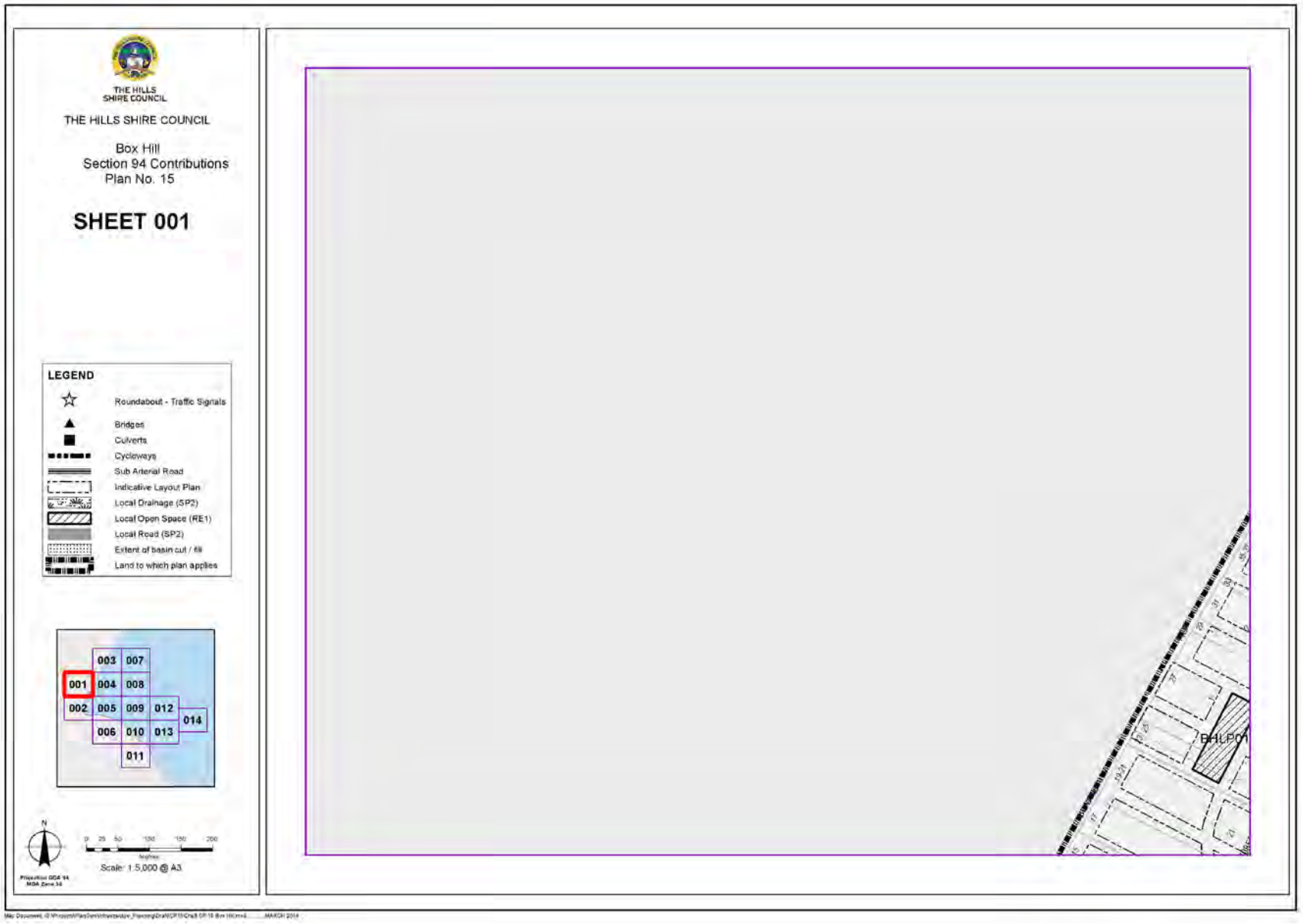
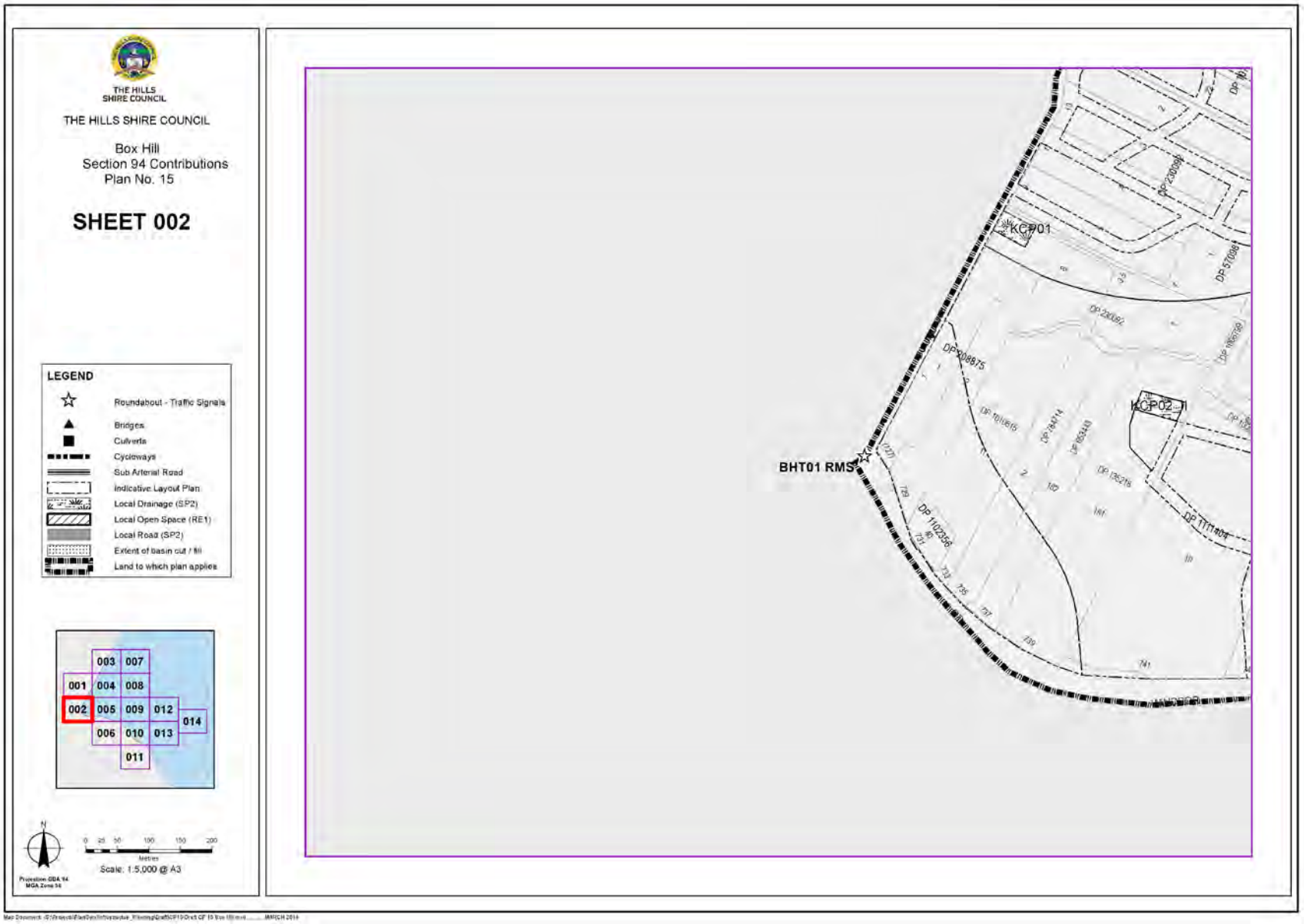

KCP
SPC
Contributions Plan No. 15 –
Box Hill Precinct
Catchment Location
Second Ponds Creek (SPC)
Killarney Chain of Ponds (KCP)
N

FIGURE 6: LOCATION OF FACILITIES (SHEETS 1 – 14)


THE HILLS SHIRE COUNCIL
THE HILLS SHIRE COUNCIL
Box Hill
Section 94 Contributions
Plan No. 15
SHEET 001
LEGEND
Roundabout - Traffic Signals
Bridges
Culverts
Cycleways
Sub Arterial Road
Indicative Layout Plan
Local Drainage (SP2)
Local Open Space (RE1)
Local Road (SP2)
Extent of basin cut / fill
Land to which plan applies
003
007
001
004
008
002
005
009
012
014
006
010
013
011
N
Scale: 1:5,000 @ A3
BHLP01


THE HILLS SHIRE COUNCIL
THE HILLS SHIRE COUNCIL
Box Hill
Section 94 Contributions
Plan No. 15
SHEET 002
LEGEND
Roundabout - Traffic Signals
Bridges
Culverts
Cycleways
Sub Arterial Road
Indicative Layout Plan
Local Drainage (SP2)
Local Open Space (RE1)
Local Road (SP2)
Extent of basin cut / fill
Land to which plan applies
003
007
001
004
008
002
005
009
012
014
006
010
013
011
0 25 50 100 150 200
Metres
Scale: 1:5,000 @ A3
KCP01
KCP02
BHT01 RMS
DP 570981
DP 808875
DP 1102356
DP 1177404


THE HILLS SHIRE COUNCIL
THE HILLS SHIRE COUNCIL
Box Hill
Section 94 Contributions
Plan No. 15
SHEET 003
LEGEND
Roundabout - Traffic Signals
Bridges
Culverts
Cycleways
Sub Arterial Road
Indicative Layout Plan
Local Drainage (SP2)
Local Open Space (RE1)
Local Road (SP2)
Extent of basin cut / fill
Land to which plan applies
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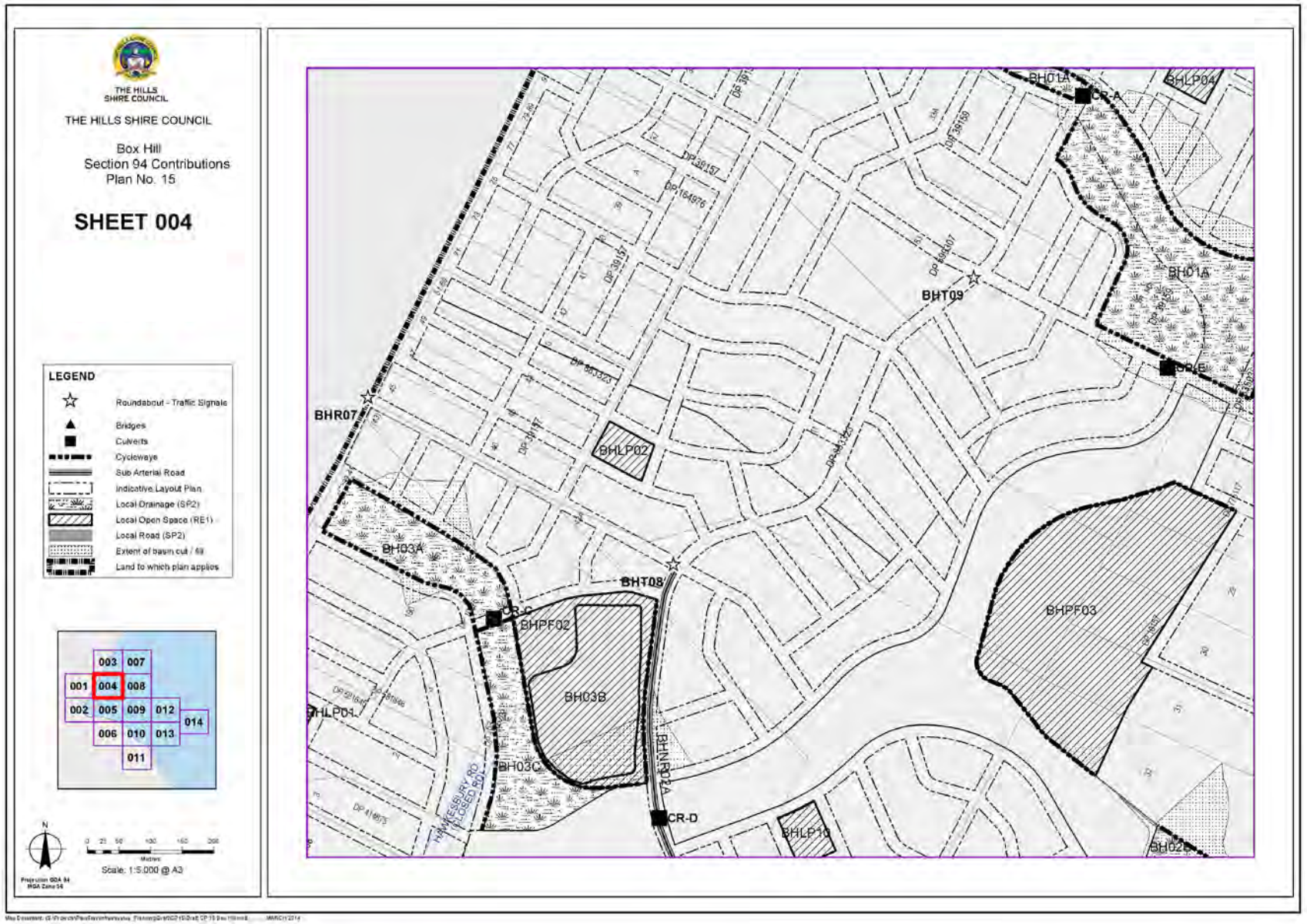
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Section 94 Contributions
Plan No. 15
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Bridges
Culverts
Cycleways
Sub Arterial Road
Indicative Layout Plan
Local Drainage (SP2)
Local Open Space (RE1)
Local Road (SP2)
Extent of basin cut / fill
Land to which plan applies
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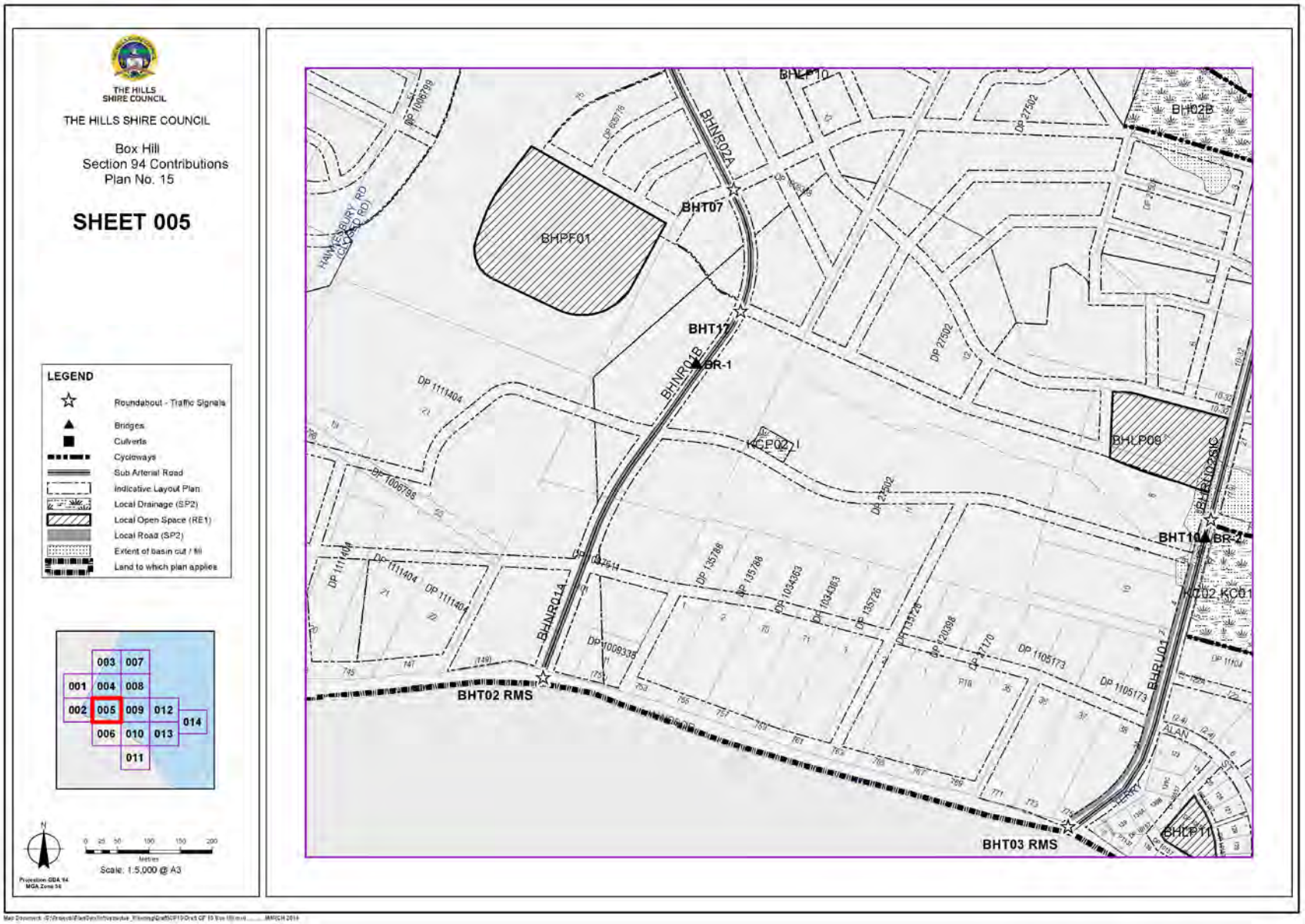
Scale: 1:5,000 @ A3
BH01A
CR-A
BHLP04
BH01A
BHT09
CR-E
BHR07
BHLP02
BH03A
BHT08
CR-C
BHPF02
BHPF03
BH03B
BHLP01
BHR07A
BH03C
CR-D
BHLP10
BH02B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Box Hill
Section 94 Contributions
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LEGEND
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Bridges
Culverts
Cycleways
Sub Arterial Road
Indicative Layout Plan
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Local Open Space (RE1)
Local Road (SP2)
Extent of basin cut / fill
Land to which plan applies
003 007
001 004 008
002 005 009 012 014
006 010 013
011
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BHLP10
BH02B
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BHT07
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BHLR02SIC
BHT10
BR-2
KCP02
BHT02 KC01
BHNR01A
BHT02 RMS
BHRU01
BHLP11
BHT03 RMS
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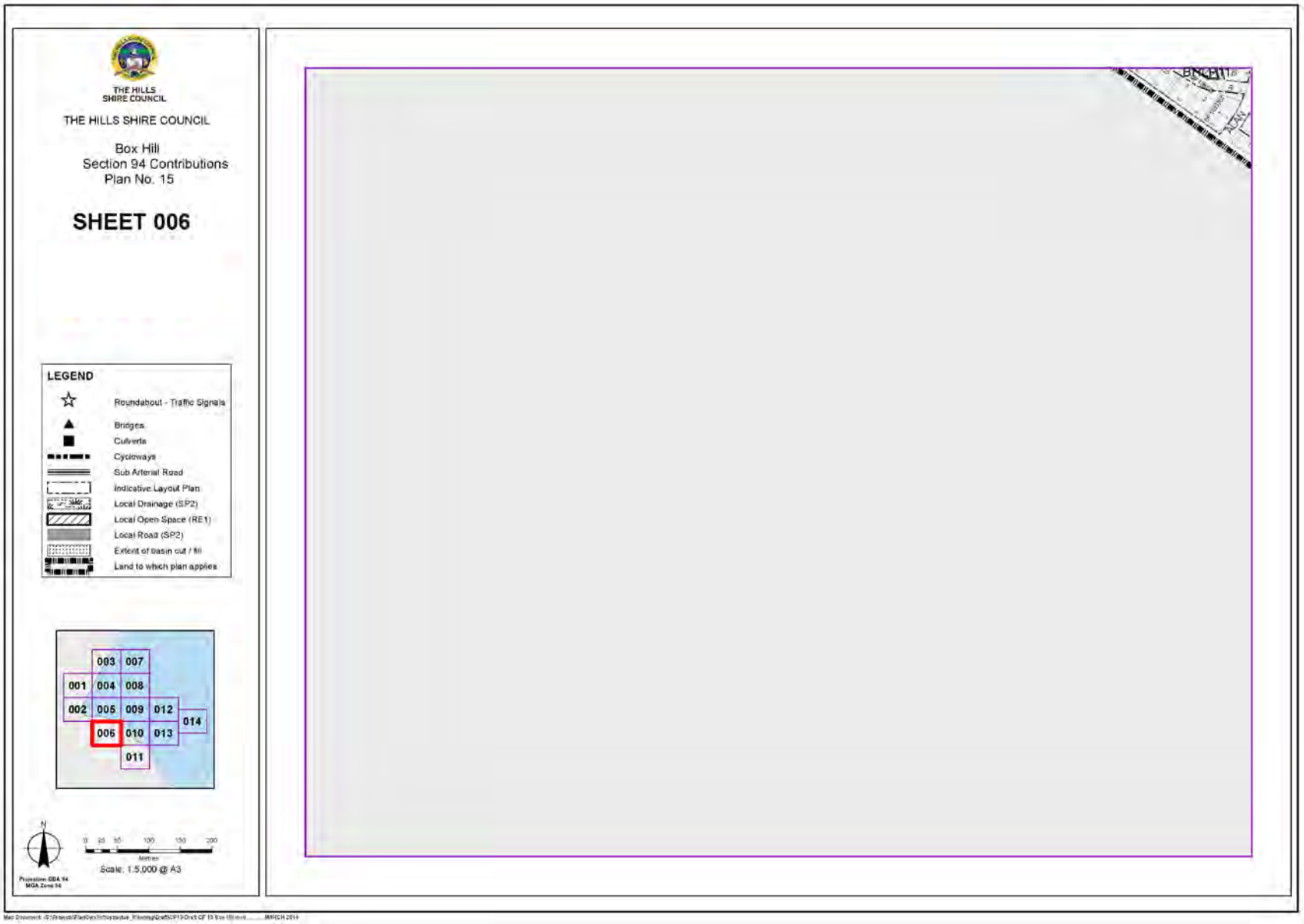
THE HILLS SHIRE COUNCIL
THE HILLS SHIRE COUNCIL
Box Hill
Section 94 Contributions
Plan No. 15
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LEGEND
Roundabout - Traffic Signals
Bridges
Culverts
Cycleways
Sub Arterial Road
Indicative Layout Plan
Local Drainage (SP2)
Local Open Space (RE1)
Local Road (SP2)
Extent of basin cut / fill
Land to which plan applies
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0 25 50 100 150 200
Metres
Scale: 1:5,000 @ A3
Projection: GDA 94
MGA Zone 56


THE HILLS SHIRE COUNCIL
THE HILLS SHIRE COUNCIL
Box Hill
Section 94 Contributions
Plan No. 15
SHEET 007
LEGEND
Roundabout - Traffic Signals
Bridges
Culverts
Cycleways
Sub Arterial Road
Indicative Layout Plan
Local Drainage (SP2)
Local Open Space (RE1)
Local Road (SP2)
Extent of basin cut / fill
Land to which plan applies
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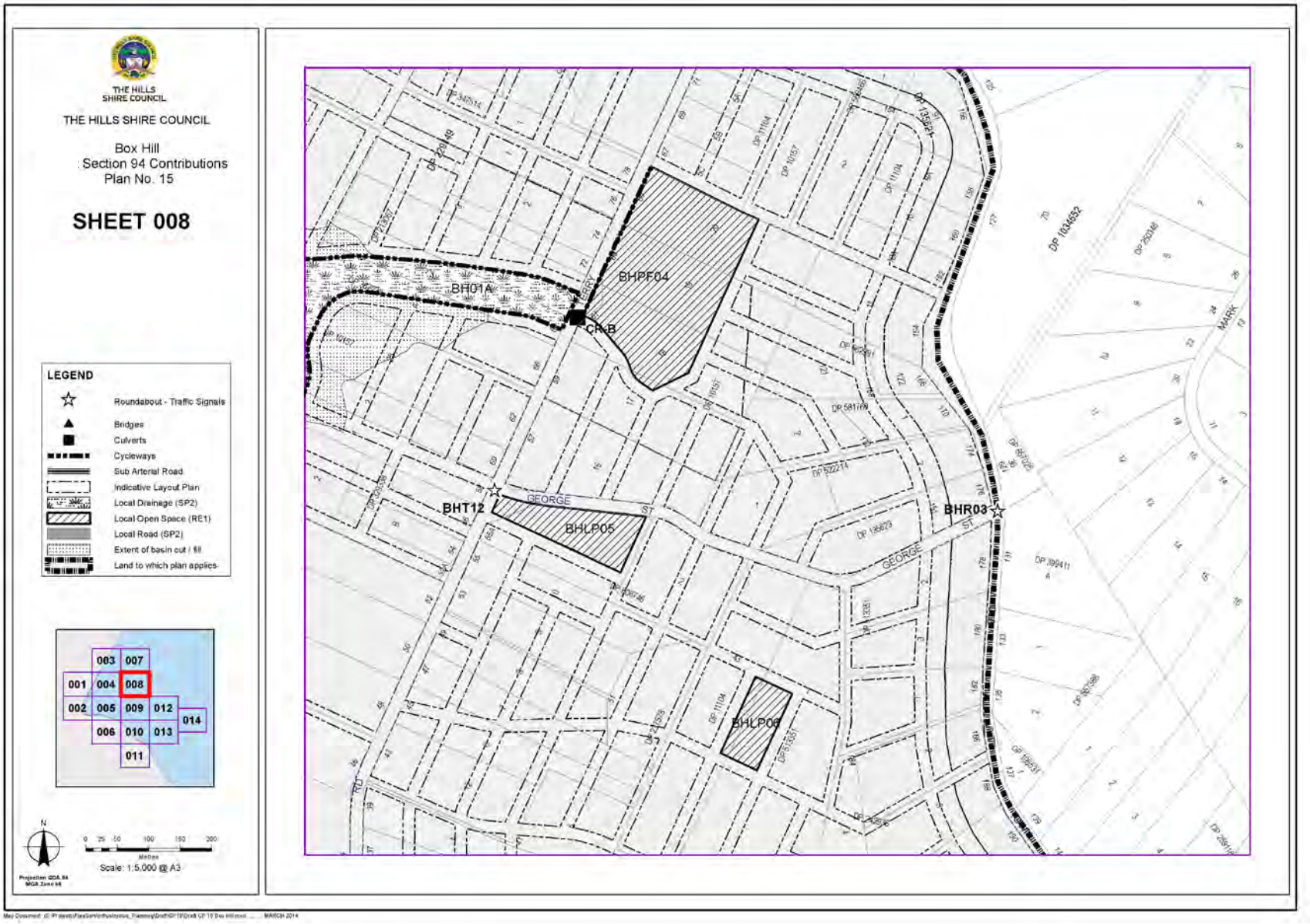
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Section 94 Contributions
Plan No. 15
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LEGEND
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Bridges
Culverts
Cycleways
Sub Arterial Road
Indicative Layout Plan
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Local Open Space (RE1)
Local Road (SP2)
Extent of basin cut / fill
Land to which plan applies
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BH01A
BHPF04
CR.B
BHT12
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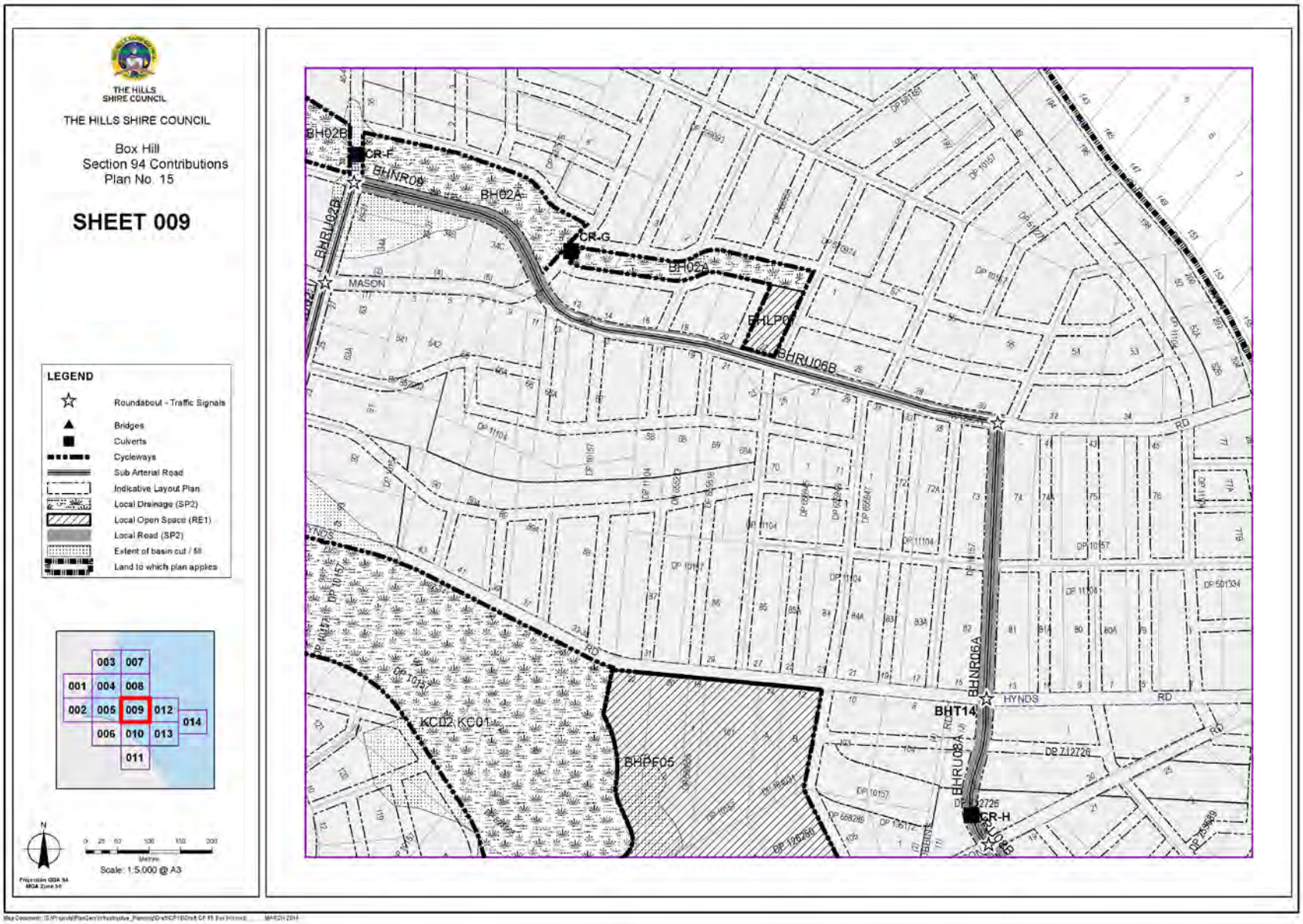
BHR03
BHLP06
GEORGE
TERRY
MARK


THE HILLS SHIRE COUNCIL
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Section 94 Contributions
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Bridges
Culverts
Cycleways
Sub Arterial Road
Indicative Layout Plan
Local Drainage (SP2)
Local Open Space (RE1)
Local Road (SP2)
Extent of basin cut / fill
Land to which plan applies
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Scale: 1:5,000 @ A3
BH02B
CR-F
BHNR01
BH02A
CR-G
BHRU02B
MASON
BHLP01
BHRU06B
RD
BHNR06A
HYNDS
BHT14
KC02 KC01
BHPF05
BHRU08A
CR-H
BHRU08B


THE HILLS SHIRE COUNCIL
THE HILLS SHIRE COUNCIL
Box Hill
Section 94 Contributions
Plan No. 15
SHEET 010
LEGEND
Roundabout - Traffic Signals
Bridges
Culverts
Cycleways
Sub Arterial Road
Indicative Layout Plan
Local Drainage (SP2)
Local Open Space (RE1)
Local Road (SP2)
Extent of basin cut / fill
Land to which plan applies
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Scale: 1:5,000 @ A3
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BHT19
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KC01
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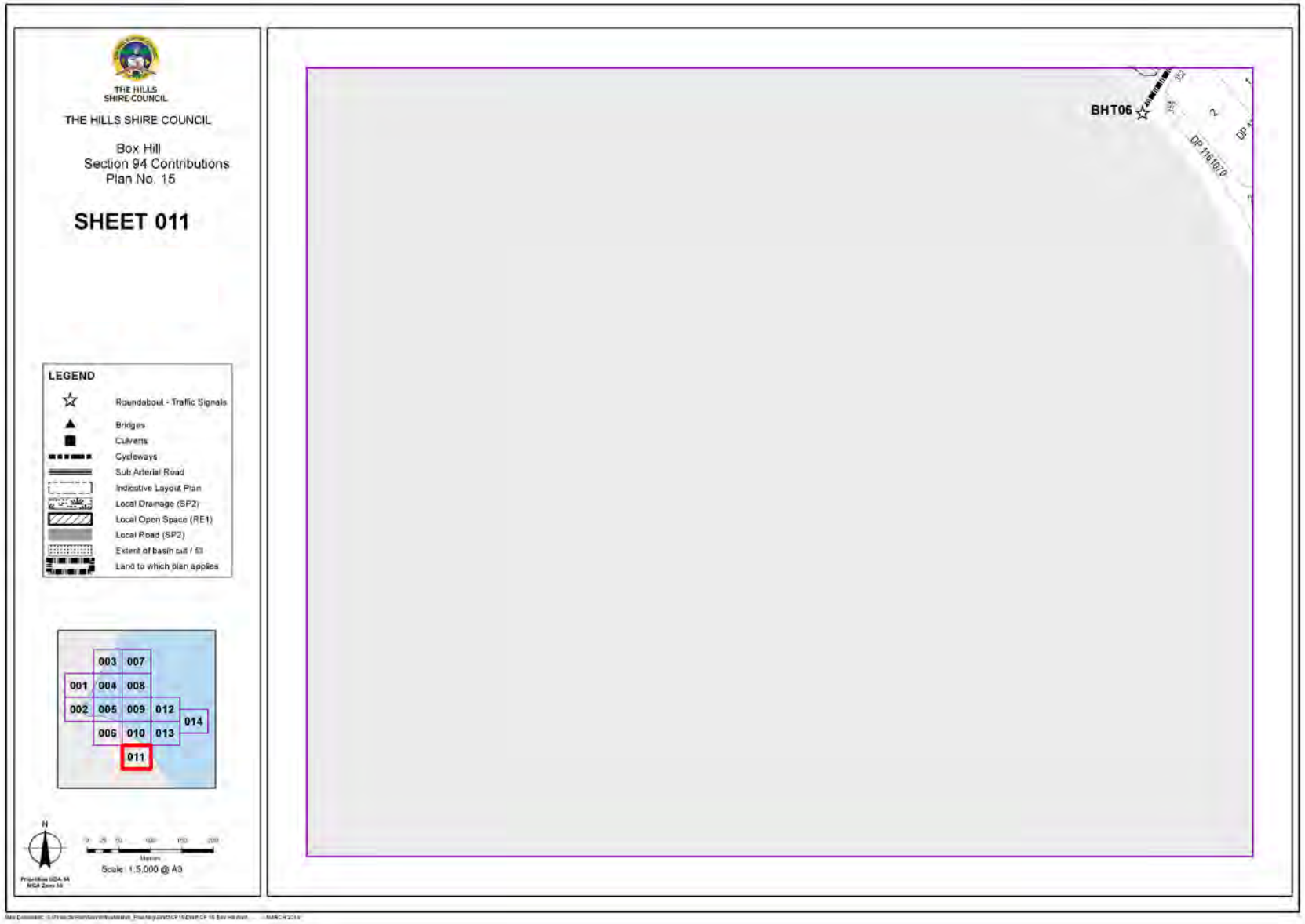
BHR U09E
NELSON
BOX
RD
CLOSED


THE HILLS SHIRE COUNCIL
THE HILLS SHIRE COUNCIL
Box Hill
Section 94 Contributions
Plan No. 15
SHEET 011
LEGEND
Roundabout - Traffic Signals
Bridges
Culverts
Cycleways
Sub Arterial Road
Indicative Layout Plan
Local Drainage (SP2)
Local Open Space (RE1)
Local Road (SP2)
Extent of basin cut / fill
Land to which plan applies
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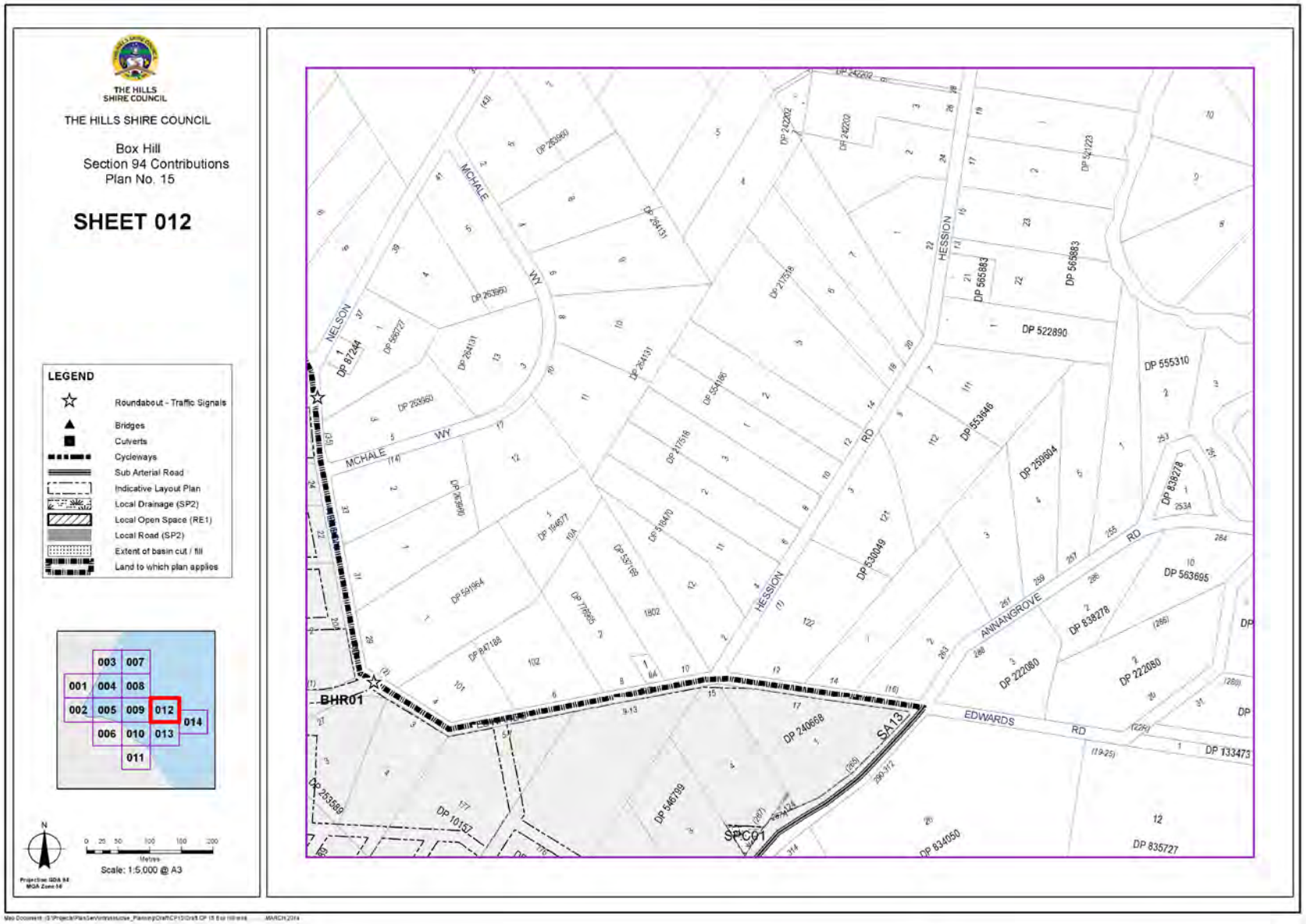
DP 1161070


THE HILLS SHIRE COUNCIL
THE HILLS SHIRE COUNCIL
Box Hill
Section 94 Contributions
Plan No. 15
SHEET 012
LEGEND
Roundabout - Traffic Signals
Bridges
Culverts
Cycleways
Sub Arterial Road
Indicative Layout Plan
Local Drainage (SP2)
Local Open Space (RE1)
Local Road (SP2)
Extent of basin cut / fill
Land to which plan applies
003 007
001 004 008
002 005 009 012 014
006 010 013
011
N
0 25 50 100 150 200
Metres
Scale: 1:5,000 @ A3
NELSON
MICHALE
WY
HESSION
RD
ANNANGROVE
EDWARDS
BHR01
SPC01
SA13
DP 242202
DP 263960
DP 264131
DP 87244
DP 565727
DP 565883
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DP 847188
DP 776695
DP 240668
DP 546789
DP 253589
DP 10157
DP 834050
DP 835727
DP 133473
DP 222080


THE HILLS SHIRE COUNCIL
THE HILLS SHIRE COUNCIL
Box Hill
Section 94 Contributions
Plan No. 15
SHEET 013
LEGEND
Roundabout - Traffic Signals
Bridges
Culverts
Cycleways
Sub Arterial Road
Indicative Layout Plan
Local Drainage (SP2)
Local Open Space (RE1)
Local Road (SP2)
Extent of basin cut / fill
Land to which plan applies
003 007
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002 005 009 012 014
006 010 013
011
Scale: 1:5,000 @ A3
BHPF06
SPC02
SPC03
BHRD09 - SIC
SA13
BHT10
DP 10157
DP 834050
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DP 1011305
DP 251094
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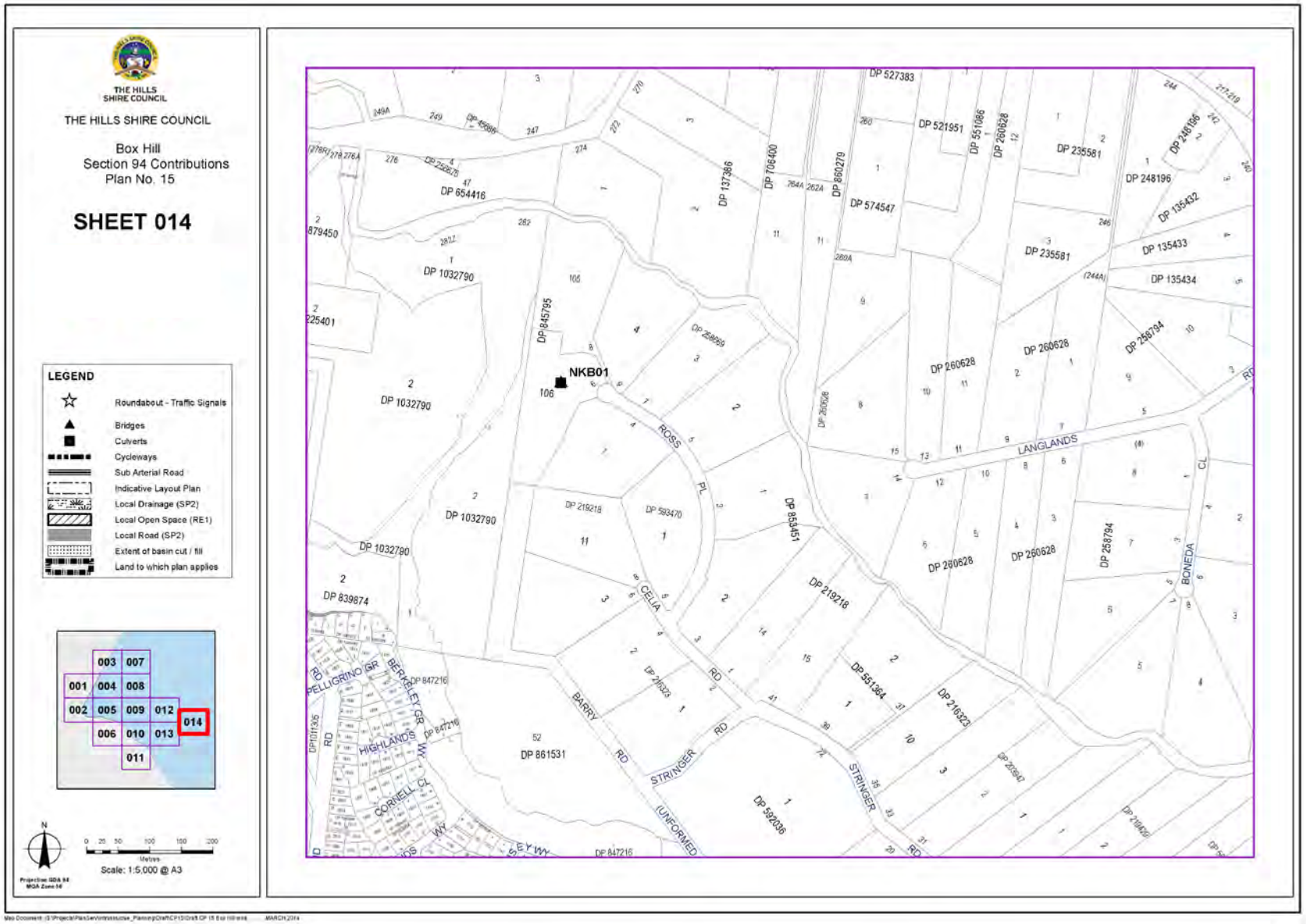
DP 830552
DP 1088407
DP 834049
DP 838675
DP 1158760
DP 32107
DP 838563
SP 78246
MONEY CL
MILE END
SETON
STANFORD
DALTON CL
DUXTON CL
WEEROONA PL
BILYANA PL
WITHERS
MAILEY
MAILEY CRCT
SPOTTED GUM PL
ISEGROUT PL


THE HILLS SHIRE COUNCIL
THE HILLS SHIRE COUNCIL
Box Hill
Section 94 Contributions
Plan No. 15
SHEET 014
LEGEND
Roundabout - Traffic Signals
Bridges
Culverts
Cycleways
Sub Arterial Road
Indicative Layout Plan
Local Drainage (SP2)
Local Open Space (RE1)
Local Road (SP2)
Extent of basin cut / fill
Land to which plan applies
003 007
001 004 008
002 005 009 012
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006 010 013
011
N
0 25 50 100 150 200
Metres
Scale: 1:5,000 @ A3
NKB01
DP 1032790
DP 839874
DP 861531
DP 592036
DP 847216
DP 219218
DP 551364
DP 216323
DP 260628
DP 256794
DP 135432
DP 135433
DP 135434
DP 248196
DP 235581
DP 574547
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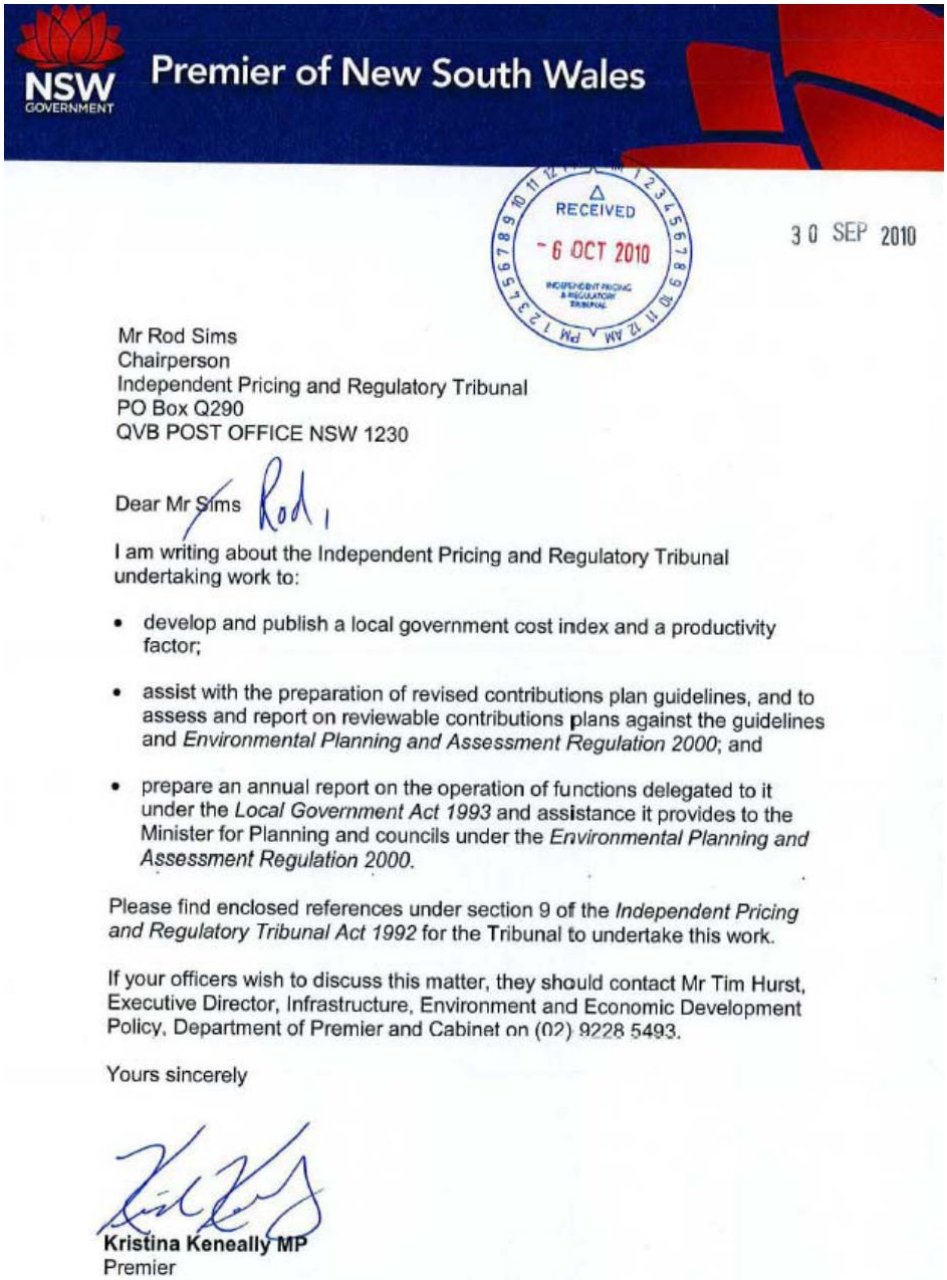
DP 521951
DP 551086
DP 706400
DP 137386
DP 860279
DP 654416
DP 879450
DP 225401
DP 845795
DP 855451
DP 593470
ROSS PL
LANGLANDS
CELIA
BARRY RD
STRINGER RD
(UNFORMED)
BONEDA
PELLIGRINO GR
BERKELEY GR
HIGHLANDS WY
CORNELL CL

4 PART D: SUPPORTING MATERIAL

The following list identifies reports, documents and studies, which have been used for researching the basis of strategies and the Section 94 Contributions Plan:

- Water Cycle Management Post Exhibition Report (June 2012) - J Wyndham Prince
- Water Cycle Management Strategy Post-Exhibition Report (November 2012) – J Wyndham Prince
- Box Hill Retail and Employment Study (February 2011) – Hill PDA
- Transport and Access Study (February 2011 and April 2012) – GHD
- Demographics and Social Infrastructure Report (February 2011) - Urbis
- Local Infrastructure Benchmark Costs – Final Report (April 2014) – Independent Pricing and Regulatory Tribunal

C Terms of Reference



Premier of New South Wales

RECEIVED
- 6 OCT 2010
INDEPENDENT PRICING & REGULATORY TRIBUNAL

30 SEP 2010

Mr Rod Sims
Chairperson
Independent Pricing and Regulatory Tribunal
PO Box Q290
QVB POST OFFICE NSW 1230

Dear Mr Sims Rod,

I am writing about the Independent Pricing and Regulatory Tribunal undertaking work to:

- develop and publish a local government cost index and a productivity factor;
- assist with the preparation of revised contributions plan guidelines, and to assess and report on reviewable contributions plans against the guidelines and *Environmental Planning and Assessment Regulation 2000*; and
- prepare an annual report on the operation of functions delegated to it under the *Local Government Act 1993* and assistance it provides to the Minister for Planning and councils under the *Environmental Planning and Assessment Regulation 2000*.

Please find enclosed references under section 9 of the *Independent Pricing and Regulatory Tribunal Act 1992* for the Tribunal to undertake this work.

If your officers wish to discuss this matter, they should contact Mr Tim Hurst, Executive Director, Infrastructure, Environment and Economic Development Policy, Department of Premier and Cabinet on (02) 9228 5493.

Yours sincerely

Kristina Keneally MP
Premier

D Assessment of CP15 against the information requirements in Clause 27 of the EP&A Regulation

Sub-clause		Location in CP15
1(a)	Purpose of the plan	Section 2.4
1(b)	Land to which the plan applies	Figure 1
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	Part C
1(d)	The formulas to be used for determining the section 94 contributions required for different categories of public amenities and services	Section 2.20
1(e)	The section 94 contribution rates for different types of development, as specified in a schedule in the plan	Part A
1(g)	The council's policy concerning the timing of the payment of monetary section 94 contributions, section 94A levies and the imposition of section 94 conditions or section 94A conditions that allow deferred or periodic payment	Sections 2.8 to 2.12
1(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)	Figure 6 and Works Schedule
1(i)	If the plan authorises monetary section 94 contributions or section 94A 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, Works Schedule and Table 17
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 94 or 94A of the Act in relation to the issue of a complying development certificate must provide that the payment of monetary section 94 contributions and section 94A 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 2.14
2	In determining the section 94 contribution rates or section 94A levy percentages for different types of development, the council must take into consideration the conditions that may be imposed under section 80A (6)(b) of the Act or section 97 (1) (b) of the Local Government Act 1993.	Sections 2.8 to 2.16 (generally)
3	A contributions plan must not contain a provision that authorises monetary section 94 contributions or section 94A 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.	N/A

Glossary

ABS	Australian Bureau of Statistics
Apportionment	The division of the costs equitably between all those who will benefit from the infrastructure, including any existing population. Full cost recovery from contributions should only occur where the infrastructure is provided to meet the demand from new development only.
Base contributions rate	The rate used to calculate the total contributions payable by the developer for different infrastructure categories.
Base level embellishment	Base level embellishment of open space is considered to be those works required to bring the open space up to a level where the site is secure and suitable for passive or active recreation. This may include: – site regrading – utilities servicing – basic landscaping (turfing, asphalt and other synthetic playing surfaces, planting, paths) – drainage and irrigation – basic park structures and equipment (park furniture, toilet facilities and change rooms, shade structures and play equipment) – security lighting and local sportsfield floodlighting – sportsfields, tennis courts, netball courts, basketball courts (outdoor only) but does not include skate parks, BMX tracks and the like.
Condition of development consent	Conditions imposed by a consent authority (eg, council) when approving an application for development.
Conservation zone	Land zoned E2 - Environmental Conservation
Contributions cap	The maximum contribution payable by a developer for local infrastructure per residential lot or lot.

Contributions plan	A plan that a council uses to impose a contribution on new development to help fund the cost of providing new local infrastructure and services to support that development.
CP11	The Hills Shire Council, *Section 94 Contributions Plan No 11 – Annangrove Light Industrial Area*
CP12	The Hills Shire Council, *Section 94 Contributions Plan No 12 – Balmoral Road Release Area*
CP13	The Hills Shire Council, *Section 94 Contributions Plan No 13 – North Kellyville Precinct*
CP24	Blacktown City Council, *Draft Section 94 Contributions Plan No 24 - Schofields Precinct*.
CPI	Consumer Price Index
DP&E	Department of Planning and Environment
EP&A Act	*Environmental Planning and Assessment Act 1979*
EP&A Regulation	*Environmental Planning and Assessment Regulation 2000*
Essential Works List	The following public amenities or public services are considered essential works: – land for open space (for example, parks and sporting facilities) including base level embellishment – land for community services (for example, childcare centres and libraries) – land and facilities for transport (for example, road works, traffic management and pedestrian and cyclist facilities), but not including carparking – land and facilities for stormwater management – the costs of plan preparation and administration.
GCC	Growth Centres Commission
Greenfield	Undeveloped land that is suitable for urban development, usually located in the fringe areas of existing urban development and requiring significant provision of new infrastructure and services to facilitate development.
Growth Centres Development Code	Growth Centres Commission, *Growth Centres Development Code*, October 2006.

Growth Centres SEPP	*State Environmental Planning Policy (Sydney Region Growth Centres) 2006*
Indicative Layout Plan	A plan illustrating the broad land uses, main road pattern, infrastructure requirements, urban connections, activity centres, landscape corridors and stormwater management measures for a precinct.
IPART	Independent Pricing and Regulatory Tribunal
IPART's Benchmark report	IPART, *Local Infrastructure Benchmark Costs - Costing Infrastructure in Local Infrastructure Plans - Final Report*, April 2014.
Net Developable Area (NDA)	The land occupied by development, including internal streets plus half the width of any adjoining access roads that provide vehicular access, but excluding public open space indicated on the Precinct Plan and other non-residential and non-industrial zoned land.
Nexus	The connection between the demand created by the new development, and the public facilities provided, which is assessed to ensure that equity exists for those funding the facilities.
North West Growth Centre	A group of 16 greenfield development precincts in north west Sydney across 3 local government areas – The Hills Shire Council, Blacktown City Council and Hawkesbury Council.
Plan administration costs	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, and/or – project management costs for preparing and implementing the plan (eg, the employment of someone to coordinate the plan).
Planning agreement	A voluntary agreement referred to in s93F of the EP&A Act.

2014 Practice Note	NSW Planning and Infrastructure, *Revised Local Development Contributions Practice Note - For the assessment of Local Contributions Plans by IPART*, February 2014.
Precinct Planning	Precinct planning coordinates the planning and delivery of water, wastewater, recycled water, power, roads, transport and other services in time to service new communities in Sydney's Growth Centres. Precinct planning involves detailed investigations into appropriate land use options, physical environment constraints and infrastructure requirements.
Rates of provision	Threshold guides used to determine the provision of open space or community facilities eg, per head of population or net developable area.
Reasonableness	Relates to nexus and apportionment.
Recreation and Open Space Planning Guidelines for Local Government	Department of Planning, *Recreation and Open Space Planning Guidelines for Local Government* (2010).
Riparian	The riparian area is defined as the part of the landscape adjoining rivers and streams that has a direct influence on the water and aquatic ecosystems within them. It includes the stream banks and a strip of land of variable width along the banks.
RMS	Roads and Maritime Services
Section 94 contributions	Section 94 contributions are imposed by way of a condition of development consent or complying development, and can be satisfied by: – dedication of land – monetary contribution – material public benefit – a combination of some or all of the above.
SEPP	State Environmental Planning Policy
SIC	State Infrastructure Contributions

South West Growth Centre	A group of 18 greenfield precincts in south west Sydney across 3 local government areas - Liverpool City Council, Camden Council and Campbelltown City Council.
Terms of Reference	Refer to the Terms of Reference received by IPART from the Premier of NSW on 30 September 2010 outlining IPART's role to assist with the preparation of revised contributions plan guidelines, and to assess and report on reviewable contributions plans against the guidelines and EP&A Regulation.
VPA	Voluntary Planning Agreement
Works-in-kind	The construction or provision of the whole or part of a public facility that is identified in a works schedule in a contributions plan.