



Independent Pricing and Regulatory Tribunal  
New South Wales

# Blacktown City Council QS Review

IPART

September 2018



**Document status**

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## 1. Introduction

The 'Independent Pricing and Regulatory Tribunal of NSW' (IPART) has engaged Morrison Low to undertake a review of the cost schedules used for Blacktown City Council's (BCC) latest submission 'Contribution's Plan 22 – Rouse Hill' (CP22). This report outlines the methodology and assumptions employed by Morrison Low to undertake this review as well as a breakdown of the findings and recommendations for IPART.

### 1.1. Background

Section 7.11 of the Environmental Planning and Assessment Act 1979 allows councils to levy contributions towards the cost of providing local infrastructure. IPART plays a key role in ensuring contribution plans are equitable and assesses them in accordance with the criteria set out in Local Infrastructure Contributions – Practice Note, issued by the Department of Planning and Environment (DPE).

The methodology employed by BCC involves multiplying unit rates estimates provided by a quantity surveyor over the necessary number units (m<sup>2</sup>, m, units etc.) required for the development of an individual reserve. IPART generally agrees with this methodology and believes this is a reasonable approach. However, their recent assessment of CP22 found that the cost of open space infrastructure embellishment was high on a per person basis when compared to other plans.

As such, IPART engaged Morrison Low to provide an external review on the reasonableness and reliability of the costings and to provide an alternative to any discrepancies. This review would cover the Open Space assets required for the Area 20 and Riverstone East Contributions Plan.

## 2. Methodology

In undertaking this review, we would employ a structured approach to ensure that each element of the Quantity Surveyors breakdown was reasonable. It is important to note that this was not an exercise in achieving the lowest price possible for each asset but rather a review of whether the costs used were reasonable, accurately accounted for all elements and were a good representation of community expectations.

Each asset was evaluated in the following way:

1. Appropriate asset elements – each element was assessed to ensure that it was suitable and relevant to the supply process and to ensure that there were no overlaps between not only individual elements but also dependant assets.
2. Appropriate units of measure – each element was assessed to ensure that the appropriate unit of measure was being used as well as a review of whether the area's/units that were used were appropriate and logical.
3. Appropriate unit rates – each element was inspected to ensure that a reasonable unit rate was adopted. These would be tested against industry rates (such as the "Australian construction Handbook") as well as against Morrison Low data from other comparable councils.

When inconsistencies were identified these would then be noted and replaced with what Morrison Low believes to be the appropriate conservative alternatives. This would then be fed back into the Contributions Plan worksheet. A summary of the differences can be found in the Findings section.

It is important to note that although we identified what we believe to be inconsistencies in the provided data, we only had limited access to the quantity surveyors assumptions, no access to their workings and did not have access to any plans. As such our findings may not always provide a complete representation. Also, the provided rates were not compared to BCC's previous submission CP21, as to avoid skewing our interpretation of the data. It is our understanding that this is an exercise which has already been undertaken by IPART, in part prompting this review.

### 3. Findings

The findings below highlight any inconsistencies or items of interest that were found in the CP22 data sheet provided. These range from inconsistencies within specific assets, common across multiple assets as well as irregularities in linkage back to the main costing sheet. It should be noted that not all of these individual changes resulted in cost savings. However, overall each asset type (except for spectator seats) resulted in a lower rate. We have presented these as per the individual assets in the data sheet provided.

#### 3.1. General

- Overall design, preliminary and contingency fee's seem reasonable across the board. These figures will most often be project based and dependant on the level of planning undertaken. The rates are comparable to past projects Morrison Low has been involved with.
- More clarity required around justification for index rates.
- Cut and Fill formula adjusted to ensure consistency.
- Cut and Fill depth standardised to 300mm.

#### 3.2. Pathways

- Area was converted into a more appropriate measure of Lineal meters.

- $\frac{200 \text{ m}^2 \text{ (concrete area)}}{1.5\text{m (footpath width)}} = 133 \text{ Lineal m (footpath run)}$

- Temporary fencing was deemed not applicable.

#### 3.3. Cycle paths

- Area was converted into a more appropriate measure of Lineal meters.

- $\frac{200\text{m}^2 \text{ (concrete area)}}{2.5\text{m (cyclepath width)}} = 80 \text{ Lineal m (cyclepath run)}$

- Temporary fencing was deemed not applicable.
- Kerb Divider was deemed inappropriate for a cycle path within a park.

### 3.4. Paved area's

- Granite Paver rate deemed excessive, Rawlinsons used to reduce rate to \$300/m<sup>2</sup>.
- Temporary fencing was deemed not applicable.

### 3.5. Fencing & gates

- Scope of site preparation deemed excessive.
- Pipe rail rate deemed excessive, Morrison Low project rate used to reduce rate to \$200/m.

### 3.6. Playground

- Site area increased to 500m<sup>2</sup> to accommodate all equipment – element areas adjusted accordingly.
- Spectator embankment deemed not applicable.
- Morrison Low Mulch rate applied.
- Concrete path removed.
- Turfing rate adopted from turf asset tab.
- Irrigation cost deemed excessive, Morrison Low rates applied.

### 3.7. Shade sail

- Site preparation removed, as asset is dependent on playground asset.
- Rawlinsons applied to cost of shade sale
- Certification element removed as it is already accounted for in shade sail cost.

### 3.8. Fitness station

- Run of temporary fencing reduced to better represent site area.
- Fitness equipment approx. m<sup>2</sup> rate adopted from Morrison Low rates.
- Rubber soft fall rate reduced to Morrison Low rate.
- Concrete edging removed as it is already included in equipment rates.

### 3.9. Car park

- Costs seem excessive when compared to Rawlinsons' rates.
- Removed allowance for tree removal as this would be factored in in planning stage.
- Bitumen area reduced to 80% of total area.

- Drainage rate deemed excessive. Rawlinsons' rate applied for an allowance of 2 x Pits and 60m of 375mm diameter pipe.
- Carpark lighting adjusted to be consistent with Park Light.
- Automatic entry gate spec reduced to manual gate.
- Bins removed from Carpark.
- Landscaping adjusted to be consistent with Landscaping 2 rates.
- Road safety spec reduced to be in line with open carpark expectations.

### **3.10. Picnic area**

- Concrete surfacing already accounted for in fitment unit rates.
- Concrete path removed.
- External Storm drainage removed.

### **3.11. BBQ area**

- Concrete surfacing already accounted for in fitment unit rates.
- Concrete path removed.
- External Storm drainage removed.

### **3.12. Seating area**

- Timber seat rate deemed excessive, reduced to Morrison Low rate.
- Removed bin enclosure.
- Concrete surface included in install of furniture.

### **3.13. Park light**

- Site preparation scope reduced and excavation limited to trenching.

### **3.14. Landscape 1, 2 & 3**

- Reduced Cut and Fill depth to 100mm.

### **3.15. Turfing**

- Removed double up of fertiliser.
- Provided Morrison Low rate for Kikuyu alternative.

### **3.16. Hydraulic works**

- Removed connection to water mains as it is included in dependant asset costs.
- Removed install of water meters as it is included in dependant asset costs.
- Removed connection to infrastructure as it is included in dependant asset costs.

### **3.17. Electrical works**

- Removed supply and install of switchboard as it is included in dependant asset costs.
- Removed connection to power supply as it is included in dependant asset costs.
- Further investigation is required into whether the substation is part of the initial electricity installation for the area
- Given that it is a new release area it is not clear what size and or type substation may be required, this will have significant impact on the cost.

### **3.18. Double playing fields**

- Subsoil drainage rate deemed excessive, Rawlinsons' rate applied.
- 375mm Diameter pipe supply and install rate reduced to Morrison Low rates.
- Irrigation rates reduced to Morrison Low rates.
- Removed excessive fencing.
- Cricket pitch costs adopted from cricket tab.

### **3.19. Double playing fields Light 100 LUX**

- Removed site preparation due to dependence on double playing fields.
- Reduced Supply and Install rate for lighting based off of Morrison Low rates.

### **3.20. Cricket**

- All items removed due to overlap with double playing fields.

### **3.21. Tennis court with lighting**

- Removed spectator embankment.
- Drainage connection to infrastructure deemed not applicable.
- Adjusted fencing to an appropriate lineal meter run.
- Allowance for tennis nets reduced based on Morrison Low rates.



### **3.22. Netball court**

- Site area reduced to represent court dimensions provided.
- Removed spectator embankment.
- Increased number of netball poles.

### **3.23. Netball Lighting**

- Removed site preparation as asset is dependent on netball courts.

### **3.24. Amenities building**

- Rawlinsons' rate applied to overall building cost.

### **3.25. Dog Agility Park**

- Removed allowance for excess site preparation included excess soils, spectator embankments and stripping of the topsoil.

### **3.26. Building demolition**

- Rate reduced by applying Rawlinsons and EPA guidelines on wastage.

The monetary impacts of these changes are summarised in Table 1 below and we can see that there is a significant change to the bottom line. The total costs as per BCC's rates comes in at just under \$171 million whereas our rate adjustments bring this down to under \$100 million. We can see that the disparity between the rates results in a total difference of just under \$71.6 million dollars or 41.9% of BCC's initial value. Table 1 has been sorted such that the assets are in descending order by the difference in total values highlighting the assets of particular concern. A significant portion of the \$71.6 million can be attributed to the playing fields and lighting alone. Together, the difference due to these assets is over \$31 million dollars and this can be primarily attributed to inconsistent site preparation and excessive rates for irrigation. The other asset types, despite having lesser changes in the unit rates themselves due to the large quantities required for the reserves, again result in a significant dollar value change.

## 4. Conclusion

Throughout this review we noticed several trends in the estimates provided by the quantity surveyor:

- Site preparation elements were often inappropriate for the relevant construction activities. This is most evident in the playing field lighting whereby the surveyor has nominated to excavate 20,000 cubic meters of soil for the installation of 12 lighting poles, resulting in an additional cost of \$900,000.00 per set of 12 poles.
- There was limited consideration for interconnection and dependency between assets resulting in a double dipping effect. An example of this can be seen with the cricket pitches. From the costings sheet we can see that there is a cricket pitch for every double playing field. The double playing fields sheet also provides costs for both a cricket pitch and bowling nets, resulting in a double up of not only supply and install costs but also site preparation costs.
- The areas or unit rates used for each asset type were often inappropriate. This is most recognisable in the playground section whereby 5 significant pieces of playground equipment (each requiring compliance clearance) have been squeezed into an area of 200m<sup>2</sup> (about ¼ of the size of a tennis court).
- There was considerable 'over spec-ing' in the elements of several assets. This was especially evident in the repeated requirement for a 375mm diameter drainage pipe with connection to existing infrastructure, whereby a simple drainage ditch would be far more appropriate, if not already excessive (e.g. BBQ area).
- Where areas would need to be subdivided between multiple elements, the full unit area would be applied to each element. An example of this would be with the playgrounds whereby a 200m<sup>2</sup> area contained 200m<sup>2</sup> of mulch, 100m<sup>2</sup> of concrete footpaths, 100m<sup>2</sup> of turf and 100m<sup>2</sup> of mass planting.
- There were several instances of inappropriate elements. Examples of this include the provision of a temporary fence for the installation of a fence and the provision of extra over to create a spectator embankment for the tennis courts.

It is difficult to fully assess the reasonableness of the estimates provided by the quantity surveyor as we do not have access to the appropriate plans, assumptions, calculations and or methodology used. However, from the limited data available, there is evidence of several inconsistencies which we recommend IPART request BCC to provide further details and justification for.

**Table 1 QS Review Summary**

Existing					New						
Asset	Total Cost	#	Units	Rate	Asset	Total Cost	#	Units	Rate	Difference	
Double playing lighting 100 Lux	\$19,648,079.36	9.50	/ Dbl Field	\$2,068,218.88	Double playing lighting 100 Lux	\$3,054,105.60	9.50	/Dbl Field	\$321,484.80	\$16,593,973.76	
Double playing fields	\$33,479,360.10	9.50	/ Dbl Field	\$3,524,143.17	Double playing fields	\$18,908,731.30	9.50	/Dbl Field	\$1,990,392.77	\$14,570,628.80	
Boundary Fencing / Lm	\$15,176,429.89	33,088.63	Lineal Meters	\$458.66	Boundary Fencing/ Lm	\$8,953,220.74	33,088.63	Lineal Meters	\$270.58	\$6,223,209.15	
Picnic area	\$6,487,412.57	44.38	/ 120sqm picnic area	\$146,195.21	Picnic area	\$1,220,922.25	44.38	/120sqm picnic area	\$27,513.74	\$5,266,490.32	
Amenities building 400sqm	\$12,980,984.00	8.33	Square Meters	\$1,558,692.26	Amenities building 400sqm	\$8,861,125.00	8.33	Square Meters	\$1,064,000.00	\$4,119,859.00	
Car park / 100spc	\$9,277,716.45	11.00	/ 100 Space Carpark	\$843,428.77	Car park/ 100spc	\$5,289,027.74	11.00	/ 100 Space Carpark	\$480,820.70	\$3,988,688.70	
Playground	\$7,963,722.68	34.19	/ 500sqm playground	\$232,942.53	Playground	\$5,582,391.00	34.19	/200sqm playground	\$163,287.49	\$2,381,331.68	
Fitness station	\$3,856,059.48	12.19	/ 200sqm station	\$316,394.62	Fitness station	\$1,638,090.64	12.19	/200sqm station	\$134,407.44	\$2,217,968.84	
Seating area	\$2,756,929.74	167.88	/ 10sqm seating area	\$16,422.52	Seating area	\$604,905.46	167.88	/10sqm seating area	\$3,603.31	\$2,152,024.27	
Landscape type 1 / sqm	\$8,637,366.45	72,450.63	Square Meters	\$119.22	Landscape type 1 / smq	\$6,696,385.22	72,450.63	Square Meters	\$92.43	\$1,940,981.22	
Cycleway / Lm	\$10,630,991.64	16,363.75	Lineal Meters	\$649.67	Cycleway/Lm	\$8,702,069.45	16,363.75	Lineal Meters	\$531.79	\$1,928,922.20	
Demolition	\$6,362,720.00	47.50	/house	\$133,952.00	Demolition	\$4,743,000.00	47.50	/house	\$99,852.63	\$1,619,720.00	
Electrical works	\$3,861,903.14	11.50	/ connection	\$335,817.66	Electrical works	\$2,321,455.14	11.50	/ connection	\$201,865.66	\$1,540,448.00	
Landscape type 2 / sqm	\$6,744,236.23	47,950.63	Square Meters	\$140.65	Landscape type 2 / smq	\$5,459,619.80	47,950.63	Square Meters	\$113.86	\$1,284,616.42	
Tennis court & lighting	\$2,887,469.31	8.00	/ court	\$360,933.66	Tennis court & lighting	\$1,797,635.84	8.00	/court	\$224,704.48	\$1,089,833.47	
Shade sail	\$2,196,695.59	21.19	/ 100sqm Shade Sale	\$103,678.85	Shade sail	\$1,277,148.60	21.19	/100sqm Shade Sale	\$60,278.40	\$919,546.99	
Paved area / m2	\$1,789,617.20	2,380.00	Square Meters	\$751.94	Paved area/m2	\$963,400.20	2,380.00	Square Meters	\$404.79	\$826,217.00	
Turfing / sqm	\$3,715,440.02	51,365.00	Square Meters	\$72.33	Turfing / smq	\$2,958,591.13	51,365.00	Square Meters	\$57.60	\$756,848.89	
Netball courts / 6no.	\$1,680,903.37	1.33	/ 6 court netball court	\$1,263,837.12	Netball courts/ 6no.	\$1,246,202.34	1.33	/6 court netball court	\$936,994.24	\$434,701.03	
Cricket wicket	\$370,000.00	5.00	/ Cricket Pitch	\$74,000.00	Cricket wicket	\$-	5.00	/Cricket Pitch	\$-	\$370,000.00	
BBQ area	\$622,615.59	12.38	/ 10sqm BBQ area	\$50,312.37	BBQ area	\$307,660.95	12.38	/10sqm BBQ area	\$24,861.49	\$314,954.64	
Landscape type 3 / sqm	\$3,057,001.47	13,825.00	Square Meters	\$221.12	Landscape type 3 / smq	\$2,713,013.58	13,825.00	Square Meters	\$196.24	\$343,987.90	
Hydraulic works	\$624,695.20	13.50	/ connection	\$46,273.72	Hydraulic works	\$353,442.40	13.50	/ connection	\$26,180.92	\$271,252.80	
Pathway / Lm	\$4,902,189.77	13,164.25	Lineal Meters	\$372.39	Pathway /Lm	\$4,708,218.23	13,164.25	Lineal Meters	\$357.65	\$193,971.54	
Park lighting	\$699,229.44	3.00	/ 1000 sqm of area to be lit	\$233,076.48	Park lighting	\$506,740.42	3.00	/1000 sqm of area to be lit	\$168,913.47	\$192,489.02	
Dog agility park	\$214,323.20	2.00	/ 1000 sqm park	\$107,161.60	Dog agility park	\$119,217.28	2.00	/1000 sqm park	\$59,608.64	\$95,105.92	
Netball courts lighting / court	\$129,665.54	2.00	/court	\$64,832.77	Netball courts lighting / court	\$117,877.76	2.00	/court	\$58,938.88	\$11,787.78	
Spectator seat / ea	\$184,186.00	76.00	/ seat	\$2,423.50	Spectator seat/ea	\$184,186.00	76.00	/seat	\$2,423.50	\$-	
Walling / Lm	\$-	-		\$-	Walling/Lm	\$-	-		\$-	\$-	
Aquatic play area	\$-	-		\$-	Aquatic play area	\$-	-		\$-	\$-	
Youth facilities type 1	\$-	-		\$-	Youth facilities type 1	\$-	-		\$-	\$-	
Youth facilities type 2	\$-	-		\$-	Youth facilities type 2	\$-	-		\$-	\$-	
Pedestrian bridge	\$-	-		\$-	Pedestrian bridge	\$-	-		\$-	\$-	
Lookout/ pavilion	\$-	-		\$-	Lookout/ pavilion	\$-	-		\$-	\$-	
Double playing lighting 200 Lux	\$-	-		\$-	Double playing lighting 200 Lux	\$-	-		\$-	\$-	
Basketball & lighting	\$-	-		\$-	Basketball & lighting	\$-	-		\$-	\$-	
Baseball/ softball fields	\$-	-		\$-	Baseball/ softball fields	\$-	-		\$-	\$-	
<b>\$ 170,937,943.42</b>					<b>\$99,288,384.06</b>						<b>\$71,649,559.36</b>