
Responses to IPART Questions – Stormwater & Open Space

- 1) ***In general, stormwater costs are lower than what was proposed in the Alluvium report. For example, the Alluvium report recommends about \$1,670,100 of WSUD related works to manage stormwater arising from public space in the new town centre. However, no specific works to manage stormwater in the town centre have been listed in the CP (apart from a \$150,000 stormwater harvesting scheme). From our initial analysis, stormwater spend in this CP seem relatively low. Could Council please provide any additional information to support its proposed stormwater costs?***

Alluvium prepared the Frenchs Forest WSUD Strategy (2019) to ensure that stormwater quality and quantity can be effectively managed within the precinct. The Alluvium report recognises that there are limited opportunities for centralised precinct-scale stormwater solutions outside of the town centre.

Centralised management of stormwater quality is unlikely to be feasible considering natural drainage paths, existing steep terrain and limited availability of land in appropriate locations. It is likely that distributed treatment measures within private land will be required as a component of individual developments to address Council's water quality objectives to overcome this lack of available centralised land. The base WSUD strategy assumes that lot scale WSUD treatment systems comprising rainwater tanks, permeable paving, stormwater gardens and vegetated filter strips would be required within private residential lots to address Council's targets (p51).

The recommended strategy to managing stormwater is identified in section 8.1 (p42) of the Alluvium report. This approach comprises several treatment options that can be incorporated into future development to meet Council's stormwater targets. The base strategy includes opportunities to achieve targets through the provision of stormwater treatment in public land. This includes:

- A centralised stormwater harvesting system in the Village Green open space.
- Biofiltration basins within Akora and Brick Pit Reserves as a component of future redevelopment of these community assets.

Other WSUD measures identified in the strategy are to be delivered on privately owned land by developers as part of their future development of these lands. The internal roads (including road drainage) within the town centre are to be delivered by the developer(s) of the town centre and is to remain in private ownership under a future Strata or Community Title scheme. These are not included in the contributions plan.

Section 11 of the Alluvium report provides indicative costings for the base WSUD strategy measures. Only the costs of infrastructure to be accommodated within the Council owned land has been included in the contributions plan.

Council engaged a quantity surveyor (Mitchell Brandtman) to cost the infrastructure in the contributions plan. The following stormwater costs from the QS report have been included in the contributions plan:

- Stormwater harvesting tank in the Village Green open space - \$150,000

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- Biofiltration basin in Brick Pit Reserve - \$434,540.
 - Biofiltration basin in Akora Reserve - \$220,000 (the original infrastructure schedule only included \$200,00 for this infrastructure. This has been amended to \$220,000 in the updated schedule consistent with the QS report).

Council is happy to reassess these stormwater costs if IPART believe they are too low.

2) ***An initial analysis of the amount of open space in the CP area shows that it is low compared with the recommendations of Council's consultants and relevant benchmarks. Could Council please provide any additional information (e.g. alternative options which were initially explored) to support its proposed open space allowances?***

The provision of adequate open space to support development in this precinct was identified as a challenge early in the preparation of the contributions plan. There is no spare capacity of existing open space in surrounding areas and infill development of the precinct provides limited opportunities for feasible and suitable new areas of open space.

Otium Planning were engaged by Council to undertake an open space options analysis (Frenchs Forest Open Space for Recreation Options Analysis – Sep 2019). This report identified open space demands and options to address this demand for all three phases of Council's adopted Hospital Precinct Structure Plan.

The recommended provision strategy included the redevelopment of Aquatic Reserve. Aquatic Reserve is located approximately 1km from the town centre (see Image 1) and currently contains existing baseball diamonds and the Warringah Aquatic Centre. At the time of preparing the Otium Report (2019), Aquatic Reserve was the NSW Government's preferred site for the relocation of the Forest High School. This provided opportunities for new and upgraded active open space, including shared use arrangement with the new school, to address anticipated demand.

One of the main strategies in the Otium Report (2019) was the redevelopment of Aquatic Reserve to accommodate the new school and reconfigure the existing fields to:

- Upgrade and expand the existing aquatic and fitness centre.
- Provide 3 indoor sports courts as part of the school that will be available to the community outside of school hours.
- Provide 3 new synthetic fields with 1 of these fields dedicated to school use during school hours.
- Relocate the existing baseball fields to another location within the Northern Beaches.

Notwithstanding that this approach would unlock significant recreational capacity particularly during the winter sport months, Council determined this was not a feasible approach due to:

- significant contamination and site suitability issues at Aquatic Reserve
- difficulties in finding a suitable site to relocate the existing baseball fields.

Subsequently, the NSW Government advised that the Forest High School would not be relocated to Aquatic Reserve.

Otium Planning was then commissioned to prepare an addendum to their original 2019 report, expressly to update the original open space strategy to reflect the changes regarding Aquatic Reserve and focus on the required open space provision for phase 1 of the Structure Plan.

The Otium Addendum Report (2021) uses a demand analysis model to identify the open space and recreation demands of the precinct. Otium also considered the outcomes of their model against other relevant open space benchmarks but identifies the importance of access to quality open space rather than simply achieving a set benchmark or quantum of land.

Based on their benchmark analysis, the Otium Addendum Report identifies the following open space land requirements for the catchment area (p18, chapter 2.2.6):

- 6.8-7.7ha of parkland for recreation
- 3.8-4.5ha for fields and outdoor courts

The Otium Addendum Report acknowledges that the acquisition and development of this quantum of land in the catchment area (being infill development) is likely not feasible. The topography and existing road network present barriers to the delivery of suitable open space within the precinct. This is made more difficult when the fractured and highly capitalised land ownership is considered.

The following matters were considered in the preparation of open space strategy in the contributions plan:

- the precinct is located close to large bushland reserves and nature-based recreation such as Manly Dam and Garigal National Park.
- There is limited suitable land available for open space within the precinct (particularly for sports and other active recreation).
- There are opportunities to maximise and improve existing areas of open space in surrounding locations to enhance the quality of these spaces to address anticipated demand.

The provision of active open space to address demand for sports facilities is particularly challenging in the precinct. Council initially investigated opportunities to embellish existing fields outside of the precinct to increase the available hours of use, including:

- Upgrade of the existing turf field at County Road, Belrose (approximately 1.8km from the town centre – see Image 2) to a synthetic field with lights.
- Upgrade the existing turf field at Ararat Reserve, Forestville (approximately 1.4km from the town centre – see Image 3) to a new synthetic field with lights.
- Upgrade the existing turf oval at Killarney Heights Oval, Killarney Heights (approximately 2.8km from the town centre – see Image 4) to synthetic and provide new cricket nets.

It was ultimately decided that the best opportunity to increase the available hours of use for active open space was to upgrade Forestville Park (approximately 1.2km from the town centre – see Image 5).

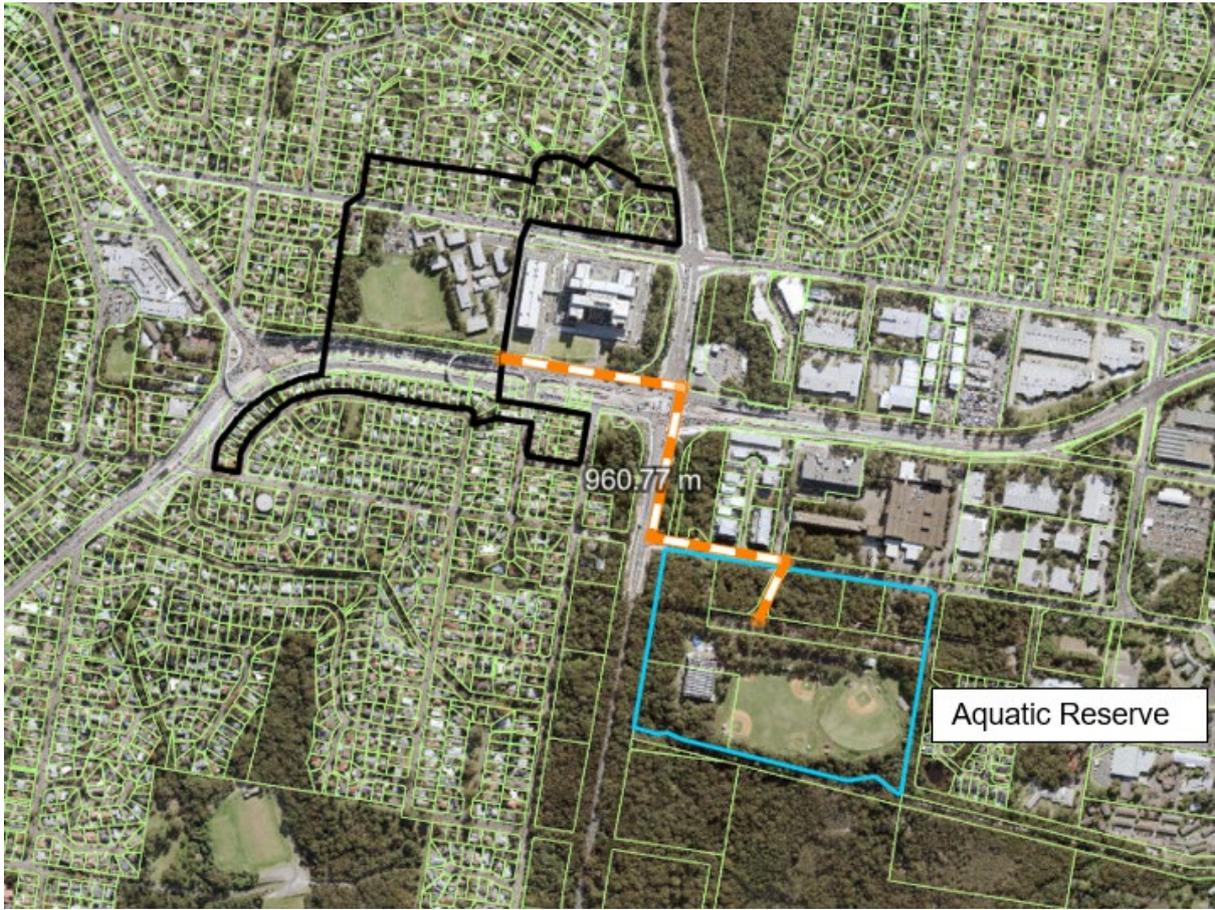


Image 1 – Distance to Aquatic Reserve



Image 2 – Distance to County Road



Image 3 – Distance to Ararat Reserve

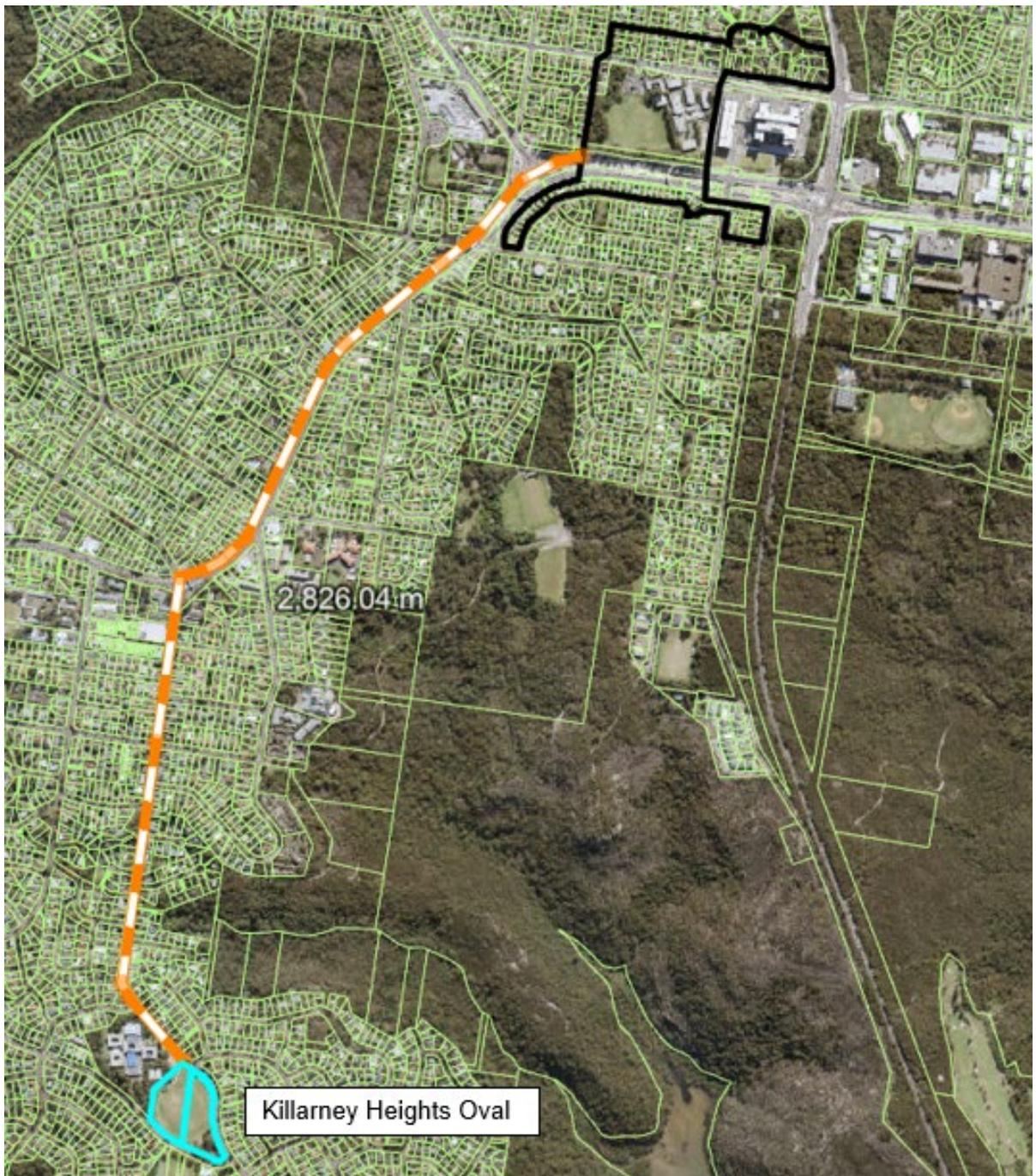


Image 4 – Distance to Killarney Heights Oval

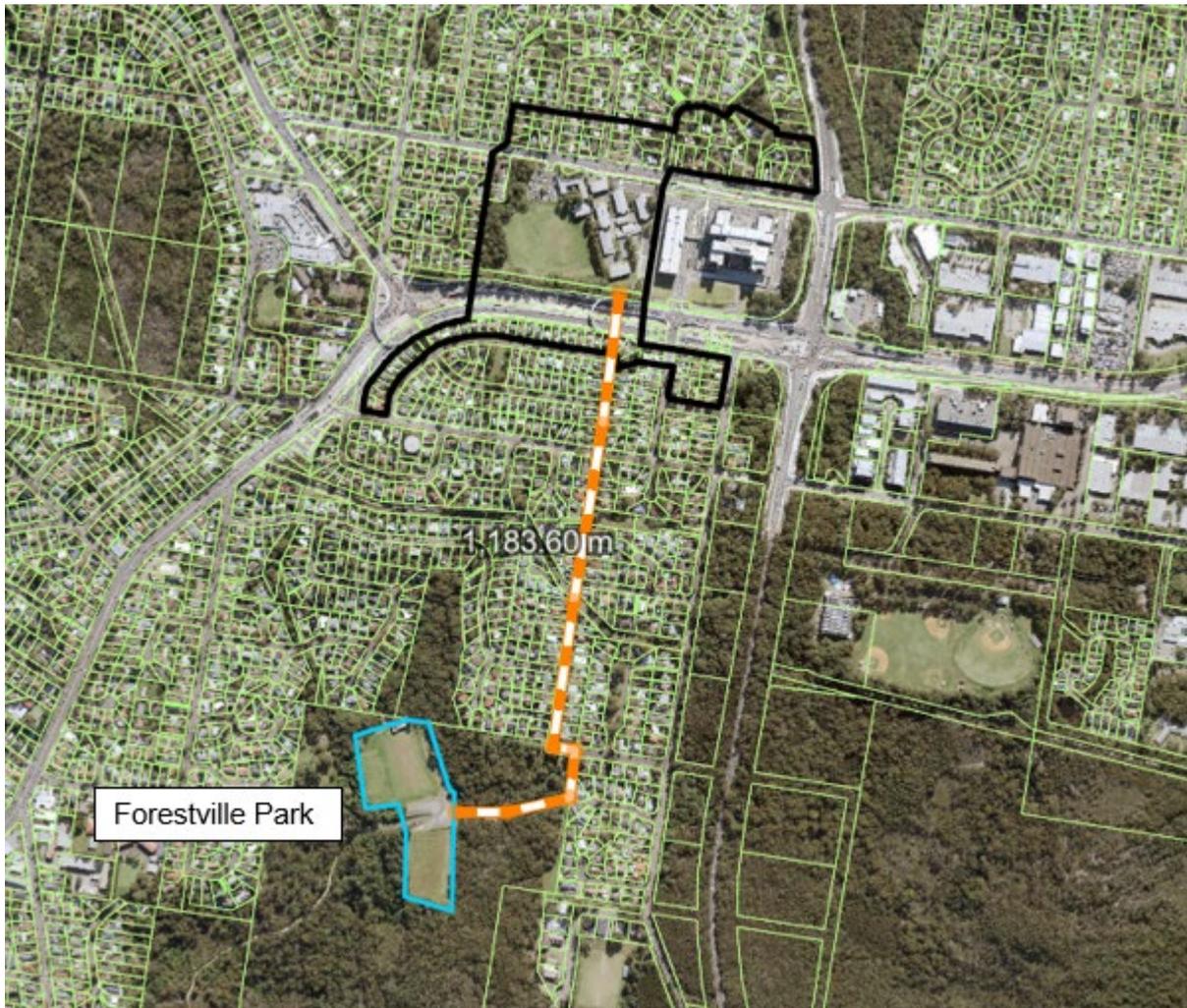


Image 5 – Distance to Forestville Park

Table 10 (p19) in the Otium Addendum Report provides the recommended provision strategy to meet the identified open space demands. Council is implementing this provision strategy, and the infrastructure in the Contributions Plan is a key component. Table 1 below, details the provision strategy (as it relates to demand from the precinct only) and Council comments on how it will be delivered.

Table 1 – Open Space Provision Strategy

Otium - Recommended Strategy		Council Comment
Sports Fields	Upgrade the two fields at Forestville Park to high quality/ high-capacity natural turf fields with lights.	These embellishment works have been included in the contributions plan – Item OS5.
	Develop a new synthetic field with lights as part of the new high school.	Council is advocating for the shared use of the open space and recreation facilities at the new high school site in Allambie Road. Council has negotiated similar arrangements with the Department of Education at other locations in the LGA.
Sports Courts	Develop four new hard courts at the high school as shared facilities.	
	Develop 2 multi-use courts in the town centre with at least one in the parkland and a second as a built solution on a rooftop or similar	<p>A multiuse court will be provided in the town centre. This is identified in the Public Domain Masterplan (prepared by Tyrrell Studios, dated October 2019). The cost of this court was considered in the QS report and is incorporated into Item OS1 in the contributions plan.</p> <p>Council will investigate opportunities to deliver a second multi-use court through built solutions with developers.</p>
Indoor Sports	Provide 2 new indoor courts as part of the high school as a shared provision.	Council is advocating for the shared use of the open space and recreation facilities at the new high school site in Allambie Road.
Indoor Recreation	Provide a number of indoor program spaces as part of other community facilities and community accessible space at the new high school.	<p>The construction costs of community facilities and indoor recreation are expressly excluded from IPART's essential infrastructure list and are not included in the contributions plan.</p> <p>Council will investigate opportunities to provide recreation space in any future community facility in the town centre.</p>

	Upgrade capacity at Warringah Aquatic Centre (WAC) as per current plans (only 12% of costs apportioned to the catchment area).	The construction costs of indoor recreation are expressly excluded from IPART's essential infrastructure list and is not included in the contributions plan.
Public Open Space and Outdoor Recreation	Acquisition and embellishment of land in the town centre (as per current master plan) for a town centre parkland.	The embellishment of the town centre open space is Item OS1 in the contributions plan.
	Acquire additional land to expand Rabbett Reserve and upgrade the reserve as per the Master Plan.	The acquisition and embellishment of additional land at Rabbett Reserve is Items LA2 and OS4 respectively in the contributions plan. Council has secured grant funding for the embellishment of the existing Rabbett Reserve from the NSW Government.
	Pursue opportunities to expand multiple use of Aquatic Reserve through use of land around the Diamonds to provide youth recreation, an informal social sport field and exercise and fitness spaces.	Council is investigating opportunities.
	Embellish Brick Pit Reserve as per the Master Plan	Council has secured grant funding for the embellishment of the existing Brick Pit Reserve from the NSW Government.
	Acquire additional land to expand Akora Reserve and upgrade the existing reserve to increase youth space provision and active space.	The acquisition and embellishment of additional land at Akora Reserve is Items LA1 and OS3 respectively in the contributions plan. Council has secured grant funding for the embellishment of the existing reserve from the NSW Government.

	Recreation trails network – provide additional trail heads, improve signage, provide new links, implement the active transport network.	<p>Council is investigating opportunities for recreational trail improvements. No specific works or costs have been included in the contributions plan.</p> <p>The traffic schedule in the contributions plan includes a shared path along Rabbett Street to connect the town centre to the existing reserve.</p>
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As identified in Council's IPART application form, Council has secured grant funding from the NSW Government to upgrade the exiting Brick Pit Reserve, Akora Reserve and Rabbett Reserve. These upgrades will improve the quality and capacity of the existing open space which are within or adjacent to the precinct. The costs associated with the upgrade of these existing reserves have been removed from the updated infrastructure schedule which is provided with this response.

In summary, the parts of the strategy to address open space and recreation demand included in the contributions plan are detailed in Table 2. It is considered that these present a reasonable and feasible approach to address anticipated demand as part of the broader strategy being implemented by Council.

Table 2 – Open Space Provision in Contribution Plan

Infrastructure	In Contributions Plan	Not in Contributions Plan	Infrastructure (Total)
Open Space Land	2,409m ²	15,000m ² (dedicated by the NSW Government as part of the redevelopment of the school)	17,409m ²
Embellishment (new open space)	17,409m ²		17,409m ²
Embellishment (existing open space)	Forestville Park - 24,028m ²	Brick Pit Reserve - 13,116m ² , Akora Reserve - 3,122m ² Rabbett Reserve - 4,477m ²	44,743m ²

3) *An initial analysis shows that Forestville Park, which is proposed for embellishment in the CP, is around 1.1km from the centre of the CP area. It may be difficult to show a nexus between the CP and the embellishment. Could Council provide any additional information to support its proposed approach?*

The Otium Addendum Report identifies that there are limited opportunities to address active open space demands (particularly for sporting facilities) within the precinct. As identified above, Council has investigated opportunities to address this demand at Aquatic Reserve which has been ruled out due to site contamination and suitability issues.

The existing field at Forestville Park is the closest sports field to the precinct and presents the best opportunity to significantly increase the available hours of use to address demand arising from the anticipated development. It is not feasible to satisfy this demand within the precinct due site suitability and financial considerations. It is also not reasonable to ignore the additional active open space demands (particularly for sporting facilities) anticipated by development of the precinct.