
STRATHFIELD TRIANGLE

PLANNING & URBAN DESIGN REVIEW

LAND ECONOMICS ANALYSIS

GROUP GSA (ON BEHALF OF CANADA BAY COUNCIL)
JANUARY 2019



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EXECUTIVE SUMMARY

BACKGROUND

The Strathfield Triangle has long been earmarked for high-density residential development. It measures about 5.5ha and borders the Homebush and Burwood LGAs. Precinct planning by City of Canada Bay culminated in a new planning framework - with planning controls implemented in the Canada Bay LEP (2013), supplemented by a site-specific Development Control Plan, Development Contributions Plan and Public Domain Plan.

Since implementation of the new planning framework, development take-up has been modest despite buoyant market conditions across much of metropolitan Sydney over the 2012-2017 period.

The Public Domain Plan identified a series of infrastructure items including new parks, pedestrian links, rear lane accessways and road realignments. These items were to be funded through a combination of methods including development contributions, land dedications, divestment of Council-owned land and the acquisition of private land.

The delivery of infrastructure has been limited by the low amount of contributions received and rising land values. Accordingly, a review of the planning controls and infrastructure delivery arrangements is considered necessary to investigate alternate mechanisms for viable delivery of the identified infrastructure.

Group GSA has been engaged by City of Canada Bay Council (Council) to undertake a planning and urban design review ('the Review') of the Strathfield Triangle with a focus on the viable delivery of public domain infrastructure. AEC Group (AEC) is engaged as sub-consultant to Group GSA to provide land economics advice with respect the potential for, and capacity of development to contribute to infrastructure in the Strathfield Triangle.

PURPOSE & APPROACH

The overarching objective of the Review is to assist Council understand if there are planning mechanisms and alternate development scenarios that could assist with the current challenges of infrastructure delivery.

The Review will provide direction for amendments to the Canada Bay LEP (2013), Development Control Plan, Development Contributions Plan and the Public Domain Plan.

In order to fulfil the requirements of the brief, it was necessary for the project team to:

- Identify and investigate the viability of existing planning controls (the Base Case) and conclude the likelihood of identified infrastructure items being delivered in the Base Case.
- Identify planning and non-planning mechanisms that could assist with delivery of infrastructure (e.g. land dedication and transfer of floorspace, incentive/bonus floorspace, land divestment).
- Develop up alternate development scenarios and investigate their potential for delivery of infrastructure.
- Recommend a Preferred Alternate Development Scenario.

AEC worked with Group GSA, attended workshops with Council and provided input to the Review at various stages.

COST OF INFRASTRUCTURE DELIVERY

Little new development in the Study Area occurred post-implementation of Strathfield Triangle planning framework.

Total development contributions received (to 2019) are understood to be in the order of \$1.8m. These funds have generated some \$200,000 of interest, bringing the total contributions revenue received to date to just over \$2m.

A recent review (2018) of the civil costs of the Public Domain Plan estimated the cost of works at \$18.1m (increased from \$7.9m in 2013). Revaluations of the properties identified for compulsory acquisition were similarly undertaken in 2018, with the market values of properties assessed at \$21.0m (increased from \$8.7m in 2013).

In total, the estimated cost of delivering the Public Domain Plan is \$42.6m (compared to \$20.1m in 2013).

Council has commenced compulsory acquisition proceedings for 36 Leicester Avenue (indicative cost \$3.5m) to progress delivery of an identified through-site link between Leicester Avenue and Hilts Road.

DO-NOTHING SCENARIO

Base Case

Group GSA carried out an urban design review to examine opportunities to improve built form outcomes and deliverability of development. The urban design testing of the Base Case (existing planning controls) identified several instances of non-compliance with the Apartment Design Guide and a less desirable urban design outcome.

Adjustments were made to address the identified non-compliance issues whilst minimising deviation from the Base Case. This resulted in the Adjusted DCP Scheme.

Adjusted DCP Scheme

The Adjusted DCP Scheme identified theoretical potential for 802 units across the Study Area, or 865 units if including the DA consent at 38-42 Leicester Avenue.

Development yield is distributed across seven development blocks with building heights aligning with the Base Case (ranging from 2 storeys to 18 storeys). Development blocks comprise FSRs ranging from 1.2:1 to 5.2:1.

Generic feasibility testing found that density controls of FSR 2.2:1 to FSR 2.5:1 are required at a minimum for development to be viable in the Study Area. Three development lots (Lot 1, 2 and 3) were considered not feasible. Therefore, the number of dwellings likely to be delivered in the Study Area decreases from 802 units to 750 units.

By applying existing contribution rates to the development lots considered feasible to develop, a total contributions amount \$12.4m results. Including the \$2m of development contributions already received, total contributions under the Adjusted DCP Scheme amounts to \$14.4m. Against the revised cost of delivering the public domain plan (\$42.6m) there is a shortfall of \$28.2m.

ALTERNATE DEVELOPMENT SCENARIOS

Given the significant funding shortfall (\$28.2m), alternate development scenarios which reduce the quantum/ cost of infrastructure or increase revenue potential were examined. Potential actions explored by project team were:

- Reduction in cost of land acquisition through planning mechanisms;
- Increase in development capacity;
- Reduction of public domain infrastructure.

The reduction in quantum of public domain infrastructure was not considered an acceptable course of action given the already limited quantum of public open space in the vicinity and scale of development contemplated.

The major issue for infrastructure delivery is the acquisition cost of the Hilt Road Park in the Base Case. The park covers five allotments that do not adjoin any developable land, precluding use of floorspace transfer mechanism.

The alternate development scenarios were premised on a floorspace transfer planning mechanism. The cost of land acquisitions was therefore *excluded* from the cost to deliver the Public Domain Plan (the exception being 36 Leicester Avenue given compulsory acquisition proceedings have commenced).

Floorspace Transfer Mechanism (Dedication of Land and Transfer of Development Potential)

The planning mechanism for procuring of land (allowing for transfer and development of floorspace potential) for a public purpose is not new. It is premised on a recognition that should development potential (FSR) of the land dedicated be transferred for development elsewhere on the remaining site, there is no loss of development potential. No loss is suffered and therefore no (or nominal) value is ascribed to the land that is dedicated.

Where land is identified as required by Council or a public authority for a public purpose (whether in an infrastructure schedule or in a precinct plan) and the development potential of that land can be transferred to the remaining site*, this procurement of land is referred to as 'land dedication'. A voluntary planning agreement (VPA) is expected to be the instrument through which land is dedicated to Council.

**remaining site refers to land that is contiguous and in similar ownership, regardless of its structure in single or multiple allotments.*

In contrast, where land dedication is required to address development need, for example, if proposed residential uses are to front a rear laneway and a footpath is required to be created for access, the land required for dedication is not for a public purpose. Accordingly, the requirement for land will be a condition of development consent.

Land dedication (and transfer of development potential) is distinguished from land reservation for a public purpose in an environmental planning instrument where council could be identified as the acquiring authority. In this instance, the procurement of land is through compulsory acquisition and compensation would be subject to the provisions of *Land Acquisition (Just Terms Compensation) Act 1991*.

Preliminary Scenarios

Three alternate development scenarios examined the viability of *different* park locations based on whether potential floorspace associated with land for the new park could be harvested and transferred to adjoining land. Table ES.1 summarises key metrics of these alternate scenarios.

Table ES.1: Preliminary Development Scenarios, Summary of Key Metrics

Development Scenario	Total Yield	Likely Yield	Potential Contributions	Revised Infrastructure Cost*	Surplus (Deficit)
Leicester Avenue Park	965	842	\$15.1m	\$21.6m	(\$6.5m)
Central Park	1,005	851	\$15.2m	\$21.6m	(\$6.4m)
Cooper Street Park	965	811	\$14.6m	\$21.6m	(\$7.0m)

*based on existing Public Domain Plan
Source: AEC/ Group GSA

The Central Park Scenario was selected as preferred as it provides the greatest level of amenity and has the greatest potential for development take-up.

Feasibility testing of the Central Park Scenario indicated that densities proposed on a number of development lots were insufficient to incentivise redevelopment. The Central Park Scenario was re-visited and refined to optimise densities (where appropriate) and leverage the floorspace potential of Council-owned land. The refined Central Park Scenario is the Preferred Development Scenario.

Preferred Development Scenario

The Preferred Development Scenario relocates the Hilts Road Park to Lot 5 with the development floorspace of this land harvested and transferred to the remainder of Lot 5 and Lot 6.

Lots 1 and 2 are consolidated with a density control of FSR 2.4:1 and the newly created Lot 8 recommended with an FSR 2.3:1. A theoretical yield of 997 units results (1,060 units including DA-approved 38-42 Leicester Avenue).

The Preferred Development Scenario envisages two locations within the Study Area where land is required for dedication (new park and new road). The Preferred Development Scenario envisages a number of through-site links, however these could be required as a condition of consent without necessarily requiring land be dedicated.

Figure ES.1 illustrates the spatial distribution of required land for public domain works and Table ES.2 compares the GFA potential of sites which are key to the securing of land required.

Table ES.2: Preferred Development Scenario Required Land Dedication, Key Development Lots

Ref.	Public Domain	Address	Adjusted DCP Scheme		Preferred Development Scenario	
			Site Area (sqm)	GFA (sqm)	Site Area (sqm)	GFA (sqm)
1	New park	2-12 Chapman St	4,368	11,357	4,368	11,357
		11-21 Chapman St				
2	New road	2-12 Leicester Ave	4,513	18,054	4,513	18,054
		25-27 Cooper St				

Source: Group GSA

In each of the key lots, there is no change in GFA entitlement on privately-owned land between the Preferred Development Scenario and Adjusted DCP Scheme. The incentive to deliver the public domain items would instead be the provision of Council-owned land into the development lots, providing for a larger development.

Figure ES.1: Preferred Development Scenario, Required Land Dedication

Source: Group GSA

Council-owned Lands

The Preferred Development Scenario identified redundancy of Chapman Street and Cooper Street.

- Chapman Street would be closed and form part of new park and Lot 6. The floorspace potential could be harvested and transferred to the remainder of Lot 6.
- The southernmost portion of Cooper Street would be closed and consolidated to form part of Lot 4. The floorspace potential could be harvested and transferred to the remainder of Lot 4.

Use of the floorspace potential associated with the Council-owned land could be an important incentive tool as well as source of funds for delivery of public infrastructure.

Potential Contributions v Cost of Infrastructure

Potential contributions from the Preferred Development Scenario (assuming Council-owned lands are developed) added to \$2m of contributions already received totals some \$18.5m. When compared against the assumed cost of infrastructure of \$21.6m (excluding cost of land acquisition), a shortfall of \$3.1m results.

If Council-owned lands are not developed, potential yield reduces by 133 units and total potential contributions falls to \$15.5m. When compared against the assumed cost of infrastructure of \$21.6m, a shortfall of \$6.1m results.

Table ES.3: Potential Contributions v Revised Costs, Preferred Development Scenario

Item	Amount
Development Contributions	
Total Potential Contributions	
With Council lands	\$16,484,648
Without Council lands	\$13,528,535
Contributions Received	\$2,005,444
Total Contributions	
With Council lands	\$18,490,092

Item	Amount
Without Council lands	\$15,533,979
Cost of Infrastructure	
Acquisition of 36 Leicester Avenue	\$3,500,000
Civil Works	\$18,131,301
Total Costs	\$21,631,301
Surplus (Shortfall)	
With Council lands	(\$3,141,209)
Without Council lands	(\$6,097,322)

Source: AEC

Impact of Other Contributions

The feasibility testing only considered known statutory charges (i.e. s7.11 contributions, DA and CC fees), not considering charges such as Special Infrastructure Contributions and affordable housing that could be required.

- **Special Infrastructure Contributions (SIC)**

The Study Area is located in the vicinity of the Strathfield, Burwood, Homebush Planned Precinct. The formal boundaries of the Planned Precinct are not yet known.

When including a hypothetical SIC rate of \$20,000 per dwelling, the minimum density threshold (tipping point) for feasible development increases to FSR 2.7:1. Accordingly, Lots 1-2, Lot 3, Lot 5 and Lot 8 are no longer feasible in the Preferred Development Scenario.

When excluding the contributions from lots no longer feasible, and assuming the Council-owned lands are developed, the funding shortfall under the Preferred Development Scenario increases from \$3.1m to \$8.9m.

- **Affordable Housing Contributions**

Lots 1-2, Lot 3 and Lot 8 would benefit from an increase in permitted densities above those in the Base Case. Feasibility testing indicates an affordable housing rate of 5% on these development lots would render them no longer feasible in the Preferred Development Scenario.

When excluding the contributions from lots no longer feasible, and assuming the Council-owned lands are developed, the funding shortfall under the Preferred Development Scenario increases from \$3.1m to \$6.4m.

MATTERS FOR CONSIDERATION

The premise of land dedication (free of cost, or at nominal cost to Council) is that the dedicated land's floorspace potential is harvested so that the site's overall development capacity is not reduced.

A floorspace incentive (by way of increased density) is a common delivery mechanism for local community infrastructure. Floorspace potential is calculated on the overall site area (before land dedication) and the development capacity of the dedicated land is transferred to the remainder of the site. The required land is then dedicated at nominal cost. This is practised by several councils and is embodied in respective policy documents.

Certainty and Flexibility

A precinct plan that is viable provides certainty that is necessary for investment (compared to an ad-hoc approach in response to individual landowner proposals). When requiring contributions (cash or kind) to deliver specified infrastructure items, the following should be clearly identified on a plan:

- Community infrastructure and land requirements (e.g. new park, through site links, community facilities).
- Development blocks/ amalgamation patterns and incentive floorspace (from Council land). Testing of amalgamation patterns is critical to ensure consolidated development blocks are viable, i.e. have the environmental capacity to accommodate the built form, delivery of public domain infrastructure and transfer of floorspace potential.

Flexibility should be embedded to allow development blocks to be considered on a merits assessment, i.e. delivering the desired infrastructure with acceptable environmental impact to surrounding lands.

Treatment and Valuation of Contributions

The administering of contributions should have regard to the following:

- Land dedicated is valued at nominal value (where the floorspace potential of the lands are transferred and developed on the remaining site) to avoid ‘double dipping’.
- Unless identified in a s7.11 contributions plan, land dedicated is not eligible for offset in s7.11 payable.
- Works identified and funded in a s7.11 contributions plan could be delivered and offset against s7.11 payable.
- If an entire site is identified for dedication and the landowner does not have interest in adjoining land, a more appropriate mechanism could be to reserve the land for acquisition. This would provide certainty of delivery.

Funding Shortfall and Potential Funding Solutions

The best case scenario (assuming Council-owned lands are developed and pay s7.11 contributions) is estimated with a funding shortfall of \$3.1m. Less favourable scenarios are \$6.1m (if Council-owned lands are not developed) and \$8.9m (if a SIC of \$20,000 per dwellings were applicable).

The Review considers it prudent for Council to investigate additional funding sources. Leveraging Council-owned land at Chapman Street and Cooper Street (part) is a logical approach.

Divestment of the development potential at Chapman Street and Cooper Street would assist with closing the funding shortfall. This would also ensure the floorspace potential is taken up and contributions are paid.

Use of the floorspace potential associated with the Council-owned land could be an important incentive tool for delivery of public infrastructure (whether included/ gifted or available at a concessional rate as an incentive), particularly as the likely timing of development is uncertain.

The development potential associated with Council-owned lands could be:

- Bonus floorspace to:
 - Incentivise land dedication, particularly with uncertain timing of development.
 - Mitigate impacts should a SIC and/ or affordable housing contributions be required.
- Divested and sale proceeds to assist with delivery of infrastructure.
- Foregone, leaving a funding shortfall even in best case scenario where majority of development is taken-up.

An increase in s7.11 development contribution rates could be considered, however this will reduce the attractiveness of development as an investment proposition and could reduce development take-up. In any event, a review of the Development Contributions Plan will be in order after a new Public Domain Plan is prepared.

Next Steps

Should Council adopt the Review’s findings and recommendations, the following will be necessary:

- Amendments to Canada Bay LEP and DCP.
- Preparation of new Strathfield Triangle Public Domain Plan.
- Preparation of new Strathfield Development Contributions Plan.

While not necessarily specific to the Study Area, a Planning Agreement Policy could be prepared. This would guide the quantum and manner in which public benefit contributions are to be made (land dedication, works-in-kind), the treatment/ valuation of works in kind and critically, what constitutes a material public benefit.

Following preparation of the new public domain plan, the following matters will require investigation:

- s7.11 contribution rates that are appropriate, focused on the overarching objective of infrastructure delivery.
- Treatment of GFA potential from Council-owned land (whether available as an incentive or divested for value).
- Comparison of new s7.11 contributions against the cost of infrastructure delivery.

TABLE OF CONTENTS

DOCUMENT CONTROL.....	I
EXECUTIVE SUMMARY	II
TABLE OF CONTENTS	VIII
1. INTRODUCTION.....	9
1.1 BACKGROUND AND OVERVIEW	9
1.2 THE STUDY AREA.....	9
1.3 SCOPE AND PURPOSE.....	10
1.4 APPROACH AND TASKS	11
1.5 ASSUMPTIONS AND LIMITATIONS	12
2. CURRENT CONTEXT	13
2.1 PLANNING FRAMEWORK	13
2.2 DEVELOPMENT ACTIVITY	16
2.3 COST OF INFRASTRUCTURE DELIVERY	17
2.4 BASE CASE DEFINITION.....	18
3. ALTERNATE DEVELOPMENT SCENARIOS.....	21
3.1 PREMISE AND RATIONALE.....	21
3.2 ALTERNATE DEVELOPMENT SCENARIOS.....	21
3.3 ANALYSIS OF DEVELOPMENT SCENARIOS.....	25
3.4 PREFERRED DEVELOPMENT SCENARIO.....	28
4. PROVIDING FOR INFRASTRUCTURE	32
4.1 INFRASTRUCTURE FUNDING.....	32
4.2 DEDICATION OF LAND.....	33
4.3 CAPACITY OF DEVELOPMENT TO CONTRIBUTE	36
4.4 MATTERS FOR CONSIDERATION	38
REFERENCES.....	40
APPENDIX A: GENERIC FEASIBILITY ASSUMPTIONS.....	41

1. INTRODUCTION

1.1 BACKGROUND AND OVERVIEW

The Strathfield Triangle is a triangular area of land forming the southernmost edge of the Canada Bay local government area. Situated between the T1 Epping rail line and Parramatta Road, the Strathfield Triangle is zoned R4 High Density Residential and comprises a mix of recently constructed residential flat buildings, older single storey detached houses and vacant parcels of land.

The Strathfield Triangle has long been earmarked for high-density residential development. A review undertaken by City of Canada Bay in 2012 culminated in a new planning framework. The new planning framework was implemented in the Canada Bay LEP (2013) and supplemented by a site-specific Development Control Plan, Development Contributions Plan and Public Domain Plan.

Since implementation of the suite of new planning controls, development take-up within the Strathfield Triangle has been modest. Whilst some development activity has occurred (mostly in the northern section fronting Parramatta Road), development take-up has been sluggish despite buoyant market conditions across much of metropolitan Sydney over the 2012-2017 period.

The Strathfield Triangle does not currently have significant public open space and lacks good permeability. The Strathfield Triangle Public Domain Plan identified a series of infrastructure items to be delivered progressively, including new parks, pedestrian links, rear lane accessways and road realignments. These items were to be funded through a combination of methods including development contributions, land dedications, divestment of Council-owned landholdings and the acquisition of private land.

The ability of the City of Canada Bay Council to deliver public domain infrastructure has been limited by a lack of development contributions received (given the modest level of development take-up) and rising land values. Accordingly, a review of the planning controls and infrastructure delivery arrangements is considered necessary to investigate alternate mechanisms for viable delivery of the identified infrastructure.

Group GSA has been engaged by City of Canada Bay Council (Council) to undertake a planning and urban design review (referred to as 'the Review') of the Strathfield Triangle with a focus on the viable delivery of public domain infrastructure. AEC Group (AEC) is engaged as sub-consultant to Group GSA to provide land economics advice with respect the potential for, and capacity of development to contribute to infrastructure in the Strathfield Triangle.

1.2 THE STUDY AREA

The Strathfield Triangle measures approximately 5.5ha and directly borders the Homebush and Burwood LGAs. Triangular in shape, the Strathfield Triangle is bounded by Parramatta Road in the north, Leicester Avenue in the east and the T1 Epping Rail line to the west and south. For the purposes of the Review, the Strathfield Triangle is referred to as the 'Study Area'.

The Study Area features an eclectic mix of built form with recently constructed apartment buildings in the northern section near Parramatta Road ranging from 7 to 10 storeys whereas older style, single storey brick houses are observed along much of Leicester Avenue. A number of vacant blocks of land are interspersed throughout the Study Area, formerly detached houses which were acquired and demolished for future development.

The Study Area is strategically located; the Strathfield and Homebush local centres are within 800m to the south while the North Strathfield centre is about 1km to the north. Proximity to these local centres provides strong regional transport connections via the T1 Northern, Western and Epping rail line and the T2 Inner West rail line. Local bus stops along Leicester Avenue provide accessibility to local and regional destinations with Parramatta Road being a major arterial road connecting east-west across metropolitan Sydney.

Several important employment precincts are located in close proximity. The Bakehouse Quarter immediately north of Parramatta Road in North Strathfield comprises a mix of commercial office and retail uses whilst Strathfield is an important suburban office market with a number of national tenants, government agencies and NGOs.

The Study Area is depicted in Figure 1.1.

Figure 1.1: Strathfield Triangle, Location Map

Source: Group GSA

The Study Area falls within the Parramatta Road Corridor. Planning controls recommended in the Parramatta Road Corridor Urban Transformation Strategy reflect those in the Canada Bay Local Environmental Plan (2013).

The centres of Burwood, Homebush and Strathfield have been identified as Planned Precincts, having the potential to accommodate additional housing and employment. Precinct planning investigations are led by Department of Planning and Environment (DPE) and are understood to be ongoing.

1.3 SCOPE AND PURPOSE

The overarching objective of the Review is to assist Council understand if there are planning mechanisms and alternate development scenarios that could assist with the current challenges of infrastructure delivery.

More specifically, the Review is to address the following objectives:

- Test alternate options that create an environment with a high level of amenity for residents that can be delivered;
- Ensure alternate development scenarios deliver high quality urban design and public domain outcomes;
- Ensure changes to planning controls are justified on planning and urban design grounds; and
- Review the assumptions in the Strathfield Triangle Development Contributions Plan and consider appropriate infrastructure delivery mechanisms.

The Review will provide a direction for amendments to the Canada Bay Local Environmental Plan, Strathfield Triangle Development Control Plan, Strathfield Triangle Development Contributions Plan and the Strathfield Triangle Public Domain Plan.

1.4 APPROACH AND TASKS

In order to fulfil the requirements of the brief, it was necessary for the project team to:

- Identify and investigate the viability of existing planning controls (the Base Case) and conclude the likelihood of identified infrastructure items being delivered in the Base Case.
- Identify planning and non-planning mechanisms that could assist with delivery of infrastructure (e.g. land dedication and transfer of floorspace, incentive/bonus floorspace, land divestment).
- Review the infrastructure items and identify if any savings could be made.
- Develop up a series of alternate development scenarios in the Study Area and investigate their potential to assist with delivery of infrastructure.
- Recommend a Preferred Alternate Development Scenario which could utilise a mix of planning and non-planning mechanisms for delivery of infrastructure.

AEC worked with Group GSA, attended workshops with Council and provided input to the Review at various stages.

Stage 1 - Base Case Analysis

- Review development status in the Study Area (where development is complete and yet to be progressed).
- Understand remaining development capacity (in yield terms).
- Understand estimated cost to deliver identified infrastructure (per Development Control Plan, Development Contributions Plan and Public Domain Plan) and compare against contributions received so far.
- Residential market appraisal to understand price points, market attitudes and prices paid for development opportunities in the Study Area and surrounds.
- Feasibility modelling to test Base Case planning controls in the Study Area.
- Identify likelihood of development occurring in the Base Case (considering lot and amalgamation patterns, financial feasibility) as well as likelihood of identified infrastructure being delivered.
- Conclude the implications of a Do-Nothing scenario (the Base Case), specifically development and infrastructure that could be delivered.

Stage 2 - Planning and Urban Design Review

- Investigate the potential for planning mechanisms to assist with delivery of infrastructure (specifically land dedication and transfer of floorspace, incentive/ bonus floorspace).
- Review three alternate development scenarios developed by Group GSA, specifically from the perspective of:
 - Development feasibility and likelihood of take-up;
 - Minimum FSRs required for development feasibility;
 - Viability of lot amalgamation patterns;
 - Potential for land dedication for transfer of floorspace and/or bonus floorspace; and
 - Potential contributions against assumed cost of infrastructure delivery.
- Contribute to selection of a preferred development scenario.
- Assess the feasibility of the preferred development scenario (including the potential impact of other development contributions) and its capacity to deliver the infrastructure. If development contributions alone are insufficient to cover the assumed cost of infrastructure, investigate alternate revenue sources.
- Identify risks that may be inherent in the preferred development scenario.

Stage 3 - Analysis and Recommendations

- Make recommendations for Council to consider with respect:
 - Viable densities and lot/ amalgamation patterns;
 - Planning mechanisms for delivering infrastructure (land dedication, transfer of floorspace, incentive/ bonus floorspace);
 - Other solutions to address funding shortfall (if any).
- Document the analysis and findings in a report to accompany the Planning and Urban Design Review.

1.5 ASSUMPTIONS AND LIMITATIONS

Generic Feasibility Testing

Generic feasibility testing is carried out to test the feasibility and deliverability of development in the Base Case. The feasibility and deliverability of alternate development scenarios are also tested.

The limitations of generic feasibility testing are acknowledged, in particular the following:

- Desktop appraisal of 'as is' property values, without the benefit of internal inspections.
- Generic feasibility testing does not consider nuances of a site typically considered in detailed feasibility analysis. Development costs assumed are 'generic', based on construction cost publications and past industry experience. No provision is made for extraordinary development costs that may be necessary as a result of ground conditions or environmental constraints.

The results of generic feasibility testing are cross-checked with development site sales to ensure they are in line with observed market activity. Despite the limitations, generic feasibility testing is considered an appropriate tool where a study area is comprised of numerous development blocks and detailed site-by-site analysis is not possible.

Revised Cost Estimates

Council undertook a review of the cost of infrastructure delivery (cost of works and cost of land acquisition) in 2018. While the revised cost estimates provide an indication of the cost of delivery in current dollar terms, they relate to items in the Public Domain Plan in the Base Case.

Broad order of magnitude costs for the alternate development scenarios have been estimated relying on Base Case cost plans. The Review highlights that the public domain infrastructure items associated with alternate development scenarios have not been formally specified and costed.

Should an alternate development scenario be pursued in the Strathfield Triangle, preparation of a new Development Control Plan and Public Domain Plan will be necessary. This would necessitate preparation of a new cost plan. The findings of the Review should be re-visited at that stage.

Analysis of Potential Contributions v Assumed Cost of Infrastructure

The Review compares potential contributions receivable in the Base Case and alternate development scenarios against the assumed cost of infrastructure in today's dollars. In reality, development occurs over time and contributions received in the future will be at indexed contribution rates. Similarly, the cost of infrastructure works will be subject to escalations over time until delivered.

Once a new Public Domain Plan and associated cost plan is prepared, an analysis of potential contributions revenue against the cost of infrastructure delivery should be re-visited.

The estimate of potential contributions does not account for credits that may be granted for existing use.

Notwithstanding the limitations above, the approach is considered appropriate for the purposes of the Review, which is to provide direction for amendments to the Strathfield Triangle planning framework.

2. CURRENT CONTEXT

2.1 PLANNING FRAMEWORK

A suite of planning policy including the Canada Bay Local Environmental Plan (2013), Strathfield Triangle Development Control Plan (2013), Strathfield Triangle Public Domain Plan (2013) and Strathfield Triangle Development Contributions Plan (2013) form the planning framework for development in the Study Area.

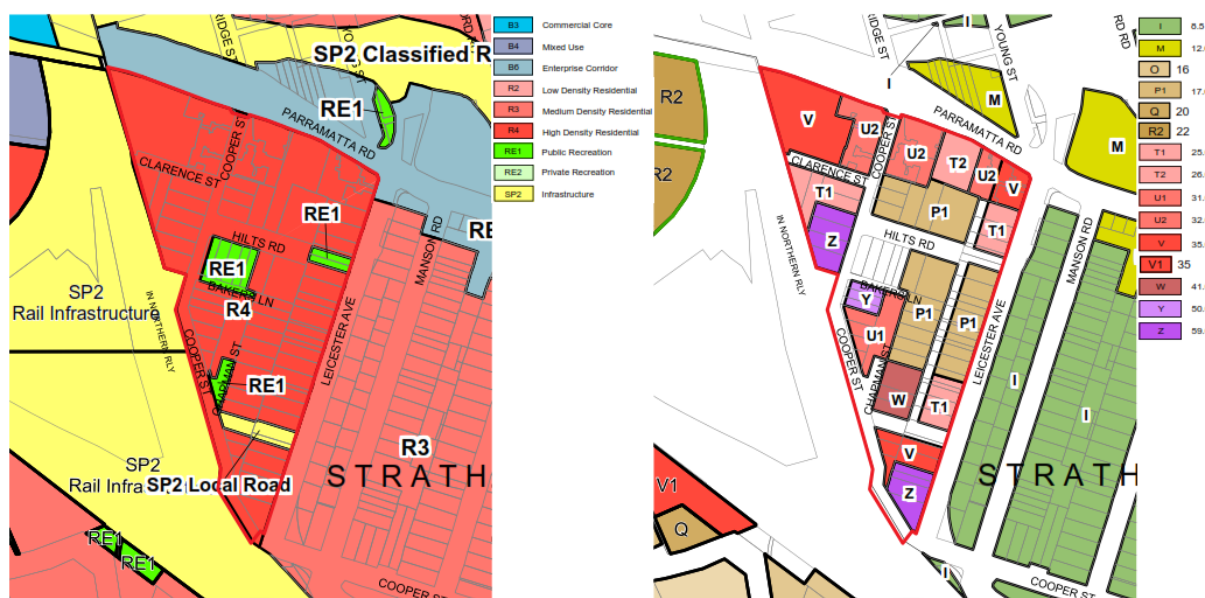
2.1.1 Canada Bay Local Environmental Plan (2013)

The Study Area is predominantly zoned R4 High Density Residential with a number of lots zoned RE1 Public Recreation. A small portion of land is zoned SP2 Local Road, providing for a realignment of Copper Street and a new through-site link between Leicester Avenue and Cooper Street. Lands immediately north of the Study Area along Parramatta Road are zoned B6 Enterprise Corridor with lands immediately to the east zoned R3 Medium Density Residential. The railway corridor immediately west is zoned SP2 Rail Infrastructure.

Density in the Study Area is controlled by maximum building heights with no specified floor space ratios (FSRs). Lands zoned R4 High Density Residential are subject to height controls of 17m (5 storeys) to 59m (18 storeys). Land immediately north and east of the Study Area is subject to height controls of 12m and 8.5m respectively.

Figure 2.1 depicts the land use zones and maximum building height controls applicable in the Study Area.

Figure 2.1: Land Use Zones and Building Heights, Canada Bay LEP (2013)



Source: CBLEP (2013)

Lands zoned RE1 Public Recreation and SP2 Local Road are identified as land reserved for acquisition and identified on the Land Reservation Acquisition Map.

Lands within the Study Area is subject to a minimum lot size control of 450sqm.

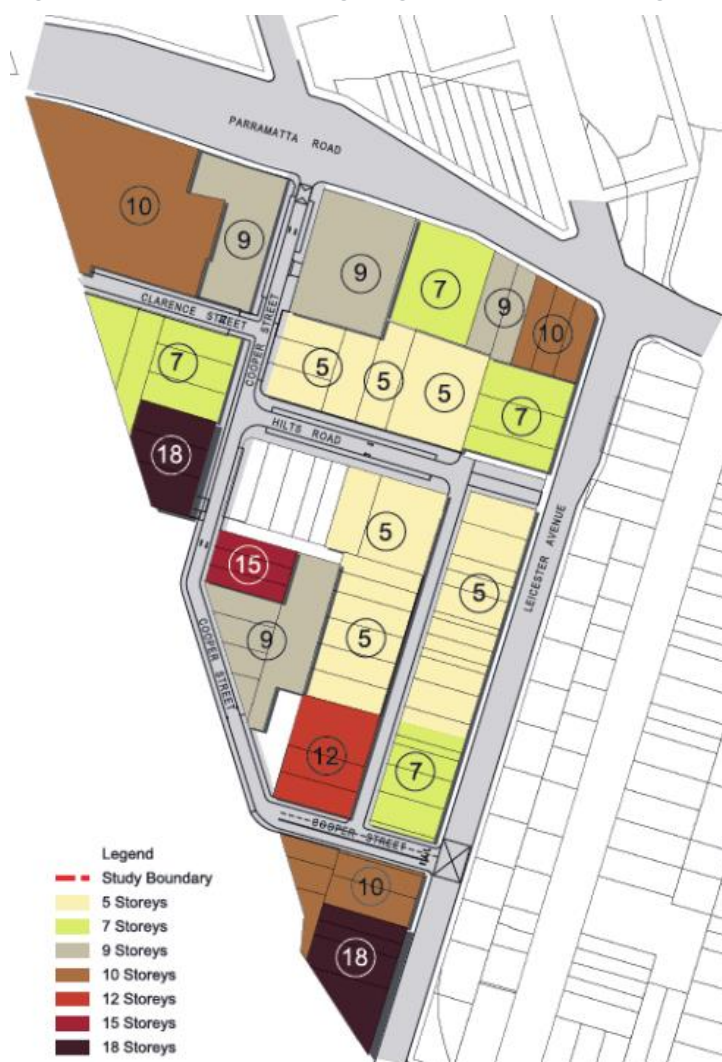
2.1.2 Strathfield Triangle Development Control Plan (2013)

The Strathfield Triangle DCP was prepared over the course of 2012-2013 in conjunction with the Canada Bay LEP (2013). The DCP details development principles, controls and guidelines to achieve the development outcomes envisioned for the Study Area.

The Strathfield Triangle DCP envisaged development of the Study Area into a high-density residential and mixed-use precinct which capitalised on its strategic location proximate both the Strathfield train station and town centre to the south, as well as to the Bakehouse Quarter on the northern side of Parramatta Road. The DCP identified a series of maximum building heights, amalgamation patterns and indicative building footprints.

Figure 2.2 illustrates the recommended maximum building heights and amalgamation patterns outlined in the DCP.

Figure 2.2: Maximum Building Height Controls and Amalgamation Patterns, Strathfield Triangle



Source: CBC (2013)

The Strathfield Triangle Public Domain Plan 2013 (the Public Domain Plan) was adopted concurrently with the Strathfield Triangle DCP. The Public Domain Plan identified the public domain infrastructure items required to meet the anticipated demand of future residents, as well as items required to improve amenity and permeability in the Study Area. Key items identified under the Public Domain Plan include:

- New 1,840sqm public park on corner of Hilts Road and Cooper Street;
- Realignment of Cooper Street and Leicester Avenue intersection;
- Road widening of Cooper Street;
- New pedestrian link between Hilts Road and Leicester Avenue;
- New pocket park at the southern end of Chapman Street;
- New Leicester Lane providing rear lane access to future developments along Leicester Avenue.

Delivery of the public domain infrastructure items outlined in the Strathfield Triangle DCP and Public Domain Plan require a combination of civil works and land dedications (via land acquisitions). The primary mechanism to fund these costs were development contributions (s7.11, formerly known as s94). Detailed cost plans and required development contributions were outlined in the Strathfield Triangle Development Contributions Plan (2013).

2.1.3 Strathfield Triangle Development Contributions Plan (2013)

The Strathfield Triangle Development Contributions Plan 2013 (the Development Contributions Plan) identified and costed the public domain infrastructure items outlined in the DCP and Public Domain Plan. These costs broadly fall into two categories: civil works and land acquisitions. At the time of drafting, the Development Contributions Plan expected a total delivery cost of almost \$20.1m.

The Development Contributions Plan identified various mechanisms to fund required infrastructure items, including:

- Development Contributions (s7.11 charges);
- Dedication of land by developers in lieu of development contributions;
- Council-led land acquisitions (subject to collection of sufficient development contribution funds);
- Divestment of the Council-owned Chapman Street;
- Formal closure of Bakers Lane and southern section of Cooper Street.

The divestment of Chapman Street was expected to generate \$2.7m in revenue, with revenue collected (or expected to be collected) from the existing contributions plan estimated at almost \$2.9m. The Plan also identified General Revenue funding of \$3.445m which could support land acquisitions. After deducting these revenues from the total cost of \$20.1m, a shortfall of \$10,986,186 was required to be funded by the Strathfield Triangle Development Contributions Plan. This is summarised in Table 2.1.

Table 2.1: Required Revenue, Strathfield Triangle Development Contributions Plan (2013)

Type	Surplus (Shortfall)
Costs	
Civil Works	\$7,899,738
Land Acquisitions	\$8,715,422
Cost to Council to Support Acquisition of Open Space	\$3,445,000
Total Costs	\$20,060,164
Revenue	
Revenue from Existing Contributions	\$2,898,977
Proposed Sale of Chapman Street	\$2,730,000
General Revenue to Support Acquisition of Open Space	\$3,445,000
Shortfall Required to be Funded in New Contributions Plan	(\$10,986,186)

Source: CBC (2013)

The Development Contributions Plan calculated s7.11 contributions required in the Study Area to meet the \$10.98m shortfall. Contribution rates were premised on a theoretical development capacity of 730 additional dwellings (which was estimated from dwelling mix and apartment size assumptions) and assumed occupancy rates.

Contributions under the plan were to be indexed to Consumer Price Index (CPI) each quarter. The Contributions Plan stipulated a maximum contribution rate of \$20,000 per dwelling (consistent with the \$20,000 cap).

Table 2.2 summarises the s7.11 contributions applicable to residential development in the Study Area (as at November 2018) and extrapolates anticipated development to calculate total potential contributions receivable.

Table 2.2: Strathfield Triangle s7.11 (s.94) Theoretical Development Contribution (November 2018)

	Studio/1BR	2BR	3BR+
Development Contribution	\$10,744	\$15,824	\$20,000
Apartment Mix	15%	70%	15%
Expected Dwellings	109.5	511	109.5
Total Theoretical Contributions	\$1,176,470	\$8,086,008	\$2,190,000

Source: CBC (2013)

Based on existing s7.11 rates and the adopted yield and unit mix assumptions in the Development Contributions Plan, a total of \$11.45m could theoretically be received from residential development in the Study Area.

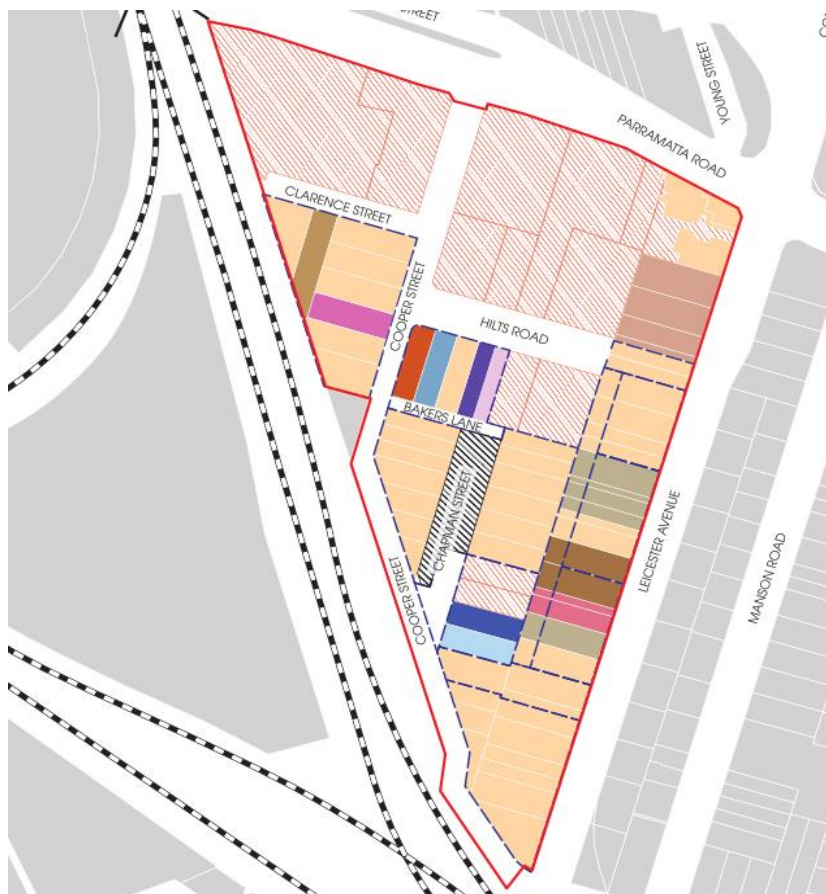
2.2 DEVELOPMENT ACTIVITY

Since implementation of the Strathfield Triangle planning framework in 2013, take-up of development opportunities in the Study Area has been relatively modest. Development has predominantly been clustered in the northern section of the Study Area, mostly limited to sites with frontages to Parramatta Road. Notable examples include 7-9 Hilts Road and 44-50 Cooper Street.

Elsewhere in the Study Area, little new activity has been observed in recent years. It is understood much of the Study Area is held by a small number of major landowners (many of whom are also developers). There has been a dearth of recent sales activity, the most recent sale being a single detached dwelling in early 2017.

Figure 2.3 depicts the current land ownership pattern with different colours representing different landowners.

Figure 2.3: Land Ownership Patterns, Study Area



Source: CBC

As observed from Figure 2.3, a large proportion of the Study Area is held in majority ownership. Several of the newest developments fronting Parramatta Road were progressed by the same party.

In the areas immediately surrounding the Study Area, high-density development activity has been ongoing since 2014, particularly in the R4 High Density Residential and B4 Mixed Use area immediately north of Homebush train station and along Parramatta Road.

A flurry of development site sales and building activity occurred in that precinct north of the Homebush train station over the 2014-2018 period. This precinct is considered comparable to the Study Area given its existing built form (aged detached housing), proximity to Parramatta Road and similar planning controls. Developers have generally paid between \$2,200/sqm to \$2,500/sqm of GFA for development opportunities in that precinct.

2.3 COST OF INFRASTRUCTURE DELIVERY

The deliverability of the identified public domain infrastructure items is dependent on the collection of development contributions to fund the acquisition of privately-owned land and construction of public domain works.

Little new development in the Study Area has occurred post implementation of Strathfield Triangle planning framework. None of the major infrastructure items detailed in the Public Domain Plan have been delivered.

Total development contributions received under the Contributions Plan (Q2 2019) are understood to be in the order of \$1.8m. These funds have generated some \$200,000 of interest, bringing the total contributions revenue received to date to just over \$2m.

A recent review (2018) of the civil costs associated with the Public Domain Plan was undertaken by Northcroft Quantity Surveyors on behalf of Council. Owing to significant increases in the price of construction materials and labour since 2013, the cost of works has increased to \$18.1m (from \$7.9m in 2013).

Revaluations of the properties identified for compulsory acquisition were undertaken by Southern Alliance Valuation Services in mid-2018 on behalf of Council. Strong price growth in the residential housing market over the 2013-2018 period across Greater Sydney has resulted in a significant increase in the market value of these properties.

The market value of properties required for acquisition was assessed at \$20.97m (increased from \$8.7m in 2013). Council has commenced compulsory acquisition proceedings for 36 Leicester Avenue to progress delivery of an identified through-site link between Leicester Avenue and Hilts Road. An indicative sum of \$3.5m is included.

In total, the estimated cost of delivering the Public Domain Plan is \$42.6m (compared to \$20.1m in 2013).

Figure 2.3 outlines the updated land acquisition costs and civil works costs to deliver the Public Domain Plan.

Table 2.3: Updated Land Acquisition Costs and Civil Works Costs (2018)

Item	Amount
Land Acquisition Costs	
8 Hilts Road	\$1,725,000
8a Hilts Road	\$1,780,000
10 Hilts Road	\$2,470,000
12 Hilts Road	\$2,465,000
14 Hilts Road	\$2,470,000
12 Leicester Avenue	\$4,300,000
Part 10 Leicester Avenue	\$1,920,000
Part 27 Leicester Avenue	\$3,840,000
36 Leicester Avenue	\$3,500,000
Total Land Costs	\$24,470,000
Public Domain Infrastructure Works	
Site Preparation and Bulk Earthworks	\$959,434
Cooper St	\$3,629,383
Chapman St Park	\$719,902
Leicester Lane	\$1,025,980
Leicester Avenue (incl. Pedestrian access to Leicester Lane from Hilts Rd)	\$952,929
Hilts Rd	\$920,060
Clarence St	\$690,682
Parramatta Rd	\$545,695
Bakers Lane Park	\$1,388,297
Electrical Services	\$675,108
Preliminaries, Overheads and Margin	\$1,475,531
Contingency	\$3,500,000
GST	\$1,648,300
Total Public Domain Infrastructure Works Costs	\$18,131,301
Revised Cost of Public Domain Plan	\$42,601,301

Source: Northcroft (2018)/Southern Alliance Valuations (2018)

2.4 BASE CASE DEFINITION

2.4.1 Urban Design Review

An urban design review of the built form controls in the Strathfield Triangle DCP (referred to as the Base Case) was undertaken by Group GSA. The objective was to examine opportunities to improve built form outcomes and deliverability of development.

Urban design and built form testing adopting the development controls in the DCP identified a number of instances which did not comply with the NSW Apartment Design Guide (ADG) resulting in a less desirable urban design outcome for the Study Area.

Adjustments were made to the Base Case to address the identified issues whilst minimising deviation from the Base Case. This resulted in the Adjusted DCP Scheme.

Adjusted DCP Scheme

The Adjusted DCP Scheme identified theoretical potential for 802 units across the Study Area, or 865 units if including the current DA for 38-42 Leicester Avenue.

Development yield is distributed across seven development blocks with building heights aligning with the Base Case (ranging from 2 storeys to 18 storeys). Development blocks comprise FSRs ranging from 1.2:1 to FSR 5.2:1.

Figure 2.4: Adjusted DCP Scheme



Source: Group GSA

Table 2.4 shows the yields associated with each development block in the Adjusted DCP Scheme. These lots and yields correlate with those illustrated in Figure 2.4.

Table 2.4: Potential Yield, Adjusted DCP Scheme

Development Lot	FSR	Building Height (storeys)	Potential Yield			Total
			1BR	2BR	3BR	
1	1.2:1	4-5	6	18	6	30
2	1.4:1	4-5	22	7	36	36
3	2.0:1	4-7	10	29	10	49
4	4.0:1	4-18	39	117	39	195
5	2.6:1	5-15	32	97	33	162
6	4.9:1	5-12	18	56	19	93
7	5.2:1	7-18	47	142	48	237
Total Potential Yield						802
Current DA	3.0:1	8	29	28	6	6
Grand Total Yield			203	494	197	865

Source: Group GSA

Before applying current s7.11 contribution rates to the development yields in the Adjusted DCP Scheme, feasibility testing was undertaken to examine the viability of the resultant density controls.

An understanding of the likelihood of development occurring under the Adjusted DCP Scheme is essential given the deliverability of the Public Domain Plan is largely dependent on the collection of development contributions.

2.4.2 Feasibility Testing of Adjusted DCP Scheme

To assess the viability of the planning controls (specifically FSRs) proposed in the Adjusted DCP Scheme, the Hypothetical Development or Residual Land Value (RLV) approach has been adopted as the method of assessment, utilising development feasibility software Estate Master.

The RLV approach involves assessing the value of the end product of the development, allowing for development costs, and making a further deduction for the profit and risk that a developer would require to take on the project.

The Residual Land Value (RLV) can be defined to be the maximum price a developer would be prepared to pay for a site in exchange for the opportunity to develop the site, whilst achieving target hurdle rates for profit and project return.

This approach involves assessing the value of the completed product, making a deduction for development costs and further deduction for profit and risk whilst ensuring the development achieves the target project margin and return.

The principle of highest and best use influences the feasibility of development. In order to economically acquire and develop land, development must translate into a higher value than the existing use of a property, including any improvements on it (or its 'as is' use). A key metric for development feasibility is land value, which is a 'residual' after all costs and revenues are taken into account. In order for development of any given site to be considered feasible, the Residual Land Value (RLV) must exceed the 'as is' value of the land and any premium required to incentivise a landowner to sell.

A list of generic revenue and cost assumptions (including land costs) is appended at Appendix A. It is noted that cost assumptions are based on industry benchmarks and have not verified by a quantity surveyor.

Feasibility Testing Results

Generic feasibility testing found that density controls of at least FSR 2.2:1 to FSR 2.5:1 are required for development to be viable in the Study Area, with three development lots (Lot 1, 2 and 3) considered not feasible under the Adjusted DCP Scheme.

Therefore, the number of dwellings likely to be delivered in the Study Area decreases from 802 units to 750 units. The results of the generic feasibility testing are summarised in Table 2.5.

Table 2.5: Development Feasibility Results, Adjusted DCP Scheme

Lot	FSR	Storeys	Units	Feasible?	Comments
1	1.2:1	4-5	30	No	Not feasible; requires min. FSR 2.2:1. Located along Leicester Avenue where interface to low-density residential limits building heights.
2	1.4:1	4-5	36	No	
3	2.0:1	4-7	49	Marginal	Development is marginal; multiple landowners likely to inhibit economical site consolidation.
4	4.0:1	4-18	195	Yes	Feasible; single owner with much of the site cleared.
5	2.6:1	5-15	162	Yes	Feasible. Held in single ownership (with the exception of the Council-owned road) with much of the site cleared.
6	4.9:1	5-12	93	Yes	Feasible; density high-enough to displace existing 3-storey unit block comprising 12x2 bedroom apartments.
7	5.2:1	7-18	237	Yes	Feasible.

Source: AEC

The feasibility of development implicates deliverability and ultimately capacity of the Adjusted DCP Scheme to fund the cost to deliver the Public Domain Plan through development contributions.

2.4.3 Potential Development Contributions and Implications

By applying the contribution rates outlined in Table 2.2 to the development lots considered feasible to develop, a total of \$12.4m development contributions results. Lot 3 (which was identified as being marginally feasible) is excluded. When including the \$2m of development contributions already received, total contributions under the Adjusted DCP Scheme amounts to \$14.4m.

When comparing the potential contributions that could be received (\$14.4m) under the Adjusted DCP Scheme against the revised cost of delivering the public domain plan (\$42.6m), a shortfall of \$28.2m results.

Table 2.6 shows the potential contributions revenue against the revised costs of the Public Domain Plan.

Table 2.6: Potential Contributions v Revised Costs, Adjusted DCP Scheme

Lot	FSR	Potential Yield			Feasible?	Potential Contributions
		1BR	2BR	3BR		
1	1.2:1	6	18	6	No	-
2	1.4:1	7	22	7	No	-
3	2.0:1	10	29	10	Marginal	-
4	4.0:1	39	117	39	Yes	\$3,050,412
5	2.6:1	32	97	33	Yes	\$2,538,726
6	4.9:1	18	56	19	Yes	\$1,459,530
7	5.2:1	47	142	48	Yes	\$3,711,961
Current DA	3.0:1	29	28	6	Yes	\$874,646
Potential Contributions						\$11,635,275
Contributions Received						\$2,005,444
Total Potential Contributions						\$13,640,719
Revised Cost of Public Domain Plan						\$42,601,301
Surplus (Shortfall)						(\$28,960,582)

Source: AEC

There is a significant shortfall in funding required to deliver the Public Domain Plan. It is therefore reasonable to expect that many of the infrastructure items would not be delivered under the Adjusted DCP Scheme, thereby compromising the future amenity and built outcome desired for the Study Area.

Intervention is accordingly needed to examine alternate development schemes and sources of funding. Alternate development schemes which could assist in the delivery of the required public domain infrastructure in the Study Area are examined next.

3. ALTERNATE DEVELOPMENT SCENARIOS

3.1 PREMISE AND RATIONALE

The cost of delivering the public domain infrastructure items identified in the Strathfield Triangle Public Domain Plan has risen significantly since 2013.

Analysis of the Base Case and Adjusted DCP Scheme in section 2.4 indicates a potential funding shortfall of \$28.2m, putting at serious risk the likelihood of infrastructure delivery in the Study Area.

Given the significance of the funding shortfall, alternate development scenarios which reduce the quantum/ cost of infrastructure or increase revenue potential were examined. The three areas explored by project team were:

- Reduction in cost of land acquisition through planning mechanisms;
- Increase in development capacity;
- Reduction of public domain infrastructure.

The reduction in quantum of public domain infrastructure was not considered an acceptable course of action given the already limited quantum of public open space in the vicinity and scale of development contemplated.

Accordingly, alternate development scenarios investigated focused on a combination of *reducing* the amount of private land required for acquisition and *increasing* densities across the Study Area where possible. A key tenet of the investigations was to maintain the quantum of public domain space envisaged in the Public Domain Plan.

Dedication of Land and Transfer of Development Potential

Where land is identified as required by Council or a public authority for a public purpose (whether in an infrastructure schedule or in a precinct plan) and the development potential of that land can be transferred to the remaining site*, this procurement of land is referred to as 'land dedication'. A voluntary planning agreement (VPA) is expected to be the instrument through which land is dedicated to Council.

**remaining site refers to land that is contiguous and in similar ownership, regardless of whether that land is in a single, or multiple allotments.*

In contrast, where land dedication is required to address development need, for example, if proposed residential uses are to front a rear laneway and a footpath is required to be created for access, the land required for dedication is not for a public purpose. Accordingly, the requirement for land will be a condition of development consent.

Land dedication (and transfer of development potential) is distinguished from land reservation for a public purpose in an environmental planning instrument where council could be identified as the acquiring authority. In this instance, the procurement of land is through compulsory acquisition and compensation would be subject to the provisions of *Land Acquisition (Just Terms Compensation) Act 1991*.

The planning mechanism for procuring of land (allowing for transfer and development of floorspace potential) for a public purpose is not new. Its premise is a recognition that should development potential (FSR) of the land dedicated be transferred for development elsewhere on the remaining site, there is no loss of development potential. No loss is suffered and therefore no value is ascribed to the land that is dedicated.

This mechanism is examined in greater detail in section 4.2.

3.2 ALTERNATE DEVELOPMENT SCENARIOS

Preliminary investigations of alternate development scenarios were iterative in nature and had regard to desired planning and urban design outcomes as well as economic and financial feasibility factors.

The major issue for infrastructure delivery is the significant land acquisition cost of the Hilts Road Park in the Base Case. The Hilts Road Park covers five separate allotments that do not adjoin any developable land, limiting potential for a transfer of floorspace mechanism.

Three alternate development scenarios examined the viability of *different* park locations. Various park locations were selected based on whether potential floorspace associated with land for the new park could be harvested and transferred for development on adjoining land. Additionally, the capacity of different areas across the Study Area to accommodate additional (transferred) residential density was necessarily considered.

3.2.1 Leicester Avenue Park

The Leicester Avenue Scenario relocates the DCP Park to the northern edge of Leicester Avenue (on the former Lot 1) and creates a new Lot 8 on the former DCP Park. This new location responds the low-density nature of existing built form on the eastern side of Leicester Avenue. The floorspace potential associated with Lot 1 is assumed to be transferred to Lot 4 and 5.

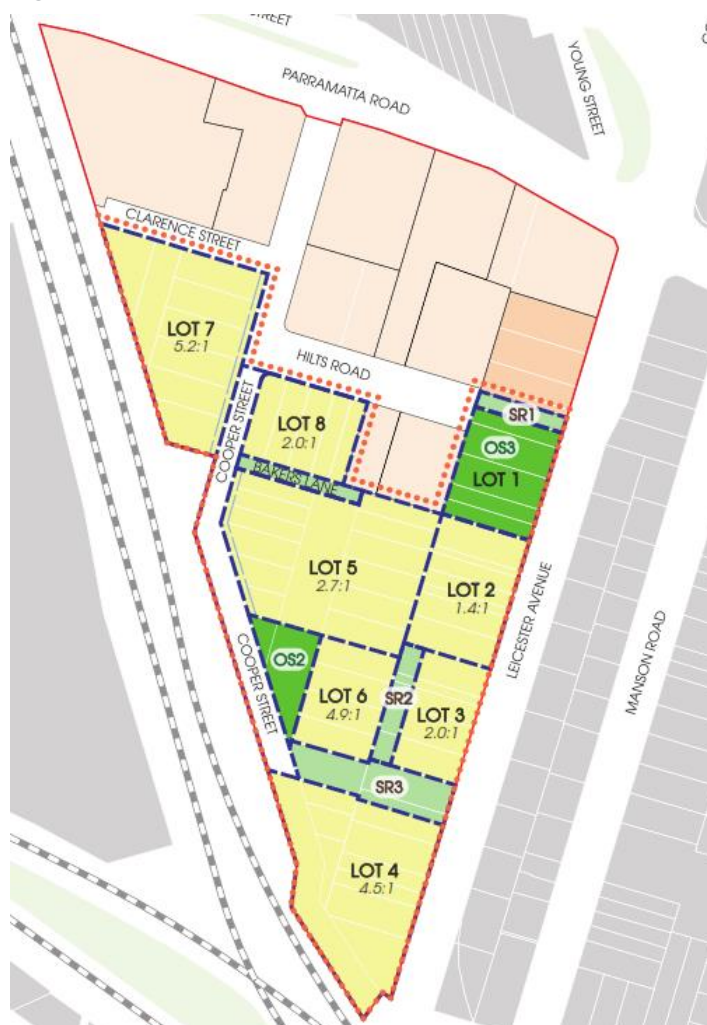
Whilst the floorspace mechanism is possible given a common landowner of Lot 1, 4 and 5, these lots are not contiguous. This could make any floorspace transfer difficult to administer from a legal and planning perspective.

The Leicester Avenue Scenario has a theoretical capacity of 902 units (965 units when including the DA-approved site at 38-42 Leicester Avenue). This represents an increase of 100 units compared to the Adjusted DCP Scheme.

Notwithstanding, densities for Lot 2, Lot 3 and the new Lot 8 were considered unlikely to be feasible given they did not meet the FSR 2.2:1 threshold.

Figure 3.1 illustrates the proposed layout and densities of the Leicester Avenue Park scenario.

Figure 3.1: Leicester Avenue Park Scenario



Source: Group GSA

3.2.2 Central Park

The Central Park Scenario relocates the DCP Park (and smaller pocket park) in the Adjusted DCP Scheme into a consolidated, central park in the heart of the Study Area. This new park location maximises outlook for new development and integrates with existing development immediately north.

This new park would be situated mainly on Lot 5; its development potential assumed to be transferred to the remainder of Lot 5 and Lot 6. Part of Lot 5 is Council-owned land. Densities along Leicester Avenue on Lots 1 and 2 are still unlikely to be viable.

The Central Park Scenario has a theoretical capacity of 940 units (1,005 units including the DA-approved site at 38-42 Leicester Avenue). This represents an increase of 140 units compared to the Adjusted DCP Scheme.

Figure 3.2 illustrates the proposed layout and densities of the Central Park scenario.

Figure 3.2: Central Park Scenario



Source: Group GSA

3.2.3 Cooper Street Park

In the Cooper Street Park Scenario, the DCP park (and smaller pocket park) in the Adjusted DCP Scheme are consolidated into one park adjoining a proposed Cooper Street/ Leicester Avenue intersection. This scenario requires the least amount of land for streets and laneways, maximising developable land.

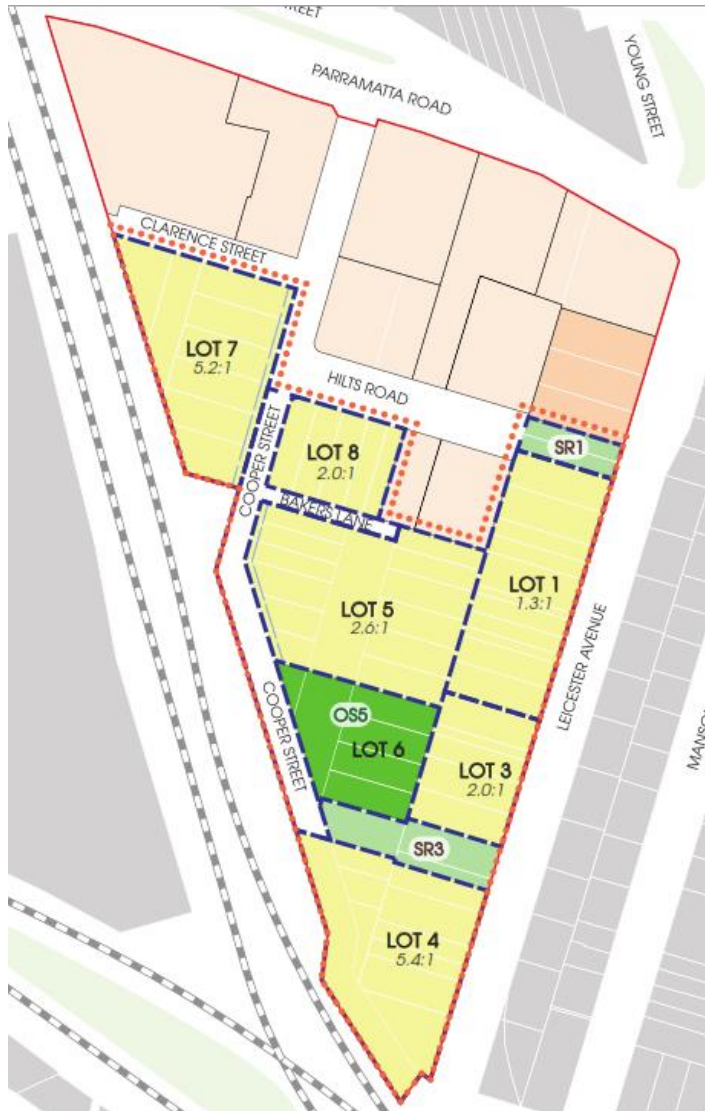
This Cooper Street Park would be situated on part of Lot 5 and all of Lot 6, with the floorspace potential associated with the required land harvested and transferred to Lot 4 and remainder of Lot 5. Additionally, Lots 1 and 2 could be consolidated as there is no longer a requirement for rear lane access to lots along Leicester Avenue.

Given that Lot 6 comprises a three-storey unit block with multiple owners, the transfer of floorspace mechanism is likely to be challenging to implement. Additionally, the density proposed for the amalgamated Lots 1 and 2 is still below the required FSR threshold.

The Cooper Street Park Scenario has a theoretical capacity of 902 units (965 units when including the DA-approved site at 38-42 Leicester Avenue). This represents an increase of 100 units compared to the Adjusted DCP Scheme.

Figure 3.3 illustrates the proposed layout and densities of the Cooper Street Park scenario.

Figure 3.3: Cooper Street Park Scenario



Source: Group GSA

3.3 ANALYSIS OF DEVELOPMENT SCENARIOS

Feasibility testing of the alternate development scenarios was undertaken to assess their viability and likelihood of development under the density controls contemplated. The likely contributions which could be received under each scenario were then estimated and compared against the revised costs of infrastructure delivery.

Generic revenue and cost assumptions (including land costs) adopted in section 2.4.2 were used in the feasibility testing, appended in Appendix A.

Leicester Avenue Park

Feasibility testing indicates that development lots subject to density controls below FSR 2.2:1 are unlikely to be feasible to develop. Lot 2 is not feasible at FSR 1.4:1, with development feasibility of Lot 3 and the new Lot 8 considered marginal.

When excluding unfeasible and marginal development lots, the total number of dwellings which could be delivered under the Leicester Avenue Park Scenario falls from 965 units to 842 units.

Applying current s7.11 contribution rates to the 842 units results in potential development contributions revenue of almost \$13.1m.

Table 3.1: Feasibility Results and Potential Contributions, Leicester Avenue Park Scenario

Lot	DCP FSR	New FSR	Yield	Feasible	Comments	Potential Contributions
1		-	-	-	Location of new DCP park. Floorspace transferred to Lots 4-5.	-
2	1.4:1	1.4:1	36	No	Not feasible; no increase in FSR.	-
3	2:1	2.0:1	49	Marginal	Marginal; no increase in FSR.	-
4	4:1	4.5:1	287	Yes	Feasible; additional GFA transferred from Lot 1.	\$4,494,118
5	2.6:1	2.7:1	161	Yes	Feasible; additional GFA transferred from Lot 1.	\$2,538,726
6	4.9:1	4.9:1	93	Yes	Feasible, no increase in FSR.	\$1,459,530
7	5.2:1	5.2:1	237	Yes	Feasible, no increase in FSR.	\$3,711,961
8	-	2:1	39	Marginal	New development lot on former DCP park site. Feasibility is marginal; likely need FSR 2.2:1 to 2.5:1.	-
Current DA	3:1	3:1	63	Yes		\$874,646
Total						\$13,078,981

Source: AEC

The Leicester Avenue Park Scenario is premised on a floorspace transfer mechanism. The cost of land acquisitions is therefore *excluded* from the cost to deliver the Public Domain Plan (the exception being 36 Leicester Avenue given compulsory acquisition proceedings have commenced).

When comparing potential revenue contributions from the Leicester Avenue Park Scenario (and including \$2m of contributions already received) against the assumed costs of infrastructure delivery, a shortfall of \$6.5m results. This is detailed in Table 3.2.

Table 3.2: Potential Contributions v Revised Costs, Leicester Avenue Park Scenario

Item	Amount
Development Contributions	
Total Potential Contributions	\$13,078,981
Contributions Received	\$2,005,444
Total Contributions	\$15,084,425
Cost of Infrastructure	
Acquisition of 36 Leicester Avenue	\$3,500,000
Civil Works	\$18,131,301
Total Costs	\$21,631,301
Surplus (Shortfall)	(\$6,546,876)

Source: AEC

Central Park

In the Central Park Scenario, development on Lots 1 and 2 is unlikely to be feasible. Similar to the Leicester Avenue Park Scenario, development feasibility of the new Lot 8 at FSR 2:1 is considered marginal.

When excluding unfeasible and marginal development lots, the likely number of dwellings that could be delivered under the Central Park Scenario falls from 1,005 units to 851 units.

Applying current s7.11 contribution rates to the 851 units results in potential development contributions revenue of \$13.2m.

Table 3.3: Feasibility Results and Potential Contributions, Central Park Scenario

Lot	DCP FSR	New FSR	Yield	Feasible	Comments	Potential Contributions
1	1.2:1	1.2:1	30	No	Not feasible; no increase in FSR.	-
2	1.4:1	1.4:1	36	No	Not feasible; no increase in FSR.	-
3	2.0:1	2.0:1	49	Marginal	Marginal; no increase in FSR.	-
4	4.0:1	4.0:1	257	Yes	Feasible; no increase in FSR.	\$4,024,824
5	2.6:1	2.6:1	154	Yes	Feasible although site area reduced; GFA harvested.	\$2,408,863
6	4.9:1	4.9:1	140	Yes	Feasible, additional GFA transferred from Lot 5.	\$2,190,039
7	5.2:1	5.2:1	237	Yes	Feasible, no increase in FSR.	\$3,711,961
8	-	-	39	Marginal	New development lot on former DCP park site. Feasibility is marginal; likely need FSR 2.2:1 to 2.5:1.	-
Current DA	3:1	3:1	63	Yes		\$874,646
Total						\$13,210,333

Source: AEC

The Leicester Avenue Park Scenario is premised on a floorspace transfer mechanism. The cost of land acquisitions is therefore *excluded* from the cost to deliver the Public Domain Plan (the exception being 36 Leicester Avenue given compulsory acquisition proceedings have commenced).

When comparing potential contributions from the Central Park Scenario (and including \$2m of contributions already received) against the assumed costs of infrastructure delivery, a shortfall of \$6.4m results.

Table 3.4: Potential Contributions v Revised Costs, Central Park Scenario

Item	Amount
Development Contributions	
Total Potential Contributions	\$13,210,333
Contributions Received	\$2,005,444
Total Contributions	\$15,215,777
Cost of Infrastructure	
Acquisition of 36 Leicester Avenue	\$3,500,000
Civil Works	\$18,131,301
Total Costs	\$21,631,301
Surplus (Shortfall)	(\$6,415,524)

Source: AEC

Cooper Street Park

Development on Lots 1, 2 and 8 are likely to be feasible given they are below FSR 2.2:1.

The floorspace potential harvested from Lot 6 improves the feasibility of Lots 4 and 5, however these lots were already feasible under the Adjusted DCP Scheme.

When excluding unfeasible and marginal development lots, the likely number of dwellings which could be delivered falls from 965 units to 811 units. This is the lowest yield of the three development scenarios.

Applying current s7.11 contributions to those 811 units, potential development contributions revenue of \$12.6m results.

Table 3.5: Feasibility Results and Potential Contributions, Cooper Street Park Scenario

Lot	DCP FSR	New FSR	Yield	Feasible	Comments	Potential Contributions
1	1.2:1	1.3:1	66	No	Not feasible; FSR still below FSR 2.2:1.	-
2-3	2.0:1	2.0:1	49	No	Feasibility is marginal; larger site however FSR still below 2.2:1	-
4	4.0:1	5.4:1	349	Yes	Feasible; additional GFA harvested from Lot 6.	\$5,459,274
5	2.6:1	2.6:1	162	Yes	Feasible; additional GFA harvested from Lot 6.	\$2,538,726
6	4.9:1	-	-	-	Location of new DCP park. Floorspace transferred to Lots 4-5.	-
7	5.2:1	5.2:1	237	Yes	Feasible, no increase in FSR.	\$3,711,961
8	-	2:1	39	Marginal	New development lot on former DCP park site. Feasibility is marginal; likely need FSR 2.2:1 to 2.5:1.	-
Current DA	3:1	3:1	63	Yes		\$874,646
Total						\$12,584,607

Source: AEC

The Cooper Street Park Scenario is premised on a floorspace transfer mechanism. The cost of land acquisitions is therefore *excluded* from the cost to deliver the Public Domain Plan (the exception being 36 Leicester Avenue given compulsory acquisition proceedings have commenced).

When comparing potential contributions from the Cooper Street Park Scenario (and including \$2m of contributions already received) against the assumed cost of infrastructure delivery, a shortfall of \$7m results. This is detailed in Table 3.6.

Table 3.6: Potential Contributions v Revised Costs, Cooper Street Park Scenario

Item	Amount
Development Contributions	
Total Potential Contributions	\$12,584,607
Contributions Received	\$2,005,444
Total Contributions	\$14,590,051
Cost of Infrastructure	
Acquisition of 36 Leicester Avenue	\$3,500,000
Civil Works	\$18,131,301
Total Costs	\$21,631,301
Surplus (Shortfall)	(\$7,041,250)

Source: AEC

Selection of Preferred Development Scenario

Following a review of the alternate development scenarios and their implications for infrastructure delivery, the Central Park Scenario was selected as preferred as it provides the greatest level of amenity and has the greatest potential for development take-up.

Feasibility testing of the Central Park Scenario indicated that densities proposed on a number of development lots were insufficient to incentivise redevelopment. Accordingly, the Central Park Scenario was re-visited and refined to optimise densities (where appropriate) and leverage the floorspace potential of Council-owned land. The refined Central Park Scenario is discussed next.

3.4 PREFERRED DEVELOPMENT SCENARIO

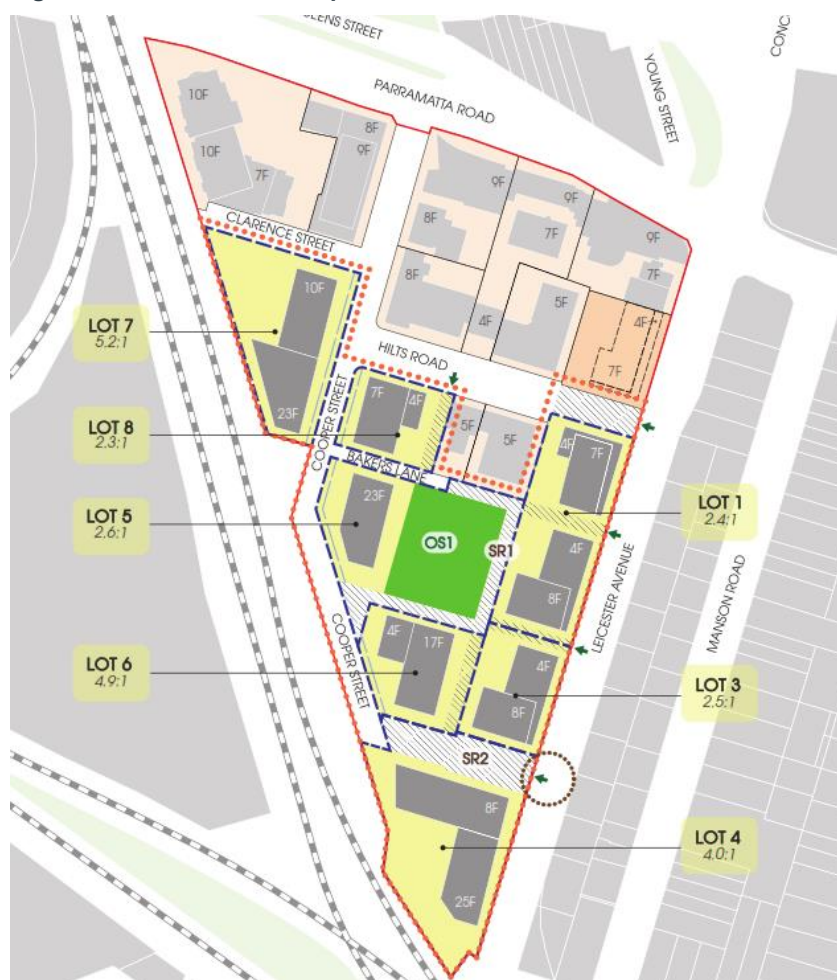
The refined Central Park Scenario is referred to as the 'Preferred Development Scenario'.

Similar to the initial Central Park Scenario, the Preferred Development Scenario relocates the DCP park to Lot 5 with the development floorspace of this land harvested and transferred to the remainder of Lot 5 and Lot 6.

In order to improve development feasibility, Lots 1 and 2 are consolidated with a density control of FSR 2.4:1 (excluding 36 Leicester Avenue). Similarly, the new Lot 8 is recommended with an FSR 2.3:1. A theoretical yield of 997 units results, increasing to 1,060 units when including the DA-approved site at 38-42 Leicester Avenue.

Figure 3.4 illustrates the amalgamation pattern and density controls of the Preferred Development Scenario.

Figure 3.4: Preferred Development Scenario



Source: Group GSA

3.4.1 Development Potential of Council-Owned Lands

The Preferred Development Scenario is predicated on incorporating Council-owned lands (and their floorspace potential) into several development lots. Both Council-owned roads which would not be required under this scenario.

- **Chapman Street:** 1,946sqm of land with floorspace potential of 6,739sqm. Chapman Street would be closed and form part of new park and Lot 6. The floorspace potential could be harvested and transferred to Lot 6.
- **Cooper Street (part):** 1,392sqm of land with floorspace potential of 5,569sqm. The southernmost portion of Cooper Street would be closed and consolidated to form part of Lot 4. The floorspace potential could be harvested and transferred to Lot 4.

Figure 3.5 depicts the location of the Council-owned lands within the Study Area.

Figure 3.5: Council-Owned Lands, Strathfield Triangle

Source: Group GSA

While the Preferred Development Scenario has assumed these two parcels of land could be developed as part of adjoining lots, the Preferred Development Scenario does not depend on the inclusion of this development potential to be viable.

Should the Council-owned lands *not* be utilised in the Preferred Development Scenario, the theoretical dwelling yield reduces from 997 units to 864 units. The density controls (FSRs) suggested for each development lot would remain unchanged, avoiding any impact on development feasibility.

3.4.2 Feasibility Analysis and Potential Development Contributions

Feasibility testing was undertaken to examine the viability of the Preferred Development Scenario. All development lots are observed to comprise density controls of FSR 2.3:1 or higher, thus meeting the key density threshold, or 'tipping point' earlier identified. Accordingly, the theoretical development capacity of 997 units is likely to be feasible.

Applying current s7.11 contribution rates to the yields identified in the Preferred Development Scenario results in potential development contributions revenue of \$16.5m.

Table 3.7: Feasibility Results and Potential Contributions, Preferred Development Scenario

Lot	DCP FSR	New FSR	Yield	Feasible?	Comments	Potential Contributions
1-2	1.2:1	2.3:1	107	Yes	Feasible; consolidated Lots 1-2.	\$1,674,177
3	2.0:1	2.5:1	58	Yes	Feasible; meets density threshold of FSR 2.2:1	\$906,941

Lot	DCP FSR	New FSR	Yield	Feasible?	Comments	Potential Contributions
4	4.0:1	4.0:1	257	Yes	Feasible; no increase in FSR but larger site area.	\$4,024,824
5	2.6:1	2.6:1	158	Yes	Feasible; no increase in FSR.	\$2,476,334
6	4.9:1	4.9:1	132	Yes	Feasible, additional GFA transferred from Lot 5.	\$2,069,432
7	5.2:1	5.2:1	239	Yes	Feasible, no increase in FSR.	\$3,738,529
8	-	2.3:1	46	Yes	Feasible; meets density threshold of FSR 2.2:1	\$719,765
Current DA	3:1		63	Yes		\$874,646
Total						\$16,484,648

Source: AEC

The Preferred Development Scenario is premised on a floorspace transfer mechanism. The cost of land acquisitions is therefore *excluded* from the cost to deliver the Public Domain Plan (the exception being 36 Leicester Avenue given compulsory acquisition proceedings have commenced).

Potential contributions from the Preferred Development Scenario (assuming Council-owned lands are developed) added to \$2m of contributions already received adds to \$18.5m. When compared against the assumed cost of infrastructure of \$21.6m, a shortfall of \$3.1m results.

If Council-owned lands are not developed, potential residential units reduce by some 133 units and total potential contributions falls to \$15.5m. When compared against the assumed cost of infrastructure of \$21.6m, a shortfall of \$6.1m results.

Table 3.8 shows the impact of the inclusion of Council-owned lands for development on contributions receivable.

Table 3.8: Potential Contributions v Revised Costs, Preferred Development Scenario

Item	Amount
Development Contributions	
Total Potential Contributions	
With Council lands	\$16,484,648
Without Council lands	\$13,528,535
Contributions Received	\$2,005,444
Total Contributions	
With Council lands	\$18,490,092
Without Council lands	\$15,533,979
Cost of Infrastructure	
Acquisition of 36 Leicester Avenue	\$3,500,000
Civil Works	\$18,131,301
Total Costs	\$21,631,301
Surplus (Shortfall)	
With Council lands	(\$3,141,209)
Without Council lands	(\$6,097,322)

Source: AEC

3.4.3 Impact of Other Contributions

The feasibility testing only considered known statutory charges (i.e. s7.11 contributions, DA and CC fees). Other statutory contributions such as Special Infrastructure Contribution (SIC) and affordable housing contributions were not included.

This section investigates the impact on development feasibility and potential contributions in the Preferred Development Scenario should a SIC and affordable housing contributions be required.

Special Infrastructure Contributions (SIC)

SICs are a state-administered contribution to fund state and regional infrastructure.

The Study Area is located within the vicinity of the Strathfield town centre which was, together with Burwood and Homebush were announced in 2017 as a Planned Precinct. While the formal boundaries of the Planned Precinct

are not as yet known, sensitivity testing has been undertaken to assess the impact of a hypothetical SIC on development feasibility in the Study Area.

When including a hypothetical SIC rate of \$20,000 per dwelling, the minimum density threshold (tipping point) for feasible development increases to FSR 2.7:1. Accordingly, Lots 1-2, Lot 3, Lot 5 and Lot 8 would no longer be considered feasible as proposed in the Preferred Development Scenario.

When excluding the development contributions associated with development lots no longer feasible, and assuming the Council-owned lands are developed, the funding shortfall under the Preferred Development Scenario increases from \$3.1m to \$8.9m.

Affordable Housing Contributions

The Greater Sydney Region Plan (GSC, 2018) encourages local councils to levy affordable housing contributions in instances where additional residential floorspace potential results from a new rezoning or upzoning, subject to development viability. Contribution rates are accepted to vary from market to market, however contribution rates of 5% to 10% of the *additional* residential floorspace (or uplift) are suggested.

In the case of the Preferred Development Scenario, Lots 1-2, Lot 3 and Lot 8 would benefit from an increase in permitted densities above those envisaged in the DCP. Accordingly, these development lots could be subject to an affordable housing contribution.

Feasibility testing indicates that when including an affordable housing contribution rate of 5% on these development lots, development is no longer feasible under the Preferred Scenario density controls.

When excluding the development contributions associated with development lots no longer feasible, and assuming the Council-owned lands are developed, the funding shortfall under the Preferred Development Scenario increases from \$3.1m to \$6.4m.

3.4.4 Additional Funding Options

The Preferred Development Scenario reflects a step-change from the DCP Scheme, utilising a floorspace transfer mechanism which allows development potential of the land dedicated to be harvested/ transferred for development on the remaining site.

Notwithstanding the harvest and transfer floorspace potential of land required for dedication, a shortfall persists between potential development contributions and the revised costs of the Public Domain Plan. The \$3.5m cost to acquire 36 Leicester Avenue is a large component of the shortfall. When excluding this cost item, the development contributions from the Preferred Scenario exceeds the revised costs of the Public Domain Plan.

Nevertheless, it is prudent to investigate additional funding sources. These could include:

- 1 Divestment of Council-owned land (as envisaged in the Preferred Development Scenario), or;
- 2 Increasing the s7.11 contribution rates.

These are examined in Chapter 4.

4. PROVIDING FOR INFRASTRUCTURE

4.1 INFRASTRUCTURE FUNDING

4.1.1 Statutory Funding Mechanisms

Statutory funding mechanisms are targeted in their scope of application, in that only 'additional' demand resulting from new development can be funded via these mechanisms.

The main types of development contributions that are applicable in NSW are:

- **Section 7.11 contributions**
Payable to local councils when development results in additional floorspace
- **Section 7.12 levies**
Levied as a percentage of development cost and payable to local councils. Section 7.12 levies are commonplace in established urban centres where new development is likely to be infill opportunities and incremental in nature.
- **Planning agreements**
Negotiated between a developer and consent authority, often where there is no contributions plan or if a change to planning controls is sought (e.g. land use zone, density).
- **Affordable housing levy**
Levy payable to council in designated areas where the availability of affordable housing is reduced or development results in a need for affordable housing.
- **Special infrastructure contribution**
Applicable in select growth areas to fund state and regional infrastructure. Proposed to be extended across planned precincts and all growth areas.

Section 7.11 Contributions

Section 7.11 of the *Environmental Planning and Assessment Act 1979* covers the contribution of development towards local infrastructure provision.

Contributions paid under this regime are based on the principles of reasonableness, nexus and fair apportionment of the cost of planned infrastructure to development. This model is generally used where development is occurring at a predictable pace and infrastructure needs can be reasonably foreseen and planned.

Costs of infrastructure are generally apportioned on the basis of estimated demand load on infrastructure or estimated benefit from public amenities and public services. Accordingly, this form of contribution is a form of upfront (and estimates based) user pays charge.

The contributions are payable as a condition of consent as a cash payment or if agreed, dedication of land or works-in-kind in lieu of cash payment. The manner of charging is based on the characteristics of development (such as land development or project/ building development) and based on the selected unit of charge.

In order for s7.11 contributions to be charged, the relevant agency must prepare a Contributions Plan which is generally based on the planning framework for an area and its associated population (residents and workers) estimates, development estimates and infrastructure needs. The cost of infrastructure is then apportioned to development sites using a method deemed reasonable for the circumstances, with the objective being to share costs fairly amongst benefiting developments or sites.

The Strathfield Triangle Development Contributions Plan (2014) addresses anticipated demand for infrastructure from new development in Strathfield Triangle. Contribution rates are indexed to CPI and subject to \$20,000 cap.

The limitations of current statutory funding mechanisms have been recognised by local governments, with an increasing role played by a range of incentive-based funding mechanisms to fund and deliver public domain and infrastructure works.

4.1.2 Incentive-based Funding Mechanisms

The use and role of incentive-based infrastructure funding mechanisms are important particularly where, owing to statutory limitations not all infrastructure can be funded by s7.11 contributions or s7.12 levies.

There are a few incentive-based infrastructure funding mechanisms that are codified in NSW. Those few include Green Square Community Infrastructure contributions and Ryde LEP 2014 (Amendment 1) Macquarie Corridor. There are current proposals for similar incentive-based mechanisms at St Leonards South (Lane Cove Council) and Parramatta CBD (City of Parramatta).

Incentive-based funding mechanisms generally provide density bonuses and/or planning concessions and require 'capture' of value uplift associated with a rezoning or increased density as contributions to public benefit.

These contributions are in addition to s7.11 or s7.12 and are only required if development seeks to access incentive floorspace. Community infrastructure (including public streets, pedestrian and bike networks, public open spaces) is typically identified for dedication and provision, typically as part of a planning agreement.

4.2 DEDICATION OF LAND

Urban renewal and growth planning necessarily require planning authorities to plan for new parks and other items of infrastructure, most of which require land. Through-site links and road widenings also have land requirements.

This section reviews how various councils treat and value land that is required for dedication.

City of Sydney

The *City of Sydney Development Contributions Plan (2015)* outlines an open space strategy through which it will ensure sufficiency of public open space that maintains existing provision rates. A multi-pronged approach is taken:

- **Acquisition of land** (using contributions as payment) where land is identified in the contributions plan. The acquisition of sites will be staged according to when contributions are received and suitable sites are available.
- **Dedication of land** where part of a site is dedicated for open space and the floorspace associated with the land dedicated "is transferred to the remaining part of the site without loss". The City may provide a credit for the land dedicated against the contribution required, the credit generally calculated at \$200/sqm of site area¹. Land for dedication must first be identified in the works program to be eligible for dedication under this approach. Any land dedication offer is required to be secured through a planning agreement.
- **Upgrade of land** and existing open spaces using contributions.

Part 6 Division 2 of the Sydney LEP 2012 provides for "additional floorspace" outside Central Sydney in a number of circumstances including at Green Square where community infrastructure is provided (clause 6.14 LEP).

Additional floorspace provided in Green Square is subject to the City of Sydney's '*Development Guidelines - Providing Community Infrastructure in Green Square*' (City of Sydney, 2012), referred to as 'the Guidelines'.

A proposal including community infrastructure floorspace must be acceptable in terms of environmental capacity, compliance with development controls and have little or no impact on adjoining properties and surrounding area.

If acceptable on a merits assessment, a package of community infrastructure work must then be agreed with the City. The Sydney DCP identifies community infrastructure (including public streets, pedestrian and bike networks and public open spaces) to be provided in conjunction with community infrastructure floorspace in Green Square.

Where dedication of *part of a site* is required, and development potential of the dedicated land is able to be transferred and developed elsewhere on the site, the land is valued at a nominal rate of \$200/sqm of site area.

If an entire allotment is required (and there is no opportunity for transfer of the development potential of the dedicated land), payment for the land will be from contributions received.

¹ The credit of \$200/sqm is intended to cover legal and administrative costs. This practice is consistent with CoS' Green Square Community Infrastructure Floorspace provisions.

City of Parramatta

The City of Parramatta (CoP) adopted a *Voluntary Planning Agreements Policy* in November 2018. The policy details the principles that are relied upon for planning agreements, including how public benefits are to be valued.

Clause 2.11 states that unless otherwise agreed in a particular case:

- Dedication of land for a public purpose will be valued according to the provisions of the *Land Acquisition (Just Terms Compensation) Act 1991*.
- Where any FSR entitlement is transferred from the land proposed for dedication to the remainder of the site, a nominal value of \$1 will be attributed to the land. In a report to CoP Council dated 13 June 2017, the approach of attributing a nominal value (\$1) for land was explained as intended to avoid “double dipping” where a developer may receive the benefit of the FSR attributable to the land that is dedicated *and* a second payment or credited ‘value’ for the land itself.

Similar to the City of Sydney, CoP takes a nuanced approach to valuing land that is required for a public purpose. Where floorspace is able to be harvested and developed elsewhere on the site, a nominal \$1 credit is attributable to the land that is dedicated. Otherwise, the land is to be valued pursuant to the provisions of *Land Acquisition (Just Terms Compensation) Act 1991*.

Cumberland Council

Cumberland Council adopted its Planning Agreements Guidelines and Planning Agreements Policy in September 2017. Both documents address the issue of land dedication where development potential is calculated on the ‘overall site area’ (that is, including the land that is to be dedicated) and transferred to the remainder of the site.

Section 3.2(c) of the Planning Agreements Guidelines state:

Where the development potential (floor space ratio) is to be calculated by including the land to be dedicated as part of the ‘site area’ as defined in the LEP, there is no loss of development potential. As the development potential of the land to be dedicated has been transferred, the value of the land to be dedicated for a public purpose will be considered to be nil. Such land is to be dedicated to Council free of all encumbrances, for nil consideration and nil cost to Council.

In other circumstances, where the benefit is the provision of land for a public purpose, the Council will generally seek to value the benefit on the basis of the market value of the land. This market value is to be provided by the proponent and independently verified by a registered and appropriately qualified and experienced property valuer. Council will seek an independent peer review of the valuation.

The Planning Agreements Policy affirms the position that “where development potential (FSR) is to be calculated including land to be dedicated as part of the ‘site area’, such land is to be dedicated at nil cost to Council and will not be offset against s7.11 or s7.12 development contributions”.

Showground Station Precinct

The Showground Station precinct is within the Sydney Metro Northwest Priority Urban Renewal Corridor. In December 2017, the precinct was formally rezoned in Part 9 of the Hills Shire Local Environment Plan (2012).

DPE released the *Showground Station Precinct Finalisation Report* (December 2017) which provides an overview of the precinct and details the planning amendments that were proposed.

The Finalisation Report details a ‘transfer of floor space ratio clause’ to encourage provision of new roads, public open space and drainage works to be delivered and dedicated to Council or relevant public authorities. The clause would enable the land to be dedicated be included for the purposes of applying a floor space ratio.

Clause 9.2 provides that the site area of proposed development on land within the Showground Station Precinct is, for the purposes of applying a floor space ratio under clause 4.5, taken to include land that:

- (a) is dedicated to the Council or a public authority for a public purpose (including roads, drainage or open space), and
- (b) would have been part of the site area if it had not been so dedicated.

The Finalisation Report describes in detail the operation of similar provisions in other local environmental plans, confirming that “consent authorities require landowners to dedicate open space, roads or other public infrastructure ‘at no cost’ as a matter of course, where bonus floorspace is awarded”. The Finalisation Report goes on to recommend that The Hills include a provision in its development contributions plan to clarify that no ‘double dipping’ can occur where FSR has been transferred under the clause for a public asset to be dedicated.

The Hills adopted *Contributions Plan No. 19 (Showground Station Precinct)* in September 2018. Clause 2.9 of the contributions plan provides:

As development within the Precinct occurs, a number of sites identified for roads, drainage and open space must be dedicated to Council by developers. This plan does not include any value for the acquisition of these parcels.

In recognition of this, clause 9.2 of the LEP 2012 provides that where land for the purpose of roads, drainage or open space is dedicated to Council, at no cost, this land can be included for the purpose of calculating site and the application of floor space ratio under clause 4.5 of LEP 2012. Essentially, gross floor area potential which could have otherwise been achieved on this land may be transferred to other land within the development.

The contributions plan states the use of a floorspace transfer mechanism that allows a developer to ‘transfer’ development potential from dedicated lands and ensures a developer’s overall yield is not decreased as a result of dedicated land to Council and provides appropriate compensation to the developer associated with any dedication.

The contributions plan states that unless acquisition of land is specifically funded under the plan, land required for dedication will be at no cost to Council and the developer is not eligible for any financial compensation or offset in s7.11 payable as a result of land dedication or completing works on the land.

Key observations with respect the treatment/ valuation of land dedicated for a public purpose are:

- Where *part* of a site is required for dedication, development potential is calculated on the total site area (including the land for dedication). Where the development potential of the land dedicated is transferred to the remainder of the site, only nominal value (ranging from nil to \$200/sqm) is ascribed for the purposes of offset to a development’s contributions liability.
- Where an *entire* site is required for a public purpose and the development potential of the site is foregone (i.e. not transferred for development to adjoining land), the basis for valuation will be market value or in accordance with the provisions of the Just Terms legislation to be assessed by a qualified property valuer.

Underpinning the above policy positions is a recognition that should development potential be transferred elsewhere on a site, no loss is suffered and therefore no value is ascribed to the land that is dedicated. Ascribing a value to the land that is dedicated (that no longer has any development capacity) to be offset against a development’s contributions liability would amount to ‘double dipping’.

The majority of policies reviewed cite ‘market value’ as the basis for valuing land (entire sites). Where the acquisition of land is funded in a contributions plan, payment for the land will be from contributions received.

The foregoing principles were applied in the alternate development scenarios, where the dedication of land was assumed to be accompanied by concurrent transfer of the land’s development potential to an adjoining site/s. The ensures there is no loss of development capacity despite the dedication of land.

Take-up of development opportunities under these circumstances is critical for the delivery of public domain infrastructure. The next section examines the capacity of development under the Preferred Development Scenario to contribute, in cash and/ or through land dedication.

4.3 CAPACITY OF DEVELOPMENT TO CONTRIBUTE

The capacity of development to contribute to delivery of public domain infrastructure is predicated on the following:

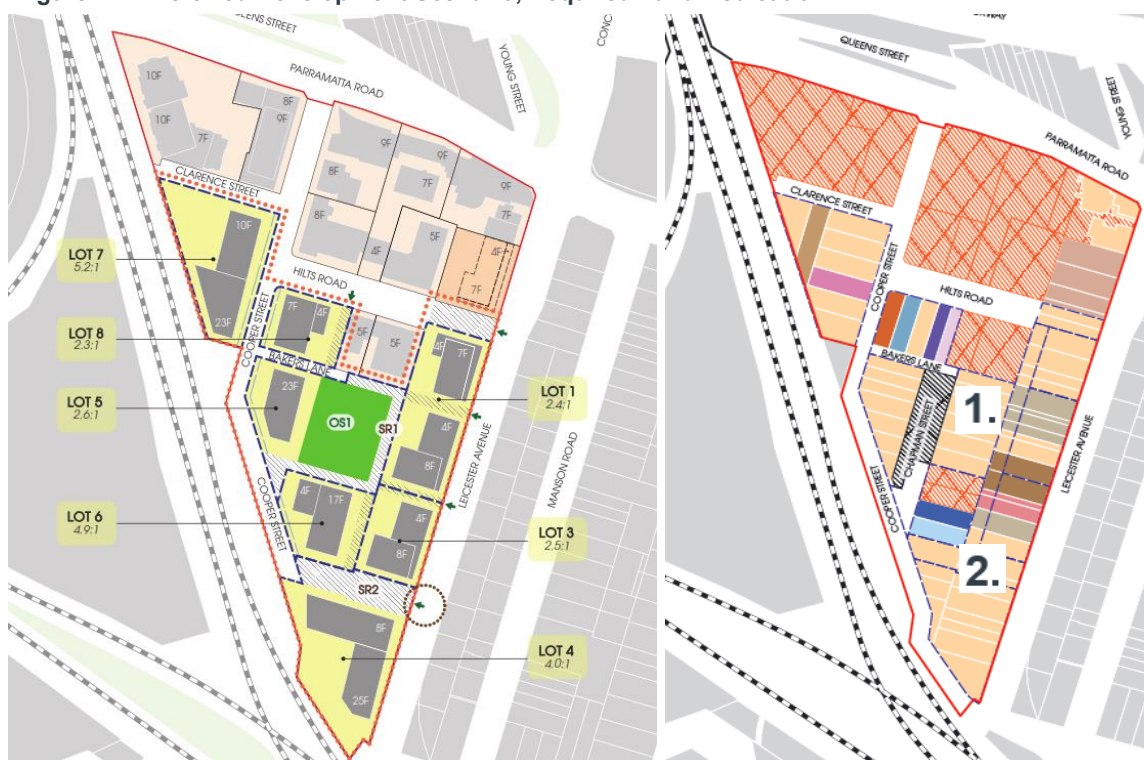
- **Dedication of land free of cost**
The planning mechanism that allows transfer of development potential from dedicated land preserves the value of the development opportunity, allowing land to be dedicated free of cost with no offset to contributions liability.
- **Sufficiency of development contributions**
s7.11 contributions are the main funding source for construction of the public domain infrastructure. Should development opportunities not be taken up, the ability of Council to deliver works will be constrained.

Land Dedication

The Preferred Development Scenario envisages two locations within the Study Area where land is required for dedication (new park and new road). The Preferred Development Scenario envisages a number of through-site links, however these could be required as a condition of consent without necessarily requiring land be dedicated.

Figure 4.1 illustrates the spatial distribution of required land for public domain works and Table 4.1 compares the GFA potential of sites which are key to the securing of land required.

Figure 4.1: Preferred Development Scenario, Required Land Dedication



Source: Group GSA

Table 4.1: Preferred Development Scenario Required Land Dedication, Key Development Lots

Ref.	Public Domain	Address	Adjusted DCP Scheme		Preferred Development Scenario	
			Site Area (sqm)	GFA (sqm)	Site Area (sqm)	GFA (sqm)
1	New park	2-12 Chapman St	4,368	11,357	4,368	11,357
		11-21 Chapman St				
2	New road	2-12 Leicester Ave	4,513	18,054	4,513	18,054
		25-27 Cooper St				

Source: Group GSA

In each of the key lots, there is no change in GFA entitlement on privately-owned land between the Preferred Development Scenario and Adjusted DCP Scheme. The incentive to deliver the public domain items would instead be the provision of Council-owned land into the development lots, providing for a larger development.

Sufficiency of Development Contributions

Construction of public domain infrastructure is subject to the take-up of development and payment of contributions in the Study Area. Unless feasible, development will not occur and contributions will not be made. That said, the motivations of landowners are not always financial in nature and despite being a commercial proposition development may still not occur.

The effectiveness of a planning mechanism that allows a transfer of floorspace potential for development elsewhere on a remaining site is subject to the 'carrying capacity' (or environmental capacity) of that remaining land. Should the remaining land not have the environmental capacity to accommodate the transferred floorspace potential, the notion of floorspace transfer will merely be a theoretical one. Loss of any foregone floorspace should be recognised either through a credit offset or payment for land.

Built form testing carried out by Group GSA examined the capacity of development lots to accommodate transferred floorspace. The Preferred Development Scenario results in an increase in residential floorspace for most development blocks compared to the Base Case with the exception of Lots 6 and 7.

In the case of Lot 6, marginal decrease of 413sqm GFA results. This reduction in GFA is limited to the Council-owned portion of Cooper Street which forms part of the development lot. Privately-owned land in Lot 6 does not reduce in floorspace potential. In the case of Lot 7, there is no change in floorspace potential, development tested to be feasible in both scenarios.

Table 4.2 illustrates the floorspace potential that can be accommodated in each development blocks (Adjusted DCP Scheme and Preferred Development Scenario).

Table 4.2: Adjusted DCP Scheme v Preferred Development Scenario, Gross Floor Area (GFA)

Lot	Adjusted DCP Scheme		Preferred Development Scenario		GFA Gain (Loss)	Comment
	Site Area (sqm)	GFA (sqm)	Site Area (sqm)	GFA (sqm)		
1	2,312	2,774	4,151	9,961	3,809	Increase in FSR compared to Adjusted DCP Scheme.
2	2,413	3,378				
3	2,150	4,300	2,150	5,375	1,075	Increase in FSR to ensure feasibility.
4	4,513	18,054	5,906	23,623	5,569	Larger site area and GFA due to inclusion of Cooper St (part).
5	5,742	14,930	5,583	14,516	(413)	Smaller site area due to land dedication for new park. Slightly lower GFA on Council-owned lands.
6	1,747	8,560	2,478	12,141	3,581	Larger site area and GFA due to inclusion of Chapman Street (part).
7	4,230	21,995	4,230	21,995	-	No change in site area or GFA; remains feasible.
8	1,825	-	1,825	4,199	4,199	Former location of DCP park; GFA is tested to be feasible.

Source: Group GSA

Section 3.4.2 examined potential contributions from development under the Preferred Development Scenario.

- Assuming Council-owned lands are developed, some \$18.5m in contributions could be received (including \$2m already received). Against the assumed cost of infrastructure of \$21.6m, there is a shortfall of \$3.1m.
- If Council-owned lands are not developed, potential contributions fall to \$15.5m, resulting in a larger shortfall of \$6.1m.

This demonstrates the importance of the development opportunity associated with Council-owned lands for the payment of contributions.

Council-owned Lands

The Preferred Development Scenario identified redundancy of Chapman Street and Cooper Street (section 3.4.1).

- Chapman Street would be closed and form part of new park and Lot 6. The floorspace potential could be harvested and transferred to the remainder of Lot 6.
- The southernmost portion of Cooper Street would be closed and consolidated to form part of Lot 4. The floorspace potential could be harvested and transferred to the remainder of Lot 4.

The floorspace potential associated with Council-owned lands is as follows:

- Chapman Street - 6,739sqm GFA potential.
- Cooper Street (part) - 5,569sqm GFA potential.

Use of the floorspace potential associated with the Council-owned land could be an important incentive tool as well as source of funds for delivery of public infrastructure.

4.4 MATTERS FOR CONSIDERATION

The premise of land dedication (free of cost, or at nominal cost to Council) is that the dedicated land's floorspace potential is harvested so that the site's overall development capacity is not reduced.

A floorspace incentive (by way of increased density) is a common delivery mechanism for local community infrastructure. Floorspace potential is calculated on the overall site area (before land dedication) and the development capacity of the dedicated land is transferred to the remainder of the site. The required land is then dedicated at nominal cost. This is practised by several councils and is embodied in respective policy documents.

Certainty and Flexibility

A precinct plan that is viable provides certainty that is necessary for investment (compared to an ad-hoc approach in response to individual landowner proposals). When requiring contributions (cash or kind) to deliver specified infrastructure items, the following should be clearly identified on a plan:

- Community infrastructure and land requirements (e.g. new park, through site links, community facilities).
- Development blocks/ amalgamation patterns and incentive floorspace (if available). Testing of amalgamation patterns is critical to ensure consolidated development blocks are viable, i.e. have the environmental capacity to accommodate the built form, delivery of public domain infrastructure and transfer of floorspace potential.

A major challenge to any precinct plan is that landowners' intentions are not always financial. Flexibility should be embedded to allow development blocks to be considered on a merits assessment, i.e. delivering the desired infrastructure with acceptable environmental impact to surrounding lands.

Treatment and Valuation of Contributions

The administering of contributions should have regard to the following:

- Contributions (land or works) are delivered through a planning agreement.
- Land dedicated is valued at nominal value (where the floorspace potential of the lands are transferred and developed on the remaining site) to avoid 'double dipping'.
- Unless the land is identified in a s7.11 contributions plan, land that is dedicated is not eligible for any offset or reduction in s7.11 that is payable.
- Works identified and funded in a s7.11 contributions plan could be delivered by a proponent and offset against s7.11 contributions payable.
- If an entire site is identified for dedication and the landowner does not have any interest in adjoining land, a more appropriate mechanism could be to reserve the land on the Land Acquisition map. This would allow for certainty of delivery. This situation does not apply in the Study Area; land required for dedication are part of larger landholdings and therefore offer the potential for floorspace transfer.

Funding Shortfall and Potential Funding Solutions

The best case scenario (assuming Council-owned lands are developed and pay s7.11 contributions) is estimated with a funding shortfall of \$3.1m. Less favourable scenarios are \$6.1m (if Council-owned lands are not developed) and \$8.9m (if a SIC of \$20,000 per dwellings were applicable).

The Review considers it prudent for Council to investigate additional funding sources. Leveraging Council-owned land at Chapman Street and Cooper Street (part) is a logical approach.

Divestment of the development potential at Chapman Street and Cooper Street would assist with closing the funding shortfall. This would also ensure the floorspace potential is taken up and contributions are paid.

Use of the floorspace potential associated with the Council-owned land could be an important incentive tool for delivery of public infrastructure (whether included/ gifted or available at a concessional rate as an incentive), particularly as the likely timing of development is uncertain.

The development potential associated with Council-owned lands could be:

- Bonus floorspace to:
 - Incentivise land dedication, particularly with uncertain timing of development.
 - Mitigate impacts should a SIC and/ or affordable housing contributions be required.
- Divested and sale proceeds to assist with delivery of infrastructure.
- Foregone, leaving a funding shortfall even in best case scenario where majority of development is taken-up.

An increase in s7.11 development contribution rates could be considered, however this will reduce the attractiveness of development as an investment proposition and could reduce development take-up. In any event, a review of the Development Contributions Plan will be in order after a new Public Domain Plan is prepared.

Next Steps

Should Council adopt the Review's findings and recommendations, the following will be necessary:

- Amendments to Canada Bay LEP and DCP.
- Preparation of new Strathfield Triangle Public Domain Plan.
- Preparation of new Strathfield Development Contributions Plan.

While not necessarily specific to the Study Area, a Planning Agreement Policy could be prepared. This would provide policy guidelines on the quantum and manner in which public benefit contributions are to be made (land dedication, works-in-kind), the treatment/ valuation of works in kind and critically, what constitutes a material public benefit.

Following preparation of the new public domain plan, the following matters will require investigation:

- s7.11 contribution rates that are appropriate, focused on the overarching objective of infrastructure delivery.
- Treatment of GFA potential from Council-owned land, whether available as incentive floorspace for delivery of public infrastructure or divested for value.
- Comparison of new s7.11 contributions against the cost of infrastructure delivery.

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APPENDIX A: GENERIC FEASIBILITY ASSUMPTIONS

Generic feasibility testing in the Feasibility Analysis adopts the Residual Land Value approach. This involves assessing the value of the end product of a hypothetical development, then deducting all of the development costs (including site acquisition costs, site demolition and/or clearance, construction costs, consultant fees for design and project management, statutory fees) and making a further deduction for the profit and risk that a developer would require to take on the project.

The land value is the 'residual' that remains, i.e. the amount a developer could afford to pay in exchange for the opportunity to develop the site.

Project Timing

Development application is assumed to be progressed immediately upon settlement with pre-sales occurring shortly thereafter. Construction is assumed to begin in Month 12 and span for 12-18 months depending on the scale of the development, sale of remaining units to be completed immediately following.

Development Yield

Development yield assumed at unit mix of: 1 bedroom: 2 bedroom: 3 bedroom (20%: 60%: 20%) and at internal unit sizes of 55sqm, 77sqm and 105sqm respectively.

Revenue Assumptions

Market analysis demonstrates the demand for new residential product within the Strathfield region is strong as evidenced by steady sales and take-up rates.

The following average sale prices and sale rates are assumed:

- Average 1 bedroom units at \$687,500 (\$12,500/sqm).
- Average 2 bedroom units at \$924,000 (\$12,000/sqm).
- Average 3 bedroom units at \$1,207,500 (\$11,500/sqm).
- Residential revenue was assumed to escalate at 3.0% per annum; commercial/retail revenue was assumed to escalate at 2% per annum.
- It was assumed that 50% of apartments would be pre-sold prior to construction and the balance would be settled after construction at the rate of between 4-5 units per month.
- Other revenue assumptions
 - GST is included on the residential sales.
 - Sales commission and legal costs on sales was included at 3% of gross residential sales.
 - Legal cost on sales was included at 0.3% of gross sales.

Cost Assumptions

- Land purchase cost based on a desktop analysis of 'as is' values within the area.
- Legal costs, valuation and due diligence was assumed at 0.5% of land price and stamp duty was included. These costs to be paid at settlement assumed in Month 3.
- Cost escalation of 3% per annum was assumed to commencement of construction.
- Construction of residential units was assumed at \$2,500/sqm-\$3,000/sqm of building area with balconies assumed at \$800/sqm.
- Basement car parking was included at \$40,000 per space.

- Demolition and clearing costs were costed at \$60 per square metre of site area.
- Landscaping allowed at \$200/sqm of site area.
- A further 5% construction contingency allowance was included.
- Professional fees at 9% of construction costs.
- Development management fee at 1% of project cost (excluding land and finance).
- Section 7.11 charges as per the Development Contributions Plan (November 2018 index).
- Advertising and marketing costs were included at 1.5% of gross sales.
- Land holding costs including land tax, Council and water rates based on assumed unimproved land values.
- Project contingency of 5.0% (of total project costs net of land and finance).
- Other cost assumptions include:
 - Developers equity is assumed at 25% of land acquisition cost. Equity is progressively injected when required.
 - The balance of project cost is assumed to be debt funded with interest capitalised monthly (nominal 7.0% per annum).
 - Finance establishment costs at 0.35% of project debt.

Hurdle Rates and Performance Indicators

Target hurdle rates are dependent on the perceived risk associated with a project (planning, market, financial and construction risk). The more risk associated with a project, the higher the hurdle rate. A number of performance indicators are relied upon when ascertaining the feasibility or otherwise of a development.

- Development margin is the profit divided by total development costs (including selling costs). A target hurdle rate is assumed at 20%.
- Discount Rate - this refers to the project internal rate of return (IRR) at which the net present values of an investment becomes zero.
- Residual Land Value - this has been determined by establishing the maximum land value a developer is willing to pay based on a 20% internal rate of return (IRR) taking into account all other costs and project revenue.
- Development Profit – this represents the total revenue less total cost including interest paid and received.

If the resulting profit from this feasibility analysis is large enough to meet the target hurdles (in this case the discount rate and development margin), the project is considered financially viable for redevelopment.

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