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PART 1 - BACKGROUND INFORMATION AND ADMINISTRATION

1 Introduction

1.1 What is this Plan?

This Plan is known as *Shellharbour City Council Local Infrastructure Contributions Plan 2019 - 9th Review* (the Plan) and is **effective from 14th August 2019**. The purpose of this Plan is to authorise Council to impose a condition on relevant development consents requiring a contribution towards the provision of infrastructure under Section 7.11 of the *Environmental Planning and Assessment Act 1979*, as amended.

This Plan has been prepared within the legislative framework of Part 7, Subdivision 3 of the *Environmental Planning and Assessment Act 1979* (EP&A Act), Part 4 of the *Environmental Planning & Assessment Regulation 2000* (EP&A Regulation) and DIPNR's *Development Contributions Practice Notes – July 2005.*

This Plan amends the Section 94 Contributions Plan 2016 (8th Review) Amendment 1 and previous Plan versions as shown at Table 1.1.

TABLE 1.1: PLAN REVIEW HISTORY

Plan / Review	Date adopted/effective	Effective until
Original	21 June 1993	19 June 1994
First Review	20 June 1994	4 July 1995
Second Review	5 July 1995	16 July 1996
Third Review	17 July 1996	21 October 1997
Fourth Review	22 October 1997	5 December 2000
Fifth Review	6 December 2000	27 September 2005
Sixth Review	28 September 2005	13 September 2006
Sixth Review (Amendment 1)	14 September 2006	17 December 2013
Seventh Review	18 December 2013	27 September 2016
Eighth Review	28 September 2016	7 March 2017
Eighth Review (Amendment 1)	8 March 2017	13 August 2019
Ninth Review	14 August 2019	

1.2 Background

Section 7.11 of the EP&A Act enables Council to levy a contribution from any development that will, or is likely to, require the provision of or increase the demand for public infrastructure and services. The contribution may be either in cash or in-kind and may be

allocated to the cost of new infrastructure or those already constructed in anticipation of demand.

Council has required contributions from developers of certain developments towards the provision of a wide range of community, recreation and sporting infrastructure since 1984. In May 1991 Council adopted Development Control Plan No. 6/90, which outlined how contributions were to be levied, how much was to be levied and the way in which contributions levied would be spent. This Plan was superseded by Council's *Section 94 Contributions Plan*, which was adopted in June 1993 and has been reviewed 8 times. This Plan constitutes the Ninth (9th) Review of Council's Development Contributions Plan.

The Plan levies for a range of community infrastructure items to meet future population needs. The infrastructure levied for under the Plan includes open space and recreation, community infrastructure, roads, traffic, drainage works, car parking and development contributions management. When determining whether a particular infrastructure item should be included in this Plan, Council has considered whether there is a nexus (or linkage) between new development and the need for the infrastructure, and whether the provision of and associated costs are considered reasonable.

1.3 Objectives

The objectives of this Plan are to ensure that:

- 1. Shellharbour City's future needs for community infrastructure are adequately met as population increases. This should be achieved through:
 - The effective planning for provision of infrastructure likely to be required as a result of, or to facilitate, new development;
 - A nexus between the new development and the need for community services and infrastructure is established;
 - The community is provided information as to the nature and timing of infrastructure provision.
- 2. Developers are required to contribute towards the cost of providing community infrastructure and services in a manner that is:
 - Fair and reasonable:
 - Consistent and certain;
 - Adequately and publicly accounted for.

1.4 Principles

The Plan is based on the following principles:

- i. The Plan encourages a holistic approach towards the provision of infrastructure. Fragmented, site-specific infrastructure items are discouraged, in favour of infrastructure that is multi-purpose in nature and achieves broader, long term planning objectives.
- ii. The Plan is founded on a 'cradle to the grave' approach to the provision of community infrastructure, on the assumption that at some stage in his or her life, a person is likely to require access to the full range of infrastructure and services that Council is able to provide.
- iii. Specific projects have been identified, designed and indicative costing estimated to be used as a basis for contribution determination.

iv. The Plan acknowledges that the provision of certain new community infrastructure and services is likely to benefit existing as well as new residents of Shellharbour and seeks to equitably distribute costs.

1.5 Land to which the Plan applies

This Plan applies to the whole of the Shellharbour City Council (SCC) Local Government Area (LGA) as shown in Figure 1.1 on page 9.

1.6 Timeframe

The original Plan was adopted by Council on 21 June 1993 and had a timeframe of 20 years (ie 1993-2013). As part of the 5th Review of the Plan the timeframe was extended to 2018.

As part of the 7th Review, the timeframe of the Plan was extended to 2023. Due to the nature and scale of the infrastructure and services proposed, the majority of infrastructure items are programmed for implementation by this time. Some infrastructure items within the Plan have been identified to serve a longer growth period, beyond the 10 year timeframe of the Plan. Therefore, the implementation and the cost distribution for these have been extended to 2028. This means that this Plan operates on 2 timeframes - 1993 to 2023 and 1993 to 2028.

1.7 Anticipated growth

The population of the City of Shellharbour is anticipated to grow to approximately 74,750 people by the year 2023 and approximately 79,000 by the year 2028. This population growth will result in the need for additional infrastructure and services to those that exist at present.

1.8 Integrated Planning & Reporting

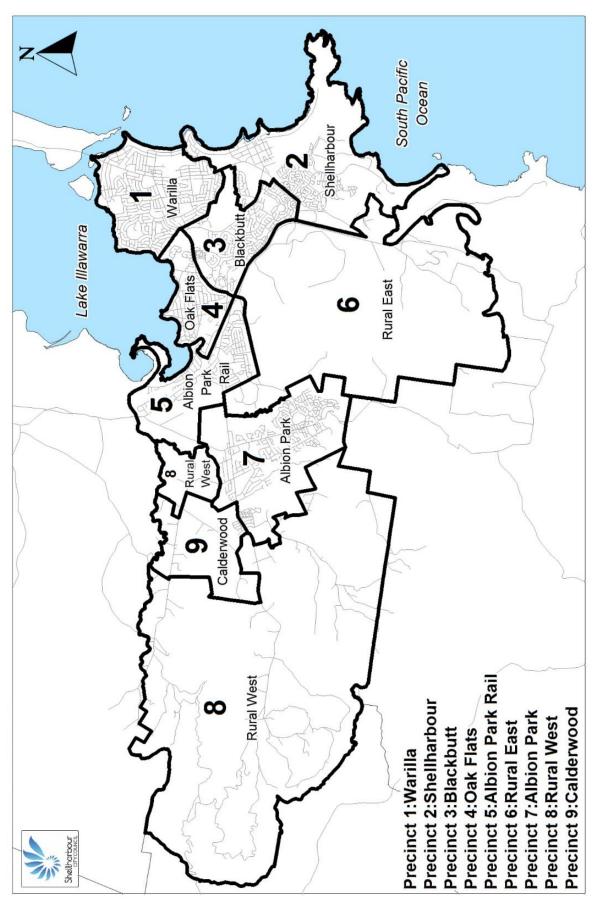
The Integrated Planning and Reporting (IP&R) Framework provides Councils in NSW the opportunity to work with their communities to develop a long-term plan for their areas. The Framework is a legislative requirement that forms part of the *Local Government Act 1993*.

Integrated Planning considers the longer-term future of an area and encourages councils to draw their various plans together, to understand how they interact and to ensure the greatest benefits are achieved by comprehensively planning for the future.

Ultimately, the Framework provides greater accountability and transparency. Councils are required to outline a clear strategic direction for their community through their Community Strategic Plan, which is supported by The Resourcing Strategy. This includes a 10-year Long Term Financial Plan, Asset Management Strategy and Workforce Management Plan.

This Plan provides a funding source to assist in achieving the outcomes identified in the Community Strategic Plan. The works to be carried out in the Infrastructure Works Plan (Appendix B) will be incorporated in the Long Term Financial Plan.

FIGURE 1.1: SHELLHARBOUR LGA - PRECINCT BOUNDARIES



1.9 Relationship to other Plans and reports

This Contributions Plan has been informed by other planning instruments, reports, strategies and agreements that apply to the land to which this plan applies. Of particular importance and relevance are:

- Section 94 Works in Kind Policy (SCC, 2016)
- Shellharbour Development Control Plan
- Illawarra Shoalhaven Regional Plan, (NSW Planning & Environment, 2015)
- Albion Park, Shellharbour Village, Oak Flats and Warilla Town Centre Plans
- Libraries and Museum Strategy 2024 (SCC, 2014)
- Shellharbour City Growth Projections (id. Forecast, November 2014)
- Calderwood Voluntary Planning Agreement (15 September 2014)
- Shellharbour Local Environmental Plan 2013
- Water Sensitive Urban Design Strategy Albion Park (Equatica, 2013)
- Justification for inclusion of the Council Administration Offices (City Hub project) in the Section 94 Contributions Plan 2013 (7th Review) (SCC, 2013)
- City Hub Stage 1 Business Case (Incoll. & Savills, 2012)
- Calderwood Consolidated Concept Plan (JBA Planning, March 2011)
- Open Space, Recreation & Community Facilities Needs Study Report (SCC, 2010)
- Calderwood Landscape and Open Space Masterplan (Environmental Partnership, 2010)
- Calderwood Social and Community Planning Assessment Final Report (Elton, 2010)
- Albion Park Traffic Study (Maunsell AECOM, 2006)
- Shellharbour City Wide Open Space & Recreation Plan (SCC, 2000)
- Review of the Need for Traffic Calming Infrastructure (SMEC, 2000)
- Shellharbour City Centre Traffic Needs Study (SMEC, 2000)
- Albion Park Open Space and Recreation (1999) Plan
- Shellharbour Cultural Resources Study (Guppy and Associates, 1999)

1.10 Transitional arrangements

A development application that has been submitted after the commencement of public exhibition of this Plan and determined after this Plan comes into effect shall be determined in accordance with the provisions of the Plan which applies at the date of determination of the application.

1.11 Modifications to development consents

Any application to modify an existing development consent shall be assessed in terms of the incremental demand for infrastructure (and hence Section 7.11 contributions) arising from the modification in accordance with the provisions of the Plan that applies at the date of determination of the modification.

Note: Contributions cannot be imposed on modification applications made under s4.55 of the Act. Any application for modification of a development necessitating the imposition of additional contributions should be made by development application.

1.12 Summary of Infrastructure Items, Cost Apportionment and Contribution Rates

Table 1.2 on pages 11 and 12 summarises the infrastructure items levied under this Plan, the cost and the developers' and Council's financial commitment for each of these. Tables 1.3 to 1.5 summarise the contribution rates payable by the developer for residential and non-residential development. Car parking contribution rates are shown at Chapter 8.

TABLE 1.2: SUMMARY OF INFRASTRUCUTRE ITEMS, COSTS AND APPORTIONMENT

			Apportionment %		Apportionment \$		Developer
Infrastructure Item	Levy Basis Total Cost		Council	Developer	Council	Developer	Contributions to 30/6/15
Open Space and Recreation Infrastructure							
C1.02 Beach Foreshore (recoupment)	City Wide	\$ 3,605,563	57.96 %	42.04 %	\$ 2,089,784	\$ 1,515,779	\$ 812,462
C1.08 Shell Cove Sports Fields	City East	\$ 3,350,885	0.00 %	100.00 %	\$ -	\$ 3,350,885	\$ 2,304,938
C1.10 Benson Basin Sports Fields	City East	\$ 2,576,962	0.00 %	100.00 %	\$ -	\$ 2,576,962	\$ 1,215,421
C1.11 City Centre Youth Recreation Facility	City East	\$ 1,051,487	69.25 %	30.75 %	\$ 728,155	\$ 323,332	\$ 229,489
C1.16 Croom - City West Sporting fields ²	City West	\$ 736,923	0.00 %	100.00 %	\$ -	\$ 736,923	\$ 733,924
C1.17 Shellharbour City Stadium (recoupment)	City Wide	\$ 4,790,192	57.96 %	42.04 %	\$ 2,776,395	\$ 2,013,797	\$ 1,221,424
C1.18 Albion Oval Touch Football Fields	City West	\$ 636,767	0.00 %	100.00 %	\$ -	\$ 636,767	\$ 234,036
C1.20 Terry Reserve Soccer Fields ²	City West	\$ 666,817	0.00 %	100.00 %	\$ -	\$ 666,817	\$ 502,191
C1.21 Con O'Keefe Reserve	City West	\$ 159,898	0.00 %	100.00 %	\$ -	\$ 159,898	\$ 74,810
C1.22 Tullimbar Sports Fields 1	City West	\$ 1,971,717	0.00 %	100.00 %	\$ -	\$ 1,971,717	\$ 760,387
C1.24 Albion Park Commercial (recoupment)	Benefit Area 4	\$ 679,637	0.00 %	100.00 %	\$ -	\$ 679,637	\$ 483,229
C1.25 Upgrade Existing Active Open Space ²	City East	\$ 992,354	0.00 %	100.00 %	\$ -	\$ 992,354	\$ 984,538
C1.25 Upgrade Existing Active Open Space ²	City West	\$ 288,275	0.00 %	100.00 %	\$ -	\$ 288,275	\$ 286,005
C1.26 Passive Open Space Embellishment	City East	\$ 6,078,261	0.00 %	100.00 %	\$ -	\$ 6,078,261	\$ 4,116,451
C1.26 Passive Open Space Embellishment	City West	\$ 2,604,969	0.00 %	100.00 %	\$ -	\$ 2,604,969	\$ 1,709,671
C1.28 Calderwood Sports Fields 1,3	Precinct 9	\$ 2,881,411	0.00 %	100.00 %	\$ -	\$ 2,881,411	\$ -
Sub total		\$ 33,072,118			\$ 5,594,334	\$ 27,477,785	\$ 15,668,976
Community Infrastructure							
C2.01 Warilla Community Centre (recoupment)	Precinct 1	\$ 944,853	90.58 %	9.42 %	\$ 855,848	\$ 89,005	\$ 32,728
C2.04 Shellharbour City Performance Theatre	City Wide	\$ 9,857,377	57.96 %	42.04 %	\$ 5,713,336	\$ 4,144,041	\$ 2,270,270
C2.06 City Library ¹	City Wide	\$ 16,438,436	54.39 %	45.61 %	\$ 8,940,865	\$ 7,497,571	\$ 3,587,096
C2.08 Council Administration Offices ¹	City Wide	\$ 21,200,248	69.96 %	30.04 %	\$ 14,831,694	\$ 6,368,554	\$ 1,718,073
C2.09 Civic Auditorium ¹	City Wide	\$ 11,261,597	54.39 %	45.61 %	\$ 6,125,183	\$ 5,136,414	\$ 1,108,660
C2.16 Albion Park Library Extensions	Precinct 7, 8, 9	\$ 1,503,583	0.00 %	100.00 %	\$ -	\$ 1,503,583	\$ 580,420
C2.18 Tullimbar Community Centre	Benefit Area 9	\$ 623,970	0.00 %	100.00 %	\$ -	\$ 623,970	\$ 29,490
C2.19 Shell Cove Library & Community Centre ¹	Precinct 2	\$ 9,916,558	21.08 %	78.92 %	\$ 2,090,410	\$ 7,826,148	\$ 1,866,636
C2.20 Calderwood Community Centre 1,3	Precinct 9	\$ 931,175	0.00 %	100.00 %	\$ -	\$ 931,175	\$ -
Sub total		\$ 72,677,797			\$ 38,557,337	\$ 34,120,460	\$ 11,193,373
Roads & Traffic Infrastructure							

			Apportionment %		Apporti	Developer	
Infrastructure Item	Levy Basis	Levy Basis Total Cost Council Developer		Council Develope		Contributions to 30/6/15	
C3.02 City Centre Traffic Management ²	Benefit Area 1	\$ 2,883,970	0.00 %	100.00 %	\$ -	\$ 2,883,970	\$ 2,429,658
C3.03 Lake Entrance Road (recoupment)	City Wide	\$ 4,422,428	#	#	\$ 2,742,352	\$ 1,680,076	\$ 1,157,277
C3.04 Oak Flats Transport Centre (recoupment)	City Wide	\$ 498,545	58.58 %	41.42 %	\$ 292,048	\$ 206,497	\$ 122,664
C3.06 Hargraves Avenue (recoupment)	Benefit Area 2	\$ 962,154	0.00 %	100.00 %	\$ -	\$ 962,154	\$ 137,611
C3.07 East West Link (recoupment)	City Wide	\$ 7,381,711	#	#	\$ 3,801,901	\$ 3,579,810	\$ 2,310,431
C3.09 Albion Park By-Pass ¹	Precinct 7, 8, 9	\$ 14,683,874	32.98 %	67.02 %	\$ 4,842,742	\$ 9,841,132	\$ 1,476,351
C3.12 Tongarra Road / Church St intersection	Precinct 7	\$ 308,621	40.36 %	59.64 %	\$ 124,559	\$ 184,062	\$ 23,745
C3.18 Illawarra Hwy / Tullimbar intersection	Benefit Area 9	\$ 1,477,028	0.00 %	100.00 %	\$ -	\$ 1,477,028	\$ 35,870
C3.19 Church Street / Sophia Street intersection	Benefit Area 9	\$ 141,098	0.00 %	100.00 %	\$ -	\$ 141,098	\$ 12,838
C3.20 Rivulet Crescent Extension	Benefit Area 3	\$ 922,283	0.00 %	100.00 %	\$ -	\$ 922,283	\$ 221,259
Sub total		\$ 33,681,712			\$ 11,803,602	\$ 21,878,110	\$ 7,927,704
Drainage Infrastructure							
C5.01 Mount Terry Drainage Catchment ²	Benefit Area 7	\$ 1,011,000	0.00 %	100.00 %	\$ -	\$ 1,011,000	\$ 1,004,987
C5.02 Tarra Drainage Catchment ²	Benefit Area 8	\$ 906,250	0.00 %	100.00 %	\$ -	\$ 906,250	\$ 746,115
C5.03 Cooback Creek Drainage Catchment	Benefit Area 8	\$ 4,262,360	0.00 %	100.00 %	\$ -	\$ 4,262,360	\$ 11,119
C5.04 Cooby Road Drainage Catchment	Benefit Area 8	\$ 4,529,638	0.00 %	100.00 %	\$ -	\$ 4,529,638	\$ -
Sub total		\$ 10,709,248			\$ -	\$ 10,709,248	\$ 1,762,221
Other Infrastructure & Services							
C6.04 Section 94 Management	City Wide	\$ 5,263,020	0.00 %	100.00 %	\$ -	\$ 5,263,020	\$ 2,792,749
Sub total		\$ 5,263,020			\$ -	\$ 5,263,020	\$ 2,792,749
TOTAL		\$ 155,403,895			\$ 55,955,272	\$ 99,448,623	\$ 39,345,023
Less: Works Provided to date		\$ 31,219,188			\$ 12,558,328	\$ 18,660,860	
Less: Section 94 management (operational costs)		\$ 2,523,448			\$ -	\$ 2,523,448	
TOTAL CAPITAL WORKS TO BE DELIVERED		\$ 121,661,259			\$ 43,396,944	\$ 78,264,315	

- 1 The cost of this infrastructure is distributed to development growth to 2028.
- 2 No contributions will be levied for this infrastructure item under this Plan.
- This item is included in the Calderwood Voluntary Planning Agreement dated 15 September 2014.
- # Refer to Section 13.4 City Wide Roads & Traffic Infrastructure Table 13.2 and 13.4 for the Developer Apportionment Factor by Precinct

TABLE 1.3: SUMMARY OF NON-RESIDENTIAL CONTRIBUTION RATES (BASE RATES)

Tier	Gross Floor Area of development	Contribution rate per development
1	1* - 500 m ²	\$ 595.18
2	501 - 1,000 m ²	\$ 1,190.37
3	1,001+ m ²	\$ 1,785.55

^{*} For extensions of existing developments, the minimum increase in gross floor area is 80sqm.

TABLE 1.4: SUMMARY OF RESIDENTIAL CONTRIBUTION RATES (BASE RATES)

Precinct	Contribution rate per lot / dwelling
1. Warilla	\$ 8,042.55
2. Shellharbour	\$ 10,634.70
3. Blackbutt	\$ 7,243.65
4. Oak Flats	\$ 8,450.00
5. Albion Park Rail	\$ 8,850.00
6. Rural East	\$ 6,647.63
7. Albion Park	\$ 14,675.47
8. Rural West	\$ 12,033.32
9. Calderwood	\$ 14,453.37

TABLE 1.5: SUMMARY OF BENEFIT AREA CONTRIBUTION RATES (BASE RATES)

Benefit Area	Contribution rate per unit	Unit (levy basis)
2. Hargraves Avenue	\$ 12.91	m² land area (lot size)
3. Rivulet Crescent Extension	\$ 2.71	m² land area (lot size)
4. Albion Park Commercial	\$ 84.95	m ² gross floor area
8. Albion Park Drainage Catchments:		
- Cooback Creek Catchment	\$ 3.66	m ² developable land area*
- Cooby Rd Catchment - Residential	\$ 18.10	m² land area (lot size)
- Cooby Rd Catchment - Rural Res.	\$ 3.62	m² land area (lot size)
9. Tullimbar Infrastructure	\$ 1,494.74	per lot / dwelling

^{*} lot size excluding watercourses or flood prone land

Note: The contribution rates provided in tables 1.3 to 1.5 are the base rates as at 30 June 2015. These rates will be indexed annually in accordance with Section 5.1 of this Plan.

The current indexed rates are based on indexation to June 30 2019 and will be available on Council's website.

2 Extent and Nature of the Plan

2.1 Context and Scope

Section 7.11 of the EP&A Act enables Council to impose contributions toward infrastructure items which are required as a result of new development. Council is not, however, able to levy for services, such as water and sewerage works that are the responsibility of another authority.

Contributions are sought whether Council or a private contractor constructs the infrastructure and the provisions of this Plan relate to both private and public sector developments equally.

The principle factor in determining the appropriateness of a Development contribution levy is the establishment of a nexus, or linkage, between new development and the need for Council to provide infrastructure as a consequence.

Development contributions are limited to the funding of capital expenditure. This includes works undertaken by Council, works contracted out by Council to another agency and works undertaken by developers as Works in Kind.

It does not include items of routine maintenance or day-to-day operation of individual infrastructure. It does however include provisions for the administration of the Plan over its life.

2.1.1 User-pays principles

This Plan aims to ensure that new development is only charged for the actual portion of demand (and therefore cost) that it generates. It seeks to do this in three ways:

- Funds raised under the provisions of Section 94 are held as restricted assets and not returned to Council's general funds;
- ii. Through the application of an apportionment formula new development is only levied for that portion of overall demand that it is likely to generate given its size and nature;
- iii. When an existing site is redeveloped, the developer will only be levied for that additional demand arising from the new development.

2.1.2 Grant funding

Where appropriate, Council will seek Federal and State grant funding to assist the financing of the infrastructure identified in this Plan. If a grant is received it will be subtracted from the total cost of the infrastructure and the outstanding amount will then be apportioned between Council and the developer based on the set apportionment formula for the item. Such grant funding will, therefore, be accounted for separately from Development contributions.

2.1.3 Cost Recoupment

Council will seek recoupment of costs for infrastructure that it has funded and provided in anticipation of future population growth. Such recoupment of funds will take into account the actual cost of the infrastructure plus indexation.

2.2 The Structure of the Plan

This Plan is based on a four-tier structure. This structure aims to ensure that the cost of providing infrastructure is appropriately apportioned to those areas that will benefit from the provision of the infrastructure. The four tiers are as follows:

- 1. **City Wide** infrastructure
- 2. City East & City West infrastructure
- 3. **Precinct** infrastructure
- 4. Special purpose **Benefit Area** infrastructure

The way in which these tiers apply is summarised in Figure 2.1 on page 17.

2.2.1 City Wide infrastructure

This Plan recognises that there are a number of infrastructure items that are intended to serve the City as a whole and as such all development in the LGA will pay a contribution toward these items.

2.2.2 City East & City West infrastructure

This Plan recognises that there are a number of passive and active open space items that service the community at a broader district level. Therefore, sporting fields and Passive Open Space Embellishment within the Open Space category are levied on a City East or City West basis. The Princes Highway is used to determine the eastern and western suburbs and this is shown in Figure 2.2 on page 18. The table below identifies the City East and City West Precincts.

TABLE 2.1: PRECINCTS INCLUDED IN CITY EAST & CITY WEST

City East	City West
Precinct 1 - Warilla	Precinct 5 - Albion Park Rail
Precinct 2 - Shellharbour	Precinct 6 - Rural East
Precinct 3 - Blackbutt	Precinct 7 - Albion Park
Precinct 4 - Oak Flats	Precinct 8 - Rural West
	Precinct 9 – Calderwood *

^{*} Precinct 9 Calderwood is not included in City West Sporting Fields.

2.2.3 Precinct level infrastructure

For the purposes of this Plan, the Shellharbour Council area has been divided into 'Precincts' based on the infrastructure provided within the catchment as a result of growth. The boundary for each of these Precincts is shown in Figure 1.1 on page 9. The nine Precincts are identified as:

TABLE 2.2: MAIN SUBURBS INCLUDED IN PRECINCTS

Precinct Number	Precinct Name	Main Suburbs include
1	Warilla	Warilla, Lake Illawarra, Mt Warrigal, Barrack Heights
2	Shellharbour	Shellharbour Village, Shell Cove, Barrack Point, Dunmore
3	Blackbutt	Blackbutt, Flinders, Shellharbour City Centre
4	Oak Flats	Oak Flats
5	Albion Park Rail	Albion Park Rail
6	Rural East	Croome, Dunmore
7	Albion Park	Albion Park, Tullimbar
8	Rural West	Yellow Rock, Macquarie Pass, Tongarra, Calderwood
9	Calderwood	North Macquarie, Calderwood, Tullimbar

2.2.4 Benefit Areas

There are a number of self-contained areas throughout the City that have specific needs with regards to infrastructure. Within this Plan these areas are called 'Benefit Areas'. These areas have been created to ensure the appropriate apportionment of costs for the infrastructure that is specifically required to meet their needs rather than the needs of the broader community.

The Benefit Areas and the infrastructure they apply to are as follows:

TABLE 2.3: BENEFIT AREAS

Benefit Area Number	Benefit Area Name
Benefit Area 1	Shellharbour City Centre Traffic Management
Benefit Area 2	Hargraves Avenue
Benefit Area 3	Rivulet Crescent Extension
Benefit Area 4	Albion Park Commercial
Benefit Area 7	Mount Terry Drainage Catchment
Benefit Area 8	Albion Park Drainage Catchments
Benefit Area 9	Tullimbar Infrastructure

Note: Benefit Area 6 - Terry Street Rehabilitation/Reconstruction, as identified in Council's Section 94 Contributions Plan 2005, and Benefit Area 5 – East West Link (Ashburton Drive), as identified in Council's Section 94 Contributions Plan 2013, have been constructed, funded and removed from the Plan.

2.2.5 How are residential contribution rates calculated under this structure?

Figure 2.1 shows the structure of this Plan. As can be seen from this structure contribution rates will vary depending on where the development is located. All developments throughout the City will be levied the relevant contribution for City Wide infrastructure. In addition to this, development may also be levied the relevant City East / City West contribution, and the Precinct level contribution. Depending on the location there may also be a Benefit Area contribution.

For example, a residential development in Oak Flats will be levied the City Wide contribution rate, the City East contribution rate, and the Precinct contribution rate for Precinct 4, Oak Flats. A residential development in Tullimbar Village will be levied a City Wide contribution rate, a City West contribution rate, the contribution rate for Precinct 7, Albion Park and the applicable contribution rates for Benefit Area 8, Albion Park Drainage Catchments and Benefit Area 9, Tullimbar Infrastructure.

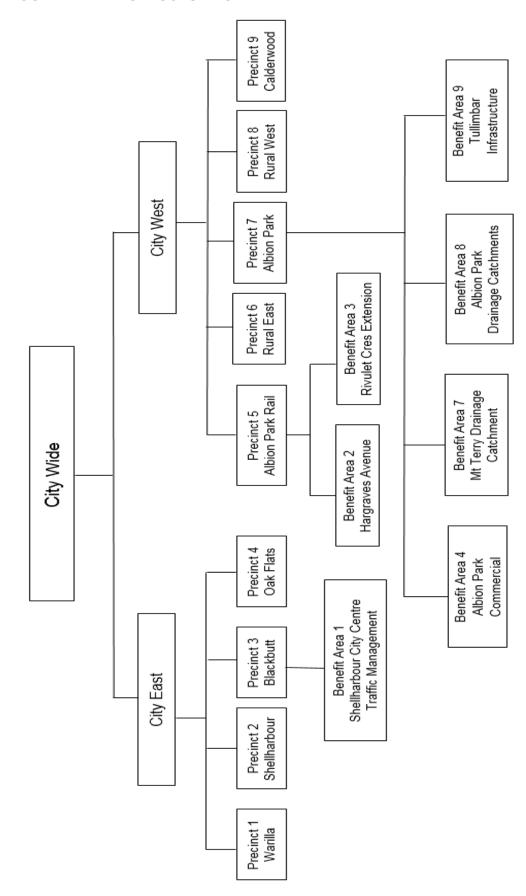
Note: The way in which non-residential development is levied is detailed in Section 7.

2.2.6 Apportionment of Costs

Where the need for specific infrastructure arises solely as a result of demand from new development, developers will be responsible for funding 100% of the cost.

However, many of the proposed infrastructure items identified in the Plan will benefit existing as well as future development. It would therefore be unreasonable to seek contributions from developers to fund the total cost of new infrastructure provision. In the majority of cases there will be a need for Council to fund the existing residents' share of cost. That is, Council pays for the existing population and Developers are levied for the future growth.

FIGURE 2.1: THE STRUCTURE OF THE PLAN



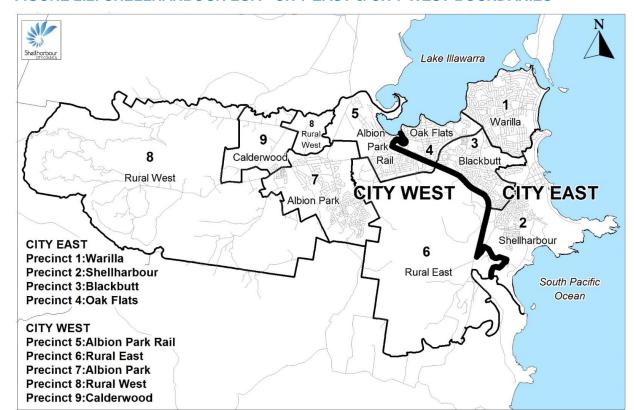


FIGURE 2.2: SHELLHARBOUR LGA - CITY EAST & CITY WEST BOUNDARIES

2.3 Categories of infrastructure under the Plan

Development contributions will be levied under the following categories of infrastructure:

- Open Space and Recreation infrastructure
- Community infrastructure
- Roads and Traffic infrastructure
- Car parking
- Drainage infrastructure
- Development contributions management

2.3.1 Open space and recreation infrastructure

This category of infrastructure includes both Passive and Active Open Space. The Plan identifies 3 levels of open space provision:

i. City Wide

City Wide parks typically have a number of characteristics that make them significant recreational destinations to serve the needs of the entire LGA. These characteristics include high visitation levels and may be unique in terms of function or standard.

City Wide Sporting Grounds tend to be clustered together and located away from residential areas to maximise flexibility of use and to reduce the potential impacts of noise, vehicular movements, parking and ground lighting on local residents. They may require a higher level of embellishment including change rooms and high level lighting.

ii. District

District parks are generally parks of substantial size (minimum 10,000 sqm) which are well developed to cater for a broad range of recreational opportunities and have a district rather than local user catchment. Embellishments are provided to cater for more complex and varied recreational activities and for multiple user groups.

District level sporting grounds primarily serve a district catchment (group of suburbs) with an appropriate level of embellishment suited to regular use by a number of sporting groups. They are typically accessible to a greater community than a single suburb and are predominantly used for local or district level competitions and also provide local use benefits.

iii. Local

The objective of a local park is to provide public open space which primarily serves a local neighbourhood, being highly accessible for pedestrians within a local catchment with an appropriate level of embellishment suited to the local population. They provide for informal, non-competitive recreation and relaxation for residents in the local neighbourhood.

2.3.2 Community infrastructure

Community infrastructure encompasses the community services and infrastructure which support individuals, families and groups to meet their social needs, such as Community Centres and Libraries. The provision of community infrastructure is necessary for creating viable and sustainable communities and is essential for health, wellbeing and the economic prosperity of communities.

2.3.3 Road & Traffic infrastructure

Although the public road and traffic system within a subdivision will normally be funded and constructed by the developer, contributions will be sought by Council for the upgrade of the external road network where a need is established and a nexus demonstrated. The East West Link and Shellharbour Road deviation are two road items required as a result of new development.

2.3.4 Car parking

A non-residential development that cannot accommodate the required number of car parking spaces within the bounds of its development site may be levied a contribution in accordance with this Plan if the development is located within a specific area where this levy applies.

Contribution rates have been determined based on the current cost of providing car parking, on a per space basis. This levy applies to non-residential development only.

2.3.5 Drainage infrastructure

Internal drainage in subdivisions is normally accepted as part of the works associated with the development and are funded and constructed by the developer.

Council also recognises that in some circumstances it is appropriate to construct drainage systems on a catchment-wide basis and that such a system may cross the boundaries between a number of development sites and subsequently require input from a variety of property owners. In such situations, Council will seek contributions from benefiting developments to cover the costs of designing and providing stormwater and drainage infrastructure.

2.3.6 Development contributions management

Council levies development contributions to fund the administration of the Plan.

2.4 Development types to which this Plan applies

This Plan will apply to the following development types, as they have a nexus to generating the need for additional infrastructure. For the purposes of this Plan, development is classified as residential and non-residential, as further defined below. A mixed use development will be levied based on the individual uses, and both a residential and non-residential contribution will be levied.

2.4.1 Residential development

A contribution will be levied to all new and/or additional lots and/or dwellings. The contribution rate will be based on the Precinct the development is located in. The number of additional lots/dwellings is calculated as follows:

Number of additional lots/dwellings*	=	Number of proposed lots/dwellings*	_	Number of existing lots/dwellings*
iots/dweilings		iots/uweiiirigs		iots/dweilings

^{*} whichever is greater

Residential development includes the following development types:

Subdivision

All forms of subdivision that create additional lots (where there is a dwelling entitlement) will be levied a contribution, irrespective of the size of the lot. For the purposes of this Plan residential subdivision includes subdivision of the following land use zones (as further defined in the Shellharbour Local Environment Plan 2013):

- Rural Zones
- Residential Zones

Construction of more than one Dwelling

The construction of more than one dwelling on a lot (or more than two dwellings on two lots etc) will be levied a contribution based on the number of additional dwellings as shown above. This type of development includes, but is not limited to, the following residential accommodation types (as further defined in the Shellharbour Local Environment Plan 2013):

- Multi dwelling housing
- Residential flat building
- Dual occupancy
- Secondary dwellings
- Shop top housing
- Seniors Housing

In addition to the residential Precinct rate, a Benefit Area contribution may also apply. This rate may be calculated on the number of additional lots/dwellings, land size or developable land area of the subject site.

Affordable housing

The contribution rates in this Plan are based on the assumption that all development that generates demand for infrastructure will contribute towards that infrastructure in a reasonable and equitable way.

Where residential development generates demand it is reasonable that it contribute towards the funding of the infrastructure it needs and the contribution rate calculated under this Plan assumes that all residential development will contribute regardless of the end user of the development.

As income that is foregone through a discount or exemption cannot be passed on to other development through increased contributions, cost of any exemption will have to be borne by Council and is therefore passed on to the general community.

Affordable housing, whether defined as such under the Act or *State Environmental Planning Policy (Affordable Rental Housing) 2009* (Affordable Rental Housing SEPP), will be levied a contribution based on the demand it generates.

Seniors housing

The following provisions apply specifically to housing provided under *State Environmental Planning Policy (Housing for Seniors and People with a Disability)* 2004 (Seniors Living SEPP).

There are three forms of housing defined under the Seniors Living SEPP:

- Self-contained dwellings
- Hostels and
- Residential care facilities

Self-contained dwellings allow for independent living. They generate the same demand as an equivalent dwelling that is not specifically for seniors living. As such self-contained dwellings will be levied the full contribution rate.

Hostels and residential care facilities place limited demand on social infrastructure due to the nature of accommodation they provide and the infrastructure required on-site. For this reason, hostels and residential care facilities will not be levied a contribution.

Note: In accordance with the Ministerial Direction issued on 14 September 2007, Council will not levy a contribution on housing provided under the Seniors Living SEPP where a social housing provider provides that housing.

2.4.2 Non-Residential Development

A contribution will be levied based on the additional gross floor area (as defined in Shellharbour Local Environment Plan 2013) of the development. Section 7 of this Plan provides further details on how non-residential development is levied. The additional gross floor area of a non-residential development is calculated as follows:

Gross Floor Area of	_	Gross Floor Area of		Gross Floor Area of
Development	=	proposed Development	_	existing Development

For the purposes of this Plan, non-residential development to which a contribution may apply includes, but is not limited to, the following development types (as further defined in the Shellharbour Local Environment Plan 2013):

Commercial premises

- Industry
- Tourist & Visitor Accommodation
- Educational establishments
- Health Service Facilities
- Child Care Centres
- Function centres
- Storage premises and establishments
- Industrial retail outlets
- Highway service centre, service stations

The following types of non-residential development will not be levied a contribution:

- The subdivision of land;
- A change of use that does not result in an increase in gross floor area;
- A fit out or refurbishment that does not result in an increase in gross floor area.

2.4.3 Exemptions

Exemptions will only be considered at the request of the applicant and are at the full discretion of the Council. A request for exemption must be submitted in writing and should include justification and/or supporting documentation to support the request.

Exemptions may be considered in the following circumstances:

• Public Sector Developments

Where the development is provided by the public sector with an underlying philosophy of community service, and run on a non-profit basis, such as a courthouse, public hospital, public educational establishment or a community centre.

Not for profit organisations

Where a non-residential development is provided by registered not for profit organisations with an underlying philosophy of community service.

Council will consider the following when assessing a request for exemption:

- Impact of the development on demand for infrastructure
- Social benefit provided
- Implications for infrastructure funding and provision
- Capacity to pay

2.5 State Environmental Planning Policies

Where a State Environmental Planning Policy (SEPP) provides specific provisions for development contributions, the SEPP will prevail over this Plan.

2.6 Section 7.17 Directions by Minister

Where the Minister has issued a Direction under Section 7.17 (formerly Section 94E) of the EP&A Act in relation to the levying of Development Contributions, the provisions of this Plan will not apply. Current Directions that may apply include:

 On 14 September 2007, the Minister issued a Direction that seniors housing development, as defined in State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004, where such development applications are made by a social housing provider, that a condition requiring the payment of Section 7.11 contributions cannot be imposed.

• In 2012 the NSW Minister for Planning and Infrastructure issued the *Environmental Planning and Assessment (Local Infrastructure) Direction* 2012 in accordance with Section 94E of the EP&A Act. This Direction relates to the maximum amount of monetary contributions that can be levied under Section 7.11 (formerly Section 94) of the EP&A Act. For the Shellharbour City Council Local Government Area, the maximum monetary contribution that can be levied is \$20,000 for each dwelling or lot to which a contribution applies unless the land is identified in Schedule 2 of the Ministerial Direction in which case a maximum contribution of \$30,000 will apply.

Where a monetary contribution calculated by this Plan exceeds the maximum contribution, the contribution will be capped in accordance with the Direction and the shortfall contribution will be allocated on a pro-rata basis across the infrastructure items.

2.7 The role of a Principal Certifying Authority

2.7.1 Construction Certificates and the obligation of accredited certifiers

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

In particular, the certifier must ensure that the applicant provides a receipt(s) confirming that contributions have been fully paid and copies of such receipts must be included with copies of the certified plans provided to the Council.

2.7.2 Complying Development and the obligation of accredited certifiers

In accordance with section 4.28(9)) of the EP&A Act and section 136K of the EP&A Regulation, accredited certifiers must impose a condition requiring monetary contributions in accordance with this Development Contributions Plan.

The conditions imposed must be consistent with Council's current consent conditions and be strictly in accordance with this Development Contributions Plan. Although it is the responsibility of accredited certifiers to accurately calculate the contribution and to apply the condition correctly, it is recommended that a 'Request for Estimate of Development Contributions' form is completed and submitted. This form is available on Council's website.

3 Projected Growth

3.1 Context

The Shellharbour City Council LGA is expected to experience continued steady growth over the next 8 to 13 years. As the concepts of nexus and apportionment within this Plan are closely linked to population growth, population projections are essential to this Plan.

The provision of infrastructure will be staged over the life of the Plan. Development contributions may either be obtained in advance of the provision of infrastructure, or as a recoupment of funds spent.

This Plan considers potential development based on current land zonings. A Planning Proposal that results in additional development potential may trigger a review of this Plan.

3.2 Non-residential development growth

The study "Non-Residential Development Growth Projections" (SCC, 2016) documents the future projections for non-residential land use developments. Table 3.1 shows the projected increase in the number of these developments based on the size of gross floor area.

TABLE 3.1: FORECAST GROWTH IN NON-RESIDENTIAL DEVELOPMENTS

Tion	Gross Floor Area of	Projected Number of Developments			
Tier	Development	2016 to 2023	2016 to 2028		
1	1 - 500 m ²	48	78		
2	501 - 1,000 m ²	20	33		
3	1,000+ m ²	17	28		
	Total	85	139		

Source: Shellharbour City Council, 2016.

3.3 Residential population and dwelling growth

The Shellharbour City Council LGA is currently transitioning from a collection of discrete urban areas, separated by large tracts of rural and other broadacre land uses, to becoming a key regional centre and an integral part of the southern greater Sydney urban area. During the 20 year period between 1993 and 2013, Shellharbour's population has increased by 40%, or on average 2% per annum.

It is anticipated that Shellharbour will continue to be an attractive residential and business location in the Illawarra region, attracting both population and employment opportunities from Wollongong and the southern districts of Sydney. On the basis Shellharbour's potential as an attractive, accessible and relatively affordable place to live, it is assumed that Shellharbour's population will continue to grow.

Informed Decisions (.id) have prepared updated population and dwelling growth projections. These are based on a base population as at 2011 derived on Estimated Resident Population from the Australian Bureau of Statistics, and consider factors such as future new dwellings as anticipated by developers, current and draft land use zonings, birth and death rates, household structures and migration. These factors have resulted in a set of population and dwelling forecasts which have been used for the purpose of this Plan.

The key areas of growth in Shellharbour City are anticipated to be Shell Cove, Tullimbar, Calderwood and the City Centre. Tables 3.2 and 3.3 on page 24 document the projected population and dwellings increase in each of the planning Precincts.

TABLE 3.2: POPULATION PROJECTIONS BY PRECINCT 1993-2028

Precinct	Actual Population		Projected Population				
Precinct	1993	2000	2011	2015	2018	2023	2028
1. Warilla	22,773	21,195	20,916	20,981	20,916	20,920	21,043
2. Shellharbour	2,879	4,087	8,329	9,710	11,178	12,465	13,257
3. Blackbutt	2,980	5,835	8,777	9,732	10,642	11,498	11,652
4. Oak Flats	5,883	5,795	6,623	6,547	6,519	6,523	6,553
City East	34,515	36,912	44,645	46,970	49,255	51,406	52,505
5. Albion Park Rail	6,840	7,348	7,236	7,112	7,013	6,943	6,952
6. Rural East	238	309	373	403	403	406	406
7. Albion Park	6,584	9,731	13,455	13,606	13,871	14,543	15,589
8. Rural West	405	451	509	549	552	552	555
9. Calderwood	*	*	*	0	0	907	3,080
Total City West	14,067	17,839	21,573	21,670	21,839	23,351	26,582
Total City Wide	48,582	54,751	66,218	68,640	71,094	74,757	79,087

Source: .id Forecast, November 2014.

TABLE 3.3: DWELLING PROJECTIONS BY PRECINCT 1993-2028

Precinct	Actual Dwellings		Projected Dwellings				
Precinct	1993	2000	2011	2015	2018	2023	2028
1. Warilla	7,959	8,117	8,549	8,674	8,713	8,787	8,871
2. Shellharbour	1,065	1,516	3,038	3,522	4,030	4,619	5,051
3. Blackbutt	981	2,172	3,110	3,480	3,839	4,255	4,423
4. Oak Flats	2,149	2,260	2,562	2,591	2,609	2,649	2,690
City East	12,154	14,065	17,259	18,267	19,191	20,310	21,035
5. Albion Park Rail	2,235	2,604	2,678	2,700	2,715	2,748	2,790
6. Rural East	102	117	126	129	129	130	130
7. Albion Park	2,106	3,125	4,507	4,695	4,871	5,218	5,631
8. Rural West	146	159	170	175	176	176	177
9. Calderwood	*	*	*	0	0	305	1,020
Total City West	4,589	6,005	7,481	7,699	7,891	8,577	9,748
Total City Wide	16,743	20,070	24,740	25,966	27,082	28,887	30,783

Source: .id Forecast, November 2014.

^{*} Until 2013 Precinct 9, Calderwood was incorporated in Precinct 8, Rural West and as such historical data is not available.

^{*} Until 2013 Precinct 9, Calderwood was incorporated in Precinct 8, Rural West and as such historical data is not available.

4 Open Space Provision

4.1 Context

Council will levy for open space using one of the following methods:

- Land dedication and embellishment of new passive and active open space areas in accordance with Council's *Parks and Recreational Space Guidelines* (Appendix C), or
- Monetary contribution toward the upgrade of existing passive open space areas.

The following is an outline of the way in which open space is levied under this Plan:

4.1.1 Land dedication and embellishment requirements for Greenfield development (New Urban Areas)

The Plan defines greenfield development as a large scale subdivision and includes requirements for both land dedication and open space embellishment. A large scale subdivision is considered to be a development site covering two or more hectares, or proposes to develop 40 lots or greater.

The provision of open space for new residential areas is based on the NSW Department of Sporting and Recreation's 2.83 hectare per 1,000 people standard. These standards are split between active and passive open space as follows:

- 0.33 ha per 1,000 people for local parks;
- 0.5 ha per 1,000 people for district parks;
- 0.3 ha per 1,000 people for citywide parks; and
- 1.7 ha per 1,000 people for sporting grounds.

The amount of passive open space provision has been determined on the basis of a population servicing ratio of 1.13ha per 1,000 people. On the basis of 2.6 residents per dwelling this translates to 29m² of passive open space per dwelling.

The basic premise that will be applied is that 90% of all residential lots are within 400m walking distance to recreational open space, and the proximity of the development to existing open space will be considered as part of the assessment for new open space areas.

Council's Development Control Plan and the Parks and Recreational Space Guidelines (Appendix B, Open Space, Recreation & Community Facilities Needs Study Report SCC, 2010) will be used to determine the location, type, design and amount of open space to be provided. Dedication of land will only be accepted where that land is considered appropriate for the intended purpose and is in accordance with the guidelines. The assessment of the quantum and suitability of land for dedication will be undertaken as part of the assessment of the development application.

Council's Parks and Recreational Space Guidelines provides a hierarchy of parks. Each level of parks in the hierarchy (Local, District and Citywide) is provided with broad principles for those parks and the typical types of embellishments that can be expected.

Open Space embellishment may include but are not limited to walk/cycle pathways, landscape improvements, play opportunities, signage, seating, bins, tables and/or shade structures.

Where land dedication and embellishment is provided onsite for large scale subdivisions by the developer, and is in accordance with Council's Parks and Recreational Space Guidelines, Council will recognise this non cash contribution as a condition of consent and the development will not be levied a monetary contribution toward C1.26 Passive Open Space Embellishment.

Note: Council aims to ensure that open space is provided in an efficient and effective manner for all new residential subdivisions. In this regard, the Plan recognises that open space usage will not be restricted to the artificial boundaries imposed by staging within a release area. Unlike the other facilities in this Plan, the specific location of open space has not been identified in the Plan as it is not possible to specify such a location until the master planning process has been completed for each release area. Therefore, it will be necessary to refer to the master plan for each release area and the Open Space, Recreation and Community Facilities Needs Study (SCC, 2010) to determine the location of the open space required by this Plan.

4.1.2 Embellishment contributions for Existing Urban Areas

The trend towards medium density in urban areas is reducing the proportion of private open space and creating additional demand for public open space. It is also recognised that, the provision for open space is generally well provided for in urban areas. As such, it is not considered reasonable to require developers within these areas to make a contribution towards the acquisition of such land. It is however, considered reasonable that infill development in established urban areas contribute towards the embellishment of existing open space in order to increase its usability so it can meet the additional demand. In this instance, a contribution will be levied toward C1.26 Passive Open Space Embellishment.

The Accessibility Map with a 400m buffer as included in the Open Space, Recreation and Community Facilities Needs Study Report SCC 2010 is shown on Figure 4.1



FIGURE 4.1: ACCESSIBILITY BUFFER MAP

Source: Open Space, Recreation and Community Facilities Needs Study (SCC, 2010)

5 Administration

5.1 Indexation

The contribution rates provided in this Plan are the base rates as at 30 June 2015. It is necessary to index these rates to maintain their relativity to present fair values. The Development Contribution rates calculated in this Plan will be indexed using the Consumer Price Index, Australia (ABS Series Code 6401.0), All Groups CPI, Sydney. Contribution rates will be indexed annually, and will come into effect the day after the June quarter rate has been released by the ABS.

Contribution rates will be indexed annually using the following formula:

$$C_1 = C_B \times \frac{CP_P}{CP_C}$$

Where:

C_I contribution rate at date of payment

C_B base contribution rate as specified in Council's *Development Contributions Plan 2019*

CP_P Latest published 'June quarter' index rate at the date of payment

CP_C Latest published 'June quarter' index rate at date of base contribution rate calculation (June 2015).

5.2 Methods of payment

Where a contribution is required under this Plan, the specific requirements will be included as a condition of the development consent. These conditions may include:

- Monetary contribution
- Dedication of land and embellishment
- Works-in-kind

5.2.1 Monetary contribution

The most common way for developers to meet their obligations under this Plan is by paying a monetary contribution. The amount payable will be specified in the conditions of consent for the development, subject to indexation. The timing of such payment is set out in Section 5.3 of this Plan and the method of indexation in Section 5.1.

5.2.2 Dedication of land and embellishment

Where land and/or embellishment is required to be dedicated in accordance with Section 4 of this Plan, the quantity and type of provision will be determined in consultation with Council and will be based on Council's Parks and Recreational Space Guidelines (Appendix B, Open Space, Recreation & Community Facilities Needs Study Report SCC, 2010).

5.2.3 Works in Kind

Under Section 7.11(5)(b) of the EP&A Act, Council may accept the provision of a material public benefit (other than land or money) in part or full satisfaction of a condition of development consent requiring development contributions. The most common form of a 'material public benefit' is the construction of works that have been identified in the

Development Contributions Plan's Infrastructure Works Plan. This is known as 'Works in Kind'.

More information can be found in Council's Works in Kind Policy.

5.3 Timing of payment

The following timeframes for the payment of development contributions have been established to ensure the timely provision of infrastructure and to provide Council with a degree of security regarding payment:

- Development applications involving building work: Prior to the release of the Construction Certificate.
- Development applications involving subdivision: Prior to the release of the Subdivision Certificate.
- Development applications involving building work and subdivision: Prior to the release
 of the Construction or Subdivision Certificate, whichever occurs first.
- Complying Development Certificates: Before any work authorised by the certificate commences.

5.4 Deferred or periodic payment of contributions

Council may accept the deferred or periodic payment of a contribution if the applicant satisfies Council that compliance with the provisions relating to the timing of payment of contributions is unreasonable or unnecessary in the circumstances of the case. All requests for deferred or periodic payments must be made in writing and the decision to accept a deferred or periodic payment is at the sole discretion of Council.

In the event that Council agrees to a deferral, it will generally be offered on the following conditions:

- 1. The period of time for deferred payment, although flexible, will generally not exceed 12 months.
- 2. Should Council agree to defer the payment of a development contribution they will require the applicant to provide a Bank Guarantee from a financial institution acceptable to Council and enter into a Deed of Agreement with Council.
- 3. Interest must be paid on the deferred payment of contributions at the rate set annually by the Minister for Local Government in relation to outstanding rates.
- 4. The Bank Guarantee must be for the total amount of the contributions outstanding at the time of the deferment together with the amount of the interest as calculated at the rate referred to above.
- 5. The Deed of Agreement is to be prepared by Council's legal representative at the full cost of the applicant. The professional fees so incurred must be paid by the applicant direct to Council's legal representative and not through Council.
- 6. Council charges an administrative fee of \$500.
- 7. In the event that the contributions are not paid by the due date, Council will call up the Bank Guarantee.

Council may, in some circumstances, agree to vary the above procedure for entering into a deferred or periodic payment arrangement but not in the case of developments approved under a complying development certificate.

5.5 Variation to contributions

Council retains the right to vary the contribution amount otherwise calculated in accordance with the provisions of this plan. A developer's request for variation to a contribution calculated in accordance with this plan must be supported by written justification included with the DA. Such request will be considered as part of the assessment of the DA and must be agreed to by Council. In considering whether to grant a waiver, variation or discount, Council shall consider the following matters:

- Whether a variation to a contribution could result in a cross subsidy to a particular development by the existing community;
- Whether the timing of provision of works identified in the contributions plan will be prejudiced by the granting of a variation or waiver of the contributions;
- Whether (in the case of a variation) the alternative type of contribution offered results in sufficient community benefit when considered against the foregone contribution

Note: An accredited certifier other than Council cannot vary a Section 7.11 contribution calculated in accordance with this Plan, without Council's written approval.

5.6 Refunding of Development Contributions

A refund of a contribution may be considered where the development consent is surrendered, and the contribution has not been spent. Lapsed consents will be considered for a refund where the owner of the consent has written to Council and agrees to surrender the consent.

Any refunds will be offered at Council's complete discretion

5.7 Planning Agreements

A planning agreement is a voluntary arrangement, between a developer and a Council and/or other planning authority, under which the developer is required to dedicate land free of cost, pay a monetary contribution or provide any other material public benefit, or a combination of these, to be used for or applied towards the provision of public infrastructure or another public purpose.

A planning agreement may be used, instead of (or in addition to) imposing the conditions included a Development Contributions Plan, to negotiate development contributions that relate to a development, that may address other purposes and have a wider public benefit.

Planning agreements may be negotiated at a pre-lodgement to the development application or as part of a request for rezoning via a planning proposal. The context of, and the process for, negotiating, exhibiting and executing planning agreements are set out in the EP&A Act and EP&A Regulation.

The key advantage of planning agreements is that they are a flexible type of development contribution mechanism. Planning Agreements allow a developer to propose alternatives and variations to the timing and method of delivering public infrastructure. They also allow Council to secure mutually beneficial outcomes that may exceed a developer's usual contribution obligation.

Planning Agreements are also known as Voluntary Planning Agreements or VPAs.

5.8 The review process

Although it is important to provide a degree of certainty with regard to the level of contributions and the types of infrastructure to be provided, it is also necessary to ensure that the Plan remains relevant to the changing development environment and the needs of the community. It is therefore, necessary to regularly review the Plan.

In this regard, a major review of the Plan should be undertaken at least once every five years. Council may also undertake minor reviews to address issues such as legislative changes, case law or issues arising out the practical application of the Plan.

All reviews will follow the procedures set out in the EP&A Regulation.

5.9 Appeal rights

As set out in Section 7.20(3) of the EP&A Act, the validity of any procedure required to be followed in making or approving this Plan is not to be questioned in any legal proceedings except those commenced in the Court by any person within 3 months after the date on which this Plan came into effect.

An applicant may however, lodge an appeal with the Land and Environment Court in response to a condition of consent that is imposed in accordance with the Plan subject to the usual requirements relating to such appeals.

6 Accounting and Management of Funds

The following is an outline of Council's accounting, management and reporting processes relating to development contributions.

6.1 Accounting standards

Council maintains records in accordance with the requirements of:

- The EP&A Act, and the EP&A Regulation made thereunder, as amended;
- The requirements of the Local Government Act 1993;
- The requirements of the Australian Accounting Standards and Interpretations as issued by the Australian Accounting Standards Board;
- The requirements of the Local Government Code of Accounting Practice and Financial Reporting.

6.2 Contributions register

As required by the EP&A Regulation, Council maintains a register of all development contributions. This register details:

- Any development consent for which a contribution has been levied;
- The nature and extent of the development contribution required and the purpose for which it has been made;
- The contributions Plan under which any such condition has been imposed;
- The date or dates on which a development contribution was received.

6.3 Accounting treatment

When accounting for development contributions Council maintains records that indicate the following:

- The various kinds of public infrastructure for which expenditure is authorised by the Plan:
- The monetary contributions received under the Plan and the public infrastructure for which they have been received;
- The amounts spent in accordance with the Plan and the items on which they have been spent.

To enable this accounting, Council has established a development contributions sub-ledger linked to its General Ledger. Accounting records are maintained in such a manner as to enable development contribution funds to be differentiated from other funds held by Council.

Development contributions are brought to account as revenue upon receipt of monetary contributions or upon finalisation of the dedication process in the case of land and other assets. Land and other dedicated assets will be recorded as assets in Council's accounts.

All monetary contributions and any additional amounts earned through their investment will be held as a restricted asset until expended in accordance with this Plan or any subsequent Development Contribution Plan adopted by Council.

Note: GST does not apply to the payment of Development Contributions.

6.4 Investment of Development Contribution funds

To maintain the real value of the monetary development contributions, Council will integrate these funds with its other monetary assets and invest them in accordance with Council's Investment Policy under the provisions of the *Local Government Act 1993*. On this basis, monetary development contributions will attract an investment rate based on the average annual rate that Council achieves from its total investment portfolio.

6.5 Pooling of contributions

This Plan expressly authorises monetary development contributions paid for different purposes to be pooled (progressively or otherwise) for those purposes. The priorities for the expenditure of the levies are shown in the Infrastructure Works Plan (Appendix B).

6.6 Reporting

In its Annual Financial Reports, Council discloses the following information regarding development contributions:

- The opening and closing balances of money held by Council for the accounting period covered by the report, by reference to the various categories of public infrastructure;
- The total amounts received by way of monetary contributions, non-cash contributions and interest earned during that period, by reference to the various categories of public infrastructure for which they have been received;
- The total amounts spent in accordance with the Contributions Plan during that period, by reference to the various categories of public infrastructure for which they have been spent;
- The outstanding obligations of Council to provide public infrastructure under the Contributions Plan, by reference to the various categories of public infrastructure.

PART 2 – NON-RESIDENTIAL CONTRIBUTIONS

7 Non-Residential Development

7.1 Context

Section 2.4.2 defines the development types to which the term non-residential applies. A non-residential contribution will apply to the construction of all new or extended developments where there is an increase in the Gross Floor Area.

That is, non-residential developments which involve the construction of a new structure and/or the construction of an extension to an existing development (where the increase in gross floor area is greater than 80sqm) are required to make a contribution based on the increase in gross floor area. The definition of gross floor area is included in the Shellharbour Local Environmental Plan 2013 Dictionary. The increase in gross floor area is calculated as follows:

Increase in Gross	Gross Floor Area of	Gross Floor Area of
Floor Area	proposed development	existing development

To encourage non-residential development and expansion within the Shellharbour LGA, the non-residential contribution has been capped at a maximum of 1,001 square metres to provide equity between residential and non-residential development for the infrastructure required as a result of this development.

Non-residential development over 1,001 square metres will pay the rate equivalent of one residential contribution for the required infrastructure and services. Non-residential development under 1,000 square meters will pay a proportion of the residential rate based on the size of the increase in Gross Floor Area.

The contribution levied will be based on a tiered structure, as outlined in the table below:

TABLE 7.1: PROPORTIONAL FACTOR

Tier	Gross Floor Area of Development	Proportional Factor		
1	1* - 500 m ²	0.33 x residential rate		
2	501 - 1,000 m ²	0.67 x residential rate		
3	1,001+ m ²	1.00 x residential rate		

^{*} For extensions of existing developments, the minimum increase in gross floor area is 80sqm.

A non-residential development that cannot accommodate the required number of car parking spaces within the bounds of its development site may be levied a contribution in accordance with this Plan if the development is located within a specific area where this levy applies. Refer to Section 8, Car Parking.

In addition, a non-residential development may also incur a contribution for a Benefit Area which is required as a direct result of future development in that specific area.

7.2 Proposed Infrastructure and services

The following infrastructure is proposed to be provided using contributions received under Section 7.11:

Council Administration Offices

To fund the costs of administering this Plan, the following item will be levied for:

 Ongoing Development Contributions Management - the cost of preparing and administering this Plan.

7.3 Nexus

The need for this infrastructure is linked to new development in the following ways:

i. Council Administration Offices

- This item will be co-located at the Civic Centre site, within the City Centre, the central location ensuring equity of access.
- Council administration offices are required to provide a range of public services and amenities to both the existing and future community. The services provided may include provision of community infrastructure, environmental auditing and protection, food surveillance/accreditation and public health. Each of these services is required to serve the needs of the community by way of protecting and enhancing the level of wellbeing, health and safety of the general community development.
- As the City continues to grow, demand for these services will also increase. If Council is to maintain the level of service it currently offers it will need to increase not only its staffing levels but also the space it has to accommodate them.
- The need for this infrastructure is supported by the document titled Justification for the inclusion of the Council Administration Offices (City Hub project) (SCC, 2013), the City Hub Stage 1 Business Case (Incol, 2012) and the Open Space, Recreation and Community Facilities Needs Study (SCC, 2010).
- It is reasonable that the cost of providing this infrastructure be apportioned to both residential and non-residential development as both types of development generate the demand.
- This item has been identified to serve a longer growth period, and will be levied over a 35 year period (1993 - 2028). The cost will be apportioned between existing and future development as both generate the need for its provision.

ii. Development Contributions Management

The following factors are considered relevant in establishing a nexus between these services and the population of the Shellharbour LGA as a whole:

- Development contributions resources are required as a direct result of future development and preparing and administering this Plan. This includes direct staff costs, consultants, valuations and forecast information.
- Council will seek contribution from all new residential and non-residential development to fund the ongoing management and administration of the Plan.

7.4 Contribution Rates

i. Council Administration Offices

The contribution rate has been calculated on the basis of the following formula:

Contribution rate =
$$\frac{(TC \times AF) - CTD}{R + C}$$

Where:

TC Total cost of infrastructure (estimated)

AF Apportionment factor between existing and future dwellings:

Based on capacity to accommodate projected increase in staffing levels

 $(263 \text{ staff} - 184 \text{ staff}) / 263 \text{ staff}. \{79 / 263 = 0.3004\}.$

CTD Developer contributions received to 30/6/15

R Projected increase in residential dwellings between 2015 and 2028 (4,817)

C Projected increase in non-residential premises (equivalent number) between

 $2015-2028 \{ (78 \times 0.33) + (33 \times 0.67) + (28 \times 1) = 76 \}$

Note: The contribution rate for one non-residential premise with a gross floor area of more than 1,001m² is the equivalent of one residential contribution rate.

ii. Development Contributions Management

The contribution rate has been calculated on the basis of the following formula:

Contribution rate =
$$\frac{TC - CTD}{R + C}$$

Where:

TC Total cost of development contributions management (estimated and actual)

CTD Developer contributions received to 30/6/15

R Projected increase in residential dwellings between 2015 - 2023 (2,921)

C Projected increase in non-residential premises (equivalent number) between

 $2015-2023 \{(48 \times 0.33) + (20 \times 0.67) + (17 \times 1) = 46\}$

Note: The contribution rate for one non-residential premise with a gross floor area of more than 1,001m² is the equivalent of one residential contribution rate.

The contribution rates for this infrastructure are documented in Table 7.2.

TABLE 7.2: NON-RESIDENTIAL CONTRIBUTION RATES

Tier	Gross Floor Area	Proportional Factor (of residential rate)	C2.08 Council Administration Office	C6.04 Contributions Management	Total Contribution
1	1* - 500 m ²	0.33	\$ 317.66	\$ 277.53	\$ 595.18
2	501 - 1,000 m ²	0.67	\$ 635.31	\$ 555.05	\$ 1,190.37
3	1,001+ m ²	1.00	\$ 952.97	\$ 832.58	\$ 1,785.55

^{*} For extensions of existing developments, the minimum increase in gross floor area is 80sqm

8 Car Parking Contributions

8.1 Context

Council has in the past, and will in the future develop, in response to demonstrated demand, public car parks on the fringes of the commercial areas in the following Precincts:

- Precinct 1 Warilla
- Precinct 2 Shellharbour
- Precinct 3 Blackbutt
- Precinct 4 Oak Flats
- Precinct 5 Albion Park Rail
- Precinct 7 Albion Park

The existing Council owned car parks have been developed in anticipation of future development. New car parks will be developed as existing capacity is used.

Note: This category applies only to non-residential development as all car parking requirements of residential developments must be provided on site.

8.2 Existing and future car parks

The collection of levies will contribute toward Council's existing and future car parking provision. The location of each of these car parks and the areas to which contributions will apply are shown in Figures 8.1 to 8.6.

8.3 Nexus

A non-residential development located in one of the areas to which car parking contributions apply (see Figures 8.1 to 8.6) which cannot accommodate the required number of car parking spaces within the bounds of its development site (in accordance with Council's current parking policy), may be levied a monetary contribution in lieu of an on-site provision.

8.4 Contribution rates

Contribution rates for car parking will be levied based on current industry benchmark standard costs as shown in Table 8.1.

TABLE 8.1: CAR PARKING - SUMMARY OF CONTRIBUTION RATES (BASE RATES)

Precinct	Type of Car park	Contribution rate per space
1. Warilla	At grade	\$ 6,300
2. Shellharbour	At grade	\$ 6,300
3. Blackbutt	Multi-deck	\$ 34,040
4. Oak Flats	At grade	\$ 6,300
5. Albion Park Rail	At grade	\$ 6,300
7. Albion Park	At grade	\$ 6,300

Note: The contribution rates provided in table 8.1 are the base rates as at 30 June 2015 and will be indexed in accordance with section 5.1 of this Plan.

FIGURE 8.1: PRECINCT 1 - WARILLA CAR PARKING

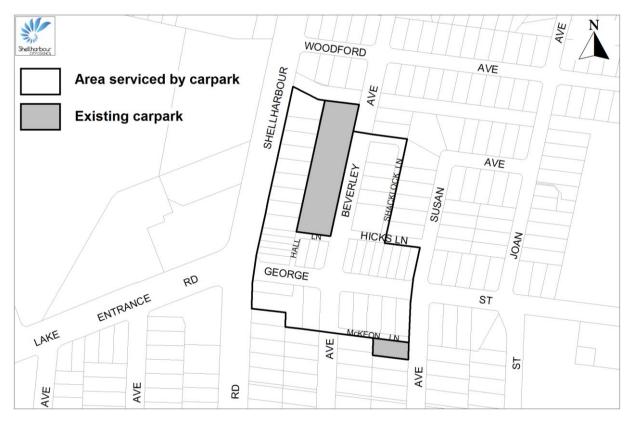


FIGURE 8.2: PRECINCT 2 - SHELLHARBOUR CAR PARKING

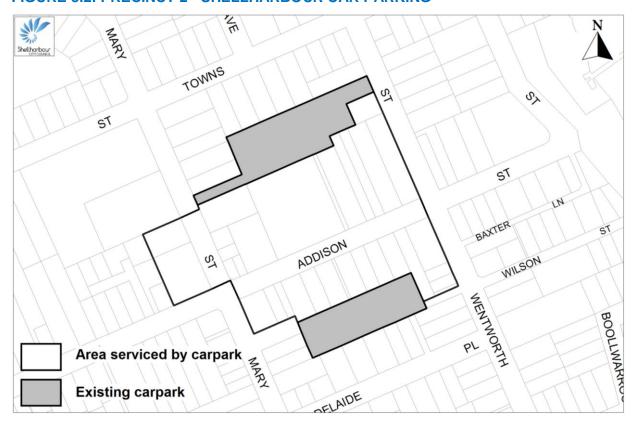


FIGURE 8.3: PRECINCT 3 - SHELLHARBOUR CITY CENTRE CAR PARKING

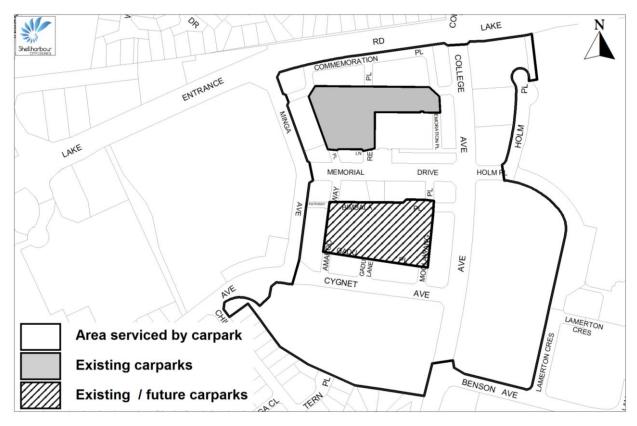


FIGURE 8.4: PRECINCT 4 - OAK FLATS CAR PARKING

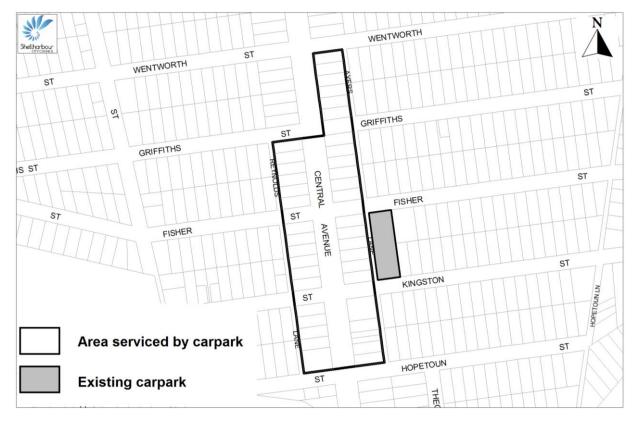


FIGURE 8.5: PRECINCT 5 - ALBION PARK RAIL CAR PARKING

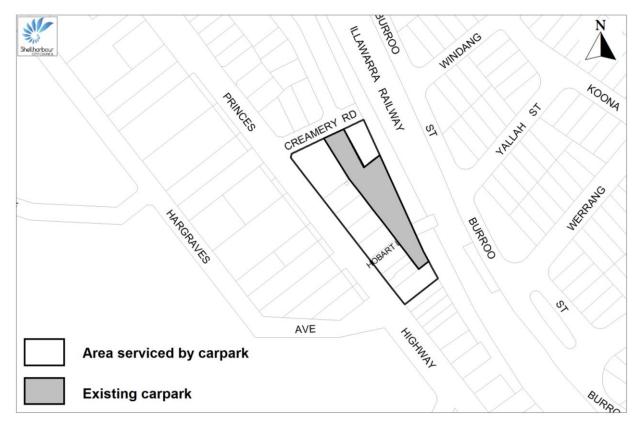
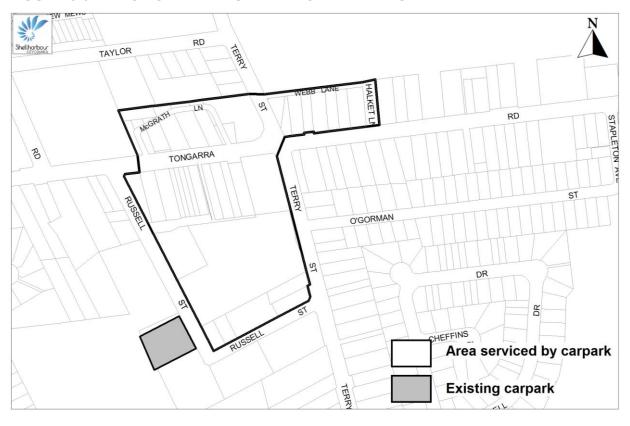


FIGURE 8.6: PRECINCT 7 - ALBION PARK CAR PARKING



9 Benefit Area 1 – Shellharbour City Centre Traffic Management

9.1 Context

In 1999, Council adopted the Shellharbour City Centre Master Plan (Annand 1998). This Plan outlines the objectives and key principles for the future development of the City Centre, identifies the future structure, land uses and road layout for this area.

This City Centre is the major retail and commercial heart of Shellharbour and commercial development within this site is projected to increase substantially between 1993 and 2023. This growth will result in an increase in vehicles within the City Centre and result in the need for a range of intersection improvements and traffic calming measures within the area.

The Shellharbour City Centre Traffic Needs Report (SMEC, 2000) identifies the traffic management required within the City Centre as a consequence of development of the area. This study aims to:

- distribute traffic through the area
- provide alternative routes to major attractions/parking areas
- slow traffic passing through the City Centre
- improve connectivity between existing and proposed traffic generating development
- encourage and facilitate the use of public transport and 'park and walk'.

In order to meet these aims, it will be necessary to implement traffic management measures within the City Centre.

The City Centre Benefit Area catchment area and infrastructure locations are shown in Figure 9.1.

9.2 Constructed Infrastructure (fully funded)

The following infrastructure has been provided for under Section 7.11:

- Traffic signals at Benson Avenue / Wattle Road
- Roundabout at Benson Avenue / Lamerton Crescent
- Roundabout at Benson Avenue / College Avenue

9.3 Proposed Infrastructure (fully funded)

The following infrastructure is proposed to be provided for under Section 7.11:

- Traffic lights at College Avenue / Cygnet Avenue
- Traffic lights at Benson Avenue / Lamerton Crescent
- Second right turn lane on Lake Entrance Road
- Intersection upgrade at Cygnet Avenue / Minga Avenue
- Footpath works

9.4 Nexus

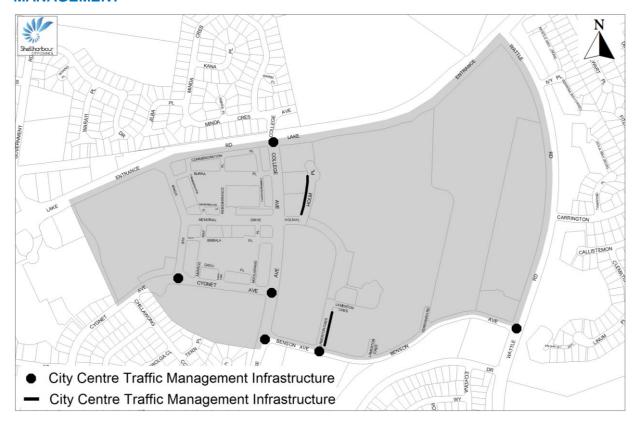
Due to the expansion of the commercial area of the City Centre, the current traffic infrastructure will not be adequate to service the community. These intersection

improvements are considered necessary as a direct consequence of the commercial expansion of City Centre.

9.5 Contribution rate

As sufficient contributions have already been levied to fund the remaining traffic management items identified in this Plan, a contribution under this Plan will not be sought.

FIGURE 9.1: BENEFIT AREA 1 - SHELLHARBOUR CITY CENTRE TRAFFIC MANAGEMENT



10 Benefit Area 2 – Hargraves Avenue

10.1 Context

To allow the future development of the area of industrial zoned land adjacent to the aerodrome, as shown in Figure 10.1, a rear access road was required to service the future development, as access from the properties fronting the Princes Highway is to be denied. Associated drainage works have also been constructed to enable those properties within the area to be developed for industrial purposes

Council constructed the northern end of Hargraves Avenue in 1998 to service this development. The southern end of the road was constructed in 2002. Council is now seeking to recoup the cost of providing this infrastructure.

10.2 Constructed Infrastructure

The following infrastructure has been provided for under Section 7.11:

Hargraves Avenue (recoupment)

10.3 Nexus

The following factors are considered relevant in establishing a nexus between this infrastructure and the stakeholders of the airport's industrial area:

- The new road is required to provide direct access to industrial allotments fronting the Princes Highway in the General Industrial zone
- The development of these lots for industrial purposes could not eventuate without the construction of the road
- It is reasonable to allocate the full costs of this road to the stakeholders of this benefit area on a per lot basis, based on the size of the lot.

10.4 Contribution rate

The contribution rate has been calculated on the basis of the following formula:

Where:

TC Total cost of infrastructure (actual)

A Total developable industrial land area within the Benefit Area (74,547m²)

a Land area (m²) of the lot subject to development.

The contribution rate for this infrastructure is shown in Table 10.1 and the location shown in Figure 10.1.

TABLE 10.1: BENEFIT AREA 2 - CONTRIBUTION RATE

Infrastructure Item	Total Cost	Rate per m ² land area (lot size)
C3.06 Hargraves Avenue	\$ 962,154	\$ 12.91

FIGURE 10.1: BENEFIT AREA 2 - HARGRAVES AVENUE



11 Benefit Area 3 – Rivulet Crescent Extension

11.1 Context

As the industrial area within the Rivulet Crescent Benefit continues to grow, safe access will be required to and from the Princes Highway. To permit the safe movement of traffic in the future, it will be necessary to provide an extension to Rivulet Crescent that will connect to the Princes Highway at the Airport Road intersection.

The construction of the Rivulet Crescent Extension is required to service existing and future industrial development on the eastern side of the Princes Highway.

11.2 Proposed Infrastructure

The following infrastructure is proposed to be provided for under Section 7.11:

Rivulet Crescent Extension

11.3 Nexus

The following factors are considered relevant in establishing a nexus between this infrastructure and development in the area shown in Figure 11.1:

- The new road is required to provide safe access to and from industrial allotments in this Benefit Area
- It is reasonable to allocate the cost of land acquisition to the stakeholders of this benefit area on a per lot basis, based on the size of the lot.

11.4 Contribution rate

The contribution rate has been calculated on the basis of the following formula:

Where:

TC Total cost of land acquisition (estimated)

A Total developable industrial land area within the Benefit Area (340,381m²)

a Land area (m²) of the lot subject to development

The contribution rate for this infrastructure is shown in Table 11.1 and the location shown in Figure 11.1.

TABLE 11.1: BENEFIT AREA 3 - CONTRIBUTION RATE

Infrastructure Item	Total Cost	Rate per m ² land area (lot size)
C3.20 Rivulet Crescent Extension	\$ 922,283	\$ 2.71

FIGURE 11.1: BENEFIT AREA 3 - RIVULET CRESCENT EXTENSION



12 Benefit Area 4 – Albion Park Commercial

12.1 Context

The Albion Park commercial centre is concentrated around Tongarra Road and Terry Street. This centre has grown significantly as a result of residential development in Albion Park. The centre is a vital element in the structure of the community, providing a range of retail and commercial services.

12.2 Constructed Infrastructure

The Albion Park Centre Study identified a need for the creation of an area of open space within the commercial centre including the following open space items:

- Pedestrian link / walkway extending from Tongarra Road through to the rear of the commercial properties fronting Tongarra Road
- An area of public open space with a land area of 3,029m².

The identified works have improved the quality of the built environment, pedestrian circulation, public safety and convenience. These works have been completed, and the cost is being recouped.

12.3 Nexus

The following factors are considered relevant in establishing a nexus between the proposed commercial open space/pedestrian environment and future commercial development:

- New commercial development will attract more shoppers to the Albion Park commercial centre who will need public open space for the purpose of eating lunch, recreation and/or relaxation
- Open space pedestrian links are important and beneficial to the activity of a retail commercial area and makes the centre more user friendly to workers and visitors
- To encourage the attractive redevelopment of this area, a central area of public open space, linked to both the retail commercial and car parking areas is considered appropriate
- New development will generate pressure on the existing open space within the Albion Park commercial centre.

12.4 Contribution rate

The contribution rate has been calculated on the basis of the following formula:

Where:

TC Total cost of infrastructure (actual)

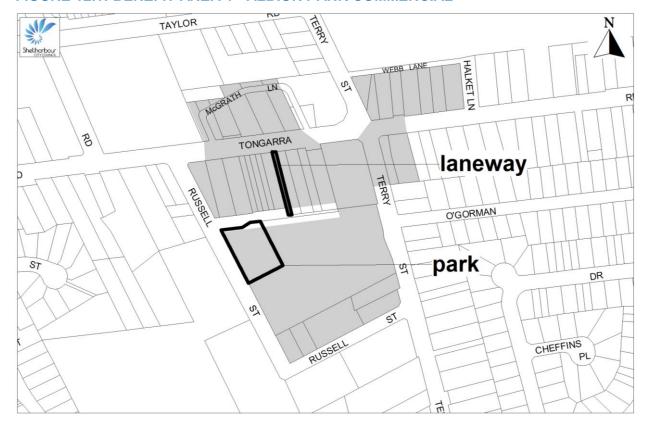
C Estimated Commercial premises gross floor area (8,000sqm).

The contribution rate for this infrastructure is shown in Table 12.1 and the location shown in Figure 12.1.

TABLE 12.1: BENEFIT AREA 4 - CONTRIBUTION RATE

Infrastructure Item	Total Cost	Rate per m ² gross floor area
C1.24 Albion Park Commercial (recoupment)	\$ 679,637	\$84.95

FIGURE 12.1: BENEFIT AREA 4 - ALBION PARK COMMERCIAL



PART 3 - RESIDENTIAL CONTRIBUTIONS

13 City Wide Infrastructure

13.1 Context

A number of infrastructure items will benefit the residents of the City as a whole and have been designated as 'City Wide', with the costs distributed equitably across all areas of the City. These items are shown in Table 13.1 and their proposed locations are shown in Figures 13.1 to 13.3.

TABLE 13.1: CITY WIDE INFRASTRUCTURE - CONTRIBUTION RATES

Infrastructure Item	Levy Basis	Total Cost	Rate per lot/dwelling
Open Space and Recreation Infrastructure			
C1.02 Beach Foreshore (recoupment)	С	\$ 3,605,563	\$ 240.78
C1.17 Shellharbour City Stadium (recoupment)	С	\$ 4,790,192	\$ 271.27
Subtotal		\$ 8,395,755	\$ 512.05
Community Infrastructure			
C2.04 Shellharbour City Performance Theatre	С	\$ 9,857,377	\$ 641.48
C2.06 City Library	С	\$ 16,438,436	\$ 811.81
C2.08 Council Administration Offices	С	\$ 21,200,248	\$ 952.97
C2.09 Civic Auditorium	С	\$ 11,261,597	\$ 836.15
Sub total		\$ 58,757,658	\$ 3,242.41
Roads & Traffic Infrastructure			
C3.03 Lake Entrance Rd Deviation (recoupment)	С	\$ 4,422,428	1
C3.04 Oak Flats Transport Centre (recoupment)	С	\$ 498,545	\$ 32.05
C3.07 East West Link (recoupment)	С	\$ 7,381,711	1
Sub total		\$ 12,302,684	1
Other			
C6.04 Development Contributions Management	С	\$ 5,263,020	\$ 832.58
Subtotal		\$ 5,263,020	\$ 832.58
Total (excluding Roads & Traffic Infrastructure)			2

¹ The contribution rates for these items varies by Precinct. Tables 13.2 to 13.5 details the contribution rates for the roads and traffic infrastructure by Precinct.

² Table 13.6 details each Precinct's total City Wide contribution rate.

13.2 City Wide Open Space and Recreation Infrastructure

13.2.1 Constructed Infrastructure (fully funded)

These projects have been delivered and fully funded using development contributions:

- Lake Illawarra Foreshore
- Shellharbour Cycleways
- City Park (Stage 1)
- Blackbutt Reserve
- Oak Flats Cycleway
- Macquarie Shores Cycleway
- Tongarra Road Cycleway
- Croom Netball Courts

13.2.2 Constructed Infrastructure (to be recouped)

These projects have been delivered and the funding is being recouped:

- Beach Foreshore (recoupment)
- Shellharbour City Indoor Stadium (recoupment)

13.2.3 Nexus

The need for this infrastructure is linked to new development in the following ways:

- The Shellharbour City Wide Open Space and Recreation Plan (2000) and the Open Space, Recreation and Community Facilities Needs Study (SCC, 2010) identifies the future need for active and passive open space in the City that will be required to serve the current and future population of Shellharbour.
- The Beach Foreshore enhancement works is a key passive open space recreation area which is required to cater for the future population's informal recreational needs such as picnics, walking, cycling and swimming. As the City continues to grow there will be increased pressure on the beach foreshore areas.
- The Shellharbour City Stadium is required to cater for the increase in demand for indoor sporting activities in the City including basketball, netball, and volleyball.

13.2.4 Contribution Rates

Beach Foreshore (recoupment) and Shellharbour City Indoor Stadium (recoupment)

The contribution rate has been calculated on the basis of the following formula:

Contribution rate per residential lot / dwelling =
$$\frac{(\text{TC x AF}) - \text{CTD}}{R}$$

Where:

TC Total cost of infrastructure (actual)

AF Apportionment factor between existing & future dwellings:

Projected increase in residential dwellings between 1993 and 2023 (12,144) / projected total number of dwellings to 2023 (28,887). {12,144 / 28,887 = 0.4204}

CTD Developer contributions received to 30/6/15

R Projected increase in residential dwellings in 2015 - 2023 (2,921)

The contribution rates for this infrastructure are documented in Table 13.1 and the locations are shown in Figures 13.1.

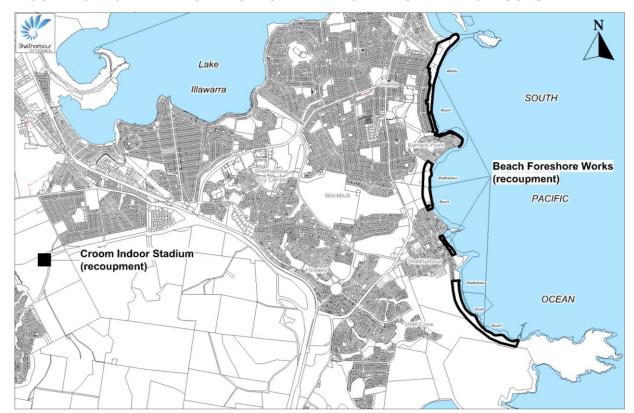


FIGURE 13.1: CITY WIDE OPEN SPACE AND RECREATION INFRASTRUCTURE

13.3 City Wide Community Infrastructure

13.3.1 Context

A large portion of the City Wide Community Infrastructure is to be located within the Civic Centre development. This site will emerge as a focus area of community, cultural and civic activity through the co-location of a number of essential services in the City Centre.

13.3.2 Proposed Infrastructure

The Shellharbour Cultural Resources Study (Guppy & Associates, 1999), The Open Space, Recreation and Community Facilities Needs Study Report (SCC, 2010), and the City Hub Stage 1 Business Case (Incoll & Savills, 2012) are the principle studies which identify the future need for community and cultural infrastructure in Shellharbour City.

The key Community Infrastructure items that are considered to be 'City Wide' are:

- Shellharbour City Performance Theatre
- City Library (including museum)
- Council Administration Offices
- Civic Auditorium

The locations of this proposed infrastructure is shown in Figure 13.2.

13.3.3 Nexus

The need for this infrastructure is linked to new development in the following ways:

i. Shellharbour City Performance Theatre

- The Shellharbour Cultural Resources Study (Guppy & Associates 1999) and the Open Space, Recreation and Community Facilities Needs Study (SCC, 2010) have identified the need for a purpose built performance theatre to cater for the population of the City.
- A purpose built performance space that caters for local community theatre/ performances is required to cater for the projected increase in demand for cultural activity space. The theatre will comprise a drama theatre, rehearsal space, and storage and workshop space.
- The cost of providing this infrastructure will be apportioned between existing and future development as both generate the need for its provision.

Civic Centre Project

The following infrastructure items will be co-located at the Civic Centre site, within the City Centre, the central location ensuring equity of access. The need for these items is identified in the City Hub Stage 1 Business Case (Incol, 2012) and the Open Space, Recreation and Community Facilities Needs Study (SCC, 2010).

These items have been identified to serve a longer growth period, and will be levied over a 35 year period (1993 - 2028). The cost will be apportioned between existing and future development as both generate the need for its provision.

ii. City Library

- The Shellharbour Libraries and Museum Strategy 2024 identifies that the new City Library will be a purpose built central library that incorporates a museum and will support the four branch libraries.
- The City Library will contain the library administration, technical services, specialist staff and specialist collections. It is the information technology hub of library resources and contains a larger and more specialised collection of materials. The City Library will serve the advanced information needs of the City.
- The City Library will incorporate the Blackbutt Branch Library, Sessional Services and a Museum.
- The Museum will provide increased access and expansion to the City's local history collection including artefacts, documents, photos and research services.

iii. Council Administration Offices

- Council administration offices are required to provide a range of public services and amenities to both the existing and future community. The services provided may include provision of community infrastructure, environmental auditing and protection, food surveillance/accreditation and public health. Each of these services is required to serve the needs of the community by way of protecting and enhancing the level of wellbeing, health and safety of the general community development.
- As the City continues to grow, demand for these services will also increase. If Council is to maintain the level of service it currently offers it will need to increase not only its staffing levels but also the space it has to accommodate them.

- The need for this infrastructure is further supported by the document titled Justification for the inclusion of the Council Administration Offices (City Hub project) (SCC, 2013)
- It is reasonable that the cost of providing this infrastructure be apportioned to both residential and non-residential development as both types of development generate the demand.

iv. Civic Auditorium

- The civic auditorium is proposed to accommodate a range of community and civic events including citizenship ceremonies as well as Council receptions and conferences. It is proposed that the auditorium be an extension of a new Council Chamber space, located in the City Centre.
- With the projected increase of Shellharbour's population there will be increased demand for a space which caters for the above mentioned infrastructure.

13.3.4 Contribution Rates

i. Shellharbour City Performance Theatre

The contribution rate has been calculated on the basis of the following formula:

Where:

TC Total cost of infrastructure (estimated)

AF Apportionment factor between existing & future dwellings:

Projected increase in dwellings 1993-2023 (12,144)/ projected total number of dwellings to 2023 (28,887). {12,144 / 28,887 = 0.4204}

CTD Developer contributions received to 30/6/15

R Projected increase in Shellharbour residential dwellings in 2015-2023 (2,921)

ii. City Library and Civic Auditorium

The contribution rate has been calculated on the basis of the following formula:

Where:

TC Total cost of infrastructure (estimated)

AF Apportionment factor between existing & future dwellings:

Projected increase in dwellings 1993-2028 (14,040)/ projected total number of dwellings to 2028 (30,783). $\{14,040 / 30,783 = 0.4561\}$

CTD Developer contributions received to 30/6/15

R Projected increase in Shellharbour residential dwellings in 2015-2028 (4,817)

iii. Council Administration Offices

The contribution rate has been calculated on the basis of the following formula:

Contribution rate =
$$\frac{(TC \times AF) - CTD}{R + C}$$

Where:

TC Total cost of infrastructure (estimated)

AF Apportionment factor based on capacity to accommodate projected increase in staffing levels:

 $(263 \text{ staff} - 184 \text{ staff}) / 263 \text{ staff}. \{79 / 243 = 0.3004\}.$

CTD Developer contributions received to 30/6/15

R Projected increase in residential dwellings between 2015 and 2028 (4,817)

C Projected increase in non-residential premises (equivalent number) between 2015-2028 { $(78 \times 0.33) + (33 \times 0.67) + (28 \times 1) = 76$ }

Note: The contribution rate for one non-residential premise with a gross floor area of more than 1,001m² is the equivalent of one residential contribution rate.

The contribution rates for this infrastructure are documented in Table 13.1 and the location is shown in Figure 13.2.

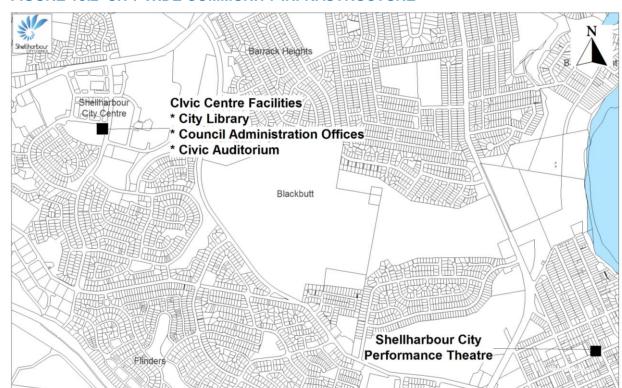


FIGURE 13.2 CITY WIDE COMMUNITY INFRASTRUCTURE

13.4 City Wide Roads and Traffic Infrastructure

13.4.1 Context

Internal roads within the new urban release areas will generally be funded and constructed by the developer. Council has however identified construction and upgrading works on higher order roads that are required to cater for the additional traffic generated by the development of the new urban release areas. These works do not form part of the standard internal road construction works usually associated with new subdivisions and will benefit the city as a whole. As such these works have been included in the Plan.

13.4.2 Constructed Infrastructure (fully funded)

The following road and traffic infrastructure have been constructed and fully funded through the Plan:

- Shellharbour Road Deviation
- Tongarra Road East

13.4.3 Constructed Infrastructure (to be recouped)

The following road and traffic infrastructure have been constructed, and the cost is now being recouped:

- <u>Lake Entrance Road</u> is a six lane divided carriageway, aligned to connect with the East West Link Road. The section of road to be recouped was constructed in anticipation of future development within the LGA to provide a link road between the eastern and western suburbs of Shellharbour.
- <u>The East West Link Road (Ashburton Drive)</u> extends from a grade separated interchange over the Princes Highway and the South Coast Railway Line to Albion

Park (the RTA funded the interchange). This route provides a direct link between the eastern and western sections of the Shellharbour LGA and provides access at an appropriate standard to and from the Princes Highway, the Illawarra's principal transport route.

• The Oak Flats Transport Centre has been developed as the Shellharbour rail/bus/taxi interchange. A new railway station has been constructed by the State Rail Authority and to ensure the useability of the infrastructure as a transport interchange covered taxi/bus terminals and a 200 space car parking area have also been provided. It is these additional works that have been included in this plan.

13.4.4 Nexus

The nexus between the East West Link Road and Lake Entrance Road and areas of benefit has been demonstrated utilising Council's TRACKS model (2000). This model recognises that, although all areas throughout the City will benefit from the provision of these roads, some will benefit more than others. As such the cost of providing the road has been distributed on a Precinct basis according to the expected distribution of benefit. These roads will also benefit both existing and future residents and the cost distribution for each Precinct has been apportioned between Council and Developers accordingly.

The Oak Flats Transport Centre is distributed evenly across residential growth in the LGA.

13.4.5 Contribution Rates

i. Lake Entrance Road and East West Link

The contribution rate for each Precinct has been calculated on the basis of the following formula:

Where:

TC Total cost of infrastructure (actual)

DOB Distribution of Benefit - Proportional use determined by Council's TRACKS Model

AF Apportionment factor between existing & future dwellings within each Precinct:

Projected increase in development between 1993 and 2023 / projected total number of dwellings to 2023 (by Precinct)

CTD Contributions received to 30/6/15

R Projected increase in residential development by Precinct between 2015 and 2023

ii. Oak Flats Transport Centre

The contribution rate has been calculated on the basis of the following formula:

Contribution rate per residential lot / dwelling =
$$\frac{(\text{TC x AF}) - \text{CTD}}{R}$$

Where:

TC Total cost of infrastructure (actual)

AF Apportionment factor between existing & future dwellings:

Projected increase in dwellings between 1993 and 2023 (12,144) / projected total number of dwellings at 2023 (28,887). {12,144 / 28,887 = 0.4204}

CTD Developer contributions received to 30/6/15

R Projected increase in residential dwellings between 2015 and 2023 (2,921)

The resultant allocation of benefits and contribution rates are documented in Tables 13.2, 13.3 and 13.4. A compilation of all road and traffic contribution rates are provided in Table 13.5, and their locations shown in Figure 13.3.

TABLE 13.2: C3.03 LAKE ENTRANCE ROAD - CONTRIBUTION RATES

Precinct	Developer Apportionment Factor	Distribution of Benefit	Developer Contributions received to 30/6/15	Rate per lot/dwelling
1. Warilla	11.88 %	34.40 %	\$ 74,780	\$ 606.84
2. Shellharbour	73.41 %	12.60 %	\$ 290,106	\$ 126.38
3. Blackbutt	75.84 %	14.50 %	\$ 358,141	\$ 174.54
4. Oak Flats	19.72 %	9.20 %	\$ 30,222	\$ 803.00
5. Albion Park Rail	20.06 %	12.20 %	\$ 78,459	\$ 463.80
6. Rural East	30.61 %	0.00 %	\$ 0	\$ 0
7. Albion Park	57.57 %	16.40 %	\$ 319,050	\$ 217.02
8. Rural West	29.47 %	0.60 %	\$ 1,133	\$ 0
9. Calderwood	100.00 %	0.00 %	\$ 0	\$ 0

TABLE 13.3: C3.04 OAK FLATS TRANSPORT CENTRE - CONTRIBUTION RATES

Precinct	Developer Apportionment Factor	Distribution of Benefit	Developer Contributions received to 30/6/15	Rate per lot/dwelling
Precinct's 1 - 8	39.96 %	City Wide	\$ 122,664	\$ 32.05

TABLE 13.4: C3.07 EAST WEST LINK - CONTRIBUTION RATES

Precinct	Developer Apportionment Factor	Distribution of Benefit	Developer Contributions received to 30/6/15	Rate per lot/dwelling
1. Warilla	11.88 %	12.30 %	\$ 45,844	\$ 351.44
2. Shellharbour	73.41 %	3.90 %	\$ 194,714	\$ 24.43
3. Blackbutt	75.84 %	22.00 %	\$ 875,339	\$ 482.87
4. Oak Flats	19.72 %	7.30 %	\$ 40,187	\$ 1,060.76
5. Albion Park Rail	20.06 %	15.80 %	\$ 169,932	\$ 995.76
6. Rural East	30.61 %	0.00 %	\$ 0	\$ 0
7. Albion Park	57.57 %	38.70 %	\$ 984,203	\$ 1,375.79
8. Rural West	29.47 %	0.00 %	\$ 0	\$ 0
9. Calderwood	100.00 %	0.00 %	\$ 0	\$ 0

TABLE 13.5: SUMMARY OF CITY WIDE ROADS & TRAFFIC CONTRIBUTION RATES

Precinct	Road and Traffic Infrastructure				
Precinct	C3.03	C3.04	C3.07	Total	
1. Warilla	\$ 606.84	\$ 32.05	\$ 351.44	\$ 990.33	
2. Shellharbour	\$ 126.38	\$ 32.05	\$ 24.43	\$ 182.86	
3. Blackbutt	\$ 174.54	\$ 32.05	\$ 482.87	\$ 689.46	
4. Oak Flats	\$ 803.00	\$ 32.05	\$ 1,060.76	\$ 1,895.81	
5. Albion Park Rail	\$ 463.80	\$ 32.05	\$ 995.76	\$ 1,491.61	
6. Rural East	\$ 0	\$ 32.05	\$ 0	\$ 32.05	
7. Albion Park	\$ 217.02	\$ 32.05	\$ 1,375.79	\$ 1,624.86	
8. Rural West	\$ 0	\$ 32.05	\$ 0	\$ 32.05	
9. Calderwood	\$ 0	\$ 0	\$ 0	\$ 0	



FIGURE 13.3 CITY WIDE ROADS AND TRAFFIC INFRASTRUCTURE

13.5 Other infrastructure

13.5.1 Constructed Infrastructure (fully funded)

The following infrastructure has been provided for under development contributions:

- Environmental Quality Monitoring
- Waste Disposal Depot
- · Works and Services Depot

13.5.2 Proposed infrastructure and services

• Ongoing Development Contributions Management - the cost of preparing and administering this Plan.

13.5.3 Nexus

The following factors are considered relevant in establishing a nexus between these services and the population of the Shellharbour LGA as a whole:

- Development contributions resources are required as a direct result of future development and preparing and administering this Plan. This includes direct staff costs, consultants, valuations and forecast information.
- Council will seek contribution from all new residential and non-residential development to fund the ongoing management and administration of the Plan.

13.5.4 Contribution Rates

The contribution rate has been calculated on the basis of the following formula:

Where:

TC Total cost of development contributions management (estimated)

CTD Developer contributions received to 30/6/15

R Projected increase in residential dwellings between 2015 - 2023 (2,921)

C Projected increase in non-residential premises (equivalent number) between

 $2015-2023 \{(48 \times 0.33) + (20 \times 0.67) + (17 \times 1) = 46\}$

Note: The contribution rate for one non-residential development with a gross floor area of more than 1,001m² is the equivalent of one residential contribution rate.

The contribution rate for this infrastructure is documented in Table 13.1.

Table 13.6 shows the total city wide contribution rates by category and Precinct.

TABLE 13.6: SUMMARY OF CITY WIDE CONTRIBUTION RATES BY PRECINCT

Precinct	Open Space and Recreation	Community Infrastructure	Roads & Traffic	Other	Total
1. Warilla	\$ 512.05	\$ 3,242.41	\$ 990.33	\$ 832.58	\$ 5,577.37
2. Shellharbour	\$ 512.05	\$ 3,242.41	\$ 182.86	\$ 832.58	\$ 4,769.90
3. Blackbutt	\$ 512.05	\$ 3,242.41	\$ 689.46	\$ 832.58	\$ 5,276.50
4. Oak Flats	\$ 512.05	\$ 3,242.41	\$ 1,895.81	\$ 832.58	\$ 6,482.85
5. Albion Park Rail	\$ 512.05	\$ 3,242.41	\$ 1,491.61	\$ 832.58	\$ 6,078.65
6. Rural East	\$ 512.05	\$ 3,242.41	\$ 32.05	\$ 832.58	\$ 4,619.09
7. Albion Park	\$ 512.05	\$ 3,242.41	\$ 1,624.86	\$ 832.58	\$ 6,211.90
8. Rural West	\$ 512.05	\$ 3,242.41	\$ 32.05	\$ 832.58	\$ 4,619.09
9. Calderwood	\$ 512.05	\$ 3,242.41	\$ -	\$ 832.58	\$ 4,587.04

14 City East Infrastructure

14.1 Context

Passive Open Space Embellishment and certain sporting fields are levied on a City East / City West basis, as they are typically accessible to a greater community than a single suburb and provide an appropriate level of embellishment suited to regular use by a number of sporting groups. The sporting infrastructure identified at 'City East' serves the communities on the eastern half of the LGA. The Princes Highway is used to determine the eastern and western suburbs.

The Warilla, Shellharbour, Blackbutt and Oak Flats Precincts form the City East Sporting District. Within this area, a range of new sporting fields have been identified under the Shellharbour City Wide Open Space and Recreation Plan (SCC, 2000), and the Open Space, Recreation and Community Facilities Needs Study (SCC, 2010) as being required as a result of future residential growth.

14.2 Constructed Infrastructure (fully funded)

The following infrastructure has been provided and fully funded for using development contributions:

- Pioneer Park
- Flinders Basketball Court
- Shell Cove Basketball Court
- Myimbar Sports Centre

14.3 Proposed infrastructure

The following infrastructure is proposed to be provided for under Section 7.11:

- Shell Cove Sporting Fields
- Benson Basin Sporting Fields
- City Centre Youth Recreation Facility
- Upgrade Existing Active Open Space (fully funded)
- Passive Open Space Embellishment

14.4 Nexus

The following factors are considered relevant in establishing a nexus between this infrastructure and the future population of the Precinct:

- Precinct's 1 4 form the City East Sporting District. Future development within these
 Precincts will generate demand for a range of sporting fields in the eastern half of the
 City. The cost of providing this infrastructure is to be apportioned to future
 development in the City East.
- The Open Space, Recreation and Community Facilities Needs Study (SCC, 2010) identifies there is a shortfall of sporting fields in the City's East and that this could be met through provision of fields at Benson Basin and Shell Cove.
- The proposed City Centre Youth Recreation Facility is the remaining item for construction in Harrison Park (City Park). The Open Space, Recreation and

Community Facilities Needs Study (SCC, 2010) identifies that provision of a new skate facility be considered in development of the City Centre. The infrastructure will provide a youth recreational space, and will involve young people to determine the appropriate design and function.

- The trend towards medium density in urban areas is reducing the proportion of private open space and creating additional demand for public open space. It is also recognised that the provision for open space is generally well provided for in urban areas. As such it is not considered reasonable to require developers within these areas to make a contribution towards the acquisition of such land.
- It is however considered reasonable that both greenfield development in new urban areas and infill development in established urban areas contribute towards the embellishment of existing and new open space in order to increase its usability so it can meet the additional demand, as detailed in Section 4 of this Plan.
- Planning studies, such as the Open Space, Recreation and Community Facilities Needs Study (2010), Town Centre Plans, along with asset conditions and priority lists, will guide the upgrade of open space areas.

14.5 Contribution rates

i. Shell Cove Sporting Fields and Benson Basin Sporting Fields

The contribution rate has been calculated on the basis of the following formula:

Contribution rate per residential lot / dwelling =
$$\frac{\text{TC - CTD}}{\text{R}_{\text{CE}}}$$

Where:

TC Total cost of infrastructure (estimated or actual)

CTD Contributions received to 30/6/15

R_{CE} Projected increase in City East residential dwellings between 2015 and 2023 (2,043)

ii. City Centre Youth Recreation Facility

As this item was introduced into the Plan in 2000, the contribution rate has been calculated on the basis of the following formula:

Contribution rate per residential lot / dwelling =
$$\frac{(TC \times AF) - CTD}{R_{CF}}$$

Where:

TC Total cost of infrastructure (estimated)

AF Apportionment factor between existing (Council) & future (Developer) dwellings:

Projected increase City East in dwellings 2000 - 2023 (6,245) / projected total number of dwellings to 2023 (20,310). $\{6,245/20,310=0.3075\}$

CTD Developer contributions received to 30/6/15

R_{CE} Projected increase in City East residential dwellings between 2015 - 2023 (2.043)

iii. Passive Open Space Embellishment

The contribution rate has been calculated on the basis of the following formula:

Contribution rate per residential lot / dwelling = (TC / A) x D

Where:

- TC Total cost to Council of embellishing a 1.13ha area of passive open space (estimated)
- A Total area of passive open space (11,300 sqm)
- D Passive Open Space provision standard (sqm) per residential dwelling:

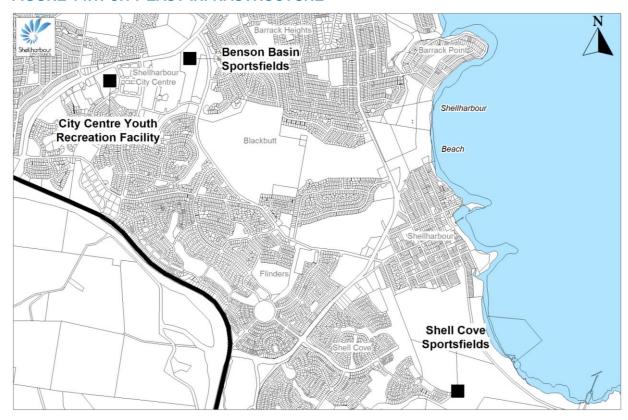
Total area of passive open space (11,300 sqm) / estimated population to be served by this open space (1,000 persons) x estimated occupancy rate per dwelling (2.6 persons / dwelling). { $11,300 / 1,000 \times 2.6 = 29 \text{ sqm}$ }

The contribution rates for this infrastructure are shown in Table 14.1 and the location shown in Figure 14.1.

TABLE 14.1: CITY EAST INFRASTRUCTURE - SUMMARY OF CONTRIBUTION RATES

Infrastructure Item		Total Cost	Rate per lot/dwelling
Open Space and Recreation Infrastructure			
C1.08 Shell Cove Sports Fields	CE	\$ 3,350,885	\$ 511.97
C1.10 Benson Basin Sports Fields	CE	\$ 2,576,962	\$ 666.44
C1.11 City Centre Youth Recreation Facility	CE	\$ 1,051,487	\$ 45.93
C1.25 Upgrade Existing Active Open Space	CE	\$ 992,354	\$ -
C1.26 Passive Open Space Embellishment	CE	\$ 6,078,261	\$ 742.81
Total			\$ 1,967.15

FIGURE 14.1: CITY EAST INFRASTRUCTURE



15 City West Infrastructure

15.1 Context

Passive Open Space Embellishment and certain sporting fields are levied on a City East / City West basis, as they are typically accessible to a greater community than a single suburb and provide an appropriate level of embellishment suited to regular use by a number of sporting groups. The sporting infrastructure identified as 'City West' serves the communities on the western half of the LGA. The Princes Highway is used to determine the eastern and western suburbs.

The Albion Park Rail, Rural East, Albion Park and Rural West Precincts form the City West Sporting District. Within this a range of new sporting fields have been identified under the City Wide Open Space and Recreation Plan (SCC, 2000) and the Open Space, Recreation and Community Facilities Needs Study (SCC, 2010), as being required as a consequence of future residential growth.

Note: For the purposes of levying sporting fields, Precinct 9 does not form part of the City West Sporting District and sporting facilities in Precinct 9 are levied on a Precinct basis only.

15.2 Proposed infrastructure

The following infrastructure is proposed to be provided for under Section 7.11:

- Croom Sporting Complex City West Sporting Fields (fully funded)
- Albion Oval Touch Football Fields
- Terry Reserve Sporting Fields (fully funded)
- Con O'Keefe Reserve
- Tullimbar Sports Fields
- Upgrade Existing Active Open Space (fully funded)
- Passive Open Space Embellishment

15.3 Nexus

- Precincts 5 8 form the City West Sporting District. Future development within these
 Precincts will generate the demand for a range of sporting fields in the western half of
 the City. The cost of providing this infrastructure is to be apportioned to future
 development in City West
- The Open Space, Recreation & Community Facilities Needs Study Report (SCC, 2010), identifies that the provision of these sportsfields will add significant capacity to the existing sporting facilities.
- The trend towards medium density in urban areas is reducing the proportion of private open space and creating additional demand for public open space. It is also recognised that the provision for open space is generally well provided for in urban areas. As such it is not considered reasonable to require developers within these areas to make a contribution towards the acquisition of such land.
- It is however considered reasonable that both Greenfield development in new urban areas and infill development in established urban areas contribute towards the embellishment of existing and new open space within the Precinct in order to increase its usability so it can meet the additional demand, as detailed in Section 4 of this Plan.

- Planning studies, such as the Open Space, Recreation and Community Facilities Needs Study (2010), Town Centre Plans, along with asset conditions and priority lists, will guide the upgrade of open space areas.
- As there are no established urban areas in Precinct 6, Rural East or Precinct 8, Rural West a contribution toward Passive Open Space embellishment is not required.

15.4 Contribution rates

i. Albion Oval Touch Football Fields and Con O'Keefe Reserve

The contribution rate has been calculated on the basis of the following formula:

Contribution rate per residential lot / dwelling =
$$\frac{\text{TC - CTD}}{\text{R}_{\text{CW}}}$$

Where:

TC: Total cost of infrastructure (estimated)

CTD: Contributions received to 30/6/15

R_{CW}: Projected increase in City West (Precincts 5 – 8) residential dwellings between 2015

and 2023 (573).

ii. Tullimbar Sports Fields

The contribution rate has been calculated on the basis of the following formula:

Contribution rate per residential lot / dwelling =
$$\frac{\text{TC - CTD}}{\text{R}_{\text{CW}}}$$

Where:

TC: Total cost of infrastructure (estimated)

CTD: Contributions received to 30/6/15

R_{CW:} Projected increase in City West (Precincts 5 – 8) residential dwellings between 2015

and 2028 (1,029).

iii. Passive Open Space Embellishment

The contribution rate has been calculated on the basis of the following formula:

Contribution rate per residential lot / dwelling = $(TC/A) \times D$

Where:

TC Total cost to Council of embellishing a 1.13ha area of passive open space (estimated)

A Total area of passive open space (11,300 sqm)

D Passive Open Space provision standard (sqm) per residential dwelling:

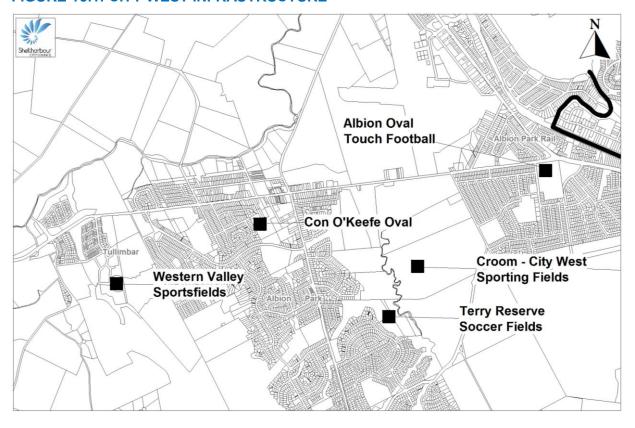
Total area of passive open space (11,300 sqm) / estimated population to be served by this open space (1,000 persons) x estimated occupancy rate per dwelling (2.6 persons / dwelling). { $11,300 / 1,000 \times 2.6 = 29 \text{ sqm}$ }

The contribution rates for this infrastructure are shown in Table 15.1 and the location shown in Figure 15.1.

TABLE 15.1: CITY WEST INFRASTRUCTURE – SUMMARY OF CONTRIBUTION RATES

Infrastructure Item	Levy Basis	Total Cost	Rate per lot/dwelling
Open Space and Recreation Infrastructure			
C1.16 Croom - City West Sporting Fields	CW	\$ 736,923	\$ -
C1.18 Albion Oval Touch Football Fields	CW	\$ 636,767	\$ 702.85
C1.20 Terry Reserve Soccer Fields	CW	\$ 666,817	\$ -
C1.21 Con O'Keefe Reserve	CW	\$ 159,898	\$ 148.50
C1.22 Tullimbar Sports Fields	CW	\$ 1,971,717	\$ 1,177.19
C1.25 Upgrade Existing Active Open Space	CW	\$ 288,275	\$ -
C1.26 Passive Open Space Embellishment	CW	\$ 2,604,969	\$ 742.81
Total			\$ 2,771.35

FIGURE 15.1: CITY WEST INFRASTRUCTURE



16 Precinct 1 - Warilla

16.1 Context

The Warilla Precinct is an established urban area, consisting of the suburbs of Warilla, Lake Illawarra, Mount Warrigal and Barrack Heights. The population of the Precinct is anticipated to decline from 22,773 in 1993 to 20,920 in 2023. Dwelling numbers however are projected to increase from 7,959 in 1993 to 8,787 in 2023. These changes are a result of both population and household structure change.

The provision of open space for the Warilla Precinct is considered adequate as on average over 90% of all residential dwellings are within 400m walking distance to any open space area. The open space within the Precinct includes beaches, parks and reserves, and the Lake Illawarra foreshore.

16.2 Constructed Infrastructure (to be recouped)

The following infrastructure has been provided for under Section 7.11:

Warilla Community Centre (recoupment)

16.3 Nexus

The following factors are considered relevant in establishing a nexus between this infrastructure and the future population of the Precinct:

 The need for a community centre was identified in the Cultural Facilities Study and was reinforced through the allocation of grant funding through the 'Community Solutions Program' run by the NSW Premier's Department. This infrastructure is required to service both the existing and future population of the Precinct.

16.4 Calculation of Contribution rates

i Warilla Community Centre (recoupment)

The contribution rate has been calculated on the basis of the following formula:

Contribution rate per residential lot / dwelling =
$$\frac{(\text{TC x AF}) - \text{CTD}}{R}$$

Where:

TC Total cost of infrastructure (actual)

AF Apportionment factor between existing & future dwellings:

Projected increase in residential dwellings between 1993 and 2023 (828) / projected total number of residential dwellings at 2023 (8,787).

 $\{828 / 8,787 = 0.0942\}$

CTD Developer contributions received to 30/6/15

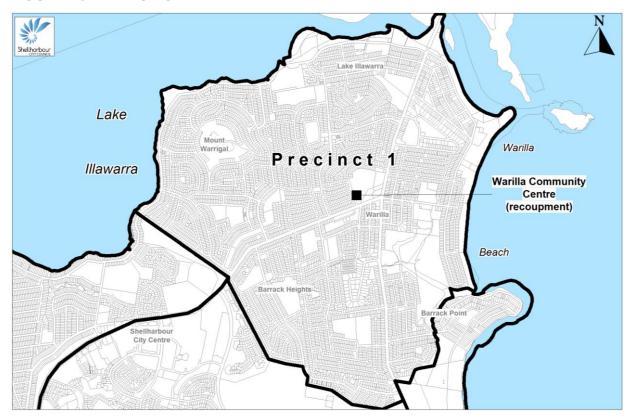
R Projected increase in residential dwellings between 2015 and 2023 (113)

The contribution rate for this infrastructure and the total residential Precinct rate is shown in Table 16.1, Summary of contribution rates, and the location is shown in Figure 16.1.

TABLE 16.1: PRECINCT 1 – SUMMARY OF CONTRIBUTION RATES

Infrastructure Item	Levy Basis	Total Cost	Rate per lot/dwelling
Open Space and Recreation Infrastructure			
C1.02 Beach Foreshore (recoupment)	С	\$ 3,605,563	\$ 240.78
C1.08 Shell Cove Sports Fields	CE	\$ 3,350,885	\$ 511.97
C1.10 Benson Basin Sports Fields	CE	\$ 2,576,962	\$ 666.44
C1.11 City Centre Youth Recreation Facility	CE	\$ 1,051,487	\$ 45.93
C1.17 Shellharbour City Stadium (recoupment)	С	\$ 4,790,192	\$ 271.27
C1.26 Passive Open Space Embellishment	CE	\$ 6,078,261	\$ 742.81
Subtotal			\$ 2,479.20
Community Infrastructure			
C2.01 Warilla Community Centre (recoupment)	Р	\$ 944,853	\$ 498.03
C2.04 Shellharbour City Performance Theatre	С	\$ 9,857,377	\$ 641.48
C2.06 City Library	С	\$ 16,438,436	\$ 811.81
C2.08 Council Administration Offices	С	\$ 21,200,248	\$ 952.97
C2.09 Civic Auditorium	С	\$ 11,261,597	\$ 836.15
Sub total			\$ 3,740.44
Roads & Traffic Infrastructure			
C3.03 Lake Entrance Rd deviation (recoupment)	С	\$ 4,422,428	\$ 606.84
C3.04 Oak Flats Transport Centre (recoupment)	С	\$ 498,545	\$ 32.05
C3.07 East West Link (recoupment)	С	\$ 7,381,711	\$ 351.44
Sub total			\$ 990.33
Development Contributions Management			
C6.04 Development Contributions Management	С	\$ 5,263,020	\$ 832.58
Subtotal			\$ 832.58
Total			\$ 8,042.55

FIGURE 16.1: PRECINCT 1 - WARILLA



17 Precinct 2 - Shellharbour

17.1 Context

The Shellharbour Precinct includes the suburbs of Barrack Point, Shellharbour Village, Shell Cove and part of Dunmore. Land within the vicinity of Shellharbour Village and Barrack Point is being developed for medium density housing. Shell Cove is a large greenfield site which is currently being developed and has Concept Plan approval for a boat harbour and marina. The area of land within the suburb of Dunmore has recently been rezoned and will ultimately become a new residential neighbourhood.

With the development of Shell Cove, the population of this Precinct is anticipated to grow from 2,879 in 1993 to 12,465 in 2023. Dwelling numbers are projected to increase from 1,065 in 1993 to 4,619 in 2023.

This Precinct encompasses an established urban core, together with large tracts of land identified for residential development. It has the second largest amount of open space in the Shellharbour LGA primarily attributable to Bass Point Reserve, Killalea State Park and the beaches of Shellharbour and North Shellharbour. The majority of this space is passive open space which serves both City and Regional recreational needs. The provision of Open Space is considered adequate as well over 90% of all residential dwellings are within 400m walking distance to any open space area.

17.2 Proposed Infrastructure

The following infrastructure is proposed to be provided for under Section 7.11:

Shell Cove Library and Community Centre

17.3 Nexus

The following factors are considered relevant in establishing a nexus between this infrastructure and the future population of the Precinct:

- The Shellharbour Libraries and Museum Strategy 2024 was developed in 2014 to provide a direction on the future of Council libraries. This strategy provides that the Shellharbour Branch Library should be located at The Waterfront, Shell Cove, and colocated with other community facilities. Based on the current projected population for this Precinct, a branch library of around 580 sgm will be required.
- The need for a community centre within the Shell Cove development has been identified by Council, the *Cultural Resources Study* (Guppy & Assoc, 1999) and is further supported by The Open Space, Recreation and Community Facilities Needs Study (SCC, 2010). The community centre will be a multi-functional centre that serves the needs of the population within the Precinct.

Note: A temporary community centre has been constructed and funded by Development contributions in order to meet existing demand. When the permanent centre is constructed, the temporary centre will be sold and the net proceeds returned to the Section 7.11 Developer restriction in order to fund the permanent Community Centre facility.

The Shell Cove Library and Community Centre will be co-located with the Visitor Information Centre. The Visitor Information Centre component of the building is not included in this Plan.

17.4 Calculation of Contribution rates

i. Shell Cove Library and Community Centre

The contribution rate has been calculated on the basis of the following formula:

Contribution rate per residential lot / dwelling =
$$\frac{(\text{TC x AF}) - \text{CTD}}{R}$$

Where:

TC Total cost of infrastructure (estimated)

AF Apportionment factor between existing & future dwellings:

Projected increase in dwellings between 1993 and 2028 (3,986) / projected total number of dwellings at 2028 (5,051). $\{3,986 / 5,051 = 0.7892\}$

CTD Developer contributions received to 30/6/15

R Projected increase in residential dwellings between 2015 and 2028 (1,529).

The contribution rates for this infrastructure and the total residential Precinct rate are shown in Table 17.1, Summary of contribution rates, and the location shown in Figure 17.1.

TABLE 17.1: PRECINCT 2 - SUMMARY OF CONTRIBUTION RATES

Infrastructure Item	Levy Basis	Total Cost	Rate per lot/dwelling
Open Space and Recreation Infrastructure			
C1.02 Beach Foreshore (recoupment)	С	\$ 3,605,563	\$ 240.78
C1.08 Shell Cove Sports Fields	CE	\$ 3,350,885	\$ 511.97
C1.10 Benson Basin Sports Fields	CE	\$ 2,576,962	\$ 666.44
C1.11 City Centre Youth Recreation Facility	CE	\$ 1,051,487	\$ 45.93
C1.17 Shellharbour City Stadium (recoupment)	С	\$ 4,790,192	\$ 271.27
C1.26 Passive Open Space Embellishment	CE	\$ 6,078,261	\$ 742.81
Subtotal			\$ 2,479.20
Community Infrastructure			
C2.04 Shellharbour City Performance Theatre	С	\$ 9,857,377	\$ 641.48
C2.06 City Library	С	\$ 16,438,436	\$ 811.81
C2.08 Council Administration Offices	С	\$ 21,200,248	\$ 952.97
C2.09 Civic Auditorium	С	\$ 11,261,597	\$ 836.15
C2.19 Shell Cove Community Centre	Р	\$ 9,916,558	\$ 3,897.65
Sub total			\$ 7,140.06
Roads & Traffic Infrastructure			

C3.03 Lake Entrance Rd deviation (recoupment)	С	\$ 4,422,428	\$ 126.38
C3.04 Oak Flats Transport Centre (recoupment)	С	\$ 498,545	\$ 32.05
C3.07 East West Link (recoupment)	С	\$ 7,381,711	\$ 24.43
Sub total			\$ 182.86
Development Contributions Management			
C6.04 Development Cotnributions Management	С	\$ 5,263,020	\$ 832.58
Subtotal			\$ 832.58
Total			\$ 10,634.70

FIGURE 17.1: PRECINCT 2 - SHELLHARBOUR



18 Precinct 3 - Blackbutt

18.1 Context

The Blackbutt Precinct encompasses the suburbs of Blackbutt, Flinders and Shellharbour City Centre as well as the locality of Balarang. The City Centre also represents the major focus for retail and commercial development in the City

The development of this area will result in the Precinct's population increasing from 2,980 in 1993 to 11,498 in 2023. This corresponds to an increase from 981 dwellings in 1993 to 4,255 in 2023. Future development is likely to be in the form of medium to high density dwellings in the City Centre, with some remaining development at Flinders.

The provision of open space is considered adequate as well over 90% of all residential dwellings are within 400m walking distance to any open space area. The key open space area in the Precinct is Blackbutt Reserve, an urban bushland reserve.

18.2 Constructed Infrastructure (fully funded)

The following infrastructure has been provided using development contributions:

- Flinders Child and Family Centre
- Blackbutt Youth Centre

18.3 Proposed Infrastructure (fully funded)

The following infrastructure is proposed to be provided using development contributions:

• Blackbutt Branch Library (part of City Library)

Note: Up until the 6th review in 2005, Precinct 3 was levied a contribution toward C2.13 Blackbutt Branch Library. As the City Centre is proposed to be the location for the Blackbutt Branch Library, it will form part of the City Library. Sufficient funds have been levied to Precinct 3 to fund the Blackbutt Branch component of the new City Library. The contributions collected for Blackbutt Branch Library have been transferred to item C2.06 City Library and this facility will be delivered as part of the City Library.

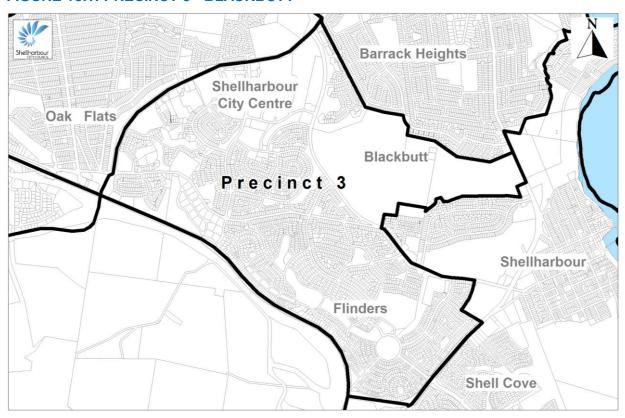
The contribution rates for this Precinct are shown in Table 18.1, Summary of contribution rates, and the location shown in Figure 18.1.

TABLE 18.1: PRECINCT 3 - SUMMARY OF CONTRIBUTION RATES

Infrastructure Item	Levy Basis	Total Cost	Rate per lot/dwelling
Open Space and Recreation Infrastructure			
C1.02 Beach Foreshore (recoupment)	С	\$ 3,605,563	\$ 240.78
C1.08 Shell Cove Sports Fields	CE	\$ 3,350,885	\$ 511.97
C1.10 Benson Basin Sports Fields	CE	\$ 2,576,962	\$ 666.44
C1.11 City Centre Youth Recreation Facility	CE	\$ 1,051,487	\$ 45.93
C1.17 Shellharbour City Stadium (recoupment)	С	\$ 4,790,192	\$ 271.27

	1		1
C1.26 Passive Open Space Embellishment	CE	\$ 6,078,261	\$ 742.81
Subtotal			\$ 2,479.20
Community Infrastructure			
C2.04 Shellharbour City Performance Theatre	С	\$ 9,857,377	\$ 641.48
C2.06 City Library	С	\$ 16,438,436	\$ 811.81
C2.08 Council Administration Offices	С	\$ 21,200,248	\$ 952.97
C2.09 Civic Auditorium	С	\$ 11,261,597	\$ 836.15
Sub total			\$ 3,242.41
Roads & Traffic Infrastructure			
C3.03 Lake Entrance Rd deviation (recoupment)	С	\$ 4,422,428	\$ 174.54
C3.04 Oak Flats Transport Centre (recoupment)	С	\$ 498,545	\$ 32.05
C3.07 East West Link (recoupment)	С	\$ 7,381,711	\$ 482.87
Sub total			\$ 689.46
Development Contributions Management			
C6.04 Development Contributions Management	С	\$ 5,263,020	\$ 832.58
Subtotal			\$ 832.58
Total			\$ 7,243.65

FIGURE 18.1: PRECINCT 3 - BLACKBUTT



19 Precinct 4 – Oak Flats

19.1 Context

The Oak Flats Precinct, which is one of the smaller Precincts in land area, comprises a well-established urban area. The population of this Precinct is anticipated to remain relatively static, increasing marginally from 5,883 in 1993 to 6,523 in 2023. Dwellings numbers are projected to increase from 2,149 in 1993 to 2,649 in 2023, mainly from infill development.

The provision of Open Space is generally considered adequate. There is a high level of district parks along the Lake Foreshore and Moore Street and a slight undersupply of open space in the Oak Flats town centre area.

The provision of infrastructure within the Precinct is generally considered to be adequate for the existing and projected population. A new Community Centre has been constructed.

19.2 Constructed Infrastructure (fully funded)

The following infrastructure has been constructed and funded using development contributions:

Oak Flats Community Centre

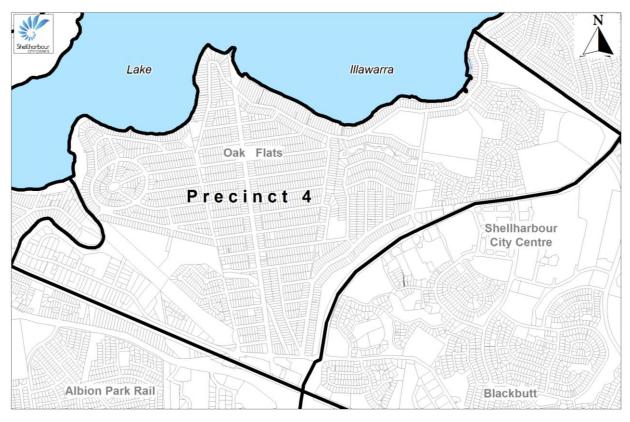
The contribution rates for this Precinct are shown in Table 19.1, Summary of contribution rates, and the location shown in Figure 19.1.

TABLE 19.1: PRECINCT 4 - SUMMARY OF CONTRIBUTION RATES

Infrastructure Item	Levy Basis	Total Cost	Rate per lot/dwelling
Open Space and Recreation Infrastructure			
C1.02 Beach Foreshore (recoupment)	С	\$ 3,605,563	\$ 240.78
C1.08 Shell Cove Sports Fields	CE	\$ 3,350,885	\$ 511.97
C1.10 Benson Basin Sports Fields	CE	\$ 2,576,962	\$ 666.44
C1.11 City Centre Youth Recreation Facility	CE	\$ 1,051,487	\$ 45.93
C1.17 Shellharbour City Stadium (recoupment)	С	\$ 4,790,192	\$ 271.27
C1.26 Passive Open Space Embellishment	CE	\$ 6,078,261	\$ 742.81
Subtotal			\$ 2,479.20
Community Infrastructure			
C2.04 Shellharbour City Performance Theatre	С	\$ 9,857,377	\$ 641.48
C2.06 City Library	С	\$ 16,438,436	\$ 811.81
C2.08 Council Administration Offices	С	\$ 21,200,248	\$ 952.97
C2.09 Civic Auditorium	С	\$ 11,261,597	\$ 836.15

Sub total			\$ 3,242.41
Roads & Traffic Infrastructure			
C3.03 Lake Entrance Rd deviation (recoupment)	С	\$ 4,422,428	\$ 803.00
C3.04 Oak Flats Transport Centre (recoupment)	С	\$ 498,545	\$ 32.05
C3.07 East West Link (recoupment)	С	\$ 7,381,711	\$ 1,060.76
Sub total			\$ 1,895.81
Development Contributions Management			
C6.04 Development Contributions Management	С	\$ 5,263,020	\$ 832.58
Subtotal			\$ 832.58
Total			\$ 8,450.00

FIGURE 19.1: PRECINCT 4 - OAK FLATS



20 Precinct 5 – Albion Park Rail

20.1 Context

The Albion Park Rail Precinct incorporates established areas of residential, industrial and commercial development together with the Illawarra Regional Airport. The population of this Precinct is anticipated to increase marginally from 6,840 in 1993 to 6,943 in 2023. Dwelling numbers are projected to increase from 2,235 in 1993 to 2,748 in 2023.

Unlike other Precincts Albion Park Rail does not have any large regional open space infrastructure. The total amount of open space and community infrastructure in the Precinct is however considered to be generally adequate to cater for its existing and projected residents, and as such no further Precinct level infrastructure will be provided.

20.2 Constructed Infrastructure (fully funded)

The following infrastructure has been provided for using development contributions:

Albion Park Rail Community Centre

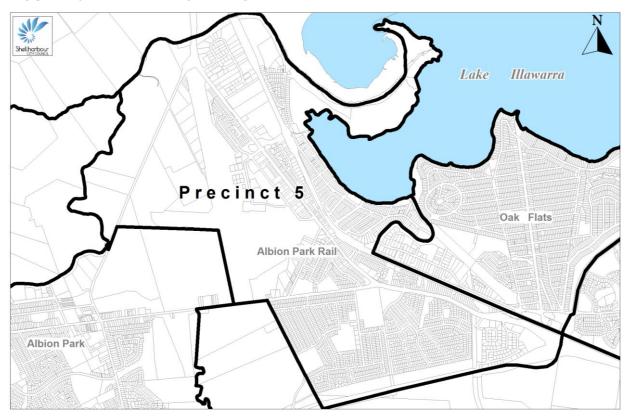
The contribution rates for Precinct are shown in Table 20.1, Summary of contribution rates, and the location shown in Figure 20.1.

TABLE 20.1: PRECINCT 5 - SUMMARY OF CONTRIBUTION RATES

Infrastructure Item	Levy Basis	Total Cost	Rate per lot/dwelling
Open Space and Recreation Infrastructure			
C1.02 Beach Foreshore (recoupment)	С	\$ 3,605,563	\$ 240.78
C1.17 Shellharbour City Stadium (recoupment)	С	\$ 4,790,192	\$ 271.27
C1.18 Albion Oval Touch Football Fields	CW	\$ 636,767	\$ 702.85
C1.21 Con O'Keefe Reserve	CW	\$ 159,898	\$ 148.50
C1.22 Tullimbar Sports Fields	CW	\$ 1,971,717	\$ 1,177.19
C1.26 Passive Open Space Embellishment	CW	\$ 2,604,969	\$ 742.81
Subtotal			\$ 3,283.40
Community Infrastructure			
C2.04 Shellharbour City Performance Theatre	С	\$ 9,857,377	\$ 641.48
C2.06 City Library	С	\$ 16,438,436	\$ 811.81
C2.08 Council Administration Offices	С	\$ 21,200,248	\$ 952.97
C2.09 Civic Auditorium	С	\$ 11,261,597	\$ 836.15
Sub total			\$ 3,242.41

Roads & Traffic Infrastructure			
C3.03 Lake Entrance Rd deviation (recoupment)	С	\$ 4,422,428	\$ 463.80
C3.04 Oak Flats Transport Centre (recoupment)	С	\$ 498,545	\$ 32.05
C3.07 East West Link (recoupment)	С	\$ 7,381,711	\$ 995.76
Sub total			\$ 1,491.61
Development Contributions Management			
C6.04 Development Contributions Management	С	\$ 5,263,020	\$ 832.58
Subtotal			\$ 832.58
Total			\$ 8,850.00

FIGURE 20.1: PRECINCT 5 - ALBION PARK RAIL



21 Precinct 6 – Rural East

21.1 Context

The Rural East Precinct includes relatively large tracts of undeveloped land to the south west of the Shellharbour township. Much of the Precinct is dominated by quarrying activities and a large portion is taken up by the Killalea State Recreation Area. The population of this Precinct is anticipated to grow from 238 in 1993 to 406 in 2023. Dwelling numbers are projected to increase from 102 in 1993 to 130 in 2023.

The total public open space provision for this Precinct is 94.34 hectares. The Precinct contains no community infrastructure with local residents accessing infrastructure outside the Precinct.

21.2 Proposed Infrastructure

There is currently no specific community infrastructure scheduled to be established within this Precinct. However, a range of infrastructure including community centres, libraries and sportsfields are considered accessible to the residents of this Precinct and as such development within the Precinct will contribute toward the cost of providing City Wide and City West infrastructure.

21.3 Nexus

- The Open Space, Recreation and Community Facilities Needs Study (SCC, 2010) states that access to City Wide infrastructure is critical for these areas.
- As there are no existing or planned urban centres in Rural East, it is considered appropriate to levy development in this Precinct a contribution towards the provision of infrastructure on a City Wide and City West basis.

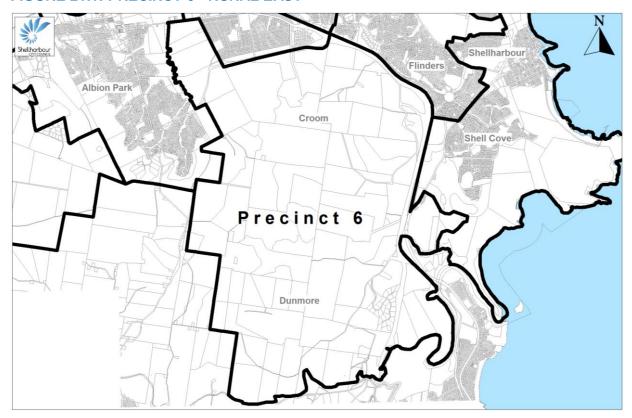
The contribution rates for this Precinct are shown in Table 21.1, Summary of contribution rates, and the location shown in Figure 21.1.

TABLE 21.1: PRECINCT 6 - SUMMARY OF CONTRIBUTION RATES

Infrastructure Item	Levy Basis	Total Cost	Rate per lot/dwelling
Open Space and Recreation Infrastructure			
C1.02 Beach Foreshore (recoupment)	С	\$ 3,605,563	\$ 240.78
C1.17 Shellharbour City Stadium (recoupment)	С	\$ 4,790,192	\$ 271.27
C1.18 Albion Oval Touch Football Fields	CW	\$ 636,767	\$ 702.85
C1.21 Con O'Keefe Reserve	CW	\$ 159,898	\$ 148.50
C1.22 Tullimbar Sports Fields	CW	\$ 1,971,717	\$ 1,177.19
Subtotal			\$ 2,540.59
Community Infrastructure			
C2.04 Shellharbour City Performance Theatre	С	\$ 9,857,377	\$ 641.48

C2.06 City Library	С	\$ 16,438,436	\$ 811.81
C2.08 Council Administration Offices	С	\$ 21,200,248	\$ 952.97
C2.09 Civic Auditorium	С	\$ 11,261,597	\$ 836.15
Sub total			\$ 3,242.41
Roads & Traffic Infrastructure			
C3.04 Oak Flats Transport Centre (recoupment)	С	\$ 498,545	\$ 32.05
Sub total			\$ 32.05
Development Contributions Management			
C6.04 Development Contributions Management	С	\$ 5,263,020	\$ 832.58
Subtotal			\$ 832.58
Total			\$ 6,647.63

FIGURE 21.1: PRECINCT 6 - RURAL EAST



22 Precinct 7 – Albion Park

22.1 Context

The Albion Park Precinct includes the Albion Park township, as well as new residential development to the south and west of the existing township and development at Tullimbar.

This Precinct has been one of the most rapidly growing Precincts in the Shellharbour LGA. However, opportunities to develop further is now limited with Tullimbar being the primary remaining Greenfield development site. The population is anticipated to increase from 6,584 in 1993 to 14,543 in 2023 and dwellings from 2,106 in 1993 to 5,218 in 2023.

The provision of Open Space for Albion Park is considered adequate as 90% of all residential dwellings are within 400m walking distance to any open space area. The current provision of community infrastructure within the Precinct is considered to be generally adequate to cater for existing levels of population, with a community centre in the Town Centre, satellite community centre in the Mount Terry Primary School, Albion Park Library and Home and Community Care (HACC) Centre. In addition, to cater for the increased population extensions to the existing library are required.

22.2 Constructed Infrastructure (fully funded)

The following infrastructure has been provided and fully funded for using development contributions:

- Albion Park cycleways
- Tongarra Road / Calderwood Road intersection
- Terry Street / Church Street intersection
- Taylor Road Traffic Calming
- O'Gorman Street Traffic Calming
- Terry Street / Ashburton Road intersection.

22.3 Proposed Infrastructure

The following infrastructure is proposed to be provided for using development contributions:

- Albion Park Library extensions
- Albion Park By-Pass
- Tongarra Road / Church Street Intersection

22.4 Nexus

The following factors are considered relevant in establishing a nexus between the proposed infrastructure and the future population of the Precinct:

• The Shellharbour Libraries and Museum Strategy 2024 was developed in 2014 to provide a direction on the future of Council libraries. This strategy provides that the location of the existing Albion Park library is well located close to other community facilities and the local shopping centre, making it convenient for residents to access this service. The extension of the library is identified to service the needs of residents within the Albion Park, Rural West and Calderwood Precincts. On this basis it is proposed that the cost of providing the library extension be apportioned to development in Precincts 7, 8 and 9. To cater for the needs of the growing population

in the catchment of Precinct 7, 8 and 9 to 2023, the library will be refurbished and extended by around 285sqm. A contribution toward this item is included in the Calderwood VPA and the final design of the library extension will need to accommodate a full Calderwood development scenario.

- The Albion Park By-Pass (Tripoli Way extension) is a proposed road which runs parallel to Tongarra Road. It commences at Illawarra Highway (east) through to the Illawarra Highway/Broughton Avenue intersection. Its primary function will be to help alleviate traffic impacts of traffic growth along the Tongarra Road commercial area and provide an alternative route to the proposed M1 motorway interchange. The Albion Park Traffic Study (Maunsell AECOM, 2006) identified that it is likely the M1 motorway will be constructed by 2030 and the full development of the Albion Park By-Pass will be required by this time, assuming significant urban development occurs in Calderwood by this time. As the demand for this infrastructure is generated by the development in Precincts 7, 8 and 9, the cost of providing this infrastructure will be apportioned to development in these Precincts to 2028.
- The study, Review of the Need for Traffic Calming Facilities (SMEC, 2000), identifies that Albion Park will require a number of intersection improvements and traffic management measures in order to control intersection traffic and improve road safety as a result of increased traffic volumes from development. The remaining upgrade to be constructed is the Tongarra Road / Church Street intersection.

22.5 Contribution rates

i. Albion Park Library

The contribution rate has been calculated on the basis of the following formula:

Where:

TC Total cost of infrastructure (estimated)

CTD Contributions received to 30/6/15

R Projected increase in Albion Park (523), Rural West (1) and Calderwood (305) residential dwellings between 2015 and 2023 (829)

ii. Albion Park By-Pass

The contribution rate has been calculated on the basis of the following formula:

Contribution rate per residential lot / dwelling =
$$\frac{(\text{TC x AF}) - \text{CTD}}{R}$$

Where:

TC Total cost of infrastructure (estimated)

AF Apportionment factor between existing & future Precinct dwellings:

Projected increase in Albion Park (3,525), Rural West (31) and Calderwood (1,020) dwellings between 1993 and 2028 (4,576) / projected total number of dwellings in Albion Park (5,631), Rural West (177) and Calderwood (1,020) at 2028 (6,828).

 $\{4,576/6,828 = 0.6702\}$

CTD Contributions received to 30/6/15

R Projected increase in Albion Park (936), Rural West (2) and Calderwood (1,020) residential dwellings between 2015 and 2028 (1,958).

iii. Tongarra Road / Church Street Intersection

The contribution rate has been calculated on the basis of the following formula:

Contribution rate per residential lot / dwelling =
$$\frac{(TC \times AF) - CTD}{R}$$

Where:

TC Total cost of infrastructure (estimated)

AF Apportionment factor between existing & future dwellings:

Projected increase in dwellings between 1993 and 2023 (3,112) / projected total

number of dwellings at 2023 (5,218).

 ${3,112/5,218 = 0.5964}$

CTD Contributions received to 30/6/15

R Projected increase in residential dwellings between 2015 and 2023 (523).

The contribution rate for this infrastructure and the total residential Precinct rate is shown in Table 22.1, Summary of contribution rates, and the location shown in Figure 22.1.

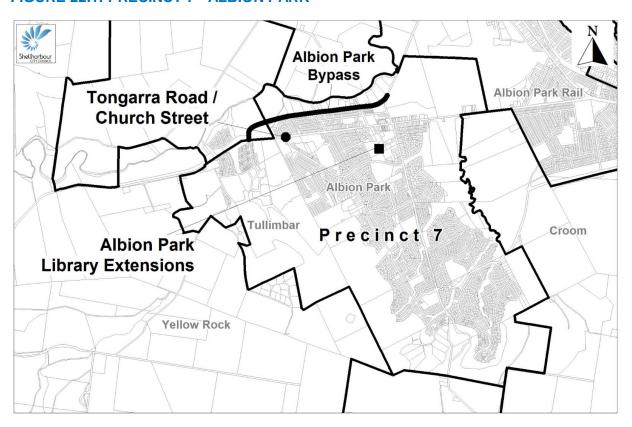
TABLE 22.1: PRECINCT 7 - SUMMARY OF CONTRIBUTION RATES

Infrastructure Item	Levy Basis	Total Cost	Rate per lot/dwelling
Open Space and Recreation Infrastructure			
C1.02 Beach Foreshore (recoupment)	С	\$ 3,605,563	\$ 240.78
C1.17 Shellharbour City Stadium (recoupment)	С	\$ 4,790,192	\$ 271.27
C1.18 Albion Oval Touch Football Fields	CW	\$ 636,767	\$ 702.85
C1.21 Con O'Keefe Reserve	CW	\$ 159,898	\$ 148.50
C1.22 Tullimbar Sports Fields	CW	\$ 1,971,717	\$ 1,177.19
C1.26 Passive Open Space Embellishment	CW	\$ 2,604,969	\$ 742.81
Subtotal			\$ 3,283.40
Community Infrastructure			
C2.04 Shellharbour City Performance Theatre	С	\$ 9,857,377	\$ 641.48
C2.06 City Library	С	\$ 16,438,436	\$ 811.81
C2.08 Council Administration Offices	С	\$ 21,200,248	\$ 952.97

C2.09 Civic Auditorium	С	\$ 11,261,597	\$ 836.15
C2.16 Albion Park Library Extensions	Р	\$ 1,503,583	\$ 1,113.59
Sub total			\$ 4,356.00
Roads & Traffic Infrastructure			
C3.03 Lake Entrance Rd deviation (recoupment)	С	\$ 4,422,428	\$ 217.02
C3.04 Oak Flats Transport Centre (recoupment)	С	\$ 498,545	\$ 32.05
C3.07 East West Link (recoupment)	С	\$ 7,381,711	\$ 1,375.79
C3.09 Albion Park By-Pass	Р	\$ 14,683,874	\$ 4,272.10
C3.12 Tongarra Rd / Church St Intersection	Р	\$ 308,621	\$ 306.53
Sub total			\$ 6,203.49
Development Contributions Management			
C6.04 Development Contributions Management	С	\$ 5,263,020	\$ 832.58
Subtotal			\$ 832.58
Total			\$ 14,675.47

Note: Residential development within this Precinct may also be subject to a Benefit Area contribution.

FIGURE 22.1: PRECINCT 7 - ALBION PARK



23 Precinct 8 – Rural West

23.1 Context

The Rural West Precinct incorporates the rural lands to the west of Albion Park and includes the Macquarie Pass National Park. This National Park is the main area of public open space within the Precinct and has a total area of 1,095 hectares.

The population is anticipated to grow marginally from 405 in 1993 to 552 in 2023. Dwelling numbers are projected to increase from 146 in 1993 to 176 in 2023.

23.2 Proposed Infrastructure

There is currently no Precinct level infrastructure scheduled to be established in Precinct 8, however development within the Precinct will generate demand for the following infrastructure which are located in adjoining Precincts:

- Albion Park Library extensions
- Albion Park By-Pass.

23.3 Nexus

- Whilst there is no existing or planned urban centre in Rural West, there is a range of City Wide and City West infrastructure including community centres, libraries and sportsfields which are considered accessible to the residents of this Precinct. It is therefore considered appropriate to levy new residential and rural residential development in this Precinct a contribution towards the provision of this infrastructure on a City Wide and City West basis.
- The Shellharbour Libraries and Museum Strategy 2024 was developed in 2014 to provide a direction on the future of Council libraries. This strategy provides that the location of the existing Albion Park library is well located close to other community facilities and the local shopping centre, making it convenient for residents to access this service. The extension of the library is identified to service the needs of residents within the Albion Park, Rural West and Calderwood Precincts. On this basis it is proposed that the cost of providing the library extension be apportioned to development in Precincts 7, 8 and 9. To cater for the needs of the growing population in the catchment of Precinct 7, 8 and 9 to 2023, the library will be refurbished and extended by around 285sqm. A contribution toward this item is included in the Calderwood VPA and the final design of the library extension will need to accommodate a full Calderwood development scenario.
- The Albion Park By-Pass (Tripoli Way extension) is a proposed road which runs parallel to Tongarra Road. It commences at Illawarra Highway (east) through to the Illawarra Highway/Broughton Avenue intersection. Its primary function will be to help alleviate traffic impacts of traffic growth along the Tongarra Road commercial area and provide an alternative route to the proposed M1 motorway interchange. The Albion Park Traffic Study (Maunsell AECOM, 2006) identified that it is likely the M1 motorway will be constructed by 2030 and the full development of the Albion Park By-Pass will be required by this time, assuming significant urban development occurs in Calderwood by this time. As the demand for this infrastructure is generated by the development in Precincts 7, 8 and 9, the cost of providing this infrastructure will be apportioned to development in these Precincts to 2028.

23.4 Contribution rates

i. Albion Park Library

The contribution rate has been calculated on the basis of the following formula:

Where:

TC Total cost of infrastructure (estimated)

CTD Contributions received to 30/6/15

R Projected increase in Albion Park (523), Rural West (1) and Calderwood (305) residential dwellings between 2015 and 2023 (829)

ii. Albion Park By-Pass

The contribution rate has been calculated on the basis of the following formula:

Where:

TC Total cost of infrastructure (estimated)

AF Apportionment factor between existing & future Precinct dwellings:

Projected increase in Albion Park (3,525), Rural West (31) and Calderwood (1,020) dwellings between 1993 and 2028 (4,576) / projected total number of dwellings in Albion Park (5,631), Rural West (177) and Calderwood (1,020) at 2028 (6,828).

 $\{4,576 / 6,828 = 0.6702\}$

CTD Contributions received to 30/6/15

R Projected increase in Albion Park (936), Rural West (2) and Calderwood (1,020) residential dwellings between 2015 and 2028 (1,958).

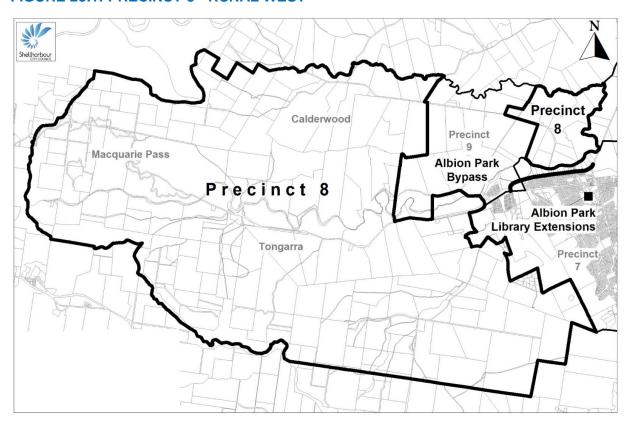
The contribution rate for this infrastructure and the total residential Precinct rate are shown in Table 23.1. Summary of contribution rates, and the location shown in Figure 23.1.

TABLE 23.1: PRECINCT 8 - SUMMARY OF CONTRIBUTION RATES

Infrastructure Item	Levy Basis	Total Cost	Rate per lot/dwelling
Open Space and Recreation Infrastructure			
C1.02 Beach Foreshore (recoupment)	С	\$ 3,605,563	\$ 240.78
C1.17 Shellharbour City Stadium (recoupment)	С	\$ 4,790,192	\$ 271.27
C1.18 Albion Oval Touch Football Fields	CW	\$ 636,767	\$ 702.85
C1.21 Con O'Keefe Reserve	CW	\$ 159,898	\$ 148.50
C1.22 Tullimbar Sports Fields	CW	\$ 1,971,717	\$ 1,177.19

Subtotal			\$ 2,540.59
Community Infrastructure			
C2.04 Shellharbour City Performance Theatre	С	\$ 9,857,377	\$ 641.48
C2.06 City Library	С	\$ 16,438,436	\$ 811.81
C2.08 Council Administration Offices	С	\$ 21,200,248	\$ 952.97
C2.09 Civic Auditorium	С	\$ 11,261,597	\$ 836.15
C2.16 Albion Park Library Extensions	Р	\$ 1,503,583	\$ 1,113.59
Sub total			\$ 4,356.00
Roads & Traffic Infrastructure			
C3.03 Lake Entrance Rd deviation (recoupment)	С	\$ 4,422,428	\$ 0.00
C3.04 Oak Flats Transport Centre (recoupment)	С	\$ 498,545	\$ 32.05
C3.09 Albion Park By-Pass	Р	\$ 14,683,874	\$ 4,272.10
Sub total			\$ 4,304.15
Development Contributions Management			
C6.04 Development Contributions Management	С	\$ 5,263,020	\$ 832.58
Subtotal			\$ 832.58
Total			\$ 12,033.32

FIGURE 23.1: PRECINCT 8 - RURAL WEST



24 Precinct 9 - Calderwood

24.1 Context

The area of land within this Precinct was re-zoned from non-urban to urban under the *State Environmental Planning Policy (Major Development) 2005*. Following this, a Part 3A Concept Plan approval was granted in 2010 to enable the development of 4,800 dwellings, with approximately 50 hectares of mixed use/employment lands, known as the Calderwood Urban Development Project (the CUDP). The CUDP is a site located to the north west of Albion Park and includes part of the suburbs of Tullimbar, North Macquarie and Calderwood.

The CUDP area covers land in both the Shellharbour and Wollongong City Council LGA's, however only the land within the Shellharbour LGA is included in this Development Contributions Plan. This land thus forms 'Precinct 9' in recognition that this site has specific planning controls and the new population will create the demand for additional infrastructure.

In 2014 Council entered into a Planning Agreement with the proponent for the provision of Shellharbour City Council local infrastructure contributions. Where development in Precinct 9 is carried out under the Part 3A Concept Plan (MP09_0082) and local infrastructure contributions are levied in accordance with the Calderwood Voluntary Planning Agreement (VPA) dated 15 September 2014, the VPA will prevail over this Plan and a contribution under this Plan will not be required.

It is anticipated in this Plan that the number of dwellings in the proposed development at Calderwood will reach 305 dwellings by 2023, and 1,020 dwellings by 2028. The population is anticipated to reach 907 people by 2023 and 3,080 people by 2028.

24.2 Proposed Infrastructure

In additional to a contribution toward City Wide infrastructure, development within the Precinct will generate the demand, and be required to make a contribution toward, the following Precinct level infrastructure:

- Calderwood Sportsfields
- Albion Park Library extensions
- Calderwood Community Centre
- Albion Park By-Pass
- Passive open space (in accordance with Section 4 of this Plan).

24.3 Nexus

- There is a range of City Wide infrastructure, which is provided to meet the needs of the Shellharbour LGA and are accessible to the residents of this Precinct. It is therefore, considered appropriate to levy new development in this Precinct a contribution towards the provision of this infrastructure on a City Wide basis.
- The future growth within the Calderwood Precinct will require the provision of active open space as identified in the Landscape and Open Space Masterplan (Environmental Partnership, 2010), prepared as part of the Part 3A Concept Plan MP09_0082. This report identifies that the baseline requirement for sportsgrounds is 1.7 ha per 1,000 people. Based on the population growth assumption of 3,080, approximately 5.24 ha will be required to cater for the anticipated population to 2028. As these sporting fields are required as a direct result of future growth it is considered

reasonable to levy developers the full cost. The delivery of this item is included in the Calderwood Planning Agreement.

- The Shellharbour Libraries and Museum Strategy 2024 was developed in 2014 to provide a direction on the future of Council libraries. This strategy provides that the location of the existing Albion Park library is well located close to other community facilities and the local shopping centre, making it convenient for residents to access this service. The extension of the library is identified to service the needs of residents within the Albion Park, Rural West and Calderwood Precincts. On this basis it is proposed that the cost of providing the library extension be apportioned to development in Precincts 7, 8 and 9. To cater for the needs of the growing population in the catchment of Precinct 7, 8 and 9 to 2023, the library will be refurbished and extended by around 285sqm. A contribution toward this item is included in the Calderwood VPA and the final design of the library extension will need to accommodate a full Calderwood development scenario.
- The need for a multi-purpose community resource centre was identified in the Part 3A Concept Plan MP09_0082 for this development. The Social and Community Planning Assessment Final Report (Elton, 2010) identifies that a permanent community centre will be required to service the future residents. A portion of this item is included in this Plan, based on the projected population growth in this Plan to 2028.
- The Albion Park By-Pass (Tripoli Way extension) is a proposed road which runs parallel to Tongarra Road. It commences at Illawarra Highway (east) through to the Illawarra Highway/Broughton Avenue intersection. Its primary function will be to help alleviate traffic impacts of traffic growth along the Tongarra Road commercial area and provide an alternative route to the proposed M1 motorway interchange. The Albion Park Traffic Study (Maunsell AECOM, 2006) identified that it is likely the M1 motorway will be constructed by 2030 and the full development of the Albion Park By-Pass will be required by this time, assuming significant urban development occurs in Calderwood by this time. As the demand for this infrastructure is generated by the development in Precincts 7, 8 and 9, the cost of providing this infrastructure will be apportioned to development in these Precincts to 2028.

24.4 Contribution rates

i. Calderwood Sports Fields and Calderwood Community Centre

The contribution rate has been calculated on the basis of the following formula:

Where:

TC: Total cost of infrastructure (estimated)

CTD: Contributions received to 30/6/15

R Projected increase in residential dwellings between 2015 and 2028 (1,020).

ii. Albion Park Library

The contribution rate has been calculated on the basis of the following formula:

Contribution rate per residential lot / dwelling =
$$\frac{\text{TC - CTD}}{\text{R}}$$

Where:

TC Total cost of infrastructure (estimated)

CTD Contributions received to 30/6/15

R Projected increase in Albion Park (523), Rural West (1) and Calderwood (305)

residential dwellings between 2015 and 2023 (829)

iii. Albion Park By-Pass

The contribution rate has been calculated on the basis of the following formula:

Where:

TC Total cost of infrastructure (estimated)

AF Apportionment factor between existing & future Precinct dwellings:

Projected increase in Albion Park (3,525), Rural West (31) and Calderwood (1,020) dwellings between 1993 and 2028 (4,576) / projected total number of dwellings in Albion Park (5,631), Rural West (177) and Calderwood (1,020) at 2028 (6,828).

 $\{4,576/6,828 = 0.6702\}$

CTD Contributions received to 30/6/15

R Projected increase in Albion Park (936), Rural West (2) and Calderwood (1,020) residential dwellings between 2015 and 2028 (1,958).

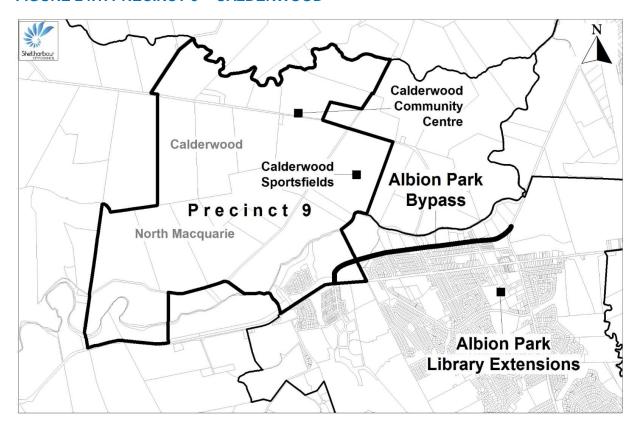
The contribution rates for this infrastructure and the total residential Precinct rate are shown in Table 24.1, Summary of contribution rates, and the location shown in Figure 24.1.

TABLE 24.1: PRECINCT 9 - SUMMARY OF CONTRIBUTION RATES

Infrastructure Item	Levy Basis	Total Cost	Rate per lot/dwelling
Open Space and Recreation Infrastructure			
C1.02 Beach Foreshore (recoupment)	С	\$ 3,605,563	\$ 240.78
C1.17 Shellharbour City Stadium (recoupment)	С	\$ 4,790,192	\$ 271.27
C1.26 Passive Open Space Embellishment	CW	\$ 2,604,969	\$ 742.81
C1.28 Calderwood Sports Fields	Р	\$ 2,881,411	\$ 2,824.91
Subtotal			\$ 4,079.77
Community Infrastructure			
C2.04 Shellharbour City Performance Theatre	С	\$ 9,857,377	\$ 641.48

C2.06 City Library	С	\$ 16,438,436	\$ 811.81
C2.08 Council Administration Offices	С	\$ 21,200,248	\$ 952.97
C2.09 Civic Auditorium	С	\$ 11,261,597	\$ 836.15
C2.16 Albion Park Library Extensions	Р	\$ 1,503,583	\$ 1,113.59
C2.20 Calderwood Community Centre	Р	\$ 931,175	\$ 912.92
Sub total			\$ 5,268.92
Roads & Traffic Infrastructure			
C3.09 Albion Park By-Pass	Р	\$ 14,638,874	\$ 4,272.10
Sub total			\$ 4,272.10
Development Contributions Management			
C6.04 Development Contributions Management	С	\$ 5,263,020	\$ 832.58
Subtotal			\$ 832.58
Total			\$ 14,453.37

FIGURE 24.1: PRECINCT 9 - CALDERWOOD



25 Benefit Area 7 – Mt Terry Drainage Catchment

25.1 Context

The Mount Terry Drainage Catchment, located to the south of Albion Park, is almost completely developed consisting mainly of residential areas with some rural land use (low intensity agriculture).

The catchment drains to the Macquarie Rivulet through a network of drainage reserves, consisting of densely vegetated riparian zones and stormwater conveyance/treatment infrastructure, integrated with public open space that consists of grass areas, footpaths and recreational facilities.

New stormwater infrastructure, and augmentation of the existing network, using current techniques and best practices, are required to support future development of the catchment.

25.2 Constructed Infrastructure

The majority of stormwater works in this Benefit Area, was completed during staged subdivision development, and include;

- Construction works to define the water courses, and control flooding and erosion;
- Embellishment works to create "naturally functioning" creeks;
- Additional landscaping works to improve the amenity of the water courses;
- Water quality treatment basins;
- Detention basins;
- Gross pollutant traps.

Playground areas have also been provided (landscaped and embellished with playground equipment) to service the population within the benefit area.

25.3 Proposed Infrastructure

The proposed works to support future development in this benefit area includes:

- Grey Street Bio-retention
- Ashburton Drive Wetland
- Stubbs Road Pond Wetland
- Daintree Drive / Cascade Road Wetland

25.4 Nexus

Stormwater drainage works in the benefit area have generally been completed in accordance with recommendations of the *Mount Terry Catchment Study* (K F Williams, 1999). Some modifications have been made to these works as changes have occurred in the approach to drainage works and more detailed designs have been carried out as part of the subdivision works for each property.

The Water Sensitive Urban Design Strategy Albion Park (Equatica, 2013) has considered the existing catchment and proposes a range of water quality improvement works to better protect downstream receiving waters, including Lake Illawarra, from the impacts of future urban development in the catchment. These include improving the vegetation of the existing

natural creek lines, riparian corridor treatment works and converting existing ponds and detention systems into more effective bio-retention systems.

25.5 Contribution rates

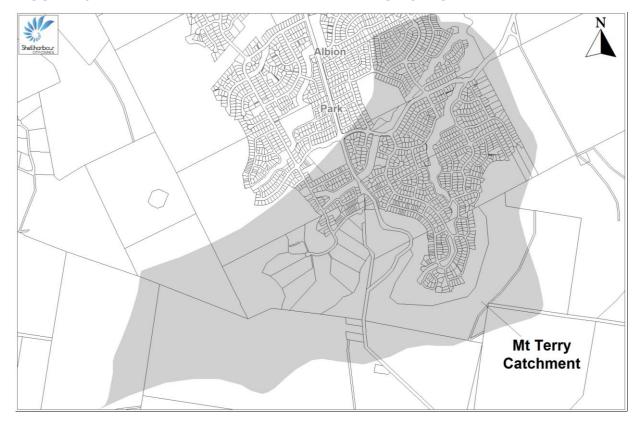
As sufficient contributions have already been levied to fund the remaining works, a contribution under this Plan will not be sought.

The summary of cost is shown at Table 25.1 and the location of the catchment area is shown in Figure 25.1.

TABLE 25.1: BENEFIT AREA 7 - CONTRIBUTION RATE

Infrastructure Item	Total Cost	Rate
C5.01 Mount Terry Drainage Catchment	\$ 1,011,000	\$ -

FIGURE 25.1: BENEFIT AREA 7 - MT TERRY DRAINAGE CATCHMENT



26 Benefit Area 8 – Albion Park Drainage Catchments

26.1 Context

Stormwater drainage is an important feature of urban development in the Albion Park Precinct and a catchment based approach to stormwater drainage systems has been adopted. As each of these catchments contains more than one landowner, these works are included as a Benefit Area within this Plan to enable the application of the catchment based approach. In this regard, developer contributions under this Benefit Area will be used to fund the capital cost of infrastructure within the following catchments:

- Tarra Catchment
- Cooback Creek Catchment
- · Cooby Road South Drainage Catchment
- Cooby Road North Drainage Catchment

Stormwater is now much more than simply the construction of pipes and channels. Community awareness and expectations of pollution and flooding control have changed significantly over the last few decades. For this reason, in 2000 and 2005 Council undertook a review of the drainage infrastructure required for the each of these catchments, with the exception of the Tarra Catchment which is nearly fully developed.

26.2 Proposed Infrastructure

To service anticipated population growth generated by new development in the areas to the south and west of Albion Park (Figure 26.1) it will be necessary to provide stormwater drainage systems for the following four catchments:

- Tarra Drainage Catchment
- Cooback Catchment
- Cooby Road South Drainage Catchment
- Cooby Road North Drainage Catchment

Note: Contributions will not be levied for drainage infrastructure in the Cooback and Cooby Road Catchments on land part zoned residential as at the date of this Plan or which is zoned residential or rural residential during the currency of the Plan, if Council is satisfied that the proposed development does not generate a need for this infrastructure (by providing its own water quality/detention on site).

26.3 Nexus

26.3.1 Tarra Catchment

The Albion Park Local Environmental Study (SCC, 1993) has guided the construction of existing stormwater infrastructure in the catchment.

Future works are identified in the *Water Sensitive Urban Design Strategy Albion Park* (Equatica, 2013) which considers the existing catchment and proposes a range of water quality improvement works to better protect downstream receiving waters, including Lake Illawarra, from the impacts of urban development. These include improving the vegetation of the existing natural creek lines, riparian corridor treatment works and converting existing ponds and detention systems into more effective bioretention systems.

26.3.2 Cooback Creek Catchment

These drainage works are required to serve new residential development within the catchment. The need for these works and their scope has been justified in both the Cooback Creek Stormwater Strategy – Concept Plan (Forbes Rigby Pty Ltd, 2000) and the Working Paper on Stormwater Management Requirements for the Cooback Creek Catchment & Section 94 Implications (Forbes Rigby, 2000).

As the need for these drainage works are directly related to new development within the catchment it is considered appropriate to levy developers within the catchment to fund the full cost of capital infrastructure.

Note: The provisions of this Plan relating to drainage in the Cooback Creek Catchment apply to that development within that area of the catchment which is zoned for residential purposes only.

26.3.3 Cooby Road Catchment

The Albion Park West Drainage Strategy & Section 94 Contributions Plan – Cooby Road Catchment Report (Storm Consulting, 2005) has identified the drainage works that are required to enable residential and rural residential development within the Cooby Road Catchment (which incorporates both the Cooby Road North and Cooby Road South sub catchments).

As the need for these drainage works are directly related to new development within the catchment it is considered appropriate to levy developers within the catchment to fund the full cost of capital infrastructure.

26.4 Contribution rates

26.4.1 Tarra Catchment

As sufficient contributions have already been levied to fund the remaining works, a contribution under this Plan will not be sought.

As sufficient funds have already been levied to fund the remaining works, a contribution under this Plan will not be sought.

26.4.2 Cooback Catchment

The contribution rate for these catchments has been calculated on the basis of the following formula:

Contribution =
$$\frac{TC}{D_T}$$
 x D_S

Where:

TC Total cost of infrastructure (actual and estimated)

D_T The total developable land area within the Catchment Benefit Area

Ds Developable land area of the subject site (ie not including areas within watercourses or floodprone):

26.4.3 Cooby Road Catchment

The method of calculation of contribution rates for this catchment is based on the recommendations of the *Albion Park West Drainage Strategy & Section 94 Contributions Plan – Cooby Road Catchment Report (Storm Consulting, 2005)* and recognises the variations in runoff requirements dependant on development type. Data on which these calculations were based are summarised in Table 27.2 below.

The contribution rate has been calculated on the basis of the following formula:

Contribution =
$$R_E \times \frac{A_E}{A_A} \times A_S$$

Where:

R_E Rate per Equivalent Area (total cost / total equivalent area)

A_E Total Equivalent Area (residential or rural residential)

A_A Total Actual Area (residential or rural residential)

As Area of subject site

Note: Equivalent area is the total area adjusted for projected % impervious area (65% for residential and 13% for rural residential).

TABLE 26.1: BENEFIT AREA 8 - CONTRIBUTION RATES

Catchment	Area (ha)	Total Cost	Rate per unit	Unit
Tarra catchment	29	\$ 906,250	\$ -	m ² developable land area
Cooback catchment	116.3	\$ 4,262,360	\$ 3.67	m ² developable land area
Cooby Road Catchment - residential development	12.6	\$ 3,510,863	\$18.10	m² land area (of subject site)
Cooby Road Catchment - rural residential development	3.7	\$ 1,018,775	\$ 3.62	m² land area (of subject site)
Total		\$ 9,698,248		

TABLE 26.2: COOBY ROAD CATCHMENT - ALLOCATION OF BENEFIT AND COSTS

	Equivalent Area (m²)	Total Cost	Actual Area (m²)	Rate / Developable Area (\$ / m²)
Residential	126,101.3	\$ 3,510,863	194,002	\$ 18.10
Rural Residential	36,591.8	\$ 1,018,775	281,475	\$ 3.62
TOTAL	162,693.1	\$ 4,529,638	475,477	
Rate per Equivalent Area (\$ / m²)	\$ 27.84			

Cooby Road
Catchment

Cooback Creek
Catchment

FIGURE 26.1: BENEFIT AREA 8 - ALBION PARK DRAINAGE CATCHMENTS

27 Benefit Area 9 – Tullimbar Infrastructure

27.1 Context

Tullimbar Village is located at the western edge of Albion Park and is one of the major residential development areas in the Albion Park Precinct. The development within this site will create the demand for additional infrastructure to be provided within this Benefit Area.

27.2 Constructed Infrastructure

The following infrastructure has been provided and is being recouped:

Illawarra Highway / Tullimbar intersection

27.3 Proposed Infrastructure

The following infrastructure is required to service the needs of new residential development within the Benefit Area:

- Tullimbar Community Centre
- Church Street / Sophia Street intersection

27.4 Nexus

- With a future population of approximately 4,000 people the Tullimbar Benefit Area is
 of sufficient size to generate the demand for community services. In order to meet this
 demand it is proposed to provide a small multi-purpose community centre within the
 Benefit Area. It is proposed that the centre be located in the commercial centre of the
 Tullimbar Village development.
- The study, Review of the Need for Traffic Calming Facilities (SMEC, 2000), identifies
 a number of intersection improvements and traffic management measures that will be
 required in order to control the flow of traffic at the identified intersections and
 improve road safety as a result of increased traffic volumes from development both
 within and immediately adjacent to the Benefit Area.

27.5 Contribution rates

The contribution rate has been calculated on the basis of the following formula:

Where:

TC Total cost of infrastructure (estimated)

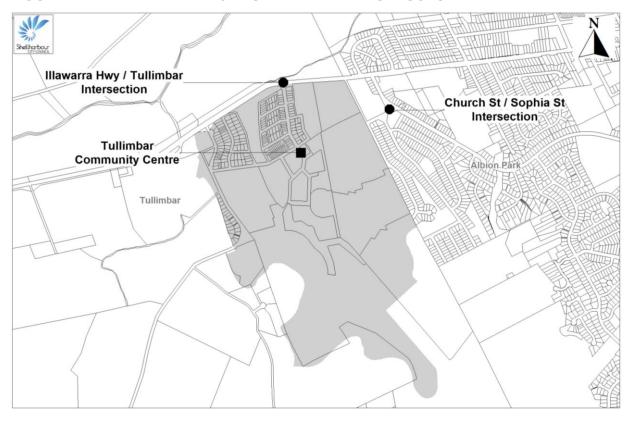
R Projected increase in Benefit Area residential dwellings (1,500)

The contribution rates for this infrastructure are shown in Table 27.1 and the location shown in Figure 27.1.

TABLE 27.1: BENEFIT AREA 9 - CONTRIBUTION RATES

Infrastructure Item	Total Cost	Rate per lot/dwelling
C2.18 Tullimbar Community Centre	\$ 623,970	\$ 415.98
C3.18 Illawarra Highway / Tullimbar Intersection	\$ 1,477,028	\$ 984.69
C3.19 Church Street / Sophia Street Intersection	\$ 141,098	\$ 94.07
Total	\$ 2,242,096	\$ 1,494.74

FIGURE 27.1: BENEFIT AREA 9 - TULLIMBAR INFRASTRUCTURE



Appendix A Cost Schedules

The cost schedules detail the breakup of the cost components. The amount is based on actual construction costs, indexed cost estimates and/or recent cost estimates.

C1.0 OPEN SPACE AND RECREATION INFRASTRUCTURE: SUMMARY TABLE

Infrastructure Item	Location (Precinct)	Levy Basis	Cost of Facility		
C1.02 Beach Foreshore (recoupment)	1	С	\$ 3,605,563	\$	812,462
C1.08 Shell Cove Sports Fields	2	CE	\$ 3,350,885	\$	2,304,938
C1.10 Benson Basin Sports Fields	3	CE	\$ 2,576,962	\$	1,215,421
C1.11 City Centre Youth Recreation Facility	3	CE	\$ 1,051,487	\$	229,489
C1.16 Croom - City West Sporting fields	7	CW	\$ 736,923	\$	733,924
C1.17 Shellharbour City Stadium (recoupment)	7	С	\$ 4,790,192	\$	1,221,424
C1.18 Albion Oval Touch Football Fields	7	CW	\$ 636,767	\$	234,036
C1.20 Terry Reserve Soccer Fields	7	CW	\$ 666,817	\$	502,191
C1.21 Con O'Keefe Reserve	7	CW	\$ 159,898	\$	74,810
C1.22 Tullimbar Sports Fields	7	CW	\$ 1,971,717	\$	760,387
C1.24 Albion Park Commercial (recoupment)	7	BA	\$ 679,637	\$	483,229
C1.25 Upgrade Existing Active Open Space	CE	CE	\$ 992,354	\$	984,538
C1.25 Upgrade Existing Active Open Space	CW	CW	\$ 288,275	\$	286,005
C1.26 Passive Open Space Embellishment	CE	CE	\$ 6,078,261	\$	4,116,451
C1.26 Passive Open Space Embellishment	CW	CW	\$ 2,604,969	\$	1,709,671
C1.28 Calderwood Sportsfields	9	Р	\$ 2,881,411	\$	-
TOTAL			\$ 33,072,118	\$	15,668,976

C: S94 Contributions levied throughout the City

CE: S94 Contributions levied throughout City East CW: S94 Contributions levied throughout City West

BA: Benefit Area

C1.02 BEACH FORESHORE (recoupment)

Component	Cost
Recoupment of past expenditure	\$ 2,796,992
Minus grant funding	\$ 538,230
Total	\$ 2,258,762
Indexed cost as at 30/06/2013	\$ 3,432,443
Indexed cost as at 30/06/2015	\$ 3,605,563
S94 developer contributions received to 30/06/2015	\$ 812,462

Source: Oculus 27/7/99

P: S94 Contribution levied in a Precinct

C1.08 SHELL COVE SPORTS FIELDS

Component		Cost
Completed Works:		
Preliminary Earthworks		\$ 575,229
Future Works:		
Preliminary costs		\$ 18,816
Field preparation & embellishments (AFL/cricket)		\$ 425,618
Car parking (60 spaces)		\$ 415,986
Amenities building		\$ 519,681
Landscaping & Access Roads		\$ 88,157
Lighting		\$ 250,000
Drainage, Irrigation & Fencing		\$ 264,354
Sub total		\$ 1,982,612
Investigation & Design	10%	\$ 198,261
Contingencies	20%	\$ 396,522
Project Management	10%	\$ 198,261
Total		\$ 3,350,885
S94 developer contributions received to 30/06/2015		\$ 2,304,938

Source: Shellharbour City Council, June 2015

C1.10 BENSON BASIN SPORTS FIELDS

Component	Qty	Rate	Cost
Preliminaries			\$ 62,500
Landscaping			\$ 338,800
Amenities building			\$ 1,000,000
Car parking	160		\$ 310,800
Lighting			\$ 175,000
Investigation & design		10%	\$ 188,710
Contingencies		20%	\$ 377,420
Total			\$ 2,453,230
Indexed cost as at 30/06/2015			\$ 2,576,962
S94 developer contributions received to 30/06/2015			\$ 1,215,421

Source: Shellharbour City Council 2012

C1.11 CITY CENTRE YOUTH RECREATION FACILITY

Component	Rate		Cost
Cleate Dayle agreety estima		¢.	770 000
Skate Park construction		\$	770,000
Investigation & design	10%	\$	77,000
Contingencies	20%	\$	154,000
Total		\$	1,001,000
Indexed cost as at 30/06/2015		\$	1,051,487
S94 developer contributions received to 30/06/2015			229, <i>4</i> 89

Source: Convic, 2012

C1.16 CROOM SPORTING COMPLEX

Component	Rate		Cost
City Work Sporting Fields			
City West Sporting Fields		•	47.040
Junior cricket pitch		\$	17,646
Ammenities building		\$	200,000
Car parking		\$	108,000
Lighting		\$	214,000
Contingencies	15%	\$	80,947
Investigation and design	10%	\$	53,965
Project Manager	5%	\$	26,982
Total		\$	701,540
Indexed cost as at 30/06/2015		\$	736,923
S94 developer contributions received to 30/06/2015		\$	733,924

Source: Junior Cricket Pitch - M Collins (& Sons) Pty Ltd, 2013 City West Sporting Fields - Raw linsons Australia Construction handbook, 2013

C1.17 SHELLHARBOUR CITY STADIUM (recoupment)

Component	Cost
Recoupment of past expenditure	\$ 4,050,000
Less grant funding from State Government (Dept Sport & Rec)	\$ 370,000
Total	\$ 3,680,000
Indexed cost as at 30/06/2013	\$ 4,560,192
Indexed cost as at 30/06/2015	\$ 4,790,192
S94 developer contributions received to 30/06/2015	\$ 1,221,424

Source: Shellharbour City Council, 2004

C1.18 ALBION OVAL TOUCH FOOTBALL FIELDS

Component	Rate	Cost	
Completed works			
Lighting		\$ 243,023	
Future works			
Amenities building		\$ 218,125	
Regional Adjustment Factor	1%	\$ 2,181	
Investigation & design	10%	\$ 21,813	
Contingencies	20%	\$ 43,625	
Subtotal		\$ 285,744	
Car parking		\$ 80,000	
Investigation & design	10%	\$ 8,000	
Project Management	5%	\$ 4,000	
Contingencies	20%	\$ 16,000	
Subtotal		\$ 108,000	
Total		\$ 636,767	
S94 developer contributions received to 30/06/2015		\$ 234,036	

Source: Shellharbour City Council, 2016

C1.20 TERRY RESERVE SOCCER FIELDS

Component	Cost
Amenities building	\$ 100,000
Car parking	\$ 108,000
Lighting	\$ 321,000
Contingencies	\$ 105,800
Total	\$ 634,800
Indexed cost as at 30/06/2015	\$ 666,817
S94 developer contributions received to 30/06/2015	\$ 502, 191

Source: Raw linsons Australia Construction handbook 2013

C1.21 CON O'KEEFE RESERVE

Component	Cost
Investigation & design	\$ 13,805
Construction	\$ 4,189
Skateboard facility	\$ 60,000
Basketball court (1/2 size)	\$ 13,150
Lighting	\$ 2,200
Public utilities	\$ 1,400
Sub Total	\$ 94,744
Fees, Charges & Contingencies	\$ 28,096
Total	\$ 122,840
Indexed cost as at 30/06/2013	\$ 152,221
Indexed cost as at 30/06/2015	\$ 159,898
S94 developer contributions received to 30/06/2015	\$ 74,810

Source: Robert MacDonald & Assoc. 9/03/00

C1.22 TULLIMBAR SPORTS FIELDS

Component	Qty	Rate	Cost
Investigation & design		10%	\$ 140,837
Preliminaries			\$ 16,066
Field preparation and embellishment (rugby league)			\$ 169,460
Car parking	33		\$ 223,319
Amenities building			\$ 552,924
Lighting			\$ 175,000
Landscaping & Access Roads			\$ 75,642
Drainage, Irrigation & Fencing			\$ 195,958
Contingency		20%	\$ 281,674
Project Management		10%	\$ 140,837
Total			\$ 1,971,717
S94 developer contributions received to 30/06/2015			\$ 760,387

Source: Shellharbour City Council 2015

C1.24 ALBION PARK COMMERCIAL (Benefit Area)

Component	Cost
Recoupment of past expenditure	\$ 622,530
Indexed cost as at 30/06/2013	\$ 647,004
Indexed cost as at 30/06/2015	\$ 679,637
S94 developer contributions received to 30/06/2015	\$ 483,229

Source: Shellharbour City Council, 2011

C1.25 UPGRADE OF EXISTING ACTIVE OPEN SPACE

Component	Unit	Qty	Rate	Cost
Seating	item	4	\$33,000	\$ 132,000
Fencing	m	650	\$100	\$ 65,000
Ammenities block				\$ 300,000
Field lighting				\$ 214,000
Car parking	bay	36	\$6,300	\$ 226,800
Investigation and design			10%	\$ 93,780
Contingencies			20%	\$ 187,560
Total				\$ 1,219,140
Indexed cost as at 30/06/2015				\$ 1,280,629
s94 contributions received to 30/06/2	2015 for City East			\$ 984,538
s94 contributions received to 30/06/2	2015 for City West			\$ 286,005

Source: Raw linsons Australia Construction handbook 2013, Cordell Commercial and Industrial Rates

C1.26 PASSIVE OPEN SPACE EMBELLISHMENT

Area of Parkland (includes mix of Local, District and Citywide parks): 1.13 ha

Component	Unit	Qty	Rate	Cost
Topsoil, trees & shrubs	m^2	2,000	\$25	\$ 90,400
Garden edging & mulch				\$ 54,720
Park furniture, bins, water service				\$ 10,500
Play equipment	set	1	\$40,000	\$ 40,000
Wetpour - softfall		1	\$30,000	\$ 30,000
Shade sail		1	\$4,000	\$ 4,000
Contingencies			20%	\$ 45,924
Total cost of 1.13ha park				\$ 275,544
Indexed cost as at 30/06/2015				\$ 289,441
Total City East				\$ 6,078,261
Total City West				\$ 2,604,969
s94 contributions received to 30/06/2015 f	or City East			\$ 4,116,451
s94 contributions received to 30/06/2015 f	or City West			\$ 1,709,671

Source: Raw linsons Australia Construction handbook 2013, Cordell Commercial and Industrial Rates

C1.28 CALDERWOOD SPORTS FIELDS

Component	Unit	Qty	Rate		Cost
Construction of Sportsfields:					
Vehicular access and parking					
Sporting grounds					
Amenities building					
Training facilities (sportsfield embellishment)					
, ,					
Lighting				σ	2 404 064
Sub total				\$	2,481,061
Land	ha	5.24	\$ 50,000	\$	262,000
			,	•	,
Total				\$	2,743,061
Indexed cost as at 30/06/2015				\$	2,881,411
S94 contributions received to 30/06/2015				\$	-

Source: Calderw ood Concept Plan, Appendix I, Local Development Schedules, 2010

Note: The cost of this facility is on a pro-rata basis, calculated on the projected population of Precinct 9 to 2028 in this Section 94 Contributions Plan.

C2.0 COMMUNITY INFRASTRUCTURE: SUMMARY TABLE

Infrastructure Item	Location (Precinct)	Levy Basis	Cost of Facility		Co r	4 Developer ontributions eceived to 30/06/2015
C2.01 Warilla Community Centre (recoupment)	1	Р	\$	944,853	\$	32,728
C2.04 Shellharbour City Performance Theatre	2	С	\$	9,857,377	\$	2,270,270
C2.06 City Library incl Museum	3	С	\$	16,438,436	\$	3,587,096
C2.08 Council Administration Offices	3	С	\$	21,200,248	\$	1,718,073
C2.09 Civic Auditorium	3	С	\$	11,261,597	\$	1,108,660
C2.16 Albion Park Library Extensions	7	Р	\$	1,503,583	\$	580,420
C2.18 Tullimbar Community Centre	7	BA	\$	623,970	\$	29,490
C2.19 Shell Cove Library & Community Centre	2	Р	\$	9,916,558	\$	1,866,636
C2.20 Calderwood Community Centre	9	Р	\$	931,175	\$	-
TOTAL			\$	72.677.797	\$	11.193.373

C: S94 Contributions levied throughout the City

C2.01 WARILLA COMMUNITY CENTRE (recoupment)

Component	Cost
Recoupment of past expenditure	\$ 1,060,870
Minus Grant from NSW Premier Department	\$ 335,000
Total	\$ 725,870
Indexed cost as at 30/06/2013	\$ 899,486
Indexed cost as at 30/06/2015	\$ 944,853
S94 developer contributions received to 30/06/2015	\$ 32,728

Source: Bishop, Hitchcock & Irw in, and Shellharbour City Council, 2005

P: S94 Contributions levied in a Precinct

BA: Benefit Area

C2.04 SHELLHARBOUR CITY PERFORMANCE THEATRE

Component	Rate	Cost
Theatre: building		\$ 4,594,000
Theatre: fitout		\$ 66,000
Access and parking		\$ 121,000
Bulk earthworks		\$ 144,000
Landscaping		\$ 5,000
Public utilities		\$ 47,000
Sub total		\$ 4,977,000
Fees and charges	10%	\$ 498,000
Contingencies	10%	\$ 548,000
Public art and design	2%	\$ 99,540
Total		\$ 6,122,540
Indexed cost as at 30/06/2013		\$ 9,384,077
Indexed cost as at 30/06/2015		\$ 9,857,377
S94 developer contributions received to 30/06/2015		\$ 2,270,270

Source: Richard Hanna 15/09/99

C2.06 CITY LIBRARY (INCLUDING MUSEUM)

Component	Rate	Cost
Construction costs (including shared spaces)		\$ 14,216,760
Consultancy Fees	7%	\$ 995,173
Project Management	3%	\$ 426,503
Books		\$ 800,000
Total		\$ 16,438,436
S94 developer contributions received to 30/06/2015		\$ 3,587,096

Source: WT Partnership, 2015

C2.08 COUNCIL ADMINISTRATION OFFICES

Component	Rate	Cost
Construction costs (including shared spaces)		\$ 19,272,952
Consultancy Fees	7%	\$ 1,349,107
Project Management	3%	\$ 578,189
Total		\$ 21,200,248
S94 developer contributions received to 30/06/2015		\$ 1,718,073

Source: WT Partnership, 2015

C2.09 CIVIC AUDITORIUM

Component	Rate	Cost
Construction costs (including shared spaces)		\$ 10,237,816
Consultancy Fees	7%	\$ 716,647
Project Management	3%	\$ 307,134
Total		\$ 11,261,597
S94 developer contributions received to 30/06/2015		\$ 1,108,660

Source: WT Partnership, 2015

C2.16 ALBION PARK LIBRARY EXTENSIONS

Component	Rate		Cost
Investigation 9 Decima	400/	æ	110 222 00
Investigation & Design	10%	\$	119,332.00
Library construction	284 sqm	\$	1,130,320
Car Parking		\$	63,000
Regional Adjustment Factor	1%	\$	11,933.00
Contingency	15%	\$	178,998
Total		\$	1,503,583
S94 developer contributions received to 30/06/2015		\$	<i>580,420</i>

Source: IPART Local Infrastructure Benchmark Costs Final Report, April 2014

C2.18 TULLIMBAR COMMUNITY CENTRE (Benefit Area)

Component	Cost
Building:	
Building and fit out	\$ 196,000
Access and parking	\$ 9,000
Bulk earthworks	\$ 12,000
Landscaping	\$ 7,000
Public utilities	\$ 24,000
Fees and charges	\$ 25,000
Contingencies	\$ 27,000
Public art and design	\$ 6,000
Sub total	\$ 306,000
Indexed cost as at 30/06/2013	\$ 469,010
Land	\$ 125,000
Total as at 30/6/2013	\$ 594,010
Indexed cost as at 30/06/2015	\$ 623,970
S94 developer contributions received to 30/06/2015	\$ 29,490

Source: Land - Shellharbour City Council 2013, Building - Richard Hanna 15/09/99

C2.19 SHELL COVE LIBRARY & COMMUNITY CENTRE

Component	Rate		Cost
Construction		\$	6,702,493
Contractors / Preliminaries	12%	\$	804,299
Contractors Margin	5%	\$	375,340
Design Contingency	10%	\$	788,213
Construction Contingency	5%	\$	433,517
Professional Fees	10%	\$	910,386
Project Manager	5%	\$	500,712
Land	1,549sqm	\$	1,250,000
Car Parking	29 spaces	\$	182,700
Sub Total		\$	11,947,660
less: Visitor Information Centre component of building *	17%	-\$	2,031,102
Total		\$	9,916,558
S94 contributions to 30/06/2015 for C2.02 Shellharbour Library		\$	1,061,693
S94 contributions to 30/06/2015 for C2.03 Shell Cove Commi	unity Centre #	\$	804,943

Source: Shellharbour City Council 2015, Herron Todd White October 2015 and IPART April 2014

C2.20 CALDERWOOD COMMUNITY CENTRE

Component	Rate	Cost
Construction Cost		\$ 669,375
Land		\$ 261,800
Total		\$ 931,175
S94 developer contributions received to 30/06/2015		\$ -

Source: Calderw ood Concept Plan, Appendix I, Local Development Schedules, 2010

Note: The cost of this facility is on a pro-rata basis, calculated on the projected population of Precinct 9 to 2028 in this Section 94 Contributions Plan.

^{*} The cost of constructing the Visitor Information Centre component of the building is not included in this Section 94 Contributions Plan.

[#] The contributions collected towards Item C2.03 Shell Cove Community Centre have been allocated to the cost of the temporary community centre and are held as an asset, not cash.

C3.0 ROADS AND TRAFFIC: SUMMARY TABLE

Infrastructure Item	Location (Precinct)	Levy Basis	Cost of Facility	Co	4 Developer ontributions eceived to 80/06/2015
C3.02 City Centre Traffic Management	3	ВА	\$ 2,883,970	\$	2,429,658
C3.03 Lake Entrance Road (recoupment)	3	C	\$ 4,422,428	\$	1,157,277
C3.04 Oak Flats Transport Centre (recoupment)	4	С	\$ 498,545	\$	122,664
C3.06 Hargraves Avenue (recoupment)	5	ВА	\$ 962,154	\$	137,611
C3.07 East West Link: City Wide (recoupment)	5	С	\$ 7,381,711	\$	2,310,431
C3.09 Albion Park By-Pass	7	Р	\$ 14,683,874	\$	1,476,351
C3.12 Church Street/Tongarra Road intersection	7	Р	\$ 308,621	\$	23,745
C3.18 Illawarra Hwy/Western Valley intersection	7	BA	\$ 1,477,028	\$	35,870
C3.19 Church Street/Sophia Street intersection	7	BA	\$ 141,098	\$	12,838
C3.20 Rivulet Crescent Extension	5	ВА	\$ 922,283	\$	221,259
Total			\$ 33,681,712	\$	7,927,704

C: S94 Contributions levied throughout the City

P: S94 Contributions levied within precincts

BA: S94 Contributions levied within a Benefit Area

C3.02 CITY CENTRE TRAFFIC MANAGEMENT (Benefit Area)

Component	Rate		Cost
Our structed lafer structure			
Constructed Infrastructure:		Φ.	004 400
College Ave / Main Street Traffic Signals		\$	384,120
Benson Ave / Wattle Rd Traffic Signals		\$	101,037
Benson Ave / College Ave Roundabout		\$	187,796
Benson Ave / Lamerton Cres Roundabaout		\$	46,201
Consultants Fees - Traffic Studies		\$	43,248
Sub total		\$	762,402
Future Works:			
1. Lake Entrance Rd/ College Ave (2nd Right Turn Lane)			
Investigation & design		\$	17,919
Utilities		\$	40,000
Property acquisition		\$	83,000
Construction works		\$	369,941
Fees & charges		\$	18,497
Contingencies	10% & 7%	\$	81,691
Sub total		\$	611,048
Indexed cost as at 30/6/13		\$	899,168
Indexed cost as at 30/6/15		\$	944,519
2. College Ave/Cygnet Ave intersection (Traffic lights)			
Signalised intersection (4 way intersection)		\$	260,680
Regional Adjustment Factor	1%	\$	2,607
Contingency	30%	Ф \$	78,204
Investigation & design	10%	\$ \$	26,068
Sub-total	1070	\$	367,559
3. Cygnet Ave & Minga Ave (Intersection upgrade)	100/	•	05.070
Investigation & design	10%	\$	25,978
Preliminaries		\$	88,472
Construction works		\$	171,305
Project management	5%	\$	12,989
Contingency	40%	\$ \$	103,911
Overheads	10%	\$	25,978
Sub-total		\$	428,633
4. City Centre Footpath Works			
Investigation & design	10%	\$	5,779
Preliminaries		\$	28,425
Construction works		\$	29,364
Project management	5%	\$	2,889
Contingency	10%	\$ \$	5,779
Sub-total Sub-total		\$	72,236
5. Benson Ave & Lamerton Ave intersection (Traffic Lights)			
Signalised intersection ("T" intersection)		\$	218,880
Regional Adjustment Factor	1%	\$	2,189
Contingency	30%	\$	65,664
- -	10%	Ф \$	
Investigation & design	10%	\$ \$	21,888
Sub-total		Þ	308,621
Total		\$	2,883,970
S94 developer contributions received to 30/06/2015		\$	2,429,658

Source: 1. Robert McDonald 13/3./00, 2. WT Partnerships 20/9/12, 3. IPART 2014, 4. Shellharbour City Council 1/4/15, 5. IPART 2014

C3.03 LAKE ENTRANCE ROAD (recoupment)

Component	Cost
Recoupment of past expenditure (including bank interest)	\$ 3,397,470
Indexed cost as at 30/06/2013	\$ 4,210,086
Indexed cost as at 30/06/2015	\$ 4,422,428
S94 developer contributions received to 30/06/2015	\$ 1,157,277

Source: Shellharbour City Council

C3.04 OAK FLATS TRANSPORT CENTRE (recoupment)

Component	Cost
Recoupment of past expenditure	\$ 383,000
Indexed cost as at 30/06/2013	\$ 474,607
Indexed cost as at 30/06/2015	\$ 498,545
S94 developer contributions received to 30/06/2013	\$ 122,664

Source: Shellharbour City Council, 2004

C3.06 HARGRAVES AVE (Benefit Area) (recoupment)

Component	Cost
Recoupment of past expenditure	\$ 780,917
Indexed cost as at 30/06/2013	\$ 915,956
Indexed cost as at 30/06/2015	\$ 962,154
S94 developer contributions received to 30/06/2015	\$ 137,611

Source: Shellharbour City Council, 2010

C3.07 EAST WEST LINK ROAD (recoupment)

Component	Cost
Recoupment of past expenditure	\$ 5,670,899
Indexed cost as at 30/06/2013	\$ 7,027,280
Indexed cost as at 30/06/2015	\$ 7,381,711
S94 developer contributions received to 30/06/2015	\$ 2,310,431

Source: Shellharbour City Council 2004

C3.09 ALBION PARK BY-PASS

Component	Cost
Construction Costs:	
Preliminaries	\$ 809,100
Road construction	\$ 3,680,638
Bridge construction	\$ 2,916,000
Roundabouts	\$ 492,500
Tripoli Way complementary measures	\$ 500,000
Stormwater drainage and culverts	\$ 1,437,350
Electrical services	\$ 774,615
Water & sewer services	\$ 55,000
Landscaping	\$ 162,805
Project management	\$ 309,900
Contingency	\$ 1,595,600
Sub-total	\$ 12,733,508
Indexed sub total as at 30/6/15	\$ 13,375,741
Land acquisition	\$ 1,308,133
Total cost as at 30/06/2015	\$ 14,683,874
S94 developer contributions received to 30/06/2015	\$ 1,476,351

Source: WT Partnership 28/8/13 & Opteon Property Group 2015

C3.12 CHURCH STREET/TONGARRA ROAD INTERSECTION

Component		Cost
Signalised intersection ("T" intersection)		\$ 218,880
Investigation and Design	10%	\$ 21,888
Regional Adjustment Factor	1%	\$ 2,189
Contingency	30%	\$ 65,664
Total		\$ 308,621
S94 developer contributions received to 30/06/2015		\$ 23,745

Source: IPART Local Infrastructure Benchmark Costs Final Report, April 2014

C3.18 ILLAWARRA HIGHWAY/WESTERN VALLEY INTERSECTION (Benefit Area)

Component	Cost
Civil Construction contract amount	\$ 845,071
Electrical	\$ 127,660
Landscaping	\$ 21,174
Telstra relocation	\$ 25,000
Design consultants civil	\$ 18,000
Design consultants landscaping	\$ 720
Design consultants electrical	\$ 2,053
Design consultants environmental	\$ 770
RTA design and supervision fees	\$ 25,525
Integral Energy design certification fees	\$ 950
Civil Contract (AS4000) admin and contractor supervision	\$ 25,530
Contingencies	\$ 42,254
Total	\$ 1,134,707
Indexed cost as at 30/06/2013	\$ 1,406,109
Indexed cost as at 30/06/2015	\$ 1,477,028
S94 developer contributions received to 30/06/2015	\$ 35,870

Source: BMD Constructions Pty Ltd, 2006

C3.19 CHURCH ST/SOPHIA ST INTERSECTION (Benefit Area)

Component		Cost
Roundabout		\$ 100,069
Investigation and Design	10%	\$ 10,007
Regional Adjustment Factor	1%	\$ 1,001
Contingency	30%	\$ 30,021
Total		\$ 141,098
S94 developer contributions received to 30/06/2015		\$ 12,838

Source: IPART Local Infrastructure Benchmark Costs Final Report, April 2014

C3.20 RIVULET CRESCENT EXTENSION (Benefit Area)

Component		Cost
Land acquisition	\$	878,000
Indexed cost as at 30/06/2015	\$	922,283
S94 developer contributions received to 30/06/2015	\$	221,259

Source: WT Partnership 20/9/12

C4.0 CAR PARKING: SUMMARY TABLE

Infrastructure Item	n Rate per space		Contributi	Developer ons received to /06/2015
C4.01 Precinct 1 - Warilla	\$	6,300	\$	98,003
C4.02 Precinct 2 - Shellharbour	\$	6,300	\$	5,496
C4.03 Precinct 3 - Blackbutt	\$	34,040	\$	294,527
C4.04 Precinct 4 - Oak Flats	\$	6,300	\$	18,002
C4.05 Precinct 5 - Albion Park Rail	\$	6,300	\$	-
C4.07 Precinct 7 - Albion Park	\$	6,300	\$	104,803

Source: IPART Local Infrastructure Benchmark Costs Final Report, April 2014

C5.0 DRAINAGE CATCHMENTS: SUMMARY TABLE

Infrastructure Item	Location (Precinct)	Levy Basis	Cost of Facility		CO	4 Developer ontribtuions eceived to 30/6/15
C5.01 Mount Terry Catchment	7	ВА	\$	1,011,000	\$	1,004,987
C5.02 Tarra Catchment	7	BA	\$	906,250	\$	746,115
C5.03 Cooback Catchment	7	BA	\$	4,262,360	\$	11,119
C5.04 Cooby Road Catchment	7	ВА	\$	4,529,638	\$	-
TOTAL			\$	10,709,248	\$	1,762,221

BA: Benefit Area

C5.01 MOUNT TERRY DRAINAGE CATCHMENT (Benefit Area)

Component	Cost
Grey St Bioretention	\$ 205,000
Ashburton Drive Wetland	\$ 185,000
Riparian Corridor Bioretention system (SC2 - 1)	\$ 56,000
Riparian Corridor Bioretention system (SC2 - 4)	\$ 65,000
Stubbs Rd Pond Wetland	\$ 500,000
Riparian Corridor Bioretention system (SC2 - 2)	\$ 82,500
Riparian Corridor Bioretention system (SC2 - 3)	\$ 92,000
Total	\$ 1,185,500
S94 net developer contributions received to 30/06/2015	\$ 1,004,987

Source: equatica 2013

C5.02 TARRA DRAINAGE CATCHMENT (Benefit Area)

Component		Cost
Billabong Bioretention Basin		\$ 625,000
Investigation and Design	10%	\$ 62,500
Project Management	5%	\$ 31,250
Contingency	30%	\$ 187,500
Sub Total		\$ 906,250
Total		\$ 906,250
S94 developer contributions received to 30/06/2015		\$ 746,115

Source: equatica 2013

C5.03 COOBACK DRAINAGE CATCHMENT (Benefit Area)

Component	Rate	Cost
Stormwater quantity management		\$ 2,100,000
Stormwater quality management		\$ 350,000
Land acquisition (for water quality pond)		\$ 500,000
Fees & charges	6%	\$ 177,000
Contingencies	5%	\$ 147,500
_Total		\$ 3,274,500
Indexed cost as at 30/06/2013		\$ 4,057,704
Indexed cost as at 30/06/2015		\$ 4,262,360
S94 developer contributions received to 30/06/2015		\$ 11,119

Source: Based on cost estimates provided by Forbes Rigby (2000)

C5.04 COOBY ROAD DRAINAGE CATCHMENT (Benefit Area)

Component	Unit	Qty		Rate	Cost
Creek Rehabilitation					
Cooby Road South catchment	m2	26,400	\$	15	\$ 396,000
Cooby Road North catchment	m2	10,990	\$	15	\$ 164,850
Yellow Rock creek	m2	106,700	\$	15	\$ 1,600,500
Culvert augmentation	ea	2	\$	50,000	\$ 100,000
Sub Total			·	,	\$ 2,261,350
End of Line Controls					
Vegetation buffer strip	m	480	\$	30	\$ 14,400
Detention basin	m2	2,500	\$	75	\$ 187,500
Sand filters	ea	3	\$	100,000	\$ 300,000
100kL Stormwater storage tanks	ea	3	\$	45,000	\$ 135,000
Pump and irrigation system for each tank	ea	3	\$	60,000	\$ 180,000
Sub total					\$ 816,900
Consultant study					\$ 35,417
Design costs					\$ 27,557
Fees & charges				6%	\$ 184,695
Contingencies				5%	\$ 153,913
Total					\$ 3,479,832
Indexed cost as at 30/06/2013					\$ 4,312,148
Indexed cost as at 30/06/2015					\$ 4,529,638
S94 developer contributions received to 30/0	06/2015				\$ -

Source: Storm Consulting Pty Ltd, March 2005

CONTRIBUTION RATES FOR COOBY RD	quivalent (rea (m2)	Total Cost (\$)		Actual Area (m2)	Ra	contribution te/Developed Area (\$/m2)
Residential	126,101.3	\$	3,510,863	194,002	\$	18.10
Rural Residential	36,591.8	\$	1,018,775	281,475	\$	3.62
TOTAL AREA	162,693.1	\$	4,529,638			
Rate/Equivalent Area (\$/m2)	\$ 27.84					

C6.0 SECTION 94 MANAGEMENT: SUMMARY TABLE

Infrastructure Item	Levy Basis	Cost of Facility	Section 94 contributions received to 30/06/2015		
C6.04 Section 94 Management	С	\$ 5,263,020	\$	2,792,749	
TOTAL		\$ 5,263,020	\$	2,792,749	

C: S94 Contributions levied throughout the City.

C6.04 SECTION 94 MANAGEMENT

Component	Cost
Past expenditure	\$ 2,739,572
Future Costs:	
Development Contributions Officer	\$ 959,742
Development Contributions Accountant	\$ 611,690
Development Contributions Assistant	\$ 352,016
Studies & Consultants	\$ 600,000
Sub total	\$ 2,523,448
Total	\$ 5,263,020
S94 developer contributions received to 30/06/2015	\$ 2,792,749

Source: Shellharbour Council, 2016

Appendix B Infrastructure Works Plan

INFRASTRUCTURE WORKS PLAN

Infrastructure Item	Delivery Year	Total \$	Council \$	Developer \$
C1.08 Shell Cove Sports Fields	2017/18 - 2018/19	\$ 2,775,656	\$ -	\$ 2,775,656
C1.10 Benson Basin Sports Fields	2019/20	\$ 2,576,962	\$ -	\$ 2,576,962
C1.11 City Centre Youth Recreation Facility	2020/21	\$ 1,051,487	\$ 728,155	\$ 323,332
C1.16 Croom - City West Sporting fields	2016/17 - 2017/18	\$ 736,923	\$ -	\$ 736,923
C1.18 Albion Oval Touch Football Fields	2021/22	\$ 393,744	\$ -	\$ 393,744
C1.20 Terry Reserve Soccer Fields	2017/18	\$ 622,893	\$ -	\$ 622,893
C1.21 Con O'Keefe Reserve	2021/22	\$ 79,850	\$ -	\$ 79,850
C1.22 Tullimbar Sports Fields	2019/20	\$ 1,971,717	\$ -	\$ 1,971,717
C1.25 Upgrade Existing Active Open Space	2017/18 - 2019/20	\$ 966,434	\$ -	\$ 966,434
C1.25 Upgrade Existing Active Open Space	2016/17-2017/18	\$ 235,787	\$ -	\$ 235,787
C1.26 Passive Open Space Embellishment	2015/16 - 2022/23	\$ 4,889,635	\$ -	\$ 4,889,635
C1.26 Passive Open Space Embellishment	2015/16 - 2022/23	\$ 1,900,841	\$ -	\$ 1,900,841
C1.28 Calderwood Sportsfields	VPA *	\$ 2,881,411	\$ -	\$ 2,881,411
C2.04 Shellharbour City Performance Theatre	2021/22 - 2022/23	\$ 9,857,377	\$ 5,713,336	\$ 4,144,041
C2.06 City Library	2015/16 - 2017/18	\$ 16,438,436	\$ 8,940,865	\$ 7,497,571
C2.08 Council Administration Offices	2015/16 - 2017/18	\$ 21,200,248	\$14,831,694	\$ 6,368,554
C2.09 Civic Auditorium	2015/16 - 2017/18	\$ 11,261,597	\$ 6,125,183	\$ 5,136,414
C2.16 Albion Park Library Extensions	2020/21	\$ 1,503,583	\$ -	\$ 1,503,583
C2.18 Tullimbar Community Centre	2022/23	\$ 623,970	\$ -	\$ 623,970
C2.19 Shell Cove Library & Community Centre	2017/18 - 2018/19	\$ 9,916,558	\$ 2,090,410	\$ 7,826,148
C2.20 Calderwood Community Centre	VPA *	\$ 931,175	\$ -	\$ 931,175
C3.02 City Centre Traffic Management	2015/16 - 2022/23	\$ 2,121,568	\$ -	\$ 2,121,568
C3.09 Albion Park By-Pass	2015/16 - 2027/28	\$ 14,683,874	\$ 4,842,742	\$ 9,841,132
C3.12 Tongarra Road/Church St intersection	2018/19	\$ 308,621	\$ 124,559	\$ 184,062
C3.19 Church St/Sophia St intersection	2018/19	\$ 141,098	\$ -	\$ 141,098
C3.20 Rivulet Crescent Extension	2026/27	\$ 922,283	\$ -	\$ 922,283
C5.01 Mount Terry Drainage Catchment	2016/17 - 2022/23	\$ 1,011,000	\$ -	\$ 1,011,000
C5.02 Tarra Drainage Catchment A	2016/17 - 2022/23	\$ 906,250	\$ -	\$ 906,250
C5.03 Cooback Drainage Catchment	2015/16 - 2022/23	\$ 4,262,360	\$ -	\$ 4,262,360
C5.04 Cooby Road Drainage Catchment	2016/17 - 2022/23	\$ 4,494,221	\$ -	\$ 4,494,221
Total Capital Works Projects		\$ 121,667,560	\$43,396,944	\$ 78,270,616
C6.04 Section 94 Management	2015/16 - 2022/23	\$ 2,523,448	\$ -	\$ 2,523,448
Total Section 94 Plan Expenditure		\$124,191,007	\$43,396,944	\$ 80,794,063

^{*} The timing for construction of this item is included in the provisions of the Calderwood Planning Agreement (VPA).

Appendix C

Shellharbour City Council

Shellharbour Open Space, Recreation and Community Facilities Needs Study Parks and Recreational Space Guidelines

Shellharbour March 2010







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. Introduction

This paper provides planning guidance for the design of parks and open spaces within the Shellharbour City Council local government area (LGA). The guidelines are designed to be used when creating new spaces or in the redevelopment of existing spaces, to ensure a consistent and transparent approach of open space provision, planning and design.

The guidelines are divided into six parts, being:

- A discussion of the general design principles to be applied to open space, parkland and sporting grounds in the Shellharbour LGA;
- Trends in open space and park planning in both general and LGA specific terms;
- Development of a Park Hierarchy;
- Development of a Sporting Ground Hierarchy;
- Identification of environmental and other open spaces; and
- Detailed design considerations for safety.

Developing clear guidelines for the design, delivery and maintenance of open space and parks provides Council, developers and the community with a clear set of expectations, which can be reviewed and updated when required.

1 Open Space and Sporting Grounds in Shellharbour

The existing network of open space and sporting grounds provides a range of opportunities to enjoy outdoor recreation and Shellharbour's unique landscape. The Shellharbour LGA enjoys a variety of spaces, from the beaches on the east linking through to Lake Illawarra to the north and the escarpment to the west. Within the urban areas, existing networks of parks and sporting grounds are complimented by natural

parkland areas such as Blackbutt Forest and the undulating rural hills to create a balance of structured and natural areas.

1.2 Council's Support for Open Space

Council supports the provision of a range of parks, sporting areas and recreational opportunities, fostering a healthy environment for all residents from our children to the elderly and for people with a disability. The mental and physical health of our community can be improved through engagement in recreational opportunities, which in turn fosters greater community well-being and community connectedness.

Council aims to create a system of parks and recreational spaces which provide for all sections of the community. Spaces should recognise and respect Indigenous and European history, and where appropriate include a range of public art and cultural elements appropriate to the type and context of the space.

Parks and recreational spaces provide affordable access and social interaction opportunities – from family gatherings to random interactions of parents and children. Within the urban environment, the importance of effective public open spaces as part of the community's social fabric should not be dismissed.

Sporting grounds, or active open spaces, provide the community with the opportunity to participate in organised recreational pursuits – creating opportunities for team building and social interaction. Council is also committed to the development of spaces that are sustainable and promote environmentally sensitive practices in line with Council's commitment to the *Illawarra Sustainability Roadmap*¹.

The Illawarra Sustainability Roadmap 2008 is a joint commitment of Shellharbour, Kiama and Wollongong Councils to bring sustainability to the region through a co-ordinated approach across all areas of local government.

3 Council's Role in Providing for Open Space

The *Local Government Act* 1993 provides councils with wide powers to carry out certain functions conferred or imposed on them by the Act or other legislation. In carrying out these functions councils must pursue a charter laid down in Section 8 of the Act. The charter is a fundamental set of principles to guide Councils' operations. It includes a number of principles that directly relate to the provision of public open space and community facilities. These include the efficient management of services and facilities, ecologically sustainable development (ESD) principles, the promotion of cultural diversity, planning for children and accountability for and effective management of public assets.

Chapter 6 Part 2 of the *Local Government Act* provides the legislative framework for the classification, use and management of public land as defined under the Act.

Councils must also comply with the provisions of the *Crown Lands Act* 1989 for the management of Crown lands under their control as Trust Manager or lands under their care, control and management. Principles for the management of Crown land are set down in Section 11 of the Crown Lands Act.

2. Background and Design Principles

The provision of public open space, parklands and sporting grounds is commonly initiated through the subdivision and development of land. Spaces can also be improved or redeveloped by Council as part of capital works programs. Within these processes, a number of overarching principles can be used to assist in establishing the basis for the provision of sustainable and effective parks and sporting grounds.

In addition to these design principles, life-cycle costing of open space areas, including the materials used, maintenance requirements and replacement costs should always be considered and an integral part of the planning process.

Table 1 identifies a number of these design principles.

Table 1: Park and Sporting Grounds Design Principles

	Issue	Principles
cion di	Safety	Design and maintain open spaces to ensure that public safety is commensurate to the level of use and targeted user groups ensuring the use of the Crime Prevention through Environmental Design principles ² (CPTED) of:
tion		▶ Surveillance
tion the state of		Access Control
tion		 Territorial Reinforcement
tion		Space/Activity Management
tion		Design of areas is to ensure the safe operation and the appropriate placement of embellishments; including separation of play and sports areas from traffic, safe play opportunity design and the safe design of water bodies.
	Access	Provide for safe and convenient access to open spaces within and between communities, and where possible co-locate open spaces with shops, schools and other community facilities to reduce parking requirements and minimise walking distances.
	Spatial Distribution	Provide equitable access to parks and open spaces to ensure that the type, location and quality of the infrastructure are appropriately distributed.

² Department of Urban Affairs and Planning 2001 – Crime Prevention and the assessment of development applications

Issue	Principles	Issue	Principles
Sustainability	Design, development and management of open space should respond to environmental values and conditions, community aspirations and economic considerations and must remain viable in the long term.	Clustering	Cluster/group sports fields and facilities in order to maximise flexibility of use and to minimise disruption to residential areas (noise, light spill and parking/ traffic issues and impacts). Locate parklands where possible adjacent to town
	In certain locations and as part of an integrated design, open space areas should provide for and assist in the detaining and cleansing of stormwater.		centres, schools and community areas to encourage greater access and shared use of parking.
Place Making	Locate open spaces to build on the special attributes of an area for long-term public amenity and connecting people with locations; for example an open-space network may include hilltops, mature trees, places with	Integration	Where possible, connections should be made between open space areas by the use of consistent vegetation, linked walkways or cycle routes within the local area. These areas should also be linked into the regional open space system where such opportunities exist.
	panoramic views, rocky outcrops and remnant native vegetation. Open spaces should also be designed to recognise	Variety	Provide a variety of open spaces to serve a range of different active and passive recreational roles to meet
	and incorporate local indigenous, cultural and historical attributes and characteristics of the place, as well as providing public art opportunities which may include:	These principles	These principles are applied to a park and sporting ground hierarchy in
	Interactive landscaped gardens;	Sections 4 and 5 respectively.	respectively.
	 Creative play opportunities; 	2.1 Cons	Consultation and Site Planning
	Standalone sculpture; or	Where parks or a within an existing	Where parks or sporting grounds are being developed or redeveloped within an existing community, consultation should be undertaken to
	Interactive signage.	ensure a sense	ensure a sense of ownership and place. Such consultation should be
Physical Attributes	Provide open space, which is physically suitable for its purpose and which will accommodate the nominated active and passive recreational uses. Attributes may be defined by slope, orientation, configuration and area of the land.	undertaken with well as with ager appropriately time the spaces.	undertaken with local residents, including children and young people, as well as with agencies or potential user groups. Consultation should be appropriately timed to ensure input to the design and embellishment of the spaces.
		III III SIAII CAS WIIA	ile parks of sporting grounds are being developed in

currently undeveloped areas, consultation with relevant areas of Council is encouraged to ensure local issues and information can be shared.

Within Council itself, multi-disciplinary consultation amongst professional staff is required where Council is seeking to provide a new or redeveloped space, or where major parks are being proposed by others. Such consultation between different areas of Council will provide a variety of perspectives and knowledge and skill gaps can be identified and procured where necessary.

In association with consultation, site analysis should be undertaken to determine the appropriate site design for issues such as solar orientation, wind protection, identification of desire lines and safety/traffic implications. Up-front site analysis will assist in the design process to ensure useability and comfort of park users is maintained during the ongoing use of the site.

Post Occupancy Surveys

Once a space is operational, it is important to ensure its use and maintenance is consistent with user needs and requirements. Post occupancy surveys can provide value information for Council that may lead to significant cost savings and overall improved useability of the spaces. Surveys may be undertaken by Council or as directed by Council as a condition on development consent.

Local Area and Open Space Trends

The design, implementation and establishment of parks and open spaces is a dynamic activity, with the requirements of both users and owners changing over time, reflecting recreation and leisure trends. These trends can be categorised into broader recreational and open space trends that have been highlighted through activities such as state-wide consultations³, and local trends which have been highlighted through localised consultation activities and other local observations⁴.

These trends are presented in this section as a precursor to the provision of design standards for parks in Sections 4 and sporting grounds in Section 5.

.1 Broad Trends in Leisure and Recreation Planning

Broad trends experienced across the State which are applicable to the Shellharbour LGA context include:

 Increased participation in formal recreational activities (sports), including a particular increase in female participation rates; For example, consultation sessions undertaken by SGS Economics and Planning on behalf of the State Government in March and April 2008 in review of the Department of Planning's 1992 Outdoor Recreation and Open Space Planning Guidelines for Local Government, and observations by GHD staff in undertaking various open space planning and Section 94 projects throughout NSW.

Consultation undertaken by GHD relating to the Shellharbour Open Space, Recreation and Community Facilities Needs Study, project evaluation and park appraisals by Family Services Illawarra for the Park & Play Illawarra Program and other observations from Shellharbour City Council and Child Friendly by Design Project staff/consultants.

- Changes in housing types, with larger houses on smaller lots, resulting in a general reduction in "backyard" space and recreational opportunities;
- Increased demand on informal recreation, particularly walking and cycling;
- Shifts in the popularity and expectations of various sports, suggesting a need for flexible spaces that can be modified over time;
- Increasing expectations of local government to provide high quality open spaces, including embellishments and maintenance;
- Increased pressure on Councils to provide after hours use of open spaces, particularly for sporting grounds and including car parking and lighting; and
- Increasing expectation for the provision of facilities that are well organised, comfortable, safe, high quality, and well provided for in terms of support/ancillary facilities (such as toilets, car parking and lighting).

3.2 Local Trends in Open Space Planning

Within the Shellharbour LGA the above trends can be further focused as follows:

- Defined areas of high growth with new open spaces being required which primarily target families with children;
- Existing established areas with limited growth opportunities, aging resident population and decreasing average household population, where open space areas may need to be reorientated to service an older population;
- An increasing demand for improved embellishments, particularly

among sporting groups, including requirements for fencing, shade, toilets, canteens and other embellishments; and

A tendency to under utilise local open space. Usage has been shown to significantly increase when organised activities are provided by others (such as in the case of the *Park & Play* project activities).

3 Trends within User Groups

An important aspect of open space design is to recognise and incorporate the special needs of targeted user groups. These groups can usually be identified through a combination of demographic analysis and community consultation. Once the targeted user group or groups are identified, the following trends and principles may assist the design process.

Design for Younger Children (0-4 years)

The provision of safe, challenging and appropriate play spaces and playgrounds for children must recognise the importance of play as an informal mechanism for the development of a child's physical, cognitive, emotional and intellectual skills.

Some basic principles $^{\rm 5}$ should be considered when developing parks and open spaces for younger children. These include:

Sensory richness: Initial contact with a park or playground is a sensory experience for younger children. Design should introduce different textures to feel and touch, with dappled light, colour, external outlooks, smells, shapes and wall displays can all contribute to extend the sensory experience. Inclusion of a vantage point (0.5 - 1.5m above ground) will provide an over viewing place;

Based on the Concepts Underpinning Play Analysis, by Prue Walsh and Play Environment Consulting 2005 (http://www.playconsulting.com/current.htm)

Variety and diversity: Younger children can move quickly from one activity to another as they explore a public space. Activity areas should be flexible to accommodate a range of activities and to challenge them to acquire additional skills. Open-ended activities not specifically linked to standard playground offerings can be made more (or even less) complicated to hold the children's interest.

These concepts can be translated into design features such as:

- Innovative play and appropriated sized climbing structures and motion apparatus which provide for sensory experiences such as reflective materials, climb throughs spaces and oversized games or activities;
- Ground manipulation to provide for grassed mounds, logs, water, sand and other natural materials and structures to allow creative play opportunities.

Design details should also ensure that play areas are fenced where necessary and shade structures are provided to protect younger children and their carers, particularly in summer.





Plate 1: Younger Children Design Examples

1: Photo-Steve Thompson, 2: Greater London Authority 2008

Design for Older Children (4-12)

Development of park spaces for older children should allow for a variety of experiences and challenges that suit the interests of this group. These needs include the provision of areas for sports related informal leisure activities such as ball games. These types of designs are also often family orientated, and may include sub-activities for adults or younger children.

Considerations for the design of open space for older children could include:

- Provision of linear pathways for riding bikes and skateboards;
- Informal tracks and mounds for BMX riding and active games;
- Adventure opportunities such as climbing structures; and
- Observation places and structures (children like to perch on top of play equipment and mounds).







Plate 2: Older Children Design Examples

1: Photo-Steve Thompson, 2: Greater London Authority 2008, 3: Photo-Steve Thompson

Design for Teenagers

Design of park spaces for teenagers is generally similar to those for older children, but should include areas for social interactions (hanging out) and to allow for provision of more formal recreation activities such as purpose designed BMX tracks and skateboard parks. Provision of hard-standing areas and structures for games such as tennis rebound walls, basketball/netball half courts or ring areas provide for increased informal active recreational opportunities.







Plate 3: Teenager Park Design Examples

1: Photo-Steve Thompson, 2&3: Greater London Authority 2008

Design for Adults

seating. Quality landscape embellishments and use of adjoining natural area and views can contribute to the provision of contemplative public adequate shelter from sun and wind, picnic facilities and comfortable Parks for adults should provide convenient comfortable spaces and spaces.

adjacent to children's play areas will result in increased usage of the park by young children. Options for recreation, such as fitness courses and exercise routes, could be used to provide alternatives to indoor fitness. The provision of larger spaces for the gathering of larger groups for Convenient seating and weather protection for parents and carers picnics and other social activities will also attract adult users.







1: Photo-Steve Thompson, 2: Photo-Warwick Francis

Design for Older People

gardens can be associated with groups such as community service clubs implemented within and co located with other passive open space areas Spaces for older people should provide for convenient and safe access and movement with a high level of safety and security. Historical or traditional design elements such as arbours or rotundas and more to ensure sites are suitable for multiple ages, for example, shaded formalised gardens should be considered, particularly where such and organisations. Spaces suitable for older people should be seating areas are provided around playground facilities. Design issues should generally be similar to those for adults with ease of walking, gentle slopes and the provision of shaded and protected areas for rest, relaxation and contemplation being very important.









Plate 5: Older People Park Design Examples 182: Photo- Warwick Francis, 3: Photo- Steve Thompson

Design for People with a Disability

needs of people with a disability both in regard to access to the park and it is essential that the design of public open space take into account the movement within the space and the use of the equipment and facilities.

parking, the provision of even walkway surfaces and gradients, and the Design should address issues such as the adequacy of accessible

detailing of kerbs, ramps, handrails, signage and facilities such as toilets.

Spaces suitable for people with a disability should be implemented within and co located with other passive open space areas to ensure dignified access to all areas, for example, playground facilities should include equipment and play opportunities for people of all abilities.

Park Hierarchy

The establishment of a hierarchy of passive open spaces, or parks, can be used to assist Council in the design, delivery and maintenance of these areas. A commonly used hierarchical system to establish the level of provision and location of parklands is based on local, district and citywide parks. These three levels then provide for specific requirements to suit the relative importance and complexity associated with the use of these types of parks.

This section utilises the principles for design discussed in Section 2, providing a practical application of the principles to a hierarchy of parks. Each level of parks in the hierarchy is also provided with broad objectives for those parks and the typical types of embellishments that can be expected.

A basic premise that should be applied to all levels of park is:

- That 90% of all residential lots should be within 400m safe walking distance to any open space area. This includes local, district and citywide parks, and sporting grounds with accessible entry points;
- That open space should adhere to the minimum size requirements as outlined in the Design Principles;
- That the 2.83 ha standard should be applied as a guide only to assist in determining the appropriate mix of open space areas.

The information that follows provides specific requirements for each level of park.

4.1 Local Parks

Local parks are generally located within residential areas and are designed to be easily accessible to local residents and workers by foot.

The objective of a local park is to:

 Provide public open space which primarily serves a local neighbourhood, being highly accessible for pedestrians within a local catchment with an appropriate level of embellishment suited to the local population.

4.1.1 Design Principles

As discussed in Section 2, the overarching design principles can be applied to local parks as described in Table 2:

Table 2: Local Park Design Principles

Principle	Application to Local Parks
Safety	Ensure a minimum of 50% of the frontage is orientated to a public street
	Buildings and structures to be orientated for passive surveillance of active park areas
	Avoid rear fences backing onto parks. Where avoidance is not possible, open form fencing is preferred.
	Ensure all park areas can be readily viewed from public streets and from surrounding active building frontages
	Fencing should only be introduced where necessary to protect the safety of children's play areas. In all instances such fencing should be see-through style fencing of no more than 1.2m in height
	Landscaping should be provided for weather protection and scenic amenity. Species selection and maintenance should ensure clear vision through landscaping between 0.6m and 1.8m in height above ground level
Access	Access pathways should follow natural desire lines and provide passive surveillance of active park areas
Spatial Distribution	90% of all residential lots should be within 400m safe walking distance to any open space area. Reference should be made to Council to ensure this

Principle	Application to Local Parks
	accessibility standard is achieved whilst ensuring a mix of park types is provided. The breakdown of the 2.83 ha standard can be applied to assist with determining an appropriate hierarchy (see 6. provision standards)
	In areas with significant levels of medium density residential development, additional local parks may be required to cater for increased use
Sustainability	Environmental attributes, such as drainage lines or significant trees, should be integrated into the park design
Place Making	Attributes of the site should be highlighted to provide character and place making for the park
Physical Attributes	The park area should be a minimum of 0.2 ha of useable space, free from environmental reserves
	Parks should be regular in shape with a minimum width of 40m
	Grassed open activity areas with a slope less than 1V:20H and greater than 1V:150H
	Maintained parkland with gradients no steeper than 1V:4H if grassed and 1V:3H where planted with vegetation (1V:6H preferred)
Clustering	Cluster local parks with other open space linkages or localised community facilities where possible
Integration	Local parks should form part of a linear park system or recreation corridor where possible with linked cycle and pedestrian paths

Embellishments 4.1.2

Embellishments within local parks could include a mix of the following:

- Walk / cycle pathways;
- Landscape improvements;
- Play opportunities;
- Signage; and
- Basic seating, bins, tables and shade structures.

Within local parks, lighting would generally not be provided.

A sample local park plan is provided in Figure 1.

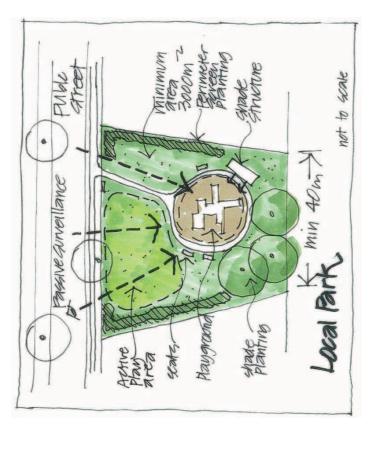


Figure 1: Sample Local Park Plan

District Parks 4.2

provided to cater for the more complex and varied recreational activities have a district rather than a local user catchment. Embellishments are developed to cater for a broad range of recreational opportunities and District parks are generally parks of substantial size which are well and for multiple user groups.

The objective of	The objective of a district park is to:	Princi
Provide a lar	Provide a larger public open space with more advanced	
embellishmer a district user	embellishments to provide for wide range of recreational activities on a district user catchment basis.	Acces
4.2.1 Design	Design Principles	
As discussed in applied to distric	As discussed in Section 2, the overarching design principles can be applied to district parks as described in Table 3:	
Table 3: District	Table 3: District Park Design Principles	
Principle	Application to District Parks	Spatia
Safety	Ensure that at least two of the park boundaries have public street frontages or back onto other public open space	7 2 2 3
	Buildings with active frontages to be orientated for passive surveillance of active park areas	
	Avoid rear fences backing onto parks. Where avoidance is not possible, open form fencing is preferred.	
	Ensure all park areas can be readily viewed from public streets and active building frontages	
	Fencing should only be introduced where necessary to protect the safety of children's play areas. In all instances such fencing should be see-through style fencing of no more than 1.2m in height	Sustai

f a district park is to:	Principle	Application to District Parks
arger public open space with more advanced		ground level
ents to provide for wide range of recreational activities on a catchment basis.	Access	Access to the park would be via pedestrian access and private vehicle. Car parking space should therefore be available. Kerbeide parking is preferred although
n Principles		performance criteria should be applied to determine the need for designated car parking space.
l Section 2, the overarching design principles can be ct parks as described in Table 3:		District parks are to have convenient vehicular and pedestrian access from the surrounding residential
st Park Design Principles		areas – access points should reflect such desired movement patterns
Application to District Parks	Spatial Distribution	90% of all residential lots should be within 400m safe
Ensure that at least two of the park boundaries have public street frontages or back onto other public open space		should be made to Council to ensure this accessibility standard is achieved whilst ensuring a mix of park types is provided. The breakdown of the 2.83 ha standard can
Buildings with active frontages to be orientated for passive surveillance of active park areas		be applied to assist with determining an appropriate hierarchy (see 6. <i>Provision Standards</i>)
Avoid rear fences backing onto parks. Where avoidance is not possible, open form fencing is preferred.		District parks should be located to cover the whole local government area with reasonable access to surrounding groupings of residential areas
Ensure all park areas can be readily viewed from public streets and active building frontages		Distribution of district parks should generally be around 800m from other similar parks to create a even
Fencing should only be introduced where necessary to		distribution
protect the safety of children's play areas. In all instances such fencing should be see-through style fencing of no more than 1.2m in height	Sustainability	Environmental attributes, such as landscape features, drainage lines or significant trees, should be integrated into the park design
Lighting of essential public circulation paths that are designed to be used at night.		Environmental education and interpretive opportunities should be developed with an appropriate signage.
Landscaping should be provided for weather protection		strategy
and scenic amenity. Species selection and		

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maintenance should ensure clear vision through landscaping between 0.6m and 1.8m in height above

Principle	Application to District Parks
Place Making	A district park should be located where possible in a physically prominent space or local landmark area in order to capitalise on special site attributes to maximise recreation opportunities and environmental values.
	District park sites should be physically well defined to develop special character and sense of place for the space
Physical Attributes	The park area should be a minimum area of 1.0 ha of useable space, free from environmental reserves
	District parks should generally be regular in shape and not less than 50m wide
	Linear parks such as foreshore reserves may be elongated subject to the minimum width indicated above
	Some variation in landform and landscape setting is desirable, however sufficient level land must be provided for informal recreation activities
Clustering	Integration with other district or higher level facilities should be incorporated where possible, for example community centres, district retail shops or sports grounds
Integration	District parks should form part of a linear series of parks or recreation corridor, enabling a start/end point for walking and cycling pathways
Variety	A range of infrastructure should be included in district parks to cater for a variety of use and recreational activities
	In certain instances district parks may provide specialised recreational opportunities to suit their natural attributes and setting

4.2.2 Embellishments

Embellishments within district parks could include a mix of the following:

- Walk / cycle pathways;
- High quality landscape improvements including planting, ground shaping and retaining walls as required;
- Playgrounds and like opportunities for a range of ages;
- Combined seating, tables, bins and shade structures / pavilions;
- Signage;
- Lighting (where designed for use at night);
- Barbeques;
- Toilets;
- Car parking;
- Structures and hard-standing areas to provide for informal sporting activities (eg. netball/basketball half court, tennis rebound wall etc) as appropriate to local needs; and
- Other structures required on a case-by-case basis including boardwalks, viewing platforms etc.

A sample district park plan is provided in Figure 2.



Figure 2: Sample District Park Plan

Citywide Parks

Citywide parks typically have a number of characteristics that make them significant recreational destinations for the entire local government area attractions and potential for flow on commercial benefits. These areas and surrounding regional areas. These characteristics include high Shellharbour, high tourism values, proximity to surrounding tourist visitation levels, significance for local and visitor perceptions of may also have high environmental values.

The objective of a citywide park is to:

resource for the entire LGA and potentially the surrounding region. Provide a large strategically located park which due to its unique setting and/or physical attributes provides a unique recreational Citywide parks typically have high levels of visitation and offer significant tourism opportunities.

Design Principles 4.3.1

As discussed in Section 2, the overarching design principles can be applied to citywide parks as described in Table 4:

Table 4: Citywide Park Design Principles

Application to Citywide Parks	Ensure high level of visibility with frontages and access from main roads and located in locations where high visibility is maintained
Principle	Safety

Buildings with active frontages to be orientated for passive surveillance of active park areas Avoid rear fences backing onto parks or provide for a consistent fencing type that is appropriate for the location and environmental conditions

necessary to protect the safety of children's play areas. In all instances such fencing should be see-through Internal fencing should only be introduced where style fencing of 1.0m in height

Lighting of key public walkway areas (where designed to be used at night)

Principle	Application to Citywide Parks	Principle	Application to Citywide Parks
		Place Making	A citywide park is typically located in a prominent area with the park capitalising on site attributes to maximise future recreation, environmental and tourism values
	landscaping between 0.6m and 1.8m in height above ground level		Areas should be well defined to develop character and sense of place for the space
Access	Access to the park would be via private vehicle as well as pedestrian access by nearby local residents – car		Public art could be utilised to reinforce the unique character and attributes of the park
	parking should therefore be provided Access roads and parking areas should be provided from higher level roads, avoiding enhinhan effects and		These attributes could include cultural, indigenous, historical and physical characteristics
	access through residential suburbs	Physical Attributes	The shape of a citywide park is typically a
	Wherever possible, access by public transport should be encouraged, through appropriately located bus stops or other infrastructure	0000	Where linkages or narrow areas are proposed, these should not be less than 50m wide
Spatial Distribution	90% of all residential lots should be within 400m safe walking distance to any open space area. Reference should be made to Council to ensure this accessibility standard is achieved whilst ensuring a mix of park	Clustering	Integration of local or district style parks adjacent to the citywide park is desirable, particularly where such areas can provide increased use and safety around the greater park area
	types is provided. The breakdown of the 2.83 ha standard can be applied to assist with determining an appropriate hierarchy (see 6. Provision Standards)		Other regional sporting, public and retail type facilities may also be located with the citywide park to capitalise on shared facilities such as parking
	Citywide parks are spatially distributed according to need and setting requirements, and no standard can be applied to their distribution	Integration	Citywide parks are typically the centrepieces of the integrated park system, with linear parks, footpaths and cycleways leading to these areas.
Sustainability	Environmental attributes, such as drainage lines, stands of significant vegetation, foreshore dunes and the like should be integrated into the park design	Variety	A range of infrastructure should be included in citywide parks to suit the environmental attributes recreational uses and expected visitation numbers and
	Environmental education and cultural interpretive opportunities should be developed with an appropriate signage strategy		demographics

4.3.2 Embellishments

Citywide parks are not intended to be developed to a specified standard but will be embellished to a level consistent with user expectations, their natural setting and the special requirements and opportunities provided by individual sites.

As a guide, citywide parks should receive as a minimum high quality landscaping, lighting of major public spaces, public artworks and interpretive signage together with an appropriate level of recreational opportunities, supporting amenities and user facilities.

4.4 Icon Parks

In some instances, parks will have a particularly special purpose or place within the community. These parks are can be within any level of the hierarchy and would attract a particular set of embellishments and maintenance standards commensurate to the proposed use of the park.

Local and district level parks with an iconic status may receive higher levels of design attention, embellishments and maintenance than is normally associated with the standard provision identified in the parks hierarchy.

5. Sporting Ground Hierarchy

In a similar fashion to the hierarchy of parks discussed in the previous section, a hierarchy of sporting grounds can also be used to assist Council in determining future design, delivery and maintenance of these areas. Within the sporting ground context, a two level approach is used with district and city wide sporting grounds.

1 District Sporting Grounds

District level sporting grounds tend to be grouped together to serve a number of adjacent residential areas and suburbs. While they also play a local role with "home teams", they are predominantly used by a number of teams on a regular basis (typically weekly during competition seasons). They tend to be strategically located to maximise visibility and to facilitate vehicular access as many users will be travelling to the site by

The objective of district level sporting grounds is to:

Provide sporting grounds that primarily serve a district catchment (group of suburbs) with an appropriate level of embellishment suited to regular use by a number of sporting groups. District sporting grounds are predominantly used for local level competitions defined by local sport associations and for visiting organisations for competition. They also provide local use benefits as well as venues for multiple-club training.

5.1.1 Design Principles

As discussed in Section 2, the overarching design principles can be applied to district sporting grounds as described in Table 5:

Table 5: District Sporting Ground Design Principles

Principle	Application to District Sporting Grounds
Safety	Ensure that the sporting ground has a complete frontage to a public road to facilitate passive surveillance
	Sporting fields and ancillary buildings are to be orientated for passive surveillance from surrounding streets, but being cognisant of sport requirements outside of fields (for example space behind goals for ball over-run and light spill)
	Fencing should also be introduced where necessary to protect fields and grounds from illegitimate access (eg. vehicle barriers) or to protect users or spectators from balls leaving the grounds into other areas
	Ensure the provision of lighting of playing areas and facilities, as well as circulation paths to provide for safe usage if proposed to be used at night
Access	Access to sporting grounds would typically be via private vehicle - car parking should therefore be provided
	Wherever possible, access by public transport should be encouraged, through appropriately located bus stops or other infrastructure
	Access should be from non-residential roads where possible to avoid traffic impacts on residential areas
Spatial Distribution	Distribution of district sporting grounds will be subject to sporting and community requirements of the LGA, but in new development areas should be conveniently accessible for residential areas while providing physical separation from dwellings

Principle	Application to District Sporting Grounds	Principle	Application to District Sporting Grounds
Sustainability	Design, development and management of sporting grounds should respond to environmental values and conditions, community needs and economic considerations and must remain viable in the long term	Clustering	Cluster/group sports fields and facilities in order to maximise flexibility of use and to minimise disruption to residential areas (noise, light spill and parking/ traffic issues and impacts)
	In certain locations and as part of an integrated design, sporting grounds should provide for and assist in the detaining and cleansing of stormwater runoff Turf and landscape planting species should be of low		While aimed at a target audience based on LGA and regional demographics, use of additional embellishments (for example pathways and seating) to facilitate broad use should be considered
Place	maintenance and have low water requirements Locate sporting grounds to ensure that special attributes of an area are protected and enhanced. Due to the	Integration	Where possible, make connections between open space areas and sporting grounds within the local open space network
0	extensive flat area often required for sporting grounds, initial site planning should avoid sensitive areas.	Variety	Designs should provide for a variety of seasonal sports uses, which will assist in providing year round use and
Physical Attributes	Land for district sportsgrounds should have the following attributes:		allow flexibility as trends change Use of clubhouses and ancillary facilities for other
	 Land should be regular in shape to maximise the number and layout of the playing fields 		community uses should also be considered where these can be used around sporting use times
	▶ Land should be relatively level, with individual fields having a slope no greater than 1V:66H, with Council preferring 1V:100H. The slope required will be determined by Council and will be based on the existing contours of the land and the proposed sport.	5.1.2 Embellishn Basic embellishments a mix of the following:	5.1.2 Embellishments Basic embellishments provided to district sporting grounds could include a mix of the following:
	 Playing fields should have a north-south orientation of the long axis 	Vehicular a	Vehicular access and parking; Sporting grounds and facilities to the appropriate standard for
	 Land should be fully serviced, with adequate drainage systems to ensure player safety and appropriate field conditions during rain events 	individual spanning by Amenities b	Individual sports at district level competition; Amenities building including referee room, change rooms, toilets,
	Adequate space should be made available for the provision of ancillary facilities and landscape buffers to minimise impacts of noise, floodlighting and traffic impacts on neighbouring properties	equipment s	equipment storage and canteen facilities; Specific training facilities such as cricket practice nets as appropriate;

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- Playing field lighting to an appropriate standard for the proposed use;
- Limited fencing and barriers to ensure safety of users and spectators;
- Spectator seating, bins, and signage; and
- Landscape improvements such as shade planting and wind protection.

2 Citywide Sporting Grounds

Citywide sporting grounds tend to be clustered together and located away from residential areas to maximise flexibility of use and to reduce the potential impacts of noise, vehicular movements, parking and lighting on local residents. Like district level sporting grounds they should be strategically located adjacent to major roads to maximise visibility and to facilitate accessibility, however citywide sporting grounds will tend to be utilised by senior teams and may therefore require additional embellishments such as change rooms and high level lighting.

The objective of citywide level sports fields is to:

Provide sporting grounds that primarily benefit the entire city regardless of physical location and to cater for competitions beyond one association or organisation in additional to providing district level benefits. They should also cater for competitions in selected sports at the regional and in some instances the State or National level. Embellishments are to be provided to a high standard appropriate to the needs or the regional and higher level competitions.

5.2.1 Design Principles

As discussed in Section 2, the overarching design principles can be applied to citywide sporting grounds as described in Table 6:

Access to sporting grounds would typically be via private Ensure that the sporting ground has a complete frontage outside of fields (for example space behind goals for ball Wherever possible, access by public transport should be to sporting and community requirements of the LGA and encouraged, through appropriately located bus stops or Fencing should also be introduced where necessary to Distribution of citywide sporting grounds will be subject protect fields and grounds from illegitimate access (eg. provide perimeter security to the grounds and to allow vehicle barriers) or to protect users or spectators from vehicle and bus/coach during larger events - car and facilities, as well as circulation paths and car parking orientated for passive surveillance from surrounding Ensure the provision of lighting of playing areas and possible to avoid traffic impacts on residential areas Access should be from non-residential roads where Fencing should be introduced in some instances to streets, but being cognisant of sport requirements to a public road to facilitate passive surveillance Sporting fields and ancillary buildings are to be Application to Citywide Sporting Grounds salls leaving the grounds into other areas ous/coach parking are therefore required Table 6: Citywide Sporting Ground Design Principles areas to allow for safe usage at night over-run and light spill) regional requirements the control of entry other infrastructure Distribution Principle Access Spatial Safety

- Specialist surfaces and facilities such as synthetic grass for hockey;
- Amenities building including referee room, change rooms, toilets, equipment storage and canteen facilities;
- Clubrooms;
- Higher standard field and where appropriate off-field lighting to an appropriate standard for the proposed use;
- Specific training facilities such as cricket practice nets as appropriate;
- Tiered spectator seating with some undercover seating,
 - Perimeter fencing to allow the ground to be secured;
- Scoreboard structures and signage;
- Bins, picnic and barbecue facilities; and
- Higher level landscape improvements such as footpaths, hardstanding areas, screening and shade planting.

6. Provision Standards

Standards of provision refer to the amount of open space to be required by Council measured by the amount of people in an area. In numerical terms, the provision of open space is generally referred to as an area (ha) per 1,000 residential persons. The most widely used approach to open space provision is the 2.83 hectares of open space per 1,000 residents, which was derived from early studies in the 1900's where British planners identified 7 acres per 1,000 residents as an appropriate standard. This standard has repeatedly been referred to by the NSW Land and Environment Court where determining open space matters.

Within the overall figure, further breakdown is required into the hierarchy as discussed in the previous sections. In the context of the Shellharbour LGA the following breakdown can be applied:

- 0.33 ha per 1,000 people for local parks;
- 0.5 ha per 1,000 people for district parks;
- 0.3 ha per 1,000 people for citywide parks; and
- 1.7 ha per 1,000 people for sporting grounds.

These standards are based on previously available NSW Department of Sport and Recreation figures which assumed a 60/40 split between active and passive recreation. These standards act as a guide, and if applied, can be used to consider open space requirements alongside a more qualitative needs based analysis. The design principles for open space including the 400m walkable distance to any open space area and the minium size requirements must be applied.

A review of the 1992 Outdoor Recreation and Open Space Planning Guidelines for Local Government, which is currently being undertaken by the NSW Department of Planning, will aim to provide a more consistent approach to these standards and review of these figures upon completion of the Department of Planning's review may therefore be necessary.

Other Open Spaces

Other open space areas are likely to be required or already exist within an integrated system which cannot be included in the above park and sporting ground hierarchy. These areas are typically smaller environmental areas, minor landscape improvements or service easements. These areas have been divided into two categories: Environmental Reserves, and Ancillary Reserves.

.1 Environmental Reserves

Environmental reserves are able to serve a range of purposes from riparian corridors and drainage management areas, to existing areas of mature vegetation or water front areas with existing flora or fauna attributes. Where environmental reserves ordinarily do not provide any recreational values they will generally not be counted towards the provision requirements for open space. Nevertheless, the provision of shared user pathways along environmental corridors to create linkages between areas is encouraged and these areas may then be considered as part of a greater open space system subject to agreement with Council.

7.1.1 Objectives

The objectives of environmental reserves are to:

- Provide public open space that are not specifically embellished and managed as parkland or sports grounds and that may include natural areas or areas that provide an informal landscape setting to adjacent urban development; and
- Manage, conserve and protect natural areas including native bushland and foreshore reserves (which include beaches and coastal

foreshores, estuaries, lakes, rivers, creeks and wetlands) and in particular areas that contain habitat for threatened species and or the presence of threatened species or endangered ecological communities or the existence of cultural heritage items.

Where environmental reserves are located as part of a larger urban park or sporting ground, appropriate safety principles should be applied in accordance with the appropriate level of the park hierarchy as discussed in earlier sections.

7.2 Ancillary Reserves

Ancillary reserves are residual public open spaces which include drainage and service easements, local infrastructure sites, various buffer areas such as bushfire asset protection zones (APZ) and similar setbacks for maintenance purposes, road side landscaping and other areas that do not have any specific recreational uses nor defined provision standards.

Like environmental reserves, ancillary reserves are not generally counted towards the provision of public open space as they may not provide any recreational values.

7.2.1 Objectives

The objective of ancillary reserves is to:

 Provide public open space that is not specifically embellished and managed as parkland or sports grounds, but are required to enable a range of uses that are important to the operations of Council or of benefit to the community.

8. Detailed Safety Considerations

Designing for the safe use of an open space is of particular importance in the open space design process. Recent auditing of parks in the Wollongong LGA⁶ has identified a number of significant findings in relation to park design and instances of safety and vandalism/anti-social behaviour. Significant findings from this audit which are relevant to Shellharbour and the appropriate design response to those issues are provided in Table 7 below.

Table 7: Significant Audit Finding and Design Response

Significant Finding	Design Response
Car Parking: Providing car parking within an open space area is a significant factor in a park being used for anti-social behaviour	Provision of car parking should only be considered for district and higher level parks and sports fields. For local parks and most district parks, on street parking is preferred.
Lighting: Lighting of open spaces has the potential to encourage use the space for illegitimate reasons, meaning the lighting is not an answer to discouraging anti-social behaviour	Lighting should only be used where an area is designed to be used for legitimate purposes at night or along essential pedestrian routes that are to be used at night. Controlled use of space at night through the closing of car parking areas should also be utilised to reinforce desired use patterns.
Size: The size of a park is	In larger parks, design elements

 $^{^{6}}$ Wollongong City Council: Community, Cultural and Library Services Division, Parks Safety Audit 2008

Significant Finding	Design Response
associated with the chances of illegitimate activities occurring, particularly in areas where passive surveillance is poor	should ensure that gathering spaces have high passive surveillance. The size of parks should reflect its use and need.
Night-time use: Extensive areas of open space that attract night-time use is problematic for surveillance and law enforcement	Where open space is designed to be used at night, they should be well defined in terms of their entry and exit points, smaller and on major roads where passive surveillance and easy access can be achieved.
Co-location: Parks co-located within business or town centre precincts are found to be underutilised in non-business times, leading to anti-social behaviour and crime	Where parks are to be co-located with community or business./retail areas, efforts should be made to ensure that other land uses (for example residential housing) also provide passive surveillance. Retail and businesses should provide a frontage to these open spaces, not "turn their backs" on such spaces.

8.1 Other Safety Considerations

Other safety considerations that must be addressed in the design of open space include:

- Provision of landscape planting that does not compromise visual surveillance. For example the use of trees with high canopies and low shrubs and hedges that allow good sightlines and the monitoring of children's play;
- The location and design of water bodies that allow a high level of

surveillance and provide safe conditions (for example the provision of a gently graded bank and shallow water); and

 Pedestrian and vehicular circulation should be separated where possible to ensure the safety of children and other open space users.
 All vehicular traffic areas should also be designed as shared spaces, cognisant of use by young children, families, prams and other similar users.

9. References

Department of Urban Affairs and Planning (2001) Crime Prevention and the assessment of development applications, NSW Government, Sydney

Greater London Authority (2008) Supplementary Planning Guidance: Provision for Children and Young People's Plan and Informal Recreation, Greater London Authority, London

Kiama Municipal Council, Shellharbour City Council and Wollongong City Council (2008) *Illawarra Sustainability Roadmap*

Wollongong City Council (2008) Parks Safety Audit 2008, Community, Cultural and Library Services Division, Wollongong