

**SECTION 94**

**CONTRIBUTIONS PLAN NO 7A**

**DRAINAGE, WATER QUALITY,  
OPEN SPACE, COMMUNITY  
FACILITIES AND ROADS**

**WARNERVALE DISTRICT**

**Wyong Shire Council  
September 2005**

**\$16.50 (GST inclusive)**  
**(GL 10.1050.000.741699.00000.00000)**

**SUMMARY OF CONTRIBUTIONS**  
**WARNERVALE EAST - WADALBA NORTH-WEST PRECINCTS**  
**AND NORTH WYONG INDUSTRIAL ESTATE**

Drainage			Water Quality		Open Space		Community Facilities		Roadworks	Other	
Sub-Catchment	Land \$/NDA	Works \$/NDA	Land \$/NDA	Works/\$NDA	Embellishment \$/DU	Land Acquisition \$/NDA	Construction \$/DU	Land Acquisition \$/NDA	Refer Separate Tables in Plan	Studies \$/NDA	Co-ordinator \$/NDA
A	9,531	21,799.95		29,504.27	5,709.28	147,704.44	7798.90	21,965		297.43	984.37
B	22,296	38,583.44	35,360	54,029.99	Wadalba North West	Wadalba North West	Comprises	Comprises			
C	20,544	34,756.21		30,262.12	Add \$6,596.03/NDA	Add \$20,083	Local Facilities 3,686.34	Local Facilities \$14,317			
D	12,724	30,219.49	26,250	27,602.88	for Environmental	for Environmental	Library 675.72	Library \$1,122			
E	12,056	39,349.07		71,197.58	Corridor	Corridor	Indoor Sports &	Indoor Sports &			
F	107,344	41,720.35		51,049.52		Plus additional corridor rate for certain properties	Aquatic Centre 3,436.84	Aquatic Centre \$6,526			
G	4,711	25,674.46		32,786.21							
H	3,185		37,216	38,928.04							
I	13,960		116,244	160,360.11							
South Wadalba		26,800.00									

(NDA is expressed in hectares and is the actual area on which a building (primarily a dwelling) could be sited and excludes land for trunk drainage, roads, open space, community facilities, noise buffers, undevelopable lands and certain major non-residential land uses.)

A **Dwelling Unit (DU)** is defined as a dwelling with an occupancy rate of 3.2 persons (equivalent to 1 additional lot in the release area). Where other than three bedroom dwellings are proposed, an equivalent number of dwelling units should be calculated and used as the basis for determining contributions for the embellishment of open space and the construction of community facilities.

Note: The above contribution rates are indexed to March 2005 using the CPI figure for the December 2004 quarter. The base CPI figure for these rates is 147.3.

## TABLE OF CONTENTS

	<b>Page No</b>
1.0 PURPOSE OF PLAN	1
2.0 RELATIONSHIP TO OTHER PLANS	1
3.0 AREA OF THE PLAN	1
4.0 DEVELOPMENT AND POPULATION PREDICTIONS	2
5.0 DEFINITIONS	4
6.0 ESTIMATED COSTS	4
7.0 TIMING OF WORKS	6
8.0 WORKS IN KIND	6
9.0 DEDICATION OF LAND	7
10.0 CONTRIBUTIONS PLAN DETAILS	9
10.1 Drainage and Water Quality Controls	9
10.2 Public Open Space	16
10.3 Community Facilities	27
10.3.1 <i>Local Community Facilities</i>	27
10.3.2 <i>Indoor Sports and Leisure Centre and Aquatic Centre</i>	29
10.3.3 <i>Central Library Facility</i>	30
10.4 Local Roads and Intersections	33
10.4.1 <i>Introduction</i>	33
10.4.2 <i>Nexus and Apportionment of Costs</i>	34
10.4.3 <i>Background Reports</i>	34
10.4.4 <i>R1 Warnervale/Wadalba Urban Release Area Local Roads</i>	35
10.4.5 <i>R2 Pollock Avenue Works</i>	39
10.4.6 <i>R3 Wyong Hospital</i>	40
10.4.7 <i>R4 North Wyong Industrial Estate</i>	41
10.4.8 <i>R5 Wider Warnervale District</i>	42
10.4.9 <i>Timing of Proposed Roadworks and Traffic Management Facilities</i>	46
10.5 Environmental Studies	49
10.6 Warnervale Project Co-ordinator	49
11.0 TIMING AND METHOD OF PAYMENT	50
Pooling of Funds	
12.0 METHOD OF UPDATING CONTRIBUTIONS	50
13.0 REVISION OF PLAN	51

**TABLE OF AMENDMENTS:**

<b>Amendment Number</b>	<b>Adopted by Council</b>	<b>Effective</b>
1	February 11 1998	February 19 1998
2	October 14 1998	October 22 1998
3	November 24 1999	November 26 1999
4	September 13 2000	N/A
5	September 27 2000	October 25 2000
6	November 28 2001	December 5 2001
7	March 13 2002	May 8 2002
8	June 23 2004	June 29 2004
9	September 14 2005	September 21 2005

## 1.0 PURPOSE OF PLAN

The purpose of this Contributions Plan is to determine the contribution rates and means of providing the following public services and amenities necessary as a consequence of proposed development within the Warnervale and Wadalba Urban Release Areas, the North Wyong Industrial Estate and the Wider Warnervale District:

- \* Roads and Intersection Improvements.
- \* Community Facilities.
- \* Public Open Space.
- \* Drainage and Water Quality Control.
- \* Studies and Warnervale Co-ordinator.

Contributions from the proposed development will not be used to address any backlog in the provision of works and services for the existing population, for development which has already obtained development consent at the date of preparation of this Plan, or for development not requiring consent.

This Plan has been prepared in accordance with the requirements of Section 94 of the Environmental Planning and Assessment Act.

## 2.0 RELATIONSHIP TO OTHER PLANS

This Plan should be read in conjunction with Wyong Local Environmental Plan 1991, relevant Development Control Plans and Council's Codes and Policies.

This Plan replaces any requirements and details related to Section 94 Contributions that exist within any Development Control Plan previously prepared by Council for this area.

This Plan takes precedence over any of Council's Codes and Policies where there are any inconsistencies in relation to Section 94 Contributions.

## 3.0 AREA OF THE PLAN

This Plan covers the wider Warnervale District that includes:

- Warnervale and Wadalba Urban Release Areas;
- North Wyong Industrial Estate;
- Proposed Warnervale Town Centre;
- Precinct 7A (Warnervale south);
- Precincts 6A and 6B (future employment uses);
- Precincts 11 and 13 (future employment uses);
- Warnervale Business Park;
- Warnervale Education Site;
- Warnervale Village;
- Bruce Crescent; and
- Other surrounding areas as shown on Figure 1.

The 2004 review of the plan expanded the area of the Plan to include land extending to the F3 Freeway and Precinct 6 as outlined in the map

The expanded area allows for the wider area to contribute to services and facilities such as major roads and intersections in the area. Contributions can be pooled from the wider area and prioritised within the Schedule of Works in the plan.

#### 4.0 DEVELOPMENT AND POPULATION PREDICTIONS

##### Warnervale East and Wadalba North-West

The following table gives details of previous and expected growth in residential population within the Warnervale East and Wadalba North-West Precincts. The projection period is only over 10 years for which the ultimate population of 20,387 is not reached. Existing uses in these areas are mainly rural and have been excluded from the following table:

##### POPULATION PREDICTIONS FOR THE WARNERVALE EAST/WADALBA NORTH-WEST PLANNING PRECINCTS

Year	Estimated Population	Estimated Number of Dwelling Units	Cumulative Estimated Total
1994-00	3,772	1,881	1,881
2001	4,904	500	2,381
2002	6,036	400	2,781
2003	7,168	400	3,181
2004	8,300	400	3,581
2005	9,432	400	3,981
2006	10,564	400	4,381
2007	11,524	400	4,781
2008	12,485	400	5,181
2009	13,445	400	5,581
2010	14,406	400	5,981
2011	15,366	390	6,371

**Note:** Population projections are indicative only and may differ from the actual lot generation during this period. Total development area and lot yields have been based on the adopted Development Control Plan for the release area and current development yields.

### NDA FOR WIDER WARNERVALE AREA

	Lot Yield (DU) @ 17.6 DU per ha NDA	Area Residential ha NDA	Total Area ha NDA	Predicted Population @ 3.2 persons per DU
Warnervale East-Wadalba North-West Release Area	6,371	362	405	20,387
Proposed Warnervale District Centre	N/A	N/A	79.30	N/A
Wadalba East Precinct 8B	N/A	N/A	80.40	N/A
Wadalba South Precinct 8C	N/A	N/A	82.30	N/A
Warnervale South Precinct 7A	N/A	N/A	56.28	N/A
Warnervale Village East	N/A	N/A	5.06	N/A
Warnervale Village North- West	N/A	N/A	19.04	N/A
Warnervale Village South- West	N/A	N/A	4.40	N/A
North Hakone Road – Employment Corridor	N/A	N/A	89.00	N/A
Precincts 11/13	N/A	N/A	88.40	N/A
Warnervale Supplier Park	N/A	N/A	30.28	N/A
Warnervale Airport	N/A	N/A	25.69	N/A
Warnervale Education Site	N/A	N/A	35.60	N/A
Bruce Crescent Residential	N/A	N/A	27.70	N/A
Bruce Crescent Employment	N/A	N/A	134.40	N/A
North Wyong Industrial Area	N/A	N/A	55.00	N/A
Grammar School	N/A	N/A	15.00	N/A
Catholic School	N/A	N/A	5.25	N/A
<b>TOTAL</b>			<b>1,183.10</b>	

## 5.0 DEFINITIONS

Contributions are based on the concept of Net Development Area (NDA) and a Dwelling Unit (DU). NDA is expressed in hectares and is the actual area on which a building (primarily a dwelling) could be sited and excludes land for trunk drainage, roads, open space, community facilities, noise buffers, un-developable lands and certain major non-residential land uses.

A Dwelling Unit (DU) is defined as a dwelling with an occupancy rate of 3.2 persons. Where other than three bedroom dwellings are proposed, an equivalent number of dwelling units should be calculated and used as the basis for determining contributions for the embellishment of open space and the construction of community facilities.

NDA is used as the basis for determining contributions for the remainder of items in this Plan.

## 6.0 ESTIMATED COSTS

The following points should be noted in regard to cost estimates contained in this Plan:

### Capital Costs

- \* The majority of the capital cost details in this Plan are based on 1993 costs and indexed to June 1997, June 1998, March 1999, June 2000, June 2001, September 2001 and December 2003. These costs will also be adjusted periodically as detailed in Clause 11. Costs for various works within the roadwork's component of the Wadalba North West Plan are based on June 1998 costs and indexed to June 2000 and then to December 2003. The 2004 Review of the plan also included a number of revised or new cost estimates based on further information available to Council at the time of preparing that review. The March 2005 review is mainly due to the revision of land values for the sporting fields and courts north of Hakone Rd, Woongarra. Refer to the relevant technical reports for details.

### Land Values

- Land values were previously based on September 1997 valuations with valuations for the drainage corridor and environmental corridor within Wadalba North West based on August 1998 valuations. A further valuation was obtained in July 1999 for that land adjoining the Kanwal Reservoirs that was zoned 7(a) Conservation. A revised valuation for non-flood affected land within Woongarra and Hamlyn Terrace was obtained in November 1999. A revised valuation for non-flood affected land within Wadalba North-West was obtained in March 2000. A revision of land values for all categories was undertaken in August 2001. For flood affected land within the release area, individual land valuations were prepared. An average cost/ha was then calculated. When dealing with credits/offsets values for these properties, the individual value assessed for the purposes of preparing this plan will be used.

A further review of all valuations was undertaken in June 2003 and 2004. The 2004 valuations also provided a projected land value to 2008. These projected land values have been used for land to be acquired in the future.

The land for sporting fields and courts north of Hakone Rd Woongarra has been re-valued in 2005 on the basis that it is not zoned residential; rather, it is zoned 10(a) investigations precinct zone.

The land values used in the plan are:

**LAND VALUE PROJECTIONS TO 2008**  
(Includes 5% for acquisition costs)

<b>Year</b>	<b>Residential \$/ha</b>	<b>Flood Plain \$/ha</b>	<b>Trunk Drainage \$/ha</b>	<b>Wadalba Environmental \$/ha</b>	<b>Wadalba Drainage \$/ha</b>	<b>Woongarra Sporting Fields &amp; Courts \$/ha</b>
2004	1,312,500	14,780	305,760	87,024	265,776	N/A
2005	1,470,000	15,076	342,451	97,467	297,669	523,124
2006	1,627,500	15,468	395,873	112,671	344,106	523,124
2007	1,995,000	15,746	438,628	124,840	381,269	541,163
2008	2,257,500	15,872	459,682	130,832	399,570	568,221

- \* Details of the cost estimates for works are contained in the relevant technical reports.
- \* All costs contained in this plan are exclusive of the goods and services tax.

## **7.0 TIMING OF WORKS**

Council is not able to bankroll works required as a consequence of development proposed under this Plan and will only be able to provide works and services when sufficient funds have been provided by way of contributions.

Priority spending of contributions may, however, be directed to particular items identified in this Plan and this has been considered in formulating works schedules. Refer attached Tables. Actual timing of the works will be dependent on development patterns and funds available from Section 94 contributions.

In relation to the provision of any Plan requirements, the years shown in the Plan are indicative only. The provision of any item will be dependent on the threshold criteria established for that item, and not necessarily any date shown in the Plan.

## **8.0 WORKS IN KIND**

Developer contributions made in accordance with this plan may be in the form of monetary payments, however alternative "in kind" contributions may be accepted if they are deemed by Council to represent an "equivalent material public benefit ". In the case of alternative payments being offered, a developer is required to make prior written representations to Council at which time the proposal may be considered.

Council encourages developers to provide works in kind in lieu of making cash contributions provided prior agreement is reached with Council.

Offsetting of contributions will not be automatic. Applications will be considered on their merits. Water and sewerage contributions will not be offset against contributions determined in accordance with this plan; rather they will be offset against the contributions determined in accordance with the Development Servicing Plan. Nor will Council offset contributions against community facilities where such a situation is likely to lead to a delay in the provision of these facilities to the detriment of the incoming population.

Where the value of a particular work in kind exceeds the contribution due for that work, this excess value may (subject to Council's concurrence) form a credit to the developer which will be repaid upon uncommitted contribution funds becoming available.

The value of a particular work will be the value assigned to it under this Contribution Plan.

It may be feasible to provide temporary measures to service initial stages of development in lieu of constructing major works up front. Such proposals will need to be assessed at the time of application and provision of such works will be the sole responsibility of the particular applicant, except where any part of them forms part of a work identified in this contribution plan (in which case that part will be treated as works in kind).

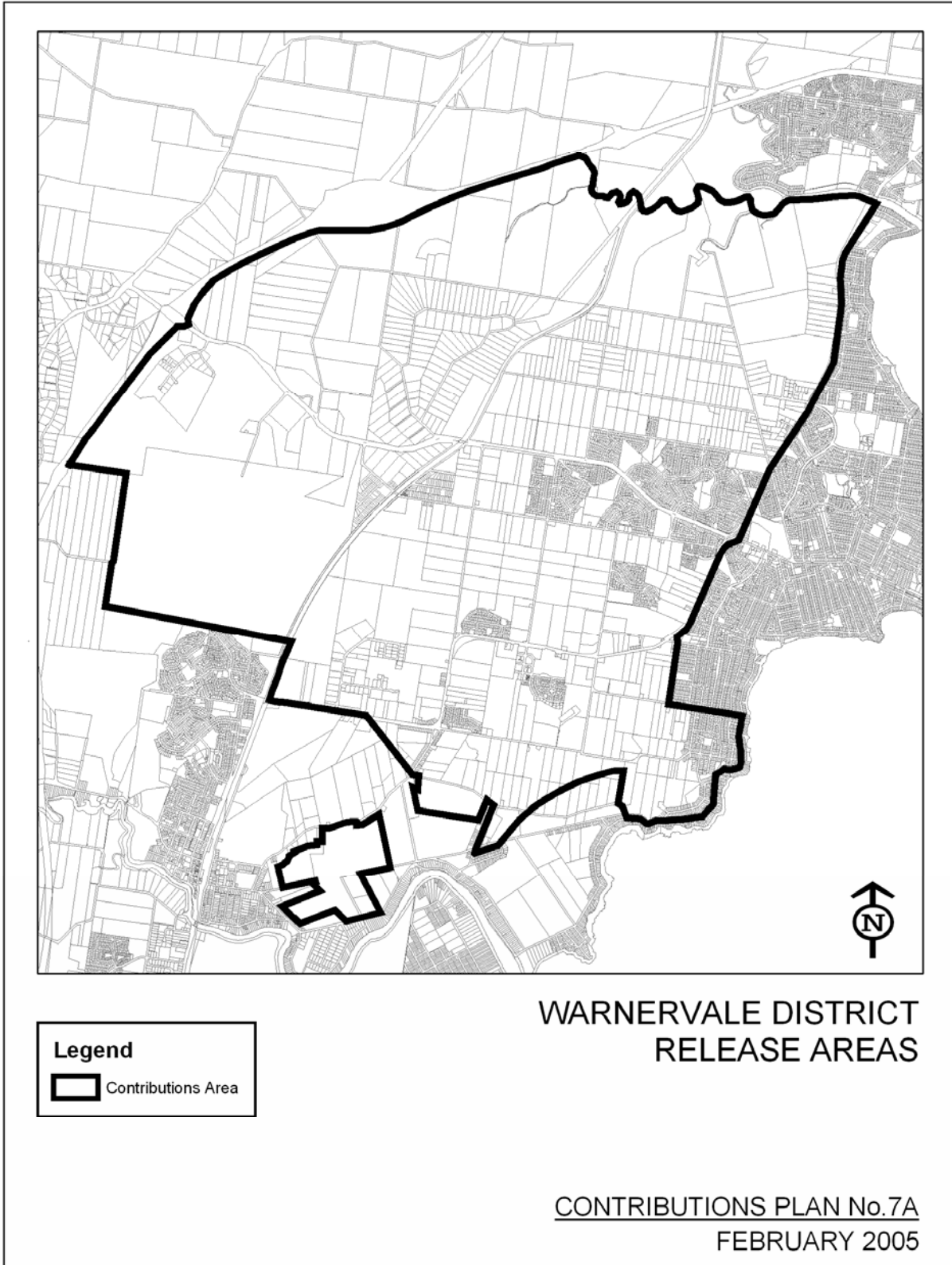
The cost of temporary works not recognised as works in kind cannot be offset against any other contributions required under this Plan.

## 9.0 DEDICATION OF LAND

Subject to prior agreement with Council, land may be dedicated in lieu of making a contribution towards the acquisition of land and in some cases; Council may require dedication of particular land as a condition of consent where the value of land dedicated exceeds the contribution due for provision of this particular type of land. This excess value may (subject to Council's concurrence) form a credit to the developer which will be repaid upon uncommitted contribution funds becoming available.

The value of a particular parcel of land will be the value assigned to it under this Contribution Plan.

Council will only accept land dedication where that land is of a suitable nature for the purpose for which it is being dedicated. All land to be transferred to Council is to be free of any improvements, structures or other impediments which would restrict or hinder its future use or development for the purposes for which it is being acquired, unless otherwise agreed by Council. The land is also to be transferred in an appropriate state, free of any refuse, contamination, or the like, unless otherwise agreed by Council.



**Legend**  
[Black Outline] Contributions Area

**WARNERVALE DISTRICT  
RELEASE AREAS**

CONTRIBUTIONS PLAN No.7A  
FEBRUARY 2005

## 10.0 CONTRIBUTIONS PLAN DETAILS

### 10.1 Drainage and Water Quality Controls

#### Introduction

This section considers the drainage and water quality control requirements generated as a result of the development in the area of this Plan.

#### Area of the Scheme

The area covered by this drainage scheme is that part of the district within the Porters Creek, Wyong River Catchment.

#### Nexus and Apportionment of Cost

##### General

The approach to establishing drainage requirements for this area has been:

- \* To carry out a flood study to establish current flood levels for floods with various probabilities of occurrence (eg. 20%, 2%, 1% etc.) based on existing levels of development.
- \* Use this study to predict future flood flows and levels for flood within the same probability of occurrence based on existing levels of development and development of existing zoned areas, but excluding the proposed development.
- \* Use the study to predict future flood flows and levels with full development of the catchment, including the proposed development;
- \* Identify drainage improvements necessary to handle the predicted flows;
- \* Identify water quality control facilities to maintain stormwater quality within the catchment; and
- \* Where necessary, apportion costs of improvements based on an area basis or, where runoff characteristics vary from area to area, or actual runoff flows from each area.

##### Report Detail

The following reports form the basis for this scheme:

- \* Trunk Drainage Investigation, Warnervale East 7B Stage 1, Flood Study, Willing and Partners, May 1990.
- \* Trunk Drainage Investigation, Warnervale East 7B, Stage 2, Floodplain Management Plan, Willing and Partners, May 1990.
- \* Wadalba West Release Area, Trunk Drainage Investigation, September 1991, Willing and Partners.
- \* Flood Drainage and Traffic Study, North Wyong, DISBOS P/L, April 1989.

- \* North Wyong Drainage Easement, Willing and Partners, March 1992.
- \* Designs and Pre-Construction Estimates for Warnervale Road Drainage Channel, Louisiana Road Culvert, Mataram Road Channel and Road culverts.
- \* Investigations undertaken by R A Young and Associates (1998 and 1999) related to the Wadalba North West Urban Release Area.
- \* Warnervale Floodplain Environmental Management Strategy - Kinhill engineers, February 1998 and 1999 investigations to identify water quality control facilities for the Warnervale Catchment.
- \* Warnervale Wetlands Concept Design Report - Kinhill Engineers, February 2000.
- \* Upstream of Louisiana Rd near Wyong Hospital, Preliminary Assessment, 2001 - Wyong Shire Council
- \* Warnervale Road Concepts and Floodway Concept Report, 2001 – Paterson Britton and Partners Pty Ltd
- \* Review of Woongarra Channel, 2003 – Azure
- \* draft Floodplain Assessment, Review of Kanwal and Wyongah Channels, 2003 - Azure

### **Scheme Details**

The overall scheme and sub-catchments for future urban development within the Warnervale/Wadalba Urban Release Area is included at the back of this plan. Existing water courses through urban areas are to be upgraded where required which will discharge to specified gross pollutant traps and water quality control facilities before reaching Porters Creek Swamp. The drainage corridor within Catchment F (Wadalba North-West) is to be embellished as a vegetated corridor maintaining a predominantly “natural” drainage regime.

The capital works relating to this Plan are shown on the enclosed Drainage Works Plan. The Contribution Plan only applies to those drainage and water quality control facilities identified within this Plan. Any additional drainage or water quality works will be at the cost of those benefiting. Contribution drainage works qualifying under this plan only include open channels whose capacity exceeds 10m<sup>3</sup> per second, culverts under existing roads and no piped drainage (except designated works within catchments E and F). The embellishment and acquisition of the drainage corridor for catchment F is also included within the drainage works identified within this plan.

Water quality control works within the plan have been revised in accordance with the study and recommendations contained within the Warnervale Floodplain Environmental Management Strategy prepared by Kinhill Pty Ltd. Amendments to the water quality scheme for land north of Mataram Road occurred following a review of the scheme for this area by J Wyndham Prince Pty Ltd. The water quality facilities included under this plan are to be provided to benefit the new urban development within the locality.

## Area of Contribution Plan

The area covered by the Scheme is shown on the drainage and water quality plans attached to this document and is divided into nine primary sub-catchments A-I. Future development within these catchments is planned as residential, commercial or, in the case of portions of Catchments G and F west of the Pacific Highway, industrial. The plan also covers a small proportion of the Wadalba South Catchment (refer drainage plan).

The provision of water quality works has generally been planned to correspond with the abovementioned catchments A-I. As such the size and location of the facilities addresses the demands generated within the corresponding catchments. Where appropriate, more specific sub-catchments have been determined.

## Apportionment of Costs

### Drainage

Each development in any catchment is to pay its proportional contribution for the drainage components planned within its catchment. Cost of land purchase for drainage reserves and landscaping costs are also included. Where more than one catchment contributes to a downstream structure the cost has been proportioned between contributing sub-catchments.

For drainage contributions, all built development is considered as contributing to increased runoff. Therefore residential, commercial, industrial, schools etc. pay their proportion of drainage costs on an area basis.

Therefore, Net Development Area is based on the gross area less the area for open space, community facilities, trunk drainage, noise buffers and roads. This is the NDA for each sub-catchment.

## Contribution Rates

Land

$$\text{Contribution} = \frac{\text{Cost of Floodplain Acquisition}}{\text{NDA for Sub-Catchment}}$$

### Drainage Land Acquisition Contributions

Catchment	NDA	Floodplain @ \$14,490	Downstream Floodplain @14,990	Channel Acquisition @ \$273,000 and \$237,300	Total	Contribution/NDA
A	54	\$53,759	\$171,264	\$289,632	\$514,656	\$9,531
B	112	\$22,362	\$1,030,480	\$1,444,312	\$2,497,154	\$22,296
C	108	\$174,300	\$544,376	\$1,500,110	\$2,218,786	\$20,544
D	105	\$136,636	\$415,928	\$783,460	\$1,336,023	\$12,724
E	32		\$258,120	\$127,672	\$385,791	\$12,056
F	48		\$358,432	\$4,794,059	\$5,152,491	\$107,344
G	64		\$200,624	\$100,901	\$301,525	\$4,711
H	106		\$337,635		\$337,635	\$3,185
I	17		\$237,323		\$237,323	\$13,960

Works

$$\text{Contribution} = \frac{\text{Cost of Drainage Works}}{\text{NDA for Sub-Catchment}}$$

### Drainage Works Contributions

Catchment	NDA	Works	Landscaping @ \$42/m	Total Cost of Drainage Works	Contribution/NDA	Indexed to March 2005
A	54	\$1,109,432	\$22,957	\$1,132,389	\$20,970	\$21,799.95
B	112	\$4,108,875	\$47,951	\$4,156,826	\$37,115	\$38,583.44
C	108	\$3,542,870	\$67,895	\$3,610,765	\$33,433	\$34,756.21
D	105	\$2,977,596	\$74,685	\$3,052,281	\$29,069	\$30,219.49
E	32	\$1,190,029	\$21,217	\$1,211,246	\$37,851	\$39,349.07
F	48	\$1,926,354		\$1,926,354	\$40,132	\$41,720.35
G	64	\$1,573,703	\$6,874	\$1,580,578	\$24,697	\$25,674.46
Wadalba South	10	\$268,000		\$268,000	\$26,800	\$27,860.69

### Water Quality Control

The Warnervale Floodplain Environmental Management Strategy undertaken by Kinhill Engineers on behalf of Council in February 1998 and 1999 provided a detailed investigation into water quality and the control facilities required within the Warnervale Catchment. Copies of the Strategy and resultant costings for the facilities are held by Council. Costings are contained in the Warnervale Wetlands Concept Design Report (February 2000).

As a result of this study a number of facilities have been proposed to reduce the impact of new development on water quality within the Warnervale catchment. Within the Warnervale East/Wadalba North-West release area the works have been proposed to address the demands generated within the drainage-sub catchments A-I.

Existing facilities within Catchments A, B1, B2 and C address demands generated by the part of that catchment and as such these areas have been excluded from the contribution plan.

Water quality sub-catchments and the general location of the water control artificial wetlands and associated works are shown on Figure Water Quality Control.

The contribution for these facilities is calculated as follows:

Works

$$= \frac{\text{Total Cost of Facilities Benefiting Catchment}}{\text{Total NDA of the Catchment Benefiting from these Facilities}}$$

Land

$$= \frac{\text{Total Cost of Acquisition}}{\text{Total NDA of the Catchment Benefiting from these Facilities}}$$

It should be noted that where the facilities are to be located within the floodplain the land acquisition costs have been included under the drainage contribution.

Council will meet the costs attributable to existing developments or consents which will benefit from the proposed water quality facilities where such development or consents did not include a condition for the water quality facilities.

### Water Quality Land Acquisition Contributions

Catchment	NDA	Acquisition of Land	Contribution/NDA
A	52		
B	75	\$2,652,012	\$35,360
C	85		
D	105	\$2,756,250	\$26,250
E	32		
F	48		
G	64		
H	106	\$3,944,890	\$37,216
I	17	\$1,976,140	\$116,244

### Water Quality Works Contributions

Catchment	NDA	Total Cost of Water Quality Works	Contribution/NDA	Indexed to March 2005
A	52	\$1,475,820	\$28,381	\$29,504.27
B	75	\$3,897,982	\$51,973	\$54,029.99
C	85	\$2,474,369	\$29,110	\$30,262.12
D	105	\$2,788,008	\$26,552	\$27,602.88
E	32	\$2,191,590	\$68,487	\$71,197.58
F	48	\$2,357,093	\$49,106	\$51,049.52
G	64	\$2,018,428	\$31,538	\$32,786.21
H	106	\$3,969,250	\$37,446	\$38,928.04
I	17	\$2,622,330	\$154,255	\$160,360.11

## Program for Works and Funding

An indicative time for the provisions of drainage works is shown in Table 1D (Schedule of Works) although improvements will be dictated by the following thresholds:

- \* Drainage channel progressively built as subdivision proceeds upstream.

Generally water quality controls should be the first drainage elements constructed in any sub-catchment. Channels are to be progressively extended from downstream in conjunction with development phasing.

## Land within Wadalba South Catchment

Part of the land within the Wadalba North West Urban Release Area drains to the south of Johns Road into the Tacoma Wetlands; a comprehensive drainage strategy for this catchment has not been adopted. In the interim, development within this area is required to maintain pre-development flows by the use of on-site stormwater facilities. In the longer term, culverts will be required to be constructed under Johns Road. The cost of these culverts is included within this contributions plan.

## Contribution Rate for Wadalba South Catchment

$$\begin{aligned} & \frac{\text{Total cost of Works}}{\text{NDA of land zoned for development}} \\ = & \frac{\$268,000}{10\text{ha NDA}} \\ = & \$26,800 \text{ per NDA} \end{aligned}$$

Indexed to March 2005 = \$27,860.69

## Land Requirements and Valuation Details

Warnervale East/Wadalba North-West are Greenfield areas and contained no existing drainage or water quality infrastructure to serve the future development. Therefore, all land required for drainage or water quality purposes, in accordance with the contributions plan has to be purchased under this Plan.

Land areas have been assessed at the rate of \$1,312,500 per hectare for residential potential in the Warnervale East/Wadalba North West area and \$14,780 for flood affected land. These figures include a margin of 5% added for acquisition costs and land valuations.

Further land values are also included for the Wadalba North West area for that land affected by the drainage/environmental corridor. This land has been valued at \$265,776 per hectare. This figure includes a margin of 5% added for acquisition costs and land valuations.

Land identified within formalised drainage channels has been valued at \$305,760 per hectare. This figure includes an additional 5% to cover acquisition costs etc.

Any dedication of identified drainage land will be offset against the Section 94 drainage costs in a similar manner to works in kind.

### Land Valuation

Function	Basis of Valuation	Location	Cost per Hectare
Drainage	Residential	Warnervale East (Hamlyn Terrace/Woongarra) and Wadalba	1,312,500
Drainage	Flood Affected	Warnervale-Wadalba	14,780
Drainage/Environmental Corridor	Environmental Protection/Residential	Wadalba North-West	265,776
Formalised Drainage Channels	Drainage	Warnervale-Wadalba	305,760

**Note:** The cost per hectare includes a 5% margin for acquisition costs and valuations.

## **10.2 Public Open Space**

### **Introduction**

This section considers the open space requirements generated as a result of the development in the area of this Plan.

### **Area of the Scheme**

For the purposes of Open Space Planning, the area is defined on the attached Open Space Plans and includes Warnervale East and Wadalba West LEP's.

The total net residential development area for open space is 362 hectares or approximately 6,371 development units.

### **Proposed Development**

The proposed development covers development of all of the Warnervale East/Wadalba West Urban Release areas and is predicted to yield a total population of 20,387 as shown in Clause 4.0 of this Plan.

### **Nexus and Apportionment of Cost**

#### **General**

The methodology adopted for this Plan is based on the Wyong Open Space Plan.

The approach to establishing requirements for this area has been:

- \* Identify any existing open space land and improvements;
- \* Identify requirements to service existing population and developments for which consent has already been issued;
- \* Determine any spare capacity for future development; and
- \* Determine the additional open space requirements needed to service future development being considered.

#### **Report Detail**

This Plan is based on the Warnervale/Wadalba Open Space Plan with details specific to this area prepared by Council's Landscape Planner, September 1991. Further amendments have been included following a review of the development concept for the Wadalba North West site in 1998 and the Wadalba rezoning in 1999 and following adoption of the Warnervale District Planning Strategy.

#### **Determination of Open Space Requirements**

The Wyong Open Space Plan has identified a minimum requirement for 3 hectares per thousand people for the Warnervale/Wadalba Urban Release Area. For a population growth of 20,387 people, a minimum area of 61.16 hectares would be required.

However, additional land may also be required to meet environmental conservation objectives. The demand for this type of open space is determined on a specific area basis and is exclusive of the 3 hectares of open space per 1,000 people minimum standard. The land required for cycleways and the buffer to industrial land off Mataram Road is also additional to the 3 hectare per 1,000 people minimum standard.

### Land Requirements and Valuation Details

Warnervale East/Wadalba West are greenfield areas and contain no existing open space facilities. Therefore, all land required for open space, purposes, in accordance with the contributions plan has to be purchased under this Plan.

Land areas are shown in the following Table 4 and land value has been assessed at the rate of \$1,312,500 (2004 value)per hectare for residential potential in the Warnervale East and Wadalba North West areas and \$14,780 (2004 value)for flood affected land. These figures include a margin of 5% added for acquisition costs and land valuations.

Further land values are also included for the Wadalba North West area for that land affected by the drainage/environmental corridor and that land within the environmental corridor. The respective values for these areas are \$265,776 (2004 value) per hectare and \$87,024 (2004 value) per hectare. These figures include a margin of 5% added for acquisition costs and land valuations.

Table 4 has been prepared on the basis of contributions in lieu of dedication of land. Any dedication of identified open space land will be offset against these costs in a similar manner to works in kind.

### Land Valuation

Function	Basis of Valuation	Location	Cost per Hectare
Open Space	Residential	Warnervale-East and Wadalba North-West	\$1,312,500 (2004 value)
Sporting fields and courts north of Hakone Rd Woongarra	10(a) investigations precinct zone	Lot 85A & 86A DP 22837 Hakone Rd Woongarra	\$523,124 (2005 value)
Open Space	Flood Affected	Warnervale-Wadalba	\$14,780 (2004 value)
Drainage/Environmental Corridor	Drainage/Environmental	Wadalba North-West	\$265,776 (2004 value)
Environmental Corridor	Environmental Protection	Wadalba North-West	\$87,024 (2004 value)

### Environmental Corridor

An environmental corridor is identified within the Wadalba North West Urban Release Area. A report by Lesryk Environmental Consultants (1998) recommended the incorporation of an environmental corridor within the urban release area due to the presence of Threatened Species on the site and the value of providing a fauna corridor through the site. The cost of the acquisition and embellishment of this corridor is included within this contributions plan. Other open space required to serve the urban release area population has not been compromised as a result of the requirement for this environmental area.

## Embellishment

The estimated costs of embellishment are summarised in Table 4.

Where open space land or the Wadalba North West environmental/drainage corridor lies adjacent to a future road, half the cost of constructing that road including land component is debited to the cost of providing open space facilities. This does not include internal subdivision roads to provide access to a limited number of allotments. The adjacent developer is responsible for constructing the other half of the road. The half road construction estimates are included on the following Table 4.

The cost of acquiring land for drainage purposes is included under Drainage. Also land required for noise buffers, adjacent to main roads, is the responsibility of the affected land owner (for details refer DCP 49).

## Addition to Wadalba Environmental Corridor

### Introduction

Concurrence has been received from the Department of Environmental Conservation to clear certain vegetation within the Wadalba release area. A condition of this concurrence is that an agreement must be in place to ensure that identified significant stands of vegetation are conserved. These significant stands of vegetation cover an area of 2.39 hectares. The area of vegetation that DEC has permitted to be cleared under this concurrence is 32.12 hectares.

### Area of the Scheme

The parcels identified on the plan titled "Addition to Wadalba Environmental Corridor" are to contribute to the scheme. A separate legal agreement will be in place before this amendment to the contributions plan is adopted by Council that covers the land owners of 28.3 hectares of the vegetation that can be cleared and as such, these parcels have not been included in the contributions scheme.

The specific parcels to contribute to this scheme that are not subject to the separate legal agreement are as follows:

Description	Area of Vegetation to be Cleared (Ha)
Lot 3 DP 536569 Johns Rd, Wadalba	0.6
Pt Lot 11 DP 519068 Pacific Hwy, Wadalba	1.27
Lot 13 DP 1064184 Pacific Hwy, Wadalba	1.25
Lot 1 DP 306356 Johns Rd, Wadalba	0.7
<b>Total</b>	<b>3.82</b>

### Nexus and Apportionment

As mentioned earlier, without a suitable agreement being in place covering the retention of certain significant stands of vegetation, DEC would not allow for the additional vegetation to be cleared. Therefore, the nexus between the clearing of the vegetation and the retention of the area covered by the scheme has been set. The costs for retaining the land containing the significant vegetation in public ownership is to be apportioned over the 32.12 hectares of land that can now be cleared under the DEC concurrence.

### Value of land

The value of the land to be retained is as follows:

Property Description	Rate/Ha	Area (Ha)	Amount
Lot 1 DP 376236	\$1,470,000	1.18	\$1,734,600.00
Lot 2602 DP 1043825	\$297,669	0.91	\$270,878.79
Lot 1 DP306056	\$297,669	0.2	\$59,533.80
Lot 102 DP 1019019	\$1,470,000	0.1	\$147,000
	<b>Total</b>	<b>2.39ha</b>	<b>\$2,212,013.00</b>

As mentioned above, a separate legal agreement covers the majority of the above total. Therefore, only 0.2842 hectares or \$263,072 is included in the contributions plan.

#### **Calculation of Contribution Rate**

The contribution for the addition to the environmental corridor will be as follows:

Contribution Rate = Value in plan/ Area of vegetation to be cleared

Contribution Rate = \$263,072/3.82 hectares

**Contribution Rate = \$68,867 per hectare**

TABLE 4

ITEM	QUANTITY	LAND VALUE	EMBELLISHMENT COST
<b>OPEN SPACE/RECREATION</b>			
Sporting Fields (3 fields)	15.28ha (total)	\$12,304,319	\$10,171,446
District Playing Fields*	10.9ha	\$6,781,767	\$5,026,073
Small Parks	11 x 0.50ha 1 x 0.72 ha 3 x 1.00ha 1 x 1.70ha	\$14,612,811	\$3,288,368
Large Parks	1 x 6.20ha 1 x 3.00ha	\$3,220,422	\$1,493,126
Semi-Natural Areas			
- Warnervale	25.50ha**	\$6,212,581	\$400,252
- Wadalba	4.575ha	\$861,628	\$130,873
Industrial Area Buffer	0.55ha***	\$1,241,625	\$61,694
Courts (3)	3.12ha (total)	\$4,584,449	\$3,961,632
Cycleways	4.15ha (total)****	\$3,649,406	\$1,721,715
Half Road Construction (fronting open space facilities)			\$7,098,134
Pedestrian underpass (Sparks Rd)			\$646,634
Pedestrian overpass (Pacific Hwy)			\$655,633
Pedestrian overpass (Sparks Rd)			\$655,633
Pedestrian bridge over floodplain (Sparks Rd)			\$192,235
Pacific Highway Pedestrian Facility (North of Johns Rd)			\$285,206
Pedestrian bridges (North of Mataram Rd)			\$36,003
Pedestrian overpass (Hiawatha Rd)			\$415,830
Cycleway bridge @ Dam Hotel			\$133,357
<b>TOTALS</b>		<b>\$53,469,009</b>	<b>\$36,373,847</b>

TABLE 4 CONT

ITEM	QUANTITY	LAND VALUE	EMBELLISHMENT COST
WADALBA ENVIRONMENTAL CORRIDOR *****	13.815ha	\$1,807,444	\$395,192 (embell) \$198,450 (half road)

**Notes:**

- \* 60% of cost apportioned to release area
- \*\* Includes 2.1 hectares valued at \$1,312,500 per hectare plus 5% for acquisition, valuation costs.
- \*\*\* That part of the Wadalba North West Environmental Corridor that, to meet environmental objectives, provides the surplus of open space provision in Warnervale East/Wadalba North West.
- \*\*\*\* Cycleway land and the buffer to the industrial land are in excess of the minimum 3 hectare/1,000 people of open space land
- \*\*\*\*\* Cost apportioned to Wadalba North West Area only.

### Apportionment of Costs

Future residential development is to pay a proportional cost of open space facilities in Warnervale East and Wadalba North West. Industrial, commercial and community developments are excluded from Open Space Contributions.

Contributions are split into two separate rates. For land purchased Net Residential Development Area (362ha) is used and Development Units (6,371 DU) are used for calculating embellishment cost rates.

The Wadalba North West Environmental Corridor is apportioned to that development within Wadalba North West only (90 hectares).

The District Level Playing Fields are apportioned to the residential development of the Wider Warnervale District.

### Contributions Rates

\* Land Purchase - Open Space

$$\begin{aligned} \text{Rate} &= \frac{\text{Total Cost of Open Space Land}}{\text{NDA}} \\ &= \frac{\$53,469,009}{362} \\ &= \$147,704.44/\text{NDA} \end{aligned}$$

\* Embellishment Rate - Open Space

$$\begin{aligned} &= \frac{\text{Total Cost of Open Space Embellishment}}{\text{DU}} \\ &= \frac{\$36,373,847}{6,371} \\ &= \$5,709.28/\text{DU} \end{aligned}$$

\* Environmental Corridor (Wadalba North West Only)

Land Purchase Rate

$$\begin{aligned} &= \frac{\text{Total Cost of Corridor Land}}{\text{NDA}} \\ &= \frac{\$1,807,444}{90} \\ &= \$20,083/\text{NDA} \end{aligned}$$

- \* Environmental Corridor (Wadalba North West Only)

Embellishment Rate

$$\begin{aligned}
 &= \frac{\text{Total Cost of Corridor Embellishment}}{\text{NDA}} \\
 &= \frac{\$593,643}{90} \\
 &= \$6,596.03/\text{NDA}
 \end{aligned}$$

NB: Embellishment Rate for Environmental Corridor related to NDA as level of embellishment is not derived from the number of additional dwelling units.

### **Program for Works and Funding**

An indicative time for the provision of each improvement is shown in Table 2P, although this may vary depending on the rate of development. Development of the various improvements will be dictated by the following thresholds:

- \* Small Developed Parks: To be provided early in the development process, generally by developers, in a manner that ensures residences are within 500 metres of a facility.
- \* Court Improvements: Provide one facility each time population reaches multiples of 5,000.
- \* Playing Fields: One facility each time population reaches multiples of 8,000.
- \* Cycleways: To be constructed in association with adjacent development.

Council has identified a number 'triggers' that may alter the timing of particular works including:

## Open Space - Priorities and Timing

### Wadalba Open Space Facilities

Ref	Facility	Priority	Ranking	Trigger	Works in Kind Potential
F3	Wadalba Playing Fields	High	1	School development and residential development within Wadalba	No
C3	Courts – Wadalba	High	2	Need to be considered in relation to joint venture arrangements with high/primary school	No
S4a	Small park in the area fronting Johns Road	High	3	With surrounding residential development	Yes
S1	Small park north of the Pacific Highway	Existing	NA	Completed	Yes
S2	Small park adjoining the environmental corridor	Medium	4	With surrounding residential development	Yes
S3	Small Park North of Johns Road and East of the Pacific Highway	Medium	5	With surrounding residential development	Yes
S4	Small park south of Johns Road	Low	6	With surrounding residential development	Yes
E1	Wadalba Environmental Corridor			With surrounding residential development	Yes

### Warnervale East (Hamlyn Terrace and Woongarra) Open Space Facilities

Ref	Facility	Priority	Ranking	Trigger	Works in Kind Potential
S6	Small park within Mataram Ridge	Existing	NA	NA	NA
S8	Small Park - The Oaks Estate	Existing	NA	NA	NA
S9	Small Park - The Oaks Estate	Existing	NA	NA	NA
S10	Small park - North of Warnervale Road	Existing	NA	NA	NA
S12	Small Park - south of Warnervale Road	High	1	Development in the vicinity of this small park has already occurred.	No
L1	Large Park - Mountain View Road	High	2		Yes
L2	Large park – East of Hiawatha Road	Medium		With surrounding residential development	Yes
S14	Small park located adjoining Wyong Hospital	High	3	With surrounding residential development	Yes
S7	Small Park south of Mataram Road	Medium	4	With surrounding residential development	Yes
S11	Small Park on the corner of Louisiana and Warnervale Roads	Medium	5	With surrounding development however the development of other small parks in this area can cater for the progressive development of this area until full development	Yes
S5	Small Park North of Mataram Road	Medium	6	In association with the development of the school/community centre	No
F1	Fields - Hakone Road	Medium	7	Availability of funds + school development	No
C1	Courts - Hakone Road	Medium	8	Availability of funds + school development	No
F2	Fields - Louisiana Road	Medium	9	Availability of funds	No
C2	Courts - Louisiana Road	Medium	10	Availability of funds	No
S13	Small Park - West of Louisiana Road	Low	11	With surrounding residential development	Yes
S15	Small Park - West of Louisiana Road	Low	12	With surrounding residential development	Yes

### Other Open Space Facilities

Ref	Facility	Priority	Ranking	Trigger	Works in Kind Potential
SN3	Semi-natural area - North of Warnervale Road	Low	13	As area becomes available for dedication - no urgency for the land to come into Council ownership as long as it is appropriately managed as a semi-natural area. Majority of land has already been dedicated as part of the adjoining subdivisions	Yes
SN2	Semi Natural North of Sparks Road	Low	14	As area becomes available for dedication - no urgency for the land to come into Council ownership as long as it is appropriately managed as a semi-natural area. Majority of land is likely to be dedicated as part of the adjoining subdivisions	Yes
SN5	Semi-natural area north of Wyong Hospital	Low	15	As area becomes available for dedication - no urgency for the land to come into Council ownership as long as it is appropriately managed as a semi-natural area. Majority of land is likely to be dedicated as part of the adjoining subdivisions	Yes
SN4	Semi Natural area -East of Minnesota Road	Low	16	As area becomes available for dedication - no urgency for the land to come into Council ownership as long as it is appropriately managed as a semi-natural area. Majority of land is likely to be dedicated as part of the adjoining subdivisions	Part only

## 10.3 Community Facilities

### 10.3.1 Local Community Facilities

#### Introduction

This section considers the human service requirements generated as a result of the development in the area shown by the Plan

#### General

The approach to establishing human service requirements for this area has been:

- \* Identify any existing community facilities and associated land;
- \* Identify requirements to service existing population, future single dwelling development on existing allotments for which no contribution can be sought and developments for which consent has already been issued;
- \* From the above, determine if there is any spare capacity for future development; and
- \* Determine the additional community facilities and land requirements, if any, needed to service the future development being considered.

#### Guidelines

A report has been prepared by the Strategic Planning Department to review the Strategic Social Planning Framework and Guidelines used by Council in the planning, provision and development of community facilities.

The report titled 'Guidelines For The Planning and Provision of Community Facilities In Wyong Shire' - May 2000 recommends the following amounts to be used as the basis for determining requirements for a baseline level of provision:

1	Land for Community Facilities:	7.2m <sup>2</sup> per DU
2	Community Facilities Floor Space:	1.15m <sup>2</sup> per DU

#### Report Details

This Plan is also based on Warnervale/Wadalba Human Services Plan (1990). Assessment of existing services indicates that there is no spare capacity in these facilities to meet the need generated by the future development considered in the Plan. Therefore, additional community land and facilities will need to be provided to cater for the proposed population increase of 20,387 (6,371 DU) within the area shown by the Plan.

Applying the above requirement for floor space to the remaining development gives a figure 4,083m<sup>2</sup>. Current contributions on hand and amounts committed in development consents issued prior to preparation of this plan will enable the floor space to be increased by an additional 1,462m<sup>2</sup> making a total of 5,545m<sup>2</sup> of floor space to be constructed.

These facilities comprise:

- \* Children's facilities
- \* Youth facilities
- \* Neighbourhood centres

and would occupy 3.28 hectares.

1.96 hectares of this land is identified on the development concept plans for the Warnervale (Hamlyn Terrace and Woongarah) and the Wadalba North West Urban Release Areas including:

### Community Facilities

Map Ref	Description	Approx Site Area	Assumed year of acquisition	Land Rate/ha	Total Cost Land Acquisition
CF 1	Wadalba Local Centre Facility	2,000m <sup>2</sup>	2005	\$1,470,000	\$294,000
CF 2	Wadalba adjoining playing field sites	1,600m <sup>2</sup>	Existing	\$420,000	\$67,200
CF 3	Local Centre Hamlyn Terrace	1 ha	2005	\$1,470,000	\$1,470,000
CF 4	Local Centre Woongarah	6,000m <sup>2</sup>	2004	\$1,312,500	\$787,500
<b>Total</b>		<b>1.96 ha</b>			<b>\$2,618,700</b>

The remainder of this land, i.e. 1.32 hectares is to be located in conjunction with the proposed District Centre at Warnervale (at a land rate of \$1,627,500 (50%) and \$2,257,500 (50%) per hectare land acquisition equates to \$2,564,100). Further contributions will also be collected from the wider Warnervale/Wadalba Urban Release Area to fund district level community facilities in conjunction with the Warnervale Centre.

The local community facilities will be built on those sites identified in the Warnervale East/Wadalba North-West Development Control Plan.

### Apportionment of Costs

Cost will be shared by all future residential development in the area on a proportional basis.

As the facilities are to be provided to meet the demands generated by the Warnervale East/Wadalba North-West release area, no apportionment of costs to other users is warranted.

### Baseline Community Facilities - Works

The contribution rate has been calculated by dividing the cost of constructing the facilities by the remaining DU.

$$\text{Cost} = 4,083\text{m}^2 @ \$2,412/\text{m}^2 = \$9,848,196$$

$$\text{Contribution} = \text{Cost}/\text{remaining DU (December 2003 Land Monitor)}$$

$$= \frac{\$9,848,196}{2,777}$$

$$= \$3,546/\text{DU}$$

$$\text{Indexed to March 2005} = \$3,686.34$$

### Baseline Community Facilities - Land

The contribution rate has been calculated as above.

$$\text{Cost} = \$2,618,700 + \$2,564,100 = \$5,182,800$$

$$= \frac{\$5,182,800}{362}$$

$$= \$14,317/\text{NDA}$$

#### Note:

- \* Capital works estimate includes half road construction, building construction, landscaping, site works, fitout and design.

### Program for Works and Funding

#### Land

Table 3C shows an indicative time for land acquisition but the actual time will vary depending on rate of development.

#### Facilities

An indicative time for the provision of each facility is shown in Table 3C. The actual time for provision of the various facilities will depend on the rate of development, the demographic profile of the incoming community and their identified needs.

### 10.3.2 Indoor Sports and Leisure Centre and Aquatic Centre

In addition to the above, Council has identified a requirement for an Indoor Sports and Leisure Centre and Aquatic Centre to service the Warnervale area.

The area shown by the Plan is to contribute on a proportional basis towards the provision of a 2,600 square metre indoor recreation complex and an aquatic centre on 3 hectares of land.

The catchment for the indoor sports facility is estimated to be in the order of 30,000 persons based on similar facilities provided within other developing local government areas. A similar assessment of comparable catchment areas for aquatic facilities has provided a catchment of 20,000 to 25,000 for an indoor 25 metre pool and associated facilities.

The aquatic centre will include an indoor pool, splash pool and associated facilities, whilst the indoor sports facility will include such facilities as a basketball court, gymnasium and the like. The actual facilities provided will depend on a needs assessment prior to construction.

These facilities will be located on land bounded by Sparks Road, Hiawatha Road and Hakone Road.

The population within the area shown by the Contributions Plan will contribute 85% of the total cost of providing the indoor sports centre and 72% of the total cost of providing the aquatic centre on the basis of the release area population proportional to the population that will benefit from the facility. The remainder of the costs will be borne by future new development in the greater Warnervale area which will also benefit from the facilities.

#### Apportionment of Costs

Item	Cost		Apportionment		Contribution Rates	
	Land	Capital Works	Release Area	Other New Development	Land per ha NDA	Capital Works per DU
<b>Indoor Sports Centre</b>	\$2,362,500	\$3,599,262	\$3,059,373 (85%)	\$539,889 (15%)	\$6,526	\$480 Indexed to Mar 03 \$499
<b>Aquatic Centre</b>	-	\$25,000,000	\$18,000,000 (72%)	\$0	-	\$2,826 Indexed to Mar 05 \$2,937.84
<b>Total</b>	\$2,362,500	\$28,599,262	\$21,059,373	\$539,889	\$6,526	\$3,306 Indexed to Mar 05 \$3,436.84

The Indoor Recreation Centre and the Aquatic Centre are to be provided by staged construction no earlier than when population reaches 10,000 with the ultimate facilities to be constructed when population reaches 30,000.

#### 10.3.3 Central Library Facility

Council has identified a requirement for a Central Library Facility to service the Warnervale/Wadalba area. Initially, a facility will be located at Lake Haven Shopping Centre and in the longer term at Warnervale District Centre.

The level of provision of library facilities and book stock to meet the demands of future development has been determined utilising the relevant State Library Standards of New South Wales and the applicable Australian Standards.

This standard provides for minimum standards for both floor space and book stock to meet the demands of additional population.

- \* The State Library standard for library buildings is as follows:

For library service areas where the population is between 35,000 and 65,000 persons, a minimum of 38m<sup>2</sup> per 1000 persons is to be provided in accordance with the New South Wales State Library Standard.

- \* The Australian standard for library stock is to provide at least two items for every person which the library will service.

### **Calculation of Contribution**

#### **Library Buildings**

The cost for library buildings has been calculated using the "Building Cost Guide" for Commercial and Industrial Development prepared by Rawlinsons - 1996 edition.

The cost consists of the following components:

Library in a Suburban Location (Air Condition - over 400m<sup>2</sup>) include: Sprinkler System, Carparking, Fit out, Legal & Professional Fees (6%), Landscaping (7%) and Contingencies (10%).

**Sub Total** **\$2,184.00/m<sup>2</sup>**

Indexation to December 2003 \$2,449.00/m<sup>2</sup>

The contribution for library buildings is calculated using the following formula:

= (persons per DU/1,000 additional persons) x (38m<sup>2</sup>) x (cost per m<sup>2</sup>)

=  $\frac{3.2}{1,000 \text{ additional persons}}$  x 38m<sup>2</sup> x \$2,449 = \$298 per DU

Indexed to March 2005 = \$309.79 per DU

#### **Library Stock**

The average cost for library stock is \$49.62 per item (Source: Wyong Shire Council - Current Costs - 1997).

The contribution for library stock is calculated using the following formula:

@ 2 items per person

Contribution per DU = 2 x 3.2 x \$49.91

= \$319.42 per DU

**Indexed to December 2003 = \$352 per DU**

**Indexed to March 2005 = \$365.93 per DU**

#### **Library Land Requirement**

The library facility for the Warnervale/Wadalba area is to be located on 5,000 square metres of land in Warnervale.

### Apportionment of Costs

Facility	Land Cost – Assumed acquisition 2008+	Apportionment		Contribution Rate
		Release Area	Other Future Development	Per ha NDA
Central Library Facility	\$1,128,750	\$406,350 (36%)	\$722,400 (64%)	\$1,122 per ha NDA

Therefore the total contributions for library facilities are as follows:

### Apportionment of Costs

Component	\$ per DU	\$ per ha NDA
Floor space	\$309	-
Library Stock	\$365.93	-
Land	-	\$1,122
<b>Total</b>	<b>\$675.72</b>	<b>\$1,122</b>

It should be noted that the wider Warnervale release area will also contribute to the library facilities. Any land within the Wider Warnervale District that is identified for residential but is outside of the Warnervale East and Wadalba North West Urban Release Areas, will also contribute to the library and indoor sports centre on a proportional basis.

Community Facilities Contributions for Residential Development (including aged/disabled facilities) for areas within the Wider Warnervale District (excluding the Warnervale East and Wadalba North West Urban Release Areas) will be apportioned on a similar basis to that outlined above.

### Apportionment of Costs

Facility	Contribution per DU	Contribution per NDA
Library Floor Space	\$309.79	
Library Stock	\$365.93	
Library Land		\$1,122
Indoor Sports Centre Land		\$6,526
Indoor Sports Centre Construction	\$499	
<b>Total</b>	<b>\$1,174.72</b>	<b>\$7,648</b>

## 10.4 Local Roads and Intersections

### 10.4.1 Introduction

This section considers the road and intersection requirements generated as a result of the development within the Greater Warnervale District. The contributions towards roads have been categorised into:

- Warnervale/Wadalba Urban Release Areas
- Pollock Avenue Works
- Wyong Hospital
- North Wyong Industrial Area
- Greater Warnervale District

#### Areas of Scheme

##### **R1 Warnervale/Wadalba Area**

For the purposes of Road Contributions for the Warnervale/Wadalba Release Area this Plan includes Warnervale/Wadalba precincts between the railway line and Pacific Highway (excluding Warnervale Village) and Hakone Road to the north and Jenson Road to the south. This area has a Net Development Area of 538 hectares.

##### **R2 Pollock Avenue Works**

For contributions associated with works for the upgrading of the Pacific Highway, Johns Road, Pollock Avenue Intersection, the plan extends to Zone 10 and the Lakeside Development. The Lakeside development is also to contribute to the upgrading of Pollock Avenue.

##### **R3 Wyong Hospital**

The plan includes contributions towards the intersection upgrade of the Pacific Highway and Craigie Avenue fronting the Wyong Hospital.

##### **R4 North Wyong Industrial Area**

The plan also includes contributions towards the road infrastructure required to meet the demands of development within the North Wyong Industrial area. This area has a net development area of 62 hectares.

##### **R5 Greater Warnervale District**

For the purposes of road contributions within the Greater Warnervale Release Area this plan includes precincts between the Freeway and Pacific Highway extending north to Wallarah Creek and south to Jensen Road (excluding the Warnervale/Wadalba Area). This area has a Net Development Area of 616 hectares.

### **10.4.2 Nexus and Apportionment of Costs**

#### **General**

The approach to establishing road and intersection requirements for this area has been:

- \* Identify existing road hierarchy and traffic flows;
- \* Predict future road hierarchy and traffic flows generated by all development including the proposed development in the plan area;
- \* Identify road and intersection improvements necessary to cater for these predicted flows;
- \* Identify additional road and intersection improvements necessary to cater for these predicted flows; and
- \* Apportion costs of improvements based on traffic flows.

### **10.4.3 Background Reports**

Contributions have been assessed based on the following reports:

- \* Wyong Shire Road Hierarchy and Transportation Study, Pak-Poy and Kneebone, April 1989.
- \* Tranplan Strategic Traffic Modelling for Warnervale/Wadalba, SPD September 1991
- \* Warnervale Development Future Traffic Flows on Sparks Road and Pacific Highway, SPD, September 1992.
- \* The railway bypass - When to construct? SPD, January 1993.
- \* Warnervale Future Development, analysis of key intersections, SPD, January 1993.
- \* Technical Report No 1005, Warnervale Urban Release Area Pacific Highway/Pearce Road intersection.
- \* Technical Report No 1004, Sparks Road/Minnesota Road Intersection.
- \* Concept Design and Estimates Railway Road Bypass, GHD, June 1993.
- \* Technical Report No 1145 Pacific Highway/Wallarah Road/Sparks Road intersection.
- \* Technical Report No 1714 Pollock Avenue/Pacific Highway/Johns Road intersection.
- \* Reports prepared for Landco for the Wadalba North West Urban Release Area (1998).
- \* Technical Report No 1824 Sparks Road/Warnervale Road intersection.
- \* Technical Report No 1823 Pacific Highway/Craigie Avenue intersection.
- \* Technical Report No 774 Pacific Highway/Minnesota Road intersection.

- \* Technical Report No 1975 Minnesota Road/Warnervale Road intersection.
- \* Technical Report No 773 Pacific Highway/Lucca Road intersection.
- \* Technical Report No 776 Pacific Highway/Donaldson Road intersection.
- \* Technical Report 1974 Pacific Highway/Collector Road intersection.
- \* Technical Report No 775 Pacific Highway/Lucca Road Intersection, North Wyong.
- \* Concept Design for Pacific Highway/Donaldson Road Intersection (No 776)
- \* Technical Report – 2004 Review of Contributions Plan No. 7A the Wider Warnervale District and associated electronic spreadsheets.

#### **10.4.4 R1 Warnervale/Wadalba Urban Release Area Local Roads**

##### **10.4.4.1 Area of Scheme**

For the purposes of Road Contributions for the Warnervale/Wadalba Release Area this Plan includes areas zoned by Development Control Plan No 49 and the Precincts 8B and 8C (outside of the zoned area). These areas have a Net Development Area of 538 hectares.

##### **10.4.4.2 Scheme Details**

Roadworks for the Warnervale/Wadalba Release Area are categorised into the following:

- \* General road upgrading – involving upgrading existing and future distributor/collector roads within the development areas.
- \* Major Intersections – generally intersections which are located on arterial roads adjoining development areas.

Reference	Road	Total Length (m)	Distributor Road Costs (\$)	Equ. 7m Pavement Cost (\$)	Diff. in Road Costs (\$)	Footpath Costs (\$)	Cycleway Costs (\$)	Landscape Cost (\$)	Land Cost (\$)	Other Costs (\$)	Total (\$)
R49 1	Hakone Rd	980	926,100	611,520	314,580	0	156,800	120,540	663,705	0	1,255,625
R49 2	Mataram Road	2,030	1,993,950	1,297,520	696,430	0	324,800	249,690	1,374,818	0	2,645,738
R49 3	Hakone - Mataram	480	721,380	400,680	320,700	0	76,800	59,040	758,520	0	1,215,060
R49 4	Mataram - Sparks	1,300	2,276,156	1,138,800	1,137,356	49,500	208,000	159,900	2,054,325	0	3,609,081
R49 5	Minnesota Rd (Nth of Sparks)	500	605,715	363,000	242,715	0	80,000	61,500	790,125	0	1,174,340
R49 6	Minnesota Rd (Sth of Sparks)	1,000	1,019,115	624,000	395,115	0	160,000	123,000	1,580,250	0	2,258,365
R49 7	Warnervale Rd (Sparks to Minnesota)	1,650	1,650,320	833,560	816,760	148,500	264,000	202,950	1,038,450	0	2,470,660
R49 8	Primrose Drive	465	434,310	337,590	96,720	0	74,400	57,195	556,605	973,621	1,758,541
R49 9	Louisiana Rd (Warnervale to Minnesota)	2,050	2,580,310	1,530,500	1,049,810	0	328,000	252,150	1,941,450	0	3,571,410
R49 10	Pacific Highway - Johns	1,100	1,855,118	962,900	892,218	0	176,000	135,300	1,343,213	180,000	2,726,731
R49 11	Wahroongah Extn	850	1,261,400	708,900	552,500	0	136,000	104,550	1,343,213	0	2,136,263
R49 12	Johns Rd	1,600	2,174,600	1,177,600	997,000	0	256,000	196,800	722,400	0	2,172,200
R49 13	Louisiana Rd Sth	350	399,700	218,400	181,300	0	56,000	43,050	158,025	0	438,375
R49 14	Louisiana-Highway	1,150	1,074,100	834,900	239,200	0	184,000	141,450	778,838	0	1,343,488
R49 15	Louisiana-Collector (North-Sparks Rd)	990	1,062,360	805,740	256,620	0	0	121,770	670,478	0	1,048,868
R49 16	Wadalba A3 Street Link	1,400	0	0	0	0	0	0	632,100	0	632,100

**30,456,843**

**Note:**

1. Distributor Roads include provision of footpath where identified in DCP. Only additional footpath/cycleway costs have been provided for in this Plan.
2. Footpaths/cycleways have been costed at \$90.00 / 160.00 per linear metre respectively.
3. Land values used to calculate the cost of land is based on the predicted Cost/Ha from the Robertson & Robertson Valuation Report dated 2004
4. Extra cost of wider road culverts has been included where appropriate. (Refer to the technical reports supporting this document)
5. The marginal cost rate for specific sections of roads is applied where developers do "works in kind".
6. Hakone to Mataram Road - additional length of 160 metres (\$158,200) to be met by Allam Homes.
7. Contributions for land where there is an existing road reserve, is based on land requirements over and above the existing road reserve width.

### Major Intersections - Refer Plan Nos 9904-13 & 15.

The main arterial roads adjacent to the future development areas are the Pacific Highway and Sparks Road. The following six major intersections and other traffic facilities will need to be upgraded to cater for residential development of Warnervale and Wadalba precincts (538 hectare).

#### Major Intersections

		Revised / Actual Cost	RTA / Others Contrib.	TOTAL COST
I49 1	Sparks/Warnervale Roads	802,192	0	802,192
I49 2	Sparks/Minnesota Roads	2,200,000	0	2,200,000
I49 3	Sparks/Pacific Hwy/Wallaharah Roads <sup>1</sup>	1,303,098	830,829	472,268
I49 4	Sparks/Collector (east of floodplain)	519,053	0	519,053
I49 5	Pacific Hwy/Pearce Rd/Craigie Ave (inc ped facility)	3,855,050	2,200,950	1,655,050
I49 6	Pacific Hwy/Minnesota Rd	1,485,000	0	1,485,000
I49 7	Minnesota/Warnervale Roads	650,000	0	650,000
I49 8	Pacific Highway/Warnervale Road (Closure)	100,000	0	100,000
I49 9	Sparks/Hiawatha Roads	500,000	0	500,000
I49 10	Sparks/Dundonald Rd (closure)	100,000	0	100,000
I49 11	Pacific Hwy/Louisiana Road <sup>2</sup>	2,000,000	418,708	1,581,292
I49 12	Mataram Rd Signals	200,000	0	200,000
I49 13	Pedestrian Overpass (Sparks Road West of Minnesota Road)	850,102	0	850,102
I49 14	Warnervale Rd/Louisiana Rd Signals	250,000	0	250,000
I49 15	Pacific Hwy/Johns Rd/Pollock Ave <sup>3</sup>	2,771,220	1,181,192	1,590,028
<b>Total</b>		<b>17,585,714</b>	<b>4,630,729</b>	<b>12,954,985</b>

- 1 RTA contribution based on comparative traffic volumes from developments and highway traffic.
- 2 RTA Cost is calculated at percentage of existing 2-Way Louisiana Movements/10Year Full Development Louisiana Movements. (Cardno Traffic Report Dec 2003).
- 3 Other Contributions include Lakeside Development, Zone 10 and RTA contributions. The RTA contributions include \$259,000 Blackspot funding & the shortfalls claim between the actual cost & the indexed cost (\$2,282,833, April 2004).

### Other Traffic Facilities

A number of other traffic management facilities are included within the contributions plan as shown below:

#### Other Traffic Facilities

Facility	No. of Facilities	Cost/Unit (\$)	Total Cost (\$)
Bus Shelter	34	5,000	170,000
Bus Lay-bys	9	50,150	451,350
Bus Lay-bys	1	30,090	30,090
Bus Lay-bys	24	3,036	72,864
Pedestrian Refuges	2	10,030	20,060
			<b>744,364</b>

#### 10.4.4.3 Apportionment of Costs

Apportionment of costs will be on the basis of traffic generated by the Warnervale/Wadalba Urban Release Area. Rates are to be determined on Net Development Area in hectares.

All Warnervale/Wadalba precincts (538 hectares) will contribute to the construction/upgrading of roads and intersections depending on whether the traffic from a particular precinct is generating traffic to a particular road or intersection. The contribution rate for each precinct is then calculated by the summation of all the contributions required by that precinct.

Where roads have been upgraded beyond that which would normally be required to service a residential subdivision, the marginal cost of the improvements is apportioned over the area benefiting from those improvements. This situation relates to the provision of bus routes. If not for the need for bus routes (which service the wider community), these roads would only require the construction of a 7 metre road pavement within a 15 metre road reserve. Consequently, contributions are based on the additional road cost over the estimated cost of a normal subdivision road, with a 7 metre wide pavement, of the same length in a 15 metre wide road reserve.

Low frequency bus routes (no more than a total of twelve bus movements per day) will be allowed on a 9 metre road pavement within an 18 metre reservation. Consequently, contributions are based on the additional road cost over the estimated cost of a normal subdivision road, with a 7 metre wide pavement in a 15 metre wide reservation. The Low Frequency Bus Route within Wadalba is to be designed with a 6.6 metre pavement (excluding parking) within a 19.6 metre road reservation.

- Note:**
- i Provision of separate cycleways and half road construction adjacent to reserves are included under Section 9.2 Public Open Space. Combined footpaths/cycleways are included in the distributor roads costs.
  - ii Contributions for Railway road are included. Analysis showed that ultimately 47% of North and Southbound traffic on Railway Road bypass will be generated from the new urban precincts at Warnervale/Wadalba. Therefore these areas will pay that portion of the Railway Road bypass costs.

#### 10.4.4.4 Contribution Rates

##### Roads and Intersections

Contribution Areas	NDA (Ha)	Daily Vehicle Trips	Total Cost / Area (\$)	Cost / NDA (\$/Ha)	Indexed to March 2005
Warnervale East/Wadalba NW (7B & 8A)	362	38,010	40,578,008	112,094	116,530.50
Wadalba 8B	35	3,654	3,900,869	112,094	116,530.50
Wadalba 8B1	59	6,164	3,153,089	53,715	55,804.94
Wadalba 8C	82	8,642	4,420,771	53,715	55,804.94

##### Other Traffic Facilities

Contribution Areas	NDA (Ha)	% of Area	Cost / NDA (\$/Ha)	Indexed to March 2005
Warnervale East / Wadalba NW (7B & 8A)	362	91.2	1875.3	1,949.52
Wadalba 8B	35	8.8	1871.5	1,945.57
	<b>397</b>	<b>100</b>		

#### 10.4.5 R2 Pollock Avenue Works

##### 10.4.5.1 Area of Scheme

The cost of the works associated with the construction of Pollock Avenue and the construction of the Pacific Highway/Johns Road/Pollock Avenue intersection are to be collected from the Lakeside Development, Johns Road Zone 10 and the Warnervale/Wadalba Urban Release Area.

##### 10.4.5.2 Scheme Details

Works include the construction of Pollock Avenue and the intersection of the Pacific Highway/Johns Road and Pollock Avenue.

##### 10.4.5.3 Apportionment of Costs

The cost of the Pacific Highway/Johns Rd intersection is to be apportioned between Lakeside Development, Johns Road Zone 10 and the Warnervale/Wadalba Urban Release Area.

##### Apportionment of Costs

	Pollock Avenue Reconstruction	Johns/Pacific/ Pollock Intersection
Lakeside Development	34%	18%
Johns Road Zone 10	-	7%
Warnervale/Wadalba URA	-	75%

#### 10.4.5.4 Contribution Rate

##### Contribution Rates – Lakeside Development

	<b>% Contribution</b>	<b>Cost (\$)</b>	<b>Contribution (\$)</b>
34% Reconstruction of Pollock Ave	0.34	3,037,500	<b>1,032,750</b>
18% Pacific Hwy/Johns Rd/Pollock Ave	0.18	2,771,220	<b>498,820</b>
			<b>\$1,531,570</b>
Indexed to March 2005			<b>\$1,592,187</b>

##### Contribution Rates – Zone 10

	<b>% Contribution</b>	<b>Cost (\$)</b>	<b>Contribution (\$)</b>
7% Pacific Hwy / Johns Rd / Pollock Ave	0.07	2,771,220	<b>193,985</b>
Indexed to March 2005			<b>\$201,662.60</b>
NDA – Zone 10 (Ha)	25		
<b>Contribution Rate / NDA</b>		<b>\$7,759.42</b>	
<b>Indexed to March 2005</b>		<b>\$8,066.52</b>	

#### 10.4.6 R3Wyong Hospital

##### 10.4.6.1 Area of Scheme

Extensions to Wyong Hospital are to contribute to the Pacific Highway/Craigie Avenue intersection.

### 10.4.6.2 Scheme Details

The Pacific Highway/Craigie Avenue intersection is estimated to cost \$3,855,050.

### 10.4.6.3 Apportionment of Costs

Based on analysis carried out, the contributions rate for the Pacific Highway/Craigie Avenue upgrade has been proportioned out as shown in the following table.

#### Contribution Rates – Wyong Hospital

	Contribution (\$)
RTA	1,000,000
NSW Health	1,200,000
Section 94 (Fixed)	1,655,050

The Section 94 contributions from the Warnervale/Wadalba Urban Release Area have been fixed at the rate shown in the table.

### 10.4.7 R4 North Wyong Industrial Estate

#### 10.4.7.1 Area of Scheme

The plan also includes contributions towards the road infrastructure required to meet the demands of development within the North Wyong Industrial area. This area has a net development area of 62 hectares.

#### 10.4.7.2 Scheme Details

The new industrial development within the North Wyong area has necessitated the provision of the works listed below. It should be noted that the estimates for the Lucca Road works have been discounted by \$200,000 (indexed) to account for the existing Lucca Road intersection which services the development. The estimate for the Donaldson Road intersection has been discounted by \$50,000 (indexed) to provide an allowance for Council's requirement to provide an alternate 'escape route' for the existing Kemcom development.

Reference	Intersection	Revised/Actual Cost (\$)	Other Contributions (\$)	Total Cost (\$)
I49 15	Pacific Hwy/Lucca Rd <sup>1</sup>	2,500,000	2,047,372	452,628
I49 16	Pacific Hwy/Donaldson St Extension – Signals <sup>2</sup>	2,000,000	59,298	1,940,702
R49 17	Nth Wyong Industrial – Residential Rear Access	499,300	-	499,300

1 Other contributions calculated by indexing \$200,000 and additional contribution by RTA

2 Other contributions calculated by indexing \$50,000.

### 10.4.7.3 Apportionment of Costs

Development in the North Wyong Industrial Estate will contribute to the Lucca Road/Pacific Highway and Donaldson Road/Pacific Highway intersections and the residential rear access lane to the residential properties immediately South of Donaldson St extension on a proportional basis related to NDA.

### 10.4.7.4 Contribution Rates

#### Contribution Rates – North Wyong Industrial

Intersections to Contribute Towards	Contribution (\$)
Lucca Rd/Pacific Hwy	452,628
Donaldson/Pacific Hwy	1,940,702
Residential Rear Access Lane	499,300
	<b>2,892,630</b>
NDA – North Wyong Industrial (Ha)	62.00
<b>Contribution Rate / NDA</b>	<b>\$46,655.32</b>

### 10.4.8 R5 Wider Warnervale District

#### 10.4.8.1 Area of Scheme

The Greater Warnervale District is identified on the map. This area has a total NDA of 616 hectares which consists of:

- Warnervale District Centre
- Warnervale 7A
- Warnervale Village East
- Warnervale Village West
- Precincts 11 and 13
- Warnervale Business Park
- Warnervale Airport
- Warnervale Education Site
- Federation Park
- Bruce Crescent Residential
- Bruce Crescent Employment
- Anglican Grammar School

### 10.4.8.2 Scheme Details

#### Works to be funded by the Greater Warnervale District

Reference	Road	Total Length (m)	Distributor Road Costs (\$)	Equ. 7m Pavement Cost (\$)	Diff. in Road Costs (\$)	Footpath Costs (\$)	Cycleway Costs (\$)	Landscape Cost (\$)	Land Cost (\$)	Bridge Cost (\$)	Total (\$)
R1	Railway Road	3,146									<b>18,500,000</b>
R2	Mataram Road	3,400	1,929,200	1,084,200	845,000	-	208,000	159,900	1,467,375	-	<b>2,680,275</b>
R3	District Entry Road	350	675,850	-	675,850	-	112,000	43,050	2,054,325	-	<b>2,885,225</b>
R4	Hiawatha Rd (Hakone to Mataram)	800	1,058,400	698,400	360,000	-	128,000	98,400	541,800	-	<b>1,128,200</b>
R5	Alinga Road -	2,600	3,899,000	1,734,000	2,165,000	-	736,000	319,800	2,951,681	2,600,000	<b>12,872,481</b>
R6	Hakone Rd	3,050	2,342,900	1,194,720	1,148,180	-	332,800	255,840	1,589,280	-	<b>3,326,100</b>
R7	Minnesota Rd (Ext Nth)	950	667,800	375,300	292,500	-	72,000	55,350	507,938	-	<b>927,788</b>
R8	West Side North Road	800	756,000	-	756,000	-	368,000	98,400	4,153,800	-	<b>5,376,200</b>
R9	Residential Only	1,000	1,484,000	834,000	650,000	-	288,000	123,000	1,309,350	-	<b>2,370,350</b>
R10	Minnesota Road Dev	2,400	3,288,500	1,260,750	2,027,750	-	328,000	295,200	2,714,644	-	<b>5,365,594</b>
R11	SW East Bus Route	800	928,000	667,200	260,800	-	-	98,400	361,200	-	<b>720,400</b>
R12	Minnesota Rd Dev Loop	420	743,400	213,360	530,040	-	67,200	51,660	1,280,003	-	<b>1,928,903</b>
R13	Virginia Road	700	330,750	218,400	112,350	-	112,000	86,100	474,075	-	<b>784,525</b>
R14	SW West Bus Route	3,200	3,536,200	1,240,200	2,296,000	-	512,000	393,600	7,336,875	-	<b>10,538,475</b>
R15	Mona Road	400	593,600	-	593,600	-	64,000	49,200	361,200	-	<b>1,068,000</b>
R16	Sparks Rd (Ped Facility at Railway) <sup>1</sup>		-	-	-	-	-	-	-	333,000	<b>333,000</b>
R17	Warnervale Rd (Facility at Railway) <sup>1</sup>		-	-	-	-	-	-	-	-	<b>3,530,990</b>
											<b>74,336,838</b>

(1) 66% Discount of contribution to be negotiated with RTA and SRA.

### Works to be funded by the Greater Warnervale District

	Intersections	Estimated Cost	RTA / Others Contrib.	TOTAL COST	Comments
I1	Mataram/Hiawatha Roads	100,000	0	100,000	Slow points in Hiawatha
I2	Sparks Rd/Boulevard (to District Centre)	1,500,000	0	1,500,000	
I3	Mataram Rd Extension/Boulevard (Signals)	300,000	0	300,000	
I4	Pacific Hwy/ Alinga Rd Extension (R'bout)	3,000,000	0	3,000,000	
I5	Alinga/Hiawatha Roads (R'bout)	700,000	0	700,000	
I6	Pacific Hwy/Chelmsford Rd	2,000,000	1,080,000	920,000	RTA contribution to be negotiated (54%)
I7	Chelmsford/Arizona Roads (R'bout+land)	2,000,000	0	2,000,000	
I8	Arizona/Hakone Roads (R'bout+land)	2,000,000	0	2,000,000	
I9	New - Hakone Rd (west of Arizona Rd) R'bout	1,500,000	0	1,500,000	
I10	Hakone/Hiawatha Roads (Signals)	300,000	0	300,000	
I11	Hakone Rd/Alinga Rd Extension (Signals)	300,000	0	300,000	
I12	New - Hakone Rd (East of Hiawatha Rd) Signals	300,000	0	300,000	
I13	Alinga Rd (East of Hiawatha) - Midblock Signals	150,000	0	150,000	
I14	Minnesota/Mataram Roads – Signals	300,000	0	300,000	
I15	Warnervale Rd/Minnesota Rd Diversion (East)R'bout	700,000	0	700,000	
I16	Warnervale Rd/Minnesota Rd Diversion (West)R'bout	700,000	0	700,000	
I17	Minnesota Rd Diversion/Sports Fields (Signals)	300,000	0	300,000	RTA contribution to be negotiated (25%).
I18	Pacific Hwy/Mataram Road (Seagull)	2,000,000	561,131	1,438,869	

Sparks Rd/Albert Warner Dr/Link Rd (Railway Rd) - Included in Railway Rd (Link Rd) costs

I19	Sub-arterial (West of Railway) East (Signals)	300,000	0	300,000	13m roads
I20	Sub-arterial (West of Railway) West (Signals)	300,000	0	300,000	13m roads
I21	Sub-arterial/Railway Station (Signals)	300,000	0	300,000	13m roads
I22	Sparks Rd West (Precinct 11 & 13) R'bout	2,500,000	0	2,500,000	
I23	Sparks Rd/Mountain Rd	2,500,000	0	2,500,000	
I24	Sparks Rd/Jack Grant Drive	2,500,000	0	2,500,000	
<b>TOTAL</b>				<b>24,908,869</b>	

#### 10.4.8.3 Apportionment of Costs

Apportionment of costs will be on the basis of traffic generated by the Greater Warnervale Area.

All Greater Warnervale District Precincts (616) hectares will contribute to the construction/upgrading of roads and intersections depending on whether the traffic from a particular precinct is generating traffic to a particular road or intersection. The contribution rate for each precinct is then calculated by the summation of all the contributions required by that precinct. Rates are to be determined on Net Development Area in hectares.

Where roads have been upgraded beyond that which would normally be required to service a residential subdivision, the marginal cost of the improvements is apportioned over the area benefiting from those improvements. This situation relates to the provision of bus routes. If not for the need for bus routes (which service the wider community), these roads would only require the construction of a 7 metre road pavement within a 15 metre road reserve. Consequently, contributions are based on the additional road cost over the estimated cost of a normal subdivision road, with a 7 metre wide pavement, of the same length in a 15 metre wide road reserve.

Low frequency bus routes (no more than a total of twelve bus movements per day) will be allowed on a 9 metre road pavement within an 18 metre reservation. Consequently, contributions are based on the additional road cost over the estimated cost of a normal subdivision road, with a 7 metre wide pavement in a 15 metre wide reservation. The Low Frequency Bus Route within Wadalba is to be designed with a 6.6 metre pavement (excluding parking) within a 19.6 metre road reservation.

**Note:** Provision of separate cycleways and half road construction adjacent to reserves are included under Section 9.2 Public Open Space. Combined footpaths/cycleways are included in the following distributor roads costs.

#### 10.4.8.4 Contribution Rates

Contribution Areas	NDA (Ha)	Daily Vehicle Trips	Total Cost / Area (\$)	Cost / NDA (\$/Ha)	Indexed to March 2005
Retail/comm.	10.0	15,600	7,986,916	798,692	830,302.68
RSL Site	4.0	500	1,056,929	264,232	274,689.79
Residential Dev 10 dwgs/ha	6.5	588	1,242,314	190,247	197,779.61
Residential Dev 15 dwgs/ha	13.1	1,371	2,898,733	221,955	230,739.55
Residential Dev 20 dwgs/ha	19.6	2,547	5,383,361	274,801	285,677.09
Residential Dev 40 dwgs/ha	26.1	4,702	9,938,512	380,494	395,553.22
Catholic School	5.3	790	638,514	121,622	126,435.56
Warnervale 7A	56.3	5,909	14,171,380	251,800	261,765.76
Warnervale Village East	5.1	531	1,274,513	251,800	261,765.76
Employment Corridor	89.0	4,945	10,225,059	114,888	119,435.04
PRECINCTS 11 & 13	88.4	5,083	7,125,982	80,611	83,801.43
SUPPLIER PARK	30.3	1,741	2,441,052	80,611	83,801.43
WARNERVALE AIRPORT	25.7	1,477	2,070,888	80,611	83,801.43
WARNERVALE EDUCATION SITE	35.6	1,268	992,468	27,878	28,981.36
Warnervale Village NW Residential	19.0	3,332	4,525,949	237,707	247,114.98
Warnervale Village SW Residential	4.4	770	1,015,912	237,707	247,114.98
BRUCE CRESCENT Residential	27.7	4,571	6,347,990	229,169	238,239.07
BRUCE CRESCENT Employment	134.4	7,728	10,733,457	79,862	83,022.78
GRAMMAR SCHOOL	15.0	612	478,701	31,913	33,176.05

#### 10.4.9 Timing of Proposed Roadworks and Traffic Management Facilities

An indicative time for the provision of each road improvement is shown in Table R (Schedule of Works) although this may vary dependent on the rate of development.

Construction of the various improvements will be dictated by the following thresholds:

**Intersections:** To be upgraded when average delay per vehicle exceeds 42 seconds or when upgrading is required to address safety issues.

**Roads:** To be upgraded in conjunction with the adjacent residential development or when upgrading is required to address safety issues.

**Pollock Avenue**

**Reconstruction:** To be carried out progressively as Lakeside Development is developed and traffic volumes dictate. Council funding to be provided gradually as condition of road dictates.

North Wyong Industrial Area (Lucca Road/Pacific Highway & Donaldson Road/Pacific Highway) will be dependent upon the rate of development within the area.

In general, for the proposed roadworks within the Warnervale/Wadalba and Greater Warnervale Urban Release Area, an indicative timing of provision is provided in the Schedule of Works attached to this plan. In association with this program, Council has identified a number 'triggers' that may alter the timing of particular works including:

#### Timing of Works

Reference	Works	Timing of Works / When Required			Comments
		When Adjacent Dev. Proceeds	Average Delay Exceeds 42sec	Road Safety Upgrade	
R1	Railway Road	✓			
R2	Mataram Road	✓			
R3	District Entry Road	✓			Required in conjunction with new Railway Station
R4	Hiawatha Road	✓			
R5	Alinga Road -	✓			
R6	Hakone Rd	✓			
R7	Minnesota Rd (Ext Nth)	✓			
R8	West Side North Road	✓			
R9	Residential Only	✓			
R10	Minnesota Road Dev	✓			
R11	SW East Bus Route	✓			
R12	Minnesota Rd Dev Loop	✓			
R13	Virginia Road	✓			
R14	SW West Bus Route	✓			
R15	Mona Road	✓			
R16	Sparks Rd (Ped Facilities at Railway Overpass)	✓	.	✓	With development of District Centre

Reference	Works	Timing of Works / When Required			Comments
		When Adjacent Dev. Proceeds	Average Delay Exceeds 42sec	Road Safety Upgrade	
R17	Warnervale Rd (Facilities at Railway Line)	✓		✓	
R49 1	Hakone Rd	✓			
R49 2	Mataram Road	✓			
R49 3	Hakone - Mataram	✓			
R49 4	Mataram - Sparks	✓			
R49 5	Minnesota Rd (Nth of Sparks)	✓			
R49 6	Minnesota Rd (Sth of Sparks)	✓			
R49 7	Warnervale Rd	✓			
R49 8	Louisiana-Hospital	✓			
R49 9	Louisiana Road	✓			
R49 10	Pacific Highway - Johns	✓			
R49 11	Wahroonga Extn	✓			
R49 12	Johns Rd	✓			
R49 13	Louisiana Rd Sth	✓			
R49 14	Louisiana-Highway	✓			
R49 15	Louisiana - Connector	✓			
R49 16	Wadalba A3 Street Link	✓			
R49 17	Nth Wyong Industrial - Rear Access Rd to Residential Prop. Sth of Donaldson	✓			With development of industrial area
I1	Mataram/Hiawatha Roads	✓			
I2	Sparks Rd/Boulevard (to District Centre)	✓			Required in conjunction with new Railway Station
I3	Mataram Rd Extension/Boulevard (Signals)		✓	✓	
I4	Pacific Hwy/ Alinga Rd Extension (R'bout)	✓			
I5	Alinga/Hiawatha Roads (R'bout)		✓	✓	
I6	Pacific Hwy/Chelmsford Rd		✓	✓	
I7	Chelmsford/Arizona Roads (R'bout+land)	✓	✓	✓	When either situation occurs
I8	Arizona/Hakone Roads (R'bout+land)	.	✓	✓	When either situation occurs
I9	New - Hakone Rd (west of Arizona Rd) R'bout	✓			
I10	Hakone/Hiawatha Roads (Signals)		✓	✓	
I11	Hakone Rd/Alinga Rd Extension (Signals)	✓		✓	
I12	New - Hakone Rd (East of Hiawatha Rd) Signals	✓	✓	✓	
I13	Alinga Rd (East of Hiawatha) - Midblock Signals		.	✓	
I14	Minnesota/Mataram Roads - Signals	.	✓	✓	
I15	Warnervale Rd/Minnesota Rd Diversion (East)R'bout	✓			
I16	Warnervale Rd/Minnesota Rd Diversion (West)R'bout	✓			
I17	Minnesota Rd Diversion/Sports Fields (Signals)	✓		✓	
I18	Pacific Hwy/Mataram Road (Seagull)		✓	✓	
I19	Sub-arterial (West of Railway) East (Signals)	✓		✓	

Reference	Works	Timing of Works / When Required			Comments
		When Adjacent Dev. Proceeds	Average Delay Exceeds 42sec	Road Safety Upgrade	
I20	Sub-arterial (West of Railway) West (Signals)	✓		✓	
I21	Sub-arterial/Railway Station (Signals)	✓	✓	✓	
I22	Sparks Rd West (Precinct 11 & 13) R'bout	✓	✓		
I23	Sparks Rd/Mountain Rd	✓	✓		
I24	Sparks Rd/Jack Grant Drive	✓	✓		
I49 1	Sparks/Warnervale Roads				Complete
I49 2	Sparks/Minnesota Roads	✓			When extension of Minnesota to the North is constructed creating a 4-way intersection
I49 3	Sparks/Pacific Hwy/Wallarah Roads		✓	✓	Long term as traffic volumes require.
I49 4	Sparks/Collector (east of floodplain)	✓			
I49 5	Pacific Hwy/Pearce Rd/Craigie Ave (inc ped facility)	✓			Intersection improvements required with further development of Wyong Hospital where access is gained to the Pacific Highway. If roundabout constructed, a pedestrian underpass is to be provided when development of Wadalba East proceeds.
I49 6	Pacific Hwy/Minnesota Rd				Complete
I49 7	Minnesota/Warnervale Roads		✓	✓	
I49 8	Pacific Highway/Warnervale Road (Closure)				Complete
I49 9	Sparks/Hiawatha Roads		✓	✓	
I49 10	Sparks/Dundonald Rd (closure)		✓	✓	
I49 11	Pacific Hwy/Louisiana Road	✓	✓	✓	
I49 12	Mataram Rd Signals			✓	
I49 13	Pedestrian Overpass (Sparks Road West of Minnesota Road)	✓		✓	
I49 14	Warnervale Rd/Louisiana Rd Signals	✓			Required with development of the local centre.
I49 15	Pacific Hwy/Johns Rd/Pollock Ave				Complete
I49 16	Pacific Hwy/Lucca Rd		✓	✓	
I49 17	Pacific Hwy/Donaldson St Extension - Signals	✓			
	Pollock Ave Reconstruction				In association with Stage 2 of the Lakeside Development.

## 10.5 Environmental Studies

A number of studies are required to establish the type and extent of works and land acquisitions to address the demands generated by development within the release area. These studies relate to environmental investigations throughout the area including flora and fauna investigations and studies of the Warnervale Catchment to establish the most appropriate methods of water quality control. The costs of these studies (1999 costs) have been apportioned to the Contributions Plan area.

Ecological Investigations (Flora, Orchids)	\$100,000
Fauna Study - Squirrel Gliders	\$ 60,000
Warnervale Water Quality Studies	\$ 80,000

### Apportionment of Costs

The Ecological Investigations being undertaken generally include the Wyong Shire potential development areas (6,740 gross hectares). The Warnervale/Wadalba Urban Release Area accounts for 887 hectares or 545 NDA of these potential development areas. Therefore the area is to contribute to 13% of the ecological investigations.

The Contribution Plan area is also to contribute on a proportional basis to the Squirrel Glider study and the Water Quality Studies. These studies largely relate to the total Warnervale Catchment with a potential NDA of 545 hectares.

### Contribution Rate

$$= \frac{(13\% \times \$100,000) + \$140,000}{545}$$

$$= \frac{\$13,160 + \$140,000}{545}$$

$$= \frac{\$153,160}{545}$$

$$= \$281 \text{ per NDA}$$

$$\text{Contribution Rate indexed to March 2005} = \$297.43 \text{ per NDA}$$

## 10.6 Warnervale Project Co-ordinator

To ensure the timely and efficient provision of facilities and services in accordance with this Plan and other strategies, Council's Management Plan includes a provision for a "Warnervale Place Manager". 50% of the cost of this position is to be funded by developer contributions collected within this plan (projected for the next 20 years)

### Contribution Rate

$$= \frac{\$55,000 \times 20 \text{ years}}{\text{Total NDA}}$$

$$= \frac{\$1,100,000}{118.3 \text{ ha}}$$

$$= \$930 \text{ per NDA}$$

$$\text{Indexed to March 2005} = \$984.37$$

## 11.0 TIMING AND METHOD OF PAYMENT

General practice in relation to the timing of payments for Development Contributions is as follows:

- \* Development applications involving subdivision - prior to release of linen plans;
- \* Development applications involving building works - prior to the release of construction certificate; and
- \* Development applications where no building approval is required - at the time of development consent.

In regard to the latter case, the applicant may make a cash payment of contributions prior to issue of the development consent or alternatively lodge a suitable bank guarantee, also prior to issue of the consent. This bank guarantee will be called up upon commencement of the consent.

### Pooling of Funds

In accordance with Clause 27(3) of the Environmental Planning and Assessment Act Regulation, this clause authorises the pooling of funds by Council to provide priority works and land.

## 12.0 METHOD OF UPDATING CONTRIBUTIONS

Adjustments to the contribution rate will apply in accordance with the following:

### Cost Indexation Adjustment

- \* For Land Components - Adjustment will be by revaluation of land values using an actual site valuation.
- \* For Works - The Consumer Price Index (CPI) will be used to adjust contribution rates as follows:

$$\text{Current Rate} = \text{Old Rate} \times \frac{\text{Current CPI}}{\text{Base CPI}}$$

Where:

The Base CPI is calculated as the most recently published quarterly figures for the Consumer Price Index, Australia for Sydney prior to the date of estimating. (Source: ABS 6401.0 Table 1).

The current CPI is calculated as the most recently published quarterly figures for the Consumer Price Index, Australia for Sydney prior to the date of payment. The base CPI figure for this version of the contributions plan is 147.3.

### 13.0 REVISION OF PLAN

This Plan was revised in 1997 following zoning amendments to the Warnervale East/Wadalba North West release area and revised land valuations.

The Plan was also amended in 1998 following a review of the Wadalba North-West development concept.

In 1999, the Plan was revised due to zoning amendments at Wadalba, amendments to DCP 49 and revised land values.

In 2000, the Plan was revised due to a revision in land values for Wadalba, changes to the provision for community facilities and changes to intersection improvements and costs.

In 2001, the Plan was revised due to a revision in land values in all categories throughout the study area. Other amendments in that review included indexation and alterations to some intersection costs.

In 2002, the Plan was reviewed as a new development concept was adopted for land north of Mataram Road affected by Development Control Plan No 49.

In 2004, this amended version has been prepared to incorporate the Wider Warnervale District, to update land values (including projecting land values) and construction costs and to make other amendments identified since 2002.

This Plan may be further revised if the extent or nature of the proposed development varies and these variations lead to a change in the demand for public services and amenities.

Costings of works identified in this Plan are based on preliminary designs and changes to cost estimates as a result of detailed design may also necessitate a revision to this Plan.