THE COUNCIL OF CAMDEN

CONTRIBUTIONS PLAN NO. 17

NARELLAN TOWN CENTRE

This Plan was adopted by Council on October 27, 2003.
And came into force on November 12, 2003.

Prepared by: Works & Services
File No. TC 3687/2

CONTENTS

1. EXECUTIVE SUMMARY

This Plan consists of five operative parts following this Summary and the Introduction, these are:

Chapter 3 Administration and Accounting;
Chapter 4 Demonstration of Nexus;
Chapter 5 Streetscape and Public Domain;
Chapter 6 Traffic Facilities and Roadworks;
Chapter 7 Somerset Avenue Rights of Carriageway; and

Under **Chapter 3 – Administration and Accounting**, matters relating to the Plan as a whole are addressed.

The **purpose of this Plan** is to provide a funding strategy that enables Council to levy contributions on new development within the Narellan Town centre in order to:

- acquire land;
- undertake studies;
- undertake footpath works and landscaping;
- provide street furniture;
- provide aerial bundle or underground cabling;
- construct and upgrade roads;
- construct traffic management facilities;
- construct car parking facilities;
- provide traffic lights; and
- register rights of carriageway.

The **area of this Plan** (i.e. the Narellan Town Centre) is shown in Figure 1.

This Plan also has a **relationship to other Plans** such as Local Environmental Plan (LEP) No. 46 and Development Control Pans (DCP's) Nos 65, 89 and 97.

Contribution Rates are summarised in Figure 2.

Indexation of contribution rates will be to the Consumer price Index, CPI (Sydney – All Groups).

Payment of monetary contributions will be made prior to the release of linen plan of subdivision or prior to the issue of building approval, depending on the type of Development Application made.

Council may accept a **deferred or periodic payment** of a contribution subject to a bank guarantee.

Contributions may be either **monetary, land or works in kind**, the latter also subject to a bank guarantee.

Council maintains separate **accounting records** for this Plan and at the end of the financial year prepares an annual statement.

Council also maintains a **Contributions Register** which details the nature, purpose and amount of contributions paid towards this plan.

Under **Chapter 4 – Demonstration of Nexus**, the relationship between population, floorspace, traffic generation and the demand for works and services is addressed.

The Camden Local Government Area (LGA) is estimated to grow to an **ultimate population** of 69,500 by the year 2021. This population growth will generate **additional floorspace** of 77,092m^2 with an **ultimate floorspace** of 81,492m^2 for the Narellan Town Centre.

Different land uses generate different **traffic generation** rates with retail being more intensive than the other uses. In this Plan, a weighting factor of 2 is used in calculating the amount of contribution that retail floor space should pay as opposed to less intensive uses.

Parts 3 - 7 address the works and services required within the Narellan town Centre as a result of additional population, floorspace and traffic generation. Within each part there is a **description of works**, an indication of their **location, works schedules** indicating their costing and staging, and **formulae** for the calculation of contribution rates required to fund these works.

Works schedules to the year 2021 are summarised in Figure 3.

Chapter 5 – Streetscape and Public Domain, addresses the visual and functional quality of the streets and associated public spaces that make up the public domain of the Narellan Town Centre. It is the most critical element o the Plan. The objectives of this Part are to:

- establish a defined town centre identity that will become a focus for retail and community activity;
- provide pedestrian friendly, attractive streets and public spaces;
- create a sense of place that borrows from and enhances the identity of Narellan; and
- introduce more items of cultural, artistic and social interest within the Town Centre.

Items of work include:

- footpath works;
- landscaping;
- street furniture;
- open space acquisition;
- aerial bundle cabling; and
- underground cabling.

Chapter 6 – Traffic Facilities and Roadworks, results from the estimates of traffic generated by the additional floorspace of the Town Centre. Items of works include:

- upgrading of Somerset Avenue and Queen Street;
- traffic calming in Queen Street, Richardson Road and Camden Valley Way;
- land acquisition and construction of Elyard Street (recoupment costs);
- upgrading of Elyard Street (recoupment costs);
- roundabouts at Eyard/Queen Streets and Richardson Road/Elyard Street (recoupment costs);
- traffic lights at Camden Valley Way/Somerset Avenue and Camden Valley Way/The Northern Road (recoupment cost); and
- traffic study (recoupment cost).

There is an **apportionment of costs** to the Narellan Shopping centre (the main retail development in the Town Centre) of 65% based on the demand generated by that shopping centre compared with the demand generated by the Town Centre as a whole.

Chapter 7 – Somerset Avenue Rights of Carriageway, addresses the need for rights of way required as a consequence of limiting vehicular access for redevelopment sites either side of Somerset Avenue. This will ensure minimum interruption to the free flow of traffic. There are two areas in Somerset Avenue for which registering rights of Carriageway are required.

2. INTRODUCTION

Section 94 of the Environmental Planning and Assessment Act, 1979 (EP & A Act) enables Council to levy contributions for public facilities and infrastructure required as a consequence of development.

This Plan takes effect on November 11, 2003.

A development application made before this Plan takes effect that is determined on or after that date is to be determined as if this Plan had not taken effect. In particular, such a development application is to be determined as if any contributions plan amended or repealed by this Plan had not been so amended or repealed.'

The power to levy a contribution relies on there being a link (nexus) between new development and the increased demand for facilities and infrastructure created by that development. This may be demonstrated through:

- casual nexus (what);
- spatial or physical nexus (where); and
- temporal nexus (when).

Generally, contributions can be levied for:
- capital costs (including land acquisition);
- public facilities; and
- public infrastructure

Contributions can also be levied for:
- road maintenance (excessive wear and tear caused by new development);
- costs of planning studies that result in the adoption of a Contributions Plan (CP); and
- salary costs of s.94 staff where the costs are non-recurrent.

The contribution is imposed by way of a condition of development consent. The contribution may be a combination of some or all of the following:
- land dedication
- monetary contribution; or
- material public benefit (including works in kind).

Contributions can only be levied under a CP made in accordance with the Environmental, Planning and Assessment Regulation, 2000.

The preparation of a CP and the levying of contributions under that Plan are discretionary powers of Council.

3. ADMINISTRATION AND ACCOUNTING

3.1 Name of the Plan

This Plan has been prepared in accordance with the provisions of s.94 of the EP & A Act and Part 4 of the Regulation and may be referred to as Contributions Plan (CP) No. 17: Narellan Town Centre.

3.2 Purpose of the Plan

The purpose of this Plan is to provide a funding strategy to enable Council to levy contributions on new retail, commercial and service trade developments within the Narellan Town Centre in order to:

- acquire land;
- undertake studies;
- undertake footpath works and landscaping;
- provide street furniture
- provide aerial bundle or underground cabling;
- construct and upgrade roads;
- construct traffic management facilities;
- provide traffic lights; and
- register rights of carriageway.

3.3 Objectives of the Plan

The objectives of this Plan are to:

- meet Council's obligations under the EP and A Act and the Regulation;
- complement the aims and objectives of relevant Local Environmental Plans and Development Control Plans;
- demonstrate the nexus between new retail, commercial, service trades and the increased demand for facilities and services;
- enable Council to recoup funds which it has spent in the provision of public infrastructure and facilities in anticipation of likely future development;
- provide work schedules for the required facilities and services with an estimate of their cost and staging;
- provide a comprehensive strategy for the assessment, collection, expenditure, accounting and review of

development contributions on an equitable basis throughout the Narellan Town Centre until the year 2021;
- provide formulas for the calculation of contribution rates;
- ensure that contributions are indexed on a regular basis; and
- provide for a fair apportionment of costs.

3.4 Area of the Plan

The Plan applies to the area defined as the Narellan Town Centre as shown in Figure 1.

3.5 Relationship to other Plans

Local Environmental Plans

The area of this Plan is affected by a number of zones that allow a range of residential, commercial and industrial development to occur, with appropriate urban infrastructure.

LEP No. 46 (1989) applies to the area of this Plan.

Copies of the LEP are available from Council's offices.

Development Control Plans

The area of this Plan is also affected by a number of DCPs that provide objectives and standards for commercial and industrial development and associated infrastructure.

The following DCPs apply top the area of this Contributions Plan:

DCP No. 58: Residential Code (1985);
DCP No. 65: Somerset Avenue and Queen Street, NARELLAN (1993);
DCP No. 89: Somerset Avenue, NARELLAN: Commercial Zones 1996); and
DCP No. 97: Car Parking (1996).

Copies of these DCPs are also available from Council's offices.

3.6 Apportionment of costs

Apportionment ensures that new development is only levied for that portion of demand (and therefore cost) which it actually creates.

In this Plan, apportionment of costs is determined on the basis of future traffic generation. This is discussed in more detail in section 2.7.

3.7 Calculation of contribution rates

Streetscape and Public Domain

In general, contribution rates required to fund the works and services are calculated as follows:

Contribution Rate =

$$\frac{\left[\text{Cost of land Acquisition} + \text{Cost of Works}\right] \times \left[\text{Weighting factor for each land use}\right]}{\text{Sum of the weighted additional floorspace of all land uses}}$$

Traffic Facilities and Road Works

Contribution Rate =

$$\frac{\left[\text{Cost of land Acquisition} + \text{Cost of Works}\right] \times \left[\text{Weighting factor for each land use}\right] \times \left[\text{Apportionment Factor}\right]}{\text{Sum of the weighted additional floorspace of each land use responsible for the apportionment}}$$

Somerset Avenue Rights of Carriageway

Contribution Rate = (Block 9A)

$$\frac{\text{Cost of registering right - of - way}}{\text{Additional floor space of block 9A}}$$

Contribution Rate = (Block 9B)

$$\frac{\text{Cost of registering right - of - way}}{\text{Additional floor space of block 9B}}$$

A more detailed calculation for each of the above categories of works in given in Parts.

3.8 Indexation of contribution rates

Contribution rates will be indexed quarterly to the CPI (Sydney – All Groups) to ensure that contributions reflect the increases in costs associated with the provision of the facilities and services. Contributions will be indexed in accordance with the following formula:

$$C_R = C_C \times \frac{CPI_2}{CPI_1}$$

Where:

C_R is the revised contribution rate used at the time of development determination;

C_c is the contribution rate indicated indicated in this plan at the time of the plan adoption;

CPI_2 is the Consumer Price Index at the time of consent; and

CPI_1 is the Consumer Price Index at the time of calculating C_c.

3.9 Goods and Services Tax

In circumstances where the cost of providing the public amenities and services identified in this Plan is increased as a result of Council becoming obliged to pay Goods and Services Tas (GST) for the supply of those public amenities and services, the contribution rate payable under this Plan will be increased by an equivalent amount.

3.10 Types of contributions

Monetary Contributions

When a Development Consent is issued for new subdivision or development, it will contain a condition indicating the monetary contribution payable, subject to Indexation.

Land Contributions

Land contributions may be accepted instead of monetary contributions. The land must:

- Be identified in a master plan; and
- Be dedicated to Council as either Public Reserve or Drainage Reserve.

- Have an agreed value equivalent to the nominated land value under this plan at the time of transfer; and

- Be fit for the intended function of that land according to the parameters set out in Council's Open Space strategy, or with approval of the relevant Council officer with respect to drainage or community land.

- The agreed value will be offset against contributions required under this Plan. If no further land is to be developed and all contributions due by the developer have been paid, the agreed value will be reimbursed by Council.

Land contribution of this kind is effectively a "material public benefit" and may require a "Works in Kind" agreement. Where the proposed land dedication provides a material public benefit in dollar terms, greater than the total value of contributions required by the specific development, a works in kind agreement must be entered into.

Where the total value of the land is less than the total S94 contribution required by the development, the actual works in kind credit against the contributions can be calculated and accounted for at the time of dedication.

Works in Kind Contributions (WIK)

Works in kind contributions may also be accepted instead of monetary contributions. The works in kind must:

- Be set out in an agreement in writing between Council and the developer prior to commencement of works or the development.

- Be included in the works programs, or identified in a master plan;

- Have an agreed value with any variations approved by both parties;

- Be in accordance with agreed standards, specifications and programs for completion;

- Have an appropriate defects liability period; and

- Be subject to a bank guarantee.

The agreed value will be offset against contributions required under this Plan. If no further land is to be developed and all contributions due by the developer have been paid, the agreed value will be reimbursed by Council.

A works in kind agreement will form a contract between Council and the developer. The property owner must also be a party to the agreement. The agreement will specify the following;

- The works required.
- The value of those works.
- The relationship between those works and the contribution plan.
- The expected completion of those works with respect to the development timetable.

3.11 Variation to contributions

Council retains the right to alter or vary a contribution applied under this plan. Any variation sought by a developer must be stated with the Development Application, and will be considered in conjunction with the assessment process. All relevant facts and justification for the variation must be supplied with the Development Application, this includes details of the development proposed which render the development significantly different to that anticipated by this plan. Any request for a agreement to be entered into for the provision of material Public Benefit in lieu of contributions, will also need to be stated at that time.

3.12 Timing of payment

Payment of monetary contributions will be made:

- prior to the release of the linen plan for Development Applications for subdivision; or
- prior to the issue of building approval for Development Applications for new buildings.

3.13 Deferred or periodic payments

Monetary contributions may be deferred or paid by periodic instalments only if a bank guarantee is lodged and only for a fixed period of time. The guarantee will:

- Indicate the deferred period;
- Indicate the works to which it applies;
- Indicate the contribution amount plus the estimated amount of compound interest foregone by Council for the deferred period;
- Be called up if monetary payment has not been made by the end of the deferred period; and
- Be discharged when full monetary payment has been made.

A deferral is only acceptable where significant financial hardship can be demonstrated, and will be considered at Council's discretion.

3.14 Accounting and financial information

Accounting Records

Council maintains separate accounting records for this play which indicate:

- the items of works as listed in the works schedule;
- the contributions received under the Plan; and
- the amounts spent in accordance with the Plan.

Annual Statement

At the end of each financial year, Council prepares an Annual Statement for this Plan. The Annual Statement may form part of Council's Annual Report and indicates:

- opening and closing balances for the year;
- total contributions received under the Plan;
- total expenditure in accordance with the Plan; and
- outstanding obligations under this Plan.

Contributions Register

Council maintains a Contributions register, which indicates:

- developer consents which require a S.94 contribution;

- the purpose and the amount of the contribution required;
- the CP under which the contribution is required; and
- the amount and date that the contribution was paid.

Inspection of the Contributions Register is available on request.

3.15 Plan review

This Plan will be reviewed at the completion and adoption of the Narellan UIP.

Figure 3: Contribution Rates

LAND USE CATEGORY		CONTRIBUTION RATE FOR EACH WORKS SCHEDULE		
		STREETSCAPE AND PUBLIC DOMAIN	TRAFFIC FACILITIES AND ROADWORKS	SOMERSET AVE RIGHTS OF CARRIAGEWAY
Retail	Shopping Centre	$43.13 / m²	$37.85 / m²	N/A
	Non Shopping Centre	$43.13 / m²	$14.19 / m²	N/A
	Bulky Goods	$43.13 / m²	$14.19 / m²	N/A
Non Retail	Commercial	$21.56 / m²	$7.10 / m²	Block 9A $20.07 / m² Block 9B $7.44 / m²
	Service Trades	$21.56 / m²	$7.10 / m²	N/A

4. DEMONSTRATION OF NEXUS

4.1 Relevant studies

Nexus is demonstrated in this Plan and in the following studies:

- Camden – Narellan Arterial Roads Study (Stapleton & Hallam, August 1994);
- Narellan Town Centre Traffic and Parking Study, (Christopher Stapleton Consulting, April 1995);
- Study of Support Zones; Narellan Town Centre (Leyshon Consulting Pty Ltd, October 1996);
- Narellan Town Centre Master Plan (Macarthur PLAN, November 1996);
- Narellan Town Centre Study; Drainage Report (Camden Council, November 1996); and
- Narellan Town centre Study, Traffic Report (Christopher Stapleton Consulting, November 1996).

Copies of these reports are available from Council's offices.

4.2 Causal Nexus ("What")

Expected population growth, the additional floorspace required to support that population and the traffic generated as a consequence will require the provision of new public facilities and infrastructure in the Narellan Town Centre.

The nexus between new development and the public facilities and infrastructure has been established having regard to:

- the rate and extent of population growth;
- the characteristics of that population;
- the rate and type of additional floorspace;
- the expected traffic generation as a consequence of that floorspace;
- the expected impacts on public facilities and infrastructure and the Town centre amenity as a consequence;
- the capacity of existing public facilities and infrastructure in the area; and
- the extent to which proposed works and services will meet the needs of the Narellan Town centre.

This Plan includes schedules of works which are required as a consequence of the population growth, additional floorspace

and traffic generation. The works will be carried out or have already been carried out in the Narellan Town Centre.

4.3 Physical Nexus ("Where")

This Plan identifies the location of public facilities and infrastructure to the area that contributes to such works.

All works with the exception of some roadworks and traffic facilities, will be carried out within the Narellan Town Centre, ie the contributing area. The exceptions will be carried out immediately adjacent to the Town Centre in Richardson Road and Elyard Street.

The location of works has been determined having regard to:

- the location of increased demand;
- the accessibility to the identified works; and
- the manner in which need is best satisfied.

4.4 Temporal Nexus ("When")

Only those public facilities and infrastructure which are required as a consequence of development up to the year 2-021 are included in the works schedules. Timing and the provision of these works is based on the expected take up rate of additional floorspace and the availability of contributions funds.

The works schedules identify:

- completed works as a June 1997 (Stage 1);
- estimated works 1997-2001 (Stage 2);
- estimated works 2002-2012 (Stage 3); and
- estimated works 2013-2012 (Stage 4).

Staging of the works allows time for the design, tendering and contribution to take place and for variations in the take up rate of floorspace potential.

4.5 Population growth

The "Study of Support Zones: Narellan Town Centre" by Leyshon Consulting Pty Ltd, projected an ultimate population capacity for Camden LGA to be within a range of 69,500 – 90,000. Since this report was prepared, Council has had the benefit of receiving the data from the 2001 Census. An analysis of the Census statistics and an assessment of the number of

potential new allotments in Camden has revealed that the LGA is likely to achieve a population within this range – as a minimum at 2015. Further population growth specific to Narellan is to be proposed and quantified through the Narellan Urban Improvement Programme. A further review of these figures and this plan will be undertaken when the programme has produced a quantifiable development proposal, accepted by Council.

The population growth for the purpose of this Plan is shown in Figure 2.

Figure 4A: Population Growth

	CAMDEN LOCAL GOVERNMENT AREA	PERSONS
Existing	As at 2001 Census	43,780
Additional	Includes designated Urban Release Areas / Excludes South Creek Valley	31,200
Ultimate	As at 2015	74,980

4.6 Additional floorspace

The Leyshon report analysed the available land within the Narellan Town centre. It nominated two proposed zones namely, commercial core and commercial support. Within each of these proposed zones are a number of broad land use categories, with a range of uses permitted in each.

These assumptions are accepted for the continuing use of this plan, until the Narellan UIP is adopted with alternative information.

Zones and land uses proposed by Leyshon are summarised in Figure 3.

A maximum floor space ratio (FSR) for shopfront retail uses of 0.5:1 (gross leasable area to site area) has been adopted for the "Commercial Core" zone, while an FSR of 1:1 has been adopted for commercial (non-retail) uses in this Zone. Leyshon also assigns an FSR of 0.4:1 for "service trades" and "bulky goods retailing" in the "Commercial Support" zone.
Leyshon estimates that the Narellan Town Centre has an existing gross leasable floorspace of 12,000m^2. The Narellan Shopping Centre (stage 1) accounts for 7,600m^2 of this floor space. For the purposes of this Plan, the retail floor space contained in stage one is to be subject to Section 94 contributions, as reflected in a condition of development

consent and agreement between Council and the developer. For this reason, the 7,600m^2 is considered as additional floorspace.

The remaining existing floor space in the Narellan Town Centre is 4,400m^2 and represents a mixture of retail commercial and service trades uses. Existing uses other than the Narellan Shopping centre, within the Town centre are provided with an appropriate level of infrastructure, traffic management facilities and streetscape improvements. The provision of new infrastructure and facilities is a direct requirement resulting from future development. The standards of provision for future facilities are considered to be appropriate for users of the Town Centre.

The additional floor space for the Narellan Town Centre to the year 2021 has been derived from the Leyshon report and is shown in Figure 4.

Figure 4B: Zones & Land Uses

PROPOSED ZONES	LAND USE CATEGORY	EXAMPLES OF PERMITTED USES
COMMERCIAL CORE	Retail	Shopping Centres, Shopfront Retailing.
	Commercial	Offices, Medical Centres, Government Businesses
	Residential	
COMMERCIAL SUPPORT	Service Trades	Automotive Businesses, Service Industries, Small Scale Warehousing, Printing & Allied Trades, Hardware & Building Supplies, Service Authority Depots
	Bulky Goods Retail	Furniture, Electrical Goods, Floorcoverings, Autmotive Parts, Lighting, Video Hire, Second Hand, Toys & Sporting Equipment, Outdoor Products, Plant Nurseries
	Residential	

Source : Leyshon Consulting Pty Ltd

Leyshon estimated the area available for development in the Narellan Town Centre on a block by block assessment. Figure 7 summarises these areas in terms of the proposed zoning and the likely land use scenario. The figure of 108,639m^2 represents an excess supply of floorspace based on the land area available for development within the Town Centre.

Figure 4C: Projected Floor Space, (Population based)

LAND USE CATEGORY		FLOORSPACE (m2)	FLOORSPACE RATIO
Existing	Retail / Commercial / Service Trades	4,400	N/A
SUB-TOTAL		4,400	
Additional	Retail - Shopping Centre (Stages 1 and 2)	22,480	0.5:1
	Retail - Non-Shopping Centre	1,421	0.5:1
	Retail - Bulky Goods	7,970	0.4:1
	Non Retail - Commercial	10,421	0.5:1
	Non Retail - Service Trades	26,400	0.4:1
	Non retail - Residential	8,400	0.5:1
SUB-TOTAL		77,092	
TOTAL (ULTIMATE)		81,492	

Source : Leyshon Consulting Pty Ltd

Therefore, the additional floorspace of 77,092 from Figure 4 which is based on population growth, is more than adequately catered for within the remaining land available as shown in Figure 5

Figure 4D: Projected Floor Space, (Land based)

BLOCK NO.	PROPOSED ZONES	AREA (ha)	LAND USE CATEGORY	REMAINING LAND AVAILABLE FOR DEVELOPMENT (ha)	FLOORSPACE RATIO	ADDITIONAL FLOORSPACE (m2)
1	Commercial Support	1.00	Service Trades	0.80	0.4:1	3,200
4	Commercial Support	3.15	Service Trades	1.55	0.4:1	6,200
5	Commercial Core	1.40	Retail - Non-Shopping Centre	1.00	0.5:1	5,000
8	Commercial Core	8.80	Retail - Shopping Centre	4.95	0.5:1	29,914
9A 9B 9C	Commercial Core	3.00	Commercial	0.70	0.5:1	3,500
			Residential	0.70	0.5:1	3,500
10	Commercial Support	1.42	Bulky Goods Retail	1.42	0.4:1	5,680
11	Commercial Support	3.65	Bulky Goods Retail	3.65	0.4:1	14,600
13	Commercial Support	2.10	Service Trades	2.10	0.4:1	8,400
17A	Commercial Core	3.80	Retail - Non-Shopping Centre	0.95	0.5:1	4,750
			Commercial	0.95	0.4:1	3,800
17B	Commercial Support		Service Trades	0.63	0.4:1	2,520
18A	Commercial Core	3.70	Retail - Non-Shopping Centre	0.925	0.5:1	4,625
			Commercial	0.925	0.5:1	4,625
18B	Commercial Support		Service Trades	0.925	0.4:1	3,700
			Residential	0.925	0.5:1	4,625
TOTAL				23.10		108,639

Source : Leyshon Consulting Pty Ltd

4.7 Traffic generation

Narellan will become a dominant new commercial centre for the Camden LGA. It will provide a wide range of retail, commercial and service trade facilities primarily for the residential suburbs of Narellan, Narellan Vale, Currans Hill, Mount Annan, Elderslie and Harrington Park.

In its early stages, the Town Centre developed in an unplanned fashion, with its industrial, automotive and commercial uses congregating around the intersection of three arterial roads – Camden Valley Way, Narellan Road and The Northern Road. Recently, a number of strategic planning studies have been undertaken in relation to the future retail and commercial growth of the Centre. The plan adopted as the baes for the Contribution Plan is the "Narellan Town Centre Masterplan". The outcomes of the Masterplan study reflected the recommendations contained in a review of traffic management strategies prepared by Christopher Stapleton Consulting. This identified the traffic management facilities required as a result of additional vehicles generated by the additional floorspace to the year 2021.

4.8 Apportionment of Costs

Apportionment of costs in the works schedule is related to the demand for the use of the roads which are considered to be an integral part of the Tow Centre Traffic system. The study by Christopher Stapleton Consulting estimated the traffic generated by the Town Centre as a proportion of total future traffic.

The study identified five streets, namely:

- Camden Valley Way;
- Richardson Road;
- Queen Street;
- Somerset Avenue; and
- Elyard Street

These will be impacted upon by future development of the Town Centre and will require roadworks and traffic facility measures to accommodate these impacts.

The remainder of the total future traffic (ie that which is not generated by the Town Centre, such as traffic using Richardson Road as a through road from Narellan Vale to The Northern Road) is apportioned to Council.

Stapleton based the traffic generation on a development scenario in which the Narellan Shopping Centre will generate 65% of the total traffic of the Town Centre. The remaining 35% is apportioned to the other land use categories.

Figure 4E: Apportionment of future Traffic Generation.

LOCATION	NOT GENERATED BY TOWN CENTRE	GENERATED BY TOWN CENTRE		TOTAL
	COUNCIL	NARELLAN SHOPPING CENTRE	OTHER LAND USE CATEGORIES	
Camden Valley Way	47%	34%	19%	100%
Richardson Road	83%	11%	6%	100%
Somerset Avenue	36%	42%	22%	100%
Elyard Street	10%	59%	31%	100%
Queen Street	0%	65%	35%	100%

Source : Christopher Stapleton Consulting

4.9 Weighting of Land Uses

When assessing the contribution rates for the land use categories that are anticipated within the Narellan Town Centre, it is appropriate to consider their intensity of use in terms of traffic generation and the resultant attraction of employees and users to the business area. For the purposes of this Plan, an intensity of use weighting is derived from traffic generation rates contained with the Roads and traffic Authority's publication "Guide to Traffic Generating Development" (December 1993).

This table of traffic generation rates shown in Figure 10 provides a basis for comparing land uses in terms of daily vehicle trips. These traffic generation rates clearly indicate that retail and bulky goods retail are land uses which generate considerably higher volumes of traffic than other uses such as commercial premises, service trades and medium density housing. This RTA data provides a basis for adopting a weighting factor to the contribution rate assigned to retail uses as opposed to other, less intensive uses.

In determining the weighting which should apply to retail activities, it is acknowledged that a value which is directly proportional to the actual traffic generation rates would adversely affect the economic viability of retailing development in the Narellan Town Centre. It is therefore considered that a maximum weighting of two should apply to retail land uses within the Town Centre. This weighting factor is not applicable

to the Narellan Shopping Centre where contributions for traffic facilities and roadworks are concerned, as an apportionment percentage has been assigned to this retail floorspace.

Figure 4F: Traffic Generation Rates.

LAND USE	DAILY VEHICLE TRIPS (per 100 m2 floor area)
Shopping centre (20,000 - 30,000 m2)	63 (Gross Leasable Floor Area - GLFA)
Commercial premises	12.5 (GLFA)
Car tyre retail outlets	10 (per 100 m2 site area)
Factories	6.25 (GLFA)
Warehouses	5 (GLFA)
Bulky goods retailing	Generally less than average retail shops - mean peak
	Weekend rate of 6.6 vehicles/hour/100 m2 (GLFA)
Medium density residential flat building	5 - 6.5 (per 100 m2 dwelling)

Source : Roads and Traffic Authority of NSW

5. STREETSCAPE AND PUBLIC DOMAIN

5.1 Description and location

The streetscape and public domain works are illustrated in Figures 5A, 5B, 5C and 5D.

Objectives

The Streetscape and Public Domain works addresses the streets and associated public spaces that make up the public domain of the Narellan Town Centre. The objectives are to:

- establish a defined town centre identity, that will become a focus for retail and community activity;
- provide pedestrian friendly, attractive streets and public spaces;
- create a sense of place that borrows from and enhances the identity of Narellan;
- increase recreation opportunities, improve connections between public spaces to create a network; and
- introduce more items of cultural, artistic and social heritage, within the Town Centre.

The designs use the following principles for creating an environment that favours pedestrians;

- minimises block radii to reduce vehicle speed at intersections;
- medians to reduce apparent street width and provide pedestrian refuge ;
- properly designed crossings that accommodate the impaired;
- street parking to protect pedestrians from the actual and perceived danger of moving traffic.

The objective of landscape proposals is to create a distinctive and locally appropriate environment that defines the Town Centre. The most effective expenditure of funds for street improvement is on trees. Trees provide protection and shade for pedestrians and parked cars; the modulation of light through the canopy adds life to buildings and pavements, and trunks can create a strong colonnade at the street edge. The choice of tree species will assist in reinforcing the local identity.

Details such as furniture, paving, lights etc. add to the character, convenience and sophistication of streets, but should remain subordinate to a strong framework of trees. The

proposed works utilise well designed but simple and robust furniture, fittings and pavements, that are easily understood and easily maintained.

Camden Valley Way

Camden Valley Way is the main link between Camden, Liverpool and Narellan. The section within the area of this Plan is very open in character, with an agglomeration of vehicle related developments, signage and traffic signalling which create visual clutter.

Proposals for Camden Valley Way introduce a strong avenue of trees to define the street edge, provides an attractive outlook and create an appropriate identity for Narellan. Eucalyptus maculata is the preferred species as it has the necessary scale for such a wide street, is used successfully as a street tree in other sections of Camden Valley Way and in residential streets in Narellan. The proposed spacing of 12 metres adjacent to the town centre will mean that businesses set back from the street are still visible to passing traffic.

Median planting will provide an attractive display and reduce the open nature of the street to create a more comfortable and appropriate scale for the town centre.

Median planting will provide an attractive display and reduce the open nature of the street to create a more comfortable and appropriate scale for the town centre.

Somerset Avenue

Long term development in Somerset Avenue will extend the existing shopping strip. The objective of proposals for the street is to create an atmosphere of intimacy and pedestrian dominance.

Continuous awnings along the shopping strip prevent street tree planting in the footpath. Street trees are proposed instead for the parking lane, which will reduce the apparent width of the street and create an intimate sale. The trees will provide shade for parking and attractive outlook for the street.

Jacaranda mimisaefolia is the preferred species. It has attractive foliage and flowers, is deciduous, which allows winter sunlight to penetrate the street and has a local identity.

A paving trim along the street adds detail and character, and links Somerset Avenue to other major streets in the Town Centre.

Queen Street

Queen Street will have a mix of retail and community functions. Streetscape treatments differ on each side of the street according to the function and nature of development. The western side contains a community precinct with residential scale buildings, set back from the street and with considerable landscape area. The proposed path in a grass verge reflects the existing residential character.

The eastern side is treated as an extension of the retail and commercial heart of the town centre, with a fully paved footpath and street trees planted into the pavement.

Ulmus parvofilia is the preferred tree species as it has an appropriate scale and a strong local and historic identity.

Elyard Street

It is proposed that Elyard Street will become the focal street, or main street in the Town Centre. It will be a continuous landscape corridor reflecting the street's importance, with the potential as a focus for public transport and vibrant street life.

A seven metre wide footpath on the southern side of the street will allow space for strolling, meeting people, occasional stalls, festivals and parades. The double row of trees – one in the footpath and one in the parking lane, will create an intimate pedestrian scale while expressing the street's prominence in the town centre hierarchy. Selected pole top lights will provide night time pedestrian security and enhance the streetscape.

Elyard Street will contain two public spaces of note; the playground at the corner of Somerset Avenue, and a proposed civic square. It is proposed that the park be expanded and the landscape and facilities be improved. The park will provide a green withdrawal space and a valuable play space.

A civic square is proposed at the western end of the street. The square is centrally located to retail, commercial community and health facilities to encourage activity and accessibility. Cafes and kiosks should be established to further activate the space, particularly where blank walls potentially front the street. The southern development area of the square should be occupied by community facilities to provide a public focus.

The square will be civic in character, hard paved to accommodate large gatherings and constant use. Special paving is proposed to define the square and announce it as the most prominent public space in the Town Centre. This square will also provide a space for expression of civic pride through artworks and cultural activity.

Public art within the square will focus on connections to drainage lines and water. The space beyond the square, visible through a break in the buildings, is a strong and beautiful landscape that preserves remnants of the natural drainage system which once converged on the shopping centre site. A visual connection with this landscape can be made through the square with a series of ponds, specially crafted drains and further art projects.

5.2 Schedule

Component costs of the streetscape and public domain works are summarised in Figure 12. These are based on comprehensive estimates of quantities and unit rates prepared with the assistance of consultants.

Staging o the work is show in Figure 13. Significant priority works include:

- footpath works, landscaping and street furniture in Camden Valley Way, The Northern Road, Somerset Avenue and Elyard Street;
- open space acquisition in Somerset Avenue and Elyard Street;
- aerial bundle cabling in Queen Street; and
- underground cabling in Elyard Street.

5.3 Formulae and contribution rates

The following formulae are provided to calculate the contribution rates for the streetscape and public domain works.

Retail

Retail uses are:

- Narellan Shopping Centre;
- non-shopping centre; and
- bulky goods.

The formula is:

$$CR = \frac{C \times W}{[RF \times W] + NRF}$$

Where:

CR = contribution rate ($/m²)
C = total cost of all streetscape and public domain works
W = weighting factor (2) given to retail uses
RF = total additional retail floorspace
NRF = total additional non-retail floorspace

Non-Retail

Non-retail uses are:

- Commercial;
- Service trades; and

The formula is:

$$CR = \frac{C}{[RF \times W] + NRF}$$

Where:

CR = contribution rate ($/m²)
C = total cost of all streetscape and public domain works
W = weighting factor (2) given to retail uses
RF = total additional retail floorspace
NRF = total additional non-retail floorspace

Figure 5A: Streetscape and Public Domain – Location of Works

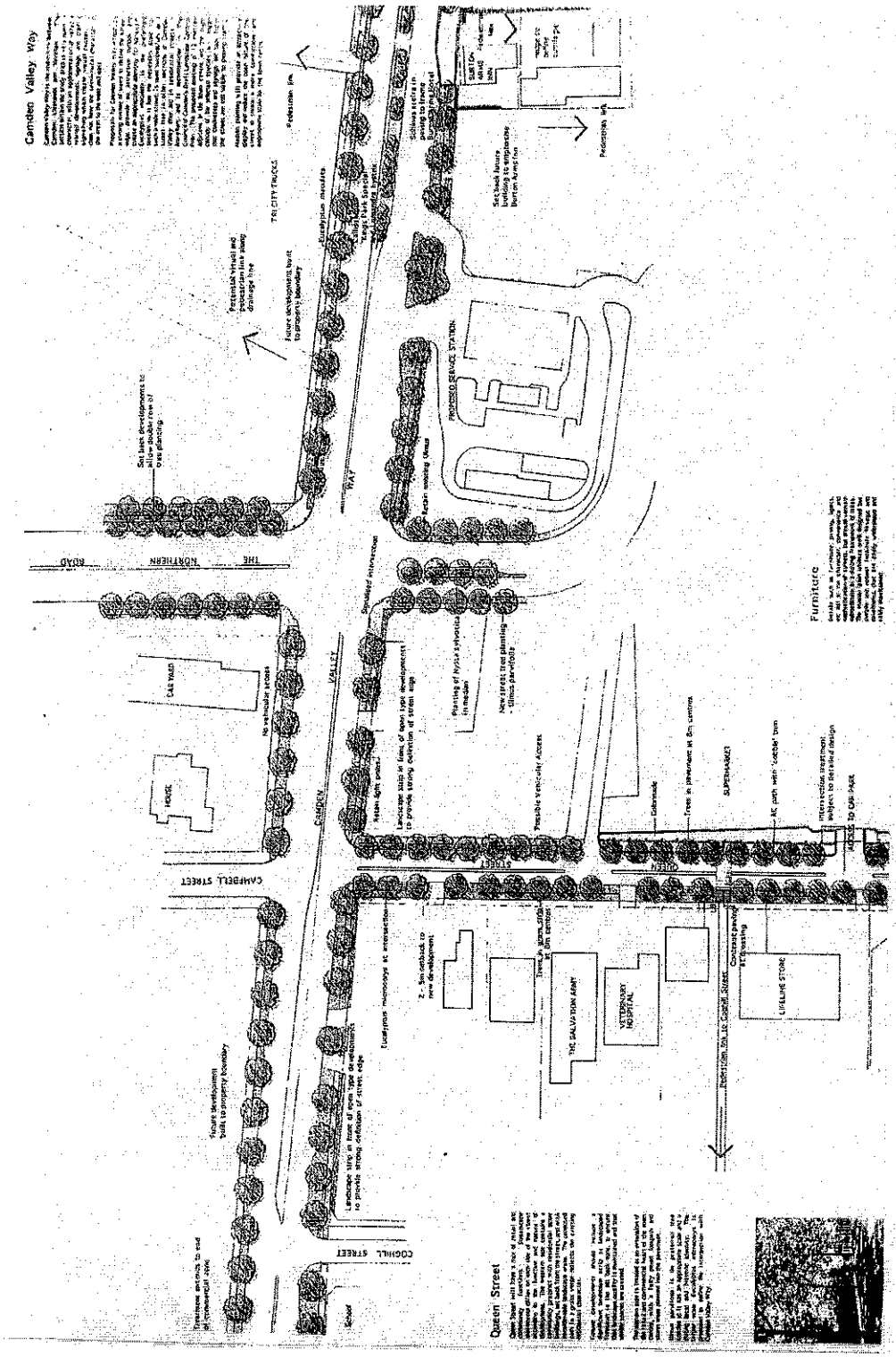


Figure 5B: Streetscape and Public Domain – Location of Works

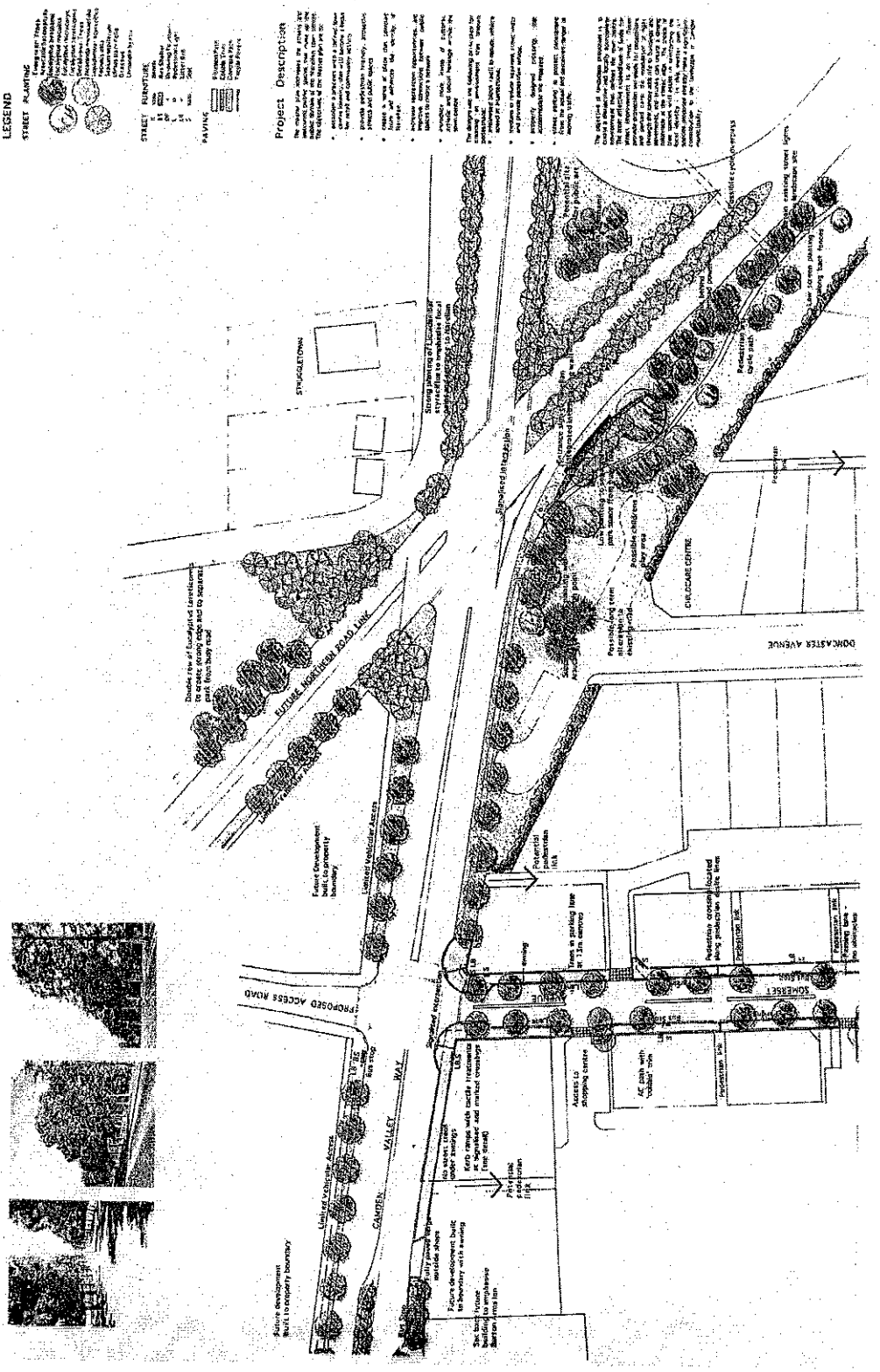


Figure 5C: Streetscape and Public Domain – Location of Works

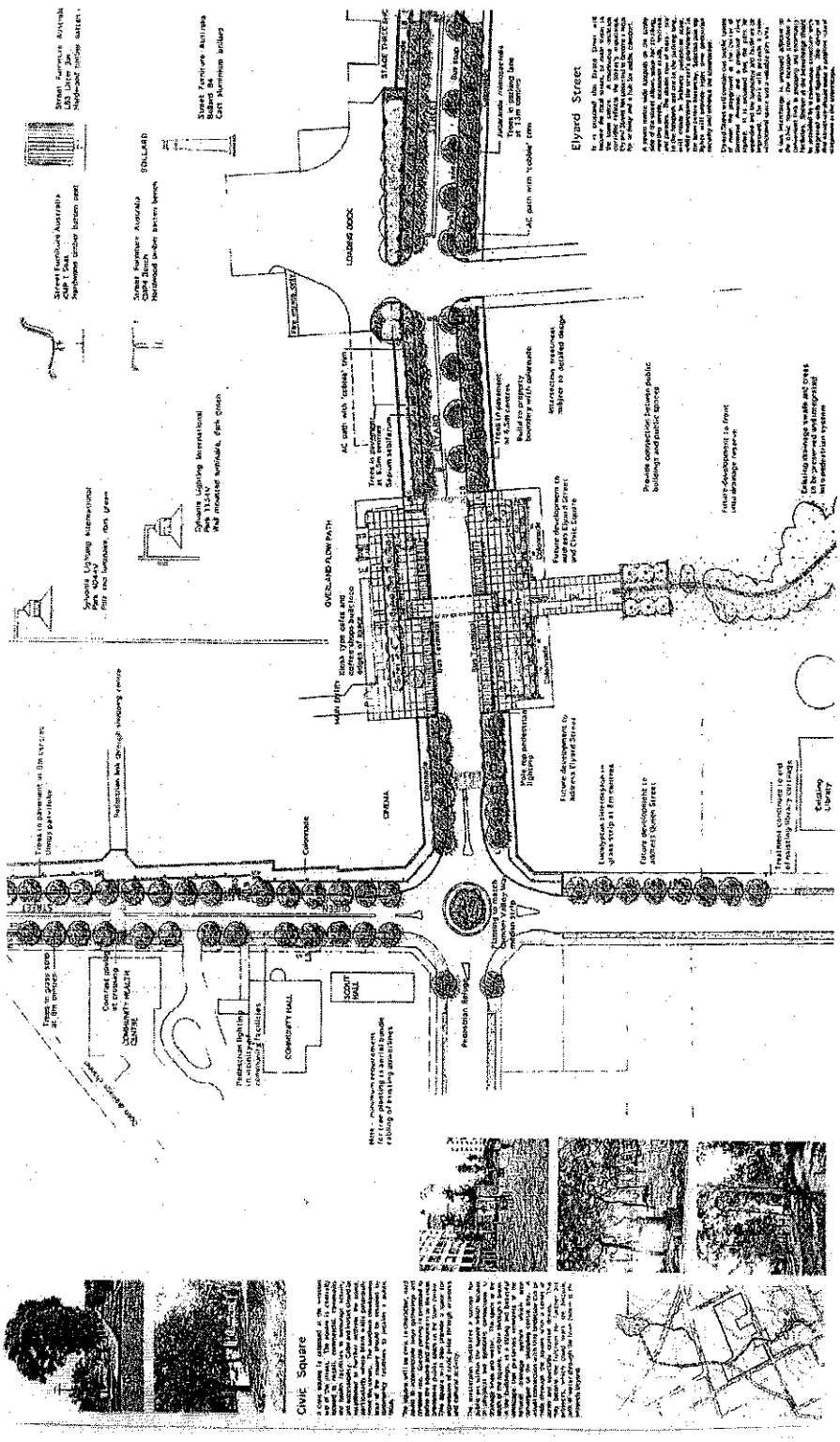


Figure 5D: Streetscape and Public Domain – Location of Works

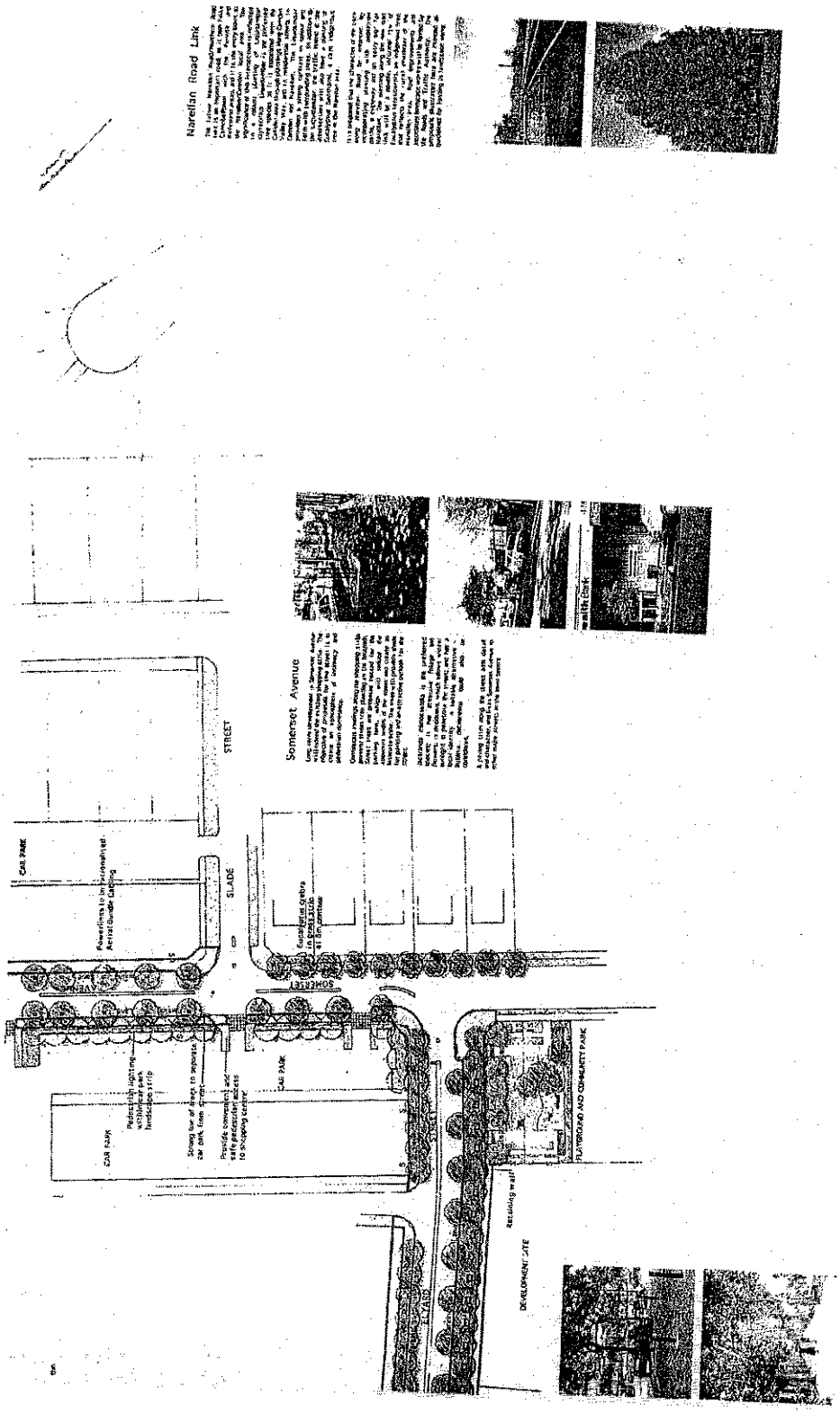


Figure 5E: Streetscape and Public Domain – Component Costs

ITEM OF WORKS	COST
CAMDEN VALLEY WAY/ THE NORTHERN ROAD	
FOOTPATH WORKS	$ 133,901.11
LANDSCAPING	$ 80,983.32
STREET FURNITURE	$ 31,717.48
CONTINGENCIES	$ 24,660.19
SUB TOTAL	$ 271,262
SOMERSET AVENUE	
OPEN SPACE ACQUISITION	$ 194,840.17
FOOTPATH WORKS	$ 99,904.13
LANDSCAPING	$ 15,805.38
STREET FURNITURE	$ 27,626.81
CONTINGENCIES	$ 14,333.63
SUB TOTAL	$ 352,510
QUEEN STREET	
AERIAL BUNDLE CABLING	$ 118,570
FOOTPATH WORKS	$ 78,763.69
LANDSCAPING	$ 41,048.94
STREET FURNITURE	$ 28,990.37
CONTINGENCIES	$ 14,880.30
SUB TOTAL	$ 282,253
ELYARD STREET	
OPEN SPACE ACQUISITION	$ 284,568.02
UNDERGROUND CABLING	$ 118,570.01
FOOTPATH WORKS	$ 400,956.35
LANDSCAPING	$ 103,170.14
STREET FURNITURE	$ 228,958.69
CONTINGENCIES	$ 73,308.52
SUB TOTAL	$ 1,209,532
NARELLAN ROAD INTERSECTION	
FOOTPATH WORKS	$ 55,063.91
LANDSCAPING	$ 128,103.04
STREET FURNITURE	$ 29,642.50
CONTINGENCIES	$ 21,280.95
SUB TOTAL	$ 234,090
TOTAL	$ 2,349,648

Figure 5F: Streetscape and Public Domain – Works Schedule

ITEM OF WORKS	STAGE 1 COMPLETED ACTUAL COST	STAGE 2 1997-2005 ESTIMATED COST	STAGE 3 2005-2013 ESTIMATED COST	STAGE 4 2013-2021[sic] ESTIMATED COST	TOTAL
CAMDEN VALLEY WAY/THE NORTHERN ROAD					
Footpath Works, Landscaping and Street Furniture		$ 159,512	$ 50,000	$ 50,000	$ 271,262
SOMERSET AVENUE					
Open Space Acquisition		$ 194,840			$ 194,840
Footpath Works, Landscaping and Street Furniture		$ 40,340	$ 94,000		$ 157,670
QUEEN STREET					
Aerial Bundle Cabling		$ 118,570			$ 118,570
Footpath Works, Landscaping and Street Furniture		$ 39,368	$ 56,000	$ 44,000	$ 163,683
ELYARD STREET					
Open Space Acquisition		$ 284,568			$ 284,568
Underground Cabling		$ 118,570			$ 118,570
Footpath Works, Landscaping and Street Furniture		$ 220,453	$ 464,000		$ 806,394
NARELLAN ROAD INTERSECTION					
Footpath Works, Landscaping and Street Furniture				$ 234,090	$ 234,090
TOTAL	$ -	$ 1,176,221	$ 664,000	$ 328,090	$ 2,349,648

6. TRAFFIC FACILITIES AND ROADWORKS

6.1 Description and location

The traffic facilities and roadworks are shown in Figure 6A. They have been based on the traffic studies referred to in Section 2.1

Camden Valley Way

Camden Valley Way is an arterial road controlled by the RTA. It is the main link road between Camden, Liverpool and Narellan. As part of Stage 1 of the development of the Narellan Town Centre, traffic signals were installed at the intersection of Camden Valley Way and Somerset Avenue and at the intersection of Camden Valley Way and The Northern Road in order to allow safe and efficient vehicular access to the shopping centre. The traffic signals will also allow safe pedestrian access to the envisaged bulky goods retailing area on the northern side of Camden Valley Way.

In the long term, a new circulation road between Narellan Road and The Northern Road will take heavy regional through-traffic out of Camden Valley Way and service the bulky goods retail area. The present traffic volumes will be reduced however, the design option maintains the present lane configuration.

The gateway to the Narellan Town centre is at the intersection of Narellan Road and Camden Valley Way. The Masterplan indicates that special consideration should be given to this site. Paved pedestrian crossing treatments at the traffic lights will be provided to give the Narellan Town Centre identity and distinction. This type of treatment is also to be provided at the traffic lights at the intersection of Camden Valley Way and Somerset Avenue, at the intersection of Camden Valley Way an The Northern Road and at the intersection of Camden Valley Way and Richardson Road. These works will be sympathetic with the brick paved median and proposed landscaping in Camden Valley Way.

An indented bus bay will be provided on the northern side of Camden Valley Way adjacent to Somerset Avenue to provide a safe set-down area for express bus services.

Richardson Road

The existing median on Camden Valley Way only allows 'left in/left out' movements to and from Queen Street. The further

development of the Narellan Town Centre will mean an increase in vehicles using Richardson Road, coming from and going to Camden via Camden Valley Way.

Because of the school site and the expected increase in traffic volumes in Richardson Road, it will be necessary o reduce vehicle speed and provide safe pedestrian crossing facilities. A wombat type raised pedestrian crossing is proposed in Richardson Road at the school mid block between Camden Valley Way and Elyard Street. This facility will also act as a traffic calming device.

Kerbside lane linemarking will be provided between Camden Valley Way and Elyard Street to provide traffic calming in Richardson Road and a safer cycling environment.

For vehicles travelling to the Town Centre from Richardson Road, a safe turning movement is provided by the existing roundabout at the intersection of Richardson Road and Elyard Street.

Queen Street

Queen Street and Elyard Street will become a retail circulation road with access to off-street parking. The existing roundabout at the intersection of Queen Street and Elyard Street provides safe turning for circulating traffic.

The existing road pavement is structurally inadequate to cater for the proposed increase in traffic loadings and is required to be upgraded.

Two wombat type raised pedestrian crossings are proposed to provide safe pedestrian linkages between the retail activities and the community and institutional precincts. One of these crossings will also serve a bus stop which will be indented to provide a safe set-down area. The raised pedestrian crossings will also act as traffic calming facilities to ensure a safer pedestrian environment.

Somerset Avenue

Somerset Avenue will also become a retail circulation road with access to off-street parking. The existing road pavement is structurally inadequate to cater for the proposed increase in traffic loadings and is required to be upgraded.

Two wombat type raised pedestrian crossings are proposed to provide safe pedestrian linkage between the retail activities and

carparking areas. The raised pedestrian crossings will also act as traffic calming facilities to ensure a safer pedestrian environment.

Kerbside lane linemarking will be provided between Camden Valley Way and Elyard Street to supplement the traffic calming facilities and ensure a safer cycling environment.

Elyard Street

In conjunction with the development of the Narellan Town Centre, Elyard Street has been realigned and reconstructed between Somerset Avenue and Queen Street. Acquisition of land in Elyard Street was required to enable these works to be undertaken.

Elyard Street will become the focal street of the Narellan Town Centre. Major landscaping treatment along Elyard Street between Somerset Avenue and Queen Street is proposed, together with the provision of a civic square with bus interchange adjacent. A median sympathetic to the landscaping will be provided along Elyard Street between Somerset Avenue and Queen Street.

Two wombat type raised pedestrian crossings are proposed either side of the bus interchange with a further wombat type raised pedestrian crossing at the proposed bus stop mid block between Somerset Avenue and Queen Street. These crossings will also act as traffic calming facilities.

There is an existing wombat type raised pedestrian crossing in Elyard Street mid block between Queen Street and Richardson Road providing safe pedestrian linkage between the school and Nott Oval. This crossing will also act as a traffic calming facility.

Kerbside lane linemarking will be provided along Elyard Street between Somerset Avenue and Queen street to supplement the traffic calming facilities and ensure a safer cycling environment.

6.2 Schedule

Costs and staging of the works are shown in Figure 6B.

6.3 Apportionment of costs

The apportionment of costs was explained earlier in section 2.7. The apportionment of costs for traffic Facilities and Roadworks is shown in Figure 6C.

6.4 Formulae and contribution rates

The following formulae are provided to calculate the contribution rates for traffic facilities and roadworks:

Narellan Shopping Centre:

$$CR = \frac{AC}{SCF}$$

Where:

CR = contribution rate ($/ m²)
AC = apportioned cost of traffic facilities and roadworks (to the Narellan Shopping Centre)
SCF = total additional floorspace of the Narellan Shopping Centre

Other Land Uses (Retail)

Other land uses (retail are:

- non-shopping centre; and
- bulky goods

The formula is:

$$CR = \frac{AC \times W}{[ORF \times W] + NRF}$$

Where:

CR = contribution rate $/ m²
SC = apportioned cost of traffic facilities and roadworks (to other land use categories)
W = weighting factor (2) given to retail uses
ORF = total additional floorspace of other land uses (retail)
NRF = total additional non-retail floorspace

Other Land Uses (Non-Retail)

Other land uses (non-retail) are:

- commercial;
- service trades; and
- residential

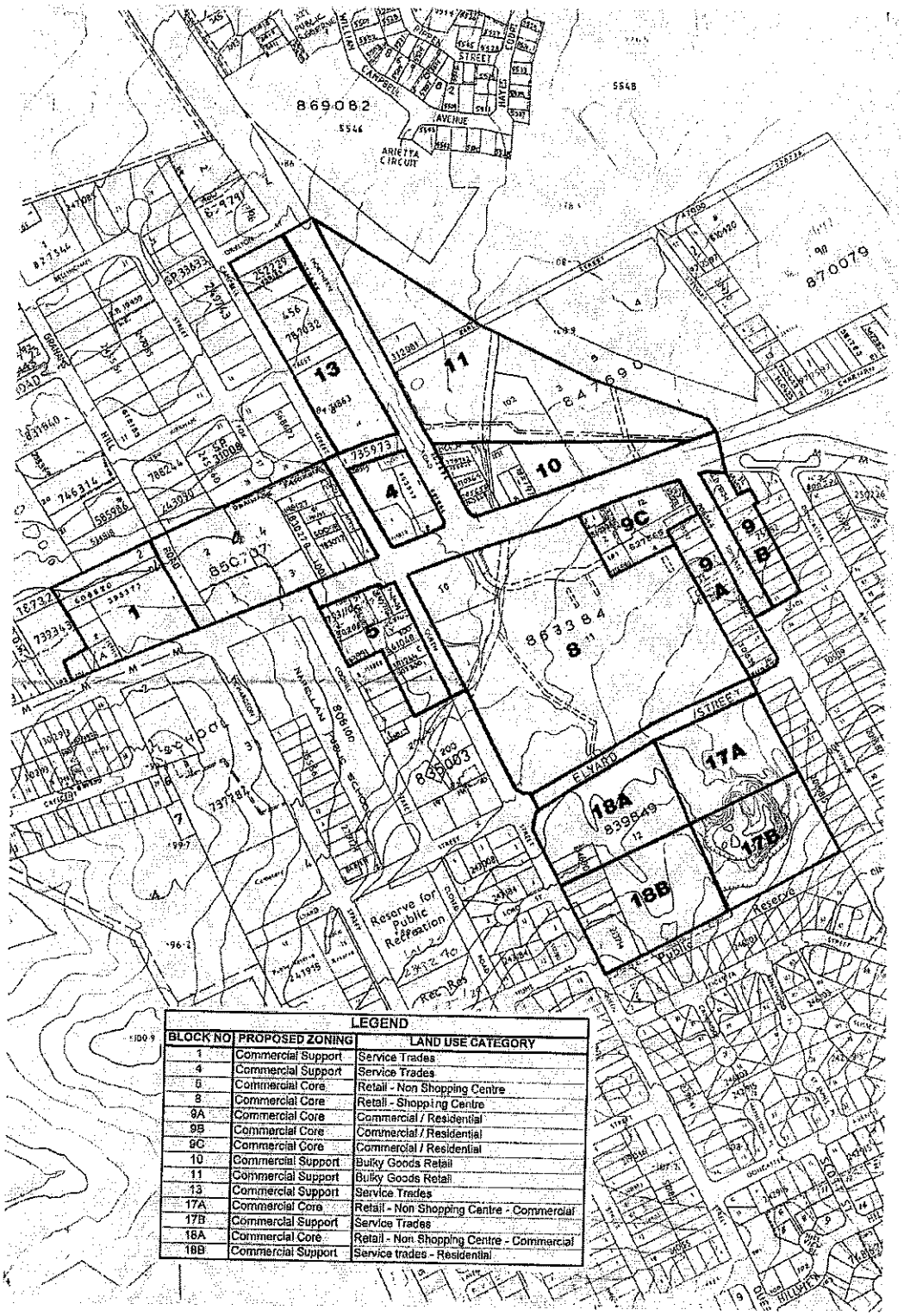
The formula is:

$$CR = \frac{AC \times W}{[ORF \times W] + NRF}$$

Where:

CR	=	contribution rate ($/m^2)
AC	=	apportioned cost of traffic facilities and roadworks (to other land use categories)
W	=	weighting factor (1) given to non retail uses
ORF	=	total additional floorspace of other land uses (retail)
NRF	=	total additional non-retail floorspace

Figure 1: Area of the Plan



BLOCK NO	PROPOSED ZONING	LAND USE CATEGORY
1	Commercial Support	Service Trades
4	Commercial Support	Service Trades
5	Commercial Core	Retail - Non Shopping Centre
8	Commercial Core	Retail - Shopping Centre
9A	Commercial Core	Commercial / Residential
9B	Commercial Core	Commercial / Residential
9C	Commercial Core	Commercial / Residential
10	Commercial Support	Bulky Goods Retail
11	Commercial Support	Bulky Goods Retail
13	Commercial Support	Service Trades
17A	Commercial Core	Retail - Non Shopping Centre - Commercial
17B	Commercial Support	Service Trades
18A	Commercial Core	Retail - Non Shopping Centre - Commercial
18B	Commercial Support	Service trades - Residential

Figure 6A: Traffic Facilities and Roadworks – Location of Works

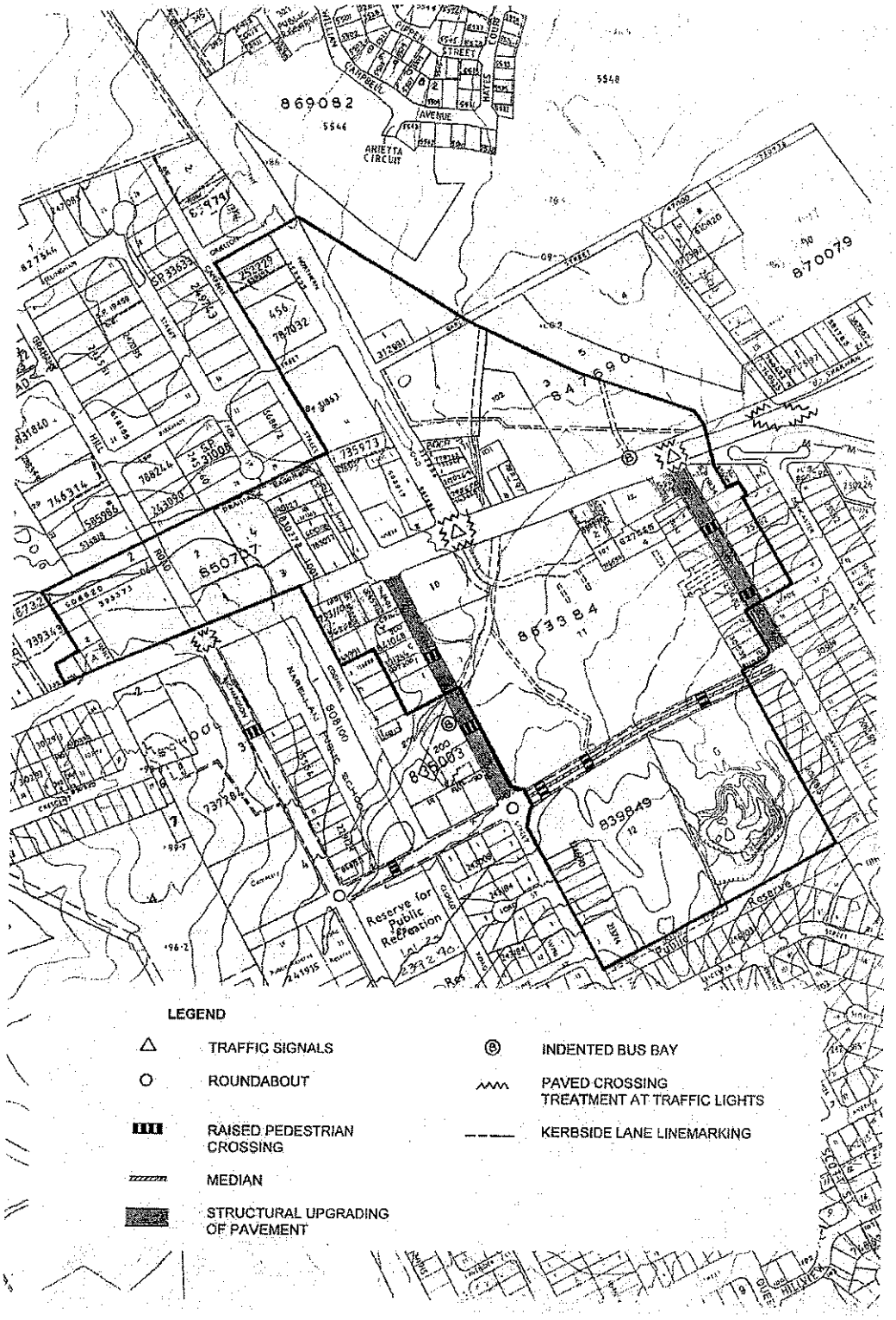


Figure 6B: Traffic Facilities and Roadworks – Cost & Staging

ITEM OF WORKS	STAGE 1 COMPLETED ACTUAL COST	STAGE 2 1997-2006 ESTIMATED COST	STAGE 3 2005-2013	STAGE 4 2013-2021 ESTIMATED COST	TOTAL
CAMDEN VALLEY WAY					
Traffic Lights					
Camden Valley Way & The Northern Road	$ 220,000				$ 220,000
Traffic Facilities					
Indented bus bay (single) - east bound lane				$ 12,090	$ 12,090
Paved crossing treatment at lights - CVW & Link Rd				$ 53,492	$ 53,492
Paved crossing treatment at lights - CVW & Somerset Ave				$ 31,547	$ 31,547
Paved crossing treatment at lights - CVW & Northern Rd				$ 38,862	$ 38,862
Paved crossing treatment at lights - CVW & Richardson Rd				$ 30,734	$ 30,734
SUB TOTAL	$ 220,000	$ -	$ -	$ 166,725	$ 386,725
RICHARDSON ROAD					
Roundabout					
Elyard St (2/3 cost - see Elyard St)	$ 85,808				$ 85,808
Traffic Calming					
Raised pedestrian crossing at school - mid block CVW to Elyard St		$ 35,000			$ 35,000
Kerbside lane linemarking - CVW to Elyard St		$ 1,500			$ 1,500
SUB TOTAL	$ 85,808	$ 36,500	$ -	$ -	$ 122,308
QUEEN STREET					
Roundabout					
Elyard St (1/2 cost - see Elyard St)	$ 2,500				$ 2,500
Structural Upgrading of Road Pavement					
Camden Valley Way to Elyard St			$ 285,000		$ 285,000
Traffic Calming					
Two raised pedestrian crossings - midblock CVW to Elyard St		$ 20,000			$ 20,000
Traffic Facilities					
Indented bus bay (single) north bound lane		$ 12,090			$ 12,090
SUB TOTAL	$ 2,500	$ 32,090	$ 285,000	$ -	$ 319,590
SOMERSET AVENUE					
Traffic Lights					
Camden Valley Way & Somerset Ave	$ 110,000				$ 110,000
Structural Upgrading of Road Pavement					
Camden Valley Way to Elyard St			$ 290,000		$ 290,000
Traffic Calming					
Two raised pedestrian crossings - midblock CVW to Elyard St			$ 20,000		$ 20,000
Kerbside lane linemarking - CVW to Elyard St		$ 1,300			$ 1,300
SUB TOTAL	$ 110,000	$ 1,300	$ 310,000	$ -	$ 421,300
ELYARD STREET					
Land Acquisition					
Queen St to Somerset Ave	$ 294,580				$ 294,580
Road Construction					
Queen St to Somerset Ave	$ 121,732				$ 121,732
Roundabout					
Richardson Rd (1/3 cost - see Richardson Rd)	$ 42,904				$ 42,904
Queen St (1/2cost- see Queen St)	$ 2,500				$ 2,500
Traffic Calming					
Stencilled median - Queen St to Somerset Ave			$ 45,796		$ 45,796
Two raised pedestrian crossings at bus terminal			$ 20,000		$ 20,000
Raised pedestrian crossing - midblock Queen St to Somerset Ave			$ 10,000		$ 10,000
Raised pedestrian crossing - midblock Queen St to Richardson Rd	$ 4,350				$ 4,350
Kerbside lane linemarking - Somerset Ave to Richardson Rd		$ 2,500			$ 2,500
SUB TOTAL	$ 466,066	$ 2,500	$ 75,796	$ -	$ 544,362
TOTAL	$ 884,374	$ 72,390	$ 670,796	$ 166,725	$ 1,794,285

Figure 6C: Traffic Facilities and Roadworks – Apportionment

APPORTIONMENT		STAGE 1 COMPLETED ACTUAL COST*	STAGE 2 1997-2005 ESTIMATED COST	STAGE 3 2005-2013 ESTIMATED COST	STAGE 4 2013-2021 ESTIMATED COST	TOTAL
CAMDEN VALLEY WAY						
Retail - Shopping centre	34%	$ 74,800	$ -	$ -	$ 56,687	$ 131,487
Other land use categories	19%	$ 41,800	$ -	$ -	$ 31,678	$ 73,478
Council	47%	$ 103,400	$ -	$ -	$ 78,361	$ 181,761
SUB TOTAL	**100%**	**$ 220,000**	**$ -**	**$ -**	**$ 166,725**	**$ 386,725**
RICHARDSON ROAD						
Retail - Shopping centre	11%	$ 9,439	$ 4,015	$ -	$ -	$ 13,454
Other land use categories	6%	$ 5,148	$ 2,190	$ -	$ -	$ 7,338
Council	83%	$ 71,221	$ 30,295	$ -	$ -	$ 101,516
SUB TOTAL	**100%**	**$ 85,808**	**$ 36,500**	**$ -**	**$ -**	**$ 122,308**
QUEEN STREET						
Retail - Shopping centre	65%	$ 1,625	$ 20,859	$ 185,250	$ -	$ 207,734
Other land use categories	35%	$ 875	$ 11,232	$ 99,750	$ -	$ 111,857
Council	0%	$ -	$ -	$ -	$ -	$ -
SUB TOTAL	**100%**	**$ 2,500**	**$ 32,090**	**$ 285,000**	**$ -**	**$ 319,590**
SOMERSET AVE						
Retail - Shopping centre	42%	$ 46,200	$ 546	$ 130,200	$ -	$ 176,946
Other land use categories	22%	$ 24,200	$ 286	$ 68,200	$ -	$ 92,686
Council	36%	$ 39,600	$ 468	$ 111,600	$ -	$ 151,668
SUB TOTAL	**100%**	**$ 110,000**	**$ 1,300**	**$ 310,000**	**$ -**	**$ 421,300**
ELYARD STREET						
Retail - Shopping centre	59%	$ 274,979	$ 1,475	$ 44,720	$ -	$ 321,174
Other land use categories	31%	$ 144,480	$ 775	$ 23,497	$ -	$ 168,752
Council	10%	$ 46,607	$ 250	$ 7,580	$ -	$ 54,436
SUB TOTAL	**100%**	**$ 466,066**	**$ 2,500**	**$ 75,796**	**$ -**	**$ 544,362**
TOTAL		**$ 884,374**	**$ 72,390**	**$ 670,796**	**$ 166,725**	**$ 1,794,285**
SUMMARY						
Retail - Shopping centre	-	$ 407,043	$ 26,895	$ 360,170	$ 56,687	$ 850,793
Other land use categories	-	$ 216,504	$ 14,483	$ 191,447	$ 31,678	$ 454,111
Council	-	$ 260,827	$ 31,013	$ 119,180	$ 78,361	$ 489,381
TOTAL		**$ 884,374**	**$ 72,390**	**$ 670,796**	**$ 166,725**	**$ 1,794,285**

7. SOMERSET AVENUE RIGHTS OF CARRIAGEWAY

7.1 Description

The location of the rights of carriageway is shown in Figure 7A.

There are two rights of carriageway for land adjoining Somerset Avenue. From a traffic management point of view, Council plans to restrict the number of vehicular access points in Somerset Avenue between Camden Valley Way and Slade Street and between Camden Valley Way and Elyard Street. Council has identified a key traffic management objective of limiting vehicular access to redevelopment sites on the eastern and western sides of Somerset Avenue to ensure minimum interruption to the free flow of traffic in this important distributor road.

Eleven allotments located on the western side of Somerset Avenue (Block 9A) will be required to contribute to the cost of acquiring a right of carriageway. It is estimated that the total site area of these lots is 7,473 sq.m. A total floor space ratio of 1:1 therefore generates a gross additional floor space of 7,473 sq.m. (retail, commercial and residential inclusive), for the redevelopment site to the west of Somerset Avenue.

A right of carriageway is also required for the nine commercial core zoned allotments on the eastern side of Somerset Avenue (Block 9B) between Camden Valley Way and Slade Street. The same land use controls and floor space ratios apply to this area as they do for the opposite side of the road.

The total site area is estimated at 6052 sq.m. and the combined retail, commercial and residential uses amount to a total floor space ratio of 1:1.

7.2 Schedule

Costs and staging of the works are shown in Figure 7B. An independent valuation was obtained for the costs of registering both rights of carriageway.

Registration is expected to take place in Stages two and three of the works schedule.

7.3 Formulae and contribution rates

Block 9A

The following formula is provided to calculate the contribution rate for the right of carriageway in Bock 9A:

$$CR = \frac{C_A}{F_A}$$

Where:

CR = contribution rate ($/m²)

C_A = total cost of registering the right of carriageway in Block 9A

F_A = total additional floorspace in Block 9A

Block 9B

The following formula is provided to calculate the contribution rate for the right of carriageway in Block 9B:

$$CR = \frac{C_B}{F_B}$$

Where:

CR = contribution rate ($/m²)

C_A = total cost of registering the right of carriageway in Block 9B

F_A = total additional floorspace in Block 9B

Figure 7A: Somerset Avenue Rights of Carriageway – Location

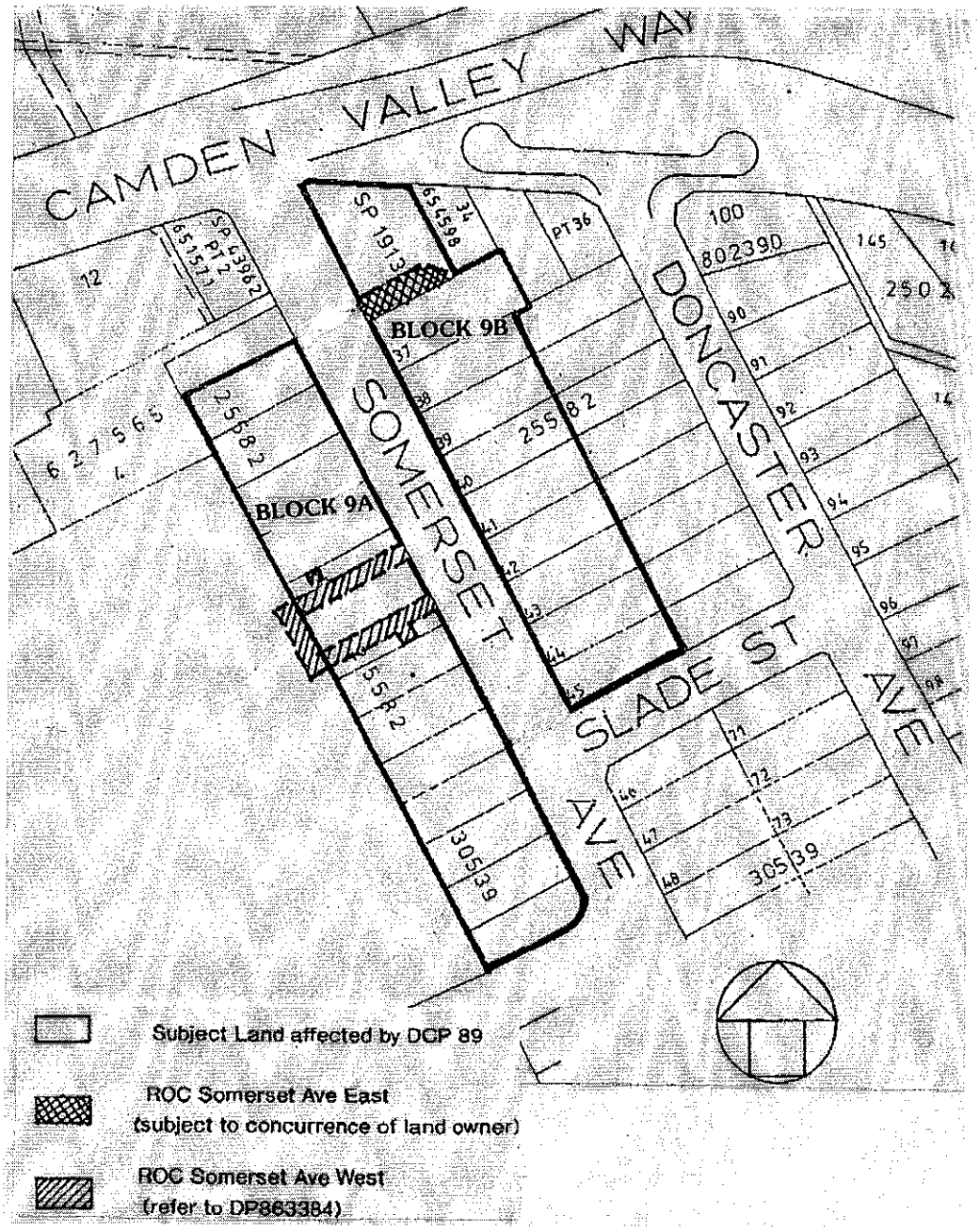


Figure 7A: Somerset Avenue Rights of Carriageway – Costs

ITEM OF WORKS	PHASE 1 COMPLETED ACTUAL COST	PHASE 2 1997-2005 ESTIMATED COST	PHASE 3 2005-2013 ESTIMATED COST	PHASE 4 2013-2021 ESTIMATED COST	TOTAL
ROW Somerset Ave West - Block 9A		$ 159,686	$ 159,686		$ 319,372
ROW Somerset Ave East - Block 9B		$ 47,906	$ 47,906		$ 95,812
TOTAL	$ -	$ 207,592	$ 207,592	$ -	$ 415,184