TWEED
SHIRE COUNCIL

TWEED ROAD CONTRIBUTION PLAN

CP No 4

DRAFT VERSION 5.0

~~March~~ July 2007

THE TWEED
VALLEY OF CONTRASTS

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CERTIFICATION:

This ***Tweed Road Contribution Plan (CP No 4 - Version 5.0)*** was adopted by Tweed Shire Council on ~~[? April~~10 July 2007] and became effective on ~~[? May~~16 July 2007].

Pursuant to Clauses 31 and 32 of the Environmental Planning and Assessment Regulation 2000, the following contribution plans are repealed by the approval of this Tweed Road Contribution Plan (being a subsequent plan):

- Tweed Road Contribution Plan (CP No 4 Version 4.1)
- Tweed Road Contribution Plan (CP No 4 Version 4.2)
- Tweed Road Contribution Plan (CP No 4 Version 4.3)
- Tweed Road Contribution Plan (CP No 4 Version 4.4)
- Tweed Road Contribution Plan (CP No 4 Version 4.5)
- Tweed Road Contribution Plan (CP No 4 Version 4.6)
- Tweed Road Contribution Plan (CP No 4 Version 4.8)
- Tweed Road Contribution Plan (CP No 4 Version 4.9)

Director, Engineering & Operations

General Manager

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This Contributions Plan enables Tweed Shire Council to levy s.94 developer contributions for the provision of additional road capacity to service increased traffic loading as a result of urban growth and/or development demands. It also permits Council to recoup past expenditures in the road network made in anticipation of development throughout the entire Tweed Shire.

According to the *Tweed 4/24 Strategic Plan 2004-2024* (Sept. 2004), the population on the Tweed could potentially reach 120,000 persons by 2024. Further, it has previously been estimated that the zoning provisions in the current *Local Environmental Plan 2000* could, ultimately, provide for a population of up to 150,000 persons. This latter figure represents almost a doubling in the Shire's current (2006) population of about 84,000 persons.

The new (2004) strategic plan states a requirement for all Contribution Plans to be reviewed and updated.

The traffic studies, which have shaped this Plan are the:-

- *Banora Point and Tweed Road Development Strategy Review 2004*.
- *Murwillumbah Distributor Road Network Study (2005)*, and
- *Tweed Road Development Strategy (1997)*
- *Lower Tweed and Pacific Highway Traffic Masterplan*

Summary of Road Infrastructure Program

As a consequence of the past and projected development, and having regard to the level of road facilities currently available, it has and will be necessary to provide substantial additional road capacity.

The Plan identified 137 individual road improvement projects that either have been, or need to be, constructed to accommodate anticipated traffic volumes. (These projects exclude most of the roads and streets that developers will need to construct in order to specifically serve their own developments). The cost of the projects, that Council has or will need to fund, is $303M as summarised below.

Table ES.1 – Road Infrastructure Program Costs

		Works Status	
Location	***Capital Cost***	***Completed***	***Proposed***
TOTAL	**$~~303.2M~~305.1M**	**$37.4M**	**$~~265~~267.~~78~~M**

To date, some $19M has been collected in developer contributions, compared with the $37M already spent on works completed under the Plan. The fact that Council must carry the deficit, by completing works in advance of the anticipated development, has been anticipated and is part of the Plan's overall philosophy. By the same philosophy, Council can and will continue to levy contributions toward these and future completed works.

Summary of Contribution Rates

As in previous versions of this s.94 Plan, the proposed levies will comprise a Standard Contribution, plus a Local Area Contribution (if applicable). Local Area Contributions will be levied in 4 'local areas' of the Shire, so as to recover the full cost of selected road infrastructure projects required to specifically serve these areas. The Standard Contributions, which vary with locality across the Shire, will partially fund the balance of the road infrastructure works program.

This Plan proposes developer contributions based on land use, calculated in accordance with the traffic generating principles in Section 7. The contributions payable by a typical new household would be as follows:

Table ES.2 - TRCP Household Contributions

Sector	*Locality*	*Standard Contribution*	*Local Contribution*	*Total Contribution*
1	Tweed Heads	$ ~~3,848~~3877	$ -	$ 3,~~848~~877
2	Tweed South	$ 5,~~492~~535	$ -	$ 5,~~492~~535
3	Cobaki	$ 5,~~856~~904*	$ -	$ 5,~~856~~904*
4	Bilambil Heights	$ 10,~~686~~899*	$ -	$ 10,~~686~~899*
5	Terranora	$ ~~8,957~~9,023	$ -	$ ~~8,957~~9,023
	LAC1: 'Area E'	$ ~~8,957~~9,023	$ 3,269	$ 12,~~226~~292
6	Kingscliff	$ 5,~~050~~085	$ -	$ 5,~~050~~085
7	Duranbah/Cabarita	$ 5,~~603~~644	$ -	$ 5,~~603~~644
	LAC2: Kings Forest Development	$ 5,~~603~~644	$ 2,343	$ 7,~~943~~985
	LAC4: Kings Beach Development	$ 5,~~596~~644	$ ~~936~~935	$ 6,~~532~~579
8	Pottsville	$ 6,~~422~~470*	$ -	$ 6,~~42*~~270*
	LAC3: Koala Beach /Leisure	$ 6,~~422~~470*	$ 1,293	$ 7,~~715~~767*

	Gardens			
9	Murwillumbah	$ 6,~~844~~893	$ -	$ 6,~~844~~893
10	Kielvale	$ 9,~~386~~459	$ -	$ 9,~~386~~459
11	Burringbar	$ 6,~~584~~634	$ -	$ 6,~~584~~634
12a	Rural - Inner North Zone	$ 13,~~832~~930	$ -	$ 13,~~832~~930
12b	Rural - Inner West Zone	$ 12,~~096~~183	$ -	$ 12,~~096~~183
13	Rural - Outer Zone	$ 13,~~858~~978	$ -	$ 13,~~858~~978

*** Subject to an "adjustment factor"**

A number of older development consents with conditions requiring TRCP No4 contributions could be paid after commencement of exhibition of Draft Version 5 of this plan and prior to adoption of Version 5, at Version 4.9 rates. ~~thereby creating a cash flow shortfall for these sectors.~~ Contribution Rates for trip ends in these sectors shall be amended by applying an adjustment f~~F~~actor calculated as follows for each of sectors 3, 4 & 8:

Old = Aggregate $ value of TRCP standard payments made in the sector between 11 April ~~xx March~~ 2007 and the effective starting date of Version 5 of this plan

New = Aggregate $ value of TRCP standard payments made in the sector between 11 April ~~xx March~~ 2007 and the effective starting date of Version 5 of this plan if these payments had been made at Version 5 rates

"Adjustment factor" = 1 + **{**(New – Old)/~~remaining~~ trip ends remaining to be generated in the sector/$Standard trip end cost version 5**}**

The Adjustment factor will be calculated at and become effective at the date of Version 5 becoming effective.

The adjustment factor will only be calculated using payments made under version 4.9 if the consent is over 5 years old (issued before 11 April 2002)

~~A number of older development consents with TRCP No4 contributions may be paid at Version 4.9 rates prior to adoption Version 5 thereby creating a cash flow shortfall for these sectors. Contribution Rates for these sectors shall be amended by applying an adjustment Factor based on the difference between payments received under version 4.9 and those~~

~~payable under version 5 divided by the number of trip ends remaining in the sector. The Adjustment factor will be calculated at the date of Version 5 becoming effective.~~

A contribution may also be required in relation to activities that generate heavy haulage (extractive materials) traffic (see Section 7.2). Heavy haulage has a source and destination, to avoid double dipping, the charge will be made on destination development.

Based on the contribution rates specified in this Plan and the extent and distribution of the anticipated future development, the Plan will recover 79% of the total ($305M) cost of the road infrastructure program, as shown in Table ES.~~–~~3, below. The balance of the cost of the road infrastructure program ($~~63M~~64M) will be carried by Council and represents an investment in the 'spare capacity' of the road network that would exist, once the currently anticipated levels of development are achieved.

Table ES.3 – Road Infrastructure Cost Recovery

Works Type	Value	Revenue	Recovery
LAC Works	$ 19.6M	$ 19.6M	100%
Other Works	$ 2853.56M	$ 220222.1M0M	78%
All Works	**$ 3035.12M**	**$ 239.7M241.6M**	**79%**

The contribution rates in the Plan will be amended on the 1st of July each year based on the Construction Price Index for Brisbane as determined by the Australian Bureau of Statistics or a re run of the VLC model.

Council Policies

A) ***Concessions*****:** a concession is offered to all commercial job creating **developments (not including detached housing and unit developments)**, across the Shire except in the following areas:

i) coastal development between Kingscliff and Bogangar (Sector 7): Casuarina, Kings Forest, Salt, and the 'Tourist Property' (Lot 490 DP 47021); and
ii) developments in Bilambil Heights and Cobaki.

The concession is not available for developments exploiting 'existing use rights' as defined in Clause 7.1, and nor can Local Area Contributions be discounted by the concession.

The offer by Council stands at forty percent (40%) until the Year 2008 and Council will review the concession on an annual basis at 1st July each year.

B) ***Deferred Payments:*** Council accepts staged payment of commercial contributions: four equal payments over three years consisting of an initial payment and three subsequent payments together with a bank guarantee as security, although other options that protect Council's interest may be acceptable.

C) ***Heavy Haulage (Extractive Material)***
This contribution is applied to developments that receive extractive materials from heavy haulage vehicles using Council's road network. [If all or part of the material is obtained from a designated source, Council will waive the contribution requirement for that amount of material obtained from the designated source. A copy of the current list of designated sources may be obtained from Council.]

D) ***Eligible Business Enterprises***
Eligible Business Enterprises may be excluded from the need to make TRCP payments. Eligible Business Enterprises are defined as retail, commercial and light industrial, change of use, activities to be established in rented premises with a gross floor area of less than 1,000m2. Professional chambers are included in the definition. Final determination of the eligibility of a business into this category will be at the discretion of the Director Development Services.

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1. INTRODUCTION

1.1 Need for Plan

This Contribution Plan, known as the Tweed Road Contributions Plan (CP No 5), is a financial strategy for the provision of roads in the Tweed Shire to satisfy travel growth demands.

The timely and affordable provision of infrastructure requires extensive land use forecasts and financial planning. Contributions' plans coordinate both these aspects to provide a valuable project management tool, which transparently describes the developer pricing policies being adopted and the outcomes/services being sought/funded.

The Plan is also a requirement of the New South Wales EP&A Act (1979) and Regulation (2000) to enable the Council to require a contribution towards the provision, extension or augmentation of public amenities and services required as a consequence of growth.

1.2 Scope of Plan

This Plan undertakes to do the following:

- to ensure that an adequate level of public road infrastructure is provided throughout the Tweed Local Government Area;
- to enable the Council to recoup funds which it has spent in the provision of public facilities in anticipation of likely future development;
- to ensure that the existing community is not burdened by the provision of public roads required as a result of future development;
- to provide a comprehensive strategy for the assessment, collection, expenditure, accounting and review of development contributions on an equitable basis throughout the Tweed Shire; and
- to update Contribution Plan No 4 (Version 4.9) as a result of a review of road infrastructure requirements and their associated costs, and also to amend the Plan in respect of the boundaries used to define the sectors by which the Standard Contributions are determined. (NB. The underlying principles and methods of allocating the cost of the road infrastructure program to future development have not changed from those used in versions 4.0 to 4.9 of the Plan).

2. BACKGROUND

The *Tweed Road Development Strategy (1997)* was completed within the context of predicting traffic growth based on current and planned land zonings within the Shire.

The key documents and supporting studies, which underpin this update of Contributions Plan No.4, are the:

- *Tweed 4/24 Strategic Plan 2004-2024* (2004)
- *Tweed Local Environment Plan 2000*
- *Lower Tweed and Pacific Highway Traffic Masterplan*

2.1 the Tweed 4/24 Strategic Plan 2004-2024 (2004)

The *Tweed 4/24 Strategic Plan* updates the previous *Tweed 2000+ Strategic Plan*, which had been in effect since December 1996. This strategic plan is the over-arching document of all of the Shire's planning instruments. It sets out broad directions and objectives, and proposes a package of more detailed plans, policies and actions that will be progressively implemented and updated in response to changing needs over the next 2 decades.

Some key elements of the strategy, relevant to the Shire's road infrastructure needs and hence this Plan, are:

- a Rural Settlement Strategy to guide rural subdivision and expansion of villages
- a new Land Use Structure Plan, providing detailed proposals for urban and rural land use.
- a new and broader Tweed Infrastructure Program, which will cover all major items of physical, social and environmental infrastructure, including State and Federal Government projects, and which minimises the cost to government of servicing new development.

2.2 the Tweed Local Environment Plan 2000

The TLEP 2000 is a statutory plan, consisting of a set of 45 Zone Maps, which divide the Shire into various land-use zones, and a written document, which sets out what development can be carried out within them.

The TLEP is a 'living document'. It was first gazetted in April 2000 and has since been the subject of 47 amendments, reflecting the outcomes of the Shire's own planning studies or of planning approvals, with the last revision being in October 2006.

3. LEVY AREAS

This Contribution Plan levies all traffic generating developments within the Tweed Shire local government area. A two-tier system is used to determine the overall TRCP contribution: Standard Contribution and a Local Area Contribution.

A contribution will be required from activities that generate heavy haulage traffic anywhere in the Shire.

3.1 Standard Contribution

In assessing the standard contribution, the Plan uses a differential pricing system based on 14 sectors (or localities) and the intended land use:

- Sectors - the unit rate of contribution varies across the Shire depending on the value and amount of road space likely to be consumed by a unit of traffic (a trip-end) generated by a development located in that area. The 14 sectors defined for this purpose are shown in Figure 3.1 (in Schedule 3).

- Land Use – differing land uses and development types generate differing traffic volumes or demands. The potential traffic generation of an intended development can be determined using the trip rate table in Table 7.1 (following on Page 16).

The Standard Contribution payable is determined from the product of the sector-based unit rate and the estimated traffic generation of the development.

3.2 Local Area Contributions

Council administers, on behalf of land-owners/developers, the assignment or apportionment of responsibility for works in localised areas. These areas are listed in Table 3.1 and defined in Figures 3.2a – 3.2d. Council may add to this list where the need arises or when approached by a consortium of land owners.

Table 3.1 - Local Area Contributions

No.	*Locality*	*Developments*	*Application*
1	Terranora	Terranora, Area E	Land defined in Figure 3.2a[(1)]
2	Cabarita	Kings Forest	Land defined in Figure 3.2b[(1)]
3	Pottsville	Leisure Gardens, Koala Beach	Land defined in Figure 3.2c[(1)]
4	Duranbah /Cabarita	Kings Beach	Land defined in Figure 3.2d[(1)]

Notes: 1. Refer to Schedule 3

4. NEXUS

4.1 Need

Population growth is known through experience to generate additional traffic, creating the need for improved roads or sometimes more roads. The actual volume and characteristics of traffic demand is directly related to land-use. Field surveys and manuals on the subject, including the NSW Roads and Traffic Authority's Guide to Traffic Generating Developments (Issue 2.2 – October 2002) demonstrate that the increase in traffic is dependent on the types of development. The actual increases vary considerably with the extreme being the increase in traffic generation due to shopping centres, fast food stores and the like.

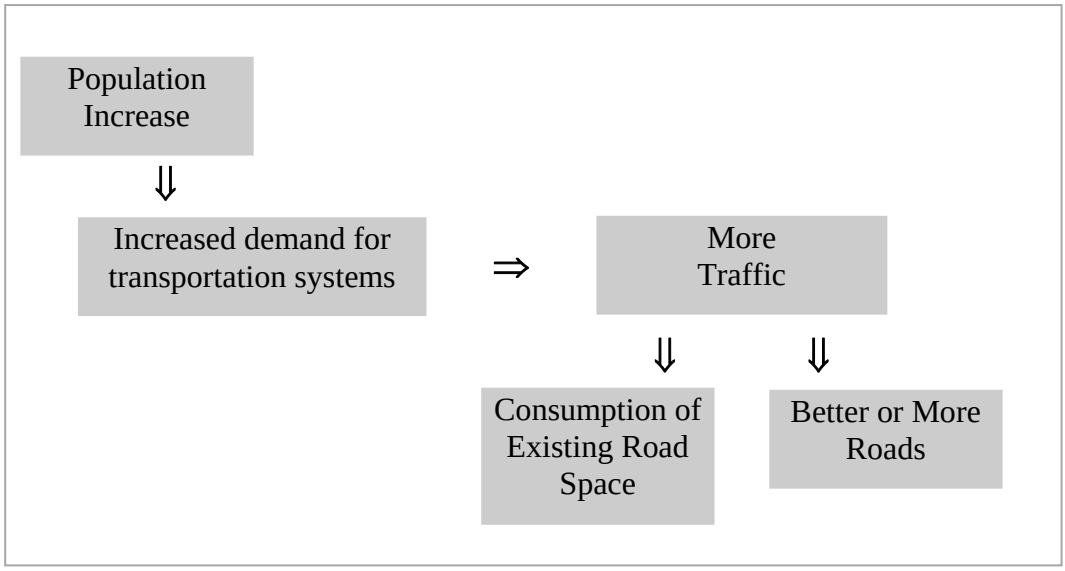

Figure 4.1 Nexus

4.2 Impacts

Extra traffic can impact upon:

* operational efficiency
* amenity
* safety
* pavement life; and
* public finances

Operational efficiency traditionally relates to the performance of major roads. However, in high growth areas like the Tweed Shire, the effects may extend to local roads, which were never designed nor envisaged to be significant traffic corridors. Amenity is primarily a concern for residents fronting local roads and in particular local urban streets. Safety, arguably the most important consideration of all, applies everywhere. Remedies are provided through augmentation, replication, and diversion.

Development traffic may significantly reduce the expected life of a road pavement. Such impacts are well advanced in literature. For example, it has been known since the 1950's (Yoder, 1959) that the life of a pavement is

proportional to the load being applied and varies directly with the logarithm of the number of load applications. That is, the heavier the load and the more frequent a load is applied, the quicker a road fails. It is this principle that forms the basis of the Heavy Haulage Contribution in Sections 6.4 and 7.2.

Traffic impacts accumulate over time. A contributions policy overcomes financing issues created by incremental development / decision making processes. It can nearly always be shown that an impact of a small single development is negligible and therefore seemingly admissible. However, in time the cumulative impact of several developments may cause significant funding dilemmas for a service provider, especially where threshold capacities are exceeded.

4.3 Assessment

Council engaged, Veitch Lister Consulting to examine the impact of development on Council's road network and to equitably assign the cost of developing the future road network between the users. This was undertaken as part of the Tweed Road Development Strategy (1997).

4.3.1 Model

Veitch Lister Consulting used advanced computer simulation techniques to predict the likely impact of traffic on the Tweed road network. The outcome of this mathematical model is the best prediction Council can obtain of the volume and distribution of traffic growth in the years to come.

4.3.2 Growth

As a prerequisite to developing the new traffic model of Tweed Shire for the Banora Point / South Tweed Traffic Study (2004), VLC undertook a comprehensive review of the Shire's potential future population and its distribution. This re-appraisal was documented in Working Paper No.2 (Demographic Assumptions) of that study and summarised in Table 4.1, below.

Table 4.1 - Forecast Population Growth

Area	***2001***	***2011***	***Ultimate (2030?)***
Tweed Heads	7,642	8,241 (+8%)	9,028 (+18%)
West Tweed Heads	9,138	13,027 (+43%)	27,461 (+201%)
South Tweed Heads	22,161	27,791 (+25%)	36,141 (+63%)
North Tweed Coast	8,807	16,075 (+83%)	29,574 (+236%)
South Tweed Coast	7,298	12,521 (+72%)	15,274 (+109%)
Murwillumbah	7,553	8,714 (+15%)	11,900 (+58%)
Rural[(1)]	11,781	12,828 (+9%)	17,888 (+52%)
TOTAL	**74,380**	**99,197 (+33%)**	**147,266 (+98%)**

Notes: 1. Including rural villages

4.3.3 Traffic

VLC's traffic modelling found that the Tweed Shire road network will experience considerable traffic growth, especially on the Tweed Coast and in the urban areas, as a result of the anticipated urban development. Most major urban road corridors will be required to carry considerably more traffic, with many needing to be upgraded or augmented through the addition of new road corridors or links.

Schedule 5 to this Plan describes in detail the scale of works needed to provide adequate levels of traffic service in these growth areas. No new rural road links are required, however many rural roads require widening and re-alignment to improve capacity and road safety generally. No rural road has been identified to be greater than two lanes.

4.4 Administration

Management is essential if the desired outcomes of this Plan are to be achieved in a timely and affordable manner, and to meet the requirements of the s94 Regulations. Constant supervision and management will be required over a number of years. The recovery of these costs is required by policy of Tweed Shire Council and is set at 5% of the contribution payable. This rate will be reviewed at the 1st of July each year.

5. WORKS SCHEDULE

5.1 Works

The road infrastructure projects covered by this Plan (both completed and proposed) are listed, along with detailed costings, in Schedule 5. The road infrastructure works program comprises 137 items, estimated to cost around $~~303M~~305M.

This road infrastructure works program is the result of functional analyses of the future road network during the various traffic studies that preceded this Plan and is listed in the Executive Summary.

5.2 Existing Roads

Contributions specified in this Plan are calculated on the unit capacity consumed in the road network, including existing roads assessed at replacement value including a land value component, in accordance with Council's policy. Although the contributions are based on road space consumption, the monies raised will all be directed toward completing the projects in the road infrastructure works program.

6.1 Background (Transport Modelling)

The prediction of traffic volumes on individual roads in Tweed Shire has been undertaken using VLC's proprietary travel demand forecasting software ('Zenith'). In essence, the Zenith models forecast the number of 'trips' likely to be made between differing areas (or zones) - a 'trip matrix'. A trip has two end points - a beginning point or 'origin' and a 'destination', which is sometimes referred to as the 'attraction'.

For example, if someone leaves home to go shopping, the 'origin' end of their trip is their house and the 'destination' end of their trip is the chosen shopping centre. On the journey home though, the shopping centre becomes the start point or origin and the person's house is the destination. Some journeys may involve a number of 'stops' and this too is accounted for via a concept called 'diverted' trips.

Given the future land use assumptions and the transport network connecting these land uses, the Zenith model uses parameters derived from existing travel patterns and choices to forecast where people will most likely travel from and to. It does this for a multiplicity of trip purposes, such as shopping trips, commuting, going to school, etc. The Zenith model also forecasts which trips are likely to be undertaken by walking or cycling and by public transport, in order to determine the 'vehicle trip matrices'.

6.2 Standard Formula

Contributions in this Plan have been calculated using 'trip-ends', which is a basic measure of traffic generation. Every trip has two ends.

In making a journey or trip, a vehicle will occupy space (or consume capacity) on each road link travelled. By assigning unit values ($) of capacity to each link in the model road network, the VLC model is able to determine the value of road space consumed by vehicular trips between pairs of areas (or sectors).
Given that each trip has two ends, the value of the road space consumed by each trip can be allocated half to each sector.

The value of road space consumed by each sector is half of the sum of the road space consumed by all trips to or from that sector. The average value of road space consumed by the sector any trip to or from the sector is, then, that sectors total share of road space consumption divided by the total number of trip-ends generated or attracted by that sector. The formula below conceptually outlines the computation process.

$$\$Standard\ Trip\ End_{cost} = \frac{\$Total\ Road\ Capacity\ Consumed_{sector}}{Total\ Trip\ Ends_{sector}}$$

For Sectors 3, 4 and 8 the above "$Standard Trip End" is also to be multiplied by an "adjustment factor" calculated in accordance with the note following Table 6.1

where:

$\$Standard\ Trip\ End_{cost}$ = Standard Contribution per daily trip-end

and

$Total\ Trip\ Ends_{sector}$ = the sum of all trip-ends either originating from or attracted to land use activities within the sector.

and

$\$Total\ Road\ Capacity\ Consumed_{sector}$ = the sum of road capacity consumed on all roads by traffic either originating or attracted to activities in the sector.

The above calculations are repeated for each individual area (or sector). In the case of this Plan, fourteen sectors have been assessed (as defined in Figure 3.1 in Schedule 3) and the calculation summarised in Table 6.1 below.

Table 6.1 - Standard Trip End Costs

Sector	*Value of Capacity Consumed by Each Sector*	*Trip Ends Generated by Each Sector*	*$Standard Trip End $ cost*
1. Tweed Heads	$52,987,985	94,010	$ 564
2. Tweed Heads South	$119,986,990	149,032	$ 805
3. Cobaki	$31,224,411	36,352	$ 859*
4. Bilambil Heights	$66,910,271	42,727	$1,566*
5. Terranora	$36,248,831	27,612	$1,313
6. Kingscliff	$46,865,751	63,352	$ 740
7. Duranbah	$62,695,377	76,362	$ 821
8. Pottsville	$26,222,698	27,880	$ 941*
9. Murwillumbah	$55,568,538	55,379	$1,003
10. Rural – Inner East	$38,625,238	28,067	$1,376
11. Burringbar	$6,584,089	6,825	$ 965
12a. Rural – Inner North	$8,075,010	3,984	$2,027
12b. Rural – Inner West	$18,565,213	10,470	$1,773
13. Rural - Outer	$21,102,214	10,373	$2,034
Overall	$591,662,616	632,425	$ 936

*** Multiplied by the "adjustment factor"**

A number of older development consents with conditions requiring TRCP No4 contributions could be paid after commencement of exhibition of Draft Version 5 of this plan and prior to adoption of Version 5, at Version 4.9 rates. Contribution Rates for these sectors shall be amended by applying an "adjustment Factor" calculated as follows for each of sectors 3, 4 & 8:

Old = Aggregate $ value of TRCP standard payments made in the sector between ~~xx~~ 11 April ~~March~~ 2007 and the effective starting date of Version 5 of this plan

New = Aggregate $ value of TRCP standard payments made in the sector between 11 April ~~xx March~~ 2007 and the effective starting date of Version 5 of this plan if these payments had been made at Version 5 rates.

"Adjustment factor" = 1 + { (New – Old)/remaining trip ends ~~remaining~~ to be generated in the sector / $standard trip end cost version 5}

The Adjustment factor will be calculated at and become effective at the date of Version 5 becoming effective.

The adjustment factor will only be calculated using payments made under version 4.9 if the consent is over 5 years old (issued before 11 April 2002)

6.3 Local Area Formula

This Plan also administers the equitable distribution of construction costs of local works between local developers. Urban release areas may involve a number of landowners, and the aim is to assist the parties to jointly fund shared and necessary infrastructure facilities.

The cost of the designated local works in each local area have been similarly apportioned on the basis of the trip-ends expected to be generated / attracted by all anticipated developments in that local area, as follows:

$$\$\text{Local Trip End}_{\text{cost}} = \frac{\$\text{Works}_{\text{local}}}{\text{New Trip Ends}_{\text{local}}}$$

where:

$Local Trip End $Cost - Local Area Contribution per daily trip end

and

$Works local - value of the local works projects.

and

New Trip Ends local - the total 'new' trip-ends expected to be generated / attracted by all anticipated (new) developments in the area.

Table 6.2 is the result of applying the local area formula at four localities. The number of localities may increase where local developers wish Council to administer the distribution or liability for local works.

Table 6.2 - Local Area Trip End Unit Costs

Location	*Value of Works local*	*New Trip Ends*	*$Local Trip End cost*	*Comments*
1. Terranora	$ 6,150,199	13,669	$479	• Applies to all of 'Area E' • Work Items 126 - 132
2. Cabarita	$ 10,301,920	30,000	$343*	• Applies to the Kings Forest Development only • Work Items 133 - 134
3. Pottsville	$ 1,863,270	10,435	$190**	• Applies to Leisure Garden and Koala Beach Estates only • Work Items 135 - 136
4. Kings Beach	$ 1,318,900	9,680	$137	• Applies to Kings Beach Development only • Works Item 137
Total	$19,634,289	--	--	

* For estimation purposes only - the Kings Forest Development will be required to construct the road

** For estimation purposes only - Work Items 135 - 136 are to be equally shared between the parties, Leisure Gardens and Koala Beach Estates, with costs and timing of the contribution subject to negotiation and surety.

Work Items 126 – 136, inclusive, are to be totally funded by the 'new' development, as the works are not required by the broader community. The determination of the Local Area Contribution is purely administrative, to allow Council to share local costs between local developers. That is, Council would not manage localised situations, if it meant funding or acting as banker to the release area.

6.4 Interest

It is not planned to borrow to fund the construction of projects listed in the Works Schedule of the Plan. The timeframe for construction will be based on cash flow paid into the Plan and projects generally wont be constructed until sufficient funds are available within the plan

6.5 Heavy Haulage (Extractive Material)

Developments in this category will be charged a contribution commensurate with the additional wear and tear on Council's road network caused by heavy transport vehicles and/or frequent traffic use. This contribution is in addition to the contributions in Section 6.1, which are based on consumption of road network space / capacity.

For the purpose of this plan "heavy haulage" applies to the haulage by road of extractive material. It includes quarry products and raw materials, soil, clay, silt, sand, gravel, rock, stone, aggregate, fill and similar substances.

Heavy haulage has a source and destination. To avoid double dipping, the charge will be made on destination development.

The contribution is a levy based on quantities, calculated as follows:

$$\$Unit = \frac{\$\text{Value of pavement consumed}_{\text{reconstruction cost}}}{\text{life of pavement}_{\text{ESAs}}}$$

where:

$Unit = heavy haulage contribution per tonne per kilometre

and

$Value of pavement consumed $_{reconstruction\ cost}$ = cost per kilometre to rehabilitate pavement for the expected usage life of the pavement

life of pavement $_{ESAs}$ = life of pavement measured as a function of usage, ie. Equivalent Standard Axles (ESA's).

Based on the assumptions and computations included in Schedule 1, the *$Unit* charge to be levied under this current Plan will be:

$ 0.21 per ESA per kilometre of road traversed with load onboard.

6.6 Administration

A surcharge of 5% to cover the costs associated with administering and updating the Plan. is applied to heavy haulage contributions collected under this Plan.

7. CONTRIBUTION RATES

Traffic generating developments are required to contribute to the development of Tweed Council's road network, calculated in accordance with Sections 7.1 and 7.2 below. Development applications will be conditioned at consent to contribute the TRCP contribution, $Con TRCP, or the "Heavy Haulage Levy" $Con TRCP - HEAVY , or both.

7.1 Standard and Local Area Contributions

TRCP contributions, Con_{TRCP}$, are calculated:

$$\$Con_{TRCP} = (Admin \times Trip\ End_{(development)} \times \$Total\ Trip\ End_{cost}) - \$Existing$$

where:

Con_{TRCP}$ - contributions to be paid to Council by way of condition of consent

and

Trip Ends $_{development}$ - the total trip ends created or attracted to the development being assessed, using trip generation rates in Table 7.1.

and

$Total Trip End $_{cost}$ - total trip-end ~~cost~~charge, as defined later in this Section.

and

$Existing - value of 'existing use rights', where applicable.

and

Admin - Administration Charge of 5%

The total trip-ends of a development shall be calculated using the trip generation rates listed in Table 7.1, following. These trip generation rates are NOT to be used for the design of traffic facilities, as Council adopts specific design codes referred to in ~~DCP 16~~Tweed Development Control Plan Section A5 for these works.

Redevelopment will not be automatically entitled to the 'existing right'. Applicants may need to show how the 'existing right' reflects contributions to the funding of major works in this Plan.

The total trip cost is given by:

$$\$TotalTripEnd_{cost} = Modification \times (\$StandardTripEnd_{cost} + \$LocalTripEnd_{cost})$$

where:

Modification - allowance for diverted trips - see Table 7.2

$Standard Trip End $_{cost}$ - Standard Contribution - see Section 6.1

$Local Trip End $_{cost}$ - Local Area Contribution - see Section 6.2

Table 7.1 - Trip Generation Rates by Land Use

No	*Land Use*	*Daily Trip Rate*	*Unit Per*
1	~~Detached Housing~~Dwelling house	6.5	Household
2	~~Unit Development~~Multi Dwelling housing	3.9	Unit
2.1	Housing for older people or people with disabilities (SEPP 5)		
	a. Residential care facility	2	Occupant
	b. Hostel	2	Occupant
	c. Self contained dwelling with onsite community facilities (community meeting rooms, recreation/sports facilities, library/reading rooms etc)	2.5	Dwelling
	d. Self contained dwelling. No onsite community facilities (apart from communal laundry, washing)	3	Dwelling
3	~~Child Minding Facility~~ Child Care Centre	3.7	Enrolment
4	Education Establishment (Primary School)	1.4	Enrolment
5	Education Establishment (High School)	1.4	Enrolment
6	Service station	200	Pump
7	Education Facility (TAFE College/University)	1.8	Enrolment
8	~~Shopping Centres~~ Shop/General Store <, 100m2	2.8 (A)	A = m2 GLA
9	Shopping Centre 101m2 < SC < 6,000m2	200 + 0.8 (A)	A = m2 GLA
10	Shopping Centre 6,001m2 < SC < 10,000m2	500 + 0.75 (A)	A = m2 GLA
11	Shopping Centre > 10,001m2	3200 + 0.48 (A)	A = m2 GLA
12	Retail Garden centre not included in Shopping Centre	40	100 m2 retail area
13	Hardware not included in shopping centre	80	100 m2 GLA
14	Mixed Retail Showroom Bulky and Non Bulky goods)	40	100 m2 GLA
15	Bulky Goods Retailing (eg Furniture Showroom)	10	100 m2 GLA
16	Commercial Premises (Offices / ~~(~~Professional Centre)	16	100 m2 GLA
17	Commercial Premises (Major Office~~r~~s ~~(~~including government)	12	100 m2 GLA
18	Medical Centres & Dentists(greater than 3 consulting rooms)	50	100 m2 GLA
19	~~GP Surgery~~ Professional Consulting Rooms	50 - 150	100 m2 GLA
20	Retail Tyre Outlets	10	100 m2 GLA
21	Motels	5	100 m2 GLA
22	~~Taverns, Hotels~~ Pub / Tavern / Hotel	110	100 m2 GLA
23	Refreshment Room (eg Restaurant)	60	100 m2 GLA
23.1	Fast food outlet with associated drive through capability	200	100m2GLA
24	Retail Market	20	100 m2 GLA
25	Recreation Facility - Squash	40	Court
26	Recreation Facility – - Tennis	40	Court
27	—Recreation Facility - Gymnasium	50	100 m2 GLA
28	~~Factories covered by light industry~~ Light Industry	5	100 m2 GLA
29	Warehouses	4	100 m2 GLA
30	Hospitality Facilities	50	100 m2 GLA
31	Licensed Clubs	100	100 m2 GLA
32	Motor Showrooms	5	100 m2 GLA
33	General Heavy Industry	1.5	100 m2 GLA
34	Mixed Industrial Park	7.0	100 m2 GLA
35	Tourist Resort	2.48 plus 12	Room or Unit 100m^2 GLA of restaurant

Notes:

a) A denotes area of floor space in m2 Gross Lease Area (GLA).
b) Detached housing in Sector 13 - adopt 4.5 daily trips per household.

c) Multiple Occupancies (MO's) in Sectors 12 and 13 - adopt half (0.5) the detached household generation rates per MO household.

~~b)~~ d) GLA for Motor Showrooms includes any external display areas.

e) A TOURIST RESORT is defined as a tourist accommodation facility with integrated reception area, common servicing and management of up to 400 rooms or units; featuring mainly accommodation with restaurants, pools, tennis courts, gym, conference facilities and moderate rates of arrival by car of 40 to 70%; and being in an Urban or Fringe Urban location within the Tweed Region.

If the Tourist Resort has a golf course/bowling greens/retail shopping/marina or is within a National park and is open to day visitors then category use No 35 does not apply and a Traffic Management Report will be required.

Allowance is made for diverted trip making, being shared purpose journeys, using factors given in Table 7.2.

Table 7.2 - Modification Factors for Specific Land Uses

Category of Land Use	*Contribution Modification*
Child Minding Facilities	0.60
Primary School	0.75
High School	0.80
Suburban Service Station	0.10
Local Shops to 100 m^2	0.15
101 m^2 < Shop < 6,000 m^2	0.15 to 0.55 at 6,000 m^2
6,001 m^2 < Shop < 10,000 m^2	0.55 to 0.60 at 10,000 m^2
Shops > 10,001 m^2	0.6
Fast food outlet with drive through facility	0.65

The modification factor applies to both the Standard and Local Area Contributions save that suburban service stations shall be a minimum of 0.5 when calculating the Local Area Contribution.

LTTS payments previously paid for a property are recognised by the TRCP at current dollar value, that is, indexed from the day of payment using the All Groups Consumer Price Index (ABS 6401.0) for Brisbane. Alternatively, where LTTS contributions have been made, recognition may be given at the rates in this Plan for equivalent land use categories. For example, a previous payment for 10 households in the old LTTS Scheme is equivalent 10 households in this scheme.

In summary, TRCP contributions per household for each sector, including local area contributions are outlined in Table 7.3. This table also gives the $Total Trip End ~~cost~~ charge for each Sector, assuming no discounts for diverted trip making and no previous LTTS payments.

Table 7.3 - TRCP $Total Trip End $_{cost}$ and Household Contributions by Sector

Sector	Locality	$Standard Trip End Contribution	$Local Trip Contribution	Admin Fee 5%	$Total Trip End Contribution (prior to application of adjustment factor)	Trip ends/Household	Household Contribution (prior to application of adjustment factor)
1	Tweed Heads	$~~564~~568	$ -	$1.05	**$~~592~~596**	6.5	**$3,~~848~~877**
2	Tweed Heads South	$~~805~~811	$ -	$1.05	**$~~845~~851**	6.5	**$5,~~492~~535**
3	Cobaki	$~~859~~865*	$ -	$1.05	**$~~901~~908**	6.5	**$5,~~856~~904**
4	Bilambil Heights	$1,~~566~~597*	$ -	$1.05	**$1,~~644~~677**	6.5	**$10.~~686~~899**
5	Terranora	$1,~~313~~322	$ -	$1.05	**$1,~~378~~388**	6.5	**$~~8,957~~9023**
	LAC1: 'Area E'	$1,~~313~~322	$~~406~~479	$1.05	**$1,~~881~~891**	6.5	**$12,~~226~~292**
6	Kingscliff	$~~740~~745	$ -	$1.05	**$~~777~~782**	6.5	**$5,~~050~~085**
7	Duranbah/Cabarita	$~~821~~827	$ -	$1.05	**$~~862~~868**	6.5	**$5,~~603~~644**
	LAC2: Kings Forest Development	$~~821~~827	$~~202~~343	$1.05	**$1,~~222~~228**	6.5	**$7,~~943~~985**
	LAC4: Casuarina	$~~821~~827	$~~81~~137	$1.05	**$1,~~005~~012**	6.5	**$6,~~532~~579**
8	Pottsville	$~~941~~948*	$ -	$1.05	**$~~988~~995**	6.5	**$6,~~422~~470**
	LAC3: Koala Beach/Seabreeze	$~~941~~948*	$~~85~~190	$1.05	**$1,~~187~~195**	6.5	**$7,~~715~~767**
9	Murwillumbah	$1,~~003~~010	$ -	$1.05	**$1,~~053~~060**	6.5	**$6,~~844~~893**
10	Rural - Inner East	$1,~~376~~386	$ -	$1.05	**$1,~~444~~455**	6.5	**$9,~~386~~459**
11	Burringbar	$~~965~~972	$ -	$1.05	**$1,~~013~~021**	6.5	**$6,~~584~~634**
12a	Rural - Inner North	$2,~~027~~041	$ -	$1.05	**$2,~~128~~143**	6.5	**$13,~~832~~930**
12b	Rural - Inner West	$1,~~773~~785	$ -	$1.05	**$1,~~861~~874**	6.5	**$12,~~096~~183**
13	Rural - Other	$2,~~034~~048	$ -	$1.05	**$2,~~132~~150**	6.5	**$13,~~858~~978**

***** *Multiplied by* **the "adjustment factor"**

A number of older development consents with conditions requiring TRCP No4 contributions could ~~may~~ be paid after commencement of exhibition of Draft Version 5 of this plan and ~~at Version 4.9 rates~~ prior to adoption of Version 5, at Version 4.9 rates. ~~thereby creating a cash flow shortfall for these sectors.~~ Contribution Rates for these sectors shall be amended by applying an "adjustment Factor" ~~r~~ calculated as follows for each of sectors 3, 4 & 8:

Old = Aggregate $ value of TRCP standard payments made in the sector between 11 April 2007~~xx March 2007~~ and the effective starting date of Version 5 of this plan
New = Aggregate $ value of TRCP standard payments made in the sector between ~~xx March~~ 11 April 2007 and the effective starting date of Version 5 of this plan if these payments had been made at Version 5 rates

"Adjustment factor" = 1 +**{** (New – Old)/remaining trip ends remaining to be generated in the sector/$Standard trip end cost version5**}**
~~based on the difference between payments received under version 4.9 and those payable under version 5 divided by the number of trip ends remaining in the sector.~~ The Adjustment factor will be calculated at and become effective at the date of Version 5 becoming effective
The adjustment factor will only be calculated using payments made under version 4.9 if the consent is over 5 years old (issued before 11 April 2002)
.

7.2 Heavy Haulage Contributions

The heavy haulage contribution applies to destination developments which attract heavy haulage (extractive material) traffic, for example (and without limiting the application of this section) - subdivisions, landfill, roadworks, parking areas, extractive material processing and the construction phase of development projects. In order to prevent double dipping it does not apply to source activities such as extractive industries and quarries.

$$\$Con_{TRCP - HEAVY} = Prod. \ X \ Dist \ x \ \$Unit$$

where:

$$\$Con_{TRCP - HEAVY} \text{ - heavy haulage contribution}$$

and
Prod. - projected demand for extractive material to be hauled to/from the site over life of project, in tonnes
Dist. - the length of the haul route on Shire roads (one way, in kms)
$Unit - the unit cost of rehabilitating a road, as in Schedule 1

For example:

$\$Con_{TRCP - HEAVY}$ = 5,000 tonnes
x 20 kilometres x 5.4c per tonne per kilometre

= $ 5,400

7.3 Self Containment and Disputes

This Plan assumes particular land uses and traditional containment factors consistent with a wide range of urban forms, but not all situations can be pre-empted. From time to time, Council may receive development applications that do no fit with these assumptions. Council will assess these instances on the merit of the individual case.

Council's strong preference is towards a negotiated outcome; however, in the event that an agreement can not be reached Council will commission a competent consultant, funded by the applicant to resolve the matter.

8. CASH FLOWS

8.1 Income

Development contributions are expected to yield $~~239.7~~241.6 Million (Table ES 3) excluding concessions. The estimated cost of the projects in the Works Schedule is $~~303~~ 305.1 Million resulting in a shortfall of $~~63.5~~64 million which is to be funded from grants and other funding sources.

8.2 Expenditure

Council will adopt a rolling 5 year Road Infrastructure Works Program based on the projects listed in the works schedule (Schedule 5) and taking into account traffic demand and the funds balance within the Plan. The 5 Year Works Program will be reviewed annually to ensure its currency

An underlying consideration in determining the Road Infrastructure Works Program is that contributions from some developments will be “in kind” for several years before ‘credit’ works are exhausted. Council must be in agreement with ‘in kind’ contributions prior to approval since ‘works contributions’ may jeopardise the financing of other Plan projects.

9. PAYMENTS

9.1 Timing of Payments

Contributions are payable at the time prescribed in Table 9.1.

Table 9.1 - Timing of Payments

Type of consent	*Timing*
Subdivision where no further approvals are required	prior to release of the subdivision certificate
Development not involving subdivision but where a subsequent development application is required	prior to release of the construction certificate
Heavy haulage developments	annual fees submitted in quarterly increments
Any other developments	prior to the endorsement of the final plan or commencement

9.2 Indexation

Contributions are fixed for a twelve month period from the date of development consent and thereafter levied at the contribution rate current at the time of payment.

Sector contributions in this Plan

(i) will be indexed on the 1st July of each year commencing on 1 July 2008

~~(i)~~ based on the Implicit Price Deflator for Private Gross Fixed Capital Expenditure for Non-dwellings Construction as published by the Australian Bureau of Statistics (5204.0) or

(ii) will be adjusted based on revised works estimates prepared and the VLC transport/contribution models re-run with the "re-valued" works included~~.~~ as and when required.

9.3 "In-kind" Contributions and "Credits"

9.3.1 "In-kind" contributions unrelated to roads

The Council may accept an offer by the applicant to make a contribution by way of an "in-kind" contribution or a material public benefit as referred to in the Regulations. The offer may only be accepted if the applicant satisfies Council that:

(i) payment of the contribution in accordance with the provisions of the Plan is unreasonable or unnecessary in the circumstances of the case; and

(ii) the 'in- kind' contribution will not prejudice the timing or manner of the provision of the road facilities for which the contribution is required; and

(iii) the value of the works to be undertaken are at least equal to the value of the contribution assessed in accordance with this Plan.

9.3.2 Credits

Some developments will require the construction of works identified in the Works Schedule. Clause 7.3.6 of Council's *Tweed Development Program - Management Plan* outlines Council's policy in these instances and it is reproduced here in Schedule 2 for completeness.

Works will be valued in accordance with the Works Schedule of this Plan provided the applicant is paying the levies nominated in this Plan

9.4 Deferred Payment

The Council will generally not accept deferred or periodic payment of contributions. However, Council may consider an application where:

(i) compliance with the provisions relating to when contributions are payable is unreasonable or unnecessary in the circumstances of the case; and

(ii) non-compliance with the terms of this clause will not prejudice the timing or the manner of the provision of road facilities for which the contribution was required as outlined in the Works Schedule.

The decision to accept a deferred or periodic payment is at the sole discretion of the Council.

In the event Council decides to accept the deferred or periodic payment of contributions, the applicant may be required to provide an unconditional bank guarantee by an Australian bank or recognised financial institution. The bank guarantee will prohibit the bank from seeking recourse to the applicant or having regard to any appeal, dispute, controversy, issue or other matter relating to the carrying out of the development in accordance with the consent.

10.1 Tweed Road Contribution Plan (CP No 4 - Version 4.9)

From the date of adoption of this subsequent plan by Tweed Shire Council, this Plan supersedes the *Tweed Road Contribution Plan (CP No 4 - Version 4.9).* All development consents more than twelve months old require the applicant to pay the rates applicable in "Council's adopted Fees and Charges current at the time of the payment" or "the relevant Section 94 contribution current at the time of the payment".

10.2 Contribution Plan No 14 - Mebbin Springs

Version 4.0 of this Plan superseded the *Rural Road Upgrading, Mebbin Springs Subdivision, Kyogle Road, Kunghur Contributions Plan (No 14).* CP No 14 was repealed with the adoption of this subsequent Plan in only so far as all future development applications are concerned, That is, Consent S94/70, the only consent issued to date, will continue to be administered under CP No 14 for as long as the consent remains valid.

11. BIBLIOGRAPHY

1. *Tweed Shire Local Environment Plan*
   By Tweed Shire Council, first gazetted April 2000, with last amendment (No. 47) in October 2006

2. *Tweed 4/24 Strategic Plan 2004-2024*
   By Tweed Shire Council, September 2004

3. *Tweed Shire 2000+ Strategic Plan*
   By Tweed Shire Council, December 1996

4. *Banora Point and Tweed Road Development Strategy Review 2004*
   By Veitch Lister Consulting, for Tweed Shire Council, December 2004

5. *Murwillumbah Distributor Road Network Study*
   By Veitch Lister Consulting, for Tweed Shire Council, June 2005

6. *Tweed Road Development Strategy 1997*
   By Veitch Lister Consulting, for Tweed Shire Council, 1997

7. *Lower Tweed and Pacific Highway Traffic Master Plan*
   By Parsons Brinckerhoff Australia, for NSW Roads and Traffic Authority and Tweed Shire Council, October 2006

8. *Principle of Pavement Design*
   By E. J. Yoder, published by John Wiley & Sons (5th printing, 1967)

Many of Council's urban and rural sealed roads have between 150 mm to 200 mm of gravel cover over virgin insitu material. While this is adequate for current needs, that is a projected life of 15 to 20 years, increased traffic usage or the increased percentage of heavy haulage traffic using a road significantly reduces the life of the existing pavement.

Council roads will normally require a further 200 mm of "top class" gravel to provide the additional strength for sustained heavy haulage developments. In most instances road base gravel may be added in the form of an "overlay". The existing bitumen is ripped, the additional gravel added, compacted and then sealed using 20/10 mm aggregates. Isolated weak points may be excavated or bridged with the use of "geo-textiles", but these additional costs are not generally incurred.

The Council's works cost-estimation database currently (at March 2007) uses a unit rate of $41 per square metre for such rehabilitation to a Type D pavement. Assuming a pavement width of 10 metres (averaged over the whole shire), a typical 2-lane road would cost $205,000 per lane-kilometre to rehabilitate.

In terms of traffic load, the life of a pavement is normally between 4x10^5 to 1x10^6 Equivalent Standard Axles (ESA's). For the purposes of this computation an average life of 7x10^5 ESA's will be assumed. The unit cost of the damage caused by heavy haulage vehicles can then be calculated as:

$Damage	$205,000 per lane-kilometre ---------- 7 x 10^5 ESA's $0.29 per ESA per kilometre of road traversed

Based on a standard T44 articulated vehicle (semi-trailer) with a laden weight of 30 tonne and a tare weight of 6 tonne (ie. a 24 tonne load), the pavement damage incurred by it making a return trip would be:

$Unit	(3.75 ESA's + 0.75 ESA's) x $0.29 per ESA $1.30 per kilometre of the haulage route 5.4c per tonne per kilometre of the haul route

SCHEDULE 2 – CREDIT POLICY

Extract from Council's Tweed Development Program (at Page 30f):

"7.3.6 Credits

STRATEGY No 9

i) Credits are not cash redeemable

ii) Credits are not transferable to other CP's unless purchased by the CP so neither fund is disadvantaged

iii) Credits are not a commodity that may be bought and sold on the open market, they reside with the land (the person or company who is the proprietor of the development may assign credits to particular land parcels within their properties)

iv) Credits may only be claimed at a new site if CP works required at the new site are not compromised by Council accepting works-in-kind rather than cash

v) Credits are indexed in proportion to any indexations of levies or contributions

vi) Not all external works are eligible for s94 assistance even though others gain benefit

Some developments require the construction of works identified in s94 Contribution Plans. In these instances Council will condition the development to build these works (s91 EPA). In addition, the consent may:

- delete any requirement to make a monetary contribution to the Contribution Plan concerned (except the administration levy). That is, Council is satisfied the development has made a sufficient contribution, works-in-kind, to the s94 works program;

- in addition to requiring the construction of the said works include a provision to pay a monetary contribution in order to fund works away from the site, needed by the development; or

- include a requirement to build works, pay contributions and a relief mechanism where the built works may be used to offset monetary contributions.

Developments may provide 'works-in-kind' in excess of their fair share of contribution liability. A development is said to be in 'credit' at this point. Council will not cash redeem any credits as outlined below because this has the potential to undermine the orderly extension of Council's infrastructure. It will be a commercial decision upon the part of the developer whether they can fund their proposals.

External works, those works beyond a development property, are often required to enable a development to proceed. For example, connection to Council's infrastructure networks and local drainage catchments. The need and scale for these works are assessed as part of development application/ determination process using merit considerations outlined in s90 of EPA. Conditions of consent are then applied to a development requiring the works to be completed with the development.

The cost of these external works may be substantial and often not included in contribution plans. In recent years, the development industry has pursued and obtained more flexible zonings which allow greater variety of land uses. However, this actually restricts the opportunities for cost sharing arrangements at the local level since the nature of development is imprecise, works undefinable, and beneficiaries unknown. Consequently, the standard nexus and financial arrangements can not be satisfactorily formulated in some contribution plans
."

SCHEDULE 3 – BOUNDARY DEFINITIONS

Figure 3.1, below, defines the boundaries of the 14 sectors to be used in determining the applicable rate of Standard Contribution.

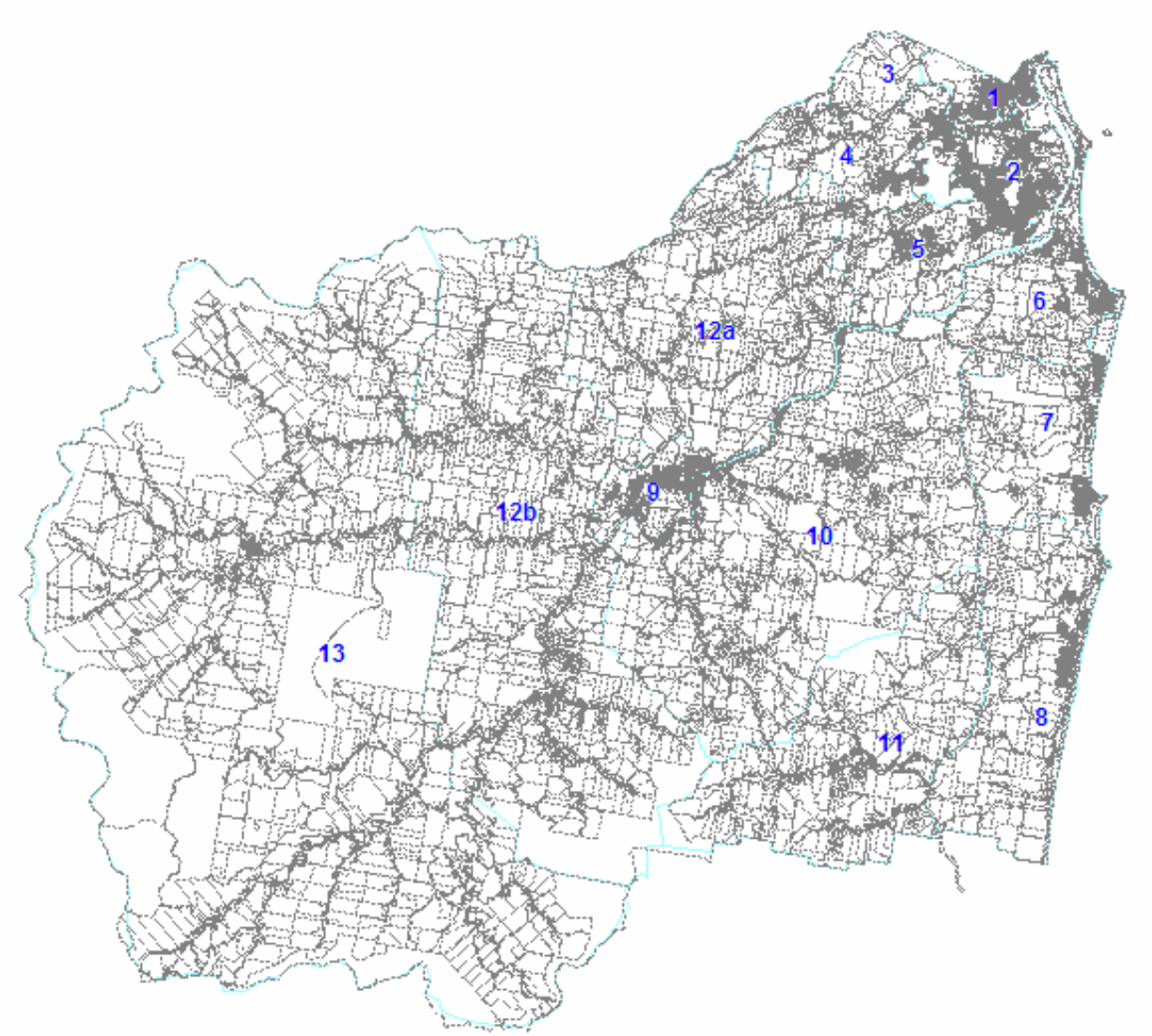

Figure 3.1: Sectors

Figure 3.2a below, defines the lands to which Local Area Contribution No 1 applies.

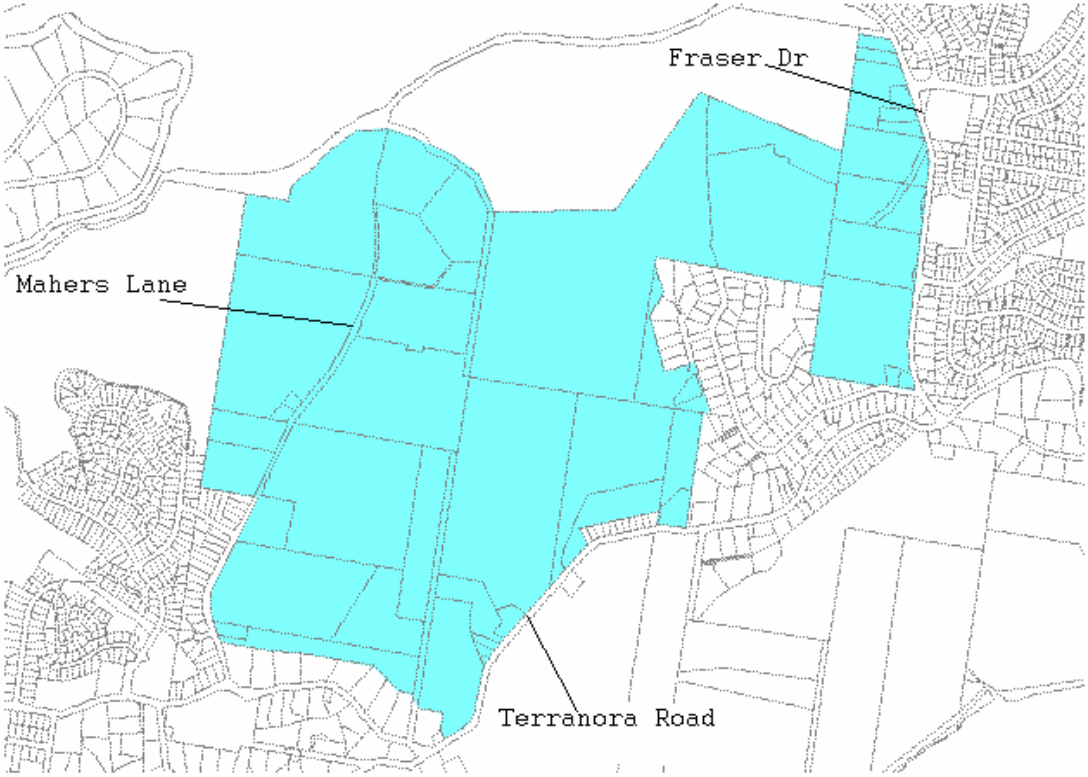

Figure 3.2a : Local Area No.1

Figure 3.2b below, defines the lands to which Local Area Contribution No 2 applies.

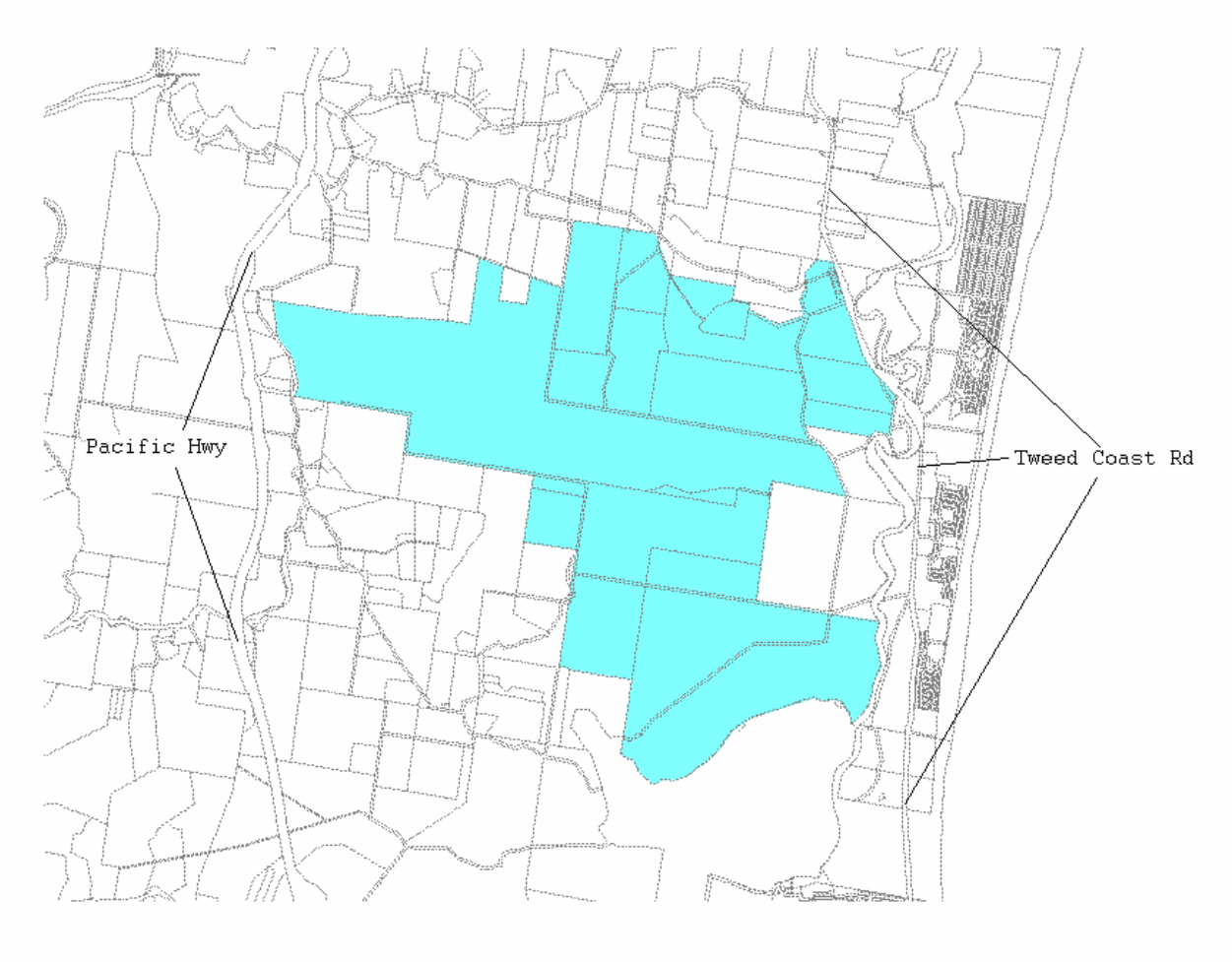

Figure 3.2b : Local Area No.2

Figure 3.2c below, defines the lands to which Local Area Contribution No 3 applies.

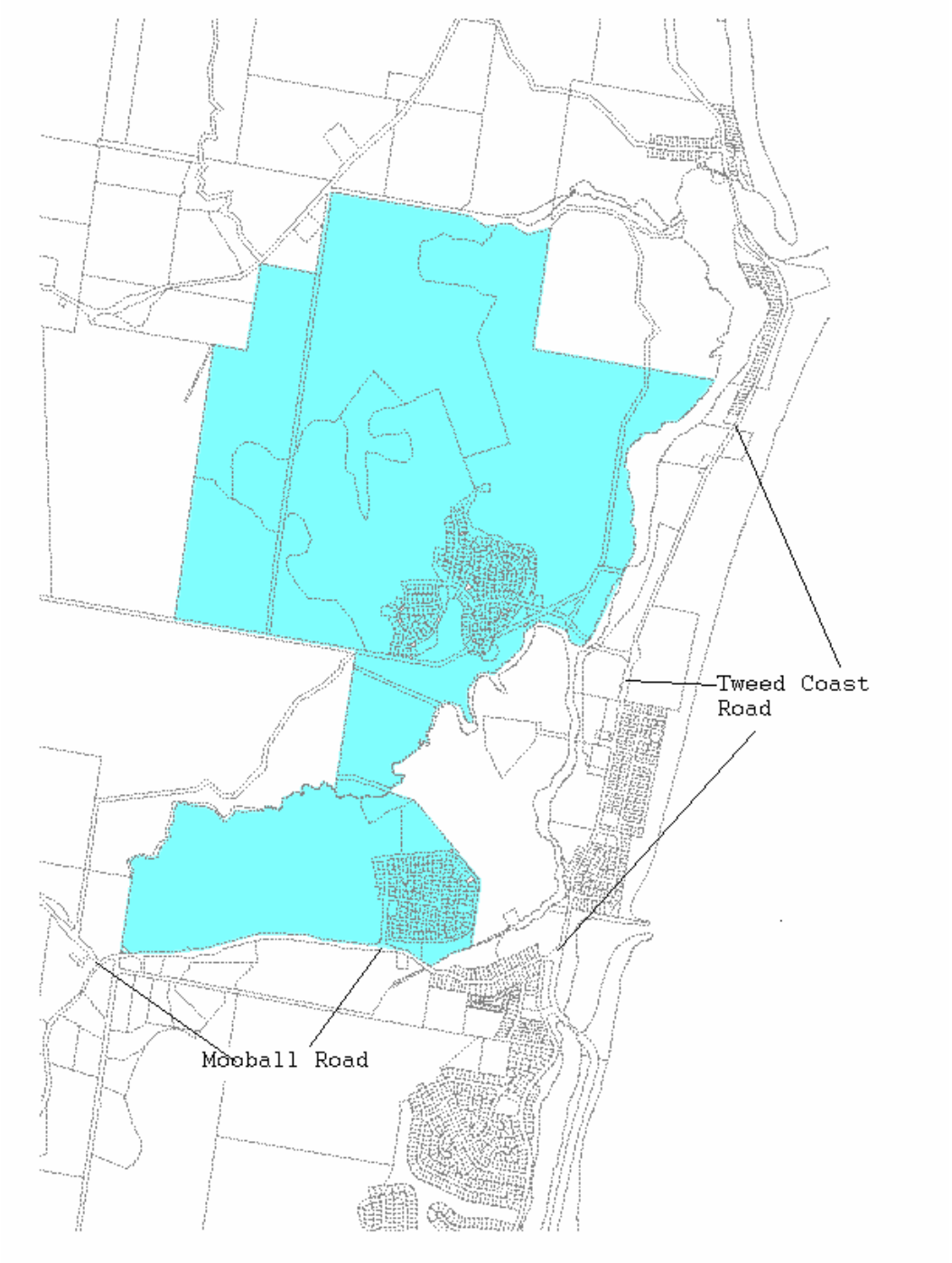

Figure 3.2c : Local Area No.3

Figure 3.2d below, defines the lands to which Local Area Contribution No 4 applies.

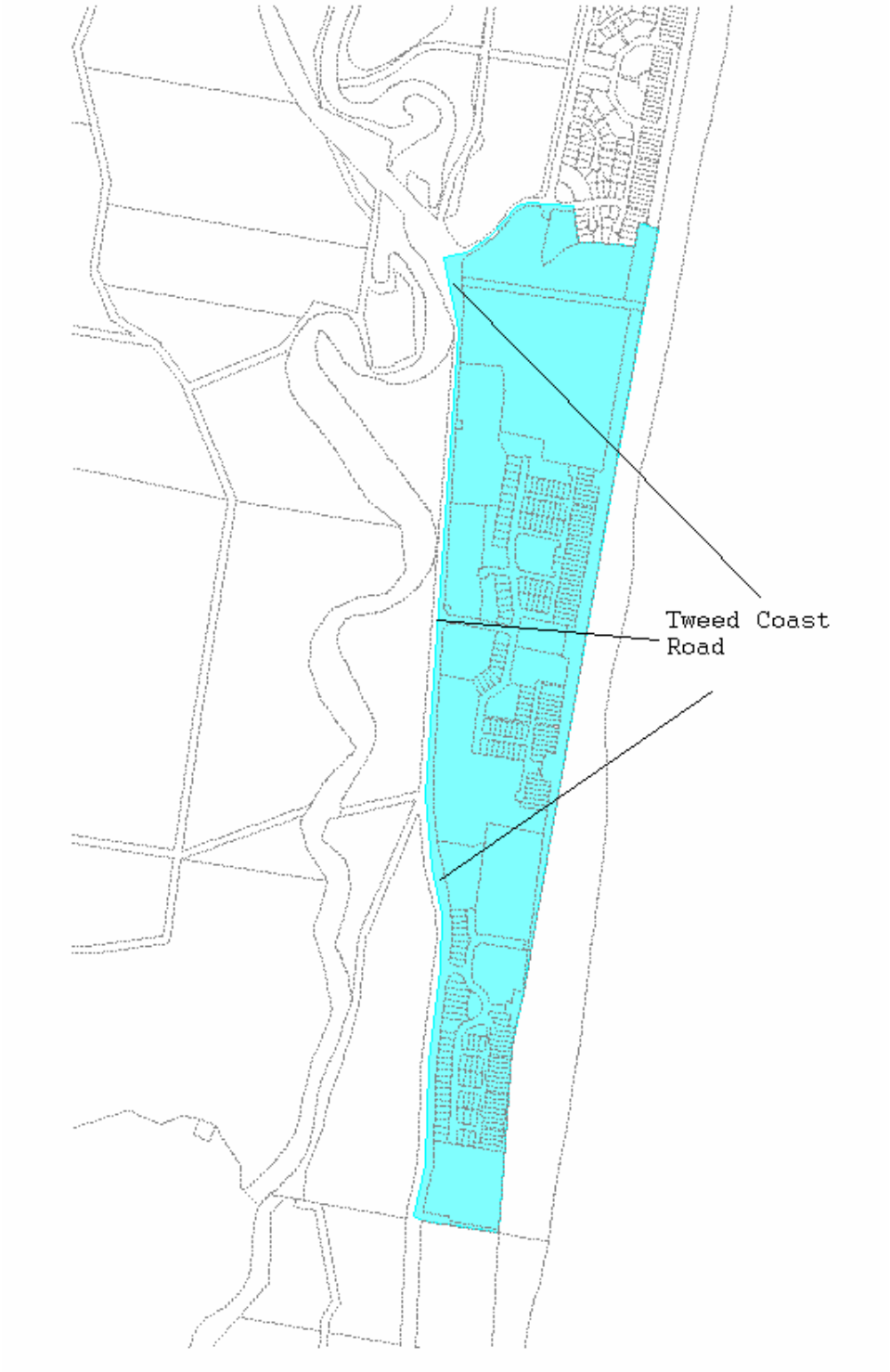

Figure 3.2d : Local Area No.4

SCHEDULE 4 – VERSIONS OF THIS PLAN

VERSIONS/EDITIONS

Version 3.2 Lower Tweed Contribution Plan (LTTS) operational from 9-12-98

Version 4.0: Tweed Road Contribution Plan, operational 20-6-97 all consents issued on or after that date; or 30-7-97 for all current consents (more than twelve months old) with conditions requiring Lower Tweed Transportation conditions.

Version 4.1: Operational 1-1-99, repeals and replaces Version 4.0. Changes operation of heavy haulage contribution.

Version 4.2: Operational 8-8-2000, repeals and replaces Version 4.1. This Version of the plan amends Table 5.1(d) "Works Schedule" and Schedule 6 "TRDS Project Costings" by adding an additional item 137 for the new Local Area No. 4.
137 Cudgen Ck to Bogangar - 3 i/s- Kings Beach, Total Cost $1,210,000

Version 4.3: Operational 3-10-2000, This Version of the plan amends Table 5.1(b) "Works Schedule" and Schedule 6 "TRDS Project Costings" by adding an additional item 138:-
138 Minjungbal Dr / Shallow Bay Dr Intersection, Total Cost $300,000

Version 4.4 provides trip generation rates for housing of older people or people with a disability (SEPP 5) and for fast food outlets.

Version 4.5 inserts the category of tourist resort in the trip generation table 7.1

Version 4.6. of this plan amends Table 5.1(b) "Works Schedule" and Schedule 6 "TRDS Project Costings" by adding additional items 139 and 140:-
139 Minjungbal Dr/Machinery Dr Intersection, Total Cost $323,000
140 Leisure Drive Upgrades

(a) Upgrade Darlington Drive from Tweed Heads Bypass to Leisure Drive
Total Cost: $495,000
(b) Upgrade Leisure Drive from Darlington Drive to about 200m past Winders Place
Total Cost $510,000
(c) Upgrade Leisure Drive from Fraser Drive to Eucalyptus Drive
Total Cost $600,000

Draft Version 4.7 amends the works programme by the addition of a new bridge over Cudgen Creek, Kingscliff (*this draft was abandoned*).

Version 4.8, effective 13 July 2004, amends Table 5.1(a) "Works Schedule" and Schedule 6 "TRDS Project Costings" by deleting item 22 and substituting existing item 23 with:

"23. Const McAllisters Rd on existing alignment Total Cost $856,300
Version 4.9, effective 19 July 2005, amends Table 5.1(b) "Works Schedule" and Schedule 6 "TRDS Project Costings" by adding items 141 and 142:

"141. Shallow Bay Drive to Eastlakes Drive connection Total Cost $341,554
142. i/s - Amber Road and Machinery Drive Total Cost $190,147"

Version 5.0, effective May 2007, updates the works program and cost estimates, and adjusts sector boundaries.

SCHEDULE 5 – WORKS SCHEDULES

SCHEDULE 5 - TWEED ROAD CONTRIBUTION PLAN No 4 (TRCP) July 2007 Version 5.0

KEY

	Completed Project. (These values are not linked to the Unit rate spreadsheet. Red values have been taken from acutal contracts or previous TRCP values, non red values are based on estimates only)
	Detailed Estimate (These values are linked to the Unit rate spreadsheet, except where indicated by red text)
	Preliminary estimate (No colour). Linked directly to Unit Rate spreadsheet
Actual Costs	* Red Values represent actual completed costs or values not linked to the "Unit Rates" spreadsheet and are based on actual costs or detailed estimates. * Preliminary Planning and Design costs (10%) and Contingency costs (15%) have not been included for Completed Projects or Detailed Estimate costs (ie have only been included in Preliminary Estimate costs).
Detailed Estimate	Estimate from detailed design and schedule of rates. Not linked back to Unit Rate spreadsheet.

WORKS SCHEDULE

TRCP ZONE	Road Corridor	Item No.	TRCP Projects	Road Form		Road Construction Costs (Class 1 to 9) 1. Type D formation 2. Rural Arterial 3. Earthworks Allowance 4. Upgrade to type D 5. Upgrade to Rural Arterial 6. Base Urban Road (2 lanes) 6.1 Base Urban Road	Bridges (Class 10 to 12) 10. Bridges <50m 11. Bridges >50m 12. Skewed	Intersection (Class 13 to 15) 13. Channelisation (basic) 13.1 Channelisation (Complex) 14. Roundabout (small) 14.1 Roundabout	Traffic Lights (Class 16 to 17) 16. Traffic Lights (Basic) 16.1 Traffic Lights (Complex) 17. Traffic Lights (Pedestrian)	Traffic Facilities (Class 18 to 19) 18. Refuges 19. Thresholds	Traffic Facilities (Class 20) 20. Noise Barriers	Street Lighting (Class 21) 21. Intersection Lighting	Street Lighting (Class 22) 22. Route Lighting	Service Relocation (Class 27 to 28) 27. Standard 28 Significant 28.1 Rural	Acquisition/Resumption Costs/Environmental Land Bank (Class 34) 34. Valuer General unimproved land value prorata	Services and Other (Class 35) All estimated items to be indexed (approximately 3% pa). 1997 to 2006 = 1.31	Provisional Items (Class 30)	SUB-TOTAL	Administration (Class 31)	Detail Design & Investigation (Class 32)	Supervision (Class 33)	Contingency (Class 36)	TOTAL (2006)
				Length (m)	Formation Width (m)	Sub Total ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Other Cost ($)		$	10%	6%	3%	15%	($)
																			$ -					
	URBAN ROADS																		$ -					
																			$ -					
ZONE 3 - COBAKI	COBAKI PARKWAY	Interchange with Western By-Pass																	$ -					
		1.	Boyd St overpass, earthworks and approach roads. Single lane only.																					$ 6,450,000
		2.	Boyd St Overpass, earthworks and approach road. Future TSC Duplication																					$ 17,738,000
		3.	North and South facing ramps (on and off)																$ -					$ 10,000,000
		3a	Vertical Walls Associated with North East Ramp																					$ 1,000,000
		3b	Signalised intesections																					$ 600,000
		3c	Compensatory Habitat and impact mitigation																					$ 1,000,000
		3d	Remove Landfill Eastern Approach																					$ 2,000,000
		4.	Purchase CALM Land													$ 60,000			$ 60,000		$ 3,600	$ 1,800		$ 65,400
		5.	Deleted																					
																			$ -	$ -	$ -	$ -	$ -	$ -
		Cobaki Lakes																	$ -	$ -	$ -	$ -	$ -	$ -
			Cobaki Parkway -- QLD Boarder to Town Centre:																$ -	$ -	$ -	$ -	$ -	$ -
		6.	-- two lanes	1260	9.8	$ 1,173,060							$ 158,760		$ 510,000				$ 1,841,820	$ 184,182	$ 110,509	$ 55,255	$ 276,273	$ 2,468,039
		7.	-- additional two lanes	1260	9.8	$ 1,173,060									$ 510,000				$ 1,683,060	$ 168,306	$ 100,984	$ 50,492	$ 252,459	$ 2,255,300
			(cont.) Widen and strengthen existing	1260	4	$ 378,000													$ 378,000	$ 37,800	$ 22,680	$ 11,340	$ 56,700	$ 506,520
		8.	i/s - Town Centre					$ 350,000	$ 205,000			$ 25,000		$ 25,000					$ 605,000	$ 60,500	$ 36,300	$ 18,150	$ 90,750	$ 810,700
			Cobaki Parkway -- Town Centre to I/S Sandy Lane:																$ -	$ -	$ -	$ -	$ -	$ -
		9.	-- two lanes	1870	9.8	$ 1,740,970							$ 235,620		$ 750,000				$ 2,726,590	$ 272,659	$ 163,595	$ 81,798	$ 408,989	$ 3,653,631
		10.	-- additional two lanes	1870	9.8	$ 1,740,970									$ 750,000				$ 2,490,970	$ 249,097	$ 149,458	$ 74,729	$ 373,646	$ 3,337,900
			(cont.) Widen and strengthen existing	1870	4	$ 561,000													$ 561,000	$ 56,100	$ 33,660	$ 16,830	$ 84,150	$ 751,740
																			$ -	$ -	$ -	$ -	$ -	$ -
		Bilambil Connector Road																	$ -	$ -	$ -	$ -	$ -	$ -
			Cobaki Parkway -- I/S Sandy Lane to Piggabeen Road:																$ -	$ -	$ -	$ -	$ -	$ -
		11.	-- two lanes	650	9.8	$ 605,150							$ 81,900		$ 252,000				$ 939,050	$ 93,905	$ 56,343	$ 28,172	$ 140,858	$ 1,258,327
		12.	-- additional two lanes	650	9.8	$ 605,150									$ 252,000				$ 857,150	$ 85,715	$ 51,429	$ 25,715	$ 128,573	$ 1,148,581
			(cont.) Widen and strengthen existing	650	4	$ 195,000													$ 195,000	$ 19,500	$ 11,700	$ 5,850	$ 29,250	$ 261,300
			Bridge over Cobaki Creek:																$ -	$ -	$ -	$ -	$ -	$ -
		13.	-- two lanes				$ 3,375,000										$ 135,000		$ 3,510,000	$ 351,000	$ 210,600	$ 105,300	$ 526,500	$ 4,703,400
		14.	-- additional two lane bridge				$ 2,700,000										$ 108,000		$ 2,808,000	$ 280,800	$ 168,480	$ 84,240	$ 421,200	$ 3,762,720
		15.	i/s - Piggabeen Road					$ 350,000	$ 205,000			$ 25,000		$ 25,000					$ 605,000	$ 60,500	$ 36,300	$ 18,150	$ 90,750	$ 810,700

TRCP ZONE	Road Corridor	Item No.	TRCP Projects	Road Form		Road Construction Costs (Class 1 to 9) 1. Type D formation 2. Rural Arterial 3. Earthworks Allowance 4. Upgrade to type D 5. Upgrade to Rural Arterial 6. Base Urban Road (2 lanes) 6.1 Base Urban Road	Bridges (Class 10 to 12) 10. Bridges <50m 11. Bridges >50m 12. Skewed	Intersection (Class 13 to 15) 13. Channelisation (basic) 13.1 Channelisation (Complex) 14. Roundabout (small) 14.1 Roundabout	Traffic Lights (Class 16 to 17) 16. Traffic Lights (Basic) 16.1 Traffic Lights (Complex) 17. Traffic Lights (Pedestrian)	Traffic Facilities (Class 18 to 19) 18. Refuges 19. Thresholds	Traffic Facilities (Class 20) 20. Noise Barriers	Street Lighting (Class 21) 21. Intersection Lighting	Street Lighting (Class 22) 22. Route Lighting	Service Relocation (Class 27 to 28) 27. Standard 28 Significant 28.1 Rural	Acquisition/Resumption Costs/Environmental Land Bank (Class 34) 34. Valuer General unimproved land value prorata	Services and Other (Class 35) All estimated items to be indexed (approximately 3% pa). 1997 to 2006 = 1.31	Provisional Items (Class 30)	SUB-TOTAL	Administration (Class 31)	Detail Design & Investigation (Class 32)	Supervision (Class 33)	Contingency (Class 36)	TOTAL (2006)
				Length (m)	Formation Width (m)	Sub Total ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Other Cost ($)		$	10%	6%	3%	15%	($)
																			$ -	$ -	$ -	$ -	$ -	$ -
ZONE 4 - BILAMBIL HEIGHTS	**BILAMBIL HTS**	**Scenic Drive Diversion**																	$ -	$ -	$ -	$ -	$ -	$ -
		16.	Piggabeen Rd to McAllister's Extension I/S	1120	11	$ 1,170,400							$ 141,120		$ 1,120,000		$ 985,600		$ 3,417,120	$ 341,712	$ 205,027	$ 102,514	$ 512,568	$ 4,578,941
		17.	i/s - McAllister's Extension					$ 155,000				$ 25,000		$ 25,000					$ 205,000	$ 20,500	$ 12,300	$ 6,150	$ 30,750	$ 274,700
		18.	McAllister's Extension to Scenic Dr	950	11	$ 992,750	$ 3,300,000								$ 1,425,000		$ 836,000		$ 6,553,750	$ 655,375	$ 393,225	$ 196,613	$ 983,063	$ 8,782,025
			(cont.) Widen and strengthen	400	11	$ 330,000							$ 50,400						$ 380,400	$ 38,040	$ 22,824	$ 11,412	$ 57,060	$ 509,736
		19.	i/s - Scenic Dr					$ 120,000				$ 25,000							$ 145,000	$ 14,500	$ 8,700	$ 4,350	$ 21,750	$ 194,300
																			$ -	$ -	$ -	$ -	$ -	$ -
		McAllisters Road																	$ -	$ -	$ -	$ -	$ -	$ -
		20.	i/s - Scenic Dr, Simpson, McAllisters Rd and Bilambil Road					$ 350,000	$ 205,000			$ 25,000		$ 25,000					$ 605,000	$ 60,500	$ 36,300	$ 18,150	$ 90,750	$ 810,700
		21.	Upgrade Existing btwn Scenic Drive to west of Buenavista Dr	325	11	$ 178,750							$ 40,950						$ 219,700	$ 21,970	$ 13,182	$ 6,591	$ 32,955	$ 294,398
		22.	Deleted																$ -	$ -	$ -	$ -	$ -	$ -
		23.	Const. McAllisters Rd on existing alignment (widen and Strengthen LHS)	1800	4	$ 684,000	$ 1,650,000								$ 2,000,000				$ 4,334,000	$ 433,400	$ 260,040	$ 130,020	$ 650,100	$ 5,807,560
			(cont.) Widen and strengthen RHS	1800	7	$ 945,000													$ 945,000	$ 94,500	$ 56,700	$ 28,350	$ 141,750	$ 1,266,300
																			$ -	$ -	$ -	$ -	$ -	$ -
		McAllisters Road Extension																	$ -	$ -	$ -	$ -	$ -	$ -
	(Increase rates due to E/W)	24.	McAllisters Rd to Scenic Dr Diversion	3750	11	$ 3,918,750							$ 472,500				$ 576,000		$ 4,967,250	$ 496,725	$ 298,035	$ 149,018	$ 745,088	$ 6,656,115
			(cont.) Widen and strengthen	3750	11	$ 3,093,750											$ 1,008,000		$ 4,101,750	$ 410,175	$ 246,105	$ 123,053	$ 615,263	$ 5,496,345
																			$ -	$ -	$ -	$ -	$ -	$ -
ZONE 1 - TWEED HEADS	**PIGGABEEN**	**Piggabeen Road**																	$ -	$ -	$ -	$ -	$ -	$ -
		25.	Upgrade - Existing from Cobaki parkway I/S to Pigabeen Rd deviation	1285	11	$ 579,535						$ 25,000							$ 604,535	$ 60,454	$ 36,272	$ 18,136	$ 90,680	$ 810,077
		26.	Piggabeen Road Deviation	1315	11	$ 1,084,875		$ 120			$ 197,250		$ 144,650	$ 40,000	$ 525,000	$ 270,000			$ 2,563,106					$ 2,563,106
			(cont.) Roundabout (med)					$ 155,000								$ 105,000			$ 260,000					$ 260,000
		27.	i/s -- Anconia Ave					$ 155,000				$ 25,000		$ 45,000	$ 27,000				$ 252,000	$ 25,200	$ 15,120	$ 7,560	$ 37,800	$ 337,680
		28.	Upgrade existing between Anconia Ave to Gollan Dr	270	11	$ 222,750										$ 70,000			$ 292,750	$ 29,275	$ 17,565	$ 8,783	$ 43,913	$ 392,285
																			$ -	$ -	$ -	$ -	$ -	$ -
	KENNEDY DRIVE	**Kennedy Drive**																	$ -	$ -	$ -	$ -	$ -	$ -
		29.	Clearway between Cobaki Ck Bridge & Motorway (Includes Rd widening near Gray St)	20	4	$ 6,000									$ 10,000	$ 100,000			$ 116,000	$ 11,600	$ 6,960	$ 3,480	$ 17,400	$ 155,440
		30.	i/s Barret St Upgrade (right turn)					$ 134,000						$ 33,150					$ 167,150	$ 16,715	$ 10,029	$ 5,015	$ 25,073	$ 223,981
		30a	Full I/s upgrade to lights					$ 200,000				$ 25,000							$ 225,000	$ 22,500	$ 13,500	$ 6,750	$ 33,750	$ 301,500
		31.	i/s - Ducat Street					$ 150,000						$ 40,000		$ 100,000			$ 290,000		$ 17,400	$ 8,700		$ 316,100
		32.	Route Lighting -- Cobaki Ck Br -- Motorway (West)	1500									$ 189,000						$ 189,000	$ 18,900	$ 11,340	$ 5,670	$ 28,350	$ 253,260
		33.	Route lighting -- Motorway to Boyds Bay Bridge (East)	1250									$ 157,500						$ 157,500	$ 15,750	$ 9,450	$ 4,725	$ 23,625	$ 211,050
																			$ -	$ -	$ -	$ -	$ -	$ -

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				Length (m)	Formation Width (m)	Sub Total ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Other Cost ($)		$	10%	6%	3%	15%	($)
ZONE 2 - TWEED SOUTH	**TERRANORA**	**Gollan Drive**																			
	CREEK	34.						$ 350,000	$ 205,000			$ 25,000		$ 45,000				$ 625,000	$ 62,500	$ 37,500	$ 18,750	$ 93,750	$ 837,500
	CROSSING &	35.	Deleted															$ -	$ -	$ -	$ -	$ -	$ -
	KIRKWOOD ROAD																	$ -					$ -
	Service Rd West Side of Pacific Hwy																						$ -
		36.	Kirkwood Rd Extension (With upgrade to Fraser Dr)		11													$ 8,181,000					$ 8,181,000
		36a	Kirkwood Rd Intersection with Northern Service Rd		11													$ 100,000					$ 100,000
		36b	Service Rd from Kirkwood Rd to Terranora Ck Bridge		11													$ 760,000					$ 760,000
		36c	Service Rd Bridge over Terranora Ck		11												$ 5,250,000	$ 5,250,000					$ 10,500,000
		36d	Service Rd from Terranora Ck Bridge to Kennedy Dr		11													$ 1,050,000					$ 1,050,000
		36e	Kennedy Dr Interchange with Service Rd		11													$ 300,000					$ 300,000
		37.	Northbound off ramp from Pacific Hwy to Kirkwood Rd		11													$ 860,000					$ 860,000
		38.	Southbound on ramp from Kirkwood Rd to Pacific Hwy		11													$ 910,000					$ 910,000
		39.	Enterprise Ave Extension	600	11	$ 627,000									$ 1,800,000		$ 1,200,000	$ 3,627,000	$ 362,700	$ 217,620	$ 108,810	$ 544,050	$ 4,860,180
																							$ -
	Service Rd East Side of Pacific Hwy																						$ -
		40.	Kennedy Dr intersection with eastern service Rd		11													$ 300,000					$ 300,000
		41.	Service Rd from Kennedy Dr to Terranora Ck Bridge		11													$ 1,050,000					$ 1,050,000
		42.	Service Rd Bridge over Terranora Ck		11												$ 5,250,000	$ 5,250,000					$ 10,500,000
		43.	Service Rd from Terranora Ck Bridge to Kirkwood Rd		11													$ 1,000,000					$ 1,000,000
		44.	Kirkwood Rd intersection with eastern Service Rd		11													$ 100,000					$ 100,000
		45.	Deleted															$ -					$ -
		46.	Deleted	1350	11													$ -					$ -
		47.	I/s Kirkwood Road and Minjungbal Dr					$ 120,000	$ 75,000									$ 195,000					$ 192,650
		47a	I/s Kennedy Dr and Crystal Waters Dr (extend merge towards bridge and reconstruct road shoulder)	70	4	$ 26,600		$ 75,000										$ 101,600	$ 10,160	$ 6,096	$ 3,048	$ 15,240	$ 136,144
																		$ -	$ -	$ -	$ -	$ -	$ -
	BANORA POINT	**Fraser Drive**																$ -	$ -	$ -	$ -	$ -	$ -
		48.	Kirkwood Rd to Leisure Dr (Widen to 4 lanes)	2000	23.6	$ 4,484,000									$ 650,000			$ 5,134,000	$ 513,400	$ 308,040	$ 154,020	$ 770,100	$ 6,879,560
			(cont.) Route lighting	2000										$ 252,000				$ 252,000	$ 25,200	$ 15,120	$ 7,560	$ 37,800	$ 337,680
		49.	i/s - Leisure Dr (Complete)					$ 275,000							$ 40,000			$ 315,000		$ 18,900	$ 9,450		$ 343,350
			(cont.) Traffic Lights						$ 205,000									$ 205,000	$ 20,500	$ 12,300	$ 6,150	$ 30,750	$ 274,700
		50.	Leisure Dr to Broadwater Parkway - Area E (Widen to 4 lane)	900	13	$ 877,500												$ 877,500	$ 87,750	$ 52,650	$ 26,325	$ 131,625	$ 1,175,850
			(cont.) Route lighting	900										$ 113,400				$ 113,400	$ 11,340	$ 6,804	$ 3,402	$ 17,010	$ 151,956
		51.	is - Broadwater Parkway															$ -	$ -	$ -	$ -	$ -	$ -
		52.	i/s Terranora Rd					$ 120,000					$ 25,000		$ 25,000			$ 170,000	$ 17,000	$ 10,200	$ 5,100	$ 25,500	$ 227,800
																		$ -	$ -	$ -	$ -	$ -	$ -
		Leisure Drive (2 Lane)																$ -	$ -	$ -	$ -	$ -	$ -
		53.	Frasers Dr to Eucalyptus Dr (Centaur) - 2 Lanes	1125	11	$ 860,625												$ 860,625					$ 860,625
			(cont.) Route Lighting	1125										$ 123,750				$ 123,750					$ 123,750
		53(a)	Eucalyptus Dr to Greenway Dr - 2 Lanes	920	11	$ 961,400												$ 961,400	$ 96,140	$ 57,684	$ 28,842	$ 144,210	$ 1,288,276
		54.	i/s - Eucalyptus Dr					$ 150,000										$ 150,000		$ 9,000	$ 4,500		$ 163,500
		55.	Bridge over Western Drainage Canal				$ 220,000											$ 220,000		$ 13,200	$ 6,600		$ 239,800
		56.	i/s - Greenway Dr					$ 135,000							$ 15,000			$ 150,000		$ 9,000	$ 4,500		$ 163,500
		57.	Darlington Dr (Motorway interchange to Leisure Dr) - 2 Lanes	450	11	$ 396,000								$ 132,000				$ 528,000	$ 52,800	$ 31,680	$ 15,840	$ 79,200	$ 707,520
		57a	Leisure Dr to Winders Pl - 2 Lanes	200	11	$ 176,000												$ 176,000	$ 17,600	$ 10,560	$ 5,280	$ 26,400	$ 235,840
		57b	Winders Pl to Greenway Dr - 2 Lanes	650	11	$ 572,000												$ 572,000	$ 57,200	$ 34,320	$ 17,160	$ 85,800	$ 766,480
		58.	i/s - Darlington Dr (East)					$ 267,300								$ 136,700		$ 404,000		$ 24,240	$ 12,120		$ 440,360
		59.	Darlington Dr/Motorway Intersection					$ 238,000										$ 259,420					$ 259,420
		59a	Winders Place/Leisure Dr Intersection (Signals only)						$ 15,000									$ 15,000	$ 1,500	$ 900	$ 450	$ 2,250	$ 20,100
		59b	**Leisure Dr Upgrade (widening to 4 lanes)**															$ -	$ -	$ -	$ -	$ -	$ -
			.- Darlington Dr from Tweed Heads Bypass to Leisure Drive	450	11	$ 470,250												$ 470,250	$ 47,025	$ 28,215	$ 14,108	$ 70,538	$ 630,135
			.- Leisure Dr from Darlington Dr to approx 200m past Winders Pl	400	11	$ 418,000												$ 418,000	$ 41,800	$ 25,080	$ 12,540	$ 62,700	$ 560,120
			.- Leisure Dr from Fraser Dr to Eucalyptus Dr	1125	11	$ 1,175,625												$ 1,175,625	$ 117,563	$ 70,538	$ 35,269	$ 176,344	$ 1,575,338
		59c	Leisure Dr from Winders Pl to Eucalyptus Dr	1570	11	$ 1,640,650	$ 840,000							$ 197,820				$ 2,678,470	$ 267,847	$ 160,708	$ 80,354	$ 401,771	$ 3,589,150
		Darlington Drive																$ -	$ -	$ -	$ -	$ -	$ -
		60.	South bound offramp from Minjungbal Dr to Darlington Dr			$ 130,000		$ 120,000									$ 48,000	$ 298,000		$ 15,000	$ 8,940		$ 321,940
		61.	Interchange -- contribution to RTA													$ 598,000		$ 598,000					$ 598,000

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				Length (m)	Formation Width (m)	Sub Total ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Other Cost ($)		$	10%	6%	3%	15%	($)
	TWEED HEADS SOUTH/BANORA																						
		61a	Minjungbal Dr/Shallow Bay Dr Intersection					$ 300,000										$ 300,000					$ 300,000
		61b	Minjungbal Dr/Machinery Dr Intersection					$ 323,000										$ 323,000					$ 323,000
		61c	Shallow Bay Dr to Eastlakes Dr Connection	100	11	$ 335,000												$ 335,000					$ 335,000
		61d	Amber Rd/Machinery Dr Intersection					$ 190,147										$ 190,147					$ 190,147
		61e	Extend Minjungbal Dr Right Turn Lane (30m) to Dry Dock Rd					$ 75,000										$ 75,000	$ 7,500	$ 4,500	$ 2,250	$ 11,250	$ 100,500
		61f	Extend Davey St(from Kirkwood to I/s Eastlakes Dr and Soorley St)	900	11	$ 940,500		$ 155,000					$ 113,400	$ 25,000	$ 300,000		$ 660,000	$ 2,193,900	$ 219,390	$ 131,634	$ 65,817	$ 329,085	$ 2,939,826
		61g	Extend Eastlakes Dr (from I/s Eastlakes and Soorley to Pacific Hwy	1000	11	$ 1,045,000		$ 155,000					$ 126,000	$ 25,000	$ 1,400,000	$ 770,000	$ 1,640,000	$ 5,161,000	$ 516,100	$ 309,660	$ 154,830	$ 774,150	$ 6,915,740

TRCP ZONE	Road Corridor	Item No.	TRCP Projects	Road Form		Road Construction Costs (Class 1 to 9) 1. Type D formation 2. Rural Arterial 3. Earthworks Allowance 4. Upgrade to type D 5. Upgrade to Rural Arterial 6. Base Urban Road (2 lanes) 6.1 Base Urban Road	Bridges (Class 10 to 12) 10. Bridges <50m 11. Bridges >50m 12. Skewed	Intersection (Class 13 to 15) 13. Channelisation (basic) 13.1 Channelisation (Complex) 14. Roundabout (small) 14.1 Roundabout	Traffic Lights (Class 16 to 17) 16. Traffic Lights (Basic) 16.1 Traffic Lights (Complex) 17. Traffic Lights (Pedestrian)	Traffic Facilities (Class 18 to 19) 18. Refuges 19. Thresholds	Traffic Facilities (Class 20) 20. Noise Barriers	Street Lighting (Class 21) 21. Intersection Lighting	Street Lighting (Class 22) 22. Route Lighting	Service Relocation (Class 27 to 28) 27. Standard 28 Significant 28.1 Rural	Acquisition/Resumption Costs/Environmental Land Bank (Class 34) 34. Valuer General unimproved land value prorata	Services and Other (Class 35) All estimated items to be indexed (approximately 3% pa). 1997 to 2006 = 1.31	Provisional Items (Class 30)	SUB-TOTAL	Administration (Class 31)	Detail Design & Investigation (Class 32)	Supervision (Class 33)	Contingency (Class 36)	TOTAL (2006)
				Length (m)	Formation Width (m)	Sub Total ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Other Cost ($)		$	10%	6%	3%	15%	($)
ZONE 5 - TERRANORA																			$ -	$ -	$ -	$ -	$ -	$ -
	TERRANORA /	**Terranora Road**																	$ -	$ -	$ -	$ -	$ -	$ -
	AREA E	62.	Upgrade existing Mahers Lane to Frasers Drive	2850	13	$ 1,852,500													$ 1,852,500	$ 185,250	$ 111,150	$ 55,575	$ 277,875	$ 2,482,350
		Broadwater Parkway																	$ -	$ -	$ -	$ -	$ -	$ -
		63.	Naponyah Rd - Existing section off Bilambil Rd	600	11	$ 330,000													$ 330,000		$ 19,800	$ 9,900		$ 359,700
		64.	Delete																				
																			$ -	$ -	$ -	$ -	$ -	$ -
ZONE 6 - KINGSCLIFF	**KINGSCLIFF**																		$ -					
		Elrond Drive																	$ -	$ -	$ -	$ -	$ -	$ -
		65.	Wommim Bay Rd and Sand Rd Intersection					$ 155,000				$ 25,000		$ 25,000					$ 205,000	$ 20,500	$ 12,300	$ 6,150	$ 30,750	$ 274,700
		66.	Terrace Street Intersection **(DELETE)**																$ -	$ -	$ -	$ -	$ -	$ -
		67.	Terrace Street to Ozone St. (Sand Street) **(DELETE)**	0	11	$ -							$ -						$ -	$ -	$ -	$ -	$ -	$ -
		68.	Ozone St Intersection	55	55	$ 121,000		$ 155,000				$ 25,000		$ 25,000					$ 326,000	$ 32,600	$ 19,560	$ 9,780	$ 48,900	$ 436,840
		69.	Ozone St. to Beach St.	650	11	$ 536,250											$ 240,000		$ 776,250		$ 46,575	$ 23,288		$ 846,113
		70.	Beach St to Monarch st	360	11	$ 297,000											$ 240,000		$ 537,000		$ 32,220	$ 16,110		$ 585,330
		71.	Monarch St to Turnoch st (Widen and straighten)	650	11	$ 357,500											$ 100,000		$ 457,500		$ 27,450	$ 13,725		$ 489,675
		72.	Turnock St Intersection	70	70	$ 196,000		$ 135,000						$ 20,000					$ 351,000		$ 21,060	$ 10,530		$ 382,590
																			$ -	$ -	$ -	$ -	$ -	$ -
		Ozone Street Link																	$ -	$ -	$ -	$ -	$ -	$ -
		73.	Kingscliff St.Intersection					$ 135,000						$ 20,000					$ 155,000		$ 9,300	$ 4,650		$ 168,950
		74.	Kingscliff St to **Elrond Drive**	**270**	**11**	$ 282,150							$ 34,020			**$ 162,000**			$ 478,170	$ 47,817	$ 28,690	$ 14,345	$ 71,726	$ 640,748
		75.	**Elrond Dr** to Tweed Coast Road	**980**	11	$ 873,180							$ 123,480			**$ 588,000**	$ 195,716		$ 1,780,376	$ 178,038	$ 106,823	$ 53,411	$ 267,056	$ 2,385,704
		76.	*(Combined with 75)*																$ -	$ -	$ -	$ -	$ -	$ -
		77.	Rotumah St/Ozone St Intersection					$ 155,000				$ 25,000		$ 25,000					$ 205,000	$ 20,500	$ 12,300	$ 6,150	$ 30,750	$ 274,700
		78.	Tweed Coast Road (Signals included)Intersection					$ 350,000	$ 280,000			$ 25,000		$ 25,000					$ 680,000	$ 68,000	$ 40,800	$ 20,400	$ 102,000	$ 911,200
																			$ -	$ -	$ -	$ -	$ -	$ -
		Turnock Street Extension																	$ -	$ -	$ -	$ -	$ -	$ -
		79.	Cudgen Rd Intersection	50	50	$ 100,000		$ 150,000						$ 20,000					$ 270,000		$ 16,200	$ 8,100		$ 294,300
		80.	Cudgen Rd to Pearl Street	1000	13	$ 1,170,000										$ 712,500			$ 1,882,500		$ 70,200	$ 56,475		$ 2,009,175
			(Cont.) Widen and Strengthen	350	2	$ 28,000													$ 28,000	$ 2,800	$ 1,680	$ 840	$ 4,200	$ 37,520
		81.	Pearl St Intersection **Upgrade**					$ 155,000				$ 25,000		$ 25,000					$ 205,000	$ 20,500	$ 12,300	$ 6,150	$ 30,750	$ 274,700
		81a	Turnock St to Tweed Coast Road	1000	11	$ 1,045,000	**$ 420,000**									**$ 600,000**			$ 2,065,000	$ 206,500	$ 123,900	$ 61,950	$ 309,750	$ 2,767,100
		81b	Turnock St and Tweed Coast Road Intersection					$ 350,000	**$ 205,000**			$ 25,000							$ 580,000	$ 58,000	$ 34,800	$ 17,400	$ 87,000	$ 777,200
																			$ -	$ -	$ -	$ -	$ -	$ -
	TWEED COAST	**Tweed Coast Road (Widening to 4 Lanes)**																	$ -	$ -	$ -	$ -	$ -	$ -
		82.	-- Chinderah Motorway Interchange to Cudgen Road (Widen and strengthen)	2400	3	$ 360,000										$ 80,000			$ 440,000		$ 21,600	$ 13,200		$ 474,800
			(cont.) Upgrade to 4 lanes	2400	9.3	$ 1,807,920										$ 150,000			$ 1,957,920		$ 117,475	$ 58,738		$ 2,134,133
		82a	Nth and Sth on Ramps I/S Tweed Coast Rd and Motorway. Widening 4m x 200m x 2	400	4	$ 120,000													$ 120,000	$ 12,000	$ 7,200	$ 3,600	$ 18,000	$ 160,800
		83.	Cudgen Road Intersection					$ 275,000						$ 15,000					$ 290,000		$ 17,400	$ 8,700		$ 316,100
			(Include traffic lights)						$ 150,000										$ 150,000		$ 9,000	$ 4,500		$ 163,500
		84.	Cudgen Rd to Cudgen Ck Widening	3500	2	$ 350,000										$ 510,000			$ 860,000		$ 21,000	$ 25,800		$ 906,800
			(Cont.) Full Width	3500	9.3	$ 2,441,250										$ 48,000			$ 2,489,250	$ 248,925	$ 149,355	$ 74,678	$ 373,388	$ 3,335,595
		85.	-- Bridge over Cudgen Ck				$ 1,500,000												$ 1,500,000	$ 150,000	$ 90,000	$ 45,000	$ 225,000	$ 2,010,000
		85a	Existing bridge over Cudgen Ck				$ 1,500,000												$ 1,500,000	$ 150,000	$ 90,000	$ 45,000	$ 225,000	$ 2,010,000
		86.	-- Cudgen Creek to Bogangar Widening and strengthening	3800	2	$ 380,000													$ 380,000		$ 22,800	$ 11,400		$ 414,200
			(cont.) Upgrade to 4 lanes	3800	9.3	$ 2,862,540										$ 500,000			$ 3,362,540	$ 336,254	$ 201,752	$ 100,876	$ 504,381	$ 4,505,804
																			$ -	$ -	$ -	$ -	$ -	$ -

TRCP ZONE	Road Corridor	Item No.	TRCP Projects	Road Form		Road Construction Costs (Class 1 to 9) 1. Type D formation 2. Rural Arterial 3. Earthworks Allowance 4. Upgrade to type D 5. Upgrade to Rural Arterial 6. Base Urban Road (2 lanes) 6.1 Base Urban Road	Bridges (Class 10 to 12) 10. Bridges <50m 11. Bridges >50m 12. Skewed	Intersection (Class 13 to 15) 13. Channelisation (basic) 13.1 Channelisation (Complex) 14. Roundabout (small) 14.1 Roundabout	Traffic Lights (Class 16 to 17) 16. Traffic Lights (Basic) 16.1 Traffic Lights (Complex) 17. Traffic Lights (Pedestrian)	Traffic Facilities (Class 18 to 19) 18. Refuges 19. Thresholds	Traffic Facilities (Class 20) 20. Noise Barriers	Street Lighting (Class 21) 21. Intersection Lighting	Street Lighting (Class 22) 22. Route Lighting	Service Relocation (Class 27 to 28) 27. Standard 28 Significant 28.1 Rural	Acquisition/Resumption Costs/Environmental Land Bank (Class 34) 34. Valuer General unimproved land value prorata	Services and Other (Class 35) All estimated items to be indexed (approximately 3% pa). 1997 to 2006 = 1.31	Provisional Items (Class 30)	SUB-TOTAL	Administration (Class 31)	Detail Design & Investigation (Class 32)	Supervision (Class 33)	Contingency (Class 36)	TOTAL (2006)
				Length (m)	Formation Width (m)	Sub Total ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Other Cost ($)		$	10%	6%	3%	15%	($)
ZONE 7 DURANBAH/CABARITA		**Bogangar:**																	-	-	-	-	-	-
		87.	-- Northern gateway threshold					$ 43,000						$ 5,000				$ 48,000					$ 48,000
		88.	-- Hastings Road/Coast Rd Intersection					$ 140,000						$ 15,000				$ 155,000					$ 155,000
		89.	-- Pedestrian crossing - Pandanus Pde					$ 150,000										$ 150,000					$ 150,000
		90.	- Rosewood Ave/Coast Rd Intersection					$ 227,000						$ 47,000				$ 274,000					$ 274,000
		91.	-- Southern Gateway							$ 43,000				$ 5,000				$ 48,000					$ 48,000
																		-	-	-	-	-	-
		Clothiers Ck:																-	-	-	-	-	-
		92.	Rosewood Ave Upgrade	600	13	$ 78,000												$ 78,000	$ 7,800	$ 4,680	$ 2,340	$ 11,700	$ 104,520
		93.	Hasting Road/Rosewood Av Intersection					$ 155,000				$ 25,000		$ 25,000				$ 205,000	$ 20,500	$ 12,300	$ 6,150	$ 30,750	$ 274,700
																		-	-	-	-	-	-
		Hastings Point:																-	-	-	-	-	-
		94.	Upgrade Tweed Coast Road - Bogangar/Hastings Point	3,300	13	$ 2,145,000												$ 2,145,000	$ 214,500	$ 128,700	$ 64,350	$ 321,750	$ 2,874,300
		95.	-- Northern Gateway							$ 46,000				$ 5,000				$ 51,000					$ 51,000
		96.	Hastings Point Traffic Management Devices														$ 150,000	$ 150,000		$ 9,000	$ 4,500		$ 163,500
		97.	-- Southern gateway threshold							$ 46,000				$ 5,000				$ 51,000		$ 3,060	$ 1,530		$ 55,590
		98.	Upgrade Tweed Coast Road - Hastings Point/Pottsville	2,200	13	$ 1,430,000												$ 1,430,000	$ 143,000	$ 85,800	$ 42,900	$ 214,500	$ 1,916,200
																		-	-	-	-	-	-
ZONE 8 - POTTSVILLE		**Pottsville:**																-	-	-	-	-	-
		99.	Boronia Ave with Tweed Coast Road Intersection					$ 150,000						$ 20,000				$ 170,000					$ 170,000
		100.	Elfran to Boronia St Traffic Management Devices											$ 10,000			$ 110,000	$ 120,000					$ 120,000
		101.	Coronation Ave/Coast Rd Intersection					$ 255,000						$ 20,000				$ 275,000					$ 275,000
		102.	Overall Dr with Tweed Coast Road Intersection					$ 124,000						$ 10,000				$ 134,000					$ 134,000
		103.	Southern Threshold							$ 43,000				$ 5,000				$ 48,000					$ 48,000
		104.	Coronation Dr Threshold (West)							$ 43,000				$ 5,000				$ 48,000					$ 48,000
		105.	Deleted															-	-	-	-	-	-
		106.	Deleted															-	-	-	-	-	-
		107.	Upgrade Tweed Coast Road - Pottsville/Blackrocks. Wooyung Rd	2,000	13	$ 1,300,000											$ 1,300,000	$ 2,600,000	$ 260,000	$ 156,000	$ 78,000	$ 390,000	$ 3,484,000
		107a	Kellehers rd from Potsville Rdto Black Rock	3500	11	$ 2,502,500		$ 150,000								$ 1,600,000		$ 4,252,500	$ 425,250	$ 255,150	$ 127,575	$ 637,875	$ 5,698,350
		107b	Seabreeze to Koala Beach connector	500	11	$ 445,500							$ 63,000					$ 508,500	$ 50,850	$ 30,510	$ 15,255	$ 76,275	$ 681,390
		107c	Seabreeze to Koala Beach connector bridge				$ 900,000											$ 900,000	$ 90,000	$ 54,000	$ 27,000	$ 135,000	$ 1,206,000
		107d	Seabreeze Bvde/ Koala Beach Connector Upgrade Intersection	600	2	$ 90,000												$ 90,000	$ 9,000	$ 5,400	$ 2,700	$ 13,500	$ 120,600
																		-	-	-	-	-	-
		Blackrocks:																-	-	-	-	-	-
		108.	Black Rocks Bridge				$ 1,650,000											$ 1,611,284					$ 1,611,284
		109.	i/s - Black Rocks Bridge & Coast Road					$ 150,000						$ 20,000				$ 170,000		$ 10,200	$ 5,100		$ 185,300
																		-	-	-	-	-	-

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				Length (m)	Formation Width (m)	Sub Total ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Other Cost ($)		$	10%	6%	3%	15%	($)
ZONE 9 - MURWILLUMBAH	**MURWILLUMBAH**	110.	Riverview Street Upgrade	900	13	$ 218,000												$ 218,000					$ 218,000
		111.	Deleted															$ -	$ -	$ -	$ -	$ -	$ -
		112.	Park Ave Upgrade	880	13	$ 858,000												$ 858,000	$ 85,800	$ 51,480	$ 25,740	$ 128,700	$ 1,149,720
		112a	Cane Rd to Barnaby Extension St Subdivision	2200	13	$ 2,230,800										$ 85,800	$ 1,144,000	$ 3,460,600	$ 346,060	$ 207,636	$ 103,818	$ 519,090	$ 4,637,204
		112b	West End to Frances St Extension	400	13	$ 494,000										$ 15,600	$ 208,000	$ 717,600	$ 71,760	$ 43,056	$ 21,528	$ 107,640	$ 961,584
		112c	Byangum Rd/William St Intersection					$ 155,000				$ 25,000						$ 180,000	$ 18,000	$ 10,800	$ 5,400	$ 27,000	$ 241,200
		112d	North Arm Rd and Old Lismore Rd (Byangum Rd) Intersection					$ 155,000				$ 25,000						$ 180,000	$ 18,000	$ 10,800	$ 5,400	$ 27,000	$ 241,200
		112e	West End/Byangum/Wollumbin St Intersection					$ 155,000				$ 25,000						$ 180,000	$ 18,000	$ 10,800	$ 5,400	$ 27,000	$ 241,200
		112f	West End/Wentworth St Intersection					$ 155,000				$ 25,000						$ 180,000	$ 18,000	$ 10,800	$ 5,400	$ 27,000	$ 241,200
		112g	Widening Castlefield St for Buses	350	11	$ 288,750												$ 288,750	$ 28,875	$ 17,325	$ 8,663	$ 43,313	$ 386,925
		112h	Widening Cane Rd	4800	4	$ 960,000												$ 960,000	$ 96,000	$ 57,600	$ 28,800	$ 144,000	$ 1,286,400
		112i	Quarry Rd and Reserve Ck Rd Roundabout (Suitable for Bdouble-15m rad)					$ 350,000								$ 4,000	$ 175,000	$ 529,000	$ 52,900	$ 31,740	$ 15,870	$ 79,350	$ 708,860
		112j	West End St Extension - Frances St to Barnaby St Subdivision (50/50 Split with Developer)	350	13	$ 216,125											$ 156,000	$ 372,125	$ 37,213	$ 22,328	$ 11,164	$ 55,819	$ 498,648
		112k	Old Lismore Rd	1500	11	$ 1,072,500												$ 1,072,500	$ 107,250	$ 64,350	$ 32,175	$ 160,875	$ 1,437,150
		112L	Wardrop Valley Rd to Reserve Ck Rd	2300	11	$ 1,644,500		$ 75,000										$ 1,719,500	$ 171,950	$ 103,170	$ 51,585	$ 257,925	$ 2,304,130
		112m	Old Lismore Rd from North Arm Rd **(DELETE)**	0	11	$ -												$ -	$ -	$ -	$ -	$ -	$ -
		112n	**Joshua St To Subdivision Boundary New Road**	**500**	**11**	**$ 357,500**		**$ 75,000**				**$ 25,000**						**$ 457,500**	**$ 45,750**	**$ 27,450**	**$ 13,725**	**$ 68,625**	**$ 613,050**
																		$ -	$ -	$ -	$ -	$ -	$ -
	COASTAL RURAL ROADS																	$ -	$ -	$ -	$ -	$ -	$ -
																		$ -	$ -	$ -	$ -	$ -	$ -
ZONE 6 - KINGSCLIFF	**Cudgen Road**	113.	Tweed Valley Way to Duranbah Rd	1790	11	$ 492,250												$ 492,250		$ 29,535	$ 14,768		$ 536,553
		114.	Duranbah Rd to Tweed Coast Road	5200	11	$ 2,345,200												$ 2,345,200	$ 234,520	$ 140,712	$ 70,356	$ 351,780	$ 3,142,568
																		$ -	$ -	$ -	$ -	$ -	$ -
ZONE 7 - DURANBAH/CABARITA	**Duranbah Rd**	115.	Cudgen Rd to Kings Forest Parkway	1900	9	$ 855,000												$ 855,000	$ 85,500	$ 51,300	$ 25,650	$ 128,250	$ 1,145,700
																		$ -	$ -	$ -	$ -	$ -	$ -
	Clothiers Ck	116.	Clothiers Ck Rd: Stage 1 Motorway to Tristinia Dr	830	13	$ 377,650												$ 377,650					$ 377,650
		116(a)	Stage 2: Tanglewood to Tristinia Dr	1100	13	$ 500,500												$ 500,500					$ 500,500
		116(b)	Stage 3: Tanglewood Dr to Rosewood	2500	13	$ 1,625,000												$ 1,625,000	$ 162,500	$ 97,500	$ 48,750	$ 243,750	$ 2,177,500
																		$ -	$ -	$ -	$ -	$ -	$ -
ZONE 8 - POTTSVILLE	**Moobal/Pottsville**	117.	Pottsville --- Cudgera Ck Rd	1450	13	$ 659,750												$ 659,750		$ 39,585	$ 19,793		$ 719,128
																		$ -	$ -	$ -	$ -	$ -	$ -
	Cudgera Ck Rd	118.	2km section from Pottsville Moobal Rd (RTA)	2000	13	$ 910,000												$ 910,000		$ 54,600	$ 27,300		$ 991,900
																		$ -	$ -	$ -	$ -	$ -	$ -
	Wooyong Rd	119.	Deleted															$ -	$ -	$ -	$ -	$ -	$ -
																		$ -	$ -	$ -	$ -	$ -	$ -
																		$ -	$ -	$ -	$ -	$ -	$ -
	INLAND RURAL ROADS																	$ -	$ -	$ -	$ -	$ -	$ -
																		$ -	$ -	$ -	$ -	$ -	$ -
ZONE 12 - RURAL INNER	**Kyogle Road**	120.	Kyogle Rd Stage 1 : Byangum Bridge Ch 0 - Ch1500 (approx Boulder Close)	1500	13	$ 390,000												$ 390,000		$ 23,400	$ 11,700		$ 425,100
		(a)	Kyogle Rd Stage 2 : Ch1500 - 2500 (approx 1//600298)	1000	13	$ 390,000												$ 390,000		$ 23,400	$ 11,700		$ 425,100
		(b)	Kyogle Rd Stage 3: Ch2500 - Ch4000 (approx Mt Warning Rd)	1500	13	$ 390,000												$ 390,000		$ 23,400	$ 11,700		$ 425,100
		(c)	Kyogle Rd Stage 4: Ch4000 - Ch8500 (approx Marshal St, Uki)	4500	13	$ 2,047,500												$ 2,047,500		$ 122,850	$ 61,425		$ 2,231,775
		(d)	Kyogle Rd Stage 5: Ch8500 - 13000 (approx Palmers Rd)	4500	13	$ 2,047,500												$ 2,047,500		$ 122,850	$ 61,425		$ 2,231,775
																		$ -	$ -	$ -	$ -	$ -	$ -
	North Arm Road	121.	Castlefield Dr to Numinbah Rd	1500	13	$ 975,000												$ 975,000	$ 97,500	$ 58,500	$ 29,250	$ 146,250	$ 1,306,500
																		$ -	$ -	$ -	$ -	$ -	$ -
	Numinbah Road	122.	Tomewin -- North Arm Rd	5900	11	$ 2,660,900												$ 2,660,900	$ 266,090	$ 159,654	$ 79,827	$ 399,135	$ 3,565,606
			North Arm Rd -- Chilcotts	5000	11	$ 2,255,000												$ 2,255,000	$ 225,500	$ 135,300	$ 67,650	$ 338,250	$ 3,021,700
																		$ -	$ -	$ -	$ -	$ -	$ -
ZONE 10- KEILVALE	**Reserve Ck Rd**	123.	Reserve Ck Rd -- Upgrade Existing from TVW to Quarry Rd	400	11	$ 180,400										$ 260,955		$ 441,355	$ 44,136	$ 26,481	$ 13,241	$ 66,203	$ 591,416
																		$ -	$ -	$ -	$ -	$ -	$ -
ZONE 12 - RURAL INNER	**Tomewin Rd**	124.	Tomewin Rd : Dulguigan -- QLD Border	7700	11	$ 3,472,700												$ 3,472,700	$ 347,270	$ 208,362	$ 104,181	$ 520,905	$ 4,653,418
			Numinbah -- Dulguigan	2500	11	$ 1,127,500												$ 1,127,500	$ 112,750	$ 67,650	$ 33,825	$ 169,125	$ 1,510,850
																		$ -	$ -	$ -	$ -	$ -	$ -
	Tyalgum Road	125.	Tyalgum Road -- Upgrade Existing	6000	11	$ 2,706,000												$ 2,706,000	$ 270,600	$ 162,360	$ 81,180	$ 405,900	$ 3,626,040
																		$ -	$ -	$ -	$ -	$ -	$ -
																		$ -	$ -	$ -	$ -	$ -	$ -

TRCP ZONE	Road Corridor	Item No.	TRCP Projects	Road Form		Road Construction Costs (Class 1 to 9) 1. Type D formation 2. Rural Arterial 3. Earthworks Allowance 4. Upgrade to type D 5. Upgrade to Rural Arterial 6. Base Urban Road (2 lanes) 6.1 Base Urban Road	Bridges (Class 10 to 12) 10. Bridges <50m 11. Bridges >50m 12. Skewed	Intersection (Class 13 to 15) 13. Channelisation (basic) 13.1 Channelisation (Complex) 14. Roundabout (small) 14.1 Roundabout	Traffic Lights (Class 16 to 17) 16. Traffic Lights (Basic) 16.1 Traffic Lights (Complex) 17. Traffic Lights (Pedestrian)	Traffic Facilities (Class 18 to 19) 18. Refuges 19. Thresholds	Traffic Facilities (Class 20) 20. Noise Barriers	Street Lighting (Class 21) 21. Intersection Lighting	Street Lighting (Class 22) 22. Route Lighting	Service Relocation (Class 27 to 28) 27. Standard 28 Significant 28.1 Rural	Acquisition/Resumption Costs/Environmental Land Bank (Class 34) 34. Valuer General unimproved land value prorata	Services and Other (Class 35) All estimated items to be indexed (approximately 3% pa). 1997 to 2006 = 1.31	Provisional Items (Class 30)	SUB-TOTAL	Administration (Class 31)	Detail Design & Investigation (Class 32)	Supervision (Class 33)	Contingency (Class 36)	TOTAL (2006)
				Length (m)	Formation Width (m)	Sub Total ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Cost ($)	Other Cost ($)		$	10%	6%	3%	15%	($)
	LOCAL AREA WORKS																	$ -	$ -	$ -	$ -	$ -	$ -
																		$ -	$ -	$ -	$ -	$ -	$ -
	Terranora	**Broadwater Parkway**																$ -	$ -	$ -	$ -	$ -	$ -
LAC 1	Local Area No 1	126.	Deleted															$ -	$ -	$ -	$ -	$ -	$ -
																		$ -	$ -	$ -	$ -	$ -	$ -
		127.	Mahers Lane to Frasers Dr.	2000	11	$ 2,090,000									$ 640,000	$ 391,432	$ 700,000	$ 3,821,432	$ 382,143	$ 229,286	$ 114,643	$ 573,215	$ 5,120,719
			(cont.)												$ 800,000	$ 260,955		$ 1,060,955	$ 106,096	$ 63,657	$ 31,829	$ 159,143	$ 1,421,680
		128.	Delete (Double of 51. Refer 51)															$ -	$ -	$ -	$ -	$ -	$ -
		129.	Frasers Dr/Amaroo Dr Intersection					$ 75,000	$ 205,000			$ 25,000		$ 25,000				$ 330,000	$ 33,000	$ 19,800	$ 9,900	$ 49,500	$ 442,200
																		$ -	$ -	$ -	$ -	$ -	$ -
		Mahers Lane																$ -	$ -	$ -	$ -	$ -	$ -
		130.	Broadwater Parkway /Mahers Lane Intersection					$ 350,000	$ 280,000			$ 25,000		$ 25,000				$ 680,000	$ 68,000	$ 40,800	$ 20,400	$ 102,000	$ 911,200
		131.	Mahers In	1600	11	$ 1,425,600												$ 1,425,600	$ 142,560	$ 85,536	$ 42,768	$ 213,840	$ 1,910,304
		132.	Terranora Rd/Mahers Lane Intersection					$ 275,000						$ 20,000				$ 295,000		$ 17,700	$ 8,850		$ 321,550
																		$ -	$ -	$ -	$ -	$ -	$ -
	Cabarita	**Kings Forest Parkway**																$ -	$ -	$ -	$ -	$ -	$ -
LAC 2	Local Area No 2	133.	Parkway -- Two lane carriageway through site	4,600	13	$ 5,681,000										$ 1,000,000		$ 6,681,000	$ 668,100	$ 400,860	$ 200,430	$ 1,002,150	$ 8,952,540
		134.	Duplication of Parkway from Tweed Coast Rd to Commercial Area	1000	10.6	$ 1,007,000												$ 1,007,000	$ 100,700	$ 60,420	$ 30,210	$ 151,050	$ 1,349,380
																		$ -	$ -	$ -	$ -	$ -	$ -
	Pottsville	**Seabreeze Estate/Koala Beach Connector:**																$ -	$ -	$ -	$ -	$ -	$ -
LAC 3	Local Area No 3	135.	Seabreeze Estate-- Bridge				$ 945,000											$ 945,000	$ 94,500	$ 56,700	$ 28,350	$ 141,750	$ 1,266,300
		136.	Seabreeze to Koala Beach Connector Rd (common share)	500	11	$ 445,500												$ 445,500	$ 44,550	$ 26,730	$ 13,365	$ 66,825	$ 596,970
		136a	Seabreeze Connector Rd/Macadamia Av Roundabout					$ 80,000										$ 80,000	$ 8,000	$ 4,800	$ 2,400	$ 12,000	$ 107,200
	Kings Beach	136b	Seabreeze. Enhance I/S at sports ground access	600	2	$ 90,000												$ 90,000	$ 9,000	$ 5,400	$ 2,700	$ 13,500	$ 120,600
LAC 4	Local Area 4	137.	3 intersection upgrades Tweed Coast Road (Dianella Dr; Barclay Dr; Celerywood Dr)					$ 1,210,000										$ 1,210,000					$ 1,318,900
																		$ -	$ -	$ -	$ -	$ -	$ -
	TOTALS					**$ 105,503,485**	**$ 19,000,000**	**$ 11,836,567**	**$ 2,235,000**	**$ 221,000**	**$ 197,250**	**$ 600,000**	**$ 2,951,270**	**$ 900,150**	**$ 19,040,455**	**$ 6,486,203**	**$ 19,788,600**	**$ 203,654,895**	**$ 14,838,024**	**$ 9,944,815**	**$ 5,012,922**	**$ 22,257,036**	**$ 305,093,243**