

**Title:** Roadworks CP2003/01A Stuart Park

**Related Policy No:** **040 Contribution Plans**

**Adopted By:** Council

**Next Review Date:** 31 May 2020

**Responsibility:** General Manager Infrastructure

**Document Number:** 3339403

Version	Decision Number	Adoption Date	History
1	20\2501	23/02/2010	Policy 040 Adopted containing contribution plans
2	21/4475	31/05/2016	Contribution Plan retained separate to Policy 040 as an independent document

## 1. Definitions

Unless otherwise defined in this Contribution Plan, the terms used have the same meaning as given to them in the Planning Act.

The following terms have the following meanings:

- “Council” : means the City of Darwin.
- “Developer” : means the proponent of a Development.
- “Development” : means the construction of one or more Dwellings on land within the Policy Area.
- “Dwelling” : means a building, or part of a building, designed, constructed or adapted for human habitation as a self-contained unit.
- “Policy Area” : means the area described in paragraph 3 of this Plan.
- “Plan” : means this Contribution Plan.

## 2. Introduction

An owner of land within the Policy Area on which a Development occurs, will be required to contribute towards the provision of Council’s infrastructure, being roadworks, in accordance with the provisions of this Plan.

### 3. Policy Area To Which The Contribution Plan Relates

The Policy Area is the area specified as the Policy Area as in Attachment 1 (Scope of Roadworks – plan).

### 4. When This Contribution Plan Takes Effect

This Plan takes effect on the publication of notice in the Gazette, specifying that the plan has been made, or specifying when the plan is to take effect.

### 5. Description Of Infrastructure Required In Policy Area

An assessment of each road and intersection within the Policy Area was made, based on projected road usage and having regard to existing and potential Development within the Policy Area. Projected road usage was calculated using recorded traffic data and traffic guidelines.

This assessment found that both the roads and intersections within the Policy Area, require upgrading, to cater for traffic generation associated with existing and potential Development of the land within the Policy Area.

The extent of the roads upgrading works required within the Policy Area, is as follows:

1. Dinah Beach Road Upgrading
  - The reconstruction of Dinah Beach Road to a width of 11 metres, with kerb and gutter both sides;
  - The upgrading of lighting along Dinah Beach Road to meet the requirements of AS/NZS1158 for Category Z2 & B1 respectively;
2. Duke Street Widening
  - The widening of Duke Street between Dinah Beach Road and the cul-de-sac head (including new footpath);
  - The upgrading of lighting along Duke Street to meet the requirements of AS/NZS1158 for Category Z2 & B1 respectively.
3. Dinah Beach Road/Duke Street Intersection Upgrading
  - The construction of a roundabout at the intersection of Duke Street and Dinah Beach Road (including new footpath and crossings) and the upgrading of lighting at the intersection to the requirements of AS/NZS1158.
4. Duke Street West Footpath
  - The construction of a 2 metre wide concrete footpath along the entirety of Dinah Beach Road and along Duke Street, between Dinah Beach Road and the Stuart Highway.

The extent of the required roadworks upgrading is shown on Attachments 1 and 2.

## 6. Statement Of Intended Order Of Works Relating To Infrastructure

Council intends to undertake works relating to infrastructure in the following order:

1. Road Widening – associated with Dinah Beach Road Upgrading, Duke Street Widening and Dinah Beach Road/Duke Street Intersection Upgrading;
2. Pedestrian Footpaths – associated with Dinah Beach Road, Duke Street Widening and Duke Street West footpaths; and
3. Street Lighting - associated with Dinah Beach Road Upgrading, Duke Street Widening and Dinah Beach Road/Duke Street Intersection Upgrading

Council may change the intended order for undertaking works, depending on the Developments that actually occur and the demands placed on existing infrastructure.

## 7. Estimate Of And Method Of Calculating The Capital Cost Of Works Relating To Infrastructure

The Capital Cost estimates in this part, for works relating to infrastructure, were calculated by reference to the most appropriate and cost-effective form of construction.

Upgrading works shall be in accordance with City of Darwin requirements, Australian Standards and relevant Austroads publications.

A cost summary for each item of the road upgrading works is provided in Table 1 below and detailed cost estimates are provided in Attachment 3.

The total contribution cost is based on 100% of the cost of the Duke Street Widening and 45% of the costs of each of the Dinah Beach Road Upgrading, Dinah Beach Road/Duke Street Intersection Upgrading and Duke Street West Footpath.

This 45% proportion of the total upgrading cost for the Dinah Beach Road Upgrading, Dinah Beach Road/Duke Street Intersection Upgrading and Duke Street West Shared Path was derived by dividing the estimated daily traffic figure for maximum potential Development in the Policy Area (895 x 5 veh/day) by the total capacity of the upgraded Dinah Beach Road (10,160 veh/day).

In relation to the Duke Street Widening, 100% of the upgrading cost is attributable to Development within the Policy Area.

Future development outside of the Policy Area described in this Plan, shall be subject to a proportion of the remaining 55% component of the Dinah Beach Road Upgrading, Dinah Beach Road/Duke Street Intersection Upgrading and Duke Street West Shared Path costs, under a separate contribution plan.

An assessment of the proportions of traffic generation from potential development on the northern and southern sides of Dinah Beach Road that could access Dinah Beach Road support the above mentioned estimations.

**Table 1 – Estimated Cost of Roadworks Upgrading Elements**

<b>Work Element</b>	<b>Estimated Cost</b>	<b>Developer Cost Under Contributions Plan</b>
1. Dinah Beach Road Upgrading	\$ 1,015,457	\$ 456,956
2. Duke Street Widening	\$ 288,144	\$ 288,144
3. Dinah Beach Road/Duke Street Intersection Upgrading	\$ 272,955	\$ 122,830
4. Duke Street West Footpath	\$ 29,874	\$ 13,443
<b>TOTAL COST</b>	<b>\$ 1,606,430</b>	<b>\$ 881,373</b>

## 8. General Formula For Determination Of Developer Contributions

The formula for determination of Developer contributions, ensures that the contribution payable by a Developer, is relative to the proportion of anticipated future usage of the infrastructure attributable to the Development and is as follows:

$$CR = \frac{T}{DUT}$$

Where:

CR = The Developer contribution for Road upgrading works per Dwelling proposed;

T = Total contribution cost for the road upgrading works;

DUT = The total number of Dwellings contributing to traffic generation.

## 9. Calculation Of Contribution Rate

Table 2 below summarises the Developer contribution rate in relation to the road upgrading works, required as a result of potential Development within the Policy Area.

The Developer Contribution for road upgrading works is determined by the formula in paragraph 8.

With :

T = Total contribution cost for the road upgrading works = \$ 881,373; and

DUT = The total number of Dwellings contributing to traffic generation = 895 (maximum possible for 8.5 HA parcel) + 144 (existing Dwellings) = 1,039 Dwellings.

Hence,

$$\begin{aligned} CR &= \$ \frac{881,373}{1,039 \text{ Dwellings}} \\ &= \$ 848.30 \text{ per Dwelling.} \end{aligned}$$

**Table 2 –Developer Contribution Summary**

<b>Upgrading Item</b>	<b>Total Capital Cost</b>	<b>Total Cost Contribution for Developers</b>	<b>Developer Contribution</b>
Roadworks	\$ 1,606,430	\$ 881,373	\$ 848.30 per Dwelling

10. Possible Works Performed By The Developer

Should the Developer, as part of a Development on the land outlined in this Plan, propose to construct infrastructure within the Policy Area that is included in the scope of works identified in this Plan, the amount of money spent by the Developer in constructing this infrastructure, may be off-set against the contribution otherwise payable under this Plan. Any off-set shall be at the discretion of the Director Technical Services, City of Darwin.

The scope of works to be undertaken by the Developer and value of these works, must be agreed to by both the Developer and Council, prior to the commencement of any such works.

11. Exhibition And Date Of Commencement Of The Contributions Plan

Council shall provide notice of the exhibition of the plan and the place where it may be viewed, in the NT News. Submissions may be made in relation to the plan. The proposed Contribution Plan shall be exhibited for a period of 28 days.

After expiration of the 28 day exhibition period, all submissions made in relation to the Plan, shall be considered and Council shall either make the proposed Plan, or amend the proposed Plan and make the proposed Plan as amended.

Notice of the Plan shall be published in the NT Government *Gazette* and the Plan shall come into operation from the date of publication of this notice, or a date specified in this notice.

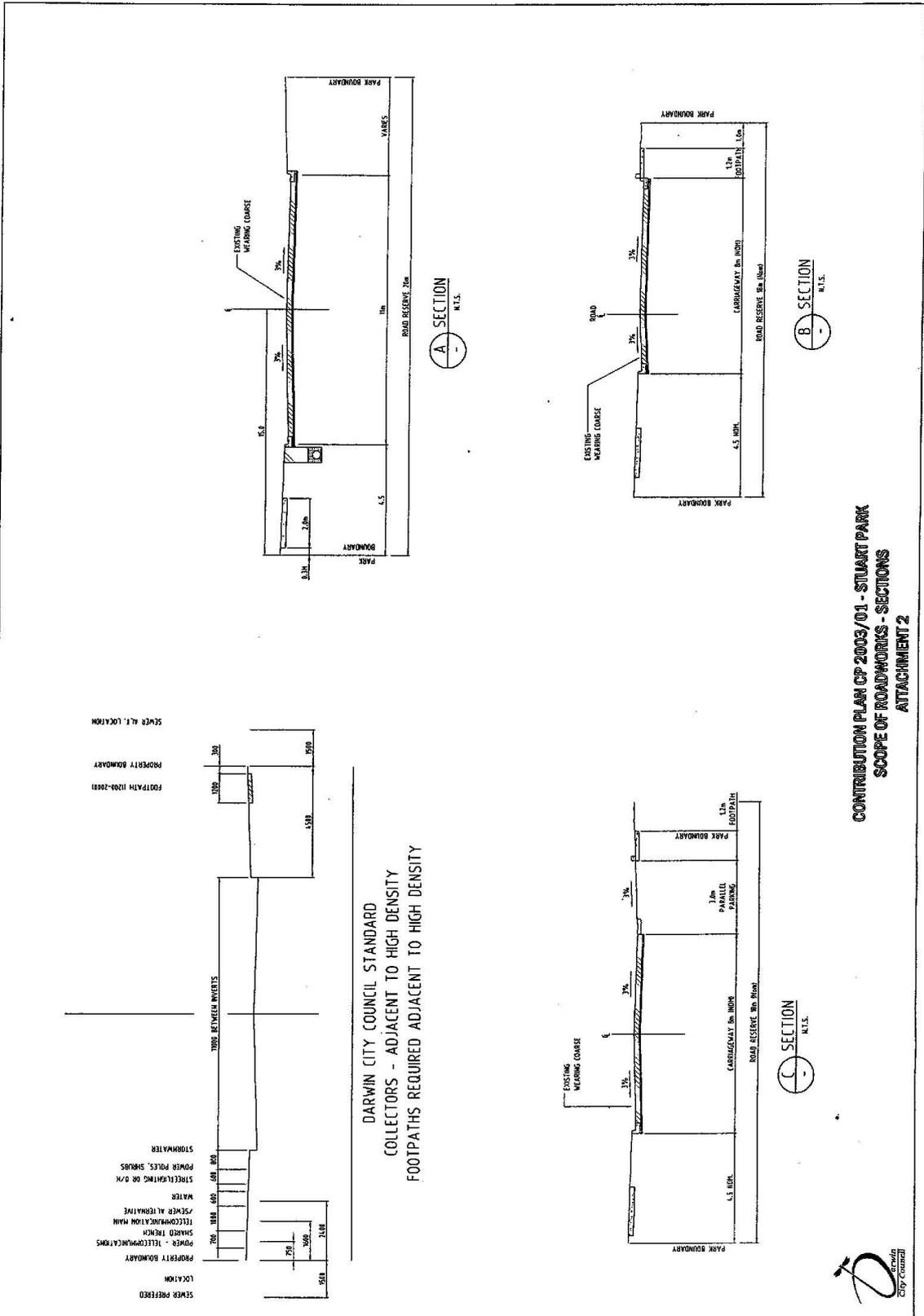
## 12. Timing Of Payment Of Developer Contribution

Developer contributions shall be payable on completion of the Development and before commencement of the use to which the Development relates.

Council shall not provide clearance for the relevant conditions of any Development Permit until the Developer contribution is paid to Council.

## Attachments





CONTRIBUTION PLAN CP 2003/01 - STUART PARK  
SCOPE OF ROADWORKS - SECTIONS  
ATTACHMENT 2



**DEVELOPER CONTRIBUTIONS PLAN CP 2003/01A  
STUART PARK  
ROADWORKS COST ESTIMATE**

ITEM	DESCRIPTION	ALLOWANCE	UNITS	QUANT.	RATE	AMOUNT
<b>ELEMENT NO. 1 - DINAH BEACH ROAD UPGRADING</b>						
<b>1</b>	<b>Preliminaries/Preparation</b>					
	Site Establishment/Disestablishment	Allowance	Item	1	\$15,450.00	\$15,450
	Provision for Traffic	Allowance	Item	1	\$20,600.00	\$20,600
	Sediment and erosion control	Allowance	Item	1	\$5,150.00	\$5,150
	Preparation of As Constructed Drawings	Allowance	Item	1	\$2,300.00	\$2,300
	Demolitions, existing culverts and accesses	Allowance	Item	1	\$5,150.00	\$5,150
	Demolitions, stripping existing bitumen and dispose	8m nominal width	sqm	4320	\$1.55	\$6,696
	Services relocations	Allowance	Item	1	\$20,600.00	\$20,600
<b>2</b>	<b>Earthworks</b>					
	Ground Surface Treatment	20 sqm/m	sqm	10800	\$5.00	\$54,000
	Excavation	4 cum/m	cum	2160	\$23.00	\$49,680
	Embankment	10% of excavation	cum	216	\$25.00	\$5,400
	Excess Excavation	Spoiled adjacent	cum	1944	\$25.00	\$48,600
	Provision for Poor Ground Improvement	5% of surface area	sqm	297	\$46.00	\$13,662
<b>3</b>	<b>Pavements and Surfacing</b>					
	Base Course 250mm	Plus 5% under kerb	cum	1559	\$156.00	\$243,243
	Sub-Base course (250mm)	Poor ground area	cum	297	\$72.00	\$21,384
	Primerseal 10mm		sqm	5940	\$8.00	\$47,520
	Asphalt, 25mm		t	457	\$215.00	\$98,337
<b>4</b>	<b>Lighting</b>					
	Outreach and luminaire, existing pole		No	1	\$465.00	\$465
	Pole, outreach and luminaire, underground		No	10	\$4,200.00	\$42,000
<b>5</b>	<b>Miscellaneous</b>					
	Linemarking - Lines (all, average)		m	540	\$4.10	\$2,214
	Linemarking - Chevron Detailing	Minimum allowance	sqm	200	\$11.00	\$2,200
	Signs, Standard, Installed		No	8	\$300.00	\$2,400
	Reconstruction of accesses		No	6	\$1,545.00	\$9,270
	Footpath 2 m wide		m	540	\$120.00	\$64,800
<b>SUBTOTAL</b>						<b>\$781,121</b>
<b>PRELIMINARY DESIGN</b>				<b>5</b>	<b>%</b>	<b>\$39,056</b>
<b>DESIGN &amp; SUPERVISION</b>				<b>10</b>	<b>%</b>	<b>\$78,112</b>
<b>CONTINGENCY</b>				<b>15</b>	<b>%</b>	<b>\$117,168</b>
<b>ESTIMATED COST (EXCL. GST)</b>						<b>\$1,015,457</b>

Revised Roadworks Cost Estimates.xls:1. Dinah Beach Road  
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**DEVELOPER CONTRIBUTIONS PLAN CP 2003/01A  
STUART PARK  
ROADWORKS COST ESTIMATE**

ITEM	DESCRIPTION	ALLOWANCE	UNITS	QUANT.	RATE	AMOUNT
<b>ELEMENT NO. 2 - DUKE STREET WIDENING</b>						
<b>1</b>	<b>Preliminaries/Preparation</b>					
	Site Establishment/Disestablishment	Allowance	Item	1	\$5,150.00	\$5,150
	Provision for Traffic	Allowance	Item	1	\$2,600.00	\$2,600
	Sediment and erosion control	Allowance	Item	1	\$2,100.00	\$2,100
	Preparation of As Constructed Drawings	Allowance	Item	1	\$2,000.00	\$2,000
	Demolitions, existing kerb	Allowance	Item	1	\$5,150.00	\$5,150
	Services relocations	Allowance	Item	1	\$10,300.00	\$10,300
<b>2</b>	<b>Earthworks</b>					
	Ground Surface Treatment	4.5 sqm/m	sqm	1958	\$5.00	\$9,788
	Excavation	1 cum/m	cum	550	\$23.00	\$12,650
	Embankment	50% of excavation	cum	275	\$25.00	\$6,875
	Excess Excavation	Spoiled adjacent	cum	275	\$25.00	\$6,875
	Provision for Poor Ground Improvement	5% of surface area	sqm	72	\$46.00	\$3,295
<b>3</b>	<b>Pavements and Surfacing</b>					
	Base Course 125mm	Plus 5% under kerb	cum	188	\$103.00	\$19,366
	Sub-Base course (125mm)	Poor ground area	cum	72	\$72.00	\$5,157
	Primerseal 10mm		sqm	1433	\$8.00	\$11,460
	Asphalt, 25mm		t	194	\$215.00	\$41,624
<b>4</b>	<b>Lighting</b>					
	Outreach and luminaire, existing pole		No	5	\$465.00	\$2,325
	Pole, outreach and luminaire, aerial		No	5	\$4,200.00	\$21,000
<b>5</b>	<b>Miscellaneous</b>					
	Linemarking - Lines (all, average)		m	0	\$4.10	\$0
	Linemarking - Chevron Detailing	Minimum allowance	sqm	0	\$11.00	\$0
	Signs, Standard, Installed		No	8	\$300.00	\$2,400
	Footpath 1200mm		m	550	\$85.00	\$46,750
	Remove and replace existing post and rail fence		m	435	\$11.00	\$4,785
<b>SUBTOTAL</b>						<b>\$221,649</b>
<b>PRELIMINARY DESIGN</b>			<b>5</b>	<b>%</b>		<b>\$11,082</b>
<b>DESIGN &amp; SUPERVISION</b>			<b>10</b>	<b>%</b>		<b>\$22,165</b>
<b>CONTINGENCY</b>			<b>15</b>	<b>%</b>		<b>\$33,247</b>
<b>ESTIMATED COST (EXCL. GST)</b>						<b>\$288,144</b>

Revised Roadworks Cost Estimates.xls:2. Duke Street  
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**DEVELOPER CONTRIBUTIONS PLAN CP 2003/01A  
STUART PARK  
ROADWORKS COST ESTIMATE**

ITEM	DESCRIPTION	ALLOWANCE	UNITS	QUANT.	RATE	AMOUNT
<b>ELEMENT NO. 3 - DINAH BEACH ROAD/DUKE STREET INTERSECTION UPGRADING</b>						
1	<b>Preliminaries/Preparation</b>					
	Site Establishment/Disestablishment	Allowance	Item	1	\$5,150.00	\$5,150
	Provision for Traffic	Allowance	Item	1	\$10,300.00	\$10,300
	Sediment and erosion control	Allowance	Item	1	\$1,100.00	\$1,100
	Preparation of As Constructed Drawings	Allowance	Item	1	\$1,200.00	\$1,200
	Demolitions, existing kerb	Allowance	Item	1	\$2,100.00	\$2,100
	Services relocations	Allowance	Item	1	\$20,600.00	\$20,600
2	<b>Earthworks</b>					
	Ground Surface Treatment	Allowance	Item	1	\$7,500.00	\$7,500
	Excavation	Allowance	Item	1	\$4,800.00	\$4,800
	Provision for Poor Ground Improvement	Allowance	Item	1	\$1,100.00	\$1,100
3	<b>Pavements and Surfacing</b>					
	Base Course 250mm	100% of total pave area	cum	257	\$156.00	\$40,048
	Sub-Base course (125mm)	100% of pave area	cum	128	\$72.00	\$9,242
	Primerseal 10mm	Base course area	sqm	1027	\$8.00	\$8,215
	Asphalt correction, 35mm nom	50% of total pave area	t	40	\$300.00	\$11,860
	Asphalt, 25mm		t	158	\$215.00	\$33,999
	Concrete Pavers		sqm	200	\$93.00	\$18,600
4	<b>Lighting</b>					
	Outreach and luminaire, existing pole		No	1	\$1,100.00	\$1,100
	Pole, outreach and luminaire, underground		No	4	\$4,200.00	\$16,800
5	<b>Miscellaneous</b>					
	Linemarking - Lines (all, average)		m	50	\$4.10	\$205
	Linemarking - Chevron Detailing	Minimum allowance	sqm	50	\$11.00	\$550
	Signs, Standard, Installed		No	12	\$300.00	\$3,600
	Footpath 2 m and crossings		m	20	\$206.00	\$4,120
	<b>SUBTOTAL</b>					<b>\$202,189</b>
	<b>PRELIMINARY DESIGN</b>		5	%		<b>\$10,109</b>
	<b>DESIGN &amp; SUPERVISION</b>		15	%		<b>\$30,328</b>
	<b>CONTINGENCY</b>		15	%		<b>\$30,328</b>
	<b>ESTIMATED COST (EXCL. GST)</b>					<b>\$272,955</b>

Revised Roadworks Cost Estimates.xls:3. Dinah Beach Rd Roundabout  
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**DEVELOPER CONTRIBUTIONS PLAN CP 2003/01A  
STUART PARK  
ROADWORKS COST ESTIMATE**

ITEM	DESCRIPTION	ALLOWANCE	UNITS	QUANT.	RATE	AMOUNT
<b>ELEMENT NO. 4 - DUKE STREET WEST FOOTPATH</b>						
1	<b>Preliminaries/Preparation</b>					
	Site Establishment/Disestablishment	Allowance	Item	1	\$600.00	\$600
	Provision for Safety	Allowance	Item	1	\$600.00	\$600
2	<b>Earthworks</b>					
	Ground Surface Preparation	Allowance	Item	1	\$3,750.00	\$3,750
	Spoil	Allowance	Item	1	\$520.00	\$520
3	<b>Miscellaneous</b>					
	Footpath 2 m and crossings		m	85	\$206.00	\$17,510
<b>SUBTOTAL</b>						<b>\$22,980</b>
	<b>PRELIMINARY DESIGN</b>		5	%		\$1,149
	<b>DESIGN &amp; SUPERVISION</b>		10	%		\$2,298
	<b>CONTINGENCY</b>		15	%		\$3,447
<b>ESTIMATED COST (EXCL. GST)</b>						<b>\$29,874</b>

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## SUMMARY

**ROADWORKS CONTRIBUTIONS PLAN NO.:** CP 2003/01A – STUART PARK

**POLICY AREA:** Refer to Attachment 1 of Contributions Plan No. CP 2003/01A – Stuart Park

**DATE OF EFFECT:**

**CONTRIBUTION PAYMENT TIMING:** At time of Acceptance.

**INFRASTRUCTURE WORKS UNDER PLAN:**

**ROADWORKS** (Includes roadworks, street lighting and footpaths along Dinah Beach Road and Duke Street – refer to Attachment 2 of Contributions Plan No. CP 2003/01A – Stuart Park)

**Total Estimated Cost of Roadworks Upgrading:** \$1,606,430

**Developer Contribution for Roadworks Upgrading:** \$ 881,373

**Developer Contribution Rate Associated with Roadworks Upgrading (CR):** \$848.30 / Dwelling