



**KENWICK - SOUTH STRUCTURE PLAN
DEVELOPMENT CONTRIBUTION PLAN REPORT**

January 2017

Document Control

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3		

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1.0 INTRODUCTION

This document is a Development Contribution Plan Report (DCPR) for the purpose of Schedule 12 of the City of Gosnells Town Planning Scheme No. 6 (TPS 6). The document details the key operational aspects of the Development Contribution Plan (DCP) associated with the Kenwick - South Structure Plan. The Structure Plan is shown in Figure 1.

The document includes the parameters for:

- The provision of Common Infrastructure Works (CIW)
- The provision of Public Open Space (POS) and
- The apportionment of the costs of this provision across the Structure Plan area.

The progression of the Structure Plan for the area has identified the establishment of the contribution arrangement so that the common costs of development can be shared between the landowners.

Some of the costs associated with developing individual parcels of land are not shared costs for the purpose of this agreement. Shared costs have been identified and are those which will provide benefits to a range of land owners within the Structure Plan area for the broader benefit of the future development.

Amendment No. 138 to TPS 6 proposes to provide for the formal establishment of a development contribution arrangement for the Structure Plan area. The amendment broadly defines the Structure Plan area as a Development Contribution Area (DCA) and the items of infrastructure that are to be provided in a shared manner by land owners.

The DCPR itemises and costs items to be included as common costs. There may be other costs associated with the development of land within the Structure Plan, however unless specified these are excluded from the DCPR and are considered to be subdivisional costs. The DCP report should be read in conjunction with Schedule 12 of TPS 6.

GLOSSARY OF TERMS

CIW - common infrastructure works to be collectively funded by Kenwick South Structure Plan developers

DCA - the area within which the compulsory sharing of CIW and POS costs applies.

DCPR - a report setting out the schedule of costs and intended operations of the development contribution arrangement.

POS - land to be set aside for public recreational use

TPS 6 - the statutory scheme for the development of the City of Gosnells.

1.1 Contribution Summary

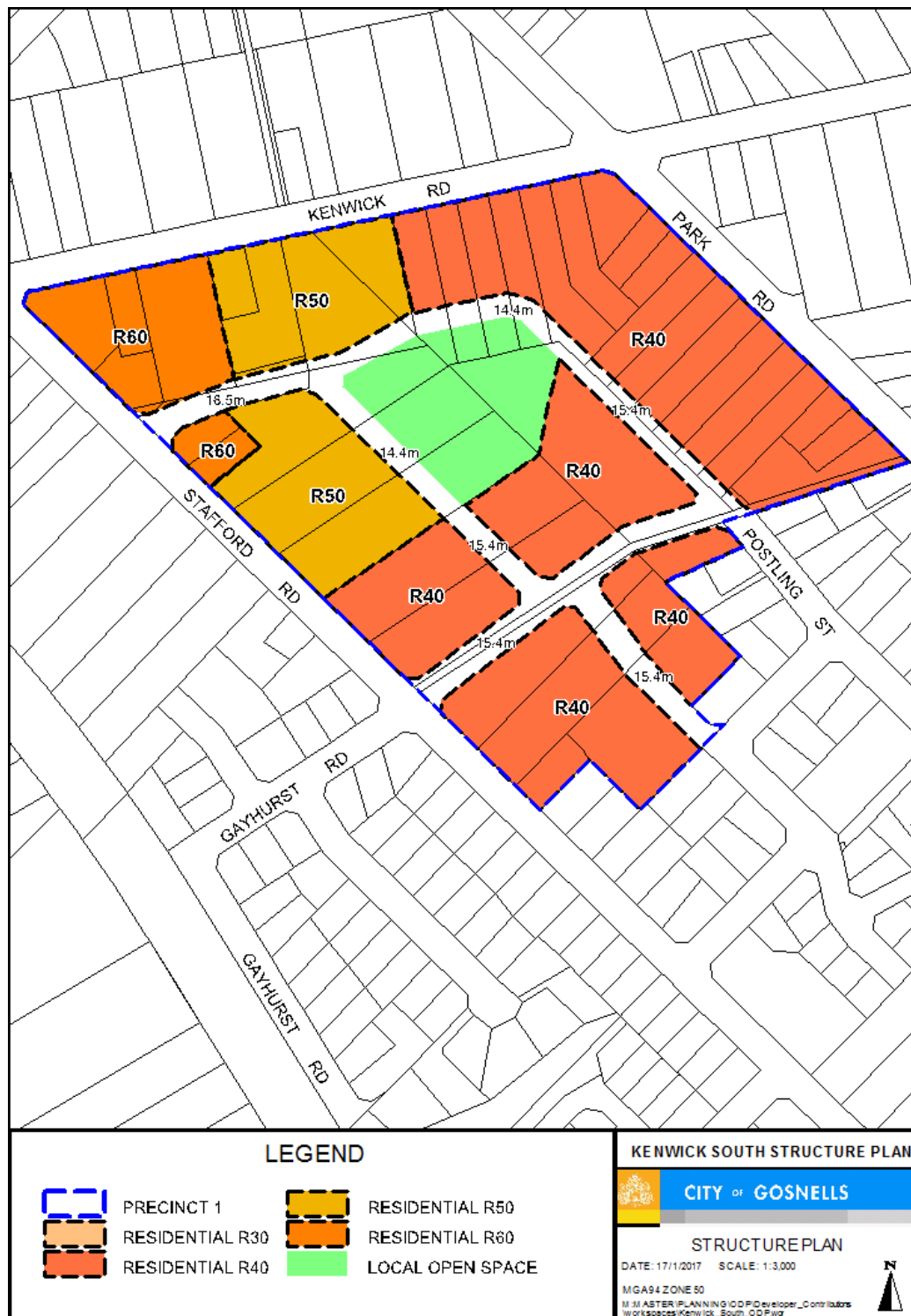
A POS contribution rate of **10.00%** is in place for the Structure Plan area. Council has adopted a land value basis for the purpose of the contribution arrangement of **\$2,850,000 per hectare**.

The total CIW cost for the DCP has been estimated at \$5,806,629. Three CIW contribution precincts have been defined. The following CIW contribution rates apply to

these precincts, which are dependent on the nature of development and associated infrastructure demand:

Precinct No.	Definition	Rate (\$/m ²)
Precinct 1	Periphery Development	\$15.48
Precinct 2	Internal Development	\$81.52
Precinct 3	Internal Development - No Drainage Contribution	\$74.37

Figure 1 – Kenwick - South Structure Plan



Note: This plan may be modified with the approval of Council and the Western Australian Planning Commission. It is advisable to check the City's website for the current Structure Plan.

2.0 PUBLIC OPEN SPACE

2.1 Calculation of Public Open Space

The plan that follows identifies the area of each land parcel that is required to contribute to the cost of acquisition of POS in the Structure Plan area. The burdened areas will contribute on a rate per hectare. The extent of the POS contribution area is shown in Figure 2. The amount of POS required in the Kenwick - South Structure Plan is affected by the developers' obligation to provide POS in accordance with Liveable Neighbourhoods standards. The calculation of required POS within the Structure Plan is shown below. The text following the table explains the methodology used in the table.

TABLE 1 – Required POS Contribution

Gross Land Area	11.68ha
<i>Less Reserves</i>	<i>0.4075ha</i>
Gross Subdivisible Area	11.2745ha
POS Provided	1.00 ha
POS Provided (as % of GSA)	8.87%

2.2 Public Open Space Valuation and Compensation Process

The DCPR identifies all POS land as having an equal value, regardless of whether it is partly used for drainage purposes or is used as unconstrained POS.

The provision of POS within the amendment area is defined in the Structure Plan. To ensure that POS is equitably provided by all landowners within the Structure Plan area, the following principles have been applied:

- Cash-in-lieu (based on en-globo value) will be paid by those land owners whose properties contribute POS at a rate which is less than 10.00% of the subdivisible area (as identified in Table 1), and
- Payments will be made (based on en-globo value) to those land owners who provide more than 10.00% of land (as calculated in accordance with Table 1) for POS.

The management of the POS component of the Structure Plan is calculated separately to the contribution requirement for other CIWs.

2.3 Valuation Process for POS Calculation

The process for valuation is consistent with the current process applied to other Structure Plans within the City of Gosnells as set out in Schedule 12, TPS 6. The valuation process provides for a Licenced Valuer to be appointed by Council to determine the en-globo rate (assuming a base code of R40, with an average lot size of 220m²) that will be applied for the purpose of establishing the contribution required. The valuation for land will be updated as necessary and at least annually to coincide with the timing of the annual review of the DCP.

The applicable rate for the payment of cash-in lieu of POS for providing less than the required 10.00% POS is the valuation current under the DCPR at the time when payment is made.

The monies shall be paid into the fund which is established for the management of the Structure Plan, and administered by the City. Reimbursements from the fund (for the provision of more than 10.00% of POS) shall be paid at the time that the land is ceded to the Crown, subject to the availability of funds.

Based on the above considerations, a valuation rate of \$2,850,000/ha for POS has been established in this report, based on a valuation undertaken by JLL Mortgage Services Pty Ltd in June 2016.

KENWICK SOUTH STRUCTURE PLAN

CITY OF GOSNELLS

POS CONTRIBUTION AREA

LEGEND

- ODP AREA
- CONTRIBUTION
- NO CONTRIBUTION

DATE: 3/11/2015 SCALE: 1:3000

HC94 ZONE 60

WATERPLAN 11000 0 P0 networ_0 ontribut

WORKSHEET: Kenwick_South_F05.dwg

3.0 COMMON INFRASTRUCTURE WORKS

All landowners who subdivide or develop land in the DCA will be required to make a contribution towards the cost of providing infrastructure, consistent with the provisions of State Planning Policy 3.6 - Development Contributions for Infrastructure and Schedule 12 of TPS 6.

Cost allowances have been made for the following items:

1. Construction of Internal Roads and Associated Infrastructure
2. Roundabout Construction - Stafford Road and Gayhurst Street
3. Footpath Construction - Park and Stafford Roads
4. Water Main Upgrade - Postling Street
5. Development of Public Open Space and Maintenance
6. Construction of Interim Drainage
7. Construction of Drainage Detention Basin
8. Preparation of Structure Plan
9. Detailed Design, Engineering and Construction Supervision
10. General Administration.

Three precincts have been defined for the apportionment of CIW costs. These precincts are generally defined by whether they are located on the periphery of the area or situated internally within the area, and their associated demand on new road and drainage infrastructure. More specifically, a lot located on the periphery can rely on existing drainage infrastructure and roads to service the lot, whereas an internal lot requires new infrastructure to support development.

The below table lists the CIW items and outlines which precincts are liable to contribute to certain CIW items.

Item	Precinct 1	Precinct 2	Precinct 3
1. Construction of Internal Roads and Associated Infrastructure	-	✓	✓
2. Roundabout Construction - Stafford Road and Gayhurst Street	✓	✓	✓
3. Footpath Construction - Park and Stafford Roads	✓	✓	✓
4. Water Main Upgrade - Postling Street	✓	✓	✓
5. Development of Public Open Space and Maintenance	✓	✓	✓
6. Construction of Interim Drainage	-	✓	-
7. Construction of Drainage Detention Basin	-	✓	-
8. Preparation of Structure Plan	✓	✓	✓
9. Detailed Design, Engineering and Construction Supervision	✓	✓	✓

Item	Precinct 1	Precinct 2	Precinct 3
10. General Administration	✓	✓	✓

This DCPR provides for the cost of specific items of common infrastructure to be distributed between developing landowners within the Structure Plan area, with the specific allowances made for these items defined by this DCPR. It is acknowledged that in some cases, the actual costs of providing these items may exceed the allowances made by the arrangement. In such circumstances, the arrangement is only able to reimburse developing landowners up to the value estimate prescribed by the DCPR.

3.1 Calculation of Net Contribution Area

The Net Contributing Area is determined by excluding any land required for POS. The Net Contribution Area is then used to determine the contribution rate per hectare for all developable land and is summarised as follows:

Gross Subdivisible Area	11.2745 ha
Less POS provided	1.00 ha
Net Contribution Area	10.2745 ha
<i>Precinct 1</i>	<i>3.675 ha</i>
<i>Precinct 2</i>	<i>4.614 ha</i>
<i>Precinct 3</i>	<i>1.985 ha</i>

The extent of the CIW contribution area and the precincts is shown in Figure 3.

3.2 Summary of Common Infrastructure Works Costs

Cost Estimate	Summary of Infrastructure Item
\$3,885,875	1. Construction of Internal Roads and Associated Infrastructure A contribution is to be made to fund the cost of the construction of internal roads and associated infrastructure. These works include: (i) Road construction; (ii) Drainage infrastructure construction; (iii) Footpath construction; (iv) Sewer construction; (v) Water main construction; (vi) Electrical and street lighting installation; (vii) Communications installation; (viii) Drainage upgrade - Postling Street to Stafford Road. The estimated cost is \$3,885,875 for 1,000m of road construction (or approximately \$3,885.87/lineal metre). Precinct 2 - 70% Precinct 3 - 30%
\$275,000	2. Construction of Roundabout - Stafford Road and Gayhurst Street A contribution is to be made for the cost of constructing a roundabout at the

Cost Estimate	Summary of Infrastructure Item
	intersection of a new subdivision road, Stafford Road and Gayhurst Street, as provided for on the adopted Structure Plan. The cost of construction of the roundabout allocated to this DCP is \$275,000. The cost will be shared between all Precincts, as outlined below. Precinct 1 - 36% Precinct 2 - 45% Precinct 3 - 19%
\$51,200	3. Construction of Footpaths - Park and Stafford Roads A contribution is to be made for the cost of constructing approximately 654m of 1.5m wide footpaths along the northern side of Stafford Road and the southern side of Park Road, where abutting the Structure Plan area. The cost of constructing the footpaths allocated to this DCP is \$51,200 based on \$80/lineal metre. The cost will be shared between all Precincts, as outlined below: Precinct 1 - 36% Precinct 2 - 45% Precinct 3 - 19%
\$99,500	4. Water Main Upgrade - Postling Street A contribution is to be made to fund the cost of upgrading the DN100 water reticulation main on Postling Street to DN150 to provide connection to the DN150 main south of the site at Jandoo Street. The estimated cost of the water main upgrade is \$99,500 based on 250m of pipe (\$398/lineal metre). The cost will be shared between all Precincts, as outlined below: Precinct 1 - 36% Precinct 2 - 45% Precinct 3 - 19%
\$507,776	5. Development of Public Open Space and Maintenance A contribution is to be made to fund the development of the central area of POS within the Structure Plan area. The contribution shall fund the development of the POS to a basic standard (i.e. turf, paths and irrigation), plus provision for drainage planting, and maintaining it for a period of 2 years, in accordance the provisions of Liveable Neighbourhoods. The estimated cost of developing and maintaining the POS is \$507,776. Precinct 1 - 36% Precinct 2 - 45% Precinct 3 - 19%
\$144,800	6. Construction of Interim Drainage A contribution is to be made to fund the construction of a temporary drainage outlet from the POS created from the development of Lot 9000, to the existing drain reserve. This cost will be borne 100% by Precinct 2.
\$185,065	7. Construction of Drainage Basin A contribution is to be made to fund the construction of a drainage detention basin within the POS. The estimated cost of constructing the basin is \$185,065.15. The cost will be borne 100% by Precinct 2.
\$129,538	8. Structure Plan Preparation A contribution is to be made to fund the cost of preparing the Structure Plan. The estimated cost is \$129,538 and it will be shared between all Precincts, as follows: Precinct 1 - 36% Precinct 2 - 45%

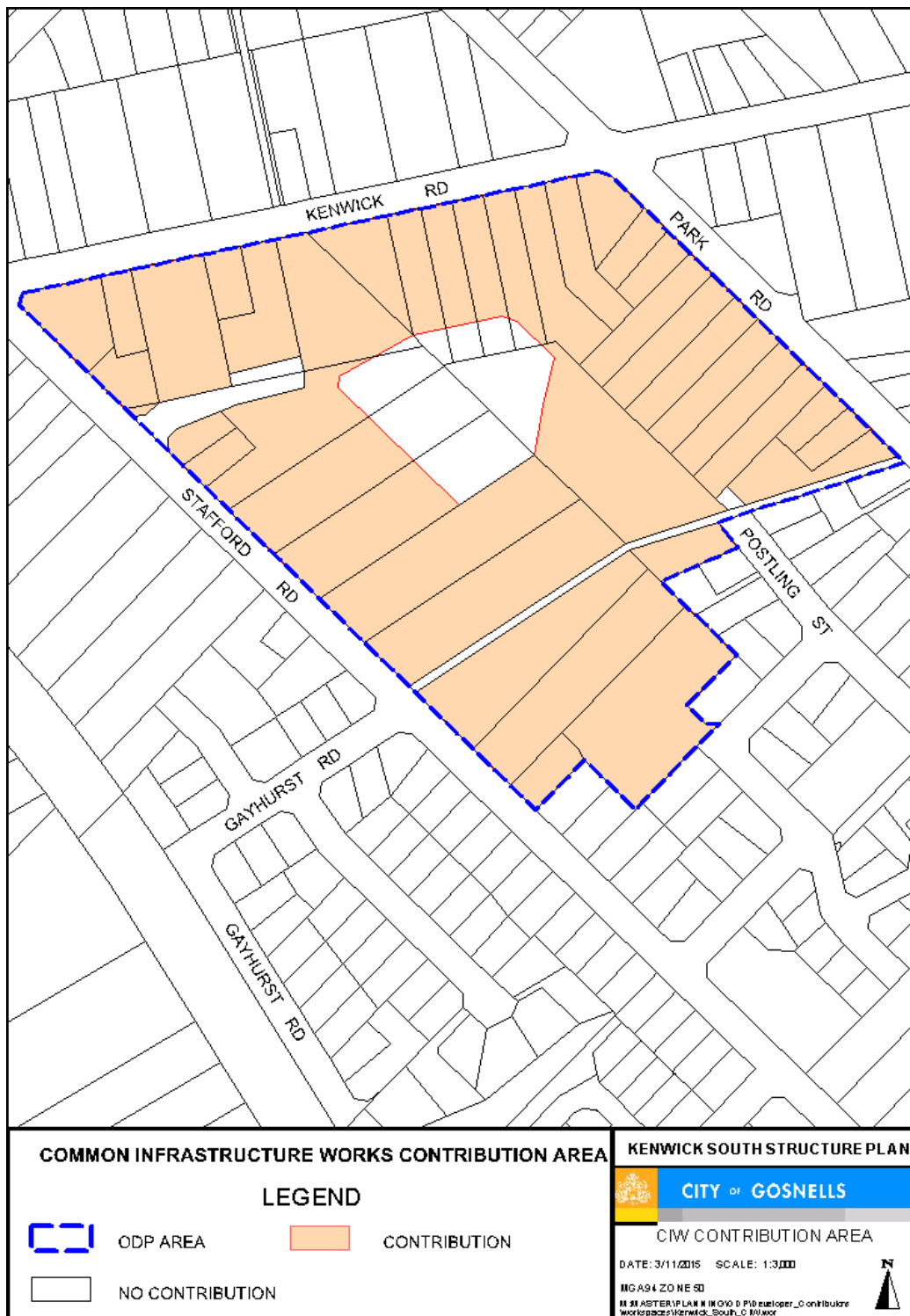
Cost Estimate	Summary of Infrastructure Item
	Precinct 3 - 19%
\$263,938	9. Detailed Design, Engineering Design Works and Construction Supervision A contribution is to be made to fund the cost of progressing detailed engineering designs, project management, tenders and construction superintendence. An industry standard of 5% of the value of the construction works has been used, generating an estimate of \$263,938. The cost will be shared between all Precincts, as outlined below: Precinct 1 - 36% Precinct 2 - 45% Precinct 3 - 19%
\$263,938	10. General Administration A contribution is to be made towards the cost of administering the contribution arrangement. The required contribution of 5% of the estimated construction costs, or \$263,938 is included. The cost will be shared between all Precincts, as outlined below: Precinct 1 - 36% Precinct 2 - 45% Precinct 3 - 19%
\$5,806,629	Estimated total cost for Common Infrastructure Works

3.3 Calculation of Contributions

The total CIW cost for the DCP has been estimated at \$5,806,629. The following table outlines the total cost per Precinct and the rate per square meter based on the total land area.

Precinct No.	Description	Land Area (m ²)	Total CIW Cost (\$)	Rate (\$/m ²)
Precinct 1	Periphery Development	36,757.3m ²	\$569,144	\$15.48
Precinct 2	Internal Development	46,140.9m ²	\$3,761,434	\$81.52
Precinct 3	Internal Development - No Drainage Contribution	19,847m ²	\$1,476,052	\$74.37

Figure 3 - Map of Net Contribution Area

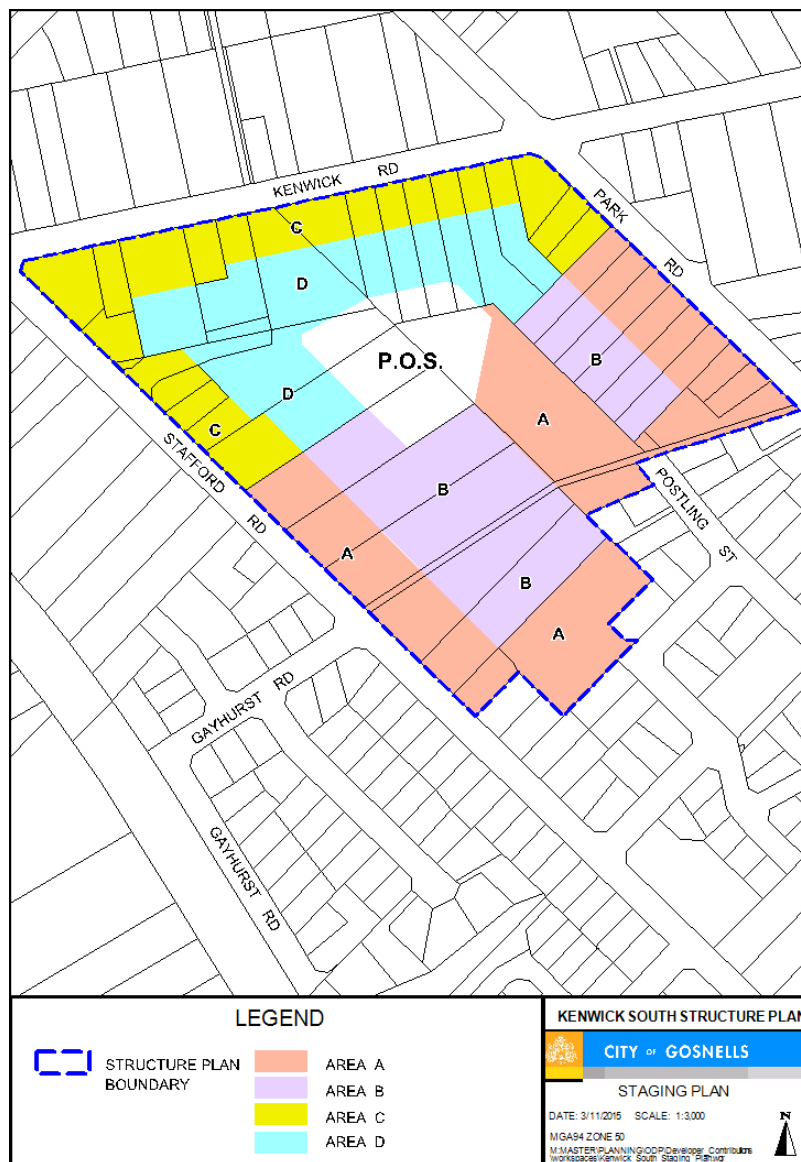


4.0 STAGING OF INFRASTRUCTURE WORKS

The implementation of the Structure Plan and the associated DCP will occur in a staged manner. The Structure Plan text outlines provisions which control the staging of subdivision and development of land within the Structure Plan area. The rate of development will have a significant impact on the timing of implementation, with factors like land owner intentions and economic conditions critical in shaping when and to what extent development may occur.

The rate of development will impact on the City's ability to ensure the timely provision of certain infrastructure in the DCP, as land owner contributions are needed to fund the required work.

Accurately forecasting when land owners may undertake development and make their contributions is difficult. Notwithstanding that, the staging plan in the Structure Plan (and as shown below) provides some indication of the likely order for which contributions will be collected.



Some of the main principles behind the above staging plan are:

1. Each development group, as identified on the Staging Plan, can commence works independently of one another, at any time, subject to the availability of infrastructure and services.
2. Subdivision and development of Stage A lots can occur immediately, subject to the ceding of land required for POS and roads, and the payment of cost contributions applicable for the whole of the lot.
3. Subdivision and development of Stage B lots can occur once land required by Stage A lots for roads and POS are ceded.
4. Subdivision and development of Stage C lots can occur once sewer is available, and subject to the ceding of land required for POS and roads.
5. Subdivision and development of Stage D lots can occur once all land required by Stage C lots for roads and POS is ceded.
6. The POS will be developed once all land has been ceded for POS.

Based on the above, the likely priority for infrastructure expenditure would be:

Priority	Item No.	Item Description
1	2	Construction of Roundabout - Stafford Road and Gayhurst Street
	4	Water Main Upgrade - Postling Street
	6	Construction of Interim Drainage
	3	Footpath Construction - Park and Stafford Roads
2	5	Development of Public Open Space and Maintenance
	7	Construction of Drainage Detention Basin
Ongoing	9	Detailed Design, Engineering and Construction Supervision.
	1	Construction of Internal Roads and Associated Infrastructure
	8	Preparation of Structure Plan
	10	General Administration

Notwithstanding the above, the uncertainty of when contributions may be made and how much income may be available at any given time can also make it difficult to determine the timing of the roll-out of infrastructure and/or when compensation will be paid where due.

In recognition of this issue, the City will explore the potential to pre-fund infrastructure provision early in the life of the contribution arrangement, or when it may be required, with the intention of providing the required infrastructure in a well-planned and co-ordinated manner. This will likely involve borrowing funds for these purposes. Provision is made in the CIW estimates for the cost of interest that the City will incur on any borrowed funds.

5.0 OPERATION OF DEVELOPMENT CONTRIBUTION PLAN REPORT

This DCPR has outlined the calculation of the estimated costs of CIW included in the arrangement. TPS 6 requires that a per hectare levy be established to be paid by landowners at the subdivision and/or development stage.

The timing of payment of contributions is vital to the successful operation of the DCP. Adequate funds need to be fed into the Structure Plan fund in order to facilitate the redistribution of funds in a timely manner.

The DCP is to operate for a period of ten years, unless otherwise determined by Council. An extension to the initial ten year time period may be required to ensure all landowners that are intending to develop in accordance with the Structure Plan pay the required scheme costs. The owners of land within the arrangement are required to pay the contributions outlined in this DCP in accordance with the relevant section of TPS 6.

The cost per hectare has been determined by dividing the total cost for CIW for each Precinct by the area that is developable for residential purposes.

6.0 ARBITRATION

Clause 6.4 of TPS 6 provides the process of arbitration of disputes that may arise from the valuation of land for the purposes of this DCPR.

APPENDIX A - PUBLIC OPEN SPACE LAND SCHEDULE

Lot No.	Street Name	Gross Subdivisible Area (m²)	Land Deducted for POS provided	POS Contribution Area	Required POS at 10%	Surplus (+) or deficit (-) of POS (m²)
116	Ulcombe	6700	0	6700	670	-670
700	Kenwick	2152	0	2152	215.2	-215.2
52	Kenwick	1058	0	1058	105.8	-105.8
2	Kenwick	4052	0	4052	405.2	-405.2
Pt 3	Kenwick	1019	0	1019	101.9	-101.9
500	Kenwick	2616	0	2616	261.6	-261.6
4	Kenwick	4206	123.8	4206	420.6	-296.8
10	Kenwick	2030	0	2030	203	-203
11	Kenwick	2026	323	2026	202.6	+120.4
12	Kenwick	2023	454.4	2023	202.3	+252.1
13	Kenwick	2023	449.1	2023	202.3	+246.8
14	Kenwick	2023	195.7	2023	202.3	-6.6
15	Kenwick	2698	0	2698	269.8	-269.8
16	Kenwick	2066	0	2066	206.6	-206.6
72	Kenwick	1474	0	1474	147.4	-147.4
73	Park	949	0	949	94.9	-94.9
74	Park	948	0	948	94.8	-94.8
81	Park	2023	0	2023	202.3	-202.3
19	Park	2023	0	2023	202.3	-202.3
20	Park	2023	0	2023	202.3	-202.3
21	Park	2023	0	2023	202.3	-202.3
22	Park	2023	0	2023	202.3	-202.3
23	Park	2023	0	2023	202.3	-202.3
71	Park	820	0	820	82	-82
70	Park	820	0	820	82	-82
69	Park	2026	0	2026	202.6	-202.6
9000	Postling	9540	2320.6	9540	954	+1366.6
9000	Postling	1270	0	1270	127	-127
701	Stafford	1103	0	1103	110.3	-110.3
79	Stafford	759	0	759	75.9	-75.9
80	Stafford	759	0	759	75.9	-75.9
10	Stafford	5762	1576	5762	576.2	+1000.2
6	Stafford	6475	2278.5	6475	647.5	+1631
7	Stafford	6475	2278.5	6475	647.5	+1631
8	Stafford	6475	0	6475	647.5	-647.5
9	Stafford	6475	0	6475	647.5	-647.5
50	Stafford	5394	0	5394	539.4	-539.4
49	Stafford	5374	0	5374	537.4	-537.4
112	Stafford	1017	0	1017	101.7	-101.7
TOTAL		112,745	10,000 (8.87%)	112,745	11,274.5	-1,274.5 (1.13%)

Notes:

1. All figures are provided as a guide only and are subject to survey.
2. The Structure Plan includes a Gross Subdividable Area (GSA) of 112,745m², and 10,000m² of POS (representing 8.87% of the GSA). POS contributions shall be provided in accordance with Western Australian Planning Commission (WAPC) Policy (i.e. 10%). The 10% contribution will ultimately generate a funds surplus equal to 1,274.5m² (1.13% of the GSA), which will be paid as cash-in-lieu and spent on the POS provided by the Structure Plan in accordance WAPC Policy.
3. The land requirement for the 1:1 year drainage contained within the POS is to be shared amongst developing landowners.

APPENDIX B - COMMON INFRASTRUCTURE WORKS - COSTING DETAILS

This section outlines the costs of Common Infrastructure Works included in the Kenwick - South Structure Plan and details the methodology used to calculate the estimated costs. Council may adjust the cost contribution of any owner in accordance with revised estimates and/or final expenditure. ***The spatial extent of the required infrastructure is illustrated on Map 1.***

1. Construction of Internal Roads and Associated Infrastructure

Allowances have been made within the DCP for constructing internal roads and associated infrastructure as shown on the Structure Plan. The estimated cost for constructing 1,000m of roads and providing associated infrastructure within the Structure Plan is \$3,885,875 (or \$3,885.87/linear metre). A summary of the costs are outlined in the below table.

No.	Item	Cost
1.1	Road Construction	\$1,315,193
1.2	Drainage Infrastructure Construction	\$793,232
1.3	Footpath Construction	\$106,600
1.4	Sewer Construction	\$395,975
1.5	Water Main Construction	\$210,875
1.6	Electrical and Street Lighting Installation	\$650,000
1.7	Communications Installation	\$120,000
1.8	Drainage Upgrade - Postling Street to Stafford Road	\$294,000
Total		\$3,885,875

The detailed costings follow.

1.1 Road Construction

Allowance has been made for the construction of all roads within the Structure Plan area. The estimated cost for the road construction, including earthworks and pavements is \$1,315,193 (or \$1,315.2/linear metre).

Item Description	Quantity	Unit	Rate	
Roadworks	-			
Mobilisation, Demobilisation, Site Establishment	5	item	\$20,000	
Trim & compact subgrade	8,400	sqm	\$2.70	
150mm compacted thickness limestone sub-base	8,400	sqm	\$10.00	
100mm compacted thickness crushed rock base course	8,400	sqm	\$8.00	
Primer seal	8,400	sqm	\$6.00	\$50,400
Asphalt - black	7,200	sqm	\$20.00	\$144,000
80mm brick paving on 30mm sand bedding	300	sqm	\$75.00	\$22,500
Kerbing	-			
a) Mountable kerb	1,675	m	\$20.00	\$33,500

b) Semi-mountable kerb	250	m	\$41.45	
Connection to existing road pavements	4	item	\$2,500.00	
Testing	-			
a) Sub-grade testing	20	item	\$100.00	
b) Basecourse testing	20	item	\$500.00	
c) Asphalt testing	20	item	\$500.00	
Road name signs	8	ea	\$500.00	
Earthworks	-			
Strip existing topsoil & respread	1,500	cum	\$3.00	
Clearing, mulch and remainder disposed of away from site	15,060	sqm	\$2.00	\$30,120
Import, shape and compact fill	14,440	cum	\$35.00	\$505,400
Dispose remaining material from trenches	7,000	cum	\$25.00	\$175,000
Testing	1	item	\$10,000.00	\$10,000
Stabilise lots areas, road verges & POS	15,060	sqm	\$0.50	\$7,530
Dust management	4	weeks	\$3,000.00	\$12,000
SUB-TOTAL AMOUNT				\$1,315,193

A plan showing the extent of road construction required is contained in Appendix D.

1.2 Drainage Infrastructure

Allowance has been made for the construction of all road drainage within the Structure Plan area. The estimated cost for the road drainage construction is \$793,232 (or \$792.232/linear metre).

Item Description	Quantity	Unit	Rate	Cost (ex. GST)
Excavate & backfill	-			
a) 0-2m deep	1,141	m	\$50.00	\$57,050
Pipework	-			
a) Supply 225mm dia. Class 2 RC	442	m	\$54.00	\$23,868
b) Supply 300mm dia. Class 2 RC	182	m	\$70.00	\$11,830
c) Supply 375mm dia. Class 2 RC	400	m	\$87.50	\$35,000
d) Supply 450mm dia. Class 2 RC	31	m	\$100.00	\$3,100
f) Prepare base & lay pipe	1,060	m	\$375.00	\$397,500
g) Dewatering	400	m	\$55.00	\$22,000
Supply & install sub-soil drainage	352	m	\$92.00	\$32,384
Supply & install pits	-			
a) Side entry pit to drains	9	ea	\$2,500.00	\$22,500
b) Side entry pit to raingarden	12	ea	\$2,000.00	\$24,000
c) Bubble-up pit	1	ea	\$5,000.00	\$5,000
Raingardens (2.5m wide)	202	m	\$500.00	\$101,000
Junction pits	-			
a) Standard trafficable chambers	9	ea	\$2,500.00	\$22,500
c) Dewatering	1	ea	\$30,000.00	\$30,000

Setout and "As constructed" pick-up	1	item	\$5,500.00	\$5,500
SUB-TOTAL AMOUNT				\$793,232

1.3 Footpaths

Allowance has been made for the construction of internal footpaths within the Structure Plan area. The estimated cost for footpaths, including pavement and pram ramps is \$106,600 (or \$106.60/linear metre).

Item Description	Quantity	Unit	Rate	
Pavement (2m)	1,000	m	\$100	\$100,000
Pram Ramp	12	each	\$550	\$6,600
SUB-TOTAL AMOUNT				\$106,600

A plan showing the indicative location of the paths and pram ramps is contained in Appendix D.

1.4 Sewer

Allowance has been made for the construction of sewer within the Structure Plan area. The estimated cost for providing sewer within the new road reserves to service proposed lots is \$395,975 (or \$396/linear metre).

Item Description	Quantity	Unit	Rate	Cost (ex. GST)
Excavate trenches in all classes of material	-			
a) 0-2m deep	1001	m	\$50	\$50,050
b) 2-4m deep	0	m	\$80	\$0
Stockpile unsuitable material & replace trench with suitable material	1001	m	\$50	\$50,050
Supply, lay, joint, test & backfill sewer pipes (150mm dia. metal bed)	1001	m	\$70	\$70,070
Pits	-			
a) Maintenance shafts	12	ea	\$3,000	\$36,000
b) Access chambers	3	ea	\$5,750	\$17,250
Cut-in junctions (Water Corporation fee)	4	ea	\$15,000	\$60,000
Inspection openings/shafts	20	ea	\$250	\$5,000
Connection along new sewer route (allow)	15	ea	\$1,500	\$22,500
Ovality & pressure testing	4	item	\$1,250	\$5,000
Dewatering	1001	m	\$55	\$55,055
Traffic management	4	item	\$5,000	\$20,000
Setout and "As constructed" pick-up	4	item	\$1,250	\$5,000
SUB-TOTAL AMOUNT				\$395,975

1.5 Water Mains

Allowance has been made for the construction of water mains within the Structure Plan area. The estimated cost of the water mains, including extending the water main within the developments road reserve to service proposed lots is \$210,875 (or \$209.66/linear metre).

Item Description	Quantity	Unit	Rate	Cost (ex. GST)
Excavate trenches in all classes of material	-			
a) 0-2m deep	1001	m	\$50	\$50,050
b) 2-4m deep	0	m	\$80	\$0
Stockpile unsuitable material & replace trench with suitable material	1001	m	\$50	\$50,050
Supply, lay, joint, test & backfill water pipes	-			
a) 100P-12	1001	m	\$75	\$75,075
b)150P-12	0	m	\$120	\$0
Hydrants	3	ea	\$900	\$2,700
Valves	8		\$750	\$6,000
Water Corporation connection fees	6		\$2,500	\$15,000
Pressure Testing	4		\$2,500	\$10,000
Setout and "As constructed" pick-up	4		\$500	\$2,000
SUB-TOTAL AMOUNT				\$210,875

1.6 Electrical and Street Lighting Installation

Allowance has been made for the provision of electricity services and street lighting at a rate of \$650/metre. The estimated cost for providing electricity services and street lighting for 1,000m of road is \$650,000.

1.7 Communications Installation

Allowance has been made for the installation of communications pit and pipe for NBN at a rate of \$120/metre. The estimated cost for installing communications for 1,000m of road is \$120,000.

1.8 Drainage Upgrade - Postling Street to Stafford Road.

Allowance has been made within the DCP for converting the open drain from Postling Street to Stafford Road to a piped drain. The estimated cost for the 240m length of upgrade is \$294,000 (or \$1,225/linear metre). This cost is based on the following:

Item Description	Quantity	Unit	Rate	Cost (ex. GST)
Mobilisation, Demobilisation, Site Establishment		ITEM		\$10,000
Excavate and Backfill 2-4m	240	m	\$80	\$19,200
Dispose of unsuitable material and replace with clean fill	240	m	\$60	\$14,400
Supply 750mm dia class 2 RCP	240	m	\$380	\$91,200
Prepare base and lay pipe	240	m	\$400	\$96,000
Dewatering	240	m	\$55	\$13,200
Demolish and Dispose Headwall	2	ea	\$10,000	\$20,000
Supply and Install WC main drain junction pits	3	ea	\$10,000	\$30,000
SUB-TOTAL AMOUNT				\$294,000

A plan showing the drainage upgrade is contained in Appendix D.

2. Construction of Roundabout - Stafford Road and Gayhurst Street

Allowance has been made within the DCP for the provision of a roundabout at the intersection of a new subdivision road, Stafford Road and Gayhurst Street. The cost of construction of the roundabout is \$275,000.

A plan showing the roundabout infrastructure is contained in Appendix D.

3. Footpath Construction - Park and Stafford Roads

Allowance has been made to fund the cost of constructing new 1.5m wide footpaths along the northern side of Stafford Road and the southern side of Park Road, where abutting the Structure Plan area. The estimated cost of providing 640m of path at a rate of \$80/metre is \$51,200.

A plan showing the footpath infrastructure is contained in Appendix D.

4. Water Main Upgrade - Postling Street

Allowance has been made for upgrading the DN100 water reticulation main on Postling Road to a DN150 main to provide connection to the DN150 main south of the site at Jandoo Street. The estimated cost for the 250m length of upgrade is \$99,500 (or \$398/linear metre). The cost is based on the following:

Item Description	Quantity	Unit	Rate	Cost (ex. GST)
Mobilisation, Demobilisation, Site Establishment		ITEM		\$10,000
Excavate and Backfill 0-2m	250	m	\$50	\$12,500
Upgrade DN100 to DN150	250	m	\$200	\$50,000
Water Corporation connection fees	2	ea	\$2,500	\$5,000
Temporary main to properties		ITEM		\$5,000
Remove temporary main and reconnect properties		ITEM		\$3,000
Verge and crossover Reinstatement		ITEM		
Testing		ITEM		
Setout and 'as-constructed' pickup		ITEM		\$2,000
SUB-TOTAL AMOUNT				\$99,500

A plan showing the water main upgrade is contained in Appendix D.

5. Development of Public Open Space and Maintenance

As the POS land is to be assembled from the property of multiple land owners and no coordinated subdivision is proposed, there is no one developer that can be responsible for the development of the POS. The below table outlines the items included and their associated cost, with a total cost estimated to be \$507,776 for 1ha of POS, in accordance with the plan contained in Appendix E.

Item Description	Quantity	Unit	Rate	Cost (ex. GST)
Mobilisation, Demobilisation, Site Establishment	10,000	m ²	\$1.00	\$10,000.00
Site Works				
Earthworks (excluding drainage detention basin - see cost breakdown under Item 7)	1	item	\$79,313.64	\$79,313.64
Plants				
Turf	7,000	m ²	\$9.10	\$63,700.00
Tube stock (75mm plant @ 5/m ²)	6,500	item	\$3.90	\$25,350.00
Soil conditioner - Turf Areas (25mm) (7,000m ²)	175	m ³	\$123.50	\$21,612.50
Irrigation				
Supply and install Irrigation Controller	1	item	\$2,500.00	\$2,500.00
Irrigation Cabinet	1	item	\$4,500.00	\$4,500.00
Power Supply and Connection	1	item	\$1,500.00	\$1,500.00
Water Supply (Bore or Water Meter)	1	item	\$6,000.00	\$6,000.00
Production Bore	1	item	\$33,000.00	\$33,000.00
Irrigation Fittings	7,000	m ²	\$8.50	\$59,500.00
Paths/Hardstand				
Excavations/boxing out/sub grade preparation	1,700	m ²	\$6.50	\$11,050.00
Dual Use Path Pavement (100mm @ 2.4m wide)	1,700	m ²	\$85.00	\$144,500.00
Seal Pavements	1,700	m ²	\$10.50	\$17,850.00
Maintenance				
2 years (10,000m ²)	10,000	m ²	\$2.74	\$27,400.00
SUB-TOTAL AMOUNT				\$507,776

6. Construction of Interim Drainage

Allowance has been made within the DCP to fund the construction of a drain outlet from the POS created from Lot 9000, to the existing drain reserve. The estimated cost for these works is \$144,800 and is based on the following:

Item Description	Quantity	Unit	Rate	Cost (ex. GST)
Mobilisation, Demobilisation, Site Establishment		ITEM		\$10,000
Inlet Structure		ITEM		\$5,000
Excavate and Backfill 0-2m	190	m	\$50	\$9,500
Dispose of unsuitable material and replace with clean sand fill	190	m	\$60	\$11,400
Supply and Install 450dia RCP	30	m	\$100	\$3,000
Supply and Install 375dia RCP	160	m	\$87.50	\$14,000
Prepare base and lay pipe	190	m	\$375	\$71,250
Dewatering	190	m	\$55	\$10,450
Supply and Install headwall outlet		ITEM		\$10,000
SUB-TOTAL AMOUNT				\$144,800

7. Construction of Drainage Detention Basin

Allowance has been made within the DCP to fund the cost of constructing the ultimate drainage detention basin within the POS. The estimated cost for these works is \$185,065 and is based on the following:

Item Description	Quantity	Unit	Rate	Cost (ex. GST)
Strip existing topsoil & respread	1,580	cum	\$3.00	\$4,741.28
Clearing, mulch and remainder disposed of away from site	10,536	sqm	\$2.00	\$21,072.37
Import, shape and compact fill	4,560	cum	\$35.00	\$159,600.00
Lay, shape and compact stockpiled cut from trenches for land fill	4,000	cum	\$15.00	\$60,000.00
Compaction testing	32	ea	\$100.00	\$3,160.86
Stabilise lots areas, road verges & POS	10,536	sqm	\$0.50	\$5,268.09
Limestone retaining walls (0-1m)	0	m	\$300.00	\$0.00
Dust management	4	weeks	\$3,000.00	\$10,536.18
less proportion to POS development			30%	-\$79,313.64
SUB-TOTAL AMOUNT				\$185,065.15

A plan showing the indicative location of the drainage detention basin is contained in Appendix D.

8. Preparation of Structure Plan

An allowance of \$129,538 has been made to contribute to the cost of preparing and progressing Amendment No. 138 to Town Planning Scheme No. 6, the Structure Plan and the DCPR. The costs only relate to work that would be of benefit to the entire precinct and explicitly exclude any site-specific or subdivision-specific costs. The below table outlines the composition of the allowance:

Item Description	Rate	Total Cost
City of Gosnells Application Fee	-	\$3,907.84
Planning Consultant	-	\$7,675.23
Engineering Consultant	-	\$63,700.00
<i>Servicing Report</i>	-	\$5,500.00
<i>Geotechnical Investigation</i>	-	\$3,750.00
<i>LWMS/UWMP</i>	-	\$14,000.00
<i>Traffic Flow Generation Study</i>	-	\$1,200.00
<i>Preparation of ODP Drawing</i>	10 x \$125/h	\$1,250.00
<i>Preparation of Staging Plan Drawing</i>	30 x \$200/h	\$6,000.00
<i>Advice on ODP</i>	5 x \$200/h	\$1,000.00
<i>Advice on DCPR Costings</i>	44 x \$200/h	\$8,800.00
<i>Meetings (Various)</i>	26 x \$200/h	\$5,200.00
<i>Amendments to Documentation/Plans</i>	80 x \$200/h	\$16,000.00
<i>Administration of Landscaping Consultant</i>	5 x \$200/h	\$1,000.00
Landscaping Consultant	-	\$5,720.00

Project Management	-	\$25,300.00
<i>Sourcing Consultant</i>	40 x \$100/h	\$4,000.00
<i>Council Meetings</i>	29 x \$100/h	\$2,900.00
<i>Team Meetings</i>	15 x \$100/h	\$1,500.00
<i>Meeting with Consultants</i>	20 x \$100/h	\$2,000.00
<i>Documentation Preparation</i>	136 x \$100/h	\$13,600.00
<i>Documentation Review</i>	13 x \$100/h	\$1,300.00
20% Contingency (post advertising costs)	-	\$21,589.61
Total		\$129,537.68

9. Detailed Design, Engineering and Construction Supervision

Allowance will be made to fund the progression of detailed engineering designs, project management, tender and construction superintendence. At a typical industry standard of 5% of the value of the construction works, this cost is estimated at \$263,938.

10. General Administration

Provision has been made for the contribution to general administration costs in operating the DCP. These include but are not limited to administration, bank charges, audit fees, legal, planning reports, valuations, engineering, expenses associated with the acquisition of land and Council staff salaries.

Given the actual costs incurred to date for the preparation of the DCPR and in consideration of the future administration required by further development, the cost of general administration is 5% of the estimated construction costs, or \$263,938. This allowance will require an increase in the allocated cost should administration be necessary beyond the initial ten year operational period.

APPENDIX C - COMMON INFRASTRUCTURE WORKS PRECINCT LAND SCHEDULE

Lot No.	Street Name	Net Contributing Area	Precinct 1	Precinct 2	Precinct 3
116	Ulcombe	6700	0	0	6700
700	Kenwick	2152	2152	0	0
52	Kenwick	1058	1058	0	0
2	Kenwick	4052	2024	2028	0
3	Kenwick	1019	1019	0	0
500	Kenwick	2616	781	1835	0
4	Kenwick	4082	1048	3034	0
10	Kenwick	2030	1365	665	0
11	Kenwick	1703	728	975	0
12	Kenwick	1568.6	670.6	898	0
13	Kenwick	1573.9	657.9	916	0
14	Kenwick	1827.3	672.3	1155	0
15	Kenwick	2698	674	2024	0
16	Kenwick	2066	649	1417	0
72	Kenwick	1474	1474	0	0
73	Park	949	949	0	0
74	Park	948	948	0	0
81	Park	2023	1011	1012	0
19	Park	2023	1011	1012	0
20	Park	2023	1011	1012	0
21	Park	2023	1011	1012	0
22	Park	2023	1011	1012	0
23	Park	2023	1011	1012	0
71	Park	820	820	0	0
70	Park	820	820	0	0
69	Park	2026	735	1291	0
9000	Postling	7219.4	0	7219.4	0
9000	Postling	1270	0	0	1270
701	Stafford	1103	1103	0	0
79	Stafford	759	0	0	759
80	Stafford	759	759	0	0
10	Stafford	4186	1034.5	3151.5	0
6	Stafford	4196.5	2001.5	2195	0
7	Stafford	4196.5	1976.5	2220	0
8	Stafford	6475	1953	4522	0
9	Stafford	6475	0	4523	1952
50	Stafford	5394	0	0	5394
49	Stafford	5374	1602	0	3772
112	Stafford	1017	1017	0	0
TOTAL (m²)		102,745	36,757	46,141	19,847
CIW (\$/m²)			\$15.48	\$81.52	\$74.37

APPENDIX E - LANDSCAPE CONCEPT PLAN

