



## Mundijong-Whitby Urban Traditional Infrastructure DCP Report Revision 3

## Revision Schedule:

Report No	Revision Date	Planning Scheme	Amendment	Report Status	Author
1	17/07/2023	TPS2	209	Final	Sally Murphy
2	10/02/2025	LPS3	209	Final	Sally Murphy
3	26/02/2026	LPS3	209	Final	Sally Murphy

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## 1 Purpose

This Development Contribution Plan (DCP) report outlines the framework for applying infrastructure contributions to support new development and upgrade existing infrastructure within the Development Contribution Area (DCA). These contributions are essential to address the increased demand generated by development in the DCA.

The DCP ensures equitable cost sharing among landowners, with contributions reasonably required as a result of subdivision or land development. It also facilitates the timely provision of necessary infrastructure.

Relevant documents guiding infrastructure delivery include:

- Community Infrastructure Implementation Plan
- Corporate Business Plan
- Long Term Financial Plan
- LPS3
- Mundijong District Structure Plan

## 2 Development Contribution Area

The Development Contribution Area covered by this DCP is **DCA3**, as shown on the scheme map and in "**Figure 1 - DCA Boundary**".

## 3 Period of the Plan

This DCP operates for 15 years, from **23/05/2023** to **23/05/2038**.

## 4 Operation of the DCP

The DCP and this accompanying report are prepared in accordance with **State Planning Policy 3.6 - Infrastructure Contributions** (SPP 3.6) and operate under the provisions of LPS3.

## 5 Application Requirements

For applications involving subdivision, strata subdivision, development, or land use extensions within the DCA, the local government will consider this DCP Report when making recommendations or decisions.

## 6 Estimated Costs

The costs in this DCP Report are based on the capital investment required for infrastructure necessitated by new development in the DCA. These costs are:

- Initially estimated and reviewed by qualified professionals during each **Major Review**.
- Indexed during **Minor Reviews** using rates from the **WALGA Quarterly Economic Briefing**.

Exclusions from DCP Report costs include:

- Ongoing maintenance.
- Demand generated by the existing population.
- External usage demand.
- Future usage beyond the DCP timeframe.

Where applicable, costs are allocated to specific **Precincts** within the DCA, as shown in "**Figure 2 - Precincts**". A detailed cost breakdown is provided in the Appendices, with secured grants or external funding reflected as deductions in the Cost Apportionment Schedule within the Appendices.

## 7 Items Included in the Plan

All cost items included for within this DCP Report, and for which contributions will be collected in the DCA, are detailed in the Appendices to this report. These items reflect the provisions of the latest Structure Plan(s) where applicable to the lifespan of the DCP, the need and nexus for inclusion, and the associated scope of each item that the DCP will fund.

This DCP covers district-level traditional infrastructure that supports the delivery of public open space and related urban services. This includes land acquisition and essential base works for District Open Space (DOS), such as bulk earthworks, drainage, irrigation, turf establishment, and civil works. Where minor built structures such as public toilets, basketball half-courts or path networks form part of the initial development of DOS and are integral to its function, these may also be included where justified. Larger community buildings and ancillary recreation infrastructure are included in the Shire's Community Infrastructure DCP (CIDCP).

The **Community Infrastructure and Public Open Space Strategy (CIPOS)** provides a comprehensive guide for planning community infrastructure and open space in the Shire.

### Roads

Road infrastructure costs are divided into:

- **Construction:** New or upgraded roads.
- **Land acquisition.**

See "**Figure 4 - Roads**" for details.

Excluded items:

- Landscaping and design enhancements in road reserves.
- Urban amenity improvements such as vegetation, public art, and high-standard design.
- Minor intersections treatments into the adjoining subdivisional road network.

Although some excluded items are noted to enhance the urban environment, they lack a direct nexus to the development's demand for such improvements.

## 8 Non-Infrastructure Items Included within the DCP

### Administration Costs

- Costs to prepare and administer the DCP.
- Costs associated with the annual review of cost estimates.
- Costs associated with the review of the cost apportionment schedules based on land development undertaken since the last review.
- Costs for undertaking valuations.
- Fees for professional services directly linked to the preparation and implementation of the DCP.
- Costs for computer software and/or hardware upgrades necessary to enable DCP preparation.
- Proportion of staff salaries directly related to DCP administration.
- Financial institution fees and charges associated with the administration of DCP funds.
- Interest charged on loans taken out to pre-fund items included in the DCP.

### Land for infrastructure

- Land for district open spaces, road reserves, and community facilities.
- Land for road reserves that exceed standard requirements (e.g., road widths above 20m).

**Land for Public Open Space and Drainage****Inclusions – Credit will be provided for:**

- Land for Public Open Space, where it is: unencumbered, publicly accessible, and landscaped or developed to support active or passive recreation.
- Land for drainage, *only where it is required for district drainage functions* as identified in: a local water management strategy, or urban water management plan.
- Land within multiple-use corridors (MUCs) where: the land serves a dual function for drainage and recreation, and is publicly accessible, safely designed, and forms part of the integrated POS network.

**Exclusions – No credit will be provided for:**

- The construction, development, or maintenance of POS or drainage infrastructure (e.g. drainage basins, vegetated swales, landscaping, play equipment).
- Drainage land that services only an individual subdivision or development site (i.e. local infrastructure not required at a district scale).
- Conservation areas, including: Conservation Category Wetlands (CCWs), Bush Forever sites, and any associated buffers, unless those buffers are:
  - Publicly accessible,
  - Landscaped for passive recreation, and
  - Integrated into the usable POS network.
- Inaccessible or restricted land, including: fenced areas, areas not designed for recreation or public access, or land retained in private ownership.

Where the DCP does not explicitly define the credit eligibility of specific land types or infrastructure items, the Shire will apply a consistent interpretation informed by relevant State planning policies, including *Liveable Neighbourhoods*, and recognised planning principles. Credit will be determined based on the function, accessibility, and broader benefit of the land or infrastructure to the Development Contribution Area, rather than solely its zoning, labelling, or location.

Where land performs a dual function (e.g. drainage and open space), credit may be apportioned in accordance with its useability and contribution to public amenity or district infrastructure, consistent with established planning and engineering practice.

This approach ensures that credit allocations are equitable, transparent, and aligned with the intent of the DCP, while retaining flexibility to respond to varying development contexts.

Costs associated with land for POS and Drainage are shared equally across the DCA.

**Water Monitoring**

- Funded by the DCP to address water quality and quantity through monitoring and management plans.
- Ensures compliance with water-sensitive urban design principles.

The Water Monitoring Programme is underpinned by the Shire's Drainage and Water Management Plans (DWMPs), which establish the framework for water management in the new urban development areas.

## 9 Land Valuation

There are two separate rates for land value, one for Residential land and one for Non-Residential/Mixed-Use land. The land value for each category is consistent across the DCP; i.e. The same Residential or Non-Residential rate is applicable to all POS, land for infrastructure and road widening.

The land value is indexed daily from the starting date of the DCP Report, based on the Land Value Escalation rate provided with the independent valuation. The land value plus indexation is calculated at the date the subdivision clearance which cedes the land is accepted by the Shire.

The land valuation is based on typical parcel characteristics and reviewed annually according to market value, and is determined having general regard to the International Valuation Standards Committee's definition of market value as adopted by the Australian Property Institute. To account for the direct transfer of land, the fair market value does not include for standard marketing costs such as fees, commissions, and advertising cost.

### Residential (Standard and Non-Standard)

Based on an indicative residential zoned 5-hectare lot typical for the DCA, with no servicing constraints.

### Non-Residential and/or Mixed Use

Based on a Mixed Use R60 zoned land parcel of a regular shaped 5-hectare area typical for the DCA, with no major servicing constraints and no major geotechnical/environmental issues.

The starting land values for this Report Revision are shown at the top of the Cost Apportionment Schedule within the Appendices.

## 10 Method of Calculating Contributions

### Calculating the developable potential of each Precinct

Estimations are based on Local Structure Plans (LSPs) where available. Otherwise, calculations based on spatial data are used as follows:

- Greenfield: Total site area less 40% (to account for subdivisional roads and POS/Drainage)
- Infill: Manual yield calculations less 50% (recognising existing lots may not be redeveloped)
- Mixed-use: 15 lots per Ha, or 20 lots per Ha where no land is required by state/local government.
- Non-Residential: Lot area (m<sup>2</sup>)\*.
- Residential lot calculations are based on an average R Code density of R25.

\*To calculate a square metre (m<sup>2</sup>) rate for non-residential development, the total m<sup>2</sup> area is converted into a proportion of a standard lot, where a standard lot is defined as R25m<sup>2</sup>. This proportional value is then used to determine the cost per m<sup>2</sup> by translating the cost per lot into the corresponding rate.

### Contribution liability

- Proportional to the remaining developable Lots/Dwellings within a Precinct:

Formula: ***{Remaining Cost / Remaining Lots/Dwellings = \$ contribution rate per Lots/Dwellings}***

### Contribution Rate Adjustments

The Contribution Rate is escalated daily based on the days since the last cost review, using a weighted annual escalation rate (ER):

Formula for ER:  $\{(\%IC/TC \times IER) + (\%LV/TC \times LVER) + (\%AC/TC \times AER)\}$  where IC: Infrastructure Cost, LV: Land Value, AC: Administration Cost.

- Daily Escalation Rate (DER):  $\{ER / 365\}$
- Adjusted Contribution Rate:  $\{Starting Rate \times (D \times DER) = Escalated Rate\}$

The annual escalation rates for Administration and Infrastructure reflect the forecasts in latest WALGA Quarterly Economic Briefing (the LGCI Forecasts table) available at the time the DCP Report is adopted:

- The Administration index reflects the LGCI Component “Employee Costs”
- The Infrastructure index reflects the LGCI Component “Road & Bridge Construction”.
- The Land Value index (where applicable) is provided as part of the independent Land Valuation.

The daily indexing of costs described above, means that at any point in time, the Precinct contribution per Lot/Dwelling value will vary according to the number of days since the last Cost Review (the starting date of the latest revision to the DCP Report).

### Residential Contributions

- Based on additional Lots/Dwellings created (less the Parent Lot where not previously deducted).

Formula:  $\{Precinct rate per lot \times DER \times D \times additional lots/dwellings = Required contribution\}$

Contributions are required for post-initial development (e.g., increased density or residential development above a non-residential footprint).

Non-standard residential development (such as Lifestyle village, retirement village, caravan park, park home estate or similar) is treated the same as standard residential development, where each dwelling, residential unit or similar, is deemed to be a residential lot/dwelling.

### Mixed Use development Contributions

Contributions are based on either the R25 **subdivision/development potential** or the **actual number of lots/dwellings created**, whichever is greater.

#### **Formulas:**

- **Dwelling Potential:**  $\{Precinct contribution rate \times DER \times D \times Subdivision/development potential of the site\}$

Or

- **Actual Dwellings:**  $\{Precinct contribution rate \times DER \times D \times Actual number of lots/dwellings created\}$

### Non-Residential Development Contributions

Based on the size of the lot created (under subdivision) **or** the size of the development footprint (under a development application), multiplied by the applicable development contribution rate.

Formula: *{Square metre rate × square metre size of land being developed = Required development contribution (less a one-time, one-lot discount for the Parent Lot)}*.

### Exemptions and Limits

- The floor area of any **existing, approved** non-residential development is removed from the calculation.
- Contributions are required only if the development results in **increased traffic**.
- Contributions apply only once per **land footprint** and are based on full development potential. For example, multi-level developments **beyond the first floor** are exempt from additional contributions as the liability is based on the land footprint.

### Private Educational Establishments

**Private educational establishments** are subject to the same principles as Non-Residential Development described above.

Where a **shared use agreement** for public access to the school's district level sporting space is agreed upon, the Contribution rate will instead be based on **0.3% of the value of each building licence** application for the site, as agreed with the Local Government.

## 11 Payment of Contributions

### Triggers for Payment

The earlier of either:

- Application for subdivision/strata clearance, or
- Application for Building Permit for new development, or change/extension of use.

Clause 36A 6(a) of LPS3 details **specific exemptions** for which a development contribution is not required.

### Payment Methods

- Cheque or cash.
- Land transfer.
- Physical infrastructure provision.
- Other methods acceptable to the Shire.

In the case of staged subdivisions, development contributions are payable only for the stages being cleared. Contributions are triggered only once per lot, unless subsequent development creates additional demand beyond the initial trigger.

### Example

If a residential lot is created and cleared during a subdivision, the contribution is triggered for that single lot. When a Building Permit is subsequently issued for the first dwelling on the newly created lot, no additional contribution is required, as the lot's contribution has already been accounted for (the "Parent Lot" offsets the first dwelling). However, if a Building Permit is issued for three dwellings on a single lot, contributions would be triggered for the two additional dwellings beyond the Parent Lot's coverage.

This ensures contributions fairly reflect the actual development impact at each stage.

## 12 DCP Credits

### DCP Credits

#### **Credits for Land and Infrastructure** (where included for within the DCP):

- Land ceded for POS/Drainage or Infrastructure based on indexed land value at the date of subdivision clearance.
- Pre-funding infrastructure earns credits based on actual costs expended, as approved/verified by the Shire.

#### **Use of Credits:**

- Credits offset contributions within the same Development Contribution Area (DCA).
- Credits remain with the landowner unless a legal agreement transfers them upon sale.

#### **Repayment of Credits:**

- A record of all credit balances are kept by the Shire; balances are not subject to indexation or interest.
- Credits are repaid when DCP funds are sufficient, or within 90 days of the closure of the DCP.

### Pre-Funding of DCP Infrastructure

The Shire supports pre-funding and delivery of infrastructure under the following conditions:

- The works are essential for the progression of an approved subdivision, or
- The Shire is prioritising DCP funds for other works.

The Shire and Developer will confirm via an exchange of letters, the scope, composition, and timing of the infrastructure works to be pre-funded. Once agreed, these works will be designated as *Approved Works*. The Approved Works must be clearly defined to enable accurate quantification of costs and quantities for both completed and remaining works. The value of DCP Credits allocated is exclusive of GST.

Temporary or sacrificial works are not creditable under the DCP.

### Repayment of DCP Credit Balance

When a developer or landowner has completed all developments within a DCA and no longer holds any land within that DCA, the credited amount will be held until sufficient funds are available in the DCP fund to cover the balance, taking into account any planned or committed expenditure at that time.

Requests for repayment of credit balances during the operation of the DCP must meet the above conditions and will be determined by Council. Once approved, the value of credits will be reimbursed to the developer or landowner as soon as circumstances allow.

Developers or landowners wishing to request repayment of a credit balance after completing their developments and relinquishing landholdings in the DCA must submit their request in writing to:

**[developmentcontributions@sjshire.wa.gov.au](mailto:developmentcontributions@sjshire.wa.gov.au)**

All outstanding credit balances will be repaid no later than 90 days after the DCP's closure.

## 13 DCP Reviews

### Major Review (5 Yearly)

A Major Review is required to amend, exclude, or include any provision of the DCP, including infrastructure cost items. Once the Scheme Amendment is approved, a revised DCP Report will be produced within 90 days of the Amendment's gazettal, reflecting the updated provisions.

A Major Review is classed as a Complex Amendment to the Planning Scheme, and as such is required to be advertised, and submissions considered, prior to final submission of the Amendment to the WAPC for Ministerial approval.

Typically, development approvals will include a condition referencing the new Amendment only after it has been submitted to the WAPC for final approval. For approvals without a condition referencing the ungazetted Amendment, the prevailing DCP Report will apply, provided the standard DCP condition is included.

After the Amendment is gazetted and the revised DCP Report is finalized, all developments that trigger a DCP requirement will automatically be subject to the updated Amendment.

### Minor Review (Annually)

The DCP Report which accompanies the Plan is updated at least annually. A Minor Review may update infrastructure costs, administrative expenses, developable areas/lot forecasts, and land acquisition costs.

A Minor review may not amend, add or remove any DCP scope items or provisions detailed within the current Scheme.

There is no statutory requirement to advertise or seek public comment on minor annual DCP Report updates, however the Shire will consult with the relevant Industry Reference Group(s) at each Annual Review when updates involve:

- Accounting for completed works
- Construction cost adjustments
- Changes in land values
- Revisions to undeveloped lot yields
- Other non-material changes.

## 14 Cost Review Reconciliation

### Cost Review Reconciliation

The Cost Review Reconciliation is an adjustment performed during each DCP revision to account for the current DCP Fund Balance and any outstanding liabilities. Depending on whether liabilities exceed the fund balance, the reconciliation may result in either a surplus or a deficit. This process ensures that the DCP achieves its objective of breaking even by the time it concludes. During each Cost Review, the net balance of contributions received and expenditure incurred will be calculated and incorporated into the Cost Apportionment Schedule.

## 15 Priority and timing of infrastructure delivery

A Capital Expenditure Plan is included within the Appendices. Timelines are adjusted annually based on the rate of development and available funds.

## 16 Reporting

### **Annual Audit Results**

SPP 3.6 requires the local government to undertake an external Financial Audit of each DCP. This report must be published on the local government's website within six months of the end of the financial year and is separate from the DCP Report.

The Annual Audit Report, will be available on the Shire's website by no later than December 31st of each financial year.

[www.sjshire.wa.gov.au/development-services/planning/infrastructure-contributions/statements-of-income-and-expenditure.aspx](http://www.sjshire.wa.gov.au/development-services/planning/infrastructure-contributions/statements-of-income-and-expenditure.aspx)

### **Annual Status Report**

SPP 3.6 requires the local government to prepare an Annual Status Report, which provides an overview of the progress in delivering infrastructure specified in the DCP. This report must be published on the local government's website within six months of the end of the financial year and is separate from the DCP Report.

The Annual Status Report for each respective DCP, and the Annual Audit Report for all the Shire's operative DCPs, will be available within the respective DCP page/tile on the Shire's website by no later than December 31st of each financial year.

[www.sjshire.wa.gov.au/development-services/planning/infrastructure-contributions](http://www.sjshire.wa.gov.au/development-services/planning/infrastructure-contributions)

## 17 Figures

Figure 1: DCA Boundary

DCA3 Boundary

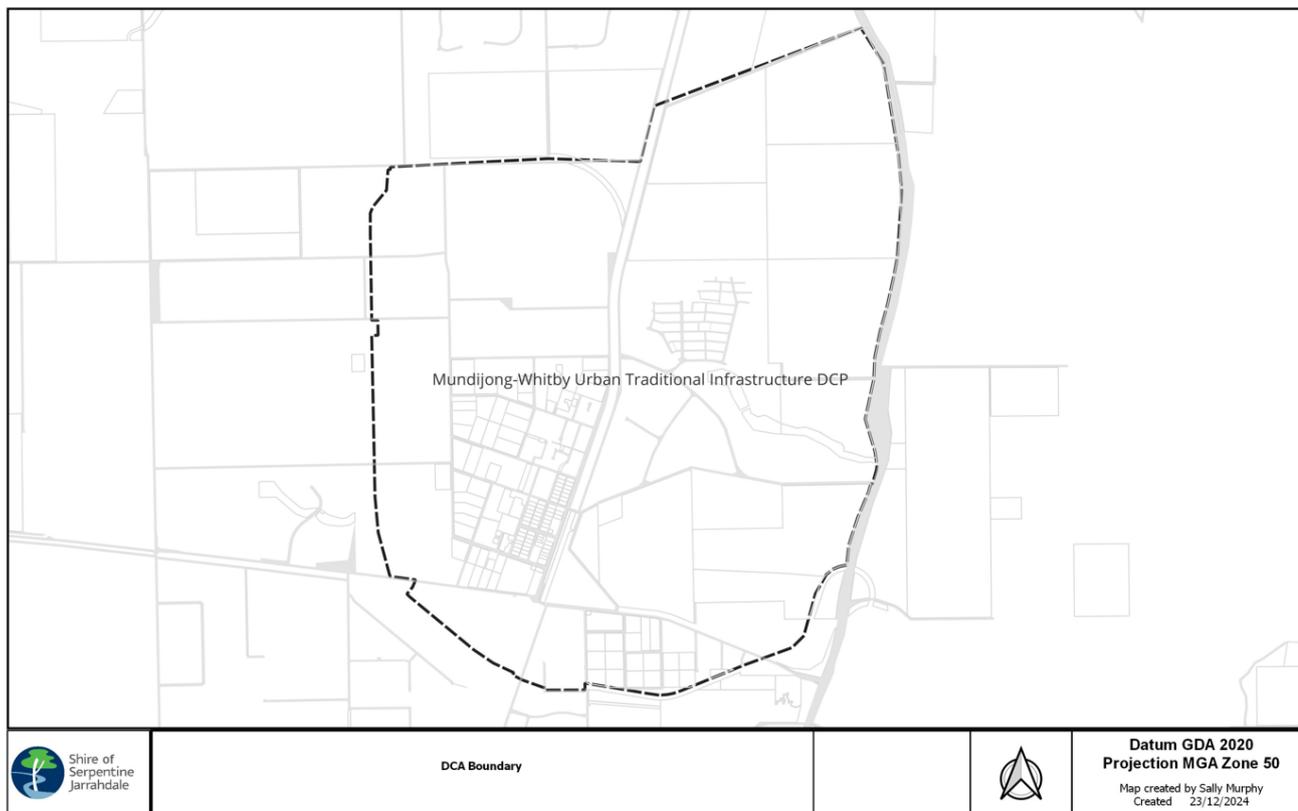


Figure 2: Precincts

DCA3 Precincts

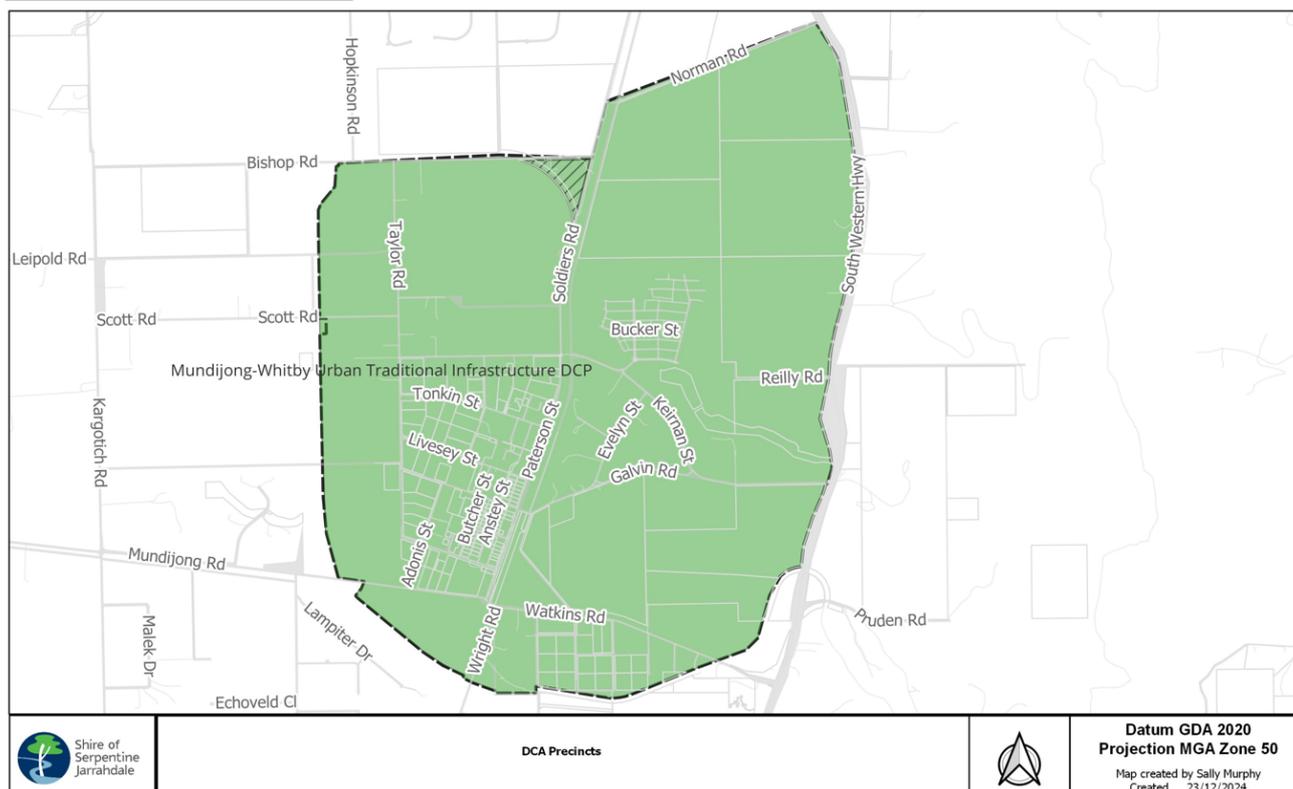


Figure 3: Facilities

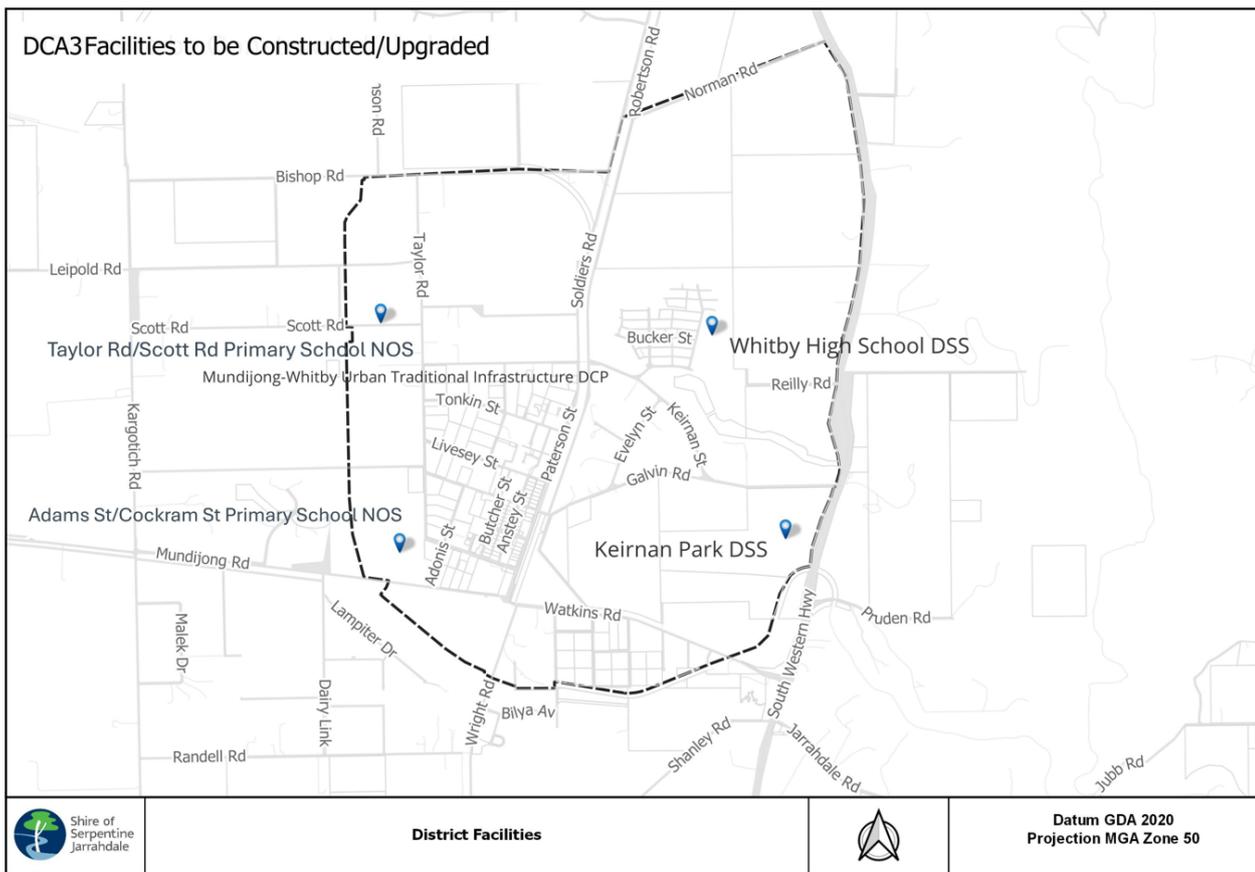


Figure 4: Roads



# APPENDICES

# Appendix A - Need and Nexus

DCA 3  
Revision 2

## **Bishop Road East**

Completed

### **Integrator B - between Tonkin Hwy and Bett Road**

The road currently exists, but will require changes in width, alignment and configuration to support development envisaged under the Mundijong District Structure Plan. The road is also proposed to provide a direct connection to the future extension of Tonkin Highway. The width of Bishop Road will be 30 metres.

The following items are included in the Development Contribution Plan for Bishop Road (East):

- Land required in excess of a standard 20m reserve, to achieve a 30m wide road reserve
- Land to accommodate channelization and/or roundabout construction at the noted intersections
- Intersection treatments and traffic control devices for:
  1. Taylor Road (Roundabout)
  2. Hopkinson Road (Roundabout)
  3. Soldiers Road (Roundabout)
  4. Bett Road (Roundabout)
- Earthworks for the whole road reserve
- Complete road construction based on the Liveable Neighbourhoods Integrator B standard
- Associated drainage works including water sensitive urban design measures
- Traffic control devices including intersection treatments and associated works
- Shared paths
- Utility removal, relocation and insertion
- Associated costs including design, administration and management.

## Keirnan Park DSS

Completed

### 2 x Senior Ovals and landscaping

The Community Infrastructure and Open Space Strategy identifies Reserve 4395 along Keirnan Street, Mundijong, as being suitable to be developed as a Sporting Complex.

The Mundijong-Whitby Urban Traditional Infrastructure Development Contribution Plan includes for two senior-sized playing fields on site, as this will support a District function. The playing fields are to have a minimum dimension of 205m x 175m each (7.2 hectares).

The following items are included in the Development Contribution Plan:

- Earthworks
- Grassing
- Irrigation
- Associated costs relating to construction including design and management.

## New Whitby Rd (aka Town Centre Distributor Rd)

Completed

### Integrator B - between Taylor Road and South Western Hwy

The road does not currently exist and will be required to support the development envisaged under the Mundijong District Structure Plan. The width of New Whitby Road will be 30 metres.

The following items are included in the Development Contribution Plan for New Whitby Road:

- Land required in excess of a standard 20m reserve, to achieve a 30m wide road reserve
- Land to accommodate channelization and/or roundabout construction at the noted intersections
- Intersection treatments and traffic control devices for:
  1. Taylor Road (Roundabout)
  2. Soldiers Road (Roundabout)
  3. South Western Highway (Channelised Intersection)
- Earthworks for the whole road reserve
- Complete road construction based on the Liveable Neighbourhoods Integrator B standard
- Associated drainage works including water sensitive urban design measures
- Traffic control devices including intersection treatments and associated works
- Construction of one at-grade rail crossing
- Costs associated with one rail crossing closure (Keirnan Street)
- Shared paths
- Utility removal, relocation and insertion
- Associated costs including design, administration and management.

## North South Road

Completed

### Integrator B - between Watkins Road and Galvin Road

The road does not currently exist and will be created through subdivision to support the development envisaged under the Mundijong District Structure Plan. The width of the North–South Road will be 30 metres.

The following items are included in the Development Contribution Plan for North-South Road:

- Land required in excess of a standard 20m reserve, to achieve a 30m wide road reserve
- Land where necessary to accommodate channelization and/or roundabout construction at the noted intersections
- Intersection treatments and traffic control devices for:
  1. Watkins Road (Roundabout)
  2. Galvin Road (Roundabout)
- Earthworks for the whole road reserve
- Complete road construction based on the Liveable Neighbourhoods Integrator B standard
- Associated drainage works including water sensitive urban design measures
- Traffic control devices including intersection treatments and associated works
- Shared paths
- Utility removal, relocation and insertion
- Associated costs including design, administration and management.

## Skyline Boulevard

Completed

### Neighbourhood Connector A - between Town Centre Distributor Rd (Whitby New Rd) and Tinspar Avenue

This is a new road that will be required to support the development envisaged under the Mundijong District Structure Plan. The width of Skyline Boulevard will be 25 metres.

The following items are included in the Development Contribution Plan for Skyline Boulevard:

- Land required in excess of a standard 20m reserve, to achieve a 25m wide road reserve
- Land where necessary to accommodate channelization and/or roundabout construction at the noted intersections
- Intersection treatments and traffic control devices for:
  1. New Whitby Road (Roundabout)
  2. Tinspar Avenue (Roundabout)
- Earthworks for the whole road reserve
- Complete road construction based on the Liveable Neighbourhoods Connector A standard
- Associated drainage works including water sensitive urban design measures
- Traffic control devices including intersection treatments and associated works
- Shared paths
- Utility removal, relocation and insertion
- Associated costs including design, administration and management.

## **Taylor Road**

Completed

### **Integrator B - between Bishop Road and Keirnan Street**

The road currently exists, but will require changes in width, alignment and configuration to support development envisaged under the Mundijong District Structure Plan. The width of Taylor Road will be 30m.

The following items are included in the Development Contribution Plan for Taylor Road:

- Land required in excess of a standard 20m reserve, to achieve a 30m wide road reserve
- Land to accommodate channelization and/or roundabout construction at the noted intersections
- Intersection treatments and traffic control devices for:
  1. Keirnan Street (Roundabout)
- Earthworks for the whole road reserve
- Complete road construction based on the Liveable Neighbourhoods Integrator B standard
- Associated drainage works including water sensitive urban design measures
- Traffic control devices including intersection treatments and associated works
- Shared paths
- Utility removal, relocation and insertion
- Associated costs including design, administration and management.

## **Taylor/Scott Rd PS NOS**

Completed

### **1 x Senior Oval**

The Community Infrastructure Open Space Strategy identifies that this sporting space will be a senior sized AFL field. A shared use agreement is anticipated with the Department of Education.

The playing field will be accommodated wholly within a future Shire reserve, funded by the Mundijong-Whitby Urban Traditional Infrastructure Development Contribution Plan.

The single playing field is to be designed to a minimum dimension of 205m x 175m (3.6 hectares).

The following items are included in the Development Contribution Plan

- Earthworks
- Grassing
- Irrigation
- Associated costs relating to construction including design and management.

## Tinspar Avenue

Completed

### Neighbourhood Connector A - between Skyline Blvd and South Western Hwy

This is a new road which will be required to support the development envisaged under the Mundijong District Structure Plan. The width of Tinspar Avenue will be 25 metres.

The following items are included in the Development Contribution Plan for Tinspar Avenue:

- Land required in excess of a standard 20m reserve, to achieve a 25m wide road reserve
- Land to accommodate channelization and/or roundabout construction at the noted intersections
- Intersection treatments and traffic control devices for:
  1. Keirnan Street (Seagull Intersection)
  2. South Western Highway (Channelised Intersection)
- Earthworks for the whole road reserve
- Complete road construction based on the Liveable Neighbourhoods Connector A standard
- Associated drainage works including water sensitive urban design measures
- Traffic control devices including intersection treatments and associated works
- Shared paths
- Utility removal, relocation and insertion
- Associated costs including design, administration and management.

## Water Monitoring

Completed

### Water Monitoring

The Shire has in place Drainage and Water Management Plans (DWMPs) which establish the framework for water management in the new urban development areas. This ensures that water quantity and quality design objectives can be achieved and that concerns and risks identified by the Department of Water (DoW) and the Water Corporation can be addressed.

The DWMP reinforces the Shire's commitment to ensuring that water sensitive urban design principles are incorporated into new urban development.

The Shire will implement water quality and quantity monitoring within the DCA. The Sampling and Analysis Plan prepared for the Shire, identifies the sampling and analysis requirements and will allow term trends in water quality and quantity to be identified and monitored as the DCA is developed. Suitable remediation works or structural controls may be implemented to rectify any identified problems.

It is likely that subdivision and development would not be approved within the area without the approval and ongoing implementation of the DWMP. As such, it is considered reasonable that all costs of, and associated with, the required water monitoring be funded by developers within the DCA.

## Whitby (Reilly Road) DSS

Completed

### 1 x Senior Oval and Landscaping

The Community Infrastructure and Open Space Strategy identifies a district sports oval to be co-located with the planned high school site in Precinct A of the Mundijong District Structure Plan. A shared-use agreement is anticipated between the Department of Education and the Shire for the use of the oval established on the High School site, to facilitate the District function.

All community buildings and clubroom facilities are funded separately through the CIDCP.  
The single playing field is to be designed to a minimum dimension of 205m x 175m (3.6 hectares).

#### Includes:

- Earthworks
- Grassing
- Irrigation
- Associated costs relating to construction including design and management.

# Appendix B - Cost Apportionment Schedule

Land Value Res	\$46.00	DER	\$0.004	Area A	Area B	Area C	Area D
Land Value Non Res	\$46.00	DER	\$0.004	<b>\$13,032.99</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
WALGA Briefing 1/12/2025				Daily Escalation	\$0.793	\$0.000	\$0.000

DCA 3 Revision 3

	Precinct	Total Cost	Grants	Shire %	DCP %	Shire Cost	DCP Cost	Shire Remaining	DCP Remaining	Area A	Area B	Area C	Area D	
<b>Adjustment 0.00%</b>		<b>\$0</b>	<b>\$0</b>			<b>\$0</b>	<b>-\$243,887</b>	<b>\$0</b>	<b>-\$243,887</b>	<b>-\$30.01</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	
<i>DER: (Index % x Area sub total) / 365</i>											<i>\$0.000</i>	<i>\$0.000</i>	<i>\$0.000</i>	<i>\$0.000</i>
Cost Reconciliation	A	\$0	\$0	0%	100%	\$0	-\$243,887	\$0	-\$243,887	-\$30.01	\$0.00	\$0.00	\$0.00	
<b>AER 4.30%</b>		<b>\$2,613,274</b>	<b>\$0</b>			<b>\$0</b>	<b>\$2,613,274</b>	<b>\$0</b>	<b>\$1,810,698</b>	<b>\$222.77</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	
<i>DER: (Index % x Area sub total) / 365</i>											<i>\$0.026</i>	<i>\$0.000</i>	<i>\$0.000</i>	<i>\$0.000</i>
Administration	A	\$2,077,640	\$0	0%	100%	\$0	\$2,077,640	\$0	\$1,275,064	\$156.87	\$0.00	\$0.00	\$0.00	
Water Monitoring	A	\$535,634	\$0	0%	100%	\$0	\$535,634	\$0	\$535,634	\$65.90	\$0.00	\$0.00	\$0.00	
<b>IER 3.00%</b>		<b>\$72,414,884</b>	<b>-\$2,000,000</b>			<b>\$0</b>	<b>\$70,414,884</b>	<b>\$0</b>	<b>\$64,783,384</b>	<b>\$7,970.42</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	
<i>DER: (Index % x Area sub total) / 365</i>											<i>\$0.655</i>	<i>\$0.000</i>	<i>\$0.000</i>	<i>\$0.000</i>
Bishop Road East	A	\$11,982,054	\$0	0%	100%	\$0	\$11,982,054	\$0	\$11,982,054	\$1,474.17	\$0.00	\$0.00	\$0.00	
G1 North PS NOS	A	\$4,542,617	\$0	0%	100%	\$0	\$4,542,617	\$0	\$4,542,617	\$558.89	\$0.00	\$0.00	\$0.00	
Goodwood Boulevard	A	\$18,344,609	\$0	0%	100%	\$0	\$18,344,609	\$0	\$16,824,328	\$2,069.93	\$0.00	\$0.00	\$0.00	
Keirnan Park DSS	A	\$4,359,146	-\$2,000,000	0%	100%	\$0	\$2,359,146	\$0	\$2,359,146	\$290.25	\$0.00	\$0.00	\$0.00	
North South Road	A	\$7,160,466	\$0	0%	100%	\$0	\$7,160,466	\$0	\$7,160,466	\$880.96	\$0.00	\$0.00	\$0.00	
Skyline Boulevard	A	\$2,790,043	\$0	0%	100%	\$0	\$2,790,043	\$0	-\$56,176	-\$6.91	\$0.00	\$0.00	\$0.00	
Taylor Road	A	\$12,272,133	\$0	0%	100%	\$0	\$12,272,133	\$0	\$12,272,133	\$1,509.86	\$0.00	\$0.00	\$0.00	
Tinspar Avenue	A	\$6,421,199	\$0	0%	100%	\$0	\$6,421,199	\$0	\$5,156,199	\$634.38	\$0.00	\$0.00	\$0.00	
Whitby (Reilly Road) DSS	A	\$4,542,617	\$0	0%	100%	\$0	\$4,542,617	\$0	\$4,542,617	\$558.89	\$0.00	\$0.00	\$0.00	
<b>LVER 3.00%</b>		<b>\$41,582,485</b>	<b>\$0</b>			<b>\$0</b>	<b>\$41,582,485</b>	<b>\$0</b>	<b>\$39,581,666</b>	<b>\$4,869.80</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	
<i>DER: (Index % x Area sub total) / 365</i>											<i>\$0.400</i>	<i>\$0.000</i>	<i>\$0.000</i>	<i>\$0.000</i>
Land For Infrastructure	A	\$6,591,852	\$0	0%	100%	\$0	\$6,591,852	\$0	\$6,233,276	\$766.89	\$0.00	\$0.00	\$0.00	
Land For POS and Drainage	A	\$34,990,633	\$0	0%	100%	\$0	\$34,990,633	\$0	\$33,348,390	\$4,102.91	\$0.00	\$0.00	\$0.00	
<b>Area Total</b>		<b>\$116,610,642</b>	<b>-\$2,000,000</b>			<b>\$0</b>	<b>\$114,366,756</b>	<b>\$0</b>	<b>\$105,931,861</b>	<b>\$13,032.99</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	
<i>Total DER (to 3 decimal places)</i>											<i>\$0.793</i>	<i>\$0.000</i>	<i>\$0.000</i>	<i>\$0.000</i>

# Appendix C - Capital Expenditure Plan

DCA 3  
Revision 3

ItemName	Precinct	Start Date	End Date	Delivered by the Shire	Completed
Administration	A			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Keirnan Park DSS	A	27/07/2025	27/07/2027	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Taylor Road	A	27/07/2026	27/07/2028	<input type="checkbox"/>	<input type="checkbox"/>
Goodwood Boulevard	A	27/07/2027	27/07/2029	<input type="checkbox"/>	<input type="checkbox"/>
Bishop Road East	A	27/07/2027	27/07/2029	<input type="checkbox"/>	<input type="checkbox"/>
North South Road	A	27/07/2030	27/07/2032	<input type="checkbox"/>	<input type="checkbox"/>
Whitby (Reilly Road) DSS	A	27/07/2031	27/07/2033	<input type="checkbox"/>	<input type="checkbox"/>
Skyline Boulevard	A	27/07/2019	27/07/2034	<input type="checkbox"/>	<input type="checkbox"/>
G1 North PS NOS	A	27/07/2033	27/07/2034	<input type="checkbox"/>	<input type="checkbox"/>
Tinspar Avenue	A	27/07/2019	27/07/2037	<input type="checkbox"/>	<input type="checkbox"/>
Water Monitoring	A	27/07/2028	27/07/2038	<input checked="" type="checkbox"/>	<input type="checkbox"/>

# Appendix D - Lots/m2 Area Report

DCA 3 Revision 3

ItemName	Parent Lots	Res Lots	Non Res m2	Non Res Lot Equivalent	Total Lots	Total Cleared	Remaining Lots
<b>Precinct A</b>							
Lot 30 Soldiers Road	0	0	0	0.00	0	0	0
G3 - Lang Road	0	0	0	0.00	0	0	0
G2 - Keirnan Street	0	700	0	0.00	700	0	700
G1 - Taylor Springs	0	2,897	2,500	7.14	2,904	0	2,904
F - Mundijong Town Centre	0	0	3,500	10.00	10	1	9
E3 - L9503 Mundijong Road	0	0	0	0.00	0	0	0
E1 & E2: Mundi Estate	0	1,095	0	0.00	1,095	155	940
D - Watkins Road South	0	0	0	0.00	0	0	0
C - Watkins Road North	0	0	0	0.00	0	0	0
B - Keirnan Street	0	0	0	0.00	0	0	0
A - Whitby Estate	0	4,194	22,500	64.29	4,258	684	3,575
<b>Subtotal</b>					<b>8,967</b>	<b>839</b>	<b>8,128</b>
<b>Totals</b>	<b>0</b>	<b>8,886</b>	<b>28,500</b>	<b>81.43</b>	<b>8,967</b>	<b>839</b>	<b>8,128</b>

# Appendix E - Cost Reconciliation Report

DCA 3

Revision 3

<b>At close of previous revision</b>	<b>Gross Contributions</b>	<b>Interest Credited</b>	<b>Administration Costs</b>	<b>Works Settled</b>	<b>POS/Drainage Land Credited</b>	<b>Infra Land Credited</b>	<b>Cleared Lots</b>	<b>Surplus or Deficit</b>
Cost Reconciliation	\$8,632,650	\$46,132	-\$802,576	-\$5,631,500	-\$1,642,243	-\$358,576	839	\$243,887

# Appendix F - Administration Detail Report

DCA 3

Revision 3

Budget This FY	Legal Expenses	Loan Interest	Consultancy	Wages	Annual Forecast	Years Remaining	Total Future Cost	Completed Cost	Total Cost
Administration	\$4,000	\$0	\$3,000	\$42,410	\$49,410	12.24	\$604,775	\$802,576	\$1,407,352

## Admin Spend to Date

DCAID	Revision	Order Date	Description	Amount
3	1	27/07/2022	Administration - Set up costs	-\$652,295.42
3	1	30/06/2023	Administration - FY 2022/23	-\$54,202.94
3	1	30/06/2024	Administration - FY 2023/24	-\$42,797.68
3	1	9/02/2025	Annual Rev Est Administration - FY 2024/25 July 2024 to February 2025	-\$56,618.00
3	2	30/05/2025	Drawdown of Admin Funds owed - CR25/65	\$0.00
3	2	30/06/2025	Confirmed Admin Costs FY 24/25 (adj for Order 494)	\$3,337.57
				<b>-\$802,576.47</b>

# Appendix G - Infrastructure Cost Summary Report

DCA 3  
Revision 3

ItemName	Precinct	Total Cost	Grants	Shire %	DCP %	Shire Cost	DCP Cost	DCP Completed	DCP Remaining
Whitby (Reilly Road) DSS	A	\$4,542,617	\$0	0%	100%	\$0	\$4,542,617	\$0	\$4,542,617
Water Monitoring	A	\$535,634	\$0	0%	100%	\$0	\$535,634	\$0	\$535,634
Tinspar Avenue	A	\$6,421,199	\$0	0%	100%	\$0	\$6,421,199	-\$1,265,000	\$5,156,199
Taylor Road	A	\$12,272,133	\$0	0%	100%	\$0	\$12,272,133	\$0	\$12,272,133
Skyline Boulevard	A	\$2,790,043	\$0	0%	100%	\$0	\$2,790,043	-\$2,846,219	-\$56,176
North South Road	A	\$7,160,466	\$0	0%	100%	\$0	\$7,160,466	\$0	\$7,160,466
Keirnan Park DSS	A	\$4,359,146	-\$2,000,000	0%	100%	\$0	\$2,359,146	\$0	\$2,359,146
Goodwood Boulevard	A	\$18,344,609	\$0	0%	100%	\$0	\$18,344,609	-\$1,520,281	\$16,824,328
G1 North PS NOS	A	\$4,542,617	\$0	0%	100%	\$0	\$4,542,617	\$0	\$4,542,617
Bishop Road East	A	\$11,982,054	\$0	0%	100%	\$0	\$11,982,054	\$0	\$11,982,054
Administration	A	\$2,077,640	\$0	0%	100%	\$0	\$2,077,640	-\$802,576	\$1,275,064
<b>Totals</b>		<b>\$75,028,158</b>	<b>-\$2,000,000</b>			<b>\$0</b>	<b>\$73,028,158</b>	<b>-\$6,434,076</b>	<b>\$66,594,081</b>

# Appendix H - Infrastructure Land Detail Report

DCA 3  
Revision 3

ItemName	Precinct	Res m2 Total	Non Res m2 Total	Res m2 Cleared	Non Res m2 Cleared	Res m2 Remaining	Non Res m2 Remaining	Total Cost Cleared Land	Total Cost Remaining	Total Cost All Land
Bishop Road East	A	12,450	0	0	0.00	12,450	0	\$0	\$572,700	\$572,700
G1 North PS NOS	A	40,000	0	0	0.00	40,000	0	\$0	\$1,840,000	\$1,840,000
Goodwood Boulevard	A	36,150	0	4,797	0.00	31,353	0	-\$157,491	\$1,442,238	\$1,599,729
Keirnan Park DSS	A	0	0	0	0.00	0	0	\$0	\$0	\$0
North South Road	A	13,000	0	0	0.00	13,000	0	\$0	\$598,000	\$598,000
Skyline Boulevard	A	3,904	0	3,904	0.00	0	0	-\$120,487	\$0	\$120,487
Taylor Road	A	33,000	0	1,307	0.00	31,693	0	-\$42,647	\$1,457,878	\$1,500,525
Tinspar Avenue	A	8,275	0	1,265	0.00	7,010	0	-\$37,950	\$322,460	\$360,410
Water Monitoring	A	0	0	0	0.00	0	0	\$0	\$0	\$0
Whitby (Reilly Road) DSS	A	0	0	0	0.00	0	0	\$0	\$0	\$0
<b>Totals</b>		<b>146,779</b>	<b>0</b>	<b>11,273</b>	<b>0.00</b>	<b>135,506</b>	<b>0</b>	<b>-\$358,576</b>	<b>\$6,233,276</b>	<b>\$6,591,852</b>

# Appendix I - Public Open Space and Drainage Land Detail Report

DCA	3	Revision	3									
ItemName	Precinct	Res m2 Total	Non Res m2 Total	Res m2 Cleared	Non Res m2 Cleared	Res m2 Remaining	Non Res m2 Remaining	Total Cost Cleared	Total Cost Remaining	Total Cost All Land		
A - Whitby Estate	A	450,707	0	44,794	0.00	405,913	0	-\$1,373,372	\$18,671,998	\$20,045,370		
B - Keirnan Street	A	0	0	0	0.00	0	0	\$0	\$0	\$0		
C - Watkins Road North	A	0	0	0	0.00	0	0	\$0	\$0	\$0		
D - Watkins Road South	A	0	0	0	0.00	0	0	\$0	\$0	\$0		
E1 & E2: Mundi Estate	A	88,468	0	8,240	0.00	80,228	0	-\$268,871	\$3,690,488	\$3,959,359		
E3 - L9503 Mundijong Road	A	0	0	0	0.00	0	0	\$0	\$0	\$0		
F - Mundijong Town Centre	A	0	0	0	0.00	0	0	\$0	\$0	\$0		
G1 - Taylor Springs	A	220,027	0	0	0.00	220,027	0	\$0	\$10,121,242	\$10,121,242		
G2 - Keirnan Street	A	18,797	0	0	0.00	18,797	0	\$0	\$864,662	\$864,662		
G3 - Lang Road	A	0	0	0	0.00	0	0	\$0	\$0	\$0		
Lot 30 Soldiers Road	A	0	0	0	0.00	0	0	\$0	\$0	\$0		
<b>Totals</b>		<b>777,999</b>	<b>0</b>	<b>53,034</b>	<b>0.00</b>	<b>724,965</b>	<b>0</b>	<b>-\$1,642,243</b>	<b>\$33,348,390</b>	<b>\$34,990,633</b>		

## Appendix J - Infrastructure Designs

To reduce file size, only designs for uncompleted infrastructure projects will be shown, where available.

## Appendix K - Detailed Infrastructure Costings

These costings are current at the last date they were independently reviewed by an external QS. At each DCP Report Revision, only the remaining cost value is indexed, based on the latest WALGA index available at the time the report is produced.

**Shire of Serpentine Jarrahdale DCP**  
**DCA 3 - Mundijong-Whitby Urban Traditional Infrastructure**

Our Ref: E22/14032

<b>Summary of Costs:</b>	<b>DCP1</b>		
	<b>Costed by</b>	<b>Date</b>	<b>Cost</b>
Bishop Road (East) – Integrator B	Rawlinsons	Jun-23	\$11,415,959
Taylor Road – Integrator B	Rawlinsons	Jun-23	\$11,692,334
New Whitby Road (aka Town Centre Distributor Road) – Integrator B	Rawlinsons	Jun-23	\$17,485,755
North-South Road – Integrator B	Rawlinsons	Jun-23	\$6,822,168
Skyline Boulevard – Neighbourhood Connector A	Rawlinsons	Jun-23	\$2,734,156
Tinspar Avenue – Neighbourhood Connector A	Rawlinsons	Jun-23	\$6,151,575
Whitby High School District Sporting Space	Rawlinsons	Jun-23	\$4,328,000
Taylor Road / Scott Road Primary School Neighbourhood Open Space	Rawlinsons	Jun-23	\$4,328,000
Keirnan Park DOS Ovals	Internal Costings	Feb-25	\$4,359,146

For each DCP revision since the last independent cost assessment, the remaining value has been indexed using the most recent WALGA Economic Briefing rates available for the previous year at the time of the DCP Annual Update.

**Shire of Serpentine Jarrahdale DCP  
 DCA 3 - Mundijong Whitby - Update**

Code	Description	Quantity	UOM	Rate	Subtotal	Sub Section Total	Section Total	Road/ DOS Total
<b>A</b>	<b>ROAD - BISHOP ROAD (EAST)</b>							
<b>A.A</b>	<b>Road Construction</b>							
<b>A.A.A</b>	<b>Road Works</b>							
	Earthworks and Site Preparation				\$0			
A.A.A.1	Site Clearance (based on light shrubs)	37,761	m2	\$4	\$132,919			
	Removal of topsoil 150mm and stockpile for later re-use							
A.A.A.2		37,761	m2	\$2	\$60,795			
A.A.A.3	Cut to Fill - General Earthworks	17,843	m3	\$8	\$146,848			
A.A.A.4	Detailed excavation - mill and profile	14,161	m2	\$19	\$268,776			
A.A.A.5	Imported Fill	0	m3	\$30	Excl.			
A.A.A.6	Form swale	7,553	m2	\$4	\$28,626			
	Subgrade Preparation				\$0			
A.A.A.7	Preparation, trim and compact	29,786	m2	\$6	\$163,823			
	Sub Base and Base Course				\$0			
A.A.A.8	100mm thick crushed rock base course	32,853	m2	\$8	\$270,052			
A.A.A.9	250mm thick compacted limestone sub base	32,853	m2	\$17	\$574,270			
	Road Paving				\$0			
A.A.A.10	50mm thick (AC14)	28,321	m2	\$31	\$884,748			
A.A.A.11	Extra over for 2% red oxide	5,665	m2	\$6	\$35,293			
A.A.A.12	Primer seal	28,321	m2	\$4	\$114,417			
	Kerbing				\$0			
A.A.A.13	Mountable Kerb (MK)	3,777	m	\$25	\$96,087			
A.A.A.14	Kerb openings	189	no	\$350	\$66,150			
A.A.A.15	Semi Mountable Kerb (SMK)	3,777	m	\$30	\$111,988			
	Line Marking and Furniture				\$0			
A.A.A.16	Line marking	7,553	m	\$6	\$47,886			
	Landscaping				\$0			
A.A.A.17	Soft landscaping	10,699	m2	\$0	Excl.			
A.A.A.18	Landscape mix	2,675	m3	\$90	\$240,750			
A.A.A.19	Rock pitching	630	m2	\$155	\$97,808			
A.A.A.20	Drainage layer	11,329	m2	\$0	Excl.			
	Other							
A.A.A.21	Allow for connection to existing road		Item		\$10,000			
	TOTAL Road Works		Item			\$3,351,235		
<b>A.A.B</b>	<b>Shared Paths</b>							
	Earthworks and Site Preparation							
A.A.B.1	Site Clearance (based on light shrubs)	4,721	m2	\$4	\$16,618			
	Removal of topsoil 150mm and stockpile for later re-use							
A.A.B.2		4,721	m2	\$2	\$7,601			
A.A.B.3	Cut to Fill - General Earthworks	1,417	m3	\$8	\$11,662			
A.A.B.4	Imported Fill	0	m3	\$30	Excl.			
	Subgrade Preparation							
A.A.B.5	Preparation, trim and compact	4,721	m2	\$6	\$25,966			
	Pathway							
A.A.B.6	100 thick concrete footpath with broomed finish	4,721	m2	\$71	\$334,436			
A.A.B.7	Sand fill below concrete footpath (100mm)	4,721	m2	\$5	\$25,777			
	TOTAL Shared Paths		Item			\$422,058		
<b>A.A.C</b>	<b>Street Lighting</b>							
A.A.C.1	6.5 SOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads	98	no	\$3,442	\$337,289			
A.A.C.2	6.5 DOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads	49	no	\$5,111	\$250,438			
	TOTAL Street Lighting		Item			\$587,727		
<b>A.A.D</b>	<b>Road Drainage</b>							
A.A.D.1	450dia reinforced concrete pipe including excavation and backfill	1,709	m	\$233	\$398,282			
A.A.D.2	150dia slotted PVC subsoil drainage pipe including aggregate, geofabric and porous sand	1,709	m	\$189	\$322,317			

A.A.D.3	Side entry pits including liner, cover, excavation, and associated works	0	no	\$2,667	CESP measured at intersections, RAB's		
A.A.D.4	Raised gully / bubble up pits including liner, cover, grate, excavation, rock pitching, and associated works	57	no	\$3,021	\$172,173		
	<b>TOTAL Road Drainage</b>		Item			\$892,773	
<b>A.A.E</b>	<b>Preliminaries and Project Costs</b>						
A.A.E.1	Traffic Management	5.0000	%	\$5,253,793	\$262,690		
A.A.E.2	Project Overheads and Preliminaries (Indirect Construction Costs)	15.0000	%	\$5,253,793	\$788,069		
A.A.E.3	Project Owner's Cost (Planning and Design Costs)	7.5000	%	\$5,253,793	\$394,034		
A.A.E.4	Risk Contingency Allowance	10.0000	%	\$6,698,586	\$669,859		
	<b>TOTAL Preliminaries and Project Costs</b>		Item			\$2,114,652	
	<b>TOTAL Road Construction</b>						<b>\$7,368,444</b>
<b>A.B</b>	<b>Hopkinson Road (T-Junction)</b>						
<b>A.B.A</b>	<b>Road Works</b>						
	Earthworks and Site Preparation				\$0		
A.B.A.1	Site Clearance (based on light shrubs)	1,611	m2	\$4	\$5,671		
A.B.A.2	Removal of topsoil 150mm and stockpile for later re-use	1,611	m2	\$2	\$2,594		
A.B.A.3	Cut to Fill - General Earthworks	484	m3	\$8	\$3,983		
A.B.A.4	Imported Fill	0	m3	\$30	\$0		
A.B.A.5	Subgrade Preparation				\$0		
A.B.A.5	Preparation, trim and compact	1,611	m2	\$6	\$8,861		
A.B.A.6	Sub Base and Base Course				\$0		
A.B.A.6	100mm thick crushed rock base course	1,563	m2	\$8	\$12,848		
A.B.A.7	250mm thick compacted limestone sub base	1,563	m2	\$17	\$27,321		
A.B.A.8	Road Paving				\$0		
A.B.A.8	50mm thick (AC14)	1,371	m2	\$31	\$42,830		
A.B.A.9	Extra over for 2% red oxide	180	m2	\$6	\$1,121		
A.B.A.10	Primer seal	1,371	m2	\$4	\$5,539		
A.B.A.10	Kerbing				\$0		
A.B.A.11	Mountable Kerb (MK)	24	m	\$25	\$611		
A.B.A.12	Semi Mountable Kerb (SMK)	101	m	\$30	\$2,995		
A.B.A.12	Line Marking and Furniture				\$0		
A.B.A.13	Line marking	140	m	\$6	\$888		
A.B.A.14	Street sign post	1	no	\$122	\$122		
A.B.A.15	Street name plate	2	no	\$199	\$398		
A.B.A.16	Chevron sign	0	no	\$613	\$0		
A.B.A.17	Traffic sign	2	no	\$450	\$900		
A.B.A.17	Landscaping				\$0		
A.B.A.18	Mulch to planter boxes (2m x 2m)	0	m2	\$16	\$0		
A.B.A.19	Trees (100l)	0	no	\$506	\$0		
A.B.A.20	Soft landscaping	0	m2	\$0	\$0		
A.B.A.21	Landscape mix	83	m3	\$90	\$7,470		
A.B.A.22	Rock pitching	15	m2	\$155	\$2,329		
A.B.A.23	Drainage layer	0	m2	\$0	\$0		
A.B.A.23	Other				\$0		
A.B.A.24	Allowed for connection to Hopskins Road		item		\$10,000		
	<b>TOTAL Road Works</b>		Item			\$136,479	
<b>A.B.B</b>	<b>Shared Paths</b>						
	Earthworks and Site Preparation						
A.B.B.1	Site Clearance (based on light shrubs)	252	m2	\$4	\$887		
A.B.B.2	Removal of topsoil 150mm and stockpile for later re-use	252	m2	\$2	\$406		
A.B.B.3	Cut to Fill - General Earthworks	76	m3	\$8	\$625		
A.B.B.4	Detailed excavation - mill and profile	0	m3	\$19	\$0		
A.B.B.5	Imported Fill	0	m3	\$30	\$0		
A.B.B.6	Subgrade Preparation				\$0		
A.B.B.6	Preparation, trim and compact	252	m2	\$6	\$1,386		
A.B.B.7	Pathway				\$0		
A.B.B.7	100 thick concrete footpath with broomed finish	252	m2	\$71	\$17,852		

A.B.B.8	Sand fill below concrete footpath (100mm)	252	m2	\$5	\$1,376			
A.B.B.9	Pram ramp	0	no	\$670	\$0			
A.B.B.10	Pram ramp including tactile Line Marking and Furniture	2	no	\$973	\$1,945			
A.B.B.11	Line marking	0	m	\$6	\$0			
A.B.B.12	Street sign post	0	no	\$122	\$0			
A.B.B.13	Street name plate	0	no	\$199	\$0			
A.B.B.14	Chevron sign	0	no	\$613	\$0			
A.B.B.15	Traffic sign Landscaping	3	no	\$450	\$1,350			
A.B.B.16	Mulch to planter boxes (2m x 2m)	0	m2	\$16	\$0			
A.B.B.17	Trees (100l)	0	no	\$506	\$0			
A.B.B.18	Soft landscaping TOTAL Shared Paths	0	m2 Item	\$0	\$0		\$25,827	
<u>A.B.C</u>	<u>Street Lighting</u>							
A.B.C.1	6.5 SOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads TOTAL Street Lighting	4	no Item	\$3,442	\$13,767		\$13,767	
<u>A.B.D</u>	<u>Road Drainage</u>							
A.B.D.1	450dia reinforced concrete pipe including excavation and backfill	120	m	\$233	\$27,966			
A.B.D.2	150dia slotted PVC subsoil drainage pipe including aggregate, geofabric and porous sand	0	m	\$189	\$0			
A.B.D.3	Side entry pits including liner, cover, excavation, and associated works Drainage layer measured with landscaping TOTAL Road Drainage	2	no Note Item	\$2,667	\$5,333		\$33,299	
<u>A.B.E</u>	<u>Preliminaries and Project Costs</u>							
A.B.E.1	Traffic Management	5.0000	%	\$209,372	\$10,469			
A.B.E.2	Project Overheads and Preliminaries (Indirect Construction Costs)	15.0000	%	\$209,372	\$31,406			
A.B.E.3	Project Owner's Cost (Planning and Design Costs)	7.5000	%	\$209,372	\$15,703			
A.B.E.4	Risk Contingency Allowance TOTAL Preliminaries and Project Costs TOTAL Hopkinson Road (T-Junction)	10.0000	% Item	\$266,949	\$26,695		\$84,272	\$293,644
<u>A.C</u>	<u>Taylor Road (T-Junction)</u>							
<u>A.C.A</u>	<u>Road Works</u>							
A.C.A.1	Earthworks and Site Preparation Site Clearance (based on light shrubs) Removal of topsoil 150mm and stockpile for later re- use	1,611	m2	\$4	\$5,671			
A.C.A.2	Cut to Fill - General Earthworks	1,611	m2	\$2	\$2,594			
A.C.A.3	Imported Fill	484	m3	\$8	\$3,983			
A.C.A.4	Subgrade Preparation	0	m3	\$30	\$0			
A.C.A.5	Preparation, trim and compact Sub Base and Base Course	1,611	m2	\$6	\$8,861			
A.C.A.6	100mm thick crushed rock base course	1,563	m2	\$8	\$12,848			
A.C.A.7	250mm thick compacted limestone sub base Road Paving	1,563	m2	\$17	\$27,321			
A.C.A.8	50mm thick (AC14)	1,371	m2	\$31	\$42,830			
A.C.A.9	Extra over for 2% red oxide	180	m2	\$6	\$1,121			
A.C.A.10	Primer seal Kerbing	1,371	m2	\$4	\$5,539			
A.C.A.11	Mountable Kerb (MK)	24	m	\$25	\$611			
A.C.A.12	Semi Mountable Kerb (SMK) Line Marking and Furniture	101	m	\$30	\$2,995			
A.C.A.13	Line marking	140	m	\$6	\$888			
A.C.A.14	Street sign post	1	no	\$122	\$122			
A.C.A.15	Street name plate	2	no	\$199	\$398			
A.C.A.16	Chevron sign	0	no	\$613	\$0			
A.C.A.17	Traffic sign	2	no	\$450	\$900			

	Landscaping				\$0			
A.C.A.18	Mulch to planter boxes (2m x 2m)	0	m2	\$16	\$0			
A.C.A.19	Trees (100l)	0	no	\$506	\$0			
A.C.A.20	Soft landscaping	0	m2	\$0	\$0			
A.C.A.21	Landscape mix	83	m3	\$90	\$7,470			
A.C.A.22	Rock pitching	15	m2	\$155	\$2,329			
A.C.A.23	Drainage layer Other	0	m2	\$0	\$0			
A.C.A.24	Allowed for connection to Taylor Road TOTAL Road Works		item Item		\$10,000		\$136,479	
<b>A.C.B</b>	<b>Shared Paths</b>							
	Earthworks and Site Preparation							
A.C.B.1	Site Clearance (based on light shrubs) Removal of topsoil 150mm and stockpile for later re-use	252	m2	\$4	\$887			
A.C.B.2	Cut to Fill - General Earthworks	252	m2	\$2	\$406			
A.C.B.3	Detailed excavation - mill and profile	76	m3	\$8	\$625			
A.C.B.4	Imported Fill	0	m3	\$19	\$0			
A.C.B.5	Subgrade Preparation	0	m3	\$30	\$0			
A.C.B.6	Preparation, trim and compact Pathway	252	m2	\$6	\$1,386			
A.C.B.7	100 thick concrete footpath with broomed finish	252	m2	\$71	\$17,852			
A.C.B.8	Sand fill below concrete footpath (100mm)	252	m2	\$5	\$1,376			
A.C.B.9	Pram ramp	0	no	\$670	\$0			
A.C.B.10	Pram ramp including tactile Line Marking and Furniture	2	no	\$973	\$1,945			
A.C.B.11	Line marking	0	m	\$6	\$0			
A.C.B.12	Street sign post	0	no	\$122	\$0			
A.C.B.13	Street name plate	0	no	\$199	\$0			
A.C.B.14	Chevron sign	0	no	\$613	\$0			
A.C.B.15	Traffic sign Landscaping	3	no	\$450	\$1,350			
A.C.B.16	Mulch to planter boxes (2m x 2m)	0	m2	\$16	\$0			
A.C.B.17	Trees (100l)	0	no	\$506	\$0			
A.C.B.18	Soft landscaping TOTAL Shared Paths	0	m2 Item	\$0	\$0		\$25,827	
<b>A.C.C</b>	<b>Street Lighting</b>							
	6.5 SOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads	4	no	\$3,442	\$13,767			
A.C.C.1	TOTAL Street Lighting		Item				\$13,767	
<b>A.C.D</b>	<b>Road Drainage</b>							
	450dia reinforced concrete pipe including excavation and backfill	120	m	\$233	\$27,966			
A.C.D.1	150dia slotted PVC subsoil drainage pipe including aggregate, geofabric and porous sand	0	m	\$189	\$0			
A.C.D.2	Side entry pits including liner, cover, excavation, and associated works	2	no	\$2,667	\$5,333			
A.C.D.3	Drainage layer measured with landscaping TOTAL Road Drainage		Note Item				\$33,299	
<b>A.C.E</b>	<b>Preliminaries and Project Costs</b>							
	Traffic Management	5.0000	%	\$209,372	\$10,469			
A.C.E.1	Project Overheads and Preliminaries (Indirect Construction Costs)	15.0000	%	\$209,372	\$31,406			
A.C.E.2	Project Owner's Cost (Planning and Design Costs)	7.5000	%	\$209,372	\$15,703			
A.C.E.3	Risk Contingency Allowance	10.0000	%	\$266,949	\$26,695			
A.C.E.4	TOTAL Preliminaries and Project Costs TOTAL Taylor Road (T-Junction)		Item				\$84,272	\$293,644
<b>A.D</b>	<b>Bett Road (Roundabout)</b>							
<b>A.D.A</b>	<b>Road Works</b>							
	Earthworks and Site Preparation							
A.D.A.1	Site Clearance (based on light shrubs)	2,504	m2	\$4	\$8,814			

A.D.A.2	Removal of topsoil 150mm and stockpile for later re-use	2,504	m2	\$2	\$4,031		
A.D.A.3	Cut to Fill - General Earthworks	752	m3	\$8	\$6,189		
A.D.A.4	Imported Fill	0	m3	\$30	Excl.		
A.D.A.5	Subgrade Preparation Preparation, trim and compact Sub Base and Base Course	2,504	m2	\$6	\$13,772		
A.D.A.6	100mm thick crushed rock base course	1,983	m2	\$8	\$16,300		
A.D.A.7	250mm thick compacted limestone sub base Road Paving	1,983	m2	\$17	\$34,663		
A.D.A.8	50mm thick (AC14)	1,518	m2	\$31	\$47,422		
A.D.A.9	Primer seal Brick Paving	1,518	m2 Item	\$4 \$0	\$6,133 \$0		
A.D.A.10	80 thick brick pavers	333	m2	\$100	\$33,333		
A.D.A.11	30 thick compacted sand bed	180	m2	\$2	\$295		
A.D.A.12	40 thick compacted sand bed (RAB)	153	m2	\$2	\$335		
A.D.A.13	170mm thick compacted limestone	180	m2	\$11	\$2,047		
A.D.A.14	250mm thick compacted limestone sub base Kerbing	153	m2	\$17	\$2,674		
A.D.A.15	Mountable Kerb (MK)	70	m	\$25	\$1,781		
A.D.A.16	Semi Mountable Kerb (SMK)	143	m	\$30	\$4,240		
A.D.A.17	Barrier Kerb (BK) Line Marking and Furniture	54	m	\$53	\$2,869		
A.D.A.18	Line marking	53	m	\$6	\$336		
A.D.A.19	Street sign post	1	no	\$122	\$122		
A.D.A.20	Street name plate	2	no	\$199	\$398		
A.D.A.21	Chevron sign	1	no	\$613	\$613		
A.D.A.22	Traffic sign Landscaping	3	no	\$450	\$1,350 \$0		
A.D.A.23	Soft landscaping	227	m2	\$0	Excl.		
A.D.A.24	Landscape mix TOTAL Road Works	57	m3 Item	\$90	\$5,130	\$192,847	
<u>A.D.B</u>	<u>Shared Paths</u>						
A.D.B.1	Earthworks and Site Preparation Site Clearance (based on light shrubs) Removal of topsoil 150mm and stockpile for later re-use	356	m2	\$4	\$1,253		
A.D.B.2	Cut to Fill - General Earthworks	107	m3	\$8	\$881		
A.D.B.3	Imported Fill	178	m3	\$30	\$5,340		
A.D.B.4	Subgrade Preparation Preparation, trim and compact Pathway	356	m2	\$6	\$1,958		
A.D.B.5	100 thick concrete footpath with broomed finish	356	m2	\$71	\$25,219		
A.D.B.6	Sand fill below concrete path (100mm) Pram ramp	356	m2 no	\$5 \$670	\$1,944		
A.D.B.7	Pram ramp including tactile	6	no	\$973	\$5,836		
A.D.B.8	Tactile paving Line Marking and Furniture	10	m2	\$325	\$3,250		
A.D.B.9	Traffic sign Landscaping	2	no	\$450	\$900		
A.D.B.10	TOTAL Shared Paths		Item			\$47,154	
<u>A.D.C</u>	<u>Street Lighting</u>						
A.D.C.1	6.5 SOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads TOTAL Street Lighting	4	no Item	\$3,442	\$13,767	\$13,767	
<u>A.D.D</u>	<u>Road Drainage</u>						
A.D.D.1	450dia reinforced concrete pipe including excavation and backfill	130	m	\$233	\$30,297		
A.D.D.2	Side entry pits including liner, cover, excavation, and associated works TOTAL Road Drainage	4	no Item	\$2,667	\$10,666	\$40,963	
<u>A.D.E</u>	<u>Preliminaries and Project Costs</u>						
A.D.E.1	Traffic Management	5.0000	%	\$294,730	\$14,737		

A.D.E.2	Project Overheads and Preliminaries (Indirect Construction Costs)	15.0000	%	\$294,730	\$44,210		
A.D.E.3	Project Owner's Cost (Planning and Design Costs)	7.5000	%	\$294,730	\$22,105		
A.D.E.4	Risk Contingency Allowance	10.0000	%	\$375,781	\$37,578		
	TOTAL Preliminaries and Project Costs		Item			\$118,629	
	<b>TOTAL Bett Road (Roundabout)</b>						<b>\$413,359</b>
<b>A.E</b>	<b>Utilities</b>						
<b>A.E.A</b>	<b>Power and Lighting (Western Power)</b>						
A.E.A.1	Relocate 1120m of Overhead Power underground - Provisional Sum	1	PS	\$1,777,985	\$1,777,985		
	TOTAL Power and Lighting (Western Power)		Item			\$1,777,985	
<b>A.E.B</b>	<b>Communications (NBN / Telstra / Westnet / etc.)</b>						
A.E.B.1	Relocate 1120m road length of communications related infrastructure about 20m from the current location - Provisional Sum	1	PS	\$352,692	\$352,692		
	TOTAL Communications (NBN / Telstra / Westnet / etc.)		Item			\$352,692	
<b>A.E.C</b>	<b>Water and Sewer (Water Corporation)</b>						
	No allowance has been made for Water Corporation diversions as we do not see existing mains from our desktop study		Note				
	TOTAL Water and Sewer (Water Corporation)		Item			\$0	
<b>A.E.D</b>	<b>Gas (ATCO)</b>						
	No allowance has been made for ATCO diversions as we do not see existing valves from our desktop study		Note				
	TOTAL Gas (ATCO)		Item			\$0	
<b>A.E.E</b>	<b>Preliminaries and Project Costs</b>						
A.E.E.1	Traffic Management	10.0000	%	\$2,130,677	\$213,068		
A.E.E.2	Project Overheads and Preliminaries (Indirect Construction Costs)	15.0000	%	\$2,130,677	\$319,602		
A.E.E.3	Project Owner's Cost (Planning and Design Costs)	5.0000	%	\$2,130,677	\$106,534		
A.E.E.4	Risk Contingency Allowance	10.0000	%	\$2,769,880	\$276,988		
	TOTAL Preliminaries and Project Costs		Item			\$916,191	
	<b>TOTAL Utilities</b>						<b>\$3,046,868</b>
A.A.A.7	Estimated Imported Fill	6,750	m3				
A.A.A.5	Total m3 of Cut to Fill - General Earthworks	21,239	m3				
	Less Cut to Fill costed	0	m3	\$30	\$0		
	<b>Total Adjustment for Imported Fill (less Cut to Fill)</b>			See "Imported Fill" sheet at the end of these costings.		<b>\$0</b>	
	<b>TOTAL Road - Bishop Road (East)</b>		Item				<b>\$11,415,959</b>

**Shire of Serpentine Jarrahdale DCP  
 DCA 3 - Mundijong Whitby - Update**

Code	Description	Quantity	UOM	Rate	Subtotal	Sub Section Total	Section Total	Road/ DOS Total
<b>B</b>	<b>ROAD - TAYLOR ROAD</b>							
<b><u>B.A</u></b>	<b><u>Road Construction</u></b>							
<b><u>B.A.A</u></b>	<b><u>Road Works</u></b>							
	Earthworks and Site Preparation				\$0			
B.A.A.1	Site Clearance (based on light shrubs)	25,275	m2	\$4	\$88,968			
	Removal of topsoil 150mm and stockpile for later re-use							
B.A.A.2		25,275	m2	\$2	\$40,693			
B.A.A.3	Cut to Fill - General Earthworks	12,566	m3	\$8	\$103,418			
B.A.A.4	Detailed excavation - mill and profile	10,833	m2	\$19	\$205,610			
B.A.A.5	Imported Fill	0	m3	\$30	Excl.			
B.A.A.6	Form swale	5,778	m2	\$4	\$21,899			
	Subgrade Preparation				\$0			
B.A.A.7	Preparation, trim and compact	36,107	m2	\$6	\$198,589			
	Sub Base and Base Course				\$0			
B.A.A.8	100mm thick crushed rock base course	25,131	m2	\$8	\$206,577			
B.A.A.9	250mm thick compacted limestone sub base	25,131	m2	\$17	\$439,290			
	Road Paving				\$0			
B.A.A.10	50mm thick (AC14)	21,665	m2	\$31	\$676,815			
B.A.A.11	Extra over for 2% red oxide	4,333	m2	\$6	\$26,995			
B.A.A.12	Primer seal	21,665	m2	\$4	\$87,527			
	Kerbing				\$0			
B.A.A.13	Mountable Kerb (MK)	2,889	m	\$25	\$73,496			
B.A.A.14	Kerb openings	145	no	\$350	\$50,750			
B.A.A.15	Semi Mountable Kerb (SMK)	2,889	m	\$30	\$85,659			
	Line Marking and Furniture				\$0			
B.A.A.16	Line marking	5,778	m	\$6	\$36,633			
	Landscaping				\$0			
B.A.A.17	Soft landscaping	8,184	m2	\$0	Excl.			
B.A.A.18	Landscape mix	2,046	m3	\$90	\$184,140			
B.A.A.19	Rock pitching	482	m2	\$155	\$74,831			
B.A.A.20	Drainage layer	8,666	m2	\$0	Excl.			
	TOTAL Road Works		Item			\$2,601,887		
<b><u>B.A.B</u></b>	<b><u>Shared Paths</u></b>							
	Earthworks and Site Preparation							
B.A.B.1	Site Clearance (based on light shrubs)	9,441	m2	\$4	\$33,232			
	Removal of topsoil 150mm and stockpile for later re-use							
B.A.B.2		9,441	m2	\$2	\$15,200			
B.A.B.3	Cut to Fill - General Earthworks	2,833	m3	\$8	\$23,316			
B.A.B.4	Imported Fill	0	m3	\$30	Excl.			
	Subgrade Preparation							
B.A.B.5	Preparation, trim and compact	9,441	m2	\$6	\$51,926			
	Pathway							
B.A.B.6	100 thick concrete footpath with broomed finish	9,441	m2	\$71	\$668,800			
B.A.B.7	Sand fill below concrete footpath (100mm)	9,441	m2	\$5	\$51,548			
B.A.B.8	Pram ramp		no	\$670	Included with intersections			
	TOTAL Shared Paths		Item			\$844,022		
<b><u>B.A.C</u></b>	<b><u>Street Lighting</u></b>							
B.A.C.1	6.5 SOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads	83	no	\$3,442	\$285,663			
B.A.C.2	6.5 DOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads	42	no	\$5,111	\$214,661			
	TOTAL Street Lighting		Item			\$500,324		

<b>B.A.D</b>	<b>Road Drainage</b>							
B.A.D.1	450dia reinforced concrete pipe including excavation and backfill	1,445	m	\$233	\$336,757			
B.A.D.2	150dia slotted PVC subsoil drainage pipe including aggregate, geofabric and porous sand	1,445	m	\$189	\$272,527			
B.A.D.3	Raised gully / bubble up pits including liner, cover, grate, excavation, rock pitching, and associated works	49	no	\$3,021	\$148,008			
B.A.D.4	6 x 500mm dia pipe culverts incl. headwall, excavation, backfill, etc.	30	m	\$3,126	\$93,765			
B.A.D.5	3 x 1200mm dia pipe culverts incl. headwall, excavation, backfill, etc.	30	m	\$5,249	\$157,470			
B.A.D.6	730x800mm box culvert incl. headwall, excavation, backfill, etc.	30	m	\$12,052	\$361,554			
B.A.D.7	Remove existing culvert in preparation for new culvert (approximatley 7m wide)	1	LS	\$9,823	\$9,823			
B.A.D.8	Remove existing culvert in preparation for new culvert (approximatley 3m wide)	2	LS	\$4,210	\$8,420			
	<b>TOTAL Road Drainage</b>		Item			\$1,388,325		
<b>B.A.E</b>	<b>Preliminaries and Project Costs</b>							
B.A.E.1	Traffic Management	5.0000	%	\$5,334,558	\$266,728			
B.A.E.2	Project Overheads and Preliminaries (Indirect Construction Costs)	15.0000	%	\$5,334,558	\$800,184			
B.A.E.3	Project Owner's Cost (Planning and Design Costs)	7.5000	%	\$5,334,558	\$400,092			
B.A.E.4	Risk Contingency Allowance	10.0000	%	\$6,801,561	\$680,156			
	<b>TOTAL Preliminaries and Project Costs</b>		Item			\$2,147,160		
	<b>TOTAL Road Construction</b>						<b>\$7,481,717</b>	
<b>B.B</b>	<b>Keirnan Street (Roundabout)</b>							
<b>B.B.A</b>	<b>Road Works</b>							
B.B.A.1	Earthworks and Site Preparation							
B.B.A.1	Site Clearance (based on light shrubs)	2,504	m2	\$4	\$8,814			
B.B.A.2	Removal of topsoil 150mm and stockpile for later re-use	2,504	m2	\$2	\$4,031			
B.B.A.3	Cut to Fill - General Earthworks	752	m3	\$8	\$6,189			
B.B.A.4	Imported Fill	0	m3	\$30	Excl.			
B.B.A.5	Subgrade Preparation							
B.B.A.5	Preparation, trim and compact Sub Base and Base Course	2,504	m2	\$6	\$13,772			
B.B.A.6	100mm thick crushed rock base course	1,983	m2	\$8	\$16,300			
B.B.A.7	250mm thick compacted limestone sub base	1,983	m2	\$17	\$34,663			
B.B.A.8	Road Paving							
B.B.A.8	50mm thick (AC14)	1,518	m2	\$31	\$47,422			
B.B.A.9	Primer seal	1,518	m2	\$4	\$6,133			
B.B.A.10	Brick Paving		Item		\$0			
B.B.A.10	80 thick brick pavers	333	m2	\$100	\$33,333			
B.B.A.11	30 thick compacted sand bed	180	m2	\$2	\$295			
B.B.A.12	40 thick compacted sand bed (RAB)	153	m2	\$2	\$335			
B.B.A.13	170mm thick compacted limestone	180	m2	\$11	\$2,047			
B.B.A.14	250mm thick compacted limestone sub base	153	m2	\$17	\$2,674			
B.B.A.15	Kerbing							
B.B.A.15	Mountable Kerb (MK)	70	m	\$25	\$1,781			
B.B.A.16	Semi Mountable Kerb (SMK)	143	m	\$30	\$4,240			
B.B.A.17	Barrier Kerb (BK)	54	m	\$53	\$2,869			
B.B.A.18	Line Marking and Furniture							
B.B.A.18	Line marking	53	m	\$6	\$336			
B.B.A.19	Street sign post	1	no	\$122	\$122			
B.B.A.20	Street name plate	2	no	\$199	\$398			
B.B.A.21	Chevron sign	1	no	\$613	\$613			
B.B.A.22	Traffic sign	3	no	\$450	\$1,350			
	Landscaping				\$0			

B.B.A.23	Soft landscaping	227	m2	\$0	Excl.			
B.B.A.24	Landscape mix Other	57	m3	\$90	\$5,130			
B.B.A.25	Allow for connection to Adams Street		item		\$10,000			
B.B.A.26	Allow for connection to Kiernan Street		item		\$10,000			
	<b>TOTAL Road Works</b>		Item				\$212,847	
<b>B.B.B</b>	<b>Shared Paths</b>							
	Earthworks and Site Preparation							
B.B.B.1	Site Clearance (based on light shrubs)	356	m2	\$4	\$1,253			
B.B.B.2	Removal of topsoil 150mm and stockpile for later re-use	356	m2	\$2	\$573			
B.B.B.3	Cut to Fill - General Earthworks	107	m3	\$8	\$881			
B.B.B.4	Imported Fill	0	m3	\$30	Excl.			
	Subgrade Preparation							
B.B.B.5	Preparation, trim and compact Pathway	356	m2	\$6	\$1,958			
B.B.B.6	100 thick concrete footpath with broomed finish	356	m2	\$71	\$25,219			
B.B.B.7	Sand fill below concrete path (100mm)	356	m2	\$5	\$1,944			
B.B.B.8	Pram ramp including tactile	6	no	\$973	\$5,836			
B.B.B.9	Tactile paving	10	m2	\$325	\$3,250			
	Line Marking and Furniture							
B.B.B.10	Traffic sign	2	no	\$450	\$900			
	<b>TOTAL Shared Paths</b>		Item				\$41,814	
<b>B.B.C</b>	<b>Street Lighting</b>							
	6.5 SOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads							
B.B.C.1	TOTAL Street Lighting	4	no	\$3,442	\$13,767		\$13,767	
	Item							
<b>B.B.D</b>	<b>Road Drainage</b>							
	450dia reinforced concrete pipe including excavation and backfill							
B.B.D.1	Side entry pits including liner, cover, excavation, and associated works	130	m	\$233	\$30,297			
B.B.D.2	TOTAL Road Drainage	4	no	\$2,667	\$10,666		\$40,963	
	Item							
<b>B.B.E</b>	<b>Preliminaries and Project Costs</b>							
B.B.E.1	Traffic Management	5.0000	%	\$309,390	\$15,470			
B.B.E.2	Project Overheads and Preliminaries (Indirect Construction Costs)	15.0000	%	\$309,390	\$46,409			
B.B.E.3	Project Owner's Cost (Planning and Design Costs)	7.5000	%	\$309,390	\$23,204			
B.B.E.4	Risk Contingency Allowance	10.0000	%	\$394,473	\$39,447			
	<b>TOTAL Preliminaries and Project Costs</b>		Item				\$124,530	
	<b>TOTAL Keirnan Street (Roundabout)</b>							<b>\$433,920</b>
<b>B.C</b>	<b>Utilities</b>							
<b>B.C.A</b>	<b>Power and Lighting (Western Power)</b>							
	Relocate 1444m of Overhead Power underground - Provisional Sum							
B.C.A.1	TOTAL Power and Lighting (Western Power)	1	PS	\$2,205,458	\$2,205,458		\$2,205,458	
	Item							
<b>B.C.B</b>	<b>Communications (NBN / Telstra / Westnet / etc.)</b>							
	Relocate 1444m road length of communications related infrastructure about 20m from the current location - Provisional Sum							
B.C.B.1	TOTAL Communications (NBN / Telstra / Westnet / etc.)	1	PS	\$435,589	\$435,589		\$435,589	
	Item							
<b>B.C.C</b>	<b>Water and Sewer (Water Corporation)</b>							
	No allowance has been made for Water Corporation diversions as we do not see existing mains from our desktop study							
	TOTAL Water and Sewer (Water Corporation)		Note				\$0	
	Item							
<b>B.C.D</b>	<b>Gas (ATCO)</b>							
	No allowance has been made for ATCO diversions as we do not see existing valves from our desktop study							
	TOTAL Gas (ATCO)		Note				\$0	
	Item							

B.C.E	<b>Preliminaries and Project Costs</b>							
B.C.E.1	Traffic Management	10.0000	%	\$2,641,047	\$264,105			
B.C.E.2	Project Overheads and Preliminaries (Indirect Construction Costs)	15.0000	%	\$2,641,047	\$396,157			
B.C.E.3	Project Owner's Cost (Planning and Design Costs)	5.0000	%	\$2,641,047	\$132,052			
B.C.E.4	Risk Contingency Allowance	10.0000	%	\$3,433,361	\$343,336			
	<b>TOTAL Preliminaries and Project Costs</b>		Item			\$1,135,650		
	<b>TOTAL Utilities</b>						<b>\$3,776,697</b>	
A.A.A.7	Estimated Imported Fill	6,885	m3					
A.A.A.5	Total m3 of Cut to Fill - General Earthworks	16,258	m3					
	Less Cut to Filll costed	0	m3	\$30	\$0			
	<b>Total Adjustment for Imported Fill (less Cut to Fill)</b>			<i>See "Imported Fill" sheet at the end of these costings.</i>			<b>\$0</b>	
	<b>TOTAL Road - Taylor Road</b>		Item					<b>\$11,692,334</b>

**Shire of Serpentine Jarrahdale DCP  
 DCA 3 - Mundijong Whitby - Update**

Code	Description	Quantity	UOM	Rate	Subtotal	Sub Section Total	Section Total	Road/ DOS Total
<b>C</b>	<b>ROAD – TOWN CENTRE DISTRIBUTOR RD (NEW WHITBY ROAD)</b>							
<b>C.A</b>	<b>Road Construction</b>							
<b>C.A.A</b>	<b>Road Works</b>							
	Earthworks and Site Preparation				\$0			
C.A.A.1	Site Clearance (based on light shrubs)	83,385	m2	\$4	\$293,515			
C.A.A.2	Removal of topsoil 150mm and stockpile for later re-use	83,385	m2	\$2	\$134,250			
C.A.A.3	Cut to Fill - General Earthworks	29,018	m3	\$8	\$238,818			
C.A.A.4	Imported Fill	0	m3	\$30	Excl.			
C.A.A.5	Form swale	13,342	m2	\$4	\$50,566			
	Subgrade Preparation							
C.A.A.6	Preparation, trim and compact Sub Base and Base Course	83,385	m2	\$6	\$458,618			
C.A.A.7	100mm thick crushed rock base course	58,036	m2	\$8	\$477,056			
C.A.A.8	250mm thick compacted limestone sub base	58,036	m2	\$17	\$1,014,469			
	Road Paving				\$0			
C.A.A.9	50mm thick (AC14)	50,031	m2	\$31	\$1,562,968			
C.A.A.10	Extra over for 2% red oxide	10,007	m2	\$6	\$62,344			
C.A.A.11	Primer seal	50,031	m2	\$4	\$202,125			
	Kerbing				\$0			
C.A.A.12	Mountable Kerb (MK)	6,671	m	\$25	\$169,710			
C.A.A.13	Kerb openings	334	no	\$350	\$116,900			
C.A.A.14	Semi Mountable Kerb (SMK)	6,671	m	\$30	\$197,795			
C.A.A.15	Concrete flush edge beam		m	\$67	\$0			
	Line Marking and Furniture				\$0			
C.A.A.16	Line marking	13,342	m	\$6	\$84,588			
	Landscaping				\$0			
C.A.A.17	Soft landscaping	18,881	m2	\$0	Excl.			
C.A.A.18	Landscape mix	4,721	m3	\$90	\$424,890			
C.A.A.19	Rock pitching	1,112	m2	\$155	\$172,638			
C.A.A.20	Drainage layer	20,013	m2	\$0	Excl.			
	TOTAL Road Works		Item			\$5,661,251		
<b>C.A.B</b>	<b>Shared Paths</b>							
	Earthworks and Site Preparation							
C.A.B.1	Site Clearance (based on light shrubs)	16,677	m2	\$4	\$58,703			
C.A.B.2	Removal of topsoil 150mm and stockpile for later re-use	16,677	m2	\$2	\$26,850			
C.A.B.3	Cut to Fill - General Earthworks	5,004	m3	\$8	\$41,183			
C.A.B.4	Imported Fill	0	m3	\$30	Excl.			
	Subgrade Preparation							
C.A.B.5	Preparation, trim and compact Pathway	16,677	m2	\$6	\$91,724			
C.A.B.6	100 thick concrete footpath with broomed finish	16,677	m2	\$71	\$1,181,399			
C.A.B.7	Sand fill below concrete footpath (100mm)	16,677	m2	\$5	\$91,056			
	TOTAL Shared Paths		Item			\$1,490,915		
<b>C.A.C</b>	<b>Street Lighting</b>							
C.A.C.1	6.5 SOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads	188	no	\$3,442	\$647,043			
C.A.C.2	6.5 DOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads	94	no	\$5,111	\$480,432			
	TOTAL Street Lighting		Item			\$1,127,475		
<b>C.A.D</b>	<b>Road Drainage</b>							
C.A.D.1	450dia reinforced concrete pipe including excavation and backfill	3,276	m	\$233	\$763,472			
C.A.D.2	150dia slotted PVC subsoil drainage pipe including aggregate, geofabric and porous sand	3,276	m	\$189	\$617,854			

C.A.D.3	Raised gully / bubble up pits including liner, cover, grate, excavation, rock pitching, and associated works	110	no	\$3,021	\$332,264		
C.A.D.4	2500x800mm box culvert incl. headwall, excavation, backfill, etc.	30	m	\$4,203	\$126,103		
C.A.D.5	Remove existing culvert in preparation for new culvert (approximatley 3m wide)	1	LS	\$4,210	\$4,210		
	TOTAL Road Drainage		Item			\$1,843,902	
<b>C.A.E</b>	<b>Preliminaries and Project Costs</b>						
C.A.E.1	Traffic Management	5.0000	%	\$10,123,543	\$506,177		
C.A.E.2	Project Overheads and Preliminaries (Indirect Construction Costs)	15.0000	%	\$10,123,543	\$1,518,532		
C.A.E.3	Project Owner's Cost (Planning and Design Costs)	7.5000	%	\$10,123,543	\$759,266		
C.A.E.4	Risk Contingency Allowance	10.0000	%	\$12,907,518	\$1,290,752		
	TOTAL Preliminaries and Project Costs		Item			\$4,074,726	
	<b>TOTAL Road Construction</b>						<b>\$14,198,270</b>
<b>C.B</b>	<b>Taylor Road (Roundabout)</b>						
<b>C.B.A</b>	<b>Road Works</b>						
	Earthworks and Site Preparation						
C.B.A.1	Site Clearance (based on light shrubs)	2,504	m2	\$4	\$8,814		
C.B.A.2	Removal of topsoil 150mm and stockpile for later re-use	2,504	m2	\$2	\$4,031		
C.B.A.3	Cut to Fill - General Earthworks	752	m3	\$8	\$6,189		
C.B.A.4	Imported Fill	0	m3	\$30	Excl.		
	Subgrade Preparation						
C.B.A.5	Preparation, trim and compact Sub Base and Base Course	2,504	m2	\$6	\$13,772		
C.B.A.6	100mm thick crushed rock base course	1,983	m2	\$8	\$16,300		
C.B.A.7	250mm thick compacted limestone sub base	1,983	m2	\$17	\$34,663		
	Road Paving						
C.B.A.8	50mm thick (AC14)	1,518	m2	\$31	\$47,422		
C.B.A.9	Primer seal	1,518	m2	\$4	\$6,133		
	Brick Paving		Item		\$0		
C.B.A.10	80 thick brick pavers	333	m2	\$100	\$33,333		
C.B.A.11	30 thick compacted sand bed	180	m2	\$2	\$295		
C.B.A.12	40 thick compacted sand bed (RAB)	153	m2	\$2	\$335		
C.B.A.13	170mm thick compacted limestone	180	m2	\$11	\$2,047		
C.B.A.14	250mm thick compacted limestone sub base	153	m2	\$17	\$2,674		
	Kerbing						
C.B.A.15	Mountable Kerb (MK)	70	m	\$25	\$1,781		
C.B.A.16	Semi Mountable Kerb (SMK)	143	m	\$30	\$4,240		
C.B.A.17	Barrier Kerb (BK)	54	m	\$53	\$2,869		
	Line Marking and Furniture						
C.B.A.18	Line marking	53	m	\$6	\$336		
C.B.A.19	Street sign post	1	no	\$122	\$122		
C.B.A.20	Street name plate	2	no	\$199	\$398		
C.B.A.21	Chevron sign	1	no	\$613	\$613		
C.B.A.22	Traffic sign	3	no	\$450	\$1,350		
	Landscaping				\$0		
C.B.A.23	Soft landscaping	227	m2	\$0	Excl.		
C.B.A.24	Landscape mix	57	m3	\$90	\$5,130		
	TOTAL Road Works		Item			\$192,847	
<b>C.B.B</b>	<b>Shared Paths</b>						
	Earthworks and Site Preparation						
C.B.B.1	Site Clearance (based on light shrubs)	356	m2	\$4	\$1,253		
C.B.B.2	Removal of topsoil 150mm and stockpile for later re-use	356	m2	\$2	\$573		
C.B.B.3	Cut to Fill - General Earthworks	107	m3	\$8	\$881		
C.B.B.4	Imported Fill	0	m3	\$30	Excl.		
	Subgrade Preparation						
C.B.B.5	Preparation, trim and compact Pathway	356	m2	\$6	\$1,958		

C.B.B.6	100 thick concrete footpath with broomed finish	356	m2	\$71	\$25,219		
C.B.B.7	Sand fill below concrete path (100mm)	356	m2	\$5	\$1,944		
C.B.B.8	Pram ramp including tactile	6	no	\$973	\$5,836		
C.B.B.9	Tactile paving	10	m2	\$325	\$3,250		
	Line Marking and Furniture						
C.B.B.10	Traffic sign	2	no	\$450	\$900		
	TOTAL Shared Paths		Item			\$41,814	
<b>C.B.C</b>	<b>Street Lighting</b>						
	6.5 SOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads	4	no	\$3,442	\$13,767		
C.B.C.1	TOTAL Street Lighting		Item			\$13,767	
<b>C.B.D</b>	<b>Road Drainage</b>						
	450dia reinforced concrete pipe including excavation and backfill	130	m	\$233	\$30,297		
C.B.D.1	Side entry pits including liner, cover, excavation, and associated works	4	no	\$2,667	\$10,666		
C.B.D.2	TOTAL Road Drainage		Item			\$40,963	
<b>C.B.E</b>	<b>Preliminaries and Project Costs</b>						
C.B.E.1	Traffic Management	5.0000	%	\$289,390	\$14,470		
	Project Overheads and Preliminaries (Indirect Construction Costs)	15.0000	%	\$289,390	\$43,409		
C.B.E.2							
C.B.E.3	Project Owner's Cost (Planning and Design Costs)	7.5000	%	\$289,390	\$21,704		
C.B.E.4	Risk Contingency Allowance	10.0000	%	\$368,973	\$36,897		
	TOTAL Preliminaries and Project Costs		Item			\$116,480	
	<b>TOTAL Taylor Road (Roundabout)</b>						<b>\$405,870</b>
<b>C.C</b>	<b>Soldiers Road (Roundabout)</b>						
<b>C.C.A</b>	<b>Road Works</b>						
	Earthworks and Site Preparation						
C.C.A.1	Site Clearance (based on light shrubs)	2,728	m2	\$4	\$9,603		
C.C.A.2	Removal of topsoil 150mm and stockpile for later re-use	2,728	m2	\$2	\$4,392		
C.C.A.3	Cut to Fill - General Earthworks	819	m3	\$8	\$6,740		
C.C.A.4	Imported Fill	0	m3	\$30	Excl.		
	Subgrade Preparation						
C.C.A.5	Preparation, trim and compact Sub Base and Base Course	2,728	m2	\$6	\$15,004		
C.C.A.6	100mm thick crushed rock base course	2,139	m2	\$8	\$17,583		
C.C.A.7	250mm thick compacted limestone sub base	2,139	m2	\$17	\$37,390		
	Road Paving						
C.C.A.8	50mm thick (AC14)	1,672	m2	\$31	\$52,233		
C.C.A.9	Primer seal	1,672	m2	\$4	\$6,755		
	Brick Paving		Item		\$0		
C.C.A.10	80 thick brick pavers	393	m2	\$100	\$39,339		
C.C.A.11	30 thick compacted sand bed	240	m2	\$2	\$394		
C.C.A.12	40 thick compacted sand bed (RAB)	153	m2	\$2	\$335		
C.C.A.13	170mm thick compacted limestone	240	m2	\$11	\$2,729		
C.C.A.14	250mm thick compacted limestone sub base	153	m2	\$17	\$2,674		
	Kerbing						
C.C.A.15	Mountable Kerb (MK)	70	m	\$25	\$1,781		
C.C.A.16	Semi Mountable Kerb (SMK)	146	m	\$30	\$4,329		
C.C.A.17	Barrier Kerb (BK)	54	m	\$53	\$2,869		
	Line Marking and Furniture						
C.C.A.18	Line marking	70	m	\$6	\$444		
C.C.A.19	Street sign post	1	no	\$122	\$122		
C.C.A.20	Street name plate	2	no	\$199	\$398		
C.C.A.21	Traffic sign	4	no	\$450	\$1,800		
	Landscaping				\$0		
C.C.A.22	Soft landscaping	227	m2	\$0	Excl.		
C.C.A.23	Landscape mix	57	m3	\$90	\$5,130		
	Other						

C.C.A.24	Allow for connection to Soldiers Road (both directions)		Item		\$20,000			
	TOTAL Road Works		Item			\$232,043		
<b>C.C.B</b>	<b>Shared Paths</b>							
	Earthworks and Site Preparation							
C.C.B.1	Site Clearance (based on light shrubs)	364	m2	\$4	\$1,281			
C.C.B.2	Removal of topsoil 150mm and stockpile for later re-use	364	m2	\$2	\$586			
C.C.B.3	Cut to Fill - General Earthworks	110	m3	\$8	\$905			
C.C.B.4	Imported Fill	0	m3	\$30	Excl.			
	Subgrade Preparation							
C.C.B.5	Preparation, trim and compact Pathway	364	m2	\$6	\$2,002			
C.C.B.6	100 thick concrete footpath with broomed finish	364	m2	\$71	\$25,786			
C.C.B.7	Sand fill below concrete path (100mm)	364	m2	\$5	\$1,987			
C.C.B.8	Pram ramp including tactile	8	no	\$973	\$7,781			
C.C.B.9	Tactile paving	13	m2	\$325	\$4,225			
	Line Marking and Furniture							
C.C.B.10	Traffic sign	4	no	\$450	\$1,800			
	TOTAL Shared Paths		Item			\$46,354		
<b>C.C.C</b>	<b>Street Lighting</b>							
	6.5 SOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads	4	no	\$3,442	\$13,767			
C.C.C.1	TOTAL Street Lighting		Item			\$13,767		
<b>C.C.D</b>	<b>Road Drainage</b>							
	450dia reinforced concrete pipe including excavation and backfill	130	m	\$233	\$30,297			
C.C.D.1	Side entry pits including liner, cover, excavation, and associated works	4	no	\$2,667	\$10,666			
C.C.D.2	TOTAL Road Drainage		Item			\$40,963		
<b>C.C.E</b>	<b>Preliminaries and Project Costs</b>							
C.C.E.1	Traffic Management	5.0000	%	\$333,126	\$16,656			
C.C.E.2	Project Overheads and Preliminaries (Indirect Construction Costs)	15.0000	%	\$333,126	\$49,969			
C.C.E.3	Project Owner's Cost (Planning and Design Costs)	7.5000	%	\$333,126	\$24,984			
C.C.E.4	Risk Contingency Allowance	10.0000	%	\$424,736	\$42,474			
	TOTAL Preliminaries and Project Costs		Item			\$134,083		
	<b>TOTAL Soldiers Road (Roundabout)</b>						<b>\$467,210</b>	
<b>C.D</b>	<b>South Western Highway (Channelised Intersection)</b>							
<b>C.D.A</b>	<b>Road Works</b>							
	Earthworks and Site Preparation				\$0			
C.D.A.1	Site Clearance (based on light shrubs)	2,550	m2	\$4	\$8,976			
C.D.A.2	Removal of topsoil 150mm and stockpile for later re-use	2,550	m2	\$2	\$4,106			
C.D.A.3	Cut to Fill - General Earthworks	765	m3	\$8	\$6,296			
C.D.A.4	Detailed excavation - mill and profile	1,800	m2	\$19	\$34,164			
C.D.A.5	Imported Fill	0	m3	\$30	Excl.			
	Subgrade Preparation				\$0			
C.D.A.6	Preparation, trim and compact Sub Base and Base Course	2,550	m2	\$6	\$14,025			
					\$0			
C.D.A.7	100mm thick crushed rock base course	2,466	m2	\$8	\$20,271			
C.D.A.8	250mm thick compacted limestone sub base	2,466	m2	\$17	\$43,106			
	Road Paving				\$0			
C.D.A.9	50mm thick (AC14)	1,980	m2	\$31	\$61,855			
C.D.A.10	Extra over for 2% red oxide	90	m2	\$6	\$561			
C.D.A.11	Primer seal	1,980	m2	\$4	\$7,999			
	Kerbing				\$0			
C.D.A.12	Mountable Kerb (MK)	60	m	\$25	\$1,526			
C.D.A.13	Semi Mountable Kerb (SMK)	80	m	\$30	\$2,372			
	Line Marking and Furniture				\$0			
C.D.A.14	Line marking	660	m	\$6	\$4,184			
C.D.A.15	Street sign post	1	no	\$122	\$122			
C.D.A.16	Street name plate	2	no	\$199	\$398			
C.D.A.17	Chevron sign	1	no	\$613	\$613			

C.D.A.18	Traffic sign Landscaping	3	no	\$450	\$1,350 \$0			
C.D.A.19	Soft landscaping	180	m2	\$0	Excl.			
C.D.A.20	Landscape mix	42	m3	\$90	\$3,780			
C.D.A.21	Rock pitching	8	m2	\$155	\$1,242			
C.D.A.22	Drainage layer Other	180	m2	\$0	Excl.			
C.D.A.23	Allow for connection to SWH TOTAL Road Works		item Item		\$20,000	\$236,945		
<b>C.D.B</b>	<b>Shared Paths</b>							
	Earthworks and Site Preparation							
C.D.B.1	Site Clearance (based on light shrubs)	150	m2	\$4	\$528			
C.D.B.2	Removal of topsoil 150mm and stockpile for later re-use	150	m2	\$2	\$242			
C.D.B.3	Cut to Fill - General Earthworks	45	m3	\$8	\$370			
C.D.B.4	Imported Fill	0	m3	\$30	Excl.			
	Subgrade Preparation							
C.D.B.5	Preparation, trim and compact Pathway	150	m2	\$6	\$825			
C.D.B.6	100 thick concrete footpath with broomed finish	150	m2	\$71	\$10,626			
C.D.B.7	Sand fill below concrete footpath (100mm)	150	m2	\$5	\$819			
C.D.B.8	Pram ramp including tactile Line Marking and Furniture	2	no	\$973	\$1,945			
C.D.B.9	Traffic sign TOTAL Shared Paths	2	no Item	\$450	\$900	\$16,255		
<b>C.D.C</b>	<b>Street Lighting</b>							
	6.5 SOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads							
C.D.C.1	TOTAL Street Lighting	2	no Item	\$3,442	\$6,883	\$6,883		
<b>C.D.D</b>	<b>Road Drainage</b>							
	450dia reinforced concrete pipe including excavation and backfill							
C.D.D.1	Side entry pits including liner, cover, excavation, and associated works	90	m	\$233	\$20,975			
C.D.D.2	TOTAL Road Drainage	2	no Item	\$2,667	\$5,333	\$26,308		
<b>C.D.E</b>	<b>Preliminaries and Project Costs</b>							
C.D.E.1	Traffic Management	5.0000	%	\$286,391	\$14,320			
C.D.E.2	Project Overheads and Preliminaries (Indirect Construction Costs)	15.0000	%	\$286,391	\$42,959			
C.D.E.3	Project Owner's Cost (Planning and Design Costs)	7.5000	%	\$286,391	\$21,479			
C.D.E.4	Risk Contingency Allowance	10.0000	%	\$365,148	\$36,515			
	TOTAL Preliminaries and Project Costs		Item			\$115,272		
	<b>TOTAL South Western Highway (Channelised Intersection)</b>						<b>\$401,663</b>	
<b>C.E</b>	<b>At-grade rail crossing</b>							
<b>C.E.A</b>	<b>Road Works</b>							
	Earthworks and Site Preparation							
C.E.A.1	Site Clearance (based on light shrubs)	1,063	m2	\$4	\$3,742			
C.E.A.2	Removal of topsoil 150mm and stockpile for later re-use	1,063	m2	\$2	\$1,711			
C.E.A.3	Cut to Fill - General Earthworks	532	m3	\$8	\$4,378			
C.E.A.4	Dispose of material off site	532	cum	\$10	\$5,320			
C.E.A.5	Imported Fill	0	m3	\$30	Excl.			
	Subgrade Preparation							
C.E.A.6	Preparation, trim and compact Sub Base and Base Course	1,063	m2	\$6	\$5,847			
C.E.A.7	100mm thick crushed rock base course	740	m2	\$8	\$6,083			
C.E.A.8	250mm thick compacted limestone sub base	740	m2	\$17	\$12,935			
	Road Paving							
C.E.A.9	50mm thick (AC14)	995	m2	\$31	\$31,084			
C.E.A.10	Primer seal Kerbing	995	m2	\$4	\$4,020			
C.E.A.11	Semi Mountable Kerb (SMK) Line Marking and Furniture	65	m	\$30	\$1,927			
C.E.A.12	Line marking	106	m	\$6	\$672			

C.E.A.13	Line marking at crossing	995	sqm	\$10	\$9,950		
C.E.A.14	Traffic sign	4	no	\$450	\$1,800		
	TOTAL Road Works		Item			\$89,469	
<b>C.E.B</b>	<b>Shared Paths</b>						
	Earthworks and Site Preparation						
C.E.B.1	Site Clearance (based on light shrubs)	213	m2	\$4	\$750		
C.E.B.2	Removal of topsoil 150mm and stockpile for later re-use	213	m2	\$2	\$343		
C.E.B.3	Cut to Fill - General Earthworks	107	m3	\$8	\$881		
C.E.B.4	Dispose of material off site	107	m3	\$10	\$1,070		
C.E.B.5	Imported Fill	0	m3	\$30	Excl.		
	Subgrade Preparation						
C.E.B.6	Preparation, trim and compact Pathway	213	m2	\$6	\$1,172		
C.E.B.7	100 thick concrete footpath with broomed finish	213	m2	\$71	\$15,089		
C.E.B.8	Sand fill below concrete path (100mm)	213	m2	\$5	\$1,163		
C.E.B.9	Pram ramp including tactile Line Marking and Furniture	4	no	\$973	\$3,891		
C.E.B.10	Traffic sign	4	no	\$450	\$1,800		
	TOTAL Shared Paths		Item			\$26,157	
<b>C.E.C</b>	<b>Street Lighting</b>						
	6.5 SOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads (provisional allowance)						
C.E.C.1	TOTAL Street Lighting	4	no	\$3,442	\$13,767	\$13,767	
			Item				
<b>C.E.D</b>	<b>Road Drainage</b>						
	450dia reinforced concrete pipe including excavation and backfill						
C.E.D.1	Side entry pits including liner, cover, excavation, and associated works (provisional allowance)	115	m	\$233	\$26,801		
C.E.D.2	TOTAL Road Drainage	4	no	\$2,667	\$10,666	\$37,467	
			Item				
<b>C.E.E</b>	<b>Level crossing at Whitby Road</b>						
	Level crossing						
C.E.E.1	Allow for new level crossing at Orton Road	1	no	\$632,500	\$632,500	\$632,500	
	TOTAL Level crossing at Whitby Road		item				
<b>C.E.F</b>	<b>Preliminaries and Project Costs</b>						
C.E.F.1	Traffic Management	10.0000	%	\$799,360	\$79,936		
C.E.F.2	Project Overheads and Preliminaries (Indirect Construction Costs)	15.0000	%	\$799,360	\$119,904		
C.E.F.3	Project Owner's Cost (Planning and Design Costs)	7.5000	%	\$799,360	\$59,952		
C.E.F.4	Risk Contingency Allowance	10.0000	%	\$1,059,152	\$105,915		
	TOTAL Preliminaries and Project Costs		Item			\$365,707	
	<b>TOTAL At-grade rail crossing</b>						<b>\$1,165,067</b>
<b>C.F</b>	<b>Bett Road (Roundabout future extension)</b>						
<b>C.F.A</b>	<b>Road Works</b>						
	Earthworks and Site Preparation						
C.F.A.1	Site Clearance (based on light shrubs)	2,728	m2	\$4	\$9,603		
C.F.A.2	Removal of topsoil 150mm and stockpile for later re-use	2,728	m2	\$2	\$4,392		
C.F.A.3	Cut to Fill - General Earthworks	819	m3	\$8	\$6,740		
C.F.A.4	Detailed excavation - mill and profile	900	m2	\$19	\$17,082		
C.F.A.5	Imported Fill (Provisional)	1,316	m3	\$30	\$39,480		
	Subgrade Preparation						
C.F.A.6	Preparation, trim and compact Sub Base and Base Course	2,728	m2	\$6	\$15,004		
C.F.A.7	100mm thick crushed rock base course	2,139	m2	\$8	\$17,583		
C.F.A.8	250mm thick compacted limestone sub base	2,139	m2	\$17	\$37,390		
	Road Paving						
C.F.A.9	50mm thick (AC14)	1,672	m2	\$31	\$52,233		
C.F.A.10	Primer seal	1,672	m2	\$4	\$6,755		
	Brick Paving		Item		\$0		
C.F.A.11	80 thick brick pavers	393	m2	\$100	\$39,339		
C.F.A.12	30 thick compacted sand bed	240	m2	\$2	\$394		
C.F.A.13	40 thick compacted sand bed (RAB)	153	m2	\$2	\$335		
C.F.A.14	170mm thick compacted limestone	240	m2	\$11	\$2,729		

C.F.A.15	250mm thick compacted limestone sub base Kerbing	153	m2	\$17	\$2,674			
C.F.A.16	Mountable Kerb (MK)	70	m	\$25	\$1,781			
C.F.A.17	Semi Mountable Kerb (SMK)	146	m	\$30	\$4,329			
C.F.A.18	Barrier Kerb (BK) Line Marking and Furniture	54	m	\$53	\$2,869			
C.F.A.19	Line marking	70	m	\$6	\$444			
C.F.A.20	Street sign post	1	no	\$122	\$122			
C.F.A.21	Street name plate	2	no	\$199	\$398			
C.F.A.22	Traffic sign Landscaping	4	no	\$450	\$1,800 \$0			
C.F.A.23	Soft landscaping	227	m2	\$0	Excl.			
C.F.A.24	Landscape mix Other	57	m3	\$90	\$5,130			
C.F.A.25	Allow for connection to Soldiers Road (both directions) TOTAL Road Works		Item Item		\$20,000		\$288,605	
<b>C.F.B</b>	<b>Shared Paths</b>							
	Earthworks and Site Preparation							
C.F.B.1	Site Clearance (based on light shrubs)	364	m2	\$4	\$1,281			
C.F.B.2	Removal of topsoil 150mm and stockpile for later re-use	364	m2	\$2	\$586			
C.F.B.3	Cut to Fill - General Earthworks	110	m3	\$8	\$905			
C.F.B.4	Imported Fill Subgrade Preparation	182	m3	\$30	\$5,460			
C.F.B.5	Preparation, trim and compact Pathway	364	m2	\$6	\$2,002			
C.F.B.6	100 thick concrete footpath with broomed finish	364	m2	\$71	\$25,786			
C.F.B.7	Sand fill below concrete path (100mm)	364	m2	\$5	\$1,987			
C.F.B.8	Pram ramp including tactile	8	no	\$973	\$7,781			
C.F.B.9	Tactile paving Line Marking and Furniture	13	m2	\$325	\$4,225			
C.F.B.10	Traffic sign TOTAL Shared Paths	4	no Item	\$450	\$1,800		\$51,814	
<b>C.F.C</b>	<b>Street Lighting</b>							
	6.5 SOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads	4	no	\$3,442	\$13,767			
C.F.C.1	TOTAL Street Lighting		Item				\$13,767	
<b>C.F.D</b>	<b>Road Drainage</b>							
	450dia reinforced concrete pipe including excavation and backfill	130	m	\$233	\$30,297			
C.F.D.1	Side entry pits including liner, cover, excavation, and associated works	6	no	\$2,667	\$15,999			
C.F.D.2	TOTAL Road Drainage		Item				\$46,296	
<b>C.F.E</b>	<b>Preliminaries and Project Costs</b>							
	Traffic Management	5.0000	%	\$400,481	\$20,024			
C.F.E.1	Project Overheads and Preliminaries (Indirect Construction Costs)	15.0000	%	\$400,481	\$60,072			
C.F.E.2	Project Owner's Cost (Planning and Design Costs)	7.5000	%	\$400,481	\$30,036			
C.F.E.3	Risk Contingency Allowance	10.0000	%	\$510,614	\$51,061			
C.F.E.4	TOTAL Preliminaries and Project Costs		Item				\$161,194	
	<b>TOTAL Bett Road (Roundabout future extension)</b>						<b>\$561,675</b>	
<b>C.G</b>	<b>Utilities</b>							
<b>C.G.A</b>	<b>Power and Lighting (Western Power)</b>							
	General Provisional Sum of \$100,000 as it is not clear if diversions are required	1	PS	\$100,000	\$100,000			
C.G.A.1	TOTAL Power and Lighting (Western Power)		Item				\$100,000	
<b>C.G.B</b>	<b>Communications (NBN / Telstra / Westnet / etc.)</b>							
	General Provisional Sum of \$100,000 as it is not clear if diversions are required	1	PS	\$100,000	\$100,000			
C.G.B.1	TOTAL Communications (NBN / Telstra / Westnet / etc.)		Item				\$100,000	

<u>C.G.C</u>	<u>Water and Sewer (Water Corporation)</u> No allowance has been made for Water Corporation diversions as we do not see existing mains from our desktop study TOTAL Water and Sewer (Water Corporation)		Note Item			\$0	
<u>C.G.D</u>	<u>Gas (ATCO)</u> No allowance has been made for ATCO diversions as we do not see existing valves from our desktop study TOTAL Gas (ATCO)		Note Item			\$0	
<u>C.G.E</u>	<u>Preliminaries and Project Costs</u>						
C.G.E.1	Traffic Management	10.0000	%	\$200,000	\$20,000		
C.G.E.2	Project Overheads and Preliminaries (Indirect Construction Costs)	15.0000	%	\$200,000	\$30,000		
C.G.E.3	Project Owner's Cost (Planning and Design Costs)	5.0000	%	\$200,000	\$10,000		
C.G.E.4	Risk Contingency Allowance	10.0000	%	\$260,000	\$26,000		
	TOTAL Preliminaries and Project Costs		Item			\$86,000	
	<b>TOTAL Utilities</b>						<b>\$286,000</b>
A.A.A.7	Estimated Imported Fill	31,905	m3				
A.A.A.5	Total m3 of Cut to Fill - General Earthworks	38,188	m3				
	Less Cut to Fill costed	0	m3	\$30	\$0		
	<b>Total Adjustment for Imported Fill (less Cut to Fill)</b>			<i>See "Imported Fill" sheet at the end of these costings.</i>		<b>\$0</b>	
	<b>TOTAL Road – New Whitby Road</b>		<b>Item</b>				<b>\$17,485,755</b>

**Shire of Serpentine Jarrahdale DCP  
 DCA 3 - Mundijong Whitby - Update**

Code	Description	Quantity	UOM	Rate	Subtotal	Sub Section Total	Section Total	Road/ DOS Total
<b>D</b>	<b>ROAD – NORTH-SOUTH ROAD</b>							
<b>D.A</b>	<b><u>Road Construction</u></b>							
<b>D.A.A</b>	<b><u>Road Works</u></b>							
	Earthworks and Site Preparation				\$0			
D.A.A.1	Site Clearance (based on light shrubs)	30,970	m2	\$4	\$109,014			
D.A.A.2	Removal of topsoil 150mm and stockpile for later re-use	30,970	m2	\$2	\$49,862			
D.A.A.3	Cut to Fill - General Earthworks	10,778	m3	\$8	\$88,703			
D.A.A.4	Imported Fill	0	m3	\$30	Excl.			
D.A.A.5	Form swale	4,956	m2	\$4	\$18,783			
	Subgrade Preparation				\$0			
D.A.A.6	Preparation, trim and compact	30,970	m2	\$6	\$170,335			
	Sub Base and Base Course				\$0			
D.A.A.7	100mm thick crushed rock base course	21,555	m2	\$8	\$177,182			
D.A.A.8	250mm thick compacted limestone sub base	21,555	m2	\$17	\$376,781			
	Road Paving				\$0			
D.A.A.9	50mm thick (AC14)	18,582	m2	\$31	\$580,502			
D.A.A.10	Extra over for 2% red oxide	3,717	m2	\$6	\$23,157			
D.A.A.11	Primer seal	18,582	m2	\$4	\$75,071			
	Kerbing				\$0			
D.A.A.12	Mountable Kerb (MK)	2,478	m	\$25	\$63,040			
D.A.A.13	Kerb openings	124	no	\$350	\$43,400			
D.A.A.14	Semi Mountable Kerb (SMK)	2,478	m	\$30	\$73,473			
	Line Marking and Furniture				\$0			
D.A.A.15	Line marking	4,956	m	\$6	\$31,421			
	Landscaping				\$0			
D.A.A.16	Soft landscaping	7,020	m2	\$0	Excl.			
D.A.A.17	Landscape mix	1,755	m3	\$90	\$157,950			
D.A.A.18	Rock pitching	413	m2	\$155	\$64,118			
D.A.A.19	Drainage layer	7,433	m2	\$0	Excl.			
	TOTAL Road Works		Item			\$2,102,793		
<b>D.A.B</b>	<b><u>Shared Paths</u></b>							
	Earthworks and Site Preparation							
D.A.B.1	Site Clearance (based on light shrubs)	6,194	m2	\$4	\$21,803			
D.A.B.2	Removal of topsoil 150mm and stockpile for later re-use	6,194	m2	\$2	\$9,972			
D.A.B.3	Cut to Fill - General Earthworks	1,859	m3	\$8	\$15,300			
D.A.B.4	Imported Fill	0	m3	\$30	Excl.			
	Subgrade Preparation							
D.A.B.5	Preparation, trim and compact	6,194	m2	\$6	\$34,067			
	Pathway							
D.A.B.6	100 thick concrete footpath with broomed finish	6,194	m2	\$71	\$438,783			
D.A.B.7	Sand fill below concrete footpath (100mm)	6,194	m2	\$5	\$33,819			
	TOTAL Shared Paths		Item			\$553,744		
<b>D.A.C</b>	<b><u>Street Lighting</u></b>							
D.A.C.1	6.5 SOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads	71	no	\$3,442	\$244,362			
D.A.C.2	6.5 DOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads	36	no	\$5,111	\$183,995			
	TOTAL Street Lighting		Item			\$428,357		
<b>D.A.D</b>	<b><u>Road Drainage</u></b>							
D.A.D.1	450dia reinforced concrete pipe including excavation and backfill	1,239	m	\$233	\$288,749			
D.A.D.2	150dia slotted PVC subsoil drainage pipe including aggregate, geofabric and porous sand	1,239	m	\$189	\$233,675			
					CESP measured at intersections, RAB's			
D.A.D.3	Side entry pits including liner, cover, excavation, and associated works	0	no	\$2,667				

D.A.D.4	Raised gully / bubble up pits including liner, cover, grate, excavation, rock pitching, and associated works	42	no	\$3,021	\$126,864		
D.A.D.5	6500x600mm box culvert incl. headwall, excavation, backfill, etc.	30	m	\$9,919	\$297,583		
D.A.D.6	Remove existing culvert in preparation for new culvert (approximatley 7m wide)	1	LS	\$9,823	\$9,823		
	<b>TOTAL Road Drainage</b>		Item			\$956,695	
<u>D.A.E</u>	<u>Preliminaries and Project Costs</u>						
D.A.E.1	Traffic Management	5.0000	%	\$4,041,589	\$202,079		
D.A.E.2	Project Overheads and Preliminaries (Indirect Construction Costs)	15.0000	%	\$4,041,589	\$606,238		
D.A.E.3	Project Owner's Cost (Planning and Design Costs)	7.5000	%	\$4,041,589	\$303,119		
D.A.E.4	Risk Contingency Allowance	10.0000	%	\$5,153,026	\$515,303		
	<b>TOTAL Preliminaries and Project Costs</b>		Item			\$1,626,740	
	<b>TOTAL Road Construction</b>						<b>\$5,668,329</b>
<u>D.B</u>	<u>Watkins Road (Roundabout)</u>						
<u>D.B.A</u>	<u>Road Works</u>						
D.B.A.1	Earthworks and Site Preparation Site Clearance (based on light shrubs)	2,504	m2	\$4	\$8,814		
D.B.A.2	Removal of topsoil 150mm and stockpile for later re-use	2,504	m2	\$2	\$4,031		
D.B.A.3	Cut to Fill - General Earthworks	752	m3	\$8	\$6,189		
D.B.A.4	Imported Fill	0	m3	\$30	Excl.		
D.B.A.5	Subgrade Preparation Preparation, trim and compact Sub Base and Base Course	2,504	m2	\$6	\$13,772		
D.B.A.6	100mm thick crushed rock base course	1,983	m2	\$8	\$16,300		
D.B.A.7	200mm thick compacted limestone sub base		m2	\$14	\$0		
D.B.A.8	250mm thick compacted limestone sub base	1,983	m2	\$17	\$34,663		
D.B.A.9	Road Paving 50mm thick (AC14)	1,518	m2	\$31	\$47,422		
D.B.A.10	Primer seal Brick Paving	1,518	m2	\$4	\$6,133		
			Item		\$0		
D.B.A.11	80 thick brick pavers	333	m2	\$100	\$33,333		
D.B.A.12	30 thick compacted sand bed	180	m2	\$2	\$295		
D.B.A.13	40 thick compacted sand bed (RAB)	153	m2	\$2	\$335		
D.B.A.14	170mm thick compacted limestone	180	m2	\$11	\$2,047		
D.B.A.15	250mm thick compacted limestone sub base Kerbing	153	m2	\$17	\$2,674		
D.B.A.16	Mountable Kerb (MK)	70	m	\$25	\$1,781		
D.B.A.17	Semi Mountable Kerb (SMK)	143	m	\$30	\$4,240		
D.B.A.18	Barrier Kerb (BK) Line Marking and Furniture	54	m	\$53	\$2,869		
D.B.A.19	Line marking	53	m	\$6	\$336		
D.B.A.20	Street sign post	1	no	\$122	\$122		
D.B.A.21	Street name plate	2	no	\$199	\$398		
D.B.A.22	Chevron sign	1	no	\$613	\$613		
D.B.A.23	Traffic sign Landscaping	3	no	\$450	\$1,350		
					\$0		
D.B.A.24	Soft landscaping	227	m2	\$0	Excl.		
D.B.A.25	Landscape mix Other	57	m3	\$90	\$5,130		
D.B.A.26	Allow for connection to Watkins Road (both sides)		item		\$20,000		
	<b>TOTAL Road Works</b>		Item			\$212,847	
<u>D.B.B</u>	<u>Shared Paths</u>						
D.B.B.1	Earthworks and Site Preparation Site Clearance (based on light shrubs)	356	m2	\$4	\$1,253		
D.B.B.2	Removal of topsoil 150mm and stockpile for later re-use	356	m2	\$2	\$573		
D.B.B.3	Cut to Fill - General Earthworks	107	m3	\$8	\$881		

D.B.B.4	Imported Fill	0	m3	\$30	Excl.			
	Subgrade Preparation							
D.B.B.5	Preparation, trim and compact Pathway	356	m2	\$6	\$1,958			
D.B.B.6	100 thick concrete footpath with broomed finish	356	m2	\$71	\$25,219			
D.B.B.7	Sand fill below concrete path (100mm)	356	m2	\$5	\$1,944			
D.B.B.8	Pram ramp including tactile	6	no	\$973	\$5,836			
D.B.B.9	Tactile paving	10	m2	\$325	\$3,250			
	Line Marking and Furniture							
D.B.B.10	Traffic sign	2	no	\$450	\$900			
	TOTAL Shared Paths		Item			\$41,814		
<b>D.B.C</b>	<b>Street Lighting</b>							
D.B.C.1	6.5 SOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads	4	no	\$3,442	\$13,767			
	TOTAL Street Lighting		Item			\$13,767		
<b>D.B.D</b>	<b>Road Drainage</b>							
D.B.D.1	450dia reinforced concrete pipe including excavation and backfill	130	m	\$233	\$30,297			
D.B.D.2	Side entry pits including liner, cover, excavation, and associated works	4	no	\$2,667	\$10,666			
	TOTAL Road Drainage		Item			\$40,963		
<b>D.B.E</b>	<b>Preliminaries and Project Costs</b>							
D.B.E.1	Traffic Management	5.0000	%	\$309,390	\$15,470			
D.B.E.2	Project Overheads and Preliminaries (Indirect Construction Costs)	15.0000	%	\$309,390	\$46,409			
D.B.E.3	Project Owner's Cost (Planning and Design Costs)	7.5000	%	\$309,390	\$23,204			
D.B.E.4	Risk Contingency Allowance	10.0000	%	\$394,473	\$39,447			
	TOTAL Preliminaries and Project Costs		Item			\$124,530		
	<b>TOTAL Watkins Road (Roundabout)</b>						<b>\$433,920</b>	
<b>D.C</b>	<b>Galvin Road (Roundabout)</b>							
<b>D.C.A</b>	<b>Road Works</b>							
	Earthworks and Site Preparation							
D.C.A.1	Site Clearance (based on light shrubs)	2,504	m2	\$4	\$8,814			
D.C.A.2	Removal of topsoil 150mm and stockpile for later re-use	2,504	m2	\$2	\$4,031			
D.C.A.3	Cut to Fill - General Earthworks	752	m3	\$8	\$6,189			
D.C.A.4	Imported Fill	0	m3	\$30	Excl.			
	Subgrade Preparation							
D.C.A.5	Preparation, trim and compact	2,504	m2	\$6	\$13,772			
	Sub Base and Base Course							
D.C.A.6	100mm thick crushed rock base course	1,983	m2	\$8	\$16,300			
D.C.A.7	250mm thick compacted limestone sub base	1,983	m2	\$17	\$34,663			
	Road Paving							
D.C.A.8	50mm thick (AC14)	1,518	m2	\$31	\$47,422			
D.C.A.9	Primer seal	1,518	m2	\$4	\$6,133			
	Brick Paving							
D.C.A.10	80 thick brick pavers	333	m2	\$100	\$33,333			
D.C.A.11	30 thick compacted sand bed	180	m2	\$2	\$295			
D.C.A.12	40 thick compacted sand bed (RAB)	153	m2	\$2	\$335			
D.C.A.13	170mm thick compacted limestone	180	m2	\$11	\$2,047			
D.C.A.14	250mm thick compacted limestone sub base	153	m2	\$17	\$2,674			
	Kerbing							
D.C.A.15	Mountable Kerb (MK)	70	m	\$25	\$1,781			
D.C.A.16	Semi Mountable Kerb (SMK)	143	m	\$30	\$4,240			
D.C.A.17	Barrier Kerb (BK)	54	m	\$53	\$2,869			
	Line Marking and Furniture							
D.C.A.18	Line marking	53	m	\$6	\$336			
D.C.A.19	Street sign post	1	no	\$122	\$122			
D.C.A.20	Street name plate	2	no	\$199	\$398			
D.C.A.21	Chevron sign	1	no	\$613	\$613			
D.C.A.22	Traffic sign	3	no	\$450	\$1,350			
	Landscaping				\$0			

D.C.A.23	Soft landscaping	227	m2	\$0	Excl.		
D.C.A.24	Landscape mix Other	57	m3	\$90	\$5,130		
D.C.A.25	Allow for connection to Galvin Road (both sides) TOTAL Road Works		item Item		\$20,000	\$212,847	
<u>D.C.B</u>	<u>Shared Paths</u>						
	Earthworks and Site Preparation						
D.C.B.1	Site Clearance (based on light shrubs)	356	m2	\$4	\$1,253		
D.C.B.2	Removal of topsoil 150mm and stockpile for later re-use	356	m2	\$2	\$573		
D.C.B.3	Cut to Fill - General Earthworks	107	m3	\$8	\$881		
D.C.B.4	Imported Fill	0	m3	\$30	Excl.		
	Subgrade Preparation						
D.C.B.5	Preparation, trim and compact Pathway	356	m2	\$6	\$1,958		
D.C.B.6	100 thick concrete footpath with broomed finish	356	m2	\$71	\$25,219		
D.C.B.7	Sand fill below concrete path (100mm) Pram ramp	356	m2 no	\$5 \$670	\$1,944		
D.C.B.8	Pram ramp including tactile	6	no	\$973	\$5,836		
D.C.B.9	Tactile paving Line Marking and Furniture	10	m2	\$325	\$3,250		
D.C.B.10	Traffic sign TOTAL Shared Paths	2	no Item	\$450	\$900	\$41,814	
<u>D.C.C</u>	<u>Street Lighting</u>						
D.C.C.1	6.5 SOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads TOTAL Street Lighting	4	no Item	\$3,442	\$13,767	\$13,767	
<u>D.C.D</u>	<u>Road Drainage</u>						
D.C.D.1	450dia reinforced concrete pipe including excavation and backfill	130	m	\$233	\$30,297		
D.C.D.2	Side entry pits including liner, cover, excavation, and associated works TOTAL Road Drainage	4	no Item	\$2,667	\$10,666	\$40,963	
<u>D.C.E</u>	<u>Preliminaries and Project Costs</u>						
D.C.E.1	Traffic Management	5.0000	%	\$309,390	\$15,470		
D.C.E.2	Project Overheads and Preliminaries (Indirect Construction Costs)	15.0000	%	\$309,390	\$46,409		
D.C.E.3	Project Owner's Cost (Planning and Design Costs)	7.5000	%	\$309,390	\$23,204		
D.C.E.4	Risk Contingency Allowance	10.0000	%	\$394,473	\$39,447		
	TOTAL Preliminaries and Project Costs		Item			\$124,530	
	<b>TOTAL Galvin Road (Roundabout)</b>						<b>\$433,920</b>
<u>D.D</u>	<u>Utilities</u>						
<u>D.D.A</u>	<u>Power and Lighting (Western Power)</u>						
D.D.A.1	General Provisional Sum of \$100,000 as it is not clear if diversions are required TOTAL Power and Lighting (Western Power)	1	PS Item	\$100,000	\$100,000	\$100,000	
<u>D.D.B</u>	<u>Communications (NBN / Telstra / Westnet / etc.)</u>						
D.D.B.1	General Provisional Sum of \$100,000 as it is not clear if diversions are required TOTAL Communications (NBN / Telstra / Westnet / etc.)	1	PS Item	\$100,000	\$100,000	\$100,000	
<u>D.D.C</u>	<u>Water and Sewer (Water Corporation)</u>						
	No allowance has been made for Water Corporation diversions as we do not see existing mains from our desktop study TOTAL Water and Sewer (Water Corporation)		Note Item			\$0	
<u>D.D.D</u>	<u>Gas (ATCO)</u>						
	No allowance has been made for ATCO diversions as we do not see existing valves from our desktop study TOTAL Gas (ATCO)		Note Item			\$0	
<u>D.D.E</u>	<u>Preliminaries and Project Costs</u>						
D.D.E.1	Traffic Management	10.0000	%	\$200,000	\$20,000		
D.D.E.2	Project Overheads and Preliminaries (Indirect Construction Costs)	15.0000	%	\$200,000	\$30,000		
D.D.E.3	Project Owner's Cost (Planning and Design Costs)	5.0000	%	\$200,000	\$10,000		
D.D.E.4	Risk Contingency Allowance	10.0000	%	\$260,000	\$26,000		

	TOTAL Preliminaries and Project Costs		Item			\$86,000			
	<b>TOTAL Utilities</b>							<b>\$286,000</b>	
A.A.A.7	Estimated Imported Fill	12,060	m3						
A.A.A.5	Total m3 of Cut to Fill - General Earthworks	14,355	m3						
	Less Cut to Fill costed	0	m3	\$30	\$0				
	<b>Total Adjustment for Imported Fill (less Cut to Fill)</b>	<i>See "Imported Fill" sheet at the end of these costings.</i>							<b>\$0</b>
	<b>TOTAL Road – North-South Road</b>		Item					<b>\$6,822,168</b>	

**Shire of Serpentine Jarrahdale DCP  
 DCA 3 - Mundijong Whitby - Update**

Code	Description	Quantity	UOM	Rate	Subtotal	Sub Section Total	Section Total	Road/ DOS Total
<b>E</b>	<b>ROAD – SKYLINE BOULEVARD</b>							
<b>E.A</b>	<b>Road Construction</b>							
<b>E.A.A</b>	<b>Road Works</b>							
	Earthworks and Site Preparation				\$0			
E.A.A.1	Site Clearance (based on light shrubs)	6,817	m2	\$4	\$23,996			
E.A.A.2	Removal of topsoil 150mm and stockpile for later re-use	6,817	m2	\$2	\$10,975			
E.A.A.3	Cut to Fill - General Earthworks	2,231	m3	\$8	\$18,361			
E.A.A.4	Imported Fill	0	m3	\$30	\$0			
E.A.A.5	Form swale	620	m2	\$4	\$2,350			
	Subgrade Preparation				\$0			
E.A.A.6	Preparation, trim and compact	6,817	m2	\$6	\$37,494			
	Sub Base and Base Course				\$0			
E.A.A.7	100mm thick crushed rock base course	4,617	m2	\$8	\$37,952			
E.A.A.8	200mm thick compacted limestone sub base	4,617	m2	\$14	\$64,592			
	Road Paving				\$0			
E.A.A.9	30mm thick (AC10)	3,486	m2	\$18	\$63,410			
E.A.A.10	Primer seal	3,486	m2	\$4	\$14,083			
	Kerbing				\$0			
E.A.A.11	Mountable Kerb (MK)	620	m	\$25	\$15,773			
E.A.A.12	Kerb openings	31	no	\$350	\$10,850			
E.A.A.13	Semi Mountable Kerb (SMK)	620	m	\$30	\$18,383			
E.A.A.14	Concrete flush edge beam	155	m	\$67	\$10,393			
	Line Marking and Furniture				\$0			
E.A.A.15	Line marking	620	m	\$6	\$3,931			
	Landscaping				\$0			
E.A.A.16	Soft landscaping	878	m2	\$0	Excl.			
E.A.A.17	Landscape mix	220	m3	\$90	\$19,800			
E.A.A.18	Rock pitching	52	m2	\$155	\$8,073			
E.A.A.19	Drainage layer	930	m2	\$0	Excl.			
	Other							
E.A.A.20	Connection to existing		item		\$10,000			
	TOTAL Road Works		Item			\$370,415		
<b>E.A.B</b>	<b>Shared Paths</b>							
	Earthworks and Site Preparation							
E.A.B.1	Site Clearance (based on light shrubs)	1,550	m2	\$4	\$5,456			
E.A.B.2	Removal of topsoil 150mm and stockpile for later re-use	1,550	m2	\$2	\$2,496			
E.A.B.3	Cut to Fill - General Earthworks	465	m3	\$8	\$3,827			
E.A.B.4	Imported Fill	0	m3	\$30	Excl.			
	Subgrade Preparation							
E.A.B.5	Preparation, trim and compact	1,550	m2	\$6	\$8,525			
	Pathway							
E.A.B.6	100 thick concrete footpath with broomed finish	1,550	m2	\$71	\$109,802			
E.A.B.7	Sand fill below concrete footpath (100mm)	1,550	m2	\$5	\$8,463			
	TOTAL Shared Paths		Item			\$138,568		
<b>E.A.C</b>	<b>Street Lighting</b>							
E.A.C.1	6.5 DOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads (as per remainder of Skyline Blvd)	9	no	\$5,111	\$45,999			
	TOTAL Street Lighting		Item			\$45,999		
<b>E.A.D</b>	<b>Road Drainage</b>							
E.A.D.1	450dia reinforced concrete pipe including excavation and backfill	310	m	\$233	\$72,246			
E.A.D.2	150dia slotted PVC subsoil drainage pipe including aggregate, geofabric and porous sand	310	m	\$189	\$58,466			

E.A.D.3	Side entry pits including liner, cover, excavation, and associated works	0	no	\$2,667	CESP measured at intersections, RAB's			
E.A.D.4	Raised gully / bubble up pits including liner, cover, grate, excavation, rock pitching, and associated works	11	no	\$3,021	\$33,226			
	<b>TOTAL Road Drainage</b>		Item			\$163,938		
<u>E.A.E</u>	<u>Preliminaries and Project Costs</u>							
E.A.E.1	Traffic Management	5.0000	%	\$718,920	\$35,946			
E.A.E.2	Project Overheads and Preliminaries (Indirect Construction Costs)	15.0000	%	\$718,920	\$107,838			
E.A.E.3	Project Owner's Cost (Planning and Design Costs)	7.5000	%	\$718,920	\$53,919			
E.A.E.4	Risk Contingency Allowance	10.0000	%	\$916,624	\$91,662			
	<b>TOTAL Preliminaries and Project Costs</b>		Item			\$289,365		
	<b>TOTAL Road Construction</b>						<b>\$1,008,286</b>	
<u>E.B</u>	<u>New Whitby Road (Roundabout)</u>							
<u>E.B.A</u>	<u>Road Works</u>							
E.B.A.1	Earthworks and Site Preparation Site Clearance (based on light shrubs)	2,504	m2	\$4	\$8,814			
E.B.A.2	Removal of topsoil 150mm and stockpile for later re-use	2,504	m2	\$2	\$4,031			
E.B.A.3	Cut to Fill - General Earthworks	752	m3	\$8	\$6,189			
E.B.A.4	Imported Fill	0	m3	\$30	Excl.			
E.B.A.5	Subgrade Preparation Preparation, trim and compact Sub Base and Base Course	2,504	m2	\$6	\$13,772			
E.B.A.6	100mm thick crushed rock base course	1,983	m2	\$8	\$16,300			
E.B.A.7	250mm thick compacted limestone sub base	1,983	m2	\$17	\$34,663			
E.B.A.8	Road Paving 50mm thick (AC14)	1,518	m2	\$31	\$47,422			
E.B.A.9	Primer seal	1,518	m2	\$4	\$6,133			
E.B.A.10	Brick Paving 80 thick brick pavers	333	m2	\$100	\$33,333			
E.B.A.11	30 thick compacted sand bed	180	m2	\$2	\$295			
E.B.A.12	40 thick compacted sand bed (RAB)	153	m2	\$2	\$335			
E.B.A.13	170mm thick compacted limestone	180	m2	\$11	\$2,047			
E.B.A.14	250mm thick compacted limestone sub base Kerbing	153	m2	\$17	\$2,674			
E.B.A.15	Mountable Kerb (MK)	70	m	\$25	\$1,781			
E.B.A.16	Semi Mountable Kerb (SMK)	143	m	\$30	\$4,240			
E.B.A.17	Barrier Kerb (BK) Line Marking and Furniture	54	m	\$53	\$2,869			
E.B.A.18	Line marking	53	m	\$6	\$336			
E.B.A.19	Street sign post	1	no	\$122	\$122			
E.B.A.20	Street name plate	2	no	\$199	\$398			
E.B.A.21	Chevron sign	1	no	\$613	\$613			
E.B.A.22	Traffic sign Landscaping	3	no	\$450	\$1,350 \$0			
E.B.A.23	Soft landscaping	227	m2	\$0	Excl.			
E.B.A.24	Landscape mix <b>TOTAL Road Works</b>	57	m3 Item	\$90	\$5,130	\$192,847		
<u>E.B.B</u>	<u>Shared Paths</u>							
E.B.B.1	Earthworks and Site Preparation Site Clearance (based on light shrubs)	356	m2	\$4	\$1,253			
E.B.B.2	Removal of topsoil 150mm and stockpile for later re-use	356	m2	\$2	\$573			
E.B.B.3	Cut to Fill - General Earthworks	107	m3	\$8	\$881			
E.B.B.4	Imported Fill	0	m3	\$30	Excl.			
E.B.B.5	Subgrade Preparation Preparation, trim and compact Pathway	356	m2	\$6	\$1,958			

E.B.B.6	100 thick concrete footpath with broomed finish	356	m2	\$71	\$25,219		
E.B.B.7	Sand fill below concrete path (100mm)	356	m2	\$5	\$1,944		
E.B.B.8	Pram ramp including tactile	6	no	\$973	\$5,836		
E.B.B.9	Tactile paving	10	m2	\$325	\$3,250		
	Line Marking and Furniture						
E.B.B.10	Traffic sign	2	no	\$450	\$900		
	TOTAL Shared Paths		Item			\$41,814	
<u>E.B.C</u>	<u>Street Lighting</u>						
E.B.C.1	6.5 SOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads	4	no	\$3,442	\$13,767		
	TOTAL Street Lighting		Item			\$13,767	
<u>E.B.D</u>	<u>Road Drainage</u>						
E.B.D.1	450dia reinforced concrete pipe including excavation and backfill	130	m	\$233	\$30,297		
E.B.D.2	Side entry pits including liner, cover, excavation, and associated works	4	no	\$2,667	\$10,666		
	TOTAL Road Drainage		Item			\$40,963	
<u>E.B.E</u>	<u>Preliminaries and Project Costs</u>						
E.B.E.1	Traffic Management	5.0000	%	\$289,390	\$14,470		
E.B.E.2	Project Overheads and Preliminaries (Indirect Construction Costs)	15.0000	%	\$289,390	\$43,409		
E.B.E.3	Project Owner's Cost (Planning and Design Costs)	7.5000	%	\$289,390	\$21,704		
E.B.E.4	Risk Contingency Allowance	10.0000	%	\$368,973	\$36,897		
	TOTAL Preliminaries and Project Costs		Item			\$116,480	
	<b>TOTAL New Whitby Road (Roundabout)</b>						<b>\$405,870</b>
<u>E.C</u>	<u>Tinspar Avenue (Roundabout) - already constructed</u>						
<u>E.C.A</u>	<u>Road Works</u>						
E.C.A.1	Already Constructed				\$0		
	TOTAL Road Works		Item			\$0	
<u>E.C.B</u>	<u>Shared Paths</u>						
E.C.B.1	Already Constructed				\$0		
	TOTAL Shared Paths		Item			\$0	
<u>E.C.C</u>	<u>Street Lighting</u>						
E.C.C.1	Already Constructed				\$0		
	TOTAL Street Lighting		Item			\$0	
<u>E.C.D</u>	<u>Road Drainage</u>						
E.C.D.1	Already Constructed				\$0		
	TOTAL Road Drainage		Item			\$0	
<u>E.C.E</u>	<u>Preliminaries and Project Costs</u>						
E.C.E.1	Already Constructed				\$0		
	TOTAL Preliminaries and Project Costs		Item			\$0	
	<b>TOTAL Tinspar Avenue (Roundabout) - already constructed</b>						<b>\$0</b>
<u>E.D</u>	<u>Utilities</u>						
<u>E.D.A</u>	<u>Power and Lighting (Western Power)</u>						
	No allowance has been made for Western Power diversions as we do not see existing mains from our desktop study		Note				
	TOTAL Power and Lighting (Western Power)		Item			\$0	
<u>E.D.B</u>	<u>Communications (NBN / Telstra / Westnet / etc.)</u>						
	No allowance has been made for Communications diversions as we do not see existing mains from our desktop study		Note				
	TOTAL Communications (NBN / Telstra / Westnet / etc.)		Item			\$0	
<u>E.D.C</u>	<u>Water and Sewer (Water Corporation)</u>						
	No allowance has been made for Water Corporation diversions as we do not see existing mains from our desktop study		Note				
	TOTAL Water and Sewer (Water Corporation)		Item			\$0	
<u>E.D.D</u>	<u>Gas (ATCO)</u>						
	No allowance has been made for ATCO diversions as we do not see existing valves from our desktop study		Note				
	TOTAL Gas (ATCO)		Item			\$0	

E.D.E	<b>Preliminaries and Project Costs</b>								
E.D.E.1	Traffic Management	10.0000	%	\$0	\$0				
E.D.E.2	Project Overheads and Preliminaries (Indirect Construction Costs)	15.0000	%	\$0	\$0				
E.D.E.3	Project Owner's Cost (Planning and Design Costs)	5.0000	%	\$0	\$0				
E.D.E.4	Risk Contingency Allowance	10.0000	%	\$0	\$0				
	TOTAL Preliminaries and Project Costs		Item			\$0			
	<b>TOTAL Utilities</b>							<b>\$0</b>	
A.A.A.7	Estimated Imported Fill	2,640	m3						
A.A.A.5	Total m3 of Cut to Fill - General Earthworks	3,555	m3						
	Less Cut to Fill costed	0	m3	\$30	\$0				
	<b>Total Adjustment for Imported Fill (less Cut to Fill)</b>	<i>See "Imported Fill" sheet at the end of these costings.</i>							<b>\$0</b>
	<b>TOTAL Road (Remaining) – Skyline Boulevard</b>		<b>Item</b>					<b>\$1,414,156</b>	
	Prefunded build completed prior to gazettal of the Amendment under DCP Condition							\$1,320,000	
	<b>Total to be included in DCP1</b>							<b>\$2,734,156</b>	

**Shire of Serpentine Jarrahdale DCP  
 DCA 3 - Mundijong Whitby - Update**

Code	Description	Quantity	UOM	Rate	Subtotal	Sub Section Total	Section Total	Road/ DOS Total
<b>F</b>	<b>ROAD – TINSPAR AVENUE</b>							
<b>F.A</b>	<b>Road Construction</b>							
<b>F.A.A</b>	<b>Road Works</b>							
	Earthworks and Site Preparation				\$0			
F.A.A.1	Site Clearance (based on light shrubs)	26,701	m2	\$4	\$93,988			
F.A.A.2	Removal of topsoil 150mm and stockpile for later re-use	26,701	m2	\$2	\$42,989			
F.A.A.3	Cut to Fill - General Earthworks	8,739	m3	\$8	\$71,922			
F.A.A.4	Imported Fill	0	m3	\$30	Excl.			
F.A.A.5	Form swale	2,428	m2	\$4	\$9,202			
	Subgrade Preparation				\$0			
F.A.A.6	Preparation, trim and compact Sub Base and Base Course	26,701	m2	\$6	\$146,856			
F.A.A.7	100mm thick crushed rock base course	15,050	m2	\$8	\$123,711			
F.A.A.8	200mm thick compacted limestone sub base	15,050	m2	\$14	\$210,550			
	Road Paving				\$0			
F.A.A.9	30mm thick (AC10)	12,137	m2	\$18	\$220,772			
F.A.A.10	Primer seal	12,137	m2	\$4	\$49,033			
	Brick Paving		Item		\$0			
F.A.A.11	80 thick brick pavers	3,035	m2	\$100	\$303,804			
F.A.A.12	30 thick compacted sand bed	3,035	m2	\$2	\$4,977			
F.A.A.13	170mm thick compacted limestone Kerbing	3,035	m2	\$11	\$34,508			
					\$0			
F.A.A.14	Mountable Kerb (MK)	2,428	m	\$25	\$61,768			
F.A.A.15	Kerb openings	122	no	\$350	\$42,700			
F.A.A.16	Semi Mountable Kerb (SMK)	2,428	m	\$30	\$71,990			
F.A.A.17	Concrete flush edge beam	1,214	m	\$67	\$81,399			
	Line Marking and Furniture				\$0			
F.A.A.18	Line marking	2,428	m	\$6	\$15,394			
	Landscaping				\$0			
F.A.A.19	Soft landscaping	3,439	m2	\$0	Excl.			
F.A.A.20	Landscape mix	860	m3	\$90	\$77,400			
F.A.A.21	Rock pitching	203	m2	\$155	\$31,516			
F.A.A.22	Drainage layer	3,642	m2	\$0	Excl.			
	TOTAL Road Works		Item			\$1,694,477		
<b>F.A.B</b>	<b>Shared Paths</b>							
	Earthworks and Site Preparation							
F.A.B.1	Site Clearance (based on light shrubs)	6,069	m2	\$4	\$21,363			
F.A.B.2	Removal of topsoil 150mm and stockpile for later re-use	6,069	m2	\$2	\$9,771			
F.A.B.3	Cut to Fill - General Earthworks	1,821	m3	\$8	\$14,987			
F.A.B.4	Imported Fill	0	m3	\$30	Excl.			
	Subgrade Preparation							
F.A.B.5	Preparation, trim and compact Pathway	6,069	m2	\$6	\$33,380			
F.A.B.6	100 thick concrete footpath with broomed finish	6,069	m2	\$71	\$429,928			
F.A.B.7	Sand fill below concrete footpath (100mm)	6,069	m2	\$5	\$33,137			
	TOTAL Shared Paths		Item			\$542,565		
<b>F.A.C</b>	<b>Street Lighting</b>							
	6.5 DOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads (as per remainder of Skyline Blvd)	35	no	\$5,111	\$178,884			
	TOTAL Street Lighting		Item			\$178,884		
<b>F.A.D</b>	<b>Road Drainage</b>							
	450dia reinforced concrete pipe including excavation and backfill	1,214	m	\$233	\$282,923			

F.A.D.2	150dia slotted PVC subsoil drainage pipe including aggregate, geofabric and porous sand	1,214	m	\$189	\$228,960			
F.A.D.3	Side entry pits including liner, cover, excavation, and associated works	0	no	\$2,667	CESP measured at intersections, RAB's			
F.A.D.4	Raised gully / bubble up pits including liner, cover, grate, excavation, rock pitching, and associated works	41	no	\$3,021	\$123,844			
	<b>TOTAL Road Drainage</b>		Item			\$635,727		
<b>F.A.E</b>	<b>Preliminaries and Project Costs</b>							
F.A.E.1	Traffic Management	5.0000	%	\$3,051,653	\$152,583			
F.A.E.2	Project Overheads and Preliminaries (Indirect Construction Costs)	15.0000	%	\$3,051,653	\$457,748			
F.A.E.3	Project Owner's Cost (Planning and Design Costs)	7.5000	%	\$3,051,653	\$228,874			
F.A.E.4	Risk Contingency Allowance	10.0000	%	\$3,890,858	\$389,086			
	<b>TOTAL Preliminaries and Project Costs</b>		Item			\$1,228,290		
	<b>TOTAL Road Construction</b>							<b>\$4,279,944</b>
	<b><u>Kiernan Street (Seagull Intersection) - already constructed</u></b>							
<b>F.B</b>	<b>Road Works</b>							
F.B.A	<b>Road Works</b>							
F.B.A.1	Already Constructed				\$0			
	<b>TOTAL Road Works</b>		Item			\$0		
F.B.B	<b>Shared Paths</b>							
F.B.B.1	Already Constructed				\$0			
	<b>TOTAL Shared Paths</b>		Item			\$0		
F.B.C	<b>Street Lighting</b>							
F.B.C.1	Already Constructed				\$0			
	<b>TOTAL Street Lighting</b>		Item			\$0		
F.B.D	<b>Road Drainage</b>							
F.B.D.1	Already Constructed				\$0			
	<b>TOTAL Road Drainage</b>		Item			\$0		
F.B.E	<b>Preliminaries and Project Costs</b>							
F.B.E.1	Already Constructed				\$0			
	<b>TOTAL Preliminaries and Project Costs</b>		Item			\$0		
	<b>TOTAL Kiernan Street (Seagull Intersection) - already constructed</b>							<b>\$0</b>
<b>F.C</b>	<b><u>South Western Highway (Channelised Intersection)</u></b>							
F.C.A	<b>Road Works</b>							
F.C.A.1	Earthworks and Site Preparation				\$0			
F.C.A.1	Site Clearance (based on light shrubs)	2,550	m2	\$4	\$8,976			
F.C.A.2	Removal of topsoil 150mm and stockpile for later re-use	2,550	m2	\$2	\$4,106			
F.C.A.3	Cut to Fill - General Earthworks	765	m3	\$8	\$6,296			
F.C.A.4	Detailed excavation - mill and profile	1,800	m2	\$19	\$34,164			
F.C.A.5	Imported Fill	0	m3	\$30	Excl.			
F.C.A.6	Subgrade Preparation				\$0			
F.C.A.6	Preparation, trim and compact	2,550	m2	\$6	\$14,025			
	<b>Sub Base and Base Course</b>				\$0			
F.C.A.7	100mm thick crushed rock base course	2,466	m2	\$8	\$20,271			
F.C.A.8	250mm thick compacted limestone sub base	2,466	m2	\$17	\$43,106			
F.C.A.9	Road Paving				\$0			
F.C.A.9	50mm thick (AC14)	1,980	m2	\$31	\$61,855			
F.C.A.10	Extra over for 2% red oxide	90	m2	\$6	\$561			
F.C.A.11	Primer seal	1,980	m2	\$4	\$7,999			
	Kerbing				\$0			
F.C.A.12	Mountable Kerb (MK)	60	m	\$25	\$1,526			
F.C.A.13	Semi Mountable Kerb (SMK)	80	m	\$30	\$2,372			
	Line Marking and Furniture				\$0			
F.C.A.14	Line marking	660	m	\$6	\$4,184			
F.C.A.15	Street sign post	1	no	\$122	\$122			
F.C.A.16	Street name plate	2	no	\$199	\$398			
F.C.A.17	Chevron sign	1	no	\$613	\$613			

F.C.A.18	Traffic sign Landscaping	3	no	\$450	\$1,350 \$0		
F.C.A.19	Soft landscaping	180	m2	\$0	Excl.		
F.C.A.20	Landscape mix	42	m3	\$90	\$3,780		
F.C.A.21	Rock pitching	8	m2	\$155	\$1,242		
F.C.A.22	Drainage layer Other	180	m2	\$0	Excl.		
F.C.A.23	Allow for connection to SWH TOTAL Road Works		item Item		\$20,000	\$236,945	
<b>F.C.B</b>	<b>Shared Paths</b>						
	Earthworks and Site Preparation						
F.C.B.1	Site Clearance (based on light shrubs)	150	m2	\$4	\$528		
F.C.B.2	Removal of topsoil 150mm and stockpile for later re-use	150	m2	\$2	\$242		
F.C.B.3	Cut to Fill - General Earthworks	45	m3	\$8	\$370		
F.C.B.4	Imported Fill	0	m3	\$30	Excl.		
	Subgrade Preparation						
F.C.B.5	Preparation, trim and compact Pathway	150	m2	\$6	\$825		
F.C.B.6	100 thick concrete footpath with broomed finish	150	m2	\$71	\$10,626		
F.C.B.7	Sand fill below concrete footpath (100mm)	150	m2	\$5	\$819		
F.C.B.8	Pram ramp including tactile Line Marking and Furniture	2	no	\$973	\$1,945		
F.C.B.9	Traffic sign TOTAL Shared Paths	2	no Item	\$450	\$900	\$16,255	
<b>F.C.C</b>	<b>Street Lighting</b>						
	6.5 SOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads						
F.C.C.1	TOTAL Street Lighting	2	no Item	\$3,442	\$6,883	\$6,883	
<b>F.C.D</b>	<b>Road Drainage</b>						
	450dia reinforced concrete pipe including excavation and backfill						
F.C.D.1		90	m	\$233	\$20,975		
	Side entry pits including liner, cover, excavation, and associated works						
F.C.D.2	TOTAL Road Drainage	2	no Item	\$2,667	\$5,333	\$26,308	
<b>F.C.E</b>	<b>Preliminaries and Project Costs</b>						
F.C.E.1	Traffic Management	5.0000	%	\$286,391	\$14,320		
F.C.E.2	Project Overheads and Preliminaries (Indirect Construction Costs)	15.0000	%	\$286,391	\$42,959		
F.C.E.3	Project Owner's Cost (Planning and Design Costs)	7.5000	%	\$286,391	\$21,479		
F.C.E.4	Risk Contingency Allowance	10.0000	%	\$365,148	\$36,515		
	TOTAL Preliminaries and Project Costs		Item			\$115,272	
	<b>TOTAL South Western Highway (Channelised Intersection)</b>						<b>\$401,663</b>
<b>F.D</b>	<b>Utilities</b>						
<b>F.D.A</b>	<b>Power and Lighting (Western Power)</b>						
	General Provisional Sum of \$50,000 as it is not clear if diversions are required						
F.D.A.1	TOTAL Power and Lighting (Western Power)	1	PS Item	\$50,000	\$50,000	\$50,000	
<b>F.D.B</b>	<b>Communications (NBN / Telstra / Westnet / etc.)</b>						
	General Provisional Sum of \$50,000 as it is not clear if diversions are required						
F.D.B.1	TOTAL Communications (NBN / Telstra / Westnet / etc.)	1	PS Item	\$50,000	\$50,000	\$50,000	
<b>F.D.C</b>	<b>Water and Sewer (Water Corporation)</b>						
	Offset and sleeve approximatley 30m road length of water and sewer about 1m deeper from the current location - Provisional Sum						
F.D.C.1	TOTAL Water and Sewer (Water Corporation)	1	PS Item	\$49,068	\$49,068	\$49,068	
<b>F.D.D</b>	<b>Gas (ATCO)</b>						
	No allowance has been made for ATCO diversions as we do not see existing valves from our desktop study						
	TOTAL Gas (ATCO)		Note Item			\$0	
<b>F.D.E</b>	<b>Preliminaries and Project Costs</b>						

F.D.E.1	Traffic Management	5.0000	%	\$149,068	\$7,453		
F.D.E.2	Project Overheads and Preliminaries (Indirect Construction Costs)	15.0000	%	\$149,068	\$22,360		
F.D.E.3	Project Owner's Cost (Planning and Design Costs)	5.0000	%	\$149,068	\$7,453		
F.D.E.4	Risk Contingency Allowance	10.0000	%	\$186,335	\$18,633		
	<b>TOTAL Preliminaries and Project Costs</b>		Item			\$55,900	
	<b>TOTAL Utilities</b>						<b>\$204,968</b>
A.A.A.7	Estimated Imported Fill	8,715	m3				
A.A.A.5	Total m3 of Cut to Fill - General Earthworks	11,370	m3				
	Less Cut to Fill costed	0	m3	\$30	\$0		
	<b>Total Adjustment for Imported Fill (less Cut to Fill)</b>	<i>See "Imported Fill" sheet at the end of these costings.</i>					<b>\$0</b>
	<b>TOTAL Road – Tinspar Avenue</b>		Item				<b>\$4,886,575</b>
	Prefunded build completed prior to gazettal of the Amendment under DCP Condition						\$1,265,000
	<b>Total to be included in DCP1</b>						<b>\$6,151,575</b>

**Shire of Serpentine Jarrahdale DCP  
 DCA 3 - Mundijong Whitby - Update**

Code	Description	Quantity	UOM	Rate	Subtotal	Sub Section Total	Section Total	Road/ DOS Total
<b>G</b>	<b>DISTRICT OPEN SPACE – WHITBY HIGH SCHOOL DISTRICT SPORTING SPACE</b>							
<b>G.A</b>	<b>Siteworks &amp; Earthworks</b>							
G.A.A	Site Clearance (based on light shrubs)	46,000	m2	\$4		\$169,280		
G.A.B	Removal of topsoil 150mm and remove off-site	46,000	m2	\$2		\$77,234		
G.A.C	Cut to Fill - General Earthworks of 300mm across site	13,800	m3	\$8		\$113,471		
G.A.D	Levelling, grading and compaction to final design levels	46,000	m2	\$3		\$151,800		
G.A.E	Weed eradication	46,000	m2	\$1		\$26,910		
G.A.F	Excavation to 300 below finished levels	13,800	m2	\$14		\$190,440		
G.A.G	300 deep clean sand fill	13,800	m3	\$30		\$414,000		
G.A.H	Gypsum soil conditioner	46,000	m2	\$2		\$77,740		
G.A.I	15 deep C-Wise Horticulture soil conditioner	46,000	m2	\$5		\$251,160		
G.A.J	100 thick imported turf sand	46,000	sqm	\$5		\$227,240		
G.A.K	Organic fertilizer to turf	46,000	sqm	\$1		\$53,820		
	<b>TOTAL Siteworks &amp; Earthworks</b>						<b>\$1,754,000</b>	
<b>G.B</b>	<b>Grassing &amp; Irrigation</b>							
G.B.A	Supply and lay roll on turf including maintaining	46,000	sqm	\$20		\$920,000		
G.B.B	Irrigation	46,000	sqm	\$8		\$368,000		
G.B.C	Provisional sum allowance for pumps, bores and controls - no allowance for storage tank	1	Item	\$80,000		\$80,000		
	<b>TOTAL Grassing &amp; Irrigation</b>						<b>\$1,368,000</b>	
<b>G.C</b>	<b>Landscaping &amp; Equipment</b>							
	Equipment							
G.C.A	AFL goal posts (set of 8) including sleeves, footings, cages and post padding	1	no	\$7,406		\$7,406		
G.C.B	Timber Bollards @1200 spacing	188	no	\$121		\$22,748		
G.C.C	<u>Line marking to oval</u>							
G.C.C.1	Allow 2 guys 1 day	16	hrs	\$100	\$1,600			
G.C.C.2	Equipment	1	no	\$1,000	\$1,000			
G.C.C.3	Profit				\$260			
	<b>TOTAL Line marking to oval</b>	<b>710</b>	<b>m</b>	<b>\$4</b>		<b>\$2,860</b>		
G.C.D	Provisional Sums Provisional sum allowance for signage	1	item	\$5,000		\$5,000		
	<b>TOTAL Landscaping &amp; Equipment</b>						<b>\$39,000</b>	
<b>G.D</b>	<b>Drainage</b>							
G.D.A	150 diameter pipe including excavation and backfill	1,310	m	\$143		\$186,675		
	<b>TOTAL Drainage</b>						<b>\$187,000</b>	
<b>G.E</b>	<b>Preliminaries &amp; Project Costs</b>							
G.E.A	Traffic Management	0.0000	%	\$3,348,000		\$0		
G.E.B	Project Overheads and Preliminaries (Indirect Construction Costs)	10.0000	%	\$3,348,000		\$334,800		
G.E.C	Project Owner's Cost (Planning and Design Costs)	7.5000	%	\$3,348,000		\$251,100		
G.E.D	Risk Contingency Allowance	10.0000	%	\$3,933,900		\$393,390		
	<b>TOTAL Preliminaries &amp; Project Costs</b>						<b>\$980,000</b>	
	<b>TOTAL District Open Space – Whitby High School District Sporting Space</b>		<b>Item</b>					<b>\$4,328,000</b>

**Shire of Serpentine Jarrahdale DCP  
 DCA 3 - Mundijong Whitby - Update**

Code	Description	Quantity	UOM	Rate	Subtotal	Sub Section Total	Section Total	Road/ DOS Total
<b>DISTRICT OPEN SPACE – TAYLOR ROAD/ SCOTT ROAD PRIMARY SCHOOL NEIGHBOURHOOD OPEN SPACE</b>								
<b>H</b>	<b>Siteworks &amp; Earthworks</b>							
H.A.A	Site Clearance (based on light shrubs)	46,000	m2	\$4		\$169,280		
H.A.B	Removal of topsoil 150mm and remove off-site	46,000	m2	\$2		\$77,234		
H.A.C	Cut to Fill - General Earthworks of 300mm across site	13,800	m3	\$8		\$113,471		
H.A.D	Levelling, grading and compaction to final design levels	46,000	m2	\$3		\$151,800		
H.A.E	Weed eradication	46,000	m2	\$1		\$26,910		
H.A.F	Excavation to 300 below finished levels	13,800	m2	\$14		\$190,440		
H.A.G	300 deep clean sand fill	13,800	m3	\$30		\$414,000		
H.A.H	Gypsum soil conditioner	46,000	m2	\$2		\$77,740		
H.A.I	15 deep C-Wise Horticulture soil conditioner	46,000	m2	\$5		\$251,160		
H.A.J	100 thick imported turf sand	46,000	sqm	\$5		\$227,240		
H.A.K	Organic fertilizer to turf	46,000	sqm	\$1		\$53,820		
	<b>TOTAL Siteworks &amp; Earthworks</b>						<b>\$1,754,000</b>	
<b>H.B</b>	<b>Grassing &amp; Irrigation</b>							
H.B.A	Supply and lay roll on turf including maintaining	46,000	sqm	\$20		\$920,000		
H.B.B	Irrigation	46,000	sqm	\$8		\$368,000		
H.B.C	Provisional sum allowance for pumps, bores and controls - no allowance for storage tank	1	Item	\$80,000		\$80,000		
	<b>TOTAL Grassing &amp; Irrigation</b>						<b>\$1,368,000</b>	
<b>H.C</b>	<b>Landscaping &amp; Equipment</b>							
	Equipment							
H.C.A	AFL goal posts (set of 8) including sleeves, footings, cages and post padding	1	no	\$7,406		\$7,406		
H.C.B	Timber Bollards @1200 spacing	188	no	\$121		\$22,748		
H.C.C	Line marking to oval							
H.C.C.1	Allow 2 guys 1 day	16	hrs	\$100	\$1,600			
H.C.C.2	Equipment	1	no	\$1,000	\$1,000			
H.C.C.3	Profit				\$260			
	<b>TOTAL Line marking to oval</b>	<b>710</b>	<b>m</b>	<b>\$4</b>		<b>\$2,860</b>		
H.C.D						\$0		
H.C.E	Provisional Sums					\$0		
H.C.F	Provisional sum allowance for signage	1	item	\$5,000		\$5,000		
	<b>TOTAL Landscaping &amp; Equipment</b>						<b>\$39,000</b>	
<b>H.D</b>	<b>Drainage</b>							
H.D.A	150 diameter pipe including excavation and backfill	1,310	m	\$143		\$186,675		
	<b>TOTAL Drainage</b>						<b>\$187,000</b>	
<b>H.E</b>	<b>Preliminaries &amp; Project Costs</b>							
H.E.A	Traffic Management	0.0000	%	\$3,348,000		\$0		
H.E.B	Project Overheads and Preliminaries (Indirect Construction Costs)	10.0000	%	\$3,348,000		\$334,800		
H.E.C	Project Owner's Cost (Planning and Design Costs)	7.5000	%	\$3,348,000		\$251,100		
H.E.D	Risk Contingency Allowance	10.0000	%	\$3,933,900		\$393,390		
	<b>TOTAL Preliminaries &amp; Project Costs</b>						<b>\$980,000</b>	
	<b>TOTAL District Open Space – Taylor Road/ Scott Road Primary School Neighbourhood Open Space</b>		<b>Item</b>					<b>\$4,328,000</b>

DCP Roads - Imported Fill inputs		Average fill depth required before topsoil removal (mm)	Topsoil removal (mm)	Total Sand depth reqd (mm)	Length	Width	Vol	Total m3	Notes
DCA3	Bishop Road East	150	150	300	1500	15	0.3	6,750.0	Existing carriageway to be upgraded, no fill required, pavement to be upgraded. Full length new carriageway 150mm fill required
	Taylor Road	150	150	300	1530	15	0.3	6,885.0	Existing carriageway to be upgraded, no fill required, pavement to be upgraded. Full length new carriageway 150mm fill required
	Town Centre Distributor Road (Whitby New Road)	150	150	300	3545	30	0.3	31,905.0	150mm fill required to lift full length
	North South Road	150	150	300	1340	30	0.3	12,060.0	150mm fill required to lift full length
	Skyline Boulevard	150	150	300	352	25	0.3	2,640.0	150mm fill required to lift full length
	Tinspar Avenue	150	150	300	1162	25	0.3	8,715.0	150mm fill required to lift full length