Wangaratta North-West Growth Area Development Contributions Plan

October 2018



mesh

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WANGARATTA NORTH-WEST GROWTH AREA DEVELOPMENT CONTRIBUTIONS PLAN

V

prepared for

Rural City of Wangaratta



October 2018

prepared on behalf of

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SUMMARY OF CHARGES

The following table provides an overview of the charges for transport, community, open space, drainage and planning infrastructure projects included in this DCP. A more detailed explanation of the strategic basis, apportionment, methods of calculation and proposed infrastructure projects are provided within the body of this document.

Table 1: Summary of DCP Charges

Project Type	Total Cost to North Western Growth Area	Residential Per Ha Rate	Commercial Per Ha Rate
ROADS	\$16,227,298	\$88,288	\$88,288
COMMUNITY INFRASTRUCTURE	\$3,378,794	\$18,484	\$0
ACTIVE OPEN SPACE	\$544,726	\$2,980	\$0
PASSIVE OPEN SPACE	\$1,353,644	\$7,365	\$7,365
OFF-ROAD PEDESTRIAN & CYCLE TRAILS	\$181,923	\$990	\$990
DRAINAGE	\$7,590,561	\$41,298	\$41,298
PLANNING COSTS	\$107,345	\$584	\$584
Total	\$29,384,291	\$159,988	\$138,524



INTRODUCTION

The Wangaratta North West Growth Area Development Contributions Plan (WNWDCP) has been prepared by Mesh with the assistance of the Rural City of Wangaratta.

The WNWDCP has been prepared to enable the equitable and efficient delivery of a range of infrastructure to service planned growth within the Wangaratta North West growth area. The Wangaratta North West (WNW) growth area is bounded by Wangandary Road to the north, Reith Road to the west, Christensen Lane, Worland Road and Three Mile Creek to the east, and the Wangaratta Racecourse and equine precinct to the south. The WNW growth area forms part of the broader growth of Wangaratta that will provide for establishment of a new community of approximately 5,000 people.

In general terms the WNWDCP identifies the necessary infrastructure and establishes a framework to ensure that the cost of infrastructure is shared equitably by all development proponents and by the broader community where relevant. The WNWDCP provides certainty for all developers and the future community by ensuring that all necessary infrastructure will be provided in a timely way and to a specified standard as development progressively takes place. In addition to identifying necessary infrastructure and defining the means by which the cost of the infrastructure will be shared, the WNWDCP includes an Implementation Strategy. The Implementation Strategy sets out the means by which the development process will be managed to ensure that necessary infrastructure is delivered in a timely and efficient way by developers as works in kind as the preferred option, whilst also ensuring that Council is not exposed to unreasonable risk in managing the WNWDCP into the future. Integral to the success of the Implementation Strategy will be a detailed understanding of the likely location and timing of development and adoption of a co-operative working relationship with developers throughout the life of the WNWDCP.

1.1 Strategic Basis

The Wangaratta North Western growth area is located 4km from the Central Business District of Wangaratta. The area surrounding the existing township has been identified in Wangaratta's Residential Municipal Strategic Statement as a future growth area to accommodate large scale residential growth. The Rural City of Wangaratta has actively set about planning for the future growth around Wangaratta and Council commissioned preparation of the Wangaratta North West Growth Area Structure Plan Report (2016) to provide a strategic framework for the future development of the north western growth area.

The Vision for the Wangaratta North West Growth Area Structure Plan (2018) is:

"To create a new, well-connected and serviced community that has a positive sense of place"

The Wangaratta North West Growth Area Structure Plan Report, which is incorporated within the Wangaratta Planning Scheme, identifies appropriate planning controls and recommendations for future development including preparation of a development contributions plan.

The strategic suitability of the land for urban development has been identified by both the Wangaratta North West Structure Plan Report (2016), Population and Housing Strategy (2013), Hume Regional Growth Plan (2014) and Municipal Strategic Statement (2004). The WNWDCP adopts a clear and deliberate coordination role to ensure the timely delivery of essential infrastructure projects. In light of the above, the WNWDCP has been prepared having regard to the following principles: -

- Simplicity: simplifying the number and type of projects included in the WNWDCP;
- Equity: maintaining and not compromising on transparency or equity; and
- Practicality: maximising the practicality of the WNWDCP to ensure the WNWDCP can be readily implemented through focusing on a development coordination role.

In summary, the WNWDCP (see Figure 1) covers an area of approximately 215 hectares and will provide for an overall yield of approximately 1,670 lots or 5,000 people. The WNWDCP comprises one charge area.

Figure 2, illustrates the future structure for the WNW growth area and clearly identifies the key infrastructure projects that are to be funded via the WNWDCP.

"To create a new, well-connected and serviced community that has a positive sense of place"





Figure 2: The Wangaratta North West Growth Area Structure Plan (2018)



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1.2 Strategic Context

Given that DCPs are implementation based tools that are linked to the plan upon which they are based it is important to set out the specific development circumstances that apply and therefore need to be taken into account in formulating the DCP. The development circumstances that are particular to the WNW growth area that need to be taken into account are:

Location and existing services – the WNWDCP comprises of a single charge area. The WNWDCP area is an extension of Wangaratta and as such is it in close proximity to existing services and facilities. Based on an analysis of the projected population (both number and composition of the population), there is demand for 4 hectares of active open space, to service the active recreation needs of the future Wangaratta North Western community. Furthermore, the future North Western community will generate the demand for a new community centre which will include three kindergarten classes, function room, meeting/community space and kitchen.

Strategic Issue: Council will need to actively monitor the development of the DCP area to ensure that the existing services can accommodate the needs of the new residents and if not, Council will need to plan for future additional/expanded services to be provided through their capital works program.

Existing Access – the WNW Charge Area contains an existing grid based road network, comprising many sealed roads which service the current residents. However, the current state of these roads is unable to support planned future development and are required

to be upgraded. Collector roads are not normally included within DCPs, however, given the level of land fragmentation within the growth area and the desire to actively coordinate the timely delivery of the infrastructure it is considered appropriate to include the construction of Wangandary Road, Christensen Lane, Worland Road, Lindner Road, Cruse Street and Reith Road within this DCP.

This approach is viewed as the most equitable means of sharing the overall cost and ensuring that the infrastructure is delivered as development occurs. The roads funded by the DCP will provide direct access to the majority of land holdings in the WNW Charge Area.

Strategic Issue: The WNWDCP will need to ensure the coordinated delivery of the collector road network occurs in an orderly manner. The collector road network plays both a key urban design and transport role and it is important that this is recognised from the outset. The WNWDCP will also need to actively consider the means by which an integrated shared pathway system can be delivered with provision for external connections to promote non car based travel options and to complement proposed vehicular connections.

Fragmentation – the WNWDCP area comprises at least 27 land holdings of varying sizes ranging from 2 to 50 hectares in area and there is currently no developer active in the area. This situation can cause difficulties in achieving coordinated outcomes particularly when the intentions of landowners differ, however, this DCP has been designed to ensure a coordinated approach is achieved.

Strategic Issue: The WNWDCP actively supports the presence of future developers to negotiate direct delivery of several key infrastructure projects, however, it must consider how potential problems associated with fragmented land can be reduced or overcome by having detailed regard to the likely timing and sequence of development and delivery of necessary infrastructure.

Summary of benefits that developers will gain in the WNWDCP area: -

- The cost to develop the collector road system through the WNW charge area will be included in the DCP and therefore the construction cost will be shared equitably;
- 2. There is no requirement for the construction of the active open space reserve; and
- The main drainage infrastructure required for the WNW growth area has been designed and costed and included in the DCP and shared equitably among the Charge Area.

1.3

The land to which this contributions plan applies

The WNWDCP area is bounded by Wangandary Road to the north, Reith Road to the west, Christensen Lane, Worland Road and Three Mile Creek to the east, and the Wangaratta Racecourse and equine precinct to the south. The WNWDCP area comprises a total of 215 hectares.

1.4

Method of Preparing the Development Contributions Plan and Compliance with Statutory Requirements

The WNWDCP has been prepared in accordance with Part 3B of the Planning and Environment Act 1987 (the Act). This DCP addresses the requirements of the Act by:

- > specifying the area to which the DCP applies;
- setting out the works, services and facilities to be funded through the plan, including the staging of the provision of those works, services or facilities;
- relating the need for the works, services and facilities to the proposed development of land in the area;
- specifying the estimated costs of each of the works, services and facilities;
- specifying the proportion of the total estimated cost of the works services and facilities which is to be funded by a development infrastructure levy;
- > specifying the land in the area and the types of development in respect of which a levy is payable and the method for determining the amount of levy payable in respect of any development of land; and
- providing the procedures for the collection of a development infrastructure levy in respect of any development for which a permit under the Act is not required.

The WNWDCP is broadly based on the userpays model proposed by the State Government's Development Contributions Review Steering Committee (Department of Sustainability and Environment, 2003) and the amended Development Contributions Guidelines (2003 and amended in 2007). The WNWDCP also takes into account the structure and content of the most recent Development Contributions Plans that have been prepared for a number of Melbourne's metropolitan and regional growth areas.

This development contributions plan forms part of the Wangaratta Planning Scheme pursuant to section 46I of the Act and is an incorporated document listed under Clause 81 of the Wangaratta Planning Scheme.



1.5 Guiding Principles

During the course of the development of land within the WNWDCP area, there are various items of infrastructure which are clearly necessary. However, it is difficult to quantify all of these items with any degree of accuracy because the actual infrastructure will be somewhat dependent upon the detailed subdivision design proposed by developers at the planning permit stage. This development contributions plan has been prepared on the expectation that necessary site specific infrastructure will be provided by developers as land is developed for urban purposes.

However, it is expected that in addition to these items of infrastructure that are usually provided by developers as they proceed with subdivision and development (e.g. local roads etc), there are other infrastructure items that are of a higher order and therefore easier to identify and quantify at this stage of the planning process. This development contributions plan deals only with these higher order infrastructure items of development infrastructure. There is one exception to this approach with regard to the key transport route. The upgrade of the key transport route comprising of several collector roads have been included due to the ownership patterns and desire to ensure an equitable approach and timely delivery of key infrastructure. Taking into account the distinction between local and higher order infrastructure, the infrastructure projects that have been included in the WNWDCP all have the following characteristics:

- They are essential to the health, safety and well-being of the community;
- They will be used by a broad cross- section of the community; and
- They reflect the vision and strategic aspirations as expressed in the Wangaratta North West Growth Area Structure Plan (2018).

1.6

Infrastructure Project Justification

Table 2 – Infrastructure Project Justification provides a detailed explanation of all projects in the WNWDCP. The location of infrastructure relating to the DCP transport projects is shown in Figure 3; community infrastructure, shared paths and open space is shown in Figure 4 and drainage infrastructure is shown in Figure 5.

The WNWDCP has been limited to non-recurrent capital project costs. The need for infrastructure has been determined according to the anticipated development scenario for the growth area as set out in the Wangaratta North West Structure Plan (2018). Whilst Figure 2 outlines the future urban structure for the WNW growth area and identifies the key infrastructure to be funded by the DCP further substantiation for the projects can be found in the following documents:

- > Wangaratta Growth Areas Structure Planning Report (2015) Aurecon;
- Wangaratta Growth Areas Transport Study (2017) (GHD);
- Land Valuation Report (2016) (Opteon Property Group);
- Wangaratta Strategic Drainage Review – project design and costings (2015) (Rural City of Wangaratta);
- Wangaratta Population and Housing Strategy (2013); and
- Wangaratta Open Space and Recreation Strategy (2012).

In addition to the strategic justification provided in the relevant background reports, the list of infrastructure projects has been reviewed, particularly with regard to timing and taking into account the extent to which infrastructure can be directly and efficiently provided by future developers.

Council have acknowledged that the WNWDCP needs to adopt a development coordination role ensuring the delivery of a reduced number of essential infrastructure projects, as opposed to taking on a more traditional DCP form that generally includes a larger list of projects without rigorous regard to the delivery of infrastructure projects. The following infrastructure items and services are not included in the WNWDCP, as they are not considered to be higher order items, but must be provided by developers as a matter of course:

- All internal local and collector roads (except those specified in this DCP) and associated traffic management measures;
- Local drainage systems (except where identified in this DCP);
- Intersections connecting the development to the existing road network (except where specified in this DCP);
- Local site specific water, drainage, sewerage, underground power, gas, telecommunications services (except where specified in this DCP);
- Local pathways and connections to the shared pathway network;
- Shared pathways within road reservations (except where specified in this DCP);
- Basic levelling, water tapping and landscaping of open space; and
- > Council's plan checking and supervision fees.



2 DESCRIPTION OF PROJECTS

This section provides a general description of the infrastructure projects that have been included in the WNWDCP. Figures 3, 4 and 5 clearly identify the type and location of the various infrastructure projects included in this DCP.

2.1 Road Based Transport Projects

The key transport-related projects in the WNWDCP are based on the transport network depicted in Figure 3. This plan was prepared taking into account the contained nature of the growth area and the existing grid based road network. Wangandary Road, Lindner/Williams Road and the proposed extension of Bella Way/Cruse Street (across Three Mile Creek) are the three key links into the WNW growth area.

The Transport Study completed by GHD show the importance of the Collector Roads included in this DCP, the modelling shows that the collector road network would cater for up to 6,000 vpd in the future. With regard to existing road reserves within the Charge Area, the WNWDCP has endeavoured to utilise the existing road reserves, to remove the need for the provision of additional land, where possible. The Collector Roads have a total reservation width of 24m which includes 11.6m of pavement and two 2.5m footpaths.

The WNWDCP does not include any separate intersection projects, however the costing of several intersections have been included in the project costs for RD01, RD07 and RD08.

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The road based transport projects included in the WNWDCP: -

RD01	Upgrade of Christensen Lane from Lindner Road to Wangandary Road to a Collector Street - Level 1 standard. DCP includes the construction of roundabout at the intersection of Christensen Lane and Lindner Road. Total road reserve is 24m, the DCP funds construction of a 5.8 m pavement and one 2.5m shared path. Road length is 1,045 lm which is constructed within the existing 24m road reserve, therefore no additional land is required.
RD02	Upgrade of Wangandary Road from Christensen Lane to Reith Road to a Collector Street - Level 1 standard. The total road reserve is 24m, the DCP funds construction of a 5.8m pavement and one 2.5m shared path. Road length is 835 lm which is constructed within the existing 24m road reserve, therefore no additional land is required.
RD03	Upgrade of Reith Road from Cruse Street to Lindner Road to a Collector Street - Level 1 standard. DCP includes the construction of a three way intersection where the proposed east-west internal local road meets Reith Road. The total reserve is 24m, the DCP funds construction of a 5.8m pavement and one 2.5m shared path. Road length is 815 lm which is constructed within the existing 24m road reserve, therefore no additional land is required.
RD04	Upgrade of Reith Road from Cruse Street to Colson Drive to a Collector Street - Level 1 standard. The total road reserve is 24m, the DCP funds construction of a 5.8m pavement and one 2.5m shared path. Road length is 1,160 lm which is constructed within the existing 24m road reserve, therefore no additional land is required.
RD05	Construction of Cruse Street extension from end of seal to 3 Mile Creek to a Collector Street - Level 1 standard. Total road reserve is 24m, the DCP funds construction of a 11.6m pavement, which varies to 9 metres at the bridge and one 2.5m shared path. Road length is 315 lm which is constructed within the existing 24m road reserve, therefore no additional land is required.
RD06	Construction of Cruse Street across 3 Mile Creek to a Collector Street – Level 1 standard. Total road reserve is 24m, the DCP funds construction of a 11.6m pavement and one 2.5m shared path. Road length is 100 lm which is constructed within the existing 24m road reserve, therefore no additional land is required. Crossing of the creek includes construction of a bridge.
RD07	Construction of Cruse Street extension from 3 Mile Creek to Worland Road to a Collector Street - Level 1 standard. DCP comprises of the construction of roundabout at Worland Road. Total road reserve is 24 metres. Construction includes support batters of varying heights, an 11.6m pavement, and one 2.5m shared path. Road length is 400 lm which will be constructed within a new road reserve. The total area of land required is 1.4 hectares, which includes 0.125 hectares of land subject to flood inundation.
RD08	Construction of Cruse Street extension from Worland Road to Reith Road to a Collector Street - Level 1 standard. Total road reserve is 24 meters, the DCP funds construction of a three way intersection at the junction of Reith Road and Cruse Street and a roundabout at the intersection of Cruse Street and the internal north south local roads, an 11.6m pavement, one 2.5m shared path and one 1.5m footpath. Road length is 1,007 lm which is to be constructed within the new road reserve. The total area of land required is 2.6 hectares.
RD09	Upgrade of Lindner Road from Worland Road to Christensen Lane to a Collector Street - Level 1 standard. Total road reserve is 24m, the DCP funds the construction of a 5.8m pavement and one 2.5m shared path. Road length is 230 lm which is constructed within the existing 24m road reserve, therefore no additional land is required.
RD10	Upgrade of Lindner Road from Christensen Lane to Reith Road to a Collector Street - Level 1 standard. Total road reserve is 24m, the DCP funds construction of a 5.8m pavement and one 2.5m shared path along the northern edge. Road length is 835 lm which is constructed within the existing 24m road reserve, however, the shared path requires land 1.57 hectares of land from properties south of the road due to the presence of mature native vegetation within the existing road reservation.





2.2

Community Infrastructure, Off-Road Shared Paths and Open Space

Community Infrastructure

The WNWDCP includes the purchase of 0.5hectares of land for and construction of a future community centre to service the needs of the future residents. The new north western future community generates 62.5% demand for this new facility.

CD01

Purchase of 0.5 hectares and construction of 1,250m2 local community centre.

Off-Road Shared Paths

The Wangaratta Growth Areas Structure Plan recognises the importance of planning for and delivering a shared path network to promote noncar based modes of transport. The network of off road shared paths has been designed to promote movement along Three Mile Creek and to connect the residents to places of interest within the plan area. The location and length of shared paths to be funded via the WNWDCP are illustrated in Figure 4 and described in the table below.

PC01

Construction of off-road shared pedestrian and cycle path along Three Mile Creek between southern boundary of the growth area and Cruse Street. Construction of 3m wide concrete path. Path length 568.3 lm.

Open Space

The location of the active and passive open space areas is clearly shown in Figure 4 and the exact area required from each property, and therefore able to be credited, is set out in the detailed property specific land budget.

The WNWDCP includes the cost of 4 hectares of active open space and 9.5 hectares of passive open space and as a result this area has been deducted from the NDA, and therefore contributions are not payable on these areas.



Purchase of 9.5 hectares of passive open space

Figure 4: Shared Path, Community Infrastructure and Open Space Projects





2.3

Drainage

An overall drainage strategy has been prepared to service the area, the land and construction cost of these projects has been included in the WNWDCP and the cost of this infrastructure has been charged equitably across the entire Charge Area.

WNWDCP: -

Planning Costs The cost of preparing the WNWDCP and Structure

Plan has been included within the WNWDCP.

2.4

The following drainage items are included in the Wangandary Road Trunk Drainage. Construction of major spine drainage system along Wangandary Road to service the northern portion of the DR01 North-Western Growth Area. A total of 1,920 lm of pipe is required along with the construction of two retarding basins. Total land area required is 1.05 hectares. Lindner Road Trunk Drainage. Construction of major spine drainage system along Lindner Road to service the central section of the North-DR02 Western Growth Area. A total of 1,975 Im of pipe is required along with the construction of two retarding basins and one bio-retention basin. Total land area required is 0.485 hectares. Reith-Cruse Street Trunk Drainage. Construction of major spine drainage system within the new Cruse Street road reserve to service the southern section of the North-Western Growth DR03 Area. A total of 2,600 lm of pipe is required along with the construction of one retarding basin and two bio-retention basins. Total land area

required is 0.45 hectares.

Figure 5: Drainage Infrastructure Projects





3

INTERPRETING THE CALCULATION OF CHARGES TABLES

As noted earlier, Table 2 provides a detailed description of, and strategic justification for, each item included within the WNWDCP.

Table 3 – Calculation of Contributions and Table 4 Schedule of Contributions together represent the key component of the WNWDCP. This section explains the workings of these tables.

3.1 Calculation of Contributions Table

The first two columns in Table 3 describe each of the infrastructure projects that are included in the WNWDCP. They are each assigned a project number and are grouped according to their broad infrastructure category. For each infrastructure project, a land and construction cost, where relevant, is specified. The construction costs are expressed in 2018 dollars and will be indexed annually on 1July.

The land cost for each project has been determined by applying the valuation data supplied by the Opteon Property Group (June, 2016) and indexed to 2018 dollars using CPI (All Groups Melbourne)

A contingency of 10% of the construction cost has been allocated to all road construction projects and 15% has been applied to the drainage construction projects to cover general contingencies, diversion and reinstatement of other underground services. The detailed construction cost sheets are provided in Appendix 1.

After making adjustments for external usage it is possible to determine the total cost of each infrastructure project that is attributable to the 'main catchment area' (MCA). The MCA is the geographic unit from which a given item of infrastructure will draw most of its usage. The Wangaratta North West MCA comprises of a single charge area. For the purposes of the WNWDCP all residnetial developable land will contribute funds for all infrastructure projects. The 1 hectare of commercial land will contribute towards the transport drainage, shared paths, passive open space and planning projects only.

Development contributions will be gathered on the Net Developable Area as defined for each property identified in Figure 6. The final two columns in Table 3 give, for each infrastructure project, the total number of net developable hectares in the MCA and the contribution per net developable hectare respectively.

It is important to note that the number of net developable hectares for the charge area is based on the land budget provided in Table 5. The per hectare contributions payable will not be amended to respond to minor changes to land budgets that may result from the subdivision design process. In other words, the WNWDCP is permanently linked to the Detailed Land Budget set out in Table 5. For the purposes of the WNWDCP, the number of developable hectares for the charge area will only change if Council formally amends the Precinct and Detailed Land Budgets and associated tables. Table 5 should be used to determine the number of developable hectares (for DCP purposes) on individual land parcels.

3.2 Schedule of Contributions Table

Whilst Table 3 sets out the per hectare contribution for each infrastructure project in the WNWDCP, Table 4 sets out a summary of the per hectare charges for each charge area, broken down into each infrastructure Category.



Table 2: Wangaratta North West DCP Strategic Justification

Project Number	Project Description	Estimated Land Cost as at 2018	Construction Cost 2018	Total Cost of Project 2018	Main Catchment Area (MCA) Determination	Indicative Provision Trigger	Strategic Justification
ROADS							
RD01	Upgrade of Christensen Lane from Lindner Road to Wangandary Road to a Collector Street - Level 1 standard. DCP includes the construction of roundabout at the intersection of Christensen Lane and Lindner Road. Total road reserve is 24m, the DCP fund construction of a 5.8 m pavement and one 2.5m shared path. Road length is 1,045 lm which is constructed within the existing 24m road reserve, therefore no additional land is required.	ls	\$5,445,345	\$5,445,345	Christensen Lane is integral to the movement network of the Wangaratta north west growth area. The development to the east of Worland Road has upgraded the northern portion of Christensen Lane adjacent to their development (Permit PInApp 12/084.5), therefore the DCP area only pays for half of the construction of this road.	As development of adjacent land occurs	Christensen Lane forms part of the main internal road network within the WNWDCP area, as set out in the Wangaratta North West Growth Area Structure Plan Report (2018). The development of the Wangaratta north west growth area together with the development of the land to the east triggers the need to upgrade this road to an urban standard.
RD02	Upgrade of Wangandary Road from Christensen Lane to Reith Road to a Collector Street - Level 1 standard. The total road reserve is 24m, the DCP funds construction of a 5.8m pavement and one 2.5m shared path. Road length is 835 Im which is constructed within the existing 24m road reserve, therefore no additional land is required.	\$0 t	\$1,649,331	\$1,649,331	Wangandary Road is integral to the movement network of the Wangaratta north west growth area.	As development of adjacent land occurs	Wangandary Road forms part of the main internal road network within the WNWDCP area, as set out in the Wangaratta North West Growth Area Structure Plan Report (2018). The development of the Wangaratta north west growth area triggers the need to upgrade this road to an urban standard.
RD03	Upgrade of Reith Road from Cruse Street to Lindner Road to a Collector Street - Level 1 standard.DCP includes the construction of a three way intersection where the proposed east-west interna local road meets Reith Road. The total reserve is 24m, the DCP funds construction of a 5.8m pavement and one 2.5m shared pat Road length is 815 Im which is constructed within the existing 24 road reserve, therefore no additional land is required.	l :h.	\$1,307,227	\$1,307,227	Reith Road is integral to the movement network of the Wangaratta north west growth area.	As development of adjacent land occurs	Reith Road forms part of the main internal road network within the WNWDCP area, as set out in the Wangaratta North West Growth Area Structure Plan Report (2018). The development of the Wangaratta north west growth area triggers the need to upgrade this road to an urban standard.
RD04	Upgrade of Reith Road from Cruse Street to Colson Drive to a Collector Street - Level 1 standard. The total road reserve is 24m, the DCP funds construction of a 5.8m pavement and one 2.5m shared path. Road length is 1,160 Im which is constructed within the existing 24m road reserve, therefore no additional land is required.	\$0	\$1,694,699	\$1,694,699	Reith Road is integral to the movement network of the Wangaratta north west growth area.	As development of adjacent land occurs	Reith Road forms part of the main internal road network within the WNWDCP area, as set out in the Wangaratta North West Growth Area Structure Plan Report (2018). The development of the Wangaratta north west growth area triggers the need to upgrade this road to an urban standard. The traffic modelling has determined the external usage for this section of road as 49%, therefore this DCP only funds 51% of this project.
RD05	Construction of Cruse Street extension from end of seal to 3 Mil Creek to a Collector Street - Level 1 standard. Total road reserve is 24m, the DCP funds construction of a 11.6m pavement, which varies to 9 metres at the bridge and one 2.5m shared path. Road length is 315 Im which is constructed within the existing 24m road reserve, therefore no additional land is required.	1	\$924,830	\$924,830	Cruse Street is integral to the movement network of the Wangaratta north west growth area.	As development of adjacent land occurs	Cruse Street forms part of the main internal road network within the WNWDCP area, as set out in the Wangaratta North West Structure Plan Report (2018). The development of the Wangaratta north west growth area triggers the need to upgrade this road to an urban standard.
RD06	Construction of Cruse Street across 3 Mile Creek to a Collector Street – Level 1 standard. Total road reserve is 24m, the DCP funds construction of a 11.6m pavement and one 2.5m shared path. Road length is 100 lm which is constructed within the existing 24m road reserve, therefore no additional land is required. Crossing of the creek includes construction of a bridge	\$0 e.	\$1,850,769	\$1,850,769	Cruse Street is integral to the movement network of the Wangaratta north west growth area.	As development of adjacent land occurs	Cruse Street forms part of the main internal road network within the WNWDCP area, as set out in the Wangaratta North West Growth Area Structure Plan Report (2018). The development of the Wangaratta north west growth area triggers the need to upgrade this road to an urban standard.

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Table 2: Wangaratta North West DCP Strategic Justification

Project Number	Project Description	Estimated Land Cost as at 2018	Constructior Cost 2018	n Total Cost of Project 2018	Main Catchment Area (MCA) Determination	Indicative Provision Trigger	Strategic Justification
ROADS							
RD07	Construction of Cruse Street extension from 3 Mile Creek to Worland Road to a Collector Street - Level 1 standard. DCP comprises of the construction of roundabout at Worland Road. Total road reserve is 24 metres. Construction includes support batters of varying heights, an 11.6m pavement, and one 2.5m shared path. Road length is 400 lm which will be constructed within a new road reserve. The total area of land required is 1.4 hectares, which includes 0.125 hectares of land subject to flood inundation.	\$136,182 \$1	1,670,233	\$1,806,415	Cruse Street is integral to the movement network of the Wangaratta north west growth area.	As developmer of adjacent land occurs	set out in the Wangaratta North West Growth
RD08	Construction of Cruse Street extension from Worland Road to Reith Road to a Collector Street - Level 1 standard. Total road reserve is 24 meters, the DCP funds construction of a three way intersection at the junction of Reith Road and Cruse Street and a roundabout at the intersection of Cruse Street and the internal north south local roads, an 11.6m pavement, one 2.5m shared path and one 1.5m footpath. Road length is 1,007 Im which is to be constructed within the new road reserve. The total area of land required is 2.6 hectares.	\$272,363 \$3	3,503,138	\$3,775,501	Cruse Street is integral to the movement network of the Wangaratta north west growth area.	As developmer of adjacent land occurs	set out in the Wangaratta North West Growth
RD09	Upgrade of Lindner Road from Worland Road to Christensen Lane to a Collector Street - Level 1 standard. Total road reserve is 24m, the DCP funds the construction of a 5.8m pavement and one 2.5m shared path. Road length is 230 Im which is constructed within the existing 24m road reserve, therefore no additional land is required.	\$0 \$5	530,834	\$530,834	Lindner Road is integral to the movement network of the Wangaratta north west growth area.	As developmer of adjacent land occurs	set out in the Wangaratta North West Growth
RD10	Upgrade of Lindner Road from Christensen Lane to Reith Road to a Collector Street - Level 1 standard. Total road reserve is 24m, the DCP funds construction of a 5.8m pavement and one 2.5m shared path along the northern edge. Road length is 835 Im which is constructed within the existing 24m road reserve, however, the shared path requires land 1.57 hectares of land from properties south of the road due to the presence of mature native vegetation within the existing road reservation.	\$224,176 \$8	315,430	\$1,039,605	Lindner Road is integral to the movement network of the Wangaratta north west growth area.	As developmer t of adjacent land occurs	set out in the Wangaratta North West Growth
Sub		\$632 720 ¢1	10 201 020	\$20.024.556			

Sub-Total Table 2: Wangaratta North West DCP Strategic Justification

Project Number	Project Description	Estimated Land Cost as at 2018	Construction Cost 2018	Total Cost of Project 2018	Main Catchment Area (MCA) Determination	Indicative Provision Trigger	Strategic Justification
COMMUN	ITY FACILITIES						
CD01	Purchase of 0.5 hectares and construction of a 1,250m2 local community centre which will include 3 kindergarden classes, long day care facility, meeting/ consulting rooms, function room and kitchen.	\$96,898	\$5,309,172	\$5,406,071	This community centre will service the Wangaratta north west growth area.	At time of subdivison	The Wangaratta North West Growth Area Structure Plan Report (2018) identifies the need for a new community centre to service the needs of the future 5,000 residents of the north west growth area. The needs analysis has determined 37.5% external usage for this centre, therefore this DCP only funds 62.5% of this project.
Sub-Total		\$96,898	\$5,309,172	\$5,406,071			
ACTIVE O	PEN SPACE						
OS01	Purchase of 4 hectares of active open space	\$544,726	\$0	\$544,726	This active open space will service the Wangaratta north west growth area.	At time of subdivison	The Wangaratta North West Growth Area Structure Plan Report (2018) identifies the need for 4 hectares of active open space to service the needs of the future 5,000 residents of the north west growth area.
Sub-Total		\$544,726	\$0	\$544,726			
PASSIVE	DPEN SPACE						
OS02	Purchase of 9.5 hectares of passive open space	\$1,353,644	\$0	\$1,353,644	This passive open space will service the Wangaratta north west growth area.	At time of subdivison	The Wangaratta North West Growth Area Structure Plan Report (2018) identifies the need for 9.5 hectares, or 5% of NDA, to service the needs of the future 5,000 residents of the north west growth area.
Sub-Total		\$1,353,644	\$0	\$1,353,644			
OFF-ROAD	PEDESTRIAN & CYCLE TRAILS						
PC01	Construction of off-road shared pedestrian and cycle path along Three Mile Creek between southern boundary of the growth area and Cruse Street. Construction of 3m wide concrete path. Path length 568.3 lm.	\$0	\$181,923	\$181,923	Pedestrian/cycle network within the closed road reserves will be used by the entire Wangaratta north west growth area.	At time of subdivision	This infrastructure project is required to provide pedestrian and cycle access through the Wangaratta north west growth area.
Sub-Total		\$0	\$181,923	\$181,923			

Table 2: Wangaratta North West DCP Strategic Justification

Project Number	Project Description	Estimated Land Cost as at 2018	Construction Cost 2018	Total Cost of Project 2018	Main Catchment Area (MCA) Determination	Indicative Provision Trigger	Strategic Justification
DRAINAGE							
DR01	Wangandary Road Trunk Drainage. Construction of major spine drainage system along Wangandary Road to service the northern portion of the North-West Growth Area. A total of 1,920 Im of pipe is required along with the construction of two retarding basins. Total land area required is 1.05 hectares.	\$170,751	\$2,724,707	\$2,895,458	This is required to service the drainage requirements of the Wangaratta north west growth area.	As required	This infrastructure project is required to provide for the local drainage requirements of the Wangaratta north west growth area.
DR02	Lindner Road Trunk Drainage. Construction of major spine drainage system along Lindner Road to service the central section of the North-West Growth Area. A total of 1,975 Im of pipe is required along with the construction of two retarding basins and one bio- retention basin. Total land area required is 0.485 hectares.	\$86,947	\$2,257,772	\$2,344,719	This is required to service the drainage requirements of the Wangaratta north west growth area.	As required	This infrastructure project is required to provide for the local drainage requirements of the Wangaratta north west growth area.
DR03	Reith-Cruse Street Trunk Drainage. Construction of major spine drainage system within the new Cruse Street road reserve to service the southern section of the North-West Growth Area. A total of 2,600 lm of pipe is required along with the construction of one retarding basin and one bio-retention basin. Total land area required is 0.45 hectares.	\$53,530	\$2,296,855	\$2,350,385	This is required to service the drainage requirements of the Wangaratta north west growth area.	As required	This infrastructure project is required to provide for the local drainage requirements of the Wangaratta north west growth area.
Sub-Total		\$311,227	\$7,279,334	\$7,590,561			
PLANNING	COSTS						
PL01	Preparation costs for preparing the Wangaratta North- West and South Growth Areas Structure Plans and DCP documents.	\$0	\$139,000	\$139,000	Preparation of the Structure Plan and Development Contributions Plan enables the entire Wangaratta north west and southern growth areas to develop.	Provided	This project is required to facilitate development of the Wangaratta north west growth area.
Sub-Total		\$0	\$139,000	\$139,000			

Project Number	Project Description	Estimated Land Cost 2018	Construction Cost 2018	Total Cost of Project 2018	Estimated External Usage/ External Funding %	Total Cost Attributable to Main Catchment Area	Main Catchment Area (MCA)	Development Types Making Contribution	Number of Net Developable Hectares in MCA	Contribution per Net Developable Hectare 2018
ROADS										
RD01	Upgrade of Christensen Lane from Lindner Road to Wangandary Road to a Collector Street - Level 1 standard .DCP includes the construction of roundabout at the intersection of Christensen Lane and Lindner Road. Total road reserve is 24m, the DCP funds construction of a 5.8 m pavement and one 2.5m shared path. Road length is 1,045 lm which is constructed within the existing 24m road reserve, therefore no additional land is required.		\$5,445,345	\$5,445,345	50%	\$2,722,672	NW	All	183.8	\$14,813
RD02	Upgrade of Wangandary Road from Christensen Lane to Reith Road to a Collector Street - Level 1 standard. The total road reserve is 24m, the DCP funds construction of a 5.8m pavement and one 2.5m shared path. Road length is 835 Im which is constructed within the existing 24m road reserve, therefore no additional land is required.	\$0	\$1,649,331	\$1,649,331	0%	\$1,649,331	NW	All	183.8	\$8,974
RD03	Upgrade of Reith Road from Cruse Street to Colson Drive to a Collector Street - Level 1 standard. The total road reserve is 24m, the DCP funds construction of a 5.8m pavement and one 2.5m shared path. Road length is 1,160 Im which is constructed within the existing 24m road reserve, therefore no additional land is required.	\$0 D	\$1,307,227	\$1,307,227	0%	\$1,307,227	NW	All	183.8	\$7,112
RD04	Upgrade of Reith Road from Cruse Street to Colson Drive to a Collector Street - Level 1 standard. The total road reserve is 24m, the DCP funds construction of a 5.8m pavement and one 2.5m shared path. Road length is 1,160 Im which is constructed within the existing 24m road reserve, therefore no additional land is required.	\$0 D	\$1,694,699	\$1,694,699	49%	\$864,297	NW	All	183.8	\$4,702
RD05	Construction of Cruse Street extension from end of seal to 3 Mile Creek to a Collector Street - Level 1 standard. Total road reserve is 24m, the DCP funds construction of a 11.6m pavement, which varies to 9 metres at the bridge and one 2.5m shared path. Road length is 315 lm which is constructed within the existing 24m road reserve, therefore no additional land is required.	\$0 e	\$924,830	\$924,830	0%	\$924,830	NW	All	183.8	\$5,032

Project Number	Project Description	Estimated Land Cost 2018	Construction Cost 2018	Total Cost of Project 2018	Estimated External Usage/ External Funding %	Total Cost Attributable to Main Catchment Area	Main Catchment Area (MCA)	Development Types Making Contribution	Number of Net Developable Hectares in MCA	Contribution per Net Developable Hectare 2018
RD06	Construction of Cruse Street across 3 Mile Creek to a Collector Street – Level 1 standard. Total road reserve is 24m, the DCP funds construction of a 11.6m pavement and one 2.5m shared path. Road length is 100 lm which is constructed within the existing 24m road reserve, therefore no additional land is required. Crossing of the creek includes construction of a bridge.	\$0	\$1,850,769	\$1,850,769	0%	\$1,850,769	NW	All	183.8	\$10,069
RD07	Construction of Cruse Street extension from 3 Mile Creek to Worland Road to a Collector Street - Level 1 standard. DCP comprises of the construction of roundabout at Worland Road. Total road reserve is 24 metres. Construction includes support batters of varying heights, an 11.6m pavement, and one 2.5m shared path. Road length is 400 lm which will be constructed within a new road reserve. The total area of land required is 1.4 hectares, which includes 0.125 hectares of land subject to flood inundation.	\$136,182	\$1,670,233	\$1,806,415	0%	\$1,806,415	NW	All	183.8	\$9,828
RD08	Construction of Cruse Street extension from Worland Road to Reith Road to a Collector Street - Level 1 standard. Total road reserve is 24 meters, the DCP funds construction of a three way intersection at the junction of Reith Road and Cruse Street and a roundabout at the intersection of Cruse Street and the internal north south local roads, an 11.6m pavement, one 2.5m shared path and one 1.5m footpath. Road length is 1,007 Im which is to be constructed within the new road reserve. The total area of land required is 2.6 hectares.	\$272,363	\$3,503,138	\$3,775,501	0%	\$3,775,501	NW	All	183.8	\$20,541
RD09	Upgrade of Lindner Road from Worland Road to Christensen Lane to a Collector Street - Level 1 standard. Total road reserve is 24m, the DCP funds the construction of a 5.8m pavement and one 2.5m shared path. Road length is 230 Im which is constructed within the existing 24m road reserve, therefore no additional land is required.	\$0	\$530,834	\$530,834	46%	\$286,650	NW	All	183.8	\$1,506
RD10	Upgrade of Lindner Road from Christensen Lane to Reith Road to a Collector Street - Level 1 standard. Total road reserve is 24m, the DCP funds construction of a 5.8m pavement and one 2.5m shared path along the northern edge. Road length is 835 Im which is constructed within the existing 24m road reserve, however, the shared path requires land 1.57 hectares of land from properties south of the road due to the presence of mature native vegetation within the existing road reservation.	\$224,176	\$815,430	\$1,039,605	0%	\$1,039,605	NW	All	183.8	\$5,656
Sub-Total		\$632,720	\$19,391,836	\$20,024,556		\$16,227,298				\$88,288

Project Number	Project Description		Construction Cost 2018	Total Cost of Project 2018	Estimated External Usage/ External Funding %	Total Cost Attributable to Main Catchment Area	Main Catchment Area (MCA)	Development Types Making Contribution	Number of Net Developable Hectares in MCA	Contribution per Net Developable Hectare 2018
соммин	TY FACILITIES									
CD01	Community activity centre. Purchase of 0.5 hectares and construction of a 1,250m2 local community centre which will include 3 kindergarden classes, long day care facility, meeting/consulting rooms, function room and kitchen.	\$96,898	\$5,309,172	\$5,406,071	38%	\$3,378,794	NW	Res	182.8	\$18,484
Sub-Total		\$96,898	\$5,309,172	\$5,406,071		\$3,378,794				\$18,484
ACTIVE OF	PEN SPACE									
OS01	Purchase of 4 hectares of active open space	\$544,726	\$0	\$544,726	0%	\$544,726	NW	Res	182.8	\$2,980
Sub-Total		\$544,726	\$0	\$544,726		\$544,726				\$2,980
PASSIVE C	PEN SPACE									
OS02	Purchase of 9.5 hectares of passive open space	\$1,353,644	\$0	\$1,353,644	0%	\$1,353,644	NW	All	183.8	\$7,365
Sub-Total		\$1,353,644	\$0	\$1,353,644		\$1,353,644				\$7,365
OFF-ROAD	PEDESTRIAN & CYCLE TRAILS									
PC01	Construction of off-road shared pedestrian and cycle path. Along Three Mile Creek between southern boundary of the growth area and Cruse Street. Construction of 3m wide concrete path. Path length 568.3 lm.	\$0	\$181,923	\$181,923	0%	\$181,923	NW	All	183.8	\$990
Sub-Total		\$0	\$181,923	\$181,923		\$181,923				\$990
DRAINAGE										
DR01	Wangandary Road Trunk Drainage. Construction of major spine drainage system along Wangandary Road to service the northern portion of the North- West Growth Area. A total of 1,920 Im of pipe is required along with the construction of two retarding basins. Total land area required is 1.05 hectares.	\$170,751	\$2,724,707	\$2,895,458	0%	\$2,895,458	NW	All	183.8	\$15,753
DR02	Lindner Road Trunk Drainage. Construction of major spine drainage system along Lindner Road to service the central section of the North-West Growth Area. A total of 1,975 Im of pipe is required along with the construction of two retarding basins and one bio-retention basin. Total land area required is 0.485 hectares.	\$86,947	\$2,257,772	\$2,344,719	0%	\$2,344,719	NW	All	183.8	\$12,757

Project Number	Project Description	Estimated Land Cost 2018	Construction Cost 2018	Total Cost of Project 2018	Estimated External Usage/ External Funding %	Total Cost Attributable to Main Catchment Area	Catchment	Development Types Making Contribution	Number of Net Developable Hectares in MCA	Contribution per Net Developable Hectare 2018
DRAINAGE										
DR03	Reith-Cruse Street Trunk Drainage. Construction of major spine drainage system within the new Cruse Street road reserve to service the southern section of the North-West Growth Area. A total of 2,600 lm of pipe is required along with the construction of one retarding basin and one bio- retention basin. Total land area required is 0.45 hectares.	\$53,530	\$2,296,855	\$2,350,385	0%	\$2,350,385	NW	All	183.8	\$12,788
Sub-Total		\$311,227	\$7,279,334	\$7,590,561	\$0	\$7,590,561				\$41,298
PLANNING	COSTS									
PL01	Preparation costs for preparing the Wangaratta North-West and South Growth Areas Structure Plans and DCP documents.	\$0	\$139,000	\$139,000	0%	\$139,000	NW and South Growth Area	n All	238.0	\$584
Sub-Total		\$0	\$139,000	\$139,000		\$139,000				\$584

TOTAL	\$2,939,216	\$32,301,265	\$35,240,481	\$29,415,946	
TOTAL CHARGE PER NET DEVELOPABLE RESIDENTIAL HECTARE FOR WANG	ARATTA NORT	H WESTERN GR	ROWTH AREA		\$159,988
TOTAL CHARGE PER NET DEVELOPABLE COMMERCIAL HECTARE FOR WANG	GARATTA NORT	TH WESTERN GI	ROWTH AREA		\$138,524

Table 4: Summary of Charges

Project Type	Total Cost to North Western Growth Area	Residential Per Ha Rate	Commercial Per Ha Rate
ROADS	\$16,227,298	\$88,288	\$88,288
COMMUNITY INFRASTRUCTURE	\$3,378,794	\$18,484	\$0
ACTIVE OPEN SPACE	\$544,726	\$2,980	\$0
PASSIVE OPEN SPACE	\$1,353,644	\$7,365	\$7,365
OFF-ROAD PEDESTRIAN & CYCLE TRAILS	\$181,923	\$990	\$990
DRAINAGE	\$7,590,561	\$41,298	\$41,298
PLANNING COSTS	\$107,345	\$584	\$584
Total	\$29,384,291	\$159,988	\$138,524

Note: PL01 - The cost of preparing the North-West and South Structure Plans and DCPs is shared equally among across both growth areas combined net developable area. Therefore, the WSDCP will fund a total of \$31,655 and the WNWDCP will fund \$107,345.



Table 5: Property Specific Land Budget

		ENC	CUMBERED LA	AND	TRAN	NSPORT	COMMUNITY				OTHER	TOTAL NET	RESIDENTIAL DENSITY			
Property Number		Land Subject to Inundation Overlay	Drainage (Retarding Basin)	Vegetation to be retained	Land for Collector Roads	I and for	Community n Facility	Unencumbered Active Open Space	Unencumbered Passive Open Space	TOTAL Net Developable Area (Hectares)	Commercial Development	RESIDENTIAL AREA (HECTARES)	Low Density		Standard Density	Onen Snace
Property 1	16.6		0.56						1.60	14.5		14.5			14.5	11.07%
Property 2	6.1								1.20	4.9		4.9			4.9	24.69%
Property 3	2.0		0.49							1.5		1.5			1.5	0.00%
Property 4	3.6								0.50	3.1		3.1			3.1	16.13%
Property 5	5.7									5.7		5.7			5.7	0.00%
Property 6	5.4									5.4		5.4			5.4	0.00%
Property 7	5.8									5.8		5.8			5.8	0.00%
Property 8	10.1								0.50	9.6		9.6			9.6	5.19%
Property 9	16.3		0.11	0.95					0.20	15.1		15.1			15.1	1.33%
Property 10	2.1			0.29					0.29	1.5		1.5			1.5	19.76%
Property 11	1.9									1.9		1.9			1.9	0.00%
Property 12	2.1									2.1		2.1			2.1	0.00%
Property 13	2.1									2.1		2.1		1.0	1.1	0.00%

		ENCUMBERED LAND			TRANSPORT COMMUNITY					TOTAL Net	OTHER	TOTAL NET	RESIDENTIAL DENSITY			
Property Number	Total Area (ha)	Land Subject to Inundation Overlay	Drainage (Retarding Basin)	Vegetation to be retained	Land for Collector Roads	Land for shared path	Community Facility	Unencumbered Active Open Space	Unencumbered Passive Open Space	Developable Area (Hectares)	Commercial Development	RESIDENTIAL AREA (HECTARES)	Low Density	Medium Density	Standard Density	Passive Open Space as % of NDA
Property 14	6.2					0.04				6.1		6.1			6.1	0.00%
Property 15	22.8		0.11	0.16		1.40		4.0		17.1		17.1			17.1	0.00%
Property 16	2.1					0.02				2.1		2.1		0.4	1.7	0.00%
Property 17	2.1			0.39		0.02				1.7		1.7		0.4	1.3	0.00%
Property 18	2.0					0.03	0.5			1.5		1.5			1.5	0.00%
Property 19	2.1		0.28			0.06			0.76	1.0	1.0	0.0			1.0	73.37%
Property 20	2.8			0.15						2.6		2.6			2.6	0.00%
Property 21	2.1			0.48					0.15	1.5		1.5			1.5	10.30%
Property 22	2.0									2.0		2.0			2.0	0.00%
Property 23	2.0									2.0		2.0			2.0	0.00%
Property 24	14.3								0.76	13.6		13.6			13.6	5.60%
Property 25	2.3									2.3		2.3			2.3	0.00%
Property 26	21.4		0.20	2.6					1.55	17.1		17.1			17.1	9.06%
Property 27	50.8	3.2	0.25	1.5	3.9				1.70	40.3		40.3	6.1		34.2	4.16%
TOTAL	214.6	3.2	2.0	6.5	3.9	1.6	0.5	4.0	9.2	183.8	1.0	182.8	6.1	1.8	175.8	

Note: PL01 - 0.125 hectares of LSIO land is required from Property 27 for the widening of Cruse Street.





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OPEN SPACE PERCENTAGES AND FUNDING

The WNWDCP includes the passive open space that will be set aside within the Structure Plan area to meet the relevant benchmarks such as Clause 56 of the Planning Scheme. To this end, a total of 9.5 hectares, or 5% of net developable area (see Figure 4 and Table 5) of passive open space has been identified. Given this open space is not equally distributed across the various landholdings, the open space is to be equalised through the DCP. That is, each local park nominated in Figure 4 and quantified in Table 5, is identified as an infrastructure item to be funded via the DCP, with landholdings identified as having passive open space in the WNW Structure Plan to be reimbursed or credited for their land contribution via the DCP fund.

Notwithstanding, a passive open space contribution of 5% is also specified in Clause 52.01 for clarity.
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5.1 Net Developable Land

In the WNWDCP contributions are payable on all net developable land on any given development site. For the purposes of the WNWDCP net developable land is defined as all land with the exception of:-

- > unencumbered active and passive open space;
- encumbered land including conservation areas and drainage lines identified in the Structure Plan;
- > collector road reservations; and
- > paper roads.

A detailed land budget for the entire WNWDCP area is provided in Table 5. The total NDA for the WNWDCP is 183.8ha.

The area of net developable land on a given land parcel is shown in Figure 2. It should be noted that future plans of subdivision will not be used for calculating net developable areas for the purposes of administering the WNWDCP. Development contributions will be payable according to the net developable area shown in the Precinct Land Budget Table 5 irrespective of whether land budget figures are modified as a result of detailed design during the subdivision design process. Table 5 provides the net developable area for each individual land holding within the DCP area.

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6.1

Community and Development Infrastructure

In accordance with the Planning and Environment Act (1987) and the Ministerial Direction on Development Contributions, the WNWDCP makes a distinction between "development" and "community" infrastructure. Furthermore, the timing of payment of contributions is linked to the type of infrastructure in question.

Contributions relating to development infrastructure are to be made by developers at the time of subdivision. For community infrastructure, contributions are to be made by the home-buyer at the time of building approval.

The WNWDCP does not contain any infrastructure projects categorised as community infrastructure. All infrastructure projects are considered to be development infrastructure.

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DCP ADMINISTRATION

Payment of any development contribution required under the WNWDCP must be made not more than 21 days before the issue of a Statement of Compliance but no later than the issue of a Statement of Compliance. Council may agree to the payment of a development contribution after the issue of a statement of compliance if an agreement under section 173 of the Planning and Environment Act (or other acceptable form of agreement) is executed and registered on the Title to the Land prior to the issue of a Statement of Compliance. However, where no planning permit is required, the development contribution levy is to be paid prior to the issue of a Building Permit.

In accordance with section 62(2)(e) of the Planning and Environment Act 1987, the compensation payable for any developable land included within the WNWDCP that is required by the Rural City of Wangaratta Council for an infrastructure project identified in the WNWDCP (incorporated plan) is fixed at the rate set in the DCP. The fixed land values may only be adjusted annually for rises in the CPI (All Groups Melbourne) between July 2018 and the date on which the owner is to be credited for provision of land required by the DCP.

7.1 Works In Kind

For some infrastructure projects, it may be possible for developers to carry out works or provide land in lieu of making a cash contribution. However, this will only be possible where the Collecting Agency and Development Agency agrees to this and there is agreement reached on the standard and timing of the works.

When a developer opts to physically provide an infrastructure item, the situation may arise where the developer delivers works and/or land with a value that exceeds that specific developers DCP liability. For example, an early-stage developer may be required to construct a large segment of a collector road such as Reith Road. In such a case the developer may be entitled to credits on other projects in the WNWDCP to the extent that they "over-contributed", i.e. the cost of the length of road that the developer built exceeded their liability under the DCP, on Reith Road. Alternatively, a developer may seek a cash reimbursement for the amount "over contributed". It is important to note that the amount referred to as an "over contribution" is the value of the DCP project being provided as works and/or land in Kind, as specified in the DCP, that exceeds the particular property/ies DCP liability. An implementation strategy has been included in Part 8 of the WNWDCP to assist with administration of the WNWDCP into the future.

The details of credits and reimbursements will need to be negotiated with, and agreed to by the Collecting Agency on a case-by-case basis.

7.2 Credit for Over Provision

Where the Collecting Agency agrees that a development proponent can deliver an infrastructure item (either works and/or land) as an in kind contribution, the situation may arise where the developer's actual contractual liabilities exceed the amounts provided for in the WNWDCP for the individual project. Unless the arrangement with the relevant Collecting Agency allows for it, the actual cost of the project over the amount specified in the WNWDCP is not creditable to the development proponent.

7.3 Funds Administration

The administration of contributions made under the WNWDCP will be transparent and demonstrate:-

- > amount and timing of funds collected;
- > the source of funds collected;
- > amount and timing of expenditure;
- the purpose for which the expenditure was made;
- the account balances for individual infrastructure projects; and
- > all transactions will be clearly identified in Council records and kept in accordance with the Local Government Act 1989.

The WNWDCP will operate for a period of 10 years, at which time it will be reviewed. It is expected that most infrastructure projects in the current DCP will be rolled-over into a subsequent DCP.

Indexation

Both the capital and land costs of all infrastructure items are in 2018 dollars and will be indexed by Council annually in July for inflation. The land value for all infrastructure projects is fixed at the rates set in the DCP.

Table 6 below sets out the indexation method to be applied to the respective infrastructure categories.

Table 6: Indexation and Timing

Infrastructure Type	Method of Indexation	Timing of Indexation
Community Infrastructure	Australian Bureau of Statistics Producer Price Indexes Non-Residential Building Construction Index, Victoria (Catalogue 6427.0, Table 17 Output of the Construction Industries)	July 1
Roads, drainage and shared paths	Australian Bureau of Statistics Producer Price Indexes Road & Bridge Construction Index, Victoria (Catalogue 6427.0, Table 17 Output of the Construction Industries)	July 1
Land	Consumer Price Index (All Groups Melbourne)	July 1

7.4

Type of Development that is Subject to the Levy

The WNWDCP Development levy applies to subdivision and/or development of land.



7.5 Collecting Agency

7.6 Agency Responsible for Works

The collecting agency is the Rural City of Wangaratta.

The Rural City of Wangaratta is responsible for the provision of the works funded by the WNWDCP except as otherwise stated.

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8 IMPLEMENTATION STRATEGY

As set out at the beginning of this document, the primary purpose of the WNWDCP is to ensure that the necessary infrastructure is delivered in a timely and efficient way. This section provides further details regarding how the Collecting Agency intends to implement the WNWDCP. In particular this section clearly identifies the rationale for the Implementation Strategy and details the various measures that have been adopted to reduce the risk posed by the WNWDCP to all parties.

8.1

Implementation Strategy Rationale

This Implementation Strategy has been incorporated into the WNWDCP to provide certainty to both the Collecting Agency and development proponents. The Implementation Strategy recognises the complexities associated with infrastructure provision and funding and seeks to minimise risk to the Collecting Agency, Development Agency, development proponents and the community. The Implementation Strategy has been formulated by:

- Assessing the risk posed by the infrastructure projects (identifying high risk items);
- > Having regard to the development context;
- Assessing the need for finance requirements
 upfront financing and pooling of funds;
- Agreeing the land value and indexing it appropriately;
- Seeking direct delivery of infrastructure and land by development proponents where appropriate;
- > Identifying preferred implementation mechanisms to achieve the above outcomes and reducing the risk associated with the DCP to ensure that it will be delivered as intended, and
- Providing adequate resources to administer the DCP.

8.2

Preferred Implementation Mechanism

Under Section 46P of the Planning and Environment Act 1987, the Collecting Agency may accept (with the consent of the Development Agency where the Collecting Agency is not also the Development Agency), the provision of land, works, services or facilities by the applicant in part or full satisfaction of the amount of levy payable. This can be agreed with the Collecting Agency before or after the application for the permit is made or before or after the development is carried out.

To co-ordinate the provision of infrastructure this section sets out an implementation strategy which identifies projects suitable for delivery as works in kind.

8.2.1 Allocation of Projects Suitable for Delivery as Works in Kind

The purpose of this section is to provide an indication of which infrastructure items may be provided by developers, the value of the credit that the developer will receive and the method by which the developer will be reimbursed for these credits. By allowing developers to provide infrastructure in return for credits against their development contribution obligation, there is a reduction in the funding risk to the Collecting Agency while developers are given greater flexibility, certainty and control over the roll-out of infrastructure within or proximate to their development area.

To assist Council in the coordinated delivery of the WNWDCP projects, Table 5 lists the projects suitable to be delivered as works in kind.

Table 7: Projects suitable to be delivered as works in kind

RD01	Upgrade of Christensen Lane from Lindner Road to Wangandary Road to a Collector Street - Level 1 standard. DCP includes the construction of roundabout at the intersection of Christensen Lane and Lindner Road. Total road reserve is 24m, the DCP funds construction of a 5.8m pavement and one 2.5m shared path. Road length is 1,045 Im which is constructed within the existing 24m road reserve, therefore no additional land is required.
RD02	Upgrade of Wangandary Road from Christensen Lane to Reith Road to a Collector Street - Level 1 standard. The total road reserve is 24m, the DCP funds construction of a 5.8m pavement and one 2.5m shared path. Road length is 835 lm which is constructed within the existing 24m road reserve, therefore no additional land is required.
RD03	Upgrade of Reith Road from Cruse Street to Lindner Road to a Collector Street - Level 1 standard. DCP includes the construction of a three way intersection where the proposed east-west internal local road meets Reith Road The total reserve is 24m, the DCP funds construction of a 5.8m pavement and one 2.5m shared path. Road length is 815 lm which is constructed within the existing 24m road reserve, therefore no additional land is required.
RD04	Upgrade of Reith Road from Cruse Street to Colson Drive to a Collector Street - Level 1 standard. The total road reserve is 24m, the DCP funds construction of a 5.8m pavement and one 2.5m shared path. Road length is 1,160 lm which is constructed within the existing 24m road reserve, therefore no additional land is required.
RD05	Construction of Cruse Street extension from end of seal to 3 Mile Creek to a Collector Street - Level 1 standard. Total road reserve is 24m, the DCP funds construction of a 11.6m pavement, which varies to 9 metres at the bridge and one 2.5m shared path. Road length is 315 lm which is constructed within the existing 24m road reserve, therefore no additional land is required.
RD06	Construction of Cruse Street across 3 Mile Creek to a Collector Street – Level 1 standard. Total road reserve is 24m, the DCP funds construction of a 11.6m pavement and one 2.5m shared path. Road length is 100 lm which is constructed within the existing 24m road reserve, therefore no additional land is required. Crossing of the creek includes construction of a bridge.
RD07	Construction of Cruse Street extension from 3 Mile Creek to Worland Road to a Collector Street - Level 1 standard. DCP comprises of the construction of roundabout at Worland Road. Total road reserve is 24 metres. Construction includes support batters of varying heights, an 11.6m pavement, and one 2.5m shared path. Road length is 400 lm which will be constructed within a new road reserve. The total area of land required is 1.4 hectares, which includes 0.125 hectares of land subject to flood inundation.
RD08	Construction of Cruse Street extension from Worland Road to Reith Road to a Collector Street - Level 1 standard. Total road reserve is 24 meters, the DCP funds construction of a three way intersection at the junction of Reith Road and Cruse Street and a roundabout at the intersection of Cruse Street and the internal north south local roads, an 11.6m pavement, one 2.5m shared path and one 1.5m footpath. Road length is 1,007 lm which is to be constructed within the new road reserve. The total area of land required is 2.6 hectares.
RD09	Upgrade of Lindner Road from Worland Road to Christensen Lane to a Collector Street - Level 1 standard. Total road reserve is 24m, the DCP funds the construction of a 5.8m pavement and one 2.5m shared path. Road length is 230 lm which is constructed within the existing 24m road reserve, therefore no additional land is required.
RD10	Upgrade of Lindner Road from Christensen Lane to Reith Road to a Collector Street - Level 1 standard. Total road reserve is 24m, the DCP funds construction of a 5.8m pavement and one 2.5m shared path along the northern edge. Road length is 835 Im which is constructed within the existing 24m road reserve, however, the shared path requires land 1.57 hectares of land from properties south of the road due to the presence of mature native vegetation within the existing road reservation.
CD01	Community activity centre. Purchase of 0.5 hectares and construction of a 1,250m ² local community centre which will include 3 kindergarden classes, long day care facility, meeting/consulting rooms, function room and kitchen.
0S01	Purchase of 4 hectares of active open space
0 \$02	Purchase of 9.5 hectares of passive open space
PC01	Construction of off-road shared pedestrian and cycle path along Three Mile Creek between southern boundary of the growth area and Cruse Street. Construction of 3m wide concrete path. Path length 568.3 lm.
DR01	Wangandary Road Trunk Drainage. Construction of major spine drainage system along Wangandary Road to service the northern portion of the North-West Growth Area. A total of 1,920 lm of pipe is required along with the construction of two retarding basins. Total land area required is 1.05 hectares.
DR02	Lindner Road Trunk Drainage. Construction of major spine drainage system along Lindner Road to service the central section of the North-West Growth Area. A total of 1,975 lm of pipe is required along with the construction of two retarding basins and one bio-retention basin. Total land area required is 0.485 hectares.
DR03	Reith-Cruse Street Trunk Drainage. Construction of major spine drainage system within the new Cruse Street road reserve to service the southern section of the North-West Growth Area. A total of 2,600 Im of pipe is required along with the construction of one retarding basin and one bio-retention basin. Total land area required is 0.45 hectares.

Developers are required to discuss and come to an agreement with the relevant Collecting Agency as to the potential for provision of works and land to offset their development contribution. A key objective is to ensure that the timing of infrastructure delivery matches the timing of development

It is envisaged, that the Implementation Strategy will be revised over time to take into account change in ownership, development fronts and potential changes to infrastructure projects.

8.2.2 Projects not Suitable for Delivery as Works in Kind

In some instances, due to land fragmentation combined with small NDA areas and therefore small WNWDCP liabilities there are some projects that may not be able to be delivered directly as works in kind. In this instance, the Collecting Agency would collect the WNWDCP cash payments and the Development Agency would be responsible for delivering particular projects.

44 WANGARATTA NORTH-WEST GROWTH AREA DEVELOPMENT CONTRIBUTIONS PLAN

Appendices



Wangaratta North West Development Contribution Plans SCHEDULE OF QUANTITIES - Growth Area Projects - Updated Road and Intersection Costs Road Projects RD01

Project ID	RD01	Date	August, 2018
Project Description	Update of Christensen La	ne from Lindner Road to Wangandary Road to	a Collector 1 Standard.
	Construction of a roundal	bout at the intersection of Christensen Lane a	and Lindner Road.
	Minor drainage (pit and p	ipe to collect stormwater from road)	
	Road Length is 1,045 lm		
	Kerb and Channel on both	n sides of the road	
	Road to be constructed in	n existing 24 m road reserve (no additional lar	nd required)
	Collector 1 Road compris	es of (and as shown in the diagram below):	
	6.6m (MN)) aining minor drainage)	
	0.50m 2.5m	COLLECTOR STREET - LEVEL 1	<u>L 25m l 050m</u>
DCP Cost (excluding GST)	\$2,462,263.00	Project Apportionment	100% of the works as described above
Project Cost (full collector street 1 standard, excluding GST)	\$4,924,526.00	Notes	 Scope: The figures below take into account the infrastructure works that are required by Planning Permit PlnApp 12/084.05 Scope Change (cost reduction): \$144,875.60 for removal of 1.5m footpath (from previous figures – March, 2017)

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1	SITE ESTABLISHMENT Ensure that all residents affected by the work are given at least seven days notice of commencement, asked to remove any private materials from their frontages, and warned that vehicle access to their property may become temporarily unavailable at times during the construction period. Provide all necessary site facilities including first aid equipment and obtain all relevant insurances and permits. Ensure that OH&S requirements are satisfied before work begins, and that the site is secured at the end of each day.		ltem	\$10,200	\$10,200
2	TRAFFIC CONTROL Develop, obtain all necessary permits from the relevant authorities for, and implement an appropriate traffic management plan. Note that the Tenderer will be required to act as the Works Manager within the meaning of the Road Management Act 2004.		ltem	\$3,100	\$ 3,100
3	SITE PREPARATION Remove and store topsoil adjacent to the site. After each section of the work has been completed, restore the profile of the nature strip, replace the topsoil, then reseed or replant all disturbed areas. After completing the works, remove and dispose of all debris and surplus material from the site.		ltem	\$2,100	\$ 2,100
4	SERVICE LOCATION Establish the location and, where appropriate, the depth of all services, obtain any necessary permits to undertake the works, and ensure that any required procedures and clearances are maintained at all times.		ltem	\$1,100	\$1,100
5	EARTHWORKS				
6	PAVEMENT CONSTRUCTION				
6.1	Excavate as required for pavement and kerb to a depth of 400 mm	2,274	m3	\$20	\$ 45,472
6.2	Scarify the exposed subgrade and compact to 95% MMDD	5,684	m2	\$5	\$ 28,420
6.3	Remove any soft areas and replace with Class 3 FCR @ 95% MMDD	43	m3	\$115	\$ 4,945
6.6	Supply, spread and consolidate 260mm deep Class 3 FCR @ 95% MMDD	1,478	m3	\$115	\$ 169,952
6.7	Supply, spread and consolidate 100mm deep Class 2 FCR @ 98% MMDD	568	m3	\$ 125	\$ 71,050
6.8	Prepare and prime surface and apply 40mm Type N Asphalt	5,684	m2	\$ 60	\$ 341,040
7	SHOULDER CONSTRUCTION				
8	ROUNDABOUT CONSTRUCTION				
8.01	Excavate as required for pavement and kerb to a depth of 400 mm	1,600	m3	\$ 20	\$ 32,000
8.02	Scarify the exposed subgrade and compact to 95% MMDD	4,002	m2	\$5	\$ 20,010
8.03	Remove any soft areas and replace with Class 3 FCR @ 95% MMDD	31	m3	\$115	\$ 3,565
8.04		0	m3		
8.05	Supply, spread and consolidate 250mm deep Class 3 FCR @ 95% MMDD	1,001	m3	\$115	\$ 115,115
8.06	Supply, spread and consolidate 100mm deep Class 2 FCR @ 98% MMDD	400	m3	\$ 125	\$ 50,000
8.07	Construct Type SM2 kerb and channel [IDM SD 100]	352	m	\$ 85	\$ 29,908
8.08	Supply and install 375Ø RC pipe under road @ max depth 1.5m [IDM SD 310]	126	m	\$ 200	\$ 25,119
8.09	Supply and install 100Ø agricultural drain with filter [IDM SD145]	176	m	\$ 25	\$ 4,398
8.10	Construct new 900 x 600 side entry pits @ max depth 1.5m	8	unit	\$ 2,200	\$ 17,600
8.11	Prepare and prime surface and apply 50mm Type N Asphalt	4,002	m2	\$ 75	\$ 300,150
9	3-WAY INTERSECTIONS	.,			+ - 50,.00

10	4-WAY INTERSECTIONS				
11	FOOTPATH				
11	SHARED PATHS				
11.1	Excavate as required for shared path to a depth of 175mm	444	m3	\$ 20	\$ 8,881
11.2	Scarify the exposed subgrade and compact to 95% MMDD	2,538	m2	\$5	\$ 12,688
11.3	Remove any soft areas and replace with Class 3 FCR @ 95% MMDD	20	m3	\$ 115	\$ 2,300
11.4	Supply, spread and consolidate 50mm deep Class 3 FCR @ 95% MMDD	508	m3	\$ 115	\$ 58,363
11.5	Construct 125mm [25MPa] RC path with one layer SL72 Mesh	2,538	m2	\$ 80	\$ 203,000
12	KERB AND CHANNEL				
12.1	Excavate the base for the new kerb and channel to the required depth	68	m3	\$ 20	\$ 1,360
12.2	Supply, spread and consolidate Class 3 FCR to 75mm compacted depth	68	m3	\$115	\$ 7,820
12.3	Construct Type B2 kerb and channel [IDM SD 100]	2,030	m	\$65	\$ 131,950
12.4	Supply and install 450Ø RC pipe behind kerb @ max depth 1.5m [IDM SD310]	1,015	m	\$ 175	\$ 177,625
12.5	Supply and install 375Ø RC pipe under road @ max depth 1.5m [IDM SD 310]	203	m	\$ 200	\$ 40,560
12.6	Supply and install 100Ø agricultural drain with filter [IDM SD145]	2,030	m	\$ 25	\$ 50,750
12.7	Construct new 900 x 600 side entry pits @ max depth 1.5m	26	unit	\$ 2,200	\$ 57,200
13	PIPE CULVERTS				
14	MINOR BOX CULVERTS				
14	MAJOR CULVERTS				
15	BRIDGE				
		SUB-TOT/	AL		\$ 2,172,616
		DESIGN AND PM			\$ 217,262
		CONTING	SENCIES		\$ 217,262
		TOTAL (E	XCL. GST)		\$2,462,263
		GST			\$246,226.30
		TOTAL (II	NCL. GST)		\$2,708,489.30

Project ID	RD02	Date	August, 2018			
Project Description	Upgrade of Wangandary F	Road from Christensen Lane to Reith Road to Co	llector 1 Standard			
	Minor drainage (pit and pipe to collect stormwater form the road)					
	Road Length 835 lm					
	Kerb and Channel require	d on both sides of the road				
	Road to be constructed in	n existing 24 m road reserve (no additional land	required)			
	Collector 1 Road compris	es of (and as shown in the diagram below):				
	th					
	Road Construction: Collec	ctor 1 Standard (in accordance with the IDM)				
	6.0m (MN)	24.0m (MN) 11.0m (MN) 6.0m (MN) 11.0m (MN) COLLECTOR STREET - LEVEL 1	25m 050m			
DCP Cost (excluding GST)	\$1,491,581	Project Apportionment	100% of the works as described above			
Project Cost (full collector street 1 standard, excluding GST)	\$2,600,857	Notes	 Scope Change (cost reduction): \$119,199 for removal of 1.5m footpath (from previous figures – March, 2017) Full project costs includes additional: 5.8 m pavement (road) One 3.5 m verge (containing minor drainage) One 2.5 m shared path 			

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1	SITE ESTABLISHMENT		Item	\$8,400	\$8,400
	Ensure that all residents affected by the work are given at least seven days notice of commencement, asked to remove any private materials from their frontages, and warned that vehicle access to their property may become temporarily unavailable at times during the construction period. Provide all necessary site facilities including first aid equipment and obtain all relevant insurances and permits. Ensure that OH&S requirements are satisfied before work begins, and that the site is secured at the end of each day.				
2	TRAFFIC CONTROL		Item	\$2,600	\$2,600
	Develop, obtain all necessary permits from the relevant authorities for, and implement an appropriate traffic management plan. Note that the Tenderer will be required to act as the Works Manager within the meaning of the Road Management Act 2004.				
3	SITE PREPARATION		Item	\$2,000	\$2,000
	Remove and store topsoil adjacent to the site. After each section of the work has been completed, restore the profile of the nature strip, replace the topsoil, then reseed or replant all disturbed areas. After completing the works, remove and dispose of all debris and surplus material from the site.				
4	SERVICE LOCATION		Item	\$1,000	\$1,000
	Establish the location and, where appropriate, the depth of all services, obtain any necessary permits to undertake the works, and ensure that any required procedures and clearances are maintained at all times.				
5	EARTHWORKS				
6	PAVEMENT CONSTRUCTION				
6.1	Excavate as required for pavement and kerb to a depth of 400 mm	2,037	m3	\$20	\$40,744
6.2	Scarify the exposed subgrade and compact to 95% MMDD	5,093	m2	\$5	\$25,465
6.3	Remove any soft areas and replace with Class 3 FCR @ 95% MMDD	39	m3	\$115	\$ 4,485
6.4		0	m3		
6.5		0	m3		
6.6	Supply, spread and consolidate 260mm deep Class 3 FCR @ 95% MMDD	1,324	m3	\$115	\$152,281
6.7	Supply, spread and consolidate 100mm deep Class 2 FCR @ 98% MMDD	509	m3	\$125	\$63,663
6.8	Prepare and prime surface and apply 40mm Type N Asphalt	5,093	m2	\$60	\$305,580
		SUB-TOTAI			
7	SHOULDER CONSTRUCTION				
8	ROUNDABOUT CONSTRUCTION				
9	3-WAY INTERSECTIONS				
10	4-WAY INTERSECTIONS				
11	FOOTPATHS				
11	SHARED PATHS				47.000
11.1	Excavate as required for shared path to a depth of 175mm	365	m3	\$20	\$7,306
11.2	Scarify the exposed subgrade and compact to 95% MMDD	2,088	m2	\$5	\$10,438
11.3	Remove any soft areas and replace with Class 3 FCR @ 95% MMDD	16	m3	\$115	\$1,840
11.4	Supply, spread and consolidate 50mm deep Class 3 FCR @ 95% MMDD	418	m3	\$115	\$48,013
11.5	Construct 125mm [25MPa] RC path with one layer SL72 Mesh	2,088	m2	\$80	\$167,000

12	KERB AND CHANNEL				
12.1	Excavate the base for the new kerb and channel to the required depth	56	m3	\$ 20	\$1,120
12.2	Supply, spread and consolidate Class 3 FCR to 75mm compacted depth	56	m3	\$115	\$6,440
12.3	Construct Type B2 kerb and channel [IDM SD 100]	1,670	m	\$65	\$108,550
12.4	Supply and install 450Ø RC pipe behind kerb @ max depth 1.5m [IDM SD310]	835	m	\$175	\$146,125
12.5	Supply and install 375Ø RC pipe under road @ max depth 1.5m [IDM SD 310]		m	\$ 200	\$34,320
12.6	Supply and install 100Ø agricultural drain with filter [IDM SD145]	1,670	m	\$ 25	\$41,750
12.7	Construct new 900 x 600 side entry pits @ max depth 1.5m	20	unit	\$ 2,200	\$44,000
		SUB-TOTAL			\$382,305
13	PIPE CULVERTS				
14	MINOR BOX CULVERTS				
14	MAJOR CULVERTS				
15	BRIDGE				
		SUB-TOTAL			\$1,342,317
		DESIGN AN	D PM		\$134,232
		CONTINGENCIES TOTAL (EXCL. GST) GST			\$134,232
					\$1,491,581
					\$149,158.10
		TOTAL (INCL. GST)			\$1,640,739.1

Project ID	RD03	Date	August, 2018				
Project Description	Update of Reith Road from Cruse Stre	eet to Lindner Road to Collector 1 Standa	rd.				
	Construction of a 3 way intersection	included					
	Minor drainage (pit and pipe to collec	Minor drainage (pit and pipe to collect stormwater from road)					
	Road Length is 815 lm						
	Kerb and channel required on both si	des of the road					
	Road to be constructed in existing 24	m road reserve (no additional land requ	ired)				
	Collector 1 Road comprises of (and a	as shown in the diagram below):					
	 Total Road Reserve width is 24 m 5.8 m pavement (road) One 3.5 m verge (containing minotic) One 2.5 m shared path Road Construction: Collector 1 Standation (MN) 0.000 + 0.000 + 0.000 + 0.000 + 0.000 + 0.0000 +		0 50m				
DCP Cost (excluding GST)	\$1,182,198	Project Apportionment	100% of the works as described above				
Project Cost (full collector street 1 standard, excluding GST)	\$1,992,626	Notes	No change in scope or cost of project (from previous figures – March, 2017) No change to current costings Full project cost includes additional: • 5.8 metre pavement (road) • One 3.5 metre verge • One 2.5 metre shared path				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1	SITE ESTABLISHMENT Ensure that all residents affected by the work are given at least seven days notice of commencement, asked to remove any private materials from their frontages, and warned that vehicle access to their property may become temporarily unavailable at times during the construction period. Provide all necessary site facilities including first aid equipment and obtain all relevant insurances and permits. Ensure that OH&S requirements are satisfied before work begins, and that the site is secured at the end of each day.		Item	\$8,200	\$8,200
2	TRAFFIC CONTROL Develop, obtain all necessary permits from the relevant authorities for, and implement an appropriate traffic management plan. Note that the Tenderer will be required to act as the Works Manager within the meaning of the Road Management Act 2004.		ltem	\$2,500	\$ 2,500
3	SITE PREPARATION Remove and store topsoil adjacent to the site. After each section of the work has been completed, restore the profile of the nature strip, replace the topsoil, then reseed or replant all disturbed areas. After completing the works, remove and dispose of all debris and surplus material from the site.		ltem	\$2,000	\$ 2,000
4	SERVICE LOCATION Establish the location and, where appropriate, the depth of all services, obtain any necessary permits to undertake the works, and ensure that any required procedures and clearances are maintained at all times.		ltem	\$1,000	\$1,000
5	EARTHWORKS				
6	PAVEMENT CONSTRUCTION				
6.1	Excavate as required for pavement and kerb to a depth of 400 mm	1,826	m3	\$ 20	\$36,512
6.2	Scarify the exposed subgrade and compact to 95% MMDD	4,564	m2	\$5	\$22,820
6.3	Remove any soft areas and replace with Class 3 FCR @ 95% MMDD	35	m3	\$115	\$4,025
6.6	Supply, spread and consolidate 300mm deep Class 3 FCR @ 95% MMDD	1,369	m3	\$115	\$157,458
6.7	Supply, spread and consolidate 100mm deep Class 2 FCR @ 98% MMDD	456	m3	\$125	\$57,050
6.8	Prepare and prime surface and apply 14/7 D/D Seal	4,564	m2	\$13	\$ 57,050
7	SHOULDER CONSTRUCTION				
8	ROUNDABOUT CONSTRUCTION				
8.01	Excavate as required for pavement and kerb to a depth of 400 mm	1,600	m3	\$20	\$32,000
8.02	Scarify the exposed subgrade and compact to 95% MMDD	4,002	m2	\$5	\$20,010
8.03	Remove any soft areas and replace with Class 3 FCR $@$ 95% MMDD	31	m3	\$115	\$3,565
8.04		0	m3		
8.05	Supply, spread and consolidate 250mm deep Class 3 FCR @ 95% MMDD	1,001	m3	\$115	\$115,115
8.06	Supply, spread and consolidate 100mm deep Class 2 FCR @ 98% MMDD	400	m3	\$125	\$50,000
8.07	Construct Type SM2 kerb and channel [IDM SD 100]	352	m	\$85	\$29,908
8.08	Supply and install 375Ø RC pipe under road @ max depth 1.5m [IDM SD 310]	126	m	\$00	\$25,119
8.09	Supply and install 100Ø agricultural drain with filter [IDM SD145]	176	m	\$25	\$4,398
8.10	Construct new 900 x 600 side entry pits @ max depth 1.5m	8	unit	\$2,200	\$17,600
8.11	Prepare and prime surface and apply 50mm Type N Asphalt	4,002	m2	\$75	\$300,150
9	3-WAY INTERSECTIONS	.,			

10	4-WAY INTERSECTIONS				
11	FOOTPATH				
11	SHARED PATHS				
11.1	Excavate as required for shared path to a depth of 155mm	316	m3	\$20	\$6,316
11.2	Scarify the exposed subgrade and compact to 95% MMDD	2,038	m2	\$5	\$10,188
11.3	Remove any soft areas and replace with Class 3 FCR @ 95% MMDD	16	m3	\$115	\$1,840
11.4	Supply, spread and consolidate 50mm deep Class 3 FCR @ 95% MMDD	204	m3	\$115	\$23,431
11.5	Prepare, prime and seal path with 30mm Type N Asphalt	2,038	m2	\$60	\$122,250
12	KERB AND CHANNEL				
12.1	Excavate the base for the new kerb and channel to the required depth	55	m3	\$20	\$1,100
12.2	Supply, spread and consolidate Class 3 FCR to 75mm compacted depth	55	m3	\$115	\$6,325
12.3	Construct Type B2 kerb and channel [IDM SD 100]	1,630	m	\$65	\$105,950
12.4	Supply and install 450Ø RC pipe behind kerb @ max depth 1.5m [IDM SD310]	815	m	\$175	\$142,625
12.5	Supply and install 375Ø RC pipe under road @ max depth 1.5m [IDM SD 310]	155	m	\$200	\$31,020
12.6	Supply and install 100Ø agricultural drain with filter [IDM SD145]	1,630	m	\$25	\$40,750
12.7	Construct new 900 x 600 side entry pits @ max depth 1.5m	20	unit	\$2,200	\$44,000
		SUB-TOTA	1		\$371,700
13	PIPE CULVERTS				
14	MINOR BOX CULVERTS				
14.05	Supply and install 1200x300 RC box culverts (Class 2) @ specified depth [IDM SD 310]	14.4	m	\$825	\$11,880
14.17	Supply and install precast concrete headers for 1200x300 RC box culverts	2	unit	\$3,000	\$6,000
14	MAJOR CULVERTS				
15	BRIDGE				
		SUB-TOTA	_		\$985,165
		DESIGN AND PM CONTINGENCIES TOTAL (EXCL. GST)			\$98,517
					\$98,517
					\$1,182,198
		GST			\$118,220
	TOTAL (INCL. GST)				\$1,300,418

Road Project RD04 SCHEDULE OF QUANTITIES Growth Area Projects - Post Panel - Updated Road and Intersection Costs

Project ID	RD04	Date	August, 2018				
Project Description	Update Reith Road from Cru	se Street to Colson Drive to a Collector 1 Sta	ndard.				
	Minor drainage (pit and pipe	to collect stormwater from road)					
	Road Length is 1,160 lm						
	Kerb and Channel on both sides of the road						
	Road to be constructed in ex	kisting 24 m road reserve (no additional land	required)				
	Collector 1 Road comprises	of (and as shown in the diagram below):					
	 Total Road Reserve width is 24 m 5.8 m pavement (road) One 3.5 m verge (containing minor drainage) One 2.5 m shared paths 						
	Road Construction: Collector	1 Standard (in accordance with the IDM)					
	0.50m	24.0m (MIN) 11.6m (MIN) 6.0m (MIN) COLLECTOR STREET - LEVEL 1	25m 0.50m				
DCP Cost (excluding GST)	\$1,532,610	Project Apportionment	100% of the works as described above				
Project Cost (full collector street 1 standard, excluding GST)	\$2,534,590	Notes	No change in scope or cost of project (from previous figures – March, 2017) No change to current costings The road length is extends from Full project cost includes additional: • 5.8 metre pavement (road) • One 3.5 meter verge • One 2.5 metre shared path				

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1	SITE ESTABLISHMENT				
	Ensure that all residents affected by the work are given at least seven days notice of commencement, asked to remove any private materials from their frontages, and warned that vehicle access to their property may become temporarily unavailable at times during the construction period. Provide all necessary site facilities including first aid equipment and obtain all relevant insurances and permits. Ensure that OH&S requirements are satisfied before work begins, and that the site is secured at the end of each day.		Item	\$ 11,600	\$ 11,600
2	TRAFFIC CONTROL				
	Develop, obtain all necessary permits from the relevant authorities for, and implement an appropriate traffic management plan. Note that the Tenderer will be required to act as the Works Manager within the meaning of the Road Management Act 2004.		Item	\$ 3,500	\$ 3,500
3	SITE PREPARATION				
	Remove and store topsoil adjacent to the site. After each section of the work has been completed, restore the profile of the nature strip, replace the topsoil, then reseed or replant all disturbed areas. After completing the works, remove and dispose of all debris and surplus material from the site.				
4	SERVICE LOCATION				
	Establish the location and, where appropriate, the depth of all services, obtain any necessary permits to undertake the works, and ensure that any required procedures and clearances are maintained at all times.		Item	\$ 1,200	\$ 1,200
5	EARTHWORKS				
6	PAVEMENT CONSTRUCTION				
6.1	Excavate as required for pavement and kerb to a depth of 400 mm	2,598	m3	\$ 20	\$ 51,968
6.2	Scarify the exposed subgrade and compact to 95% MMDD	6,496	m2	\$5	\$ 32,480
6.3	Remove any soft areas and replace with Class 3 FCR @ 95% MMDD	49	m3	\$115	\$ 5,635
6.6	Supply, spread and consolidate 300mm deep Class 3 FCR @ 95% MMDD	1,949	m3	\$ 115	\$ 224,112
6.7	Supply, spread and consolidate 100mm deep Class 2 FCR @ 98% $MMDD$	650	m3	\$ 125	\$ 81,200
6.8	Prepare and prime surface and apply 14/7 D/D Seal	6,496	m2	\$13	\$ 81,200
7	SHOULDER CONSTRUCTION				
8	ROUNDABOUT CONSTRUCTION				
9	3-WAY INTERSECTIONS				
10	4-WAY INTERSECTIONS				
11	FOOTPATHS				
11	SHARED PATHS				
11.1	Excavate as required for shared path to a depth of 155mm	450	m3	\$ 20	\$ 8,990
11.2	Scarify the exposed subgrade and compact to 95% MMDD	2,900	m2	\$5	\$ 14,500
11.3	Remove any soft areas and replace with Class 3 FCR @ 95% MMDD	22	m3	\$115	\$ 2,530
11.4	Supply, spread and consolidate 50mm deep Class 3 FCR @ 95% MMDD	290	m3	\$ 115	\$ 33,350
11.5	Prepare, prime and seal path with 30mm Type N Asphalt	2,900	m2	\$ 60	\$ 174,000
12	KERB AND CHANNEL				
12.1	Excavate the base for the new kerb and channel to the required depth	78	m3	\$ 20	\$ 1,560
12.2	Supply, spread and consolidate Class 3 FCR to 75mm compacted depth	78	m3	\$115	\$ 8,970
12.3	Construct Type B2 kerb and channel [IDM SD 100]	2,320	m	\$ 65	\$ 150,800
12.4	Supply and install 450Ø RC pipe behind kerb @ max depth 1.5m [IDM SD310]	1,160	m	\$ 175	\$ 203,000

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		1			1
12.5	Supply and install 375Ø RC pipe under road @ max depth 1.5m [IDM SD 310]	212 m \$200		\$ 42,300	
12.6	Supply and install 100Ø agricultural drain with filter [IDM SD145]	2,320	m	\$ 25	\$ 58,000
12.7	Construct new 900 x 600 side entry pits @ max depth 1.5m	30	unit	\$ 2,200	\$ 66,000
13	PIPE CULVERTS				
14	MINOR BOX CULVERTS				
13.05	Supply and install 1200x300 RC box culverts (Class 2) @ specified depth [IDM SD 310]	C box culverts (Class 2) @ specified 14.4 m \$		\$ 825	\$ 11,880
13.17	Supply and install precast concrete headers for 1200x300 RC box culverts	2 unit \$3,00		\$ 3,000	\$ 6,000
14	MAJOR CULVERTS				
15	BRIDGE				
		SUB-TOTAI	L		\$1,277,175
		DESIGN AN	ID PM		\$127,718
		CONTINGENCIES TOTAL (EXCL. GST)		\$127,718	
				\$1,532,610	
		GST	GST		
		TOTAL (IN	CL. GST)		\$1,685,871

Road Project RD05 SCHEDULE OF QUANTITIES Growth Area Projects - Post Panel - Updated Road and Intersection Costs

Project ID	RD05	Date	August, 2018				
Project Description	Construction of Cruse Street extension from end of seal (existing) to Three Mile Creek to a Collector 1 Standard.						
	Construction of a 3 way intersection included – entrance into						
	Minor drainage (pit and pipe t	o collect stormwater from road)					
	Road length is 315 lm						
	Kerb and Channel on both sid	es of the road					
	Road to be constructed in exi	sting 24 m road reserve (no additional la	nd required)				
	Collector 1 Road comprises of (and as shown in the diagram below):						
	 Total Road width is 24 m 11.6 m pavement (road), varying to 9 metres at the bridge Two 3.5 m verges (containing minor drainage) One 2.5 m shared path 						
	Road Construction: Collector	1 Standard (in accordance with the IDM)					
	6.0m (MIN)	24.0m (MIN) 11.6m (MIN) 6.0m ((/MIN)				
	0.50m	COLLECTOR STREET - LEVEL 1					
DCP Cost (excluding GST)	\$836,375	Project Apportionment	100% of the works as described above				
Project Cost (full collector street 1 standard, excluding GST)	\$921,130	Notes	No change in scope or cost of project (from previous figures – March, 2017) No change to current costings Full project cost includes additional: • One 2.5 metre shared path				

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1	SITE ESTABLISHMENT				
2	Ensure that all residents affected by the work are given at least seven days notice of commencement, asked to remove any private materials from their frontages, and warned that vehicle access to their property may become temporarily unavailable at times during the construction period. Provide all necessary site facilities including first aid equipment and obtain all relevant insurances and permits. Ensure that OH&S requirements are satisfied before work begins, and that the site is secured at the end of each day. TRAFFIC CONTROL		Item	\$ 5,000	\$ 5,000
2	Develop, obtain all necessary permits from the relevant authorities for, and implement an appropriate traffic management plan. Note that the Tenderer will be required to act as the Works Manager within the meaning of the Road Management Act 2004.		Item	\$ 2,000	\$ 2,000
3	SITE PREPARATION				
	Remove and store topsoil adjacent to the site. After each section of the work has been completed, restore the profile of the nature strip, replace the topsoil, then reseed or replant all disturbed areas. After completing the works, remove and dispose of all debris and surplus material from the site.				
4	SERVICE LOCATION				
	Establish the location and, where appropriate, the depth of all services, obtain any necessary permits to undertake the works, and ensure that any required procedures and clearances are maintained at all times.		Item	\$ 1,000	\$ 1,000
5	EARTHWORKS				
6	PAVEMENT CONSTRUCTION				
6.1	Excavate as required for pavement and kerb to a depth of 400 mm	1,243	m3	\$ 20	\$ 24,864
6.2	Scarify the exposed subgrade and compact to 95% MMDD	2,642	m2	\$5	\$ 13,210
6.3	Remove any soft areas and replace with Class 3 FCR @ 95% MMDD	20	m3	\$115	\$ 2,300
6.4	Stabilise top 200mm of subgrade with quicklime or hydrated lime and potable water	93		\$45	\$ 4,196
6.6	Supply, spread and consolidate 260mm deep Class 3 FCR @ 95% MMDD	808	m3	\$ 115	\$ 92,929
6.7	Supply, spread and consolidate 100mm deep Class 2 FCR @ 98% MMDD	311	m3	\$ 125	\$ 38,850
6.8	Prepare and prime surface and apply 40mm Type N Asphalt	3,108	m2	\$ 60	\$ 186,480
7	SHOULDER CONSTRUCTION				
8	ROUNDABOUT CONSTRUCTION				
9	3-WAY INTERSECTIONS				
9.1	Excavate as required to a depth of 400 mm	398	m3	\$ 20	\$ 7,960
9.2	Scarify the exposed subgrade and compact to 95% MMDD	847	m2	\$5	\$ 4,235
9.3	Remove any soft areas and replace with Class 3 FCR @ 95% MMDD	7	m3	\$115	\$ 805
9.4	Stabilise 200mm of subgrade with quicklime or hydrated lime and potable water	30	m3	\$ 45	\$ 1,350
9.5	Supply, spread and consolidate 250mm deep Class 3 FCR @ 95% MMDD	211	m3	\$ 115	\$ 24,265
9.6	Supply, spread and consolidate 100mm deep Class 2 FCR @ 98% MMDD	84	m3	\$ 125	\$ 10,500
9.7	Construct Type SM2 kerb and channel [IDM SD 100]	34	m	\$85	\$ 2,890
9.8	Prepare and prime surface and apply 50mm Type N Asphalt	996	m2	\$75	\$ 74,700
10	4-WAY INTERSECTIONS				
11	FOOTPATHS				
11	SHARED PATHS				

		TOTAL (IN	CL. GST)		\$ 83,637 \$ 920,012
		TOTAL (EX GST			\$ 836,375 \$ 83,637
_					\$ 69,698
		DESIGN AN			\$ 69,698
		SUB-TOTA	L		\$ 696,979
15	BRIDGE				
14	MAJOR CULVERTS				
13.17	Supply and install precast concrete headers for 1200x300 RC box culverts	2	unit	\$ 3,000	\$ 6,000
13.05	Supply and install 1200x300 RC box culverts (Class 2) @ specified depth [IDM SD 310]	14.4	m	\$ 825	\$ 11,880
14	MINOR BOX CULVERTS				
13	PIPE CULVERTS				
12.7	Construct new 900 x 600 side entry pits @ max depth 1.5m	6	unit	\$ 2,200	\$ 13,200
12.6	Supply and install 100Ø agricultural drain with filter [IDM SD145]	536	m	\$ 25	\$ 13,400
12.5	Supply and install 375Ø RC pipe under road @ max depth 1.5m [IDM SD 310]	56	m	\$ 200	\$ 11,280
12.4	Supply and install 450Ø RC pipe behind kerb @ max depth 1.5m [IDM SD310]	268	m	\$ 175	\$ 46,900
12.3	Construct Type B2 kerb and channel [IDM SD 100]	536	m	\$ 65	\$ 34,840
12.2	Supply, spread and consolidate Class 3 FCR to 75mm compacted depth	18	m3	\$ 115	\$ 2,070
12.1	Excavate the base for the new kerb and channel to the required depth	18	m3	\$ 20	\$ 360
12	KERB AND CHANNEL				
11.5	Construct 125mm [25MPa] RC path with one layer SL72 Mesh	670	m2	\$ 80	\$ 53,600
11.4	Supply, spread and consolidate 50mm deep Class 3 FCR @ 95% MMDD	134	m3	\$ 115	\$ 15,410
11.3	Remove any soft areas and replace with Class 3 FCR @ 95% MMDD		m3	\$115	\$ 690
11.2	Scarify the exposed subgrade and compact to 95% MMDD	670	m2	\$5	\$ 3,350
1.1	Excavate as required for shared path to a depth of 175mm	117	m3	\$ 20	\$ 2,345

Road Project RD06 SCHEDULE OF QUANTITIES Growth Area Projects - Post Panel - Updated Road and Intersection Costs

Project ID	RD06	Date	August, 2018			
Project Description	Construction of Cruse Stree	at across Three Mile Creek				
	Road length is 100 lm					
	Kerb and Channel on both s	ides of the road				
	Minor drainage (pit and pipe	e to collect stormwater from road)				
	Includes construction of a bridge					
	Road to be constructed in existing 24 m road reserve (no additional land required) Total Road width is 24 m 11.6 m pavement (road) Two 3.5 m verges (containing minor drainage) One 2.5 m shared paths 					
	Road Construction: Collecto	r 1 Standard (in accordance with the IDM) 240m (MN) 11.0m (MN) 6.0m (MN)	0			
	0.50m	COLLECTOR STREET - LEVEL 1	25m 050m			
DCP Cost (excluding GST)	\$1,673,753	Project Apportionment	100% of the works as described above			
Project Cost (full collector street 1 standard, excluding GST)	\$1,691,511	Notes	No change in scope or cost of project (from previous figures – March, 2017) No change to current costings Full project cost includes additional: • One 2.5 metre shared path			

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1	SITE ESTABLISHMENT				
	Ensure that all residents affected by the work are given at least seven days notice of commencement, asked to remove any private materials from their frontages, and warned that vehicle access to their property may become temporarily unavailable at times during the construction period. Provide all necessary site facilities including first aid equipment and obtain all relevant insurances and permits. Ensure that OH&S requirements are satisfied before work begins, and that the site is secured at the end of each day.				
			Item	\$ 5,000	\$ 5,000
2	TRAFFIC CONTROL				
	Develop, obtain all necessary permits from the relevant authorities for, and implement an appropriate traffic management plan. Note that the Tenderer will be required to act as the Works Manager within the meaning of the Road Management Act 2004.				
3	SITE PREPARATION		Item	\$ 2,000	\$ 2,000
	Remove and store topsoil adjacent to the site. After each section of the work has been completed, restore the profile of the nature strip, replace the topsoil, then reseed or replant all disturbed areas. After completing the works, remove and dispose of all debris and surplus material from the site.				
			Item	\$ 2,000	\$ 2,000
4	SERVICE LOCATION				
	Establish the location and, where appropriate, the depth of all services, obtain any necessary permits to undertake the works, and ensure that any required procedures and clearances are maintained at all times.				
			Item	\$ 1,000	\$ 1,000
5	EARTHWORKS				
6	PAVEMENT CONSTRUCTION				
6.1	Excavate as required for pavement and kerb to a depth of 300 mm	170	m3	\$ 20	\$ 3,390
6.2	Scarify the exposed subgrade and compact to 95% MMDD	396	m2	\$5	\$ 1,980
6.3	Remove any soft areas and replace with Class 3 FCR @ 95% MMDD	3	m3	\$ 115	\$ 345
6.4	Stabilise top 200mm of subgrade with quicklime or hydrated lime and potable water	34	m3	\$ 45	\$ 1,526
6.5		0	m3		
6.6	Supply, spread and consolidate 160mm deep Class 3 FCR @ 95% MMDD	90	m3	\$ 115	\$ 10,396
6.7	Supply, spread and consolidate 100mm deep Class 2 FCR @ 98% MMDD	57	m3	\$ 125	\$ 7,063
6.8	Prepare and prime surface and apply 40mm Type N Asphalt	565	m2	\$ 60	\$ 33,900
7	SHOULDER CONSTRUCTION				
8	ROUNDABOUT CONSTRUCTION				
9	3-WAY INTERSECTIONS				
10	4-WAY INTERSECTIONS				
11	FOOTPATHS				
11	SHARED PATHS				
11.1	Excavate as required for shared path to a depth of 175mm	28	m3	\$ 20	\$ 550
11.2	Scarify the exposed subgrade and compact to 95% MMDD	157	m2	\$ 5	\$ 786
11.3	Remove any soft areas and replace with Class 3 FCR @ 95% MMDD	2	m3	\$ 115	\$ 230

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11.4	Supply, spread and consolidate 50mm deep Class 3 FCR @ 95% MMDD	31	m3	\$ 115	\$ 3,616
11.5	Construct 125mm [25MPa] RC path with one layer SL72 Mesh	157	m2	\$ 80	\$ 12,576
				Subtotal	\$17,758
12	KERB AND CHANNEL				
12.1	Excavate the base for the new kerb and channel to the required depth	4	m3	\$ 20	\$ 80
12.2	Supply, spread and consolidate Class 3 FCR to 75mm compacted depth	4	m3	\$ 115	\$ 460
12.3	Construct Type B2 kerb and channel [IDM SD 100]	126	m	\$65	\$ 8,174
12.4	Supply and install 450Ø RC pipe behind kerb @ max depth 1.5m [IDM SD310]	63	m	\$ 175	\$ 11,004
12.5	Supply and install 375Ø RC pipe under road @ max depth 1.5m [IDM SD 310]	12	m	\$ 200	\$ 2,300
12.6	Supply and install 100Ø agricultural drain with filter [IDM SD145]	126	m	\$ 25	\$ 3,144
12.7	Construct new 900 x 600 side entry pits @ max depth 1.5m	2	unit	\$ 2,200	\$ 4,400
13	PIPE CULVERTS				
14	MINOR BOX CULVERTS				
14	MAJOR CULVERTS				
15	BRIDGE				
15.01	Construct three-span bridge 54.88m long x 9.00m wide as specified and detailed		Item	\$ 1,234,800	\$ 1,234,800
15.02	Construct 4.00m long x 9.00m wide RC approach slabs as specified and detailed	72	m2	\$ 175	\$ 12,600
15.03	Construct 2.50m high x 9.00m wide RC abutments as specified and detailed	34	m3	\$ 850	\$ 28,900
15.04	Supply and install beaching rock as directed to protect stream banks	30	m3	\$85	\$ 2,575
		SUB-TOTAL			\$ 1,394,794
		DESIGN AND	РМ		\$ 139,479
		CONTINGENO	CIES		\$ 139,479
		TOTAL (EXCL	GST)		\$ 167,375
		GST			\$ 167,375
		TOTAL (INCL	GST)		\$ 1,841,128

Road Project RD07 SCHEDULE OF QUANTITIES Growth Area Projects - Post Panel - Updated Road and Intersection Costs

Project ID	RD07	Date	August, 2018				
Project Description	Construction of Cruse Street	extension from Three Mile Creek to Worlan	d Road to a Collector 1 Standard				
	Construction of a roundabou	it at Worland Road included					
	Minor drainage (pit and pipe	to collect stormwater from road)					
	Road Length is 400 lm	Road Length is 400 lm					
	Kerb and Channel on both si	Kerb and Channel on both sides of the road					
	Batters at varying heights (to	support bridge construction)					
	Road to be constructed in existing road reserve, and 1.4 ha of land is required to facilitate road construction						
	Collector 1 Road comprises	of (and as shown in the diagram below):					
	 Total Road Reserve width is 24 m 11.6 m pavement (road) Two 3.5 m verges (containing minor drainage) One 2.5 m shared path 						
	Road Construction: Collector	1 Standard (in accordance with the IDM)					
	6.6m (MN)	24 0m (MN) 11.6m (MN) 6.0m (MN) COLLECTOR STREET - LEVEL 1	25m 0.50m				
DCP Cost (excluding GST)	\$1,510,484	Project Apportionment	100% of the works as described above				
Project Cost (full collector street 1 standard, excluding GST)	\$1,615,936	Notes	No change in scope or cost of project (from previous figures – March, 2017) No change to current costings Full project cost includes				

THIS SCHEDULE OF QUANTITIES **MUST** BE READ IN CONJUNCTION WITH THE DESIGN PLANS. ALL CONTRACTORS MUST VERIFY THE QUANTITIES AND SUBMISSION OF A TENDER WILL BE TAKEN AS CONFIRMATION THAT THEY ARE SATISFIED AS TO THEIR ACCURACY.

additional:

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1	SITE ESTABLISHMENT				
	Ensure that all residents affected by the work are given at least seven days notice of commencement, asked to remove any private materials from their frontages, and warned that vehicle access to their property may become temporarily unavailable at times during the construction period. Provide all necessary site facilities including first aid equipment and obtain all relevant insurances and permits. Ensure that OH&S requirements are satisfied before work begins, and that the site is secured at the end of each day.		ltem	\$ 5,000	\$ 5,000
2	TRAFFIC CONTROL				
	Develop, obtain all necessary permits from the relevant authorities for, and implement an appropriate traffic management plan. Note that the Tenderer will be required to act as the Works Manager within the meaning of the Road Management Act 2004.		ltem	\$ 2,000	\$ 2,000
3	SITE PREPARATION				
	Remove and store topsoil adjacent to the site. After each section of the work has been completed, restore the profile of the nature strip, replace the topsoil, then reseed or replant all disturbed areas. After completing the works, remove and dispose of all debris and surplus material from the site.		ltem	\$ 2,000	\$ 2,000
4	SERVICE LOCATION				
	Establish the location and, where appropriate, the depth of all services, obtain any necessary permits to undertake the works, and ensure that any required procedures and clearances are maintained at all times.		ltem	\$ 1,000	\$ 1,000
5	EARTHWORKS				
5.2	Excavate to subgrade level and store or remove material as directed	1,764	m3	\$ 20	\$ 35,288
5.3	Recover, place and compact stored material in 200mm layers to 95% MMDD	1,764	m3	\$ 30	\$ 52,932
6	PAVEMENT CONSTRUCTION				
6.1	Excavate as required for pavement and kerb to a depth of 400 mm	1,740	m3	\$ 20	\$ 34,800
6.2	Scarify the exposed subgrade and compact to 95% MMDD	2,175	m2	\$5	\$ 10,875
6.3	Remove any soft areas and replace with Class 3 FCR @ 95% MMDD	17	m3	\$ 115	\$ 1,955
6.4	Stabilise top 200mm of subgrade with quicklime or hydrated lime and potable water	435	m3	\$ 45	\$ 19,575
6.6	Supply, spread and consolidate 260mm deep Class 3 FCR @ 95% MMDD	1,131	m3	\$ 115	\$ 130,065
6.7	Supply, spread and consolidate 100mm deep Class 2 FCR @ 98% MMDD	435	m3	\$ 125	\$ 54,375
6.8	Prepare and prime surface and apply 40mm Type N Asphalt	4,350	m2	\$ 60	\$ 261,000
7	SHOULDER CONSTRUCTION				
8	ROUNDABOUT CONSTRUCTION				
8.01	Excavate as required for pavement and kerb to a depth of 400 mm	800	m3	\$ 20	\$ 16,000
8.02	Scarify the exposed subgrade and compact to 95% MMDD	1,001	m2	\$5	\$ 5,005
8.03	Remove any soft areas and replace with Class 3 FCR @ 95% MMDD	8	m3	\$ 115	\$ 920
8.04	Stabilise 200mm of subgrade with quicklime or hydrated lime and potable water	200	m3	\$ 45	\$ 9,004
8.05	Supply, spread and consolidate 250mm deep Class 3 FCR @ 95% MMDD	501	m3	\$ 115	\$ 57,615
8.06	Supply, spread and consolidate 100mm deep Class 2 FCR @ 98% MMDD	100	m3	\$ 125	\$ 12,500
8.07	Construct Type SM2 kerb and channel [IDM SD 100]	176	m	\$ 85	\$ 14,954
8.08	Supply and install 375Ø RC pipe under road @ max depth 1.5m [IDM SD 310]	126	m	\$ 200	\$ 25,119

8.09	Supply and install 100Ø agricultural drain with filter [IDM SD145]	176	m	\$ 25	\$ 4,398
8.10	Construct new 900 x 600 side entry pits @ max depth 1.5m	8	unit	\$ 2,200	\$ 17,600
8.11	Prepare and prime surface and apply 50mm Type N Asphalt	2,001	m2	\$75	\$ 150,075
9	3-WAY INTERSECTIONS				
9.1	Excavate as required to a depth of 400 mm	199	m3	\$ 20	\$ 3,980
9.2	Scarify the exposed subgrade and compact to 95% MMDD	249	m2	\$5	\$ 1,245
9.3	Remove any soft areas and replace with Class 3 FCR @ 95% MMDD	2	m3	\$115	\$ 230
9.4	Stabilise 200mm of subgrade with quicklime or hydrated lime and potable water	50	m3	\$ 45	\$ 2,250
9.5	Supply, spread and consolidate 250mm deep Class 3 FCR @ 95% MMDD	62	m3	\$115	\$ 7,130
9.6	Supply, spread and consolidate 100mm deep Class 2 FCR @ 98% MMDD	24	m3	\$ 125	\$ 3,000
9.7	Construct Type SM2 kerb and channel [IDM SD 100]	17	m	\$85	\$ 1,445
9.8	Prepare and prime surface and apply 50mm Type N Asphalt	498	m2	\$ 75	\$ 37,350
10	4-WAY INTERSECTIONS				
11	FOOTPATHS				
11	SHARED PATHS				
11.1	Excavate as required for shared path to a depth of 175mm	164	m3	\$ 20	\$ 3,281
11.2	Scarify the exposed subgrade and compact to 95% MMDD	938	m2	\$5	\$ 4,688
11.3	Remove any soft areas and replace with Class 3 FCR @ 95% MMDD	8	m3	\$ 115	\$ 920
11.4	Supply, spread and consolidate 50mm deep Class 3 FCR @ 95% MMDD	188	m3	\$115	\$ 21,563
11.5	Construct 125mm [25MPa] RC path with one layer SL72 Mesh	938	m2	\$ 80	\$ 75,000
				Sub Total	\$105,425
12	KERB AND CHANNEL				
12.1	Excavate the base for the new kerb and channel to the required depth	25	m3	\$ 20	\$ 500
12.2	Supply, spread and consolidate Class 3 FCR to 75mm compacted depth	25	m3	\$ 115	\$ 2,875
12.3	Construct Type B2 kerb and channel [IDM SD 100]	750	m	\$65	\$ 48,750
12.4	Supply and install 450Ø RC pipe behind kerb @ max depth 1.5m [IDM SD310]	375	m	\$ 175	\$ 65,625
12.5	Supply and install 375Ø RC pipe under road @ max depth 1.5m [IDM SD 310]	71	m	\$ 200	\$ 14,100
12.6	Supply and install 100Ø agricultural drain with filter [IDM SD145]	750	m	\$ 25	\$ 18,750
12.7	Construct new 900 x 600 side entry pits @ max depth 1.5m	10	unit	\$ 2,200	\$ 22,000
13	PIPE CULVERTS				
14	MINOR BOX CULVERTS				
14	MAJOR CULVERTS				
15	BRIDGE				
		SUB-TOTAL			\$ 1,258,737
		DESIGN AND PM		\$ 125,874	
		CONTINGENCIES			\$ 125,874
		CONTINGENCIES			Q 120,074
		CONTINGENCIES)		\$ 1,510,484
)		

Road Project RD08 SCHEDULE OF QUANTITIES Growth Area Projects - Post Panel - Updated Road and Intersection Costs

Project ID	RD08	Date	August, 2018			
Project Description	Construction of Cruse Stre	eet extension from Worland Road to Reith Road				
	Road Length is 1007 Im					
	Construction of a 3 way in	itersection included				
	Construction of a roundabout included					
	Minor drainage (pit and pi	pe to collect stormwater from road)				
	Kerb and Channel on both	sides of the road				
	Road to be constructed in existing 24 m road reserve (no additional land required)					
	Collector 1 Road comprise	es of (and as shown in the diagram below):				
	 Total Road width is 24 m 11.6 m pavement (road) Two 3.5 m verges (containing minor drainage) One 2.5 m shared paths and 1 1.5 metre footpath Road Construction: Collector 1 Standard (in accordance with the IDM)					
	0.50m (MN)	24 0m (MIN) 11 6m (MIN) 6 0m (MIN) 11 6m (MIN) 6 0m (MIN) COLLECTOR STREET - LEVEL 1	2.5m 0.50m			
DCP Cost (excluding GST)	\$3,168,081	Project Apportionment	100% of the works as described above			
Project Cost (full collector street 1 standard, excluding GST)		Notes	No change in scope or cost of project (from previous figures – March, 2017) No change to current costings The footpath is on the north side of cruse st extension and mimics what is constructed at Bella way. The shared path is on the south side of cruse street extension and joins the shared pat in road project RD07.			

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT				
1	SITE ESTABLISHMENT								
	Ensure that all residents affected by the work are given at least seven days notice of commencement, asked to remove any private materials from their frontages, and warned that vehicle access to their property may become temporarily unavailable at times during the construction period. Provide all necessary site facilities including first aid equipment and obtain all relevant insurances and permits. Ensure that OH&S requirements are satisfied before work begins, and that the site is secured at the end of each day.		ltem	\$ 10,100	\$ 10,100				
2	TRAFFIC CONTROL								
	Develop, obtain all necessary permits from the relevant authorities for, and implement an appropriate traffic management plan. Note that the Tenderer will be required to act as the Works Manager within the meaning of the Road Management Act 2004.		ltem	\$ 3,100	\$ 3,100				
3	SITE PREPARATION								
	Remove and store topsoil adjacent to the site. After each section of the work has been completed, restore the profile of the nature strip, replace the topsoil, then reseed or replant all disturbed areas. After completing the works, remove and dispose of all debris and surplus material from the site.		ltem	\$ 2,100	\$ 2,100				
4	SERVICE LOCATION								
	Establish the location and, where appropriate, the depth of all services, obtain any necessary permits to undertake the works, and ensure that any required procedures and clearances are maintained at all times.		ltem	\$ 1,100	\$ 1,100				
5	EARTHWORKS								
6	PAVEMENT CONSTRUCTION								
6.1	Excavate as required for pavement and kerb to a depth of 400 mm	4,644	m3	\$ 20	\$ 92,888				
6.3	Remove any soft areas and replace with Class 3 FCR @ 95% $MMDD$	0	m3						
6.4	Stabilise top 200mm of subgrade with quicklime or hydrated lime and potable water	2,322	m3	\$ 45	\$ 104,499				
6.6	Supply, spread and consolidate 260mm deep Class 3 FCR @ 95% MMDD	3,019	m3	\$115	\$ 347,169				
6.7	Supply, spread and consolidate 100mm deep Class 2 FCR @ 98% MMDD	1,161	m3	\$125	\$ 145,138				
6.8	Prepare and prime surface and apply 40mm Type N Asphalt	11,611	m2	\$ 60	\$ 696,660				
7	SHOULDER CONSTRUCTION								
8	ROUNDABOUT CONSTRUCTION								
8.01	Excavate as required for pavement and kerb to a depth of 400 mm	800	m3	\$ 20	\$ 16,000				
8.02	Scarify the exposed subgrade and compact to 95% MMDD	0	m2	\$5					
8.03	Remove any soft areas and replace with Class 3 FCR @ 95% MMDD	0	m3	\$ 115					
8.04	Stabilise 200mm of subgrade with quicklime or hydrated lime and potable water	400	m3	\$ 45	\$ 18,008				
8.05	Supply, spread and consolidate 250mm deep Class 3 FCR @ 95% MMDD	501	m3	\$ 115	\$ 57,615				
8.06	Supply, spread and consolidate 100mm deep Class 2 FCR @ 98% MMDD	0	m3	\$ 125					
8.07	Construct Type SM2 kerb and channel [IDM SD 100]	176	m	\$ 85	\$ 14,954				
8.08	Supply and install 375Ø RC pipe under road @ max depth 1.5m [IDM SD 310]	126	m	\$ 200	\$ 25,119				
8.09	Supply and install 100Ø agricultural drain with filter [IDM SD145]	176	m	\$ 25	\$ 4,398				
8.10	Construct new 900 x 600 side entry pits @ max depth 1.5m	8	unit	\$ 2,200	\$ 17,600				
8.11	Prepare and prime surface and apply 50mm Type N Asphalt	2,001	m2	\$75	\$ 150,075				
9	3-WAY INTERSECTIONS	-							
9.1	Excavate as required to a depth of 400 mm	199	m3	\$ 20	\$ 3,980				
9.2	Scarify the exposed subgrade and compact to 95% MMDD	0	m2	\$5					
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9.3	Remove any soft areas and replace with Class 3 FCR @ 95% MMDD	0	m3	\$115					
9.4	Stabilise 200mm of subgrade with quicklime or hydrated lime and potable water	100	m3	\$ 45	\$ 4,500				
9.5	Supply, spread and consolidate 250mm deep Class 3 FCR @ 95% MMDD	0	m3	\$115					
9.6	Supply, spread and consolidate 100mm deep Class 2 FCR @ 98% MMDD	0	m3	\$ 125					
9.7	Construct Type SM2 kerb and channel [IDM SD 100]	17	m	\$ 85	\$ 1,445				
9.8	Prepare and prime surface and apply 50mm Type N Asphalt	498	m2	\$75	\$ 37,350				
10	4-WAY INTERSECTIONS								
11	FOOTPATHS								
11.1	Excavate as required for footpath to a depth of 175mm	263	m3	\$ 20	\$ 5,255				
11.2	Scarify the exposed subgrade and compact to 95% MMDD	1,502	m2	\$ 5	\$ 7,508				
11.3	Remove any soft areas and replace with Class 3 FCR @ 95% MMDD	12	m3	\$115	\$ 1,380				
11.4	Supply, spread and consolidate 50mm deep Class 3 FCR @ 95% MMDD	75	m3	\$115	\$ 8,634				
11.5	Construct 125mm [25MPa] RC path with one layer SL72 Mesh	1,502	m2	\$ 80	\$ 120,120				
11	SHARED PATHS								
11.1	Excavate as required for shared path to a depth of 175mm	438	m3	\$ 20	\$ 8,759				
11.2	Scarify the exposed subgrade and compact to 95% MMDD	2,503	m2	\$ 5	\$ 12,513				
11.3	Remove any soft areas and replace with Class 3 FCR @ 95% MMDD	19	m3	\$115	\$ 2,185				
11.4	Supply, spread and consolidate 50mm deep Class 3 FCR @ 95% MMDD	501	m3	\$ 115	\$ 57,558				
11.5	Construct 125mm [25MPa] RC path with one layer SL72 Mesh	2,503	m2	\$ 80	\$ 200,200				
12	KERB AND CHANNEL								
12.1	Excavate the base for the new kerb and channel to the required depth	67	m3	\$ 20	\$ 1,340				
12.2	Supply, spread and consolidate Class 3 FCR to 75mm compacted depth	67	m3	\$115	\$ 7,705				
12.3	Construct Type B2 kerb and channel [IDM SD 100]	2,002	m	\$ 65	\$ 130,130				
12.4	Supply and install 450Ø RC pipe behind kerb @ max depth 1.5m [IDM SD310]	1,001	m	\$ 175	\$ 175,175				
12.5	Supply and install 375Ø RC pipe under road @ max depth 1.5m [IDM SD 310]	203	m	\$ 200	\$ 40,560				
12.6	Supply and install 100Ø agricultural drain with filter [IDM SD145]	2,002	m	\$ 25	\$ 50,050				
12.7	Construct new 900 x 600 side entry pits @ max depth 1.5m	26	unit	\$ 2,200	\$ 57,200				
13	PIPE CULVERTS								
14	MINOR BOX CULVERTS								
14	MAJOR CULVERTS								
15	BRIDGE								
		SUB-TOTAL			\$ 2,640,068				
		DESIGN AND F	PM		\$ 264,007				
		CONTINGENC			\$ 264,007				
		TOTAL (EXCL		\$ 3,168,081					
		GST			\$ 316,808				
			TOTAL (INCL. GST) \$ 3,484,889						

Road Project RD09 SCHEDULE OF QUANTITIES Growth Area Projects - Post Panel - Updated Road and Intersection Costs

Project ID	RD09	Date	August, 2018
Project Description	Update of Lindner Road from	Worland Road to Christensen Lane to a Coll	lector 1 Standard.
	Construction of a 3 way inters	section included	
	Minor drainage (pit and pipe t	to collect stormwater from road)	
	Road Length is 230 lm		
	Kerb and Channel on both sid	les of the road	
	Road to be constructed in exi	sting 24 m road reserve (no additional land	required)
	Collector 1 Road comprises of	of (and as shown in the diagram below):	
	 Total Road width is 24 m 5.8 m pavement (road) Two 3.5 m verges (contair One 2.5 m shared path 	ning minor drainage)	
	Road Construction: Collector	1 Standard (in accordance with the IDM)	
	6.0m (bllN)	24.0m (MIN) 11.6m (MIN) 6.0m (MIN)	
	0.50m	COLLECTOR STREET - LEVEL 1	2.5m0.50m
DCP Cost (excluding GST)	\$480,062.75	Project Apportionment	100% of the works as described above
Project Cost (full collector street 1	\$692,810.75	Notes	Scope Change (cost reduction): • \$32,516.25 for removal of 1.5m footpath (from previous figures – March, 2017)
standard, excluding GST)			Full project costs includes additional: • 5.8 m pavement (road) • One 2.5 m shared path

THIS SCHEDULE OF QUANTITIES **MUST** BE READ IN CONJUNCTION WITH THE DESIGN PLANS. ALL CONTRACTORS MUST VERIFY THE QUANTITIES AND SUBMISSION OF A TENDER WILL BE TAKEN AS CONFIRMATION THAT THEY ARE SATISFIED AS TO THEIR ACCURACY.

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1	SITE ESTABLISHMENT				
	Ensure that all residents affected by the work are given at least seven days notice of commencement, asked to remove any private materials from their frontages, and warned that vehicle access to their property may become temporarily unavailable at times during the construction period. Provide all necessary site facilities including first aid equipment and obtain all relevant insurances and permits. Ensure that OH&S requirements are satisfied before work begins, and that the site is secured at the end of each day.				
			ltem	\$ 5,000	\$ 5,000
2	TRAFFIC CONTROL				
	Develop, obtain all necessary permits from the relevant authorities for, and implement an appropriate traffic management plan. Note that the Tenderer will be required to act as the Works Manager within the meaning of the Road Management Act 2004.				
-			ltem	\$ 2,000	\$ 2,000
3	SITE PREPARATION Remove and store topsoil adjacent to the site. After each section of the work has been completed, restore the profile of the nature strip, replace the topsoil, then reseed or replant all disturbed areas. After completing the works, remove and dispose of all debris and surplus material from the site.				
			Item	\$ 2,000	\$ 2,000
4	SERVICE LOCATION				
	Establish the location and, where appropriate, the depth of all services, obtain any necessary permits to undertake the works, and ensure that any required procedures and clearances are maintained at all times.				
			Item	\$ 1,000	\$ 1,000
5	EARTHWORKS				
6	PAVEMENT CONSTRUCTION				
6.1	Excavate as required for pavement and kerb to a depth of 400 mm	515	m3	\$ 20	\$ 10,304
6.2	Scarify the exposed subgrade and compact to 95% MMDD	1,288	m2	\$ 5	\$ 6,440
6.6	Supply, spread and consolidate 260mm deep Class 3 FCR @ 95% MMDD	335	m3	\$ 115	\$ 38,511
6.7	Supply, spread and consolidate 100mm deep Class 2 FCR @ 98% MMDD	129	m3	\$ 125	\$ 16,100
6.8	Prepare and prime surface and apply 40mm Type N Asphalt	1,288	m2	\$ 60	\$ 77,280
7	SHOULDER CONSTRUCTION				
8	ROUNDABOUT CONSTRUCTION				
9	3-WAY INTERSECTIONS				
9.1	Excavate as required to a depth of 400 mm	199	m3	\$ 20	\$ 3,980
9.2	Scarify the exposed subgrade and compact to 95% MMDD	498	m2	\$ 5	\$ 2,490
9.3	Remove any soft areas and replace with Class 3 FCR @ 95% MMDD	0	m3	\$ 115	
9.4		0	m3		
9.5	Supply, spread and consolidate 250mm deep Class 3 FCR @ 95% MMDD	124	m3	\$ 115	\$ 14,260
9.6	Supply, spread and consolidate 100mm deep Class 2 FCR @ 98% MMDD	49	m3	\$ 125	\$ 6,125
9.7	Construct Type SM2 kerb and channel [IDM SD 100]	17	m	\$85	\$ 1,445
9.8	Prepare and prime surface and apply 50mm Type N Asphalt	498	m2	\$75	\$ 37,350
10	4-WAY INTERSECTIONS				
11	FOOTPATHS				

11	SHARED PATHS						
11.1	Excavate as required for shared path to a depth of 175mm	101	m3	\$ 20	\$ 2,013		
11.2	Scarify the exposed subgrade and compact to 95% MMDD	575	m2	\$5	\$ 2,875		
11.3	Remove any soft areas and replace with Class 3 FCR @ 95% MMDD	0	m3				
11.4	Supply, spread and consolidate 50mm deep Class 3 FCR @ 95% MMDD	115	m3	\$ 115	\$ 13,225		
11.5	Construct 125mm [25MPa] RC path with one layer SL72 Mesh	575	m2	\$ 80	\$ 46,000		
				Sub total	\$64,113		
12	KERB AND CHANNEL						
12.1	Excavate the base for the new kerb and channel to the required depth	15	m3	\$ 20	\$ 300		
12.2	Supply, spread and consolidate Class 3 FCR to 75mm compacted depth	15	m3	\$115	\$ 1,725		
12.3	Construct Type B2 kerb and channel [IDM SD 100]	460	m	\$ 65	\$ 29,900		
12.4	Supply and install 450Ø RC pipe behind kerb @ max depth 1.5m [IDM SD310]	230	m	\$ 175	\$ 40,250		
12.5	Supply and install 375Ø RC pipe under road @ max depth 1.5m [IDM SD 310]	47	m	\$ 200	\$ 9,360		
12.6	Supply and install 100Ø agricultural drain with filter [IDM SD145]	460	m	\$ 25	\$ 11,500		
12.7	Construct new 900 x 600 side entry pits @ max depth 1.5m	6	unit	\$ 2,200	\$ 13,200		
13	PIPE CULVERTS						
14	MINOR BOX CULVERTS						
14	MAJOR CULVERTS						
15	BRIDGE						
		SUB-TOTAL			\$ 427,149		
		DESIGN AN	D PM		\$ 42,715		
		CONTINGE	NCIES		\$ 42,715		
		TOTAL (EX	CL. GST)		\$ 480,062.75		
		GST			\$ 48,006.28		
		TOTAL (INC	CL GST)		\$ 528,069.03		

Road Project RD10 SCHEDULE OF QUANTITIES Growth Area Projects - Post Panel - Updated Road and Intersection Costs

Project ID	RD10	Date	August, 2018
Project Description	Update of Lindner Road from	m Christensen Lane to Reith Road to a Collect	or 1 Standard.
	Minor drainage (pit and pip	e to collect stormwater from road)	
	Road Length is 835 lm		
	Kerb and Channel on both s	sides of the road	
	Road to be constructed in e	existing 24 m road reserve (no additional land	required)
	Additional 1.57 ha of land r	equired for shared path on the south side of the	he road
	Collector 1 Road comprises	s of (and as shown in the diagram below):	
	 Total Road width is 24 n 5.8 m pavement (road) Two 3.5 m verges (contained of the contained of the	aining minor drainage)	
	Road Construction: Collecto	or 1 Standard (in accordance with the IDM)	
	0.50m 2.5m	24.0m (MIN) 11.6m (MIN) 5.0m (MIN) 11.6m (MIN) 1.6m (MIN) COLLECTOR STREET - LEVEL 1	25m0.50m
DCP Cost (excluding GST)	\$737,438	Project Apportionment	100% of the works as described above
			No change in scope or cost of project (from previous figures – March, 2017)
Project Cost (full collector street 1	\$1,386,381	Notes	No change to current costings
standard, excluding GST)	¥1,300,301	notes	Full project cost includes additional: • 5.8 m pavement (road) • One 2.5 m shared path (north side of the road)

THIS SCHEDULE OF QUANTITIES **MUST** BE READ IN CONJUNCTION WITH THE DESIGN PLANS. ALL CONTRACTORS MUST VERIFY THE QUANTITIES AND SUBMISSION OF A TENDER WILL BE TAKEN AS CONFIRMATION THAT THEY ARE SATISFIED AS TO THEIR ACCURACY.

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1	SITE ESTABLISHMENT				
	Ensure that all residents affected by the work are given at least seven days notice of commencement, asked to remove any private materials from their frontages, and warned that vehicle access to their property may become temporarily unavailable at times during the construction period. Provide all necessary site facilities including first aid equipment and obtain all relevant insurances and permits. Ensure that OH&S requirements are satisfied before work begins, and that the site is secured at the end of each day.				
			Item	\$ 8,400	\$ 8,400
2	TRAFFIC CONTROL				
	Develop, obtain all necessary permits from the relevant authorities for, and implement an appropriate traffic management plan. Note that the Tenderer will be required to act as the Works Manager within the meaning of the Road Management Act 2004.				
			Item	\$ 2,600	\$ 2,600
3	SITE PREPARATION				
	Remove and store topsoil adjacent to the site. After each section of the work has been completed, restore the profile of the nature strip, replace the topsoil, then reseed or replant all disturbed areas. After completing the works, remove and dispose of all debris and surplus material from the site.				
			Item	\$ 2,000	\$ 2,000
4	SERVICE LOCATION				
	Establish the location and, where appropriate, the depth of all services, obtain any necessary permits to undertake the works, and ensure that any required procedures and clearances are maintained at all times.				
			Item	\$ 1,000	\$ 1,000
5	EARTHWORKS				
5.5	Construct, clean and regulate swale drains where specified	200	m3	\$ 30	\$ 6,012
5.6	Supply and install beaching rock as directed	10	m3	\$85	\$ 850
6	PAVEMENT CONSTRUCTION				
6.1	Excavate as required for pavement and kerb to a depth of 400 mm	1,870	m3	\$ 20	\$ 37,408
6.2	Scarify the exposed subgrade and compact to 95% MMDD	4,676	m2	\$5	\$ 23,380
6.6	Supply, spread and consolidate 300mm deep Class 3 FCR @ 95% MMDD	1,403	m3	\$ 115	\$ 161,322
6.7	Supply, spread and consolidate 100mm deep Class 2 FCR @ 98% MMDD	468	m3	\$ 125	\$ 58,450
6.8	Prepare and prime surface and apply 14/7 D/D Seal	4,676	m2	\$13	\$ 58,450
7	SHOULDER CONSTRUCTION				
8	ROUNDABOUT CONSTRUCTION				
9	3-WAY INTERSECTIONS				
10	4-WAY INTERSECTIONS				
11	FOOTPATHS				
11	SHARED PATHS				
11.1	Excavate as required for shared path to a depth of 155mm	324	m3	\$ 20	\$ 6,471
11.2	Scarify the exposed subgrade and compact to 95% MMDD	2,088	m2	\$ 5	\$ 10,438
11.3	Remove any soft areas and replace with Class 3 FCR @ 95% MMDD	0	m3		
11.4	Supply, spread and consolidate 50mm deep Class 3 FCR @ 95% MMDD	209	m3	\$ 115	\$ 24,006

WANGARATTA NORTH-WEST GROWTH AREA C71 ADOPTION

12	KERB AND CHANNEL				
12.1	Excavate the base for the new edge strips to the required depth	37	m3	\$ 20	\$ 740
12.2	Supply, spread and consolidate Class 3 FCR to 75mm compacted depth	37	m3	\$ 115	\$ 4,255
12.3	Construct edge strips [IDM SD 100]	1,670	m	\$ 50	\$ 83,500
13	PIPE CULVERTS				
14	MINOR BOX CULVERTS				
14	MAJOR CULVERTS				
15	BRIDGE				
		SUB-TOTAL			\$614,532
		DESIGN AN	D PM		\$61,453
		CONTINGE	\$61,453		
		TOTAL (EX	\$737,438		
		GST	\$73,744		

SCHEDULE OF QUANTITIES

PROJECT: Main Drainage Scheme - Cruse Street West

DATE: 17-February-2017

HIS S								DATE:		uary-2017		
1115 5	CHEDULE OF QUANTITIES MUST BE READ IN CONJUNCTION WITH THE DESIGN PLANS. ALL CONT ARE SATISFI				TITIES AND S	UBMISSI	ON OF A TEN	IDER WILL B	E TAKEN AS	CONFIRMA	TION TI	HAT THEY
	DESCRIPTION					UNIT					AN	NOUNT
1	SITE ESTABLISHMENT Contact residents affected by the project at least one week before the works begin, ask them to remove any private materials from their frontages, and where appropriate, warn them that vehicular access to their property will become unavailable at times during the construction period. Provide all necessary site facilities including first aid equipment and obtain all relevant insurances and permits. Prepare and submit an OHS Coordination Plan and an Environmental Management Plan for approval. Ensure that all OHS requirements are satisfied before work begins, and that the site is secured at the end of each day.					ltem	\$14,383				\$	14,383.00
2	TRAFFIC CONTROL Develop, obtain all necessary permits from the relevant authorities for, and implement an approved Traffic Management Plan. Note that the Tenderer will be required to act as the Works Manager within the meaning of the Road Management Act 2004.					ltem	\$5,753				\$	5,753.20
3	SITE PREPARATION Remove and store topsoil adjacent to the site. After each section of the work has been completed, restore the profile of the nature strip, replace the topsoil, then reseed or replant all disturbed areas. After completing the works, remove and dispose of all debris and surplus material from the site.					ltem	\$8,630				\$	8,629.80
4	SERVICE LOCATION Establish the location and, where appropriate, the depth of services, obtain any necessary permits to undertake the works, and ensure that any required procedures and clearances are maintained at all times.					ltem	\$2,877				\$	2,876.60
5 1 2 3 4 5 6	EARTHWORKS Remove and stockpile existing granular materials as directed Excavate to subgrade level and store or remove material as directed Recover, place and compact stored material in 200mm layers to 95% MMDD Supply, place and compact approved clean fill in 200mm layers to 95% MMDD Construct, clean and regulate swale drains where specified Supply and install beaching rock as directed	51		FC			ST		FC			
	PIPELINES [Installed as per drawings and specifications]	1.8m	More	1.8m	More		1.8m	More	1.8m	More		
	Supply and install 375Ø reinforced concrete pipes (Class 2 RRJ)	137	0	0	0	m	\$140	\$210	\$225	\$380		19,194.00
.02	Supply and install 450Ø reinforced concrete pipes (Class 2 RRJ)	25	80	0	0	m	\$155	\$225	\$240	\$395		21,875.00
03	Supply and install 525Ø reinforced concrete pipes (Class 2 RRJ)	0	292	0	0	m	\$185	\$270	\$285	\$470		78,840.00
04	Supply and install 600Ø reinforced concrete pipes (Class 2 RRJ)	240	322	0	0	m	\$215	\$300	\$315	\$500		148,200.00
05	Supply and install 675Ø reinforced concrete pipes (Class 2 RRJ)	320	80	0	0	m	\$255	\$355	\$375	\$590	\$	110,000.00
06	Supply and install 900Ø reinforced concrete pipes (Class 2 RRJ)	0	321	0	0	m	\$410	\$525	\$545	\$795	\$	168,588.00
)7	Supply and install 1050Ø reinforced concrete pipes (Class 2 RRJ)	0	241	0	0	m	\$520	\$660	\$690	\$1,000	\$	158,895.00
08	Supply and install 1200Ø reinforced concrete pipes (Class 2 RRJ)	0	462	0	0	m	\$570	\$710	\$740	\$1,050	\$	327,828.30
09	Supply and install 1350Ø reinforced concrete pipes (Class 2 RRJ)	0	357	0	0	m	\$0	\$845	\$0	\$1,250	\$	301,580.50
												301,580.50

ITEM	DESCRIPTION			UNIT			AMOUNT

ITEM	DESCRIPTION					UNIT					AMOUNT
7	BOX CULVERTS [Installed as per drawings and specifications]	ST 1.8m	D More	F(1.8m	CR More		ST 1.8m	D More	F(1.8m	CR More	Ţ
	BOX CULVERTS [installed as per drawings and specifications]	1.8m	Nore	1.8m	Nore		1.8m	More	1.8m	Nore	
8	OPEN CHANNELS [Constructed as per drawings and specifications]										
		ST	D	TRA	FFIC		ST	D	TRA	FFIC	
9	PITS [Installed or constructed as per drawings and specifications]	1.8m	More	1.8m	More		1.8m	More	1.8m	More	
9.01	Supply and install or construct concrete pits 600mm wide	0	0	3	0	unit	\$1,800	\$2,250	\$2,100		\$ 6,300.00
9.02 9.03	Supply and install or construct concrete pits 750mm wide Supply and install or construct concrete pits 900mm wide	0	0	2 5	2 5	unit unit	\$2,400 \$3,000	\$3,000 \$3,750	\$2,800 \$3,500	\$3,400 \$4,250	\$ 12,400.00 \$ 38,750.00
9.04	Supply and install or construct concrete pits 300mm wide	0	0	0	4	unit	\$3,600	\$4,500	\$4,200	\$5,100	\$ 20,400.00
	Supply and install or construct concrete pits 1500mm wide	0	0	0	10	unit	\$4,200	\$5,250	\$5,000	\$6,050	
9.06	Supply and install or construct concrete pits 1800mm wide	0	0	0	7	unit	\$4,800	\$6,000	\$5,800	\$7,000	\$ 49,000.00
		ST		тра	FFIC		ST	'n	тра	FFIC	
11	HEADERS [Installed or constructed as per drawings and specifications]	51 1.8m	D More	1.8m	FFIC More		ST 1.8m	D More	1.8m	FFIC More	
11.01	Supply and install or construct RC headers for conduits 300Ø-375Ømm wide	0	0	3	0	unit	\$500	\$650	\$1,000	\$1,300	\$ 3,000.00
	Supply and install or construct RC headers for conduits 450Ø-525Ømm wide	0	0	3	1	unit	\$600 ¢750	\$800	\$1,250	\$1,600	
11.03 11.04	Supply and install or construct RC headers for conduits 600Ø-750Ømm wide Supply and install or construct RC headers for conduits 1350Ømm wide	0	0	2 0	0 1	unit unit	\$750 \$1,800	\$1,000 \$2,350	\$1,500 \$3,600	\$1,950 \$4,650	\$ 3,000.00 \$ 4,650.00
		_	-	_	_		+_,	+_,	+-,	+ .,	,
12 12.01	KERB AND CHANNEL [Constructed as per drawings and specifications]	Exc (m3)	Fill (m3)	Install (m)			Exc (m3)	Fill (m3)	Install (m)		
12.01											
12.03											
12.04											
12.05 12.06											
12.00											
12.08											
12.09 12.10											
12.10											
12.12											
12.13											
I	l	I	l	l							

ITEM	DESCRIPTION					UNIT					AMOUNT
13	SHOULDER FORMATION	1		1					1	1	-
14	FLOOD GATES [Supplied and installed as per drawings and specifications]	Gate	Screen				Gate	Screen			
15	LEVEE BANK										
		VOLUN	1ES (m3)	SURFACE	BANK		VOLUN	IES (m3)	SURFACE	BANK	
16	BASINS [Constructed as per drawings and specifications]	Excavate	Rock	(m2)	(m3)		Excavate	Rock	(m2)	(m3)	
	Construct retardation basin 62m x 62m x 1.77m deep	5,373	201	3,091	0	unit	\$30.00	\$90.00	\$1.50	\$35.00	\$ 183,916.50
	Construct retardation basin 34m x 34m x 1.78m deep	1,305	4	779	0		\$30.00	\$90.00	\$1.50	\$35.00	\$ 40,678.50
17 17.01 17.02	PUMPS AND PUMP STATIONS [Constructed as per drawings and specifications]	Q (l/sec)		HEAD (m)			РИМР		SYSTEM		

ITEM	DESCRIPTION			UNIT					AMOUNT
18	SURFACE REINSTATEMENT								
18.01	Spread and lightly consolidate 75mm deep topsoil on trench surfaces	3,452		m2	\$1.88				\$ 6,471.86
18.02	Apply hydraseed to exposed trench, basin and bank surfaces as directed	3,452		m2	\$1.50				\$ 5,177.49
18.03									
18.04									
18.05									
18.06									
18.07									
18.08									
18.09									
18.10									
18.11 18.12									
18.12									
18.15									
18.14									
10.10									
						SUE	3-TOTAL		\$ 1,806,237.75
					:	SERVICE DIV	ERSION	5%	\$ 90,311.89
						CONTING	GENCIES	10%	\$ 180,623.77
						TOTAL (EXCL. GST)		\$ 2,077,173.41
							GST		\$ 207,717.34
						TOTAL (INCL. GST)		\$ 2,284,890.75

SCHEDULE OF QUANTITIES

PROJECT: Main Drainage Scheme - Lindner Road

DATE: 18-February-2017

	PROJECT: Main Drainage Scheme - Lindner Road							DATE:	18-Feb	ruary-2017	
THIS	SCHEDULE OF QUANTITIES MUST BE READ IN CONJUNCTION WITH THE DESIGN PLANS. ALL CONT ARE SATISF	RACTORS M IED AS TO TI			TITIES AND S	SUBMISSI	ON OF A TEI	NDER WILL E	BE TAKEN AS	S CONFIRMA	TION THAT THEY
ITEM	DESCRIPTION					UNIT					AMOUNT
1	SITE ESTABLISHMENT										/
	Contact residents affected by the project at least one week before the works begin, ask them to remove any private materials from their frontages, and where appropriate, warn them that vehicular access to their property will become unavailable at times during the construction period. Provide all necessary site facilities including first aid equipment and obtain all relevant insurances and permits. Prepare and submit an OHS Coordination Plan and an Environmental Management Plan for approval. Ensure that all OHS requirements are satisfied before work begins, and that the site is secured at the end of each day.					ltem	\$12,451				\$ 12,450.50
2	TRAFFIC CONTROL Develop, obtain all necessary permits from the relevant authorities for, and implement an										
	approved Traffic Management Plan. Note that the Tenderer will be required to act as the Works Manager within the meaning of the Road Management Act 2004.					ltem	\$21,103				\$ 21,102.50
3	SITE PREPARATION Remove and store topsoil adjacent to the site. After each section of the work has been completed, restore the profile of the nature strip, replace the topsoil, then reseed or replant all disturbed areas. After completing the works, remove and dispose of all debris and surplus material from the site.					Item	\$15,135				\$ 15,135.00
4	SERVICE LOCATION Establish the location and, where appropriate, the depth of services, obtain any necessary permits to undertake the works, and ensure that any required procedures and clearances are maintained at all times.					ltem	\$4,605				\$ 4,604.50
5.1 5.2 5.3 5.4 5.5 5.6	EARTHWORKS Remove and stockpile existing granular materials as directed Excavate to subgrade level and store or remove material as directed Recover, place and compact stored material in 200mm layers to 95% MMDD Supply, place and compact approved clean fill in 200mm layers to 95% MMDD Construct, clean and regulate swale drains where specified Supply and install beaching rock as directed										
ł		ST	D	F	CR]	ST	D	F	CR	
6	PIPELINES [Installed as per drawings and specifications]	1.8m	More	1.8m	More		1.8m	More	1.8m	More	
6.01	Supply and install 450Ø reinforced concrete pipes (Class 2 RRJ)	0	0	19	0	m	\$155	\$225	\$240	\$395	\$ 4,560.00
6.02	Supply and install 525Ø reinforced concrete pipes (Class 2 RRJ)	0	255	0	0	m	\$185	\$270	\$285	\$470	
6.03	Supply and install 600Ø reinforced concrete pipes (Class 2 RRJ)	0 30	205 150	69 0	80 160	m	\$215 \$255	\$300 \$355	\$315 \$375	\$500 \$590	\$ 123,235.00 \$ 155,300.00
6.04 6.05	Supply and install 675Ø reinforced concrete pipes (Class 2 RRJ) Supply and install 750Ø reinforced concrete pipes (Class 2 RRJ)	0	150	9	985	m m	\$255	\$395 \$395	\$375 \$415	\$590 \$630	\$ 623,970.00

ITEM	DESCRIPTION			UNIT			AMOUNT

ITEM	DESCRIPTION					UNIT			-		AMOUNT	
-	ROY CI II VERTS [Installed as ner drawings and energifications]		TD More		CR		51 1.8m			CR		Ī
7	DESCRIPTION BOX CULVERTS [Installed as per drawings and specifications] OPEN CHANNELS [Constructed as per drawings and specifications]	51 1.8m	TD More	F(CR More		51 1.8m	D More	Fi	R More	AMOUNT	
9.01	PITS [Installed or constructed as per drawings and specifications] Supply and install or construct concrete pits 750mm wide Supply and install or construct concrete pits 900mm wide	51 1.8m 0 0	TD More 0 0	TRA 1.8m 3 3	FFIC More 3 22	unit	57 1.8m \$2,400 \$3,000	TD More \$3,000 \$3,750	1.8m \$2,800	FFIC More \$3,400 \$4,250		
		ST	ſD	TRA	FFIC		ST	D	TRA	FFIC		
	HEADERS [Installed or constructed as per drawings and specifications] Supply and install or construct RC headers for conduits 450Ø-525Ømm wide	1.8m 0	More 0	1.8m 1	More 0		1.8m \$600	More \$800	1.8m \$1,250	More \$1,600	\$ 1,250.	
	Supply and install or construct RC headers for conduits 4500-5250mm wide Supply and install or construct RC headers for conduits 6000-7500mm wide	0	0	1	0	unit unit	\$600 \$750	\$800 \$1,000		\$1,600 \$1,950		
12 12.01 12.02 12.03 12.04 12.05 12.06 12.07 12.08 12.09 12.10 12.11 12.12 12.13	KERB AND CHANNEL [Constructed as per drawings and specifications]	Ехс (т3)	Fill (m3)	Install (m)			Exc (m3)	Fill (m3)	Install (m)			

ITEM	DESCRIPTION	1				UNIT					A	MOUNT
13	SHOULDER FORMATION	1										
14	FLOOD GATES [Supplied and installed as per drawings and specifications]	Gate	Screen				Gate	Screen				
15	LEVEE BANK											
		VOLUN	IES (m3)	SURFACE	BANK		VOLUN	/IES (m3)	SURFACE	BANK		
16	BASINS [Constructed as per drawings and specifications]	Excavate	Rock	(m2)	(m3)		Excavate	Rock	(m2)	(m3)		
	Construct retardation basin 77m x 26m x 1.48m deep	2,294	52	1,589	0	unit	\$30.00	\$90.00	\$1.50	\$35.00	\$	75,883.50
	Construct retardation basin 77m x 26m x 1.47m deep Construct retardation basin 127m x 39m x 1.59m deep	2,275	51	1,586	0	unit	\$30.00 \$30.00	\$90.00 \$90.00	\$1.50 \$1.50	\$35.00 \$35.00	\$ ¢	75,219.00 216,496.50
16.03		6,639	122	4,231	0	unit	\$50.00	\$90.00	Ş1.30	\$55.00	2	210,490.30
17	PUMPS AND PUMP STATIONS [Constructed as per drawings and specifications]	Q (I/sec)		HEAD (m)			PUMP		SYSTEM		-	
17.01	romra and romr atationa [constructed as per drawings and specifications]	Q (I/sec)		HEAD (M)			FUNP		STSTEIVI		1	
17.02												

ITEM	DESCRIPTION			UNIT					AMOUNT
18	SURFACE REINSTATEMENT								
18.01	Spread and lightly consolidate 75mm deep topsoil on trench surfaces	603		m2	\$1.88				\$ 1,130.63
18.02	Apply hydraseed to exposed trench, basin and bank surfaces as directed	603		m2	\$1.50				\$ 904.50
18.03	Supply, spread and consolidate 150mm deep Class 3 FCR @ 95% MMDD	2,152		m2	\$17.25				\$ 37,129.33
18.04	Supply, spread and consolidate 150mm deep Class 2 FCR @ 98% MMDD	2,152		m2	\$37.50				\$ 80,715.94
18.05									
18.06									
18.07									
18.08	Prepare, prime and seal road/path surface with 40mm Type N Asphalt	2,152		m2	\$60.00				\$ 129,145.50
18.09									
18.10									
18.11									
18.12									
18.13									
18.14									
18.15	Reinstate line-marking to VicRoads specifications	2,160		m	\$2.00				\$ 4,320.00
							B-TOTAL		1,775,502.39
					9	SERVICE DIV		5%	\$ 88,775.12
						CONTING		10%	\$ 177,550.24
						TOTAL (EXCL. GST)		2,041,827.75
							GST		\$ 204,182.78
						TOTAL (INCL. GST)		\$ 2,246,010.53

SCHEDULE OF QUANTITIES

PROJECT: Main Drainage Upgrade - Wangandary Road

DATE: 18-February-2017

_	ARE SATISFI	ED AS TO TI	HEIR ACCUR	ACY.								
	DESCRIPTION					UNIT					Α	MOUNT
1	SITE ESTABLISHMENT											
	Contact residents affected by the project at least one week before the works begin, ask them to											
	remove any private materials from their frontages, and where appropriate, warn them that					14	ć12 200				<i>c</i>	12 200 00
	vehicular access to their property will become unavailable at times during the construction					Item	\$13,380				\$	13,380.00
	period. Provide all necessary site facilities including first aid equipment and obtain all relevant insurances and permits. Prepare and submit an OHS Coordination Plan and an Environmental											
	Management Plan for approval. Ensure that all OHS requirements are satisfied before work											
	begins, and that the site is secured at the end of each day.											
•												
2	TRAFFIC CONTROL											
	Develop, obtain all necessary permits from the relevant authorities for, and implement an					Itom	¢0 200				ć	8,280.00
	approved Traffic Management Plan. Note that the Tenderer will be required to act as the Works					Item	\$8,280				\$	8,280.00
	Manager within the meaning of the Road Management Act 2004.											
3	SITE PREPARATION											
5												
	Remove and store topsoil adjacent to the site. After each section of the work has been completed, restore the profile of the nature strip, replace the topsoil, then reseed or replant all					Item	\$9,420				\$	9,420.00
	disturbed areas. After completing the works, remove and dispose of all debris and surplus					nem	<i>\$3</i> ,120				Ŷ	5,120.00
	material from the site.											
4	SERVICE LOCATION											
-												
	Establish the location and, where appropriate, the depth of services, obtain any necessary permits to undertake the works, and ensure that any required procedures and clearances are					Item	\$3,060				\$	3,060.00
	maintained at all times.					item	<i>\$3,000</i>				Ŷ	3,000.00
5	EARTHWORKS											
5 1	Remove and stockpile existing granular materials as directed											
2												
2 3	Excavate to subgrade level and store or remove material as directed											
s 1	Recover, place and compact stored material in 200mm layers to 95% MMDD Supply, place and compact approved clean fill in 200mm layers to 95% MMDD											
4 5												
6	Construct, clean and regulate swale drains where specified Supply and install beaching rock as directed											
,	Supply and install beaching fock as directed											
		ST	D	F	CR		ST	D	FC	R		
6	PIPELINES [Installed as per drawings and specifications]	1.8m	More	1.8m	More		1.8m	More	1.8m	More		
.01	Supply and install 450Ø reinforced concrete pipes (Class 2 RRJ)	90	0	0	0	m	\$155	\$225	\$240	\$395	\$	13,950.00
.02	Supply and install 525Ø reinforced concrete pipes (Class 2 RRJ)	160	0	0	0	m	\$185	\$270	\$285	\$470		29,600.00
.03	Supply and install 600Ø reinforced concrete pipes (class 2 ma)	160	170	0	0	m	\$215	\$300	\$315			85,400.00
.04	Supply and install 675Ø reinforced concrete pipes (class 2 RB)	0	320	0	0	m	\$255	\$355	\$375	\$590		113,600.00
.05	Supply and install 7500 reinforced concrete pipes (class 2 RRJ)	0	160	0	0	m	\$295	\$395	\$415	\$630		63,200.00
.06	Supply and install 825Ø reinforced concrete pipes (class 2 mb)	0	240	0	0	m	\$360	\$475	\$495	\$745		114,000.00
.07	Supply and install 900Ø reinforced concrete pipes (class 2 RRJ)	0	320	0	80		\$410	\$525	\$545			231,600.00
.08	Supply and install 1050Ø reinforced concrete pipes (Class 2 RRJ)	0	320	0	160	m m	\$520	\$660	\$690	\$1,000		371,200.00
.09	Supply and install 1200Ø reinforced concrete pipes (class 2 RRJ)	0		-	-		6570	6740	47.40	44.050	~	
		0	400	Ū	Ū		<i>\$576</i>	<i>\$</i> , 10	<i>\$7</i> 10	<i>\</i> 1 ,050	Ŷ	201,000.00
				0								

ITEM	DESCRIPTION			UNIT			AMOUNT

ITEM	DESCRIPTION					UNIT					AM	OUNT
		ST	ſD	F	CR	-	S.	ſD	F	CR		
7	BOX CULVERTS [Installed as per drawings and specifications]	1.8m	More	1.8m	More		1.8m	More	1.8m	More		
8	OPEN CHANNELS [Constructed as per drawings and specifications]											
1												
			ſD	трл	FFIC		c.	ſD	тра	FFIC		
9	PITS [Installed or constructed as per drawings and specifications]	1.8m	More	1.8m	More		1.8m	More				
9.01	Supply and install or construct concrete pits 750mm wide	-							1.8m	More		
		0	0	2	0	unit	\$2,400	\$3,000	1.8m \$2,800	More \$3,400	\$	5,600.00
9.02	Supply and install or construct concrete pits 900mm wide	0	0	3	8	unit	\$2,400 \$3,000	\$3,000 \$3,750	\$2,800 \$3,500	\$3,400 \$4,250	\$ 4	4,500.00
9.03	Supply and install or construct concrete pits 1200mm wide	0 0	0 0	3 0	8 8	unit unit	\$2,400 \$3,000 \$3,600	\$3,000 \$3,750 \$4,500	\$2,800 \$3,500 \$4,200	\$3,400 \$4,250 \$5,100	\$ 4 \$ 4	14,500.00 10,800.00
		0	0	3	8	unit	\$2,400 \$3,000	\$3,000 \$3,750 \$4,500	\$2,800 \$3,500 \$4,200	\$3,400 \$4,250	\$ 4 \$ 4	4,500.00
9.03	Supply and install or construct concrete pits 1200mm wide	0 0	0 0	3 0	8 8	unit unit	\$2,400 \$3,000 \$3,600	\$3,000 \$3,750 \$4,500	\$2,800 \$3,500 \$4,200	\$3,400 \$4,250 \$5,100	\$ 4 \$ 4	14,500.00 10,800.00
9.03	Supply and install or construct concrete pits 1200mm wide	0 0	0 0	3 0	8 8	unit unit	\$2,400 \$3,000 \$3,600	\$3,000 \$3,750 \$4,500	\$2,800 \$3,500 \$4,200	\$3,400 \$4,250 \$5,100	\$ 4 \$ 4	14,500.00 10,800.00
9.03	Supply and install or construct concrete pits 1200mm wide	0 0	0 0	3 0	8 8	unit unit	\$2,400 \$3,000 \$3,600	\$3,000 \$3,750 \$4,500	\$2,800 \$3,500 \$4,200	\$3,400 \$4,250 \$5,100	\$ 4 \$ 4	14,500.00 10,800.00
9.03	Supply and install or construct concrete pits 1200mm wide	0 0	0 0	3 0	8 8	unit unit	\$2,400 \$3,000 \$3,600	\$3,000 \$3,750 \$4,500	\$2,800 \$3,500 \$4,200	\$3,400 \$4,250 \$5,100	\$ 4 \$ 4	14,500.00 10,800.00
9.03	Supply and install or construct concrete pits 1200mm wide	0 0	0 0 0	3 0 0	8 8	unit unit	\$2,400 \$3,000 \$3,600	\$3,000 \$3,750 \$4,500 \$5,250	\$2,800 \$3,500 \$4,200 \$5,000	\$3,400 \$4,250 \$5,100	\$ 4 \$ 4	14,500.00 10,800.00
9.03	Supply and install or construct concrete pits 1200mm wide	0 0 0	0 0 0	3 0 0	8 8 11	unit unit	\$2,400 \$3,000 \$3,600 \$4,200	\$3,000 \$3,750 \$4,500 \$5,250	\$2,800 \$3,500 \$4,200 \$5,000	\$3,400 \$4,250 \$5,100 \$6,050	\$ 4 \$ 4	14,500.00 10,800.00
9.03 9.04	Supply and install or construct concrete pits 1200mm wide Supply and install or construct concrete pits 1500mm wide HEADERS [Installed or constructed as per drawings and specifications] Supply and install or construct RC headers for conduits 450Ø-525Ømm wide	0 0 0 1.8m 0	0 0 0 0 7 0 <u>More</u> 0	3 0 0 1.8m 3	8 8 11 FFIC 0	unit unit unit	\$2,400 \$3,000 \$3,600 \$4,200 \$1.8m \$600	\$3,000 \$3,750 \$4,500 \$5,250 D More \$800	\$2,800 \$3,500 \$4,200 \$5,000 TRA 1.8m \$1,250	\$3,400 \$4,250 \$5,100 \$6,050 FFIC More \$1,600	\$ 2 \$ 2 \$ 6	14,500.00 10,800.00 16,550.00 3,750.00
9.03 9.04 11 11.01 11.02	Supply and install or construct concrete pits 1200mm wide Supply and install or construct concrete pits 1500mm wide HEADERS [Installed or constructed as per drawings and specifications] Supply and install or construct RC headers for conduits 450Ø-525Ømm wide Supply and install or construct RC headers for conduits 600Ø-750Ømm wide	0 0 0 1.8m 0 0	0 0 0 D 0 0 0	3 0 0 TRA 1.8m 3 0	8 8 11 FFIC More 0 1	unit unit unit unit	\$2,400 \$3,000 \$3,600 \$4,200 \$4,200 \$1.8m \$600 \$750	\$3,000 \$3,750 \$4,500 \$5,250 D More \$800 \$1,000	\$2,800 \$3,500 \$4,200 \$5,000 TRA 1.8m \$1,250 \$1,500	\$3,400 \$4,250 \$5,100 \$6,050 FFIC <u>More</u> \$1,600 \$1,950	\$ 2 \$ 2 \$ 6 \$ \$	14,500.00 10,800.00 16,550.00 3,750.00 1,950.00
9.03 9.04 11 11.01 11.02	Supply and install or construct concrete pits 1200mm wide Supply and install or construct concrete pits 1500mm wide HEADERS [Installed or constructed as per drawings and specifications] Supply and install or construct RC headers for conduits 450Ø-525Ømm wide	0 0 0 1.8m 0	0 0 0 0 7 0 <u>More</u> 0	3 0 0 1.8m 3	8 8 11 FFIC 0	unit unit unit	\$2,400 \$3,000 \$3,600 \$4,200 \$1.8m \$600	\$3,000 \$3,750 \$4,500 \$5,250 D More \$800 \$1,000	\$2,800 \$3,500 \$4,200 \$5,000 TRA 1.8m \$1,250	\$3,400 \$4,250 \$5,100 \$6,050 FFIC More \$1,600	\$ 2 \$ 2 \$ 6 \$ \$	14,500.00 10,800.00 16,550.00 3,750.00
9.03 9.04 11 11.01 11.02	Supply and install or construct concrete pits 1200mm wide Supply and install or construct concrete pits 1500mm wide HEADERS [Installed or constructed as per drawings and specifications] Supply and install or construct RC headers for conduits 450Ø-525Ømm wide Supply and install or construct RC headers for conduits 600Ø-750Ømm wide	0 0 0 1.8m 0 0	0 0 0 D 0 0 0	3 0 0 TRA 1.8m 3 0	8 8 11 FFIC More 0 1	unit unit unit unit	\$2,400 \$3,000 \$3,600 \$4,200 \$4,200 \$1.8m \$600 \$750	\$3,000 \$3,750 \$4,500 \$5,250 D More \$800 \$1,000	\$2,800 \$3,500 \$4,200 \$5,000 TRA 1.8m \$1,250 \$1,500	\$3,400 \$4,250 \$5,100 \$6,050 FFIC <u>More</u> \$1,600 \$1,950	\$ 2 \$ 2 \$ 6 \$ \$	14,500.00 10,800.00 16,550.00 3,750.00 1,950.00
9.03 9.04 11 11.01 11.02	Supply and install or construct concrete pits 1200mm wide Supply and install or construct concrete pits 1500mm wide HEADERS [Installed or constructed as per drawings and specifications] Supply and install or construct RC headers for conduits 450Ø-525Ømm wide Supply and install or construct RC headers for conduits 600Ø-750Ømm wide	0 0 0 1.8m 0 0	0 0 0 D 0 0 0	3 0 0 TRA 1.8m 3 0	8 8 11 FFIC More 0 1	unit unit unit unit	\$2,400 \$3,000 \$3,600 \$4,200 \$4,200 \$1.8m \$600 \$750	\$3,000 \$3,750 \$4,500 \$5,250 D More \$800 \$1,000	\$2,800 \$3,500 \$4,200 \$5,000 TRA 1.8m \$1,250 \$1,500	\$3,400 \$4,250 \$5,100 \$6,050 FFIC <u>More</u> \$1,600 \$1,950	\$ 2 \$ 2 \$ 6 \$ \$	14,500.00 10,800.00 16,550.00 3,750.00 1,950.00
9.03 9.04 11 11.01 11.02	Supply and install or construct concrete pits 1200mm wide Supply and install or construct concrete pits 1500mm wide HEADERS [Installed or constructed as per drawings and specifications] Supply and install or construct RC headers for conduits 450Ø-525Ømm wide Supply and install or construct RC headers for conduits 600Ø-750Ømm wide	0 0 0 1.8m 0 0	0 0 0 D 0 0 0	3 0 0 TRA 1.8m 3 0	8 8 11 FFIC More 0 1	unit unit unit unit	\$2,400 \$3,000 \$3,600 \$4,200 \$4,200 \$1.8m \$600 \$750	\$3,000 \$3,750 \$4,500 \$5,250 D More \$800 \$1,000	\$2,800 \$3,500 \$4,200 \$5,000 TRA 1.8m \$1,250 \$1,500	\$3,400 \$4,250 \$5,100 \$6,050 FFIC <u>More</u> \$1,600 \$1,950	\$ 2 \$ 2 \$ 6 \$ \$	14,500.00 10,800.00 16,550.00 3,750.00 1,950.00
9.03 9.04 11 11.01 11.02	Supply and install or construct concrete pits 1200mm wide Supply and install or construct concrete pits 1500mm wide HEADERS [Installed or constructed as per drawings and specifications] Supply and install or construct RC headers for conduits 450Ø-525Ømm wide Supply and install or construct RC headers for conduits 600Ø-750Ømm wide	0 0 0 1.8m 0 0	0 0 0 D 0 0 0	3 0 0 TRA 1.8m 3 0	8 8 11 FFIC More 0 1	unit unit unit unit	\$2,400 \$3,000 \$3,600 \$4,200 \$4,200 \$1.8m \$600 \$750	\$3,000 \$3,750 \$4,500 \$5,250 D More \$800 \$1,000	\$2,800 \$3,500 \$4,200 \$5,000 TRA 1.8m \$1,250 \$1,500	\$3,400 \$4,250 \$5,100 \$6,050 FFIC <u>More</u> \$1,600 \$1,950	\$ 2 \$ 2 \$ 6 \$ \$	14,500.00 10,800.00 16,550.00 3,750.00 1,950.00
9.03 9.04 11 11.01 11.02	Supply and install or construct concrete pits 1200mm wide Supply and install or construct concrete pits 1500mm wide HEADERS [Installed or constructed as per drawings and specifications] Supply and install or construct RC headers for conduits 450Ø-525Ømm wide Supply and install or construct RC headers for conduits 600Ø-750Ømm wide	0 0 0 1.8m 0 0	0 0 0 D 0 0 0	3 0 0 TRA 1.8m 3 0	8 8 11 FFIC More 0 1	unit unit unit unit	\$2,400 \$3,000 \$3,600 \$4,200 \$4,200 \$1.8m \$600 \$750	\$3,000 \$3,750 \$4,500 \$5,250 D More \$800 \$1,000	\$2,800 \$3,500 \$4,200 \$5,000 TRA 1.8m \$1,250 \$1,500	\$3,400 \$4,250 \$5,100 \$6,050 FFIC <u>More</u> \$1,600 \$1,950	\$ 2 \$ 2 \$ 6 \$ \$	14,500.00 10,800.00 16,550.00 3,750.00 1,950.00
9.03 9.04 11 11.01 11.02 11.03	Supply and install or construct concrete pits 1200mm wide Supply and install or construct concrete pits 1500mm wide HEADERS [Installed or constructed as per drawings and specifications] Supply and install or construct RC headers for conduits 450Ø-525Ømm wide Supply and install or construct RC headers for conduits 600Ø-750Ømm wide	0 0 0 1.8m 0 0	0 0 0 D 0 0 0	3 0 0 TRA 1.8m 3 0	8 8 11 FFIC More 0 1	unit unit unit unit	\$2,400 \$3,000 \$3,600 \$4,200 \$4,200 \$1.8m \$600 \$750	\$3,000 \$3,750 \$4,500 \$5,250 D More \$800 \$1,000	\$2,800 \$3,500 \$4,200 \$5,000 TRA 1.8m \$1,250 \$1,500	\$3,400 \$4,250 \$5,100 \$6,050 FFIC <u>More</u> \$1,600 \$1,950	\$ 2 \$ 2 \$ 6 \$ \$	14,500.00 10,800.00 16,550.00 3,750.00 1,950.00
9.03 9.04 11 11.01 11.02 11.03	Supply and install or construct concrete pits 1200mm wide Supply and install or construct concrete pits 1500mm wide HEADERS [Installed or constructed as per drawings and specifications] Supply and install or construct RC headers for conduits 450Ø-525Ømm wide Supply and install or construct RC headers for conduits 600Ø-750Ømm wide Supply and install or construct RC headers for conduits 1050Ø-1200Ømm wide Supply and install or construct RC headers for conduits 1050Ø-1200Ømm wide	0 0 0 1.8m 0 0 0 0 51 1.8m	0 0 0 7 0 0 0 0 0 5 111 (m3)	3 0 0 1.8m 3 0 0 0	8 8 11 FFIC More 0 1	unit unit unit unit unit	\$2,400 \$3,000 \$3,600 \$4,200 \$4,200 \$1.8m \$600 \$750 \$1,500 \$1,500	\$3,000 \$3,750 \$4,500 \$5,250 D More \$800 \$1,000 \$1,950 Fill (m3)	\$2,800 \$3,500 \$4,200 \$5,000 TRA 1.8m \$1,250 \$1,500 \$3,000 Note:	\$3,400 \$4,250 \$5,100 \$6,050 FFIC <u>More</u> \$1,600 \$1,950	\$ 2 \$ 2 \$ \$ \$ \$ \$	4,500.00 10,800.00 16,550.00 3,750.00 1,950.00 3,900.00
9.03 9.04 11 11.01 11.02 11.03 12 12.01 12.02	Supply and install or construct concrete pits 1200mm wide Supply and install or construct concrete pits 1500mm wide HEADERS [Installed or constructed as per drawings and specifications] Supply and install or construct RC headers for conduits 450Ø-525Ømm wide Supply and install or construct RC headers for conduits 600Ø-750Ømm wide Supply and install or construct RC headers for conduits 1050Ø-1200Ømm wide	0 0 0 1.8m 0 0 0	0 0 0 0 0 0 0	3 0 0 1.8m 3 0 0	8 8 11 FFIC More 0 1	unit unit unit unit	\$2,400 \$3,000 \$3,600 \$4,200 \$4,200 \$1.8m \$600 \$750 \$1,500	\$3,000 \$3,750 \$4,500 \$5,250 D More \$800 \$1,000 \$1,950 Fill (m3)	\$2,800 \$3,500 \$4,200 \$5,000 TRA 1.8m \$1,250 \$1,500 \$3,000 Note:	\$3,400 \$4,250 \$5,100 \$6,050 FFIC <u>More</u> \$1,600 \$1,950	\$ 2 \$ 2 \$ \$ \$ \$ \$	14,500.00 10,800.00 16,550.00 3,750.00 1,950.00
9.03 9.04 11 11.01 11.02 11.03	Supply and install or construct concrete pits 1200mm wide Supply and install or construct concrete pits 1500mm wide HEADERS [Installed or constructed as per drawings and specifications] Supply and install or construct RC headers for conduits 450Ø-525Ømm wide Supply and install or construct RC headers for conduits 600Ø-750Ømm wide Supply and install or construct RC headers for conduits 1050Ø-1200Ømm wide Supply and install or construct RC headers for conduits 1050Ø-1200Ømm wide	0 0 0 1.8m 0 0 0 0 51 1.8m	0 0 0 7 0 0 0 0 0 5 111 (m3)	3 0 0 1.8m 3 0 0 0	8 8 11 FFIC More 0 1	unit unit unit unit unit	\$2,400 \$3,000 \$3,600 \$4,200 \$4,200 \$1.8m \$600 \$750 \$1,500 \$1,500	\$3,000 \$3,750 \$4,500 \$5,250 D More \$800 \$1,000 \$1,950 Fill (m3)	\$2,800 \$3,500 \$4,200 \$5,000 TRA 1.8m \$1,250 \$1,500 \$3,000 Note:	\$3,400 \$4,250 \$5,100 \$6,050 FFIC <u>More</u> \$1,600 \$1,950	\$ 2 \$ 2 \$ \$ \$ \$ \$	4,500.00 10,800.00 16,550.00 3,750.00 1,950.00 3,900.00
9.03 9.04 11 11.01 11.02 11.03 12.01 12.02 12.03	Supply and install or construct concrete pits 1200mm wide Supply and install or construct concrete pits 1500mm wide HEADERS [Installed or constructed as per drawings and specifications] Supply and install or construct RC headers for conduits 450Ø-525Ømm wide Supply and install or construct RC headers for conduits 600Ø-750Ømm wide Supply and install or construct RC headers for conduits 1050Ø-1200Ømm wide Supply and install or construct RC headers for conduits 1050Ø-1200Ømm wide	0 0 0 1.8m 0 0 0 0 51 1.8m	0 0 0 7 0 0 0 0 0 5 111 (m3)	3 0 0 1.8m 3 0 0 0	8 8 11 FFIC More 0 1	unit unit unit unit unit	\$2,400 \$3,000 \$3,600 \$4,200 \$4,200 \$1.8m \$600 \$750 \$1,500 \$1,500	\$3,000 \$3,750 \$4,500 \$5,250 D More \$800 \$1,000 \$1,950 Fill (m3)	\$2,800 \$3,500 \$4,200 \$5,000 TRA 1.8m \$1,250 \$1,500 \$3,000 Note:	\$3,400 \$4,250 \$5,100 \$6,050 FFIC <u>More</u> \$1,600 \$1,950	\$ 2 \$ 2 \$ \$ \$ \$ \$	4,500.00 10,800.00 16,550.00 3,750.00 1,950.00 3,900.00
9.03 9.04 11 11.01 11.02 11.03 12.01 12.02 12.03 12.04 12.05 12.06	Supply and install or construct concrete pits 1200mm wide Supply and install or construct concrete pits 1500mm wide HEADERS [Installed or constructed as per drawings and specifications] Supply and install or construct RC headers for conduits 450Ø-525Ømm wide Supply and install or construct RC headers for conduits 600Ø-750Ømm wide Supply and install or construct RC headers for conduits 1050Ø-1200Ømm wide Supply and install or construct RC headers for conduits 1050Ø-1200Ømm wide	0 0 0 1.8m 0 0 0 0 51 1.8m	0 0 0 7 0 0 0 0 0 5 111 (m3)	3 0 0 1.8m 3 0 0 0	8 8 11 FFIC More 0 1	unit unit unit unit unit	\$2,400 \$3,000 \$3,600 \$4,200 \$4,200 \$1.8m \$600 \$750 \$1,500 \$1,500	\$3,000 \$3,750 \$4,500 \$5,250 D More \$800 \$1,000 \$1,950 Fill (m3)	\$2,800 \$3,500 \$4,200 \$5,000 TRA 1.8m \$1,250 \$1,500 \$3,000 Note:	\$3,400 \$4,250 \$5,100 \$6,050 FFIC <u>More</u> \$1,600 \$1,950	\$ 2 \$ 2 \$ \$ \$ \$ \$	4,500.00 10,800.00 16,550.00 3,750.00 1,950.00 3,900.00
9.03 9.04 11 11.01 11.02 11.03 12.01 12.02 12.03 12.04 12.05 12.06 12.07	Supply and install or construct concrete pits 1200mm wide Supply and install or construct concrete pits 1500mm wide HEADERS [Installed or constructed as per drawings and specifications] Supply and install or construct RC headers for conduits 450Ø-525Ømm wide Supply and install or construct RC headers for conduits 600Ø-750Ømm wide Supply and install or construct RC headers for conduits 1050Ø-1200Ømm wide Supply and install or construct RC headers for conduits 1050Ø-1200Ømm wide	0 0 0 1.8m 0 0 0 0 51 1.8m	0 0 0 7 0 0 0 0 0 5 111 (m3)	3 0 0 1.8m 3 0 0 0	8 8 11 FFIC More 0 1	unit unit unit unit unit	\$2,400 \$3,000 \$3,600 \$4,200 \$4,200 \$1.8m \$600 \$750 \$1,500 \$1,500	\$3,000 \$3,750 \$4,500 \$5,250 D More \$800 \$1,000 \$1,950 Fill (m3)	\$2,800 \$3,500 \$4,200 \$5,000 TRA 1.8m \$1,250 \$1,500 \$3,000 Note:	\$3,400 \$4,250 \$5,100 \$6,050 FFIC <u>More</u> \$1,600 \$1,950	\$ 2 \$ 2 \$ \$ \$ \$ \$	4,500.00 10,800.00 16,550.00 3,750.00 1,950.00 3,900.00
9.03 9.04 11 11.01 11.02 11.03 12.01 12.02 12.03 12.04 12.05 12.06 12.07 12.08	Supply and install or construct concrete pits 1200mm wide Supply and install or construct concrete pits 1500mm wide HEADERS [Installed or constructed as per drawings and specifications] Supply and install or construct RC headers for conduits 450Ø-525Ømm wide Supply and install or construct RC headers for conduits 600Ø-750Ømm wide Supply and install or construct RC headers for conduits 1050Ø-1200Ømm wide Supply and install or construct RC headers for conduits 1050Ø-1200Ømm wide	0 0 0 1.8m 0 0 0 0 51 1.8m	0 0 0 7 0 0 0 0 0 5 111 (m3)	3 0 0 1.8m 3 0 0 0	8 8 11 FFIC More 0 1	unit unit unit unit unit	\$2,400 \$3,000 \$3,600 \$4,200 \$4,200 \$1.8m \$600 \$750 \$1,500 \$1,500	\$3,000 \$3,750 \$4,500 \$5,250 D More \$800 \$1,000 \$1,950 Fill (m3)	\$2,800 \$3,500 \$4,200 \$5,000 TRA 1.8m \$1,250 \$1,500 \$3,000 Note:	\$3,400 \$4,250 \$5,100 \$6,050 FFIC <u>More</u> \$1,600 \$1,950	\$ 2 \$ 2 \$ \$ \$ \$ \$	4,500.00 10,800.00 16,550.00 3,750.00 1,950.00 3,900.00
9.03 9.04 11 11.01 11.02 11.03 12.01 12.02 12.03 12.04 12.05 12.06 12.07	Supply and install or construct concrete pits 1200mm wide Supply and install or construct concrete pits 1500mm wide HEADERS [Installed or constructed as per drawings and specifications] Supply and install or construct RC headers for conduits 450Ø-525Ømm wide Supply and install or construct RC headers for conduits 600Ø-750Ømm wide Supply and install or construct RC headers for conduits 1050Ø-1200Ømm wide Supply and install or construct RC headers for conduits 1050Ø-1200Ømm wide	0 0 0 1.8m 0 0 0 0 51 1.8m	0 0 0 7 0 0 0 0 0 5 111 (m3)	3 0 0 1.8m 3 0 0 0	8 8 11 FFIC More 0 1	unit unit unit unit unit	\$2,400 \$3,000 \$3,600 \$4,200 \$4,200 \$1.8m \$600 \$750 \$1,500 \$1,500	\$3,000 \$3,750 \$4,500 \$5,250 D More \$800 \$1,000 \$1,950 Fill (m3)	\$2,800 \$3,500 \$4,200 \$5,000 TRA 1.8m \$1,250 \$1,500 \$3,000 Note:	\$3,400 \$4,250 \$5,100 \$6,050 FFIC <u>More</u> \$1,600 \$1,950	\$ 2 \$ 2 \$ \$ \$ \$ \$	4,500.00 10,800.00 16,550.00 3,750.00 1,950.00 3,900.00
9.03 9.04 11 11.01 11.02 11.03 12.01 12.02 12.03 12.04 12.05 12.06 12.07 12.08 12.09 12.10	Supply and install or construct concrete pits 1200mm wide Supply and install or construct concrete pits 1500mm wide HEADERS [Installed or constructed as per drawings and specifications] Supply and install or construct RC headers for conduits 450Ø-525Ømm wide Supply and install or construct RC headers for conduits 600Ø-750Ømm wide Supply and install or construct RC headers for conduits 1050Ø-1200Ømm wide Supply and install or construct RC headers for conduits 1050Ø-1200Ømm wide	0 0 0 1.8m 0 0 0 0 51 1.8m	0 0 0 7 0 0 0 0 0 5 111 (m3)	3 0 0 1.8m 3 0 0 0	8 8 11 FFIC More 0 1	unit unit unit unit unit	\$2,400 \$3,000 \$3,600 \$4,200 \$4,200 \$1.8m \$600 \$750 \$1,500 \$1,500	\$3,000 \$3,750 \$4,500 \$5,250 D More \$800 \$1,000 \$1,950 Fill (m3)	\$2,800 \$3,500 \$4,200 \$5,000 TRA 1.8m \$1,250 \$1,500 \$3,000 Note:	\$3,400 \$4,250 \$5,100 \$6,050 FFIC <u>More</u> \$1,600 \$1,950	\$ 2 \$ 2 \$ \$ \$ \$ \$	14,500.00 10,800.00 16,550.00 3,750.00 1,950.00 3,900.00
9.03 9.04 11 11.01 11.02 11.03 12.01 12.02 12.03 12.04 12.07 12.08 12.09 12.10 12.12	Supply and install or construct concrete pits 1200mm wide Supply and install or construct concrete pits 1500mm wide HEADERS [Installed or constructed as per drawings and specifications] Supply and install or construct RC headers for conduits 450Ø-525Ømm wide Supply and install or construct RC headers for conduits 600Ø-750Ømm wide Supply and install or construct RC headers for conduits 1050Ø-1200Ømm wide Supply and install or construct RC headers for conduits 1050Ø-1200Ømm wide KERB AND CHANNEL [Constructed as per drawings and specifications] Construct Type B2 kerb and channel [IDM SD 100]	0 0 0 1.8m 0 0 0 0 51 1.8m 0 0 0 184	0 0 0 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	3 0 0 1.8m 3 0 0 0	8 8 11 FFIC More 0 1	unit unit unit unit unit	\$2,400 \$3,000 \$3,600 \$4,200 \$4,200 \$1.8m \$600 \$750 \$1,500 \$1,500 \$1,500	\$3,000 \$3,750 \$4,500 \$5,250 More \$800 \$1,000 \$1,950 Fill (m3) \$115.00	\$2,800 \$3,500 \$4,200 \$5,000 TRA 1.8m \$1,250 \$1,500 \$3,000 install (m) \$65.00	\$3,400 \$4,250 \$5,100 \$6,050 FFIC <u>More</u> \$1,600 \$1,950	\$ 4 \$ 6 \$ \$ \$ \$	4,500.00 10,800.00 16,550.00 3,750.00 1,950.00 3,900.00
9.03 9.04 11 11.01 11.02 11.03 12.01 12.02 12.03 12.04 12.07 12.08 12.09 12.10 12.12	Supply and install or construct concrete pits 1200mm wide Supply and install or construct concrete pits 1500mm wide HEADERS [Installed or constructed as per drawings and specifications] Supply and install or construct RC headers for conduits 450Ø-525Ømm wide Supply and install or construct RC headers for conduits 600Ø-750Ømm wide Supply and install or construct RC headers for conduits 1050Ø-1200Ømm wide Supply and install or construct RC headers for conduits 1050Ø-1200Ømm wide	0 0 0 1.8m 0 0 0 0 51 1.8m	0 0 0 7 0 0 0 0 0 5 111 (m3)	3 0 0 1.8m 3 0 0 0	8 8 11 FFIC More 0 1	unit unit unit unit unit	\$2,400 \$3,000 \$3,600 \$4,200 \$4,200 \$1.8m \$600 \$750 \$1,500 \$1,500	\$3,000 \$3,750 \$4,500 \$5,250 More \$800 \$1,000 \$1,950 Fill (m3) \$115.00	\$2,800 \$3,500 \$4,200 \$5,000 TRA 1.8m \$1,250 \$1,500 \$3,000 install (m) \$65.00	\$3,400 \$4,250 \$5,100 \$6,050 FFIC <u>More</u> \$1,600 \$1,950	\$ 4 \$ 6 \$ \$ \$ \$	14,500.00 10,800.00 16,550.00 3,750.00 1,950.00 3,900.00

ITEM	DESCRIPTION					UNIT					AMOUNT
13	SHOULDER FORMATION										
14	FLOOD GATES [Supplied and installed as per drawings and specifications]	Gate	Screen				Gate	Screen			
15	LEVEE BANK										
		VOLUM	IFS (m3)	SURFACE	BANK		VOLUN	IFS (m3)	SURFACE	BANK	
16	BASINS [Constructed as per drawings and specifications]	Excavate	Rock	(m2)	(m3)		Excavate	Rock	(m2)	(m3)	
	Construct retardation basin 94m x 56m x 2.17m deep	8,854	296	4,160	0	unit	\$30.00	\$90.00	\$1.50	\$35.00	\$ 298,500.00
	Construct retardation basin 77m x 44m x 1.37m deep	3,831	140	2,829	0		\$30.00	\$90.00	\$1.50	\$35.00	\$ 131,773.50
17 17.01 17.02	PUMPS AND PUMP STATIONS [Constructed as per drawings and specifications]	Q (l/sec)		HEAD (m)			PUMP		SYSTEM	333.00	3 131,773.30

ITEM	DESCRIPTION			UNIT					AMOUNT
18	SURFACE REINSTATEMENT								
18.01	Spread and lightly consolidate 75mm deep topsoil on trench surfaces	2,765		m2	\$1.88				\$ 5,183.44
18.02	Apply hydraseed to exposed trench, basin and bank surfaces as directed	2,765		m2	\$1.50				\$ 4,146.75
18.03	Supply, spread and consolidate 150mm deep Class 3 FCR @ 95% MMDD	480		m2	\$17.25				\$ 8,280.00
18.04	Supply, spread and consolidate 150mm deep Class 2 FCR @ 98% MMDD	480		m2	\$37.50				\$ 18,000.00
18.05									
18.06									
18.07									
18.08	Prepare, prime and seal road/path surface with 40mm Type N Asphalt	480		m2	\$60.00				\$ 28,800.00
18.09									
18.10									
18.11									
18.12									
18.13									
18.14									
18.15	Reinstate line-marking to VicRoads specifications	480		m	\$2.00				\$ 960.00
						SUE	3-TOTAL		\$ 2,142,698.69
					9	SERVICE DIV		5%	\$ 107,134.93
						CONTING		10%	\$ 214,269.87
						TOTAL (EXCL. GST)		\$ 2,464,103.49
							GST		\$ 246,410.35

GST \$ 246,410.35 TOTAL (INCL. GST) \$ 2,710,513.84

Mesh Pty Ltd Level 2, 6 Riverside Quay Southbank VIC 3006 T 03 9695 3025 E 03 9695 3001