

Wonthaggi North East

Development Contributions Plan

BUNURONG COUNTRY

January 2024

ACKNOWLEDGMENT OF COUNTRY

The Victorian Planning Authority proudly acknowledges Victoria's Aboriginal community and their rich culture and pays respect to their Elders past and present.

We **acknowledge** Aboriginal people as Australia's first peoples and as the Traditional Owners and custodians of the land and water on which we rely.

We **recognise and value** the ongoing contribution of Aboriginal people and communities to Victorian life and how this enriches us.

We **embrace** the spirit of reconciliation, working towards the equality of outcomes and ensuring an equal voice.

We acknowledge the Bunurong people as the Traditional Owners of the land to which this development contributions plan applies.

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1.0 SUMMARY

Table 1 provides an overview of the project categories and charges included within this development contributions plan. A more detailed explanation of apportionment, methods of calculation, and the description and costs of individual projects is included within the document. **Plan 1** identifies the charge areas within the development contributions plan for residential and employment development.

TABLE 1 Summary of charges

SUMMARY: NET DEVELOPABLE AREA (NDA) BY CHARGE AREA			
Charge area	Hectares	Proportion of total	
Residential (NDA-R)	444.02	88%	
Employment (NDA-E)	62.85	12%	
Total	506.87	100%	

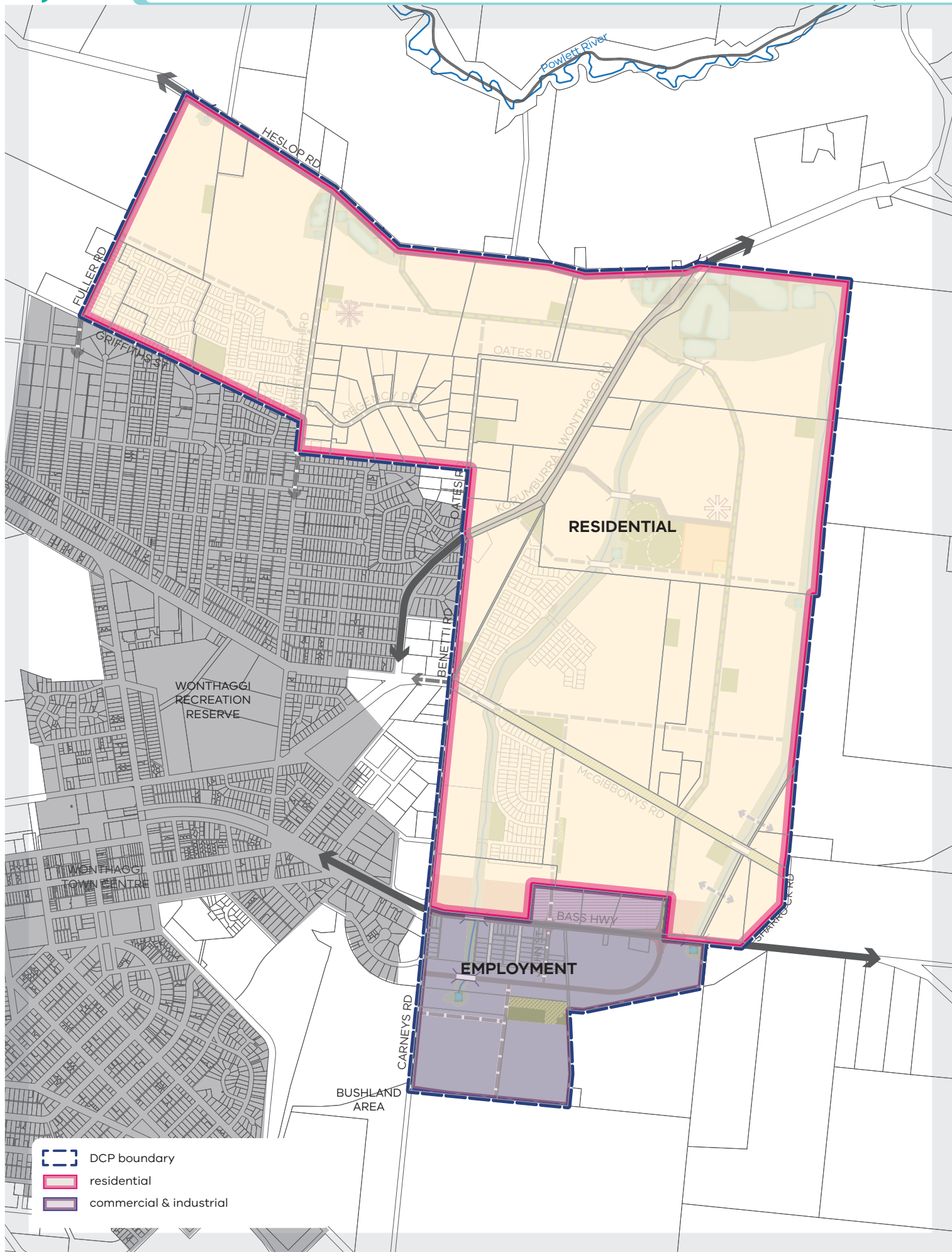
SUMMARY: DEVELOPMENT INFRASTRUCTURE LEVY	
Charge area	Contribution per net developable hectare (NDHa)
Residential	\$258,421
Employment	\$227,522

SUMMARY: DEVELOPMENT INFRASTRUCTURE COSTS			
Projects	Estimated land cost	Estimated construction cost	Total cost of project
Roads	\$0	\$5,411,836	\$5,411,836
Intersections	\$767,345	\$31,555,835	\$32,323,180
Sub-total transport	\$767,345	\$36,967,671	\$37,735,016
Bridges/culverts	\$0	\$3,296,559	\$3,296,559
Drainage	\$19,337,296	\$54,956,075	\$74,293,371
Sub-total drainage	\$19,337,296	\$58,252,634	\$77,589,930
Community facilities	\$109,093	\$4,170,117	\$4,279,210
Active recreation	\$1,408,001	\$8,032,817	\$9,440,817
Sub-total active recreation/community	\$1,517,094	\$12,202,934	\$13,720,028
Total	\$21,621,735	\$107,423,239	\$129,044,974

SUMMARY: COMMUNITY INFRASTRUCTURE LEVY		
Estimated dwellings	Estimated total contribution	Community infrastructure levy rate per dwelling
4,884	\$6,217,927	\$1,273

SUMMARY: TOTAL LEVIES TO BE COLLECTED			
Infrastructure type	Total cost of project	Total levy collected	Estimated total contribution
Development infrastructure	\$129,044,974	\$129,044,974	\$135,262,901
Community infrastructure	\$6,217,927	\$6,217,927	

Where an S173 Agreement has been entered into for an infrastructure project identified as a **reasonable match** in the DCP, prior to the approval of the DCP, the contribution amounts may vary.



1.1 Project identification

The DCP uses a project identification system of project category and sequential number in its tables and plans. The following types of projects are included in the DCP:

Transport projects

RD	Road
IN	Intersection

Community facility projects

CI	Community facility
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Active recreation projects

SR	Sports reserve
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Drainage projects

CU	Culvert
WL	Wetland
DR	Drainage reserve
SB	Sedimentation basin
PIPE	Piped drain

1.2 Infrastructure items not included in the development contributions plan (developer works)

The following infrastructure is not included in the DCP, as it is considered to be normal to the construction of a development and is not considered to warrant cost sharing arrangements beyond those set out in this DCP and must be provided by developers as a matter of course and/or pursuant to agreements with servicing agencies in implementing the PSPs:

- Internal streets including creek and drainage line crossings and associated traffic management measures (except where nominated within this DCP)
- Waterway management works and drainage systems (except where nominated within this DCP)
- Intersections connecting the development to the existing road network (except where nominated within this DCP)
- Water, sewerage, underground power, gas and telecommunications services
- Local pathways and connections to the regional and/or district pathway network
- Basic levelling and water tapping of local parks
- Preparation of local park masterplans and any associated works required by the PSP
- Council's plan checking and supervision, and
- Bus stops.

This infrastructure is usually addressed and defined by a Section 173 Agreement made under the *Planning and Environment Act 1987* and/or conditions in planning permits.

2.0 INTRODUCTION

The *Wonthaggi North East Development Contributions Plan* (DCP) has been prepared by the Victorian Planning Authority (VPA) in partnership with Bass Coast Shire Council.

The DCP:

- Outlines projects required to ensure that future residents, visitors and workers in the precinct can be provided with timely access to infrastructure and services necessary to support a quality and affordable lifestyle
- Establishes a framework for development proponents to make a financial contribution towards the cost of identified infrastructure projects
- Ensures the cost of providing new infrastructure and services is shared equitably between various development proponents and the wider community
- Provides the details of the calculation of financial contributions that must be made by future developments towards the nominated projects
- Recognises existing Section 173 agreements that contribute to the cost of identified infrastructure projects
- Provides developers, investors and the local community with certainty about development contribution requirements and how these will be administered.

The DCP document comprises five sections:

1 STRATEGIC BASIS

[1.0 Summary](#) and [2.0 Introduction](#) clearly explain the strategic basis for the DCP.

2 JUSTIFICATION

[3.0 Infrastructure project justification](#) provides justification for the various infrastructure projects included in the DCP.

3 CALCULATION OF CONTRIBUTIONS

[4.0 Calculation of contributions](#) sets out how the development contributions are calculated and costs apportioned.

4 ADMINISTRATION

[5.0 Implementation & administration](#) focuses on administration of the DCP.

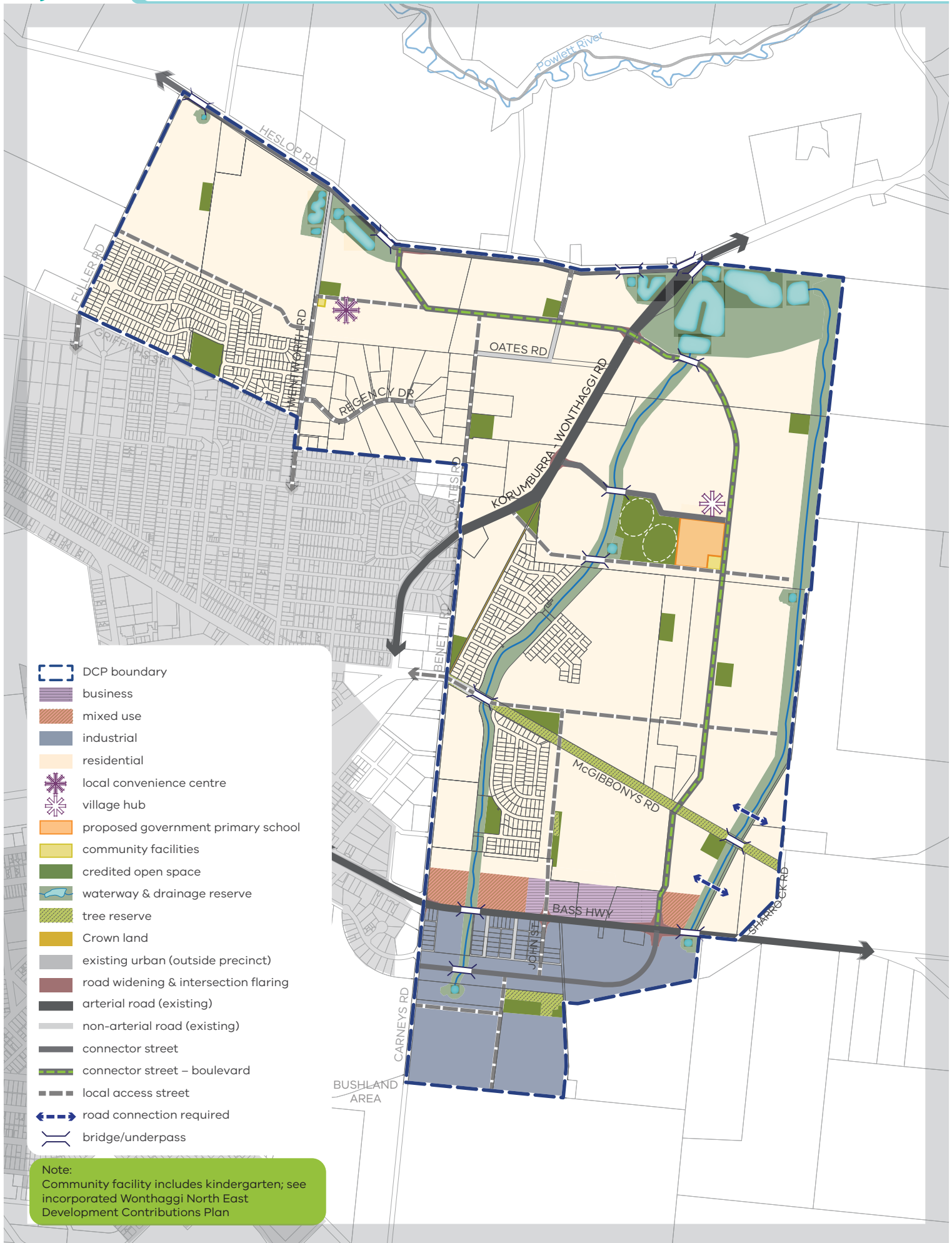
5 IMPLEMENTATION

[6.0 Implementation strategy](#) focuses on implementation of the DCP.

The strategic basis for the DCP is informed by:

- Planning Policy Framework as set out in the *Bass Coast Planning Scheme*
- *Precinct Structure Planning Guidelines* (Victorian Planning Authority, 2009 and 2021)
- *Infrastructure Design Manual* (Local Government Infrastructure Design Association)
- *Wonthaggi North East Precinct Structure Plan* (August, 2023) and supporting documents.

These documents set out or inform a broad, long-term vision for the sustainable development of the precinct and its surrounds.



2.1 Planning and Environment Act 1987

The DCP has been prepared in accordance with Part 3B of the *Planning and Environment Act 1987* (the Act) as well as other relevant legislation and has been developed in line with the Planning Policy Framework of the *Bass Coast Planning Scheme*. It is consistent with the *Ministerial Direction on the Preparation and Content of Development Contributions Plans* and *Ministerial Reporting Requirements for Development Contributions Plans* made under section 46M(1) of the Act and has had regard to the Victorian Government's *Development Contributions Plan Guidelines*.

The DCP provides for the charging of a development infrastructure levy (DIL) pursuant to section 46J(a) of the Act towards works, services and facilities. It also provides for the charging of a community infrastructure levy (CIL) pursuant to section 46J(b) of the Act as some items are classified as community infrastructure by reference to the Act, the Ministerial Direction on development contributions plans and the *Development Contributions Plan Guidelines*.

The DCP forms part of the *Bass Coast Planning Scheme* pursuant to section 46I of the Act and is an incorporated document under Clause 72.04 of the *Bass Coast Planning Scheme*. The DCP is implemented in the *Bass Coast Planning Scheme* through Schedule 1 to the Development Contributions Plan Overlay (DCPO1) that applies to the 'DCP boundary' illustrated on [Plan 1](#).

2.2 Strategic planning for Wonthaggi North East

The need for the infrastructure included within the DCP has been determined according to the anticipated development identified in the *Wonthaggi North East Precinct Structure Plan* (the PSP) and illustrated on [Plan 2](#). The PSP provides the rationale and justification for infrastructure items that have been included. Accordingly, the DCP is an implementation-based planning tool which identifies the infrastructure items required by the new community and apportions the cost of this infrastructure in an equitable manner across the plan area.

Strategic planning of the PSP is informed by a range of technical work. The *Wonthaggi North East Background Report* (VPA, November 2021) summarises technical work and other relevant considerations that have informed the PSP and DCP.

2.3 Wonthaggi North East Precinct Structure Plan

The PSP sets out the vision for how land should be developed, illustrates the future urban structure and describes the objectives to be achieved by future development. It also outlines the projects required to ensure that future residents, visitors and workers within the area are provided with timely access to service and transport infrastructure necessary to support a quality affordable lifestyle.

The future urban structure of the new community contains a number of networks, including transport, open space and sporting reserves, community facilities, centres and housing.

The PSP will deliver approximately 5,000 dwellings to accommodate approximately 12,000 residents.

2.4 The area to which the development contributions plan applies

In accordance with section 46K(1)(a) of the Act, the DCP applies to land illustrated on [Plan 1](#); this area is known as the main catchment area (MCA). The area is identified as DCPO1 in the *Bass Coast Planning Scheme*. The net developable area of the MCA is identified in [Table 2](#).

TABLE 2 Charge areas

Class of development	Net developable area (hectares)
Residential	444.02
Employment	62.85
Total	506.87

2.5 Existing Section 173 agreements

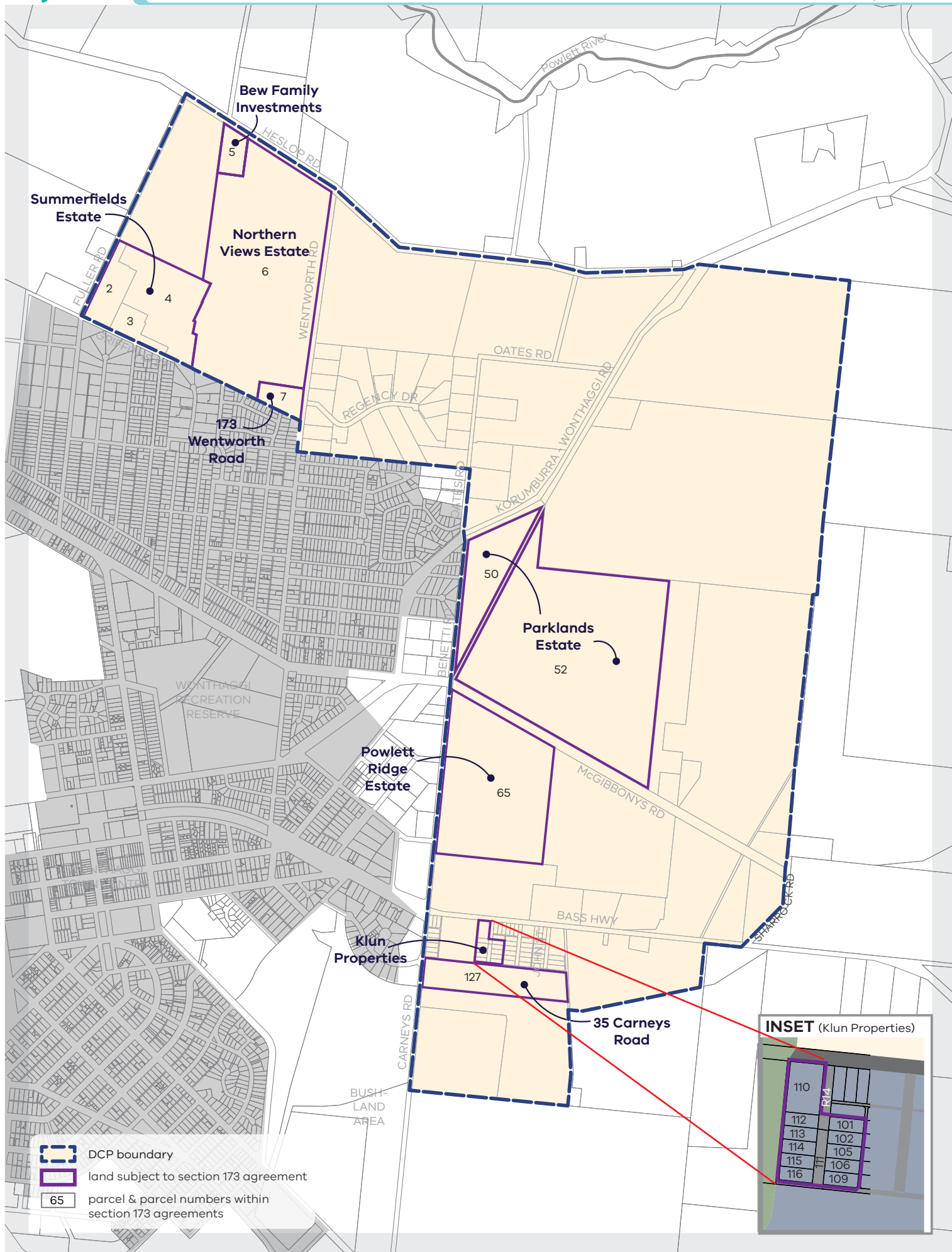
There are eight Section 173 agreements made under the *Planning and Environment Act 1987* that were executed prior to the approval date of this DCP (Prior Agreements). The Prior Agreements affect 21 land parcels within the DCP area and specify development contributions to be paid or infrastructure projects to be delivered as 'works-in-kind'. The 21 affected parcels within the precinct are illustrated on [Plan 3](#).

A summary of PSP land parcels with corresponding Prior Agreements, dealing numbers and permit status is set out in [Table 13](#) and [Plan 8](#) in [Appendix A](#) of this DCP. Some of the Prior Agreements were based on an earlier 2010 version of a DCP that was not approved. The 2010 version of the DCP included projects that differ from this DCP in terms of scope, location, cost and naming conventions.

This DCP outlines the obligations for landowners who have executed Prior Agreements where those agreements are still operative. Some projects in this DCP were listed in one or more of the agreements and have since been delivered as works-in-kind as per those existing Prior Agreements (i.e. RD-02, IN-07 and part of CU-03). [Section 4.2.2](#) of this DCP addresses how these projects have been dealt with under this DCP.

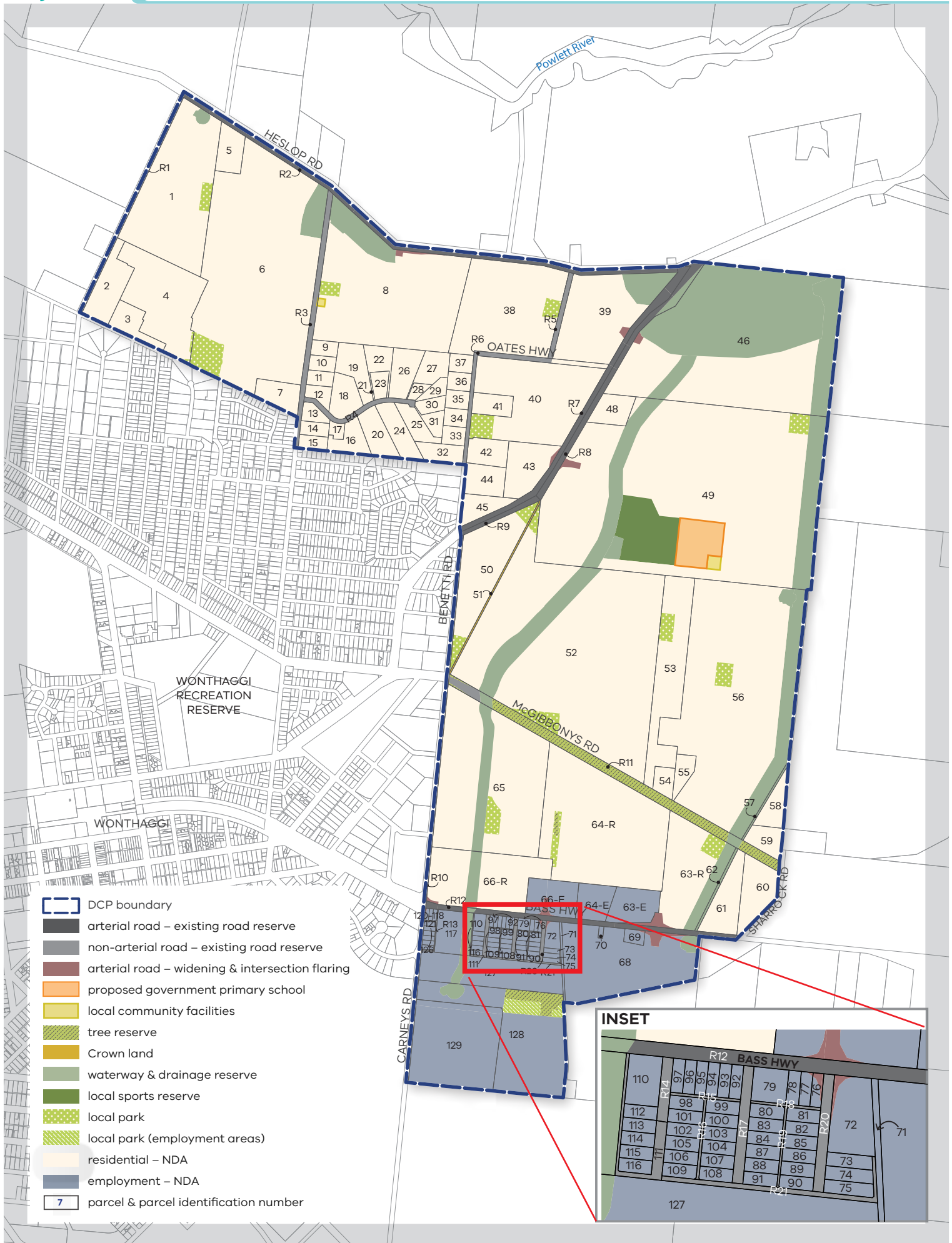
[Section 5.3.1](#) and [Section 5.3.2](#) of this DCP provides information on payment of contributions for land parcels subject to a Prior Agreement with respect to:

- 1 Where a planning permit for subdivision or development has been issued, and
- 2 Where no planning permit for subdivision or development has been issued.



2.5.1 Parcel identification

Each of the parcels in the Wonthaggi North East precinct have been given a unique parcel identification number that reflects the parcel numbers included in the PSP illustrated on [Plan 4](#).



3.0 INFRASTRUCTURE PROJECT JUSTIFICATION

3.1 Infrastructure items included in the development contributions plan

The need for infrastructure included in the DCP has been determined based on the development scenario described in the PSP and its supporting documents.

Items can be included in a DCP if the proposed development of an area is likely to create the need for infrastructure by its future community. New development does not have to trigger the need for new items in its own right. Furthermore, an item can be included in a DCP regardless of whether it is within or outside the DCP area.

Before inclusion in the DCP, all items have been assessed to ensure they have a relationship or nexus to proposed development in the PSP. The cost apportionment methodology adopted in the DCP relies on the nexus principle. A new development is deemed to have a nexus with an item if it is expected to make use of that item.

The infrastructure projects that have been included in the DCP all have the following characteristics:

- They are essential to the health, safety and wellbeing of the community
- They will be used by a broad cross-section of the community
- They will reflect the vision and strategic aspirations expressed in the PSP
- They are not recurrent items, and
- They are the basis for the future development of an integrated network.

3.2 Infrastructure projects

The following four types of infrastructure projects are included in the DCP:

- Transport
- Community facility
- Active recreation
- Integrated water management

The transport projects funded under the DCP are shown on [Plan 5](#) and described in [Table 3](#).

The community facility and active recreation projects funded under the DCP are shown on [Plan 6](#) and described in [Table 4](#).

The integrated water management projects funded under the DCP are shown on [Plan 7](#) and described in [Table 5](#).

3.2.1 Transport projects

The PSP outlines an expanded urban structure intended to support the future residential growth of Wonthaggi North East, including connector streets and local streets on a grid adjusted to meet the existing constraints of the area.

Where the precinct requires a new or upgraded major intersection within the proposed road network, the costs associated with that intersection have been included in the DCP.

Typically, arterial road widening and carriageway upgrades or construction are included in a DCP; however, a traffic impact assessment report (*Wonthaggi North East Precinct Structure Plan Transport Impact Assessment*, November 2021) undertaken as part of the preparation of the PSP indicates that additional capacity is not required on the arterial road network and upgrade projects have not been included in the DCP.

The transport projects include:

- Construction of controlled intersections and associated works
- Road construction listed in the DCP and consistent with the relevant cross sections outlined in the PSP.

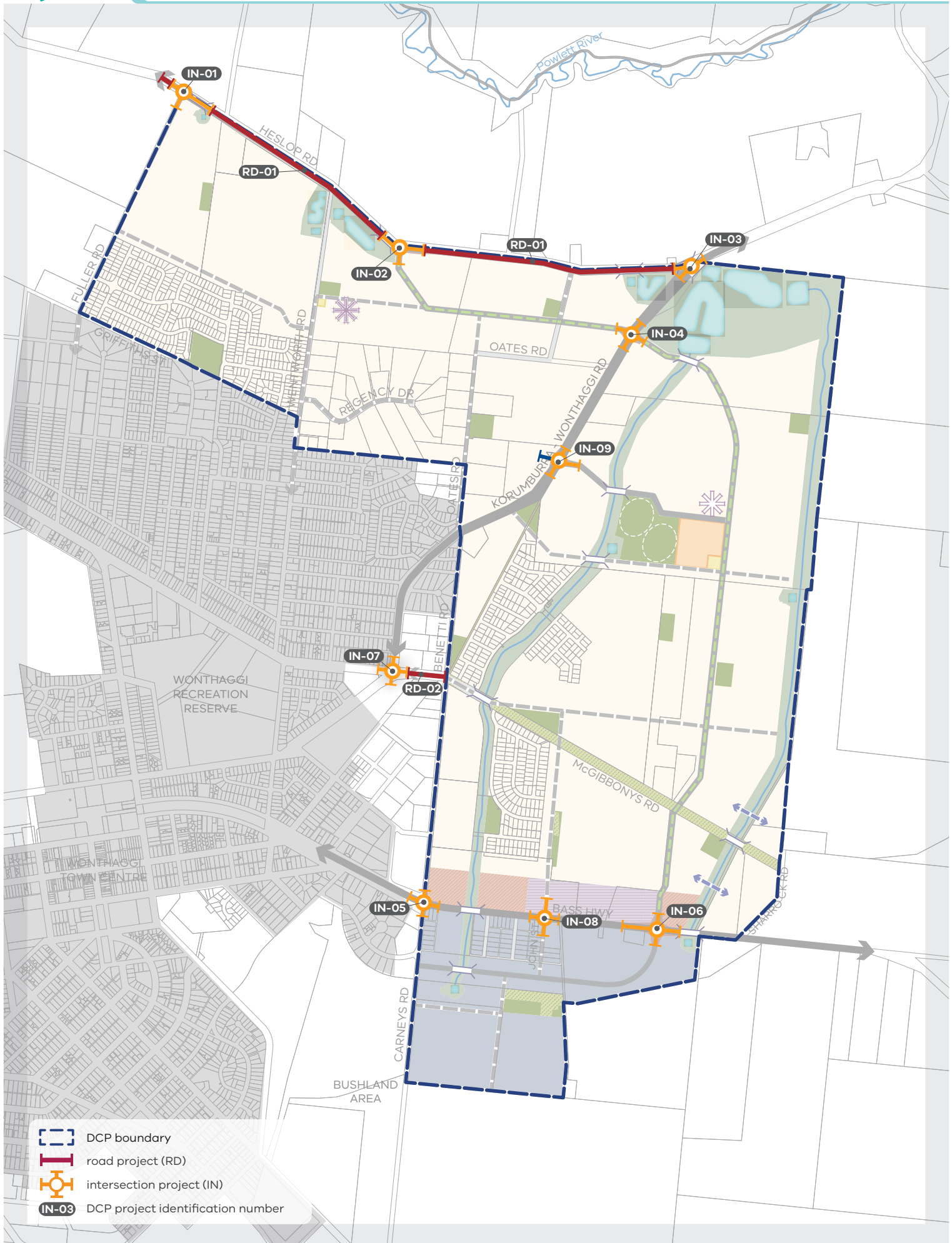


TABLE 3 Transport projects

DCP project ID	Project title & works description	Charge areas contributing	Indicative provision trigger
RD-01	Heslop Road (Fuller Road to Korumburra–Wonthaggi Road) 2,400m Construction of a 2-lane connector road (rural seal)	Residential & Employment	At time of subdivision/access requirement demand, subject to availability of DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.
RD-02	McGibbonys Road Construction of a connecting section of local access street	Residential & Employment	At time of subdivision/access requirement demand, subject to availability of DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.
IN-01	Heslop Road and Fuller Road Construction of T-intersection	Residential & Employment	At time of subdivision/access requirement demand, subject to availability of DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.
IN-02	Heslop Road and proposed Boulevard Connector Road Land and construction of T-intersection	Residential & Employment	At time of subdivision/access requirement demand, subject to availability of DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.
IN-03	Heslop Road and Korumburra–Wonthaggi Road Construction of T-intersection	Residential & Employment	At time of subdivision/access requirement demand, subject to availability of DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.
IN-04	Korumburra–Wonthaggi Road and proposed boulevard connector road Land and construction for a roundabout (arterial road to proposed boulevard connector road)	Residential & Employment	At time of subdivision/access requirement demand, subject to availability of DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.
IN-05	Bass Highway and Carneys Road Land and construction for a roundabout (arterial road to connector road)	Residential & Employment	At time of subdivision/access requirement demand, subject to availability of DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.
IN-06	Bass Highway and proposed boulevard connector road Land and construction for a roundabout (arterial road to proposed boulevard connector road)	Residential & Employment	At time of subdivision/access requirement demand, subject to availability of DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.
IN-07	McGibbonys Road and Korumburra–Wonthaggi Road Construction of turn lanes (arterial road to connector road)	Residential & Employment	At time of subdivision/access requirement demand, subject to availability of DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.
IN-08	Bass Highway and John Street Land and construction for a roundabout (Bass Highway and John Street access road)	Residential & Employment	At time of subdivision/access requirement demand, subject to availability of DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.
IN-09	Korumburra–Wonthaggi Road and connector road Land and construction for a roundabout (Korumburra–Wonthaggi Road and connector road) (Designed to accommodate potential proponent funded 4th leg, if required)	Residential & Employment	At time of subdivision/access requirement demand, subject to availability of DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.

3.2.2 Community facility projects

Community projects include land and construction of community centres.

The community projects are based on the analysis outlined in the *Wonthaggi North East Precinct Community Infrastructure Needs Assessment* (VPA, 2020). The community facilities defined in the community infrastructure needs assessment are the best estimates of the future requirements and specifications of the future communities of Wonthaggi North East.

The scope (as defined in [Table 4](#)) of each of the community projects is detailed in [Appendix C Project cost estimates & concept designs](#).

The detailed design and scope (as defined in [Table 4](#)) of each of the community projects will be reviewed by the development agency closer to the time that they are constructed.

In reviewing the scope of the facility, the development agency will have regard to matters such as charging provision standards and models, the immediate needs of the community, current regulations and best practice. The development agency may adjust and refine the scope of the facility to respond to these matters.

The development agency may refine the scope of a facility to reflect the capacity of any non-DCP funds that can be made available (for example a grant or other funding streams).

In refining any project scope the development agency must ensure that the funds levied from developers or landowners do not exceed the value nominated in the DCP (inclusive of any indexing provisions as allowed for by the DCP).

The community facility projects funded by the DCP are shown on [Plan 6](#). Projects funded by the DIL are described in [Table 4](#). Projects funded by the CIL are described in [Section 3.4](#) and [Table 7](#).

3.2.3 Active recreation projects

The active recreation projects include land take and/or construction of facilities in sporting reserves.

In determining the scope of DCP funded projects within the sporting reserve and local parks, council will have regard to matters such as changing provision standards and models, the immediate needs of the community, current regulations and best practice and may seek to adjust and refine the scope of the projects to these matters.

The active recreation projects funded by the DCP are shown on [Plan 6](#). Projects funded by the DIL are described in [Table 4](#). Projects funded by the CIL are described in [Section 3.4](#) and [Table 7](#).

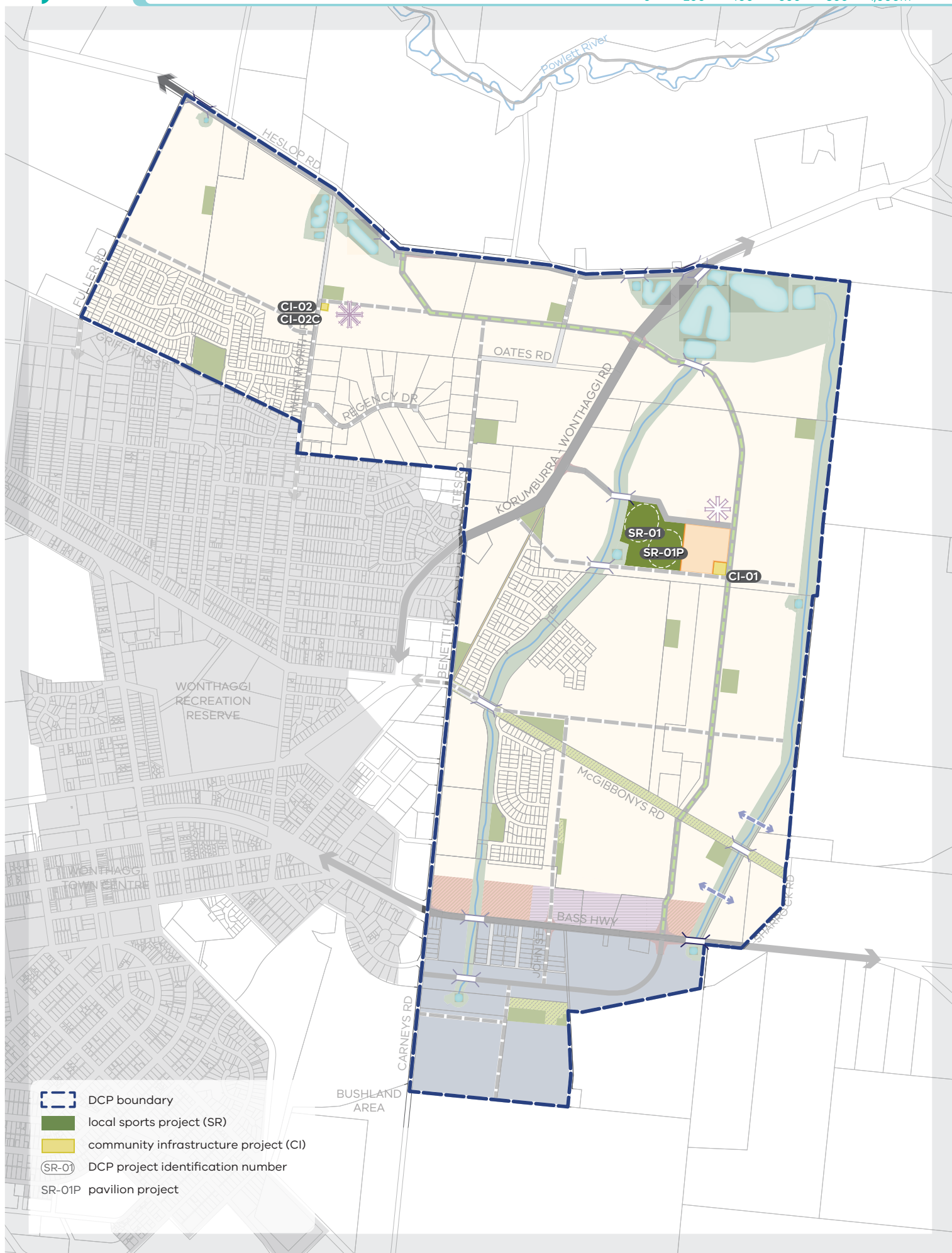


TABLE 4 Community facility & active recreation projects

DCP project ID	Project title & works description	Charge areas contributing	Indicative provision trigger
Community projects			
CI-01	Purchase of land and construction of community centre to include foyer, reception office and auxiliary spaces, outdoor space, multi-purpose space, early years/kindergarten spaces, maternal and child health and childcare facilities	Residential	As required according to demand levels, subject to DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.
CI-02	Purchase of land for a small community facility	Residential	As required according to demand levels, subject to DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.
Recreation projects			
SR-01	Purchase of land for 6 hectares multi-purpose sporting reserve, construction of pitches and facilities	Residential	As required according to demand levels, subject to DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.

3.2.4 Integrated water management projects

The DCP makes funding available for the construction of all necessary drainage infrastructure. The DCP only makes an allowance for the acquisition of land for drainage infrastructure where the land required would be otherwise unencumbered or is not the subject of a Section 173 agreement which otherwise deals with provision of land. Land for drainage projects external to the precinct is via an agreement between council and the landowner.

The drainage infrastructure has been identified through hydraulic modelling undertaken as part of the *Drainage Strategy* (Engeny, September 2023) for the PSP and the *Drainage Functional Design Report* (Alluvium, August 2023), Cardno has prepared the designs and costs for three culverts required as part of the outfall drainage infrastructure.

The drainage infrastructure is required to appropriately retard and treat stormwater flows from new urban development, in accordance with best practice principles and prior to discharge into rural areas at pre-development rates to the satisfaction of West Gippsland Catchment Management Authority.

The drainage projects include:

- Land for and construction of wetlands
- Channel works
- A legal point of discharge for each parcel within the precinct
- Piped drains
- Culverts
- Sedimentation basins.

The drainage projects are identified in [Plan 7](#) and [Table 5](#).

Implementation

The integrated water management system has an emphasis on end of line assets to trap sediment, retard, treat and then release stormwater generated from the PSP. It will also convey existing external flows through the PSP area. In recognition that the cost of the end of line solution is significant, in order to manage staged development pressures two further implementation strategies are supported:

- 1 The provision of interim water management projects (which are developer funded works for which no DCP credit will be possible). These projects are likely to have to be removed at some point in time in the future; and
- 2 Alternate Possible Permanent Integrated Water Management Projects which are water management projects for which a DCP credit in part or in full may be possible under certain circumstances as determined by the development agency.

In order to facilitate the implementation of the integrated stormwater assets identified by the PSP, the PSP includes:

- A precinct infrastructure table at Appendix 5 with supporting Guideline 75 and the Precinct Infrastructure Plan at Plan 13, and
- Guidelines 68 and 69 that provide guidance related to the delivery of interim water management projects being accepted as permanent works (Alternate Possible Permanent Integrated Water Management Project).

In order to facilitate the implementation of the integrated stormwater assets identified by the DCP, the DCP includes identification of locations for Possible Permanent Integrated Water Management Projects (PP-DR) on [Plan 7](#).

If the development agency (which is also the drainage authority) and the collecting agency agree to developer works in accordance with G68 and G69 which facilitate an upgrade of interim works to a Possible Permanent Integrated Water Management Project (PP-DR), this must occur as part of a subdivision application. Information on extending a credit or payment for these Possible Permanent Integrated Water Management Project is identified in [Section 5.3.4](#) of this DCP.

The DCP only makes an allowance for the acquisition of land for drainage infrastructure where the land required would be otherwise unencumbered. The Section 173 agreements relating to Parklands Estate and Powlett Ridge require the land for drainage item DR01 to be set aside at no cost.

LOCATION	MINIMUM HYDRAULIC WIDTH (m)	MINIMUM WATERWAY CORRIDOR WIDTH (m)
A	36	50
B	36	50
C	31	70
D	23	70
E	23	45
F	23	45
G	36	50
H	25	45
I	23	45

- natural waterway corridor
- constructed waterway corridor / drainage asset
- sedimentation basin
- land subject to existing flood extent
- contours (1m intervals)
- catchment area
- WL4** stormwater drainage & water quality treatment infrastructure (refer table 5)
- culvert
- underground drainage pipes (DCP funded)
- location for PP-DR – alternate Possible Permanent Integrated Water Management Assets are subject to agreement between Bass Coast Shire Council, Westernport Catchment Management Authority and the landowner/permit applicant

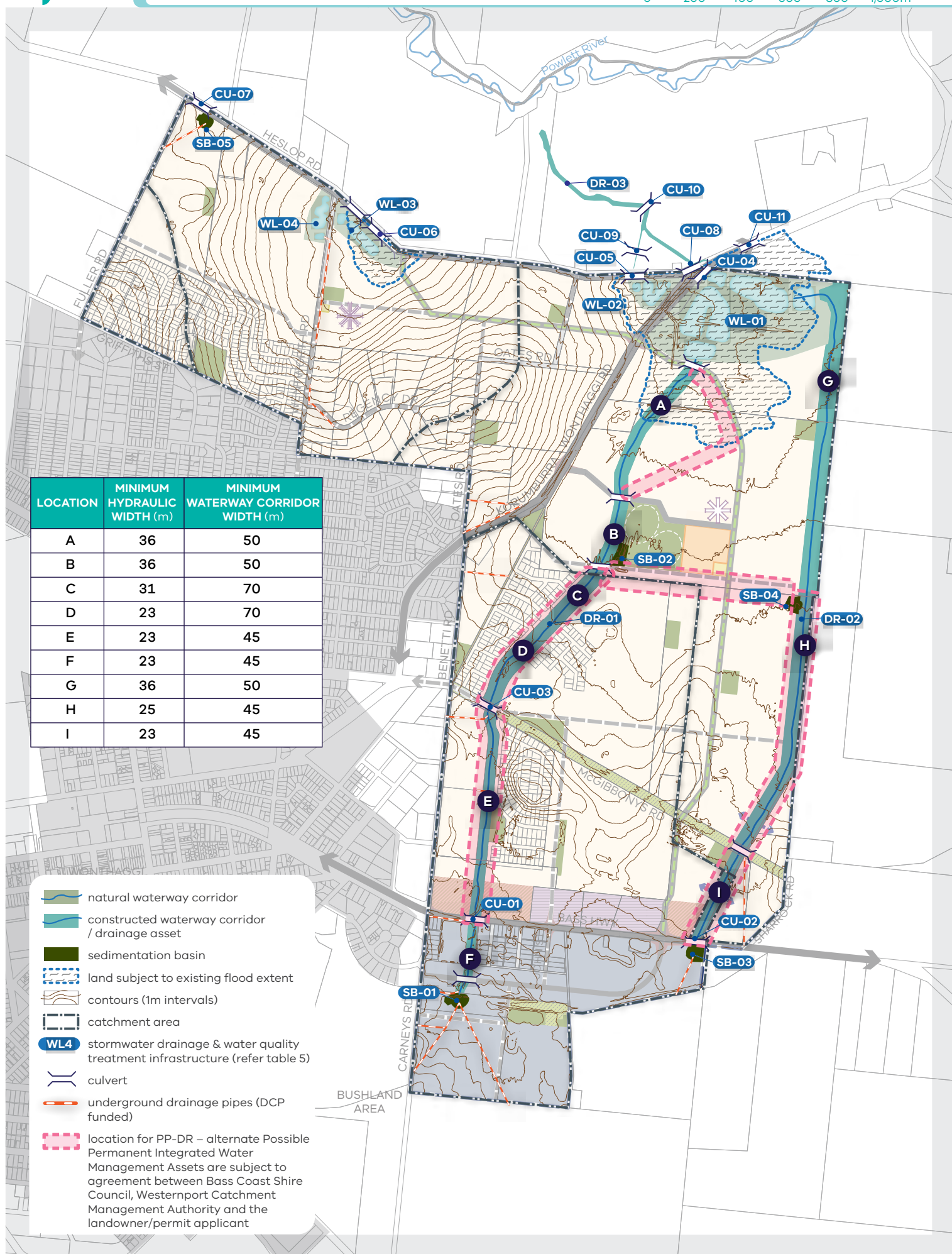


TABLE 5 Integrated water management projects

DCP project ID	Project title & works description	Charge areas contributing	Indicative provision trigger
CU-01	Bass Highway (west) Culvert at Bass Coast Highway (west)	Residential & Employment	At time of subdivision/access requirement demand, subject to availability of DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.
CU-02	Bass Highway (east) Culvert at Bass Coast Highway (east)	Residential & Employment	At time of subdivision/access requirement demand, subject to availability of DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.
CU-03	McGibbonys Road (west) Culvert at McGibbonys Road (west)	Residential & Employment	At time of subdivision/access requirement demand, subject to availability of DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.
CU-04	Korumburra–Wonthaggi Road embankment Culvert at Korumburra–Wonthaggi Road embankment	Residential & Employment	At time of subdivision/access requirement demand, subject to availability of DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.
CU-05	Heslop Road downstream of WL-02 Culvert at Heslop Road downstream of WL-02	Residential & Employment	At time of subdivision/access requirement demand, subject to availability of DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.
CU-06	Heslop Road downstream of WL-03 Culvert at Heslop Road downstream of WL-03	Residential & Employment	At time of subdivision/access requirement demand, subject to availability of DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.
CU-07	Heslop Road Culvert at Heslop Road	Residential & Employment	At time of subdivision/access requirement demand, subject to availability of DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.
CU-08	Outfall drain Crossing B Culvert at outfall waterway	Residential & Employment	At time of subdivision/access requirement demand, subject to availability of DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.
CU-09	Outfall drain Crossing A Culvert at outfall waterway	Residential & Employment	At time of subdivision/access requirement demand, subject to availability of DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.
CU-10	Outfall drain Crossing C Culvert at outfall waterway	Residential & Employment	At time of subdivision/access requirement demand, subject to availability of DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.
CU-11	Korumburra–Wonthaggi Road high flow outlet Culvert at outfall waterway	Residential & Employment	At time of subdivision/access requirement demand, subject to availability of DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.
DR-01	Western waterway Land and construction of western constructed waterway	Residential & Employment	At time of subdivision/access requirement demand, subject to availability of DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.
DR-02	Eastern waterway Land and construction of eastern constructed waterway	Residential & Employment	At time of subdivision/access requirement demand, subject to availability of DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.
DR-03	Outfall water-way Construction of main outfall to Powlett River	Residential & Employment	At time of subdivision/access requirement demand, subject to availability of DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.

DCP project ID	Project title & works description	Charge areas contributing	Indicative provision trigger
SB-01	Sedimentation basin Land and construction of sedimentation basin	Residential & Employment	At time of subdivision/access requirement demand, subject to availability of DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.
SB-02	Sedimentation basin Land and construction of sedimentation basin	Residential & Employment	At time of subdivision/access requirement demand, subject to availability of DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.
SB-03	Sedimentation basin Land and construction of sedimentation basin	Residential & Employment	At time of subdivision/access requirement demand, subject to availability of DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.
SB-04	Sedimentation basin Land and construction of sedimentation basin	Residential & Employment	At time of subdivision/access requirement demand, subject to availability of DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.
SB-05	Sedimentation basin Land and construction of sedimentation basin	Residential & Employment	At time of subdivision/access requirement demand, subject to availability of DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.
WL-01	Wetland 1 Land and construction of wetland	Residential & Employment	At time of subdivision/access requirement demand, subject to availability of DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.
WL-02	Wetland 2 Land and construction of wetland	Residential & Employment	At time of subdivision/access requirement demand, subject to availability of DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.
WL-03	Wetland 3 Land and construction of wetland	Residential & Employment	At time of subdivision/access requirement demand, subject to availability of DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.
WL-04	Wetland 4 Land and construction of wetland	Residential & Employment	At time of subdivision/access requirement demand, subject to availability of DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.
RB-01	Retarding Basin for Wetland 1 Land and construction of retarding basin for Wetland 1	Residential & Employment	At time of subdivision/access requirement demand, subject to availability of DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.
PL-01	Pipeline EI1 – EH1 (400mm dia.) Pipeline EI1 – EH1 (400mm dia.)	Residential & Employment	At time of subdivision/access requirement demand, subject to availability of DCP funding. Refer to PSP Table 8: Precinct Infrastructure for indicative timeframe.

TABLE 6 Possible Permanent Integrated Water Management Projects

DCP project ID	Project title & works description	Charge areas contributing	Indicative provision trigger
PP-DR	Alternate Possible Permanent Integrated Water Management Asset(s) STCA Potential uplift of an interim subdivisional drainage project to a permanent integrated stormwater management asset contained within PP-DR area (as identified on Plan 7).	Residential & Employment	At time of subdivision, as determined by the development agency.

3.3 Project timing

Each infrastructure project in the DCP has an assumed indicative provision trigger specified in [Table 3](#), [Table 4](#), [Table 5](#) and [Table 6](#), and references Table 8 Precinct Infrastructure in the PSP. The timing of the provision and the items in the DCP are consistent with information available at the time the DCP was prepared.

Bass Coast Shire Council is the development agency as well as the collecting agency and will monitor and assess the required timing for individual items and have regard to its capital works program.

The collecting agency may consider alternatives to the priority delivery of works or land where:

- Infrastructure is to be constructed/provided by development proponents as works or land-in-kind, as agreed by the collecting agency
- Network priorities require the delivery of works or land to facilitate broader road network connections
- The early progressive delivery of DR-01 may be required to enable orderly sequential development of the growth area with DR-02 coming online progressively as part of later stages as development
- Community needs determine the delivery of works or land for community facilities, sports reserves and open space.

All items in the DCP will be provided as soon as is practicable and as soon as sufficient development contributions are available, consistent with [Section 4.0](#) and acknowledging the development agency's capacities to provide the balance of funds not recovered by the DCP.

3.4 Distinction between development and community infrastructure

In accordance with the Act and the *Ministerial Direction on the Preparation and Content of Development Contributions Plans* and *Ministerial Reporting Requirements for Development Contributions Plans* (2016), the DCP makes a distinction between 'development' and 'community' infrastructure.

The timing of payment of contributions is linked to the type of infrastructure in question.

The community infrastructure levy is payable prior to the grant of a building approval (unless an alternative time is agreed between the council and a development proponent). The community infrastructure levy will be paid for at a 'per-dwelling' rate.

The Act currently stipulates that the amount that may be contributed under a community infrastructure levy is no more than \$1,225 per dwelling for the 2021–22 financial year. The Governor in Council may from time to time by Order published in the Government Gazette vary the maximum amount that may be imposed as the community infrastructure levy.

If in the future the community infrastructure levy is amended, then the levy applicable to the release of the remaining dwellings may be adjusted in accordance with the revised legislative and regulatory approach as directed by the Minister for Planning.

All other infrastructure projects are classified as development infrastructure projects.

Contributions relating to development infrastructure are to be made by developers at the time of subdivision. If subdivision is not applicable, payments must be made prior to construction of buildings and works (refer to [Section 4.1](#)).

Community infrastructure levy projects are identified in [Table 7](#).

TABLE 7 Community infrastructure levy projects

DCP project ID	Project title & works description	Charge areas contributing
CI-02c	Construction of community facility co-located with north-west local convenience centre	Residential
SR-01p	Construction of pavilion for sporting reserve	Residential

4.0 CALCULATION OF CONTRIBUTIONS

4.1 Calculation of net developable area and demand units

The following section sets out how the net developable area (NDA) is calculated and outlines the development projections (demand units) anticipated in the precinct.

4.1.1 Net developable area

In the DCP, all development infrastructure contributions are payable on the net developable area of land on any given development site. Calculations of NDA for each parcel identified in [Plan 4](#) of this DCP which have been used to calculate the levies under this DCP are outlined in the parcel-specific land budget included at [Appendix B](#). The levy per net developable hectare cannot be changed.

For the purposes of the DCP the NDA is defined as the total amount of land within the precinct that is made available for development. It is the total precinct area minus the land required for community facilities, educational facilities, open space and encumbered land. NDA includes any land for lots, housing and employment buildings, all local streets (including some connector streets), and any small parks defined at subdivision stage that are in addition to those outlined in the PSP.

The NDA for the DCP is outlined in [Table 8](#). The development infrastructure levy payable 'per net developable hectare' will not ordinarily be amended to respond to minor changes to the actual land budget that may result from the subdivision process. For the most part, the DCP is permanently linked to the calculation of the NDA set out in [Appendix B](#).

However, the NDA may need to be modified by a decision of the collecting agency where in the course of the development of land or as a result of one or more Alternate Possible Permanent Integrated Water Management Projects there is a resultant change to the amount of developable land within a parcel of land. Any additional levies that are raised beyond what was anticipated by this DCP will be dealt with in accordance with section 46Q of the Act.

4.1.2 Land budget & demand units

The 'net developable hectare' is the demand unit for the DCP.

'Urban development' is the one development type included in this DCP. Urban development is defined broadly to include all forms of development, including residential subdivision, development within local convenience centres and employment areas. Urban development also includes any non-residential uses within the residential area such as place of worship, education centre, retirement village, nursing home, childcare centre, medical centre, convenience store or any other approved use.

The Wonthaggi North East DCP contains an estimated 453 net developable hectares for residential land and 62 net developable hectares for employment land.

4.2 Calculation of contributions charges

4.2.1 Charge areas

The DCP contains two charge areas shown as the 'residential area' and 'employment area' in [Plan 1](#). Both charge areas cumulatively form the main catchment area (MCA) as defined in [Section 2.4](#) of this DCP. For community and active recreation projects, only the residential charge area is required to contribute.

4.2.2 Calculation of costs

Each infrastructure project has been assigned a land and/or construction cost as identified in [Table 8](#) are expressed in 2023 dollars and must be adjusted annually in accordance with the method specified in [Section 5.5](#).

TABLE 8 Summary land budget

DESCRIPTION	HECTARES	% OF TOTAL	% OF NDA
TOTAL PRECINCT AREA	632.61	100%	
TRANSPORT			
Arterial road – existing road reserve	14.51	2.29%	2.86%
Arterial road – new/widening/intersection flaring (DCP land)	2.01	0.32%	0.40%
Non-arterial road – retained existing road reserve	10.75	1.70%	2.12%
SUB-TOTAL TRANSPORT	27.26	4.31%	5.38%
COMMUNITY & EDUCATION			
Future government school	3.50	0.55%	0.69%
Local community facility (DCP land)	0.42	0.07%	0.08%
SUB-TOTAL EDUCATION	3.92	0.62%	0.77%
OPEN SPACE			
UNCREDITED OPEN SPACE			
Waterway and drainage reserve (DCP land)	68.87	10.89%	13.59%
Crown land	0.54	0.09%	0.11%
Tree reserve	7.09	1.12%	1.40%
SUB-TOTAL UNCREDITED OPEN SPACE	76.50	12.09%	15.09%
CREDITED OPEN SPACE			
Local sports reserve (DCP land)	6.00	0.95%	1.18%
Local network park (via CI 53.01) (Employment areas)	1.10	0.17%	0.22%
Local network park (via CI 53.01) (Residential areas)	10.95	1.73%	2.16%
SUB-TOTAL CREDITED OPEN SPACE	18.05	2.85%	3.56%
SUB-TOTAL ALL OPEN SPACE	94.55	14.95%	18.65%
TOTAL NET DEVELOPABLE AREA (NDA)	506.87	80.12%	
TOTAL NET DEVELOPABLE AREA – RESIDENTIAL (NDA-R)	444.02	70.19%	
TOTAL NET DEVELOPABLE AREA – EMPLOYMENT (NDA-E)	62.85	9.94%	
RESIDENTIAL LOCAL OPEN SPACE (expressed as % of NDA-R)	HECTARES	% of NDA-R	
Local sports reserve (DCP land)	6.00	1.35%	
Local network park (via CI 53.01) (Residential areas)	10.95	2.47%	
Sub-total	16.95	3.82%	
EMPLOYMENT LOCAL OPEN SPACE (expressed as % of NDA-E)	HECTARES	% of NDA-E	
Local network park (via CI 53.01) (Employment areas)	1.10	1.75%	
Sub-total	1.10	1.75%	
TOTAL OPEN SPACE	18.05	3.56%	

Road and intersection projects

Road construction costs have been determined by Stantec Consultants (previously GTA Consultants) (refer to [Appendix C](#) for road cost sheets) in 2021, using a 2020/2021 cost base.

Intersection construction costs (excepting RD-02 and IN-07) have been determined by Stantec Consultants (refer to [Appendix C](#) for intersection cost sheets) in 2021, using a 2020/2021 cost base.

Infrastructure projects RD-02 and IN-07 have been delivered as works-in-kind, to the satisfaction of the responsible authority. Therefore, the construction costs of RD-02 and IN-07 have been adopted from the respective Section 173 agreements (indexed to the date of construction: 2020 dollars).

Integrated water management projects

Integrated water management costs for wetlands, waterways, drainage pipes and sedimentation basins have been determined by Alluvium Consulting (refer [Appendix C](#) for integrated water management and drainage costs) in 2022, using a 2019/2020 cost base (indexed to 2023 dollars).

Integrated water management costs for culverts have been determined by Engeny and Cardno (refer

[Appendix C](#) for integrated water management and drainage costs) in 2019 and 2021 respectively, and subsequently adopted by Alluvium, using a 2015/2016 cost base (indexed to 2023 dollars).

The construction of WL-04 is to be provided as works-in-kind in accordance with the Prior Agreement (dealing number AT823177H, PSP parcel ID 6), executed on 1 December 2020, unless otherwise agreed by the council as development agency and drainage authority. This Prior Agreement nominates a minimum construction reimbursement cost of \$1,400,000, adjusted in accordance with the index upwards on 1 July each year after the commencement of that agreement (i.e. 2020). Therefore, the cost of WL-04 in this DCP reflects the cost specified in the Prior Agreement, indexed to 2023 dollars.

Infrastructure project CU-03 has been delivered in part as works-in-kind and the DCP adopts the respective Section 173 Agreement 2023 indexed value.

Community infrastructure projects

The cost of community facilities has been determined by Bass Coast Shire Council and VPA (refer to [Appendix C](#) for community facilities cost sheets) in 2020, using a 2020/2021 cost base (indexed to 2023 dollars).

Active recreation project costs (land and works) have been determined by Bass Coast Shire Council and VPA (refer to [Appendix C](#) for open space cost sheets) in 2020, using a 2020/2021 cost base (indexed to 2023 dollars).

All infrastructure projects have been indexed in accordance with the method specified in [Section 5.5](#) to 2023 dollars.

4.2.3 Estimate of land value

The area of land to be acquired for each DCP project on each parcel was identified from the property specific land budget prepared for the PSP. A description of the precinct land area was provided to a registered valuer to prepare an estimate of value. The valuer's estimate in turn is used to determine the value for each land project identified in the DCP.

The estimates of value were prepared using the methodology known as the Public Land Equalisation Method (PLEM). The PLEM calculates the average public land contribution required across the PSP (expressed as a percentage of NDA). The land required for from each parcel is also calculated and compared against the average.

Public land which is required from a parcel that has a required area which is less than or equal to the precinct's average public land contribution has an estimate of value derived by using a per property broad hectare methodology. The proportion of a land project that exceeds the precinct average public land contribution has an estimate of value using a site-specific method.

4.2.4 Per property broad hectare estimate of value

The per property broad hectare estimate of value prepared for each individual property assumes the unencumbered, highest-and-best use as indicated by the PSP.

The estimates of value are prepared on a 'before and after' basis where:

- The 'before' assessment is based on the total developable area of each property and ignores the land and infrastructure items to be provided by the DCP. Any development that occurs subsequent to the approval of the DCP is ignored for the purpose of the valuation.
- The 'after' assessment comprises the remaining portion of each property after all land required by the DCP has been provided. Severance or enhancement, disturbance, special value etc. are ignored for the purpose of the 'after' valuation.

4.2.5 Site-specific value estimate

The site-specific approach (where applicable) prepares an estimate of value for each separate land infrastructure item. For example, if a landowner has land identified for a road widening, a community centre and a local sports reserve, a site-specific estimate (where applicable) of value would be prepared for all three items separately.

Site-specific estimates of land value generally assume that the land identified can be sold as serviced development lots, i.e. street frontages etc. have already been constructed, therefore the land has a lower expected development cost.

4.3 Cost apportionment

The DCP apportions a charge to new development according to its projected share of use of identified infrastructure items. Since development contribution charges are levied 'up-front', a measure of actual use by individual development sites is not possible. Therefore, costs must be shared in accordance with the estimated share of use.

Cost apportionment (where it is applied) is expressed as a percentage. Projects that are 100 per cent apportioned to the DCP area are considered to be wholly required for the future development of the DCP area. Projects that are less than 100 per cent apportioned to the DCP area are shared with other areas and funding sources external to the precinct area.

4.3.1 Section 173 Agreements

A number of land parcels within the DCP area are subject to approved planning permits and Prior Agreements as a result of DPO21 in the *Bass Coast Planning Scheme*. A total of 145 hectares of land within the main charge area (MCA) is subject to a Prior Agreement. The infrastructure projects and charges under the Prior Agreements are in accordance with an earlier 2010 draft of a development contributions plan which was not incorporated into the *Bass Coast Planning Scheme* and is now outdated.

This DCP apportions the cost of all infrastructure items equally to the MCA, inclusive of parcels affected by a Prior Agreement. Therefore, the cost of all DCP projects is shared equitably among all properties within the MCA. This approach upholds the principle of nexus and ensures that future development in the DCP area is not subsidised by landowners outside the MCA. [Section 5.3.1](#) and [Section 5.3.2](#) provides information on payment obligations for parcels subject to a Prior Agreement.

Adjustments are made to the amount of the development infrastructure levy to be levied having regard to 'reasonable match' and 'substantial change' projects. That process provides some recognition of payments under Prior Agreements and the methodology is part of the development infrastructure levy calculation.

The complete list of 'reasonable match' and 'substantial change' projects is provided at [Appendix A](#).

4.3.2 Exemptions

Non-government schools

The development of land for a non-government school is exempt from the requirement to pay a development infrastructure levy and a community infrastructure levy under the DCP.

Small second dwellings

The development of land for a small second dwelling is exempt from the requirement to pay a development infrastructure levy and a community infrastructure levy under the DCP.

Social and affordable housing

Bass Coast Shire Council may consider an exemption or discount for land developed for housing by or for the Department of Health and Human Services, as defined in *Ministerial Direction on the Preparation and Content of Development Contributions Plans* of 11 October 2016. This applies to social housing development delivered by and for registered housing associations. This exemption does not apply to private dwellings developed by the Department of Health and Human Services or registered housing associations.

Land subject to an existing Section 173 agreement where a planning permit for subdivision or other development has been issued

For land which is subject to an existing Section 173 agreement that makes provision for development contributions where a planning permit for subdivision or development has been issued before the approval date, the collecting agency will not collect the development infrastructure levies payable under this DCP for that land.

4.3.3 Summary of charges per hectare

[Table 9](#) and [Table 10](#) calculate the amount of contributions payable by each charge area for each infrastructure category.

TABLE 9 Calculation of costs – development infrastructure levy (DIL)

DCP project no.	Project & project category	Land take area ha	Estimated project cost: land	Estimated project cost: construction	Total estimated project cost: land & construction	% apportioned to DCP (internal use)	Total cost attributable to MCA	Total cost per Residential NDHa in MCA	Total cost per Employment NDHa in MCA	Total cost per NDHa in MCA
ROAD PROJECTS										
RD-01	Heslop Road (Fuller Road to Korumburra–Wonthaggi Road) 2400m Development	0.00	\$–	\$5,111,260.99	\$5,111,260.99	100%	\$5,111,260.99	\$10,083.88	\$10,083.88	\$10,083.88
RD-02	McGibbonys Road Development	0.00	\$–	\$300,575.00	\$300,575.00	100%	\$300,575.00	\$593.00	\$593.00	\$593.00
Sub-total road projects		0.00	\$–	\$5,411,835.99	\$5,411,835.99		\$5,411,835.99			
INTERSECTION PROJECTS										
IN-01	Heslop Road and Fuller Road Development	0.00	\$–	\$2,271,419	\$2,271,419	100%	\$2,271,419	\$4,481	\$4,481	\$4,481
IN-02	Heslop Road and proposed Boulevard Connector Road Development	0.20	\$66,882	\$2,236,248	\$2,303,130	100%	\$2,303,130	\$4,544	\$4,544	\$4,544
IN-03	Heslop Road and Korumburra–Wonthaggi Road Development	0.00	\$–	\$3,101,928	\$3,101,928	100%	\$3,101,928	\$6,120	\$6,120	\$6,120
IN-04	Korumburra–Wonthaggi Road and proposed Boulevard Connector Road Development	0.13	\$33,815	\$3,564,835	\$3,598,650	100%	\$3,598,650	\$7,100	\$7,100	\$7,100
IN-05	Bass Highway and Carneys Road Development	0.08	\$30,578	\$4,142,334	\$4,172,912	100%	\$4,172,912	\$8,233	\$8,233	\$8,233
IN-06	Bass Highway and proposed Boulevard Connector Road Development	0.87	\$329,850	\$5,871,426	\$6,201,277	100%	\$6,201,277	\$12,234	\$12,234	\$12,234
IN-07	McGibbonys Road and Korumburra–Wonthaggi Road Development	0.00	\$–	\$721,380	\$721,380	100%	\$721,380	\$1,423	\$1,423	\$1,423
IN-08	Bass Highway and John Street Development	0.30	\$195,705	\$4,823,079	\$5,018,784	100%	\$5,018,784	\$9,901	\$9,901	\$9,901
IN-09	Korumburra–Wonthaggi Road and Connector Road Development	0.32	\$110,516	\$4,823,185	\$4,933,701	100%	\$4,933,701	\$9,734	\$9,734	\$9,734
Sub-total intersection projects		1.89	\$767,345	\$31,555,835	\$32,323,180		\$32,323,179.92			
CULVERT PROJECTS										
CU-01	Bass Highway (west) Development	0.00	\$–	\$384,172	\$384,172	100%	\$384,172	\$758	\$758	\$758
CU-02	Bass Highway (east) Development	0.00	\$–	\$374,990	\$374,990	100%	\$374,990	\$740	\$740	\$740
CU-03	McGibbonys Road (west) Development	0.00	\$–	\$216,525	\$216,525	100%	\$216,525	\$427	\$427	\$427
CU-04	Korumburra–Wonthaggi Road embankment Development	0.00	\$–	\$174,201	\$174,201	100%	\$174,201	\$344	\$344	\$344

DCP project no.	Project & project category	Land take area ha	Estimated project cost: land	Estimated project cost: construction	Total estimated project cost: land & construction	% apportioned to DCP (internal use)	Total cost attributable to MCA	Total cost per Residential NDHa in MCA	Total cost per Employment NDHa in MCA	Total cost per NDHa in MCA
CU-05	Heslop Road downstream of WL-02 Development	0.00	\$-	\$176,906	\$176,906	100%	\$176,906	\$349	\$349	\$349
CU-06	Heslop Road downstream of WL-03 Development	0.00	\$-	\$382,683	\$382,683	100%	\$382,683	\$755	\$755	\$755
CU-07	Heslop Road Development	0.00	\$-	\$220,061	\$220,061	100%	\$220,061	\$434	\$434	\$434
CU-08	Outfall drain Crossing B Development	0.00	\$-	\$123,900	\$123,900	100%	\$123,900	\$244	\$244	\$244
CU-09	Outfall drain Crossing A Development	0.00	\$-	\$245,534	\$245,534	100%	\$245,534	\$484	\$484	\$484
CU-10	Outfall drain Crossing C Development	0.00	\$-	\$602,319	\$602,319	100%	\$602,319	\$1,188	\$1,188	\$1,188
CU-11	Korumburra-Wonthaggi Road high flow outlet Development	0.00	\$-	\$395,270	\$395,270	100%	\$395,270	\$780	\$780	\$780
Sub-total culvert projects		0.00	\$-	\$3,296,559	\$3,296,559		\$3,296,559			
DRAINAGE PROJECTS										
DR-01	Western waterway Development	16.51	\$4,851,819	\$9,583,790	\$14,435,609	100%	\$14,435,609	\$28,480	\$28,480	\$28,480
DR-02	Eastern waterway Development	19.29	\$5,444,290	\$11,135,395	\$16,579,685	100%	\$16,579,685	\$32,710	\$32,710	\$32,710
DR-03	Outfall waterway Development	0.00	\$-	\$1,541,660	\$1,541,660	100%	\$1,541,660	\$3,042	\$3,042	\$3,042
SB-01	Sedimentation basin Development	0.52	\$192,008	\$954,689	\$1,146,697	100%	\$1,146,697	\$2,262	\$2,262	\$2,262
SB-02	Sedimentation basin Development	0.51	\$119,767	\$1,270,032	\$1,389,800	100%	\$1,389,800	\$2,742	\$2,742	\$2,742
SB-03	Sedimentation basin Development	0.48	\$176,822	\$932,134	\$1,108,956	100%	\$1,108,956	\$2,188	\$2,188	\$2,188
SB-04	Sedimentation basin Development	0.41	\$103,629	\$789,176	\$892,805	100%	\$892,805	\$1,761	\$1,761	\$1,761
SB-05	Sedimentation basin Development	0.33	\$121,684	\$850,210	\$971,893	100%	\$971,893	\$1,917	\$1,917	\$1,917
WL-01	Wetland 1 Development	23.48	\$6,139,095	\$18,051,829	\$24,190,924	100%	\$24,190,924	\$47,726	\$47,726	\$47,726
WL-02	Wetland 2 Development	2.06	\$752,363	\$1,885,993	\$2,638,355	100%	\$2,638,355	\$5,205	\$5,205	\$5,205
WL-03	Wetland 3 Development	2.95	\$994,545	\$2,419,815	\$3,414,361	100%	\$3,414,361	\$6,736	\$6,736	\$6,736
WL-04	Wetland 4 Development	1.75	\$441,274	\$1,650,307	\$2,091,581	100%	\$2,091,581	\$4,126	\$4,126	\$4,126

DCP project no.	Project & project category	Land take area ha	Estimated project cost: land	Estimated project cost: construction	Total estimated project cost: land & construction	% apportioned to DCP (internal use)	Total cost attributable to MCA	Total cost per Residential NDHa in MCA	Total cost per Employment NDHa in MCA	Total cost per NDHa in MCA
RB-01	Retarding basin for Wetland 1 Development	0.00	\$-	\$-	\$-	100%	\$-	\$-	\$-	\$-
PL-01	Pipeline EI1 – EH1(400mm dia.) Development	0.00	\$-	\$117,956	\$117,956	100%	\$117,956	\$233	\$233	\$233
PL-02	Pipeline EH1 – DR-01 (200mm dia.) Development	0.00	\$-	\$20,185	\$20,185	100%	\$20,185	\$40	\$40	\$40
PL-03	Pipeline EV1 – EW1 (370mm dia.) Development	0.00	\$-	\$361,082	\$361,082	100%	\$361,082	\$712	\$712	\$712
PL-04	Pipeline DU1 – DW1 (281mm dia.) Development	0.00	\$-	\$532,378	\$532,378	100%	\$532,378	\$1,050	\$1,050	\$1,050
PL-05	Pipeline DP2 – DP3 (307mm dia.) Development	0.00	\$-	\$281,487	\$281,487	100%	\$281,487	\$555	\$555	\$555
PL-06	Pipeline DQ1 – DP3 (329mm dia.) Development	0.00	\$-	\$64,536	\$64,536	100%	\$64,536	\$127	\$127	\$127
PL-07	Pipeline DP3 – DW1(317mm dia.) Development	0.00	\$-	\$116,267	\$116,267	100%	\$116,267	\$229	\$229	\$229
PL-08	Pipeline DW1 – SB1 (200mm dia.) Development	0.00	\$-	\$34,309	\$34,309	100%	\$34,309	\$68	\$68	\$68
PL-09	Pipeline DL3 – DW2 (330mm dia.) Development	0.00	\$-	\$166,526	\$166,526	100%	\$166,526	\$329	\$329	\$329
PL-10	Pipeline DM1 – DX1(486mm dia.) Development	0.00	\$-	\$171,572	\$171,572	100%	\$171,572	\$338	\$338	\$338
PL-11	Pipeline G3 – V2 (457mm dia.) Development	0.00	\$-	\$195,817	\$195,817	100%	\$195,817	\$386	\$386	\$386
PL-12	Pipeline V2 – SB-03 (333mm dia.) Development	0.00	\$-	\$24,477	\$24,477	100%	\$24,477	\$48	\$48	\$48
PL-13	Pipeline W2 – V5 (322mm dia.) Development	0.00	\$-	\$440,589	\$440,589	100%	\$440,589	\$869	\$869	\$869
PL-14	Pipeline FB1 – 14 (386mm dia.) Development	0.00	\$-	\$172,660	\$172,660	100%	\$172,660	\$341	\$341	\$341
PL-15	Pipeline EY2 – 13 (340mm dia.) Development	0.00	\$-	\$108,712	\$108,712	100%	\$108,712	\$214	\$214	\$214
PL-16	Pipeline 13 – 14 (300mm dia.) Development	0.00	\$-	\$43,502	\$43,502	100%	\$43,502	\$86	\$86	\$86
PL-17	Pipeline GY2 – GY3 (436mm dia.) Development	0.00	\$-	\$849,030	\$849,030	100%	\$849,030	\$1,675	\$1,675	\$1,675
PL-18	Pipeline GY3 – WL-04 (300mm dia.) Development	0.00	\$-	\$78,072	\$78,072	100%	\$78,072	\$154	\$154	\$154
PL-19	Pipeline HM1 – HC2 (411mm dia.) Development	0.00	\$-	\$101,012	\$101,012	100%	\$101,012	\$199	\$199	\$199

DCP project no.	Project & project category	Land take area ha	Estimated project cost: land	Estimated project cost: construction	Total estimated project cost: land & construction	% apportioned to DCP (internal use)	Total cost attributable to MCA	Total cost per Residential NDHa in MCA	Total cost per Employment NDHa in MCA	Total cost per NDHa in MCA
PL-20	Pipeline HC2 – SB-05 (400mm dia.) Development	0.00	\$–	\$10,876	\$10,876	100%	\$10,876	\$21	\$21	\$21
Sub-total drainage projects		68.29	\$19,337,296	\$54,956,075	\$74,293,371		\$74,293,371			
COMMUNITY PROJECTS										
CI-01	Community facility within Village Hub Development	0.32	\$75,093	\$4,170,117	\$4,245,210	100%	\$4,245,210	\$9,561	\$–	\$9,561
CI-02	Land for community facility co-located with north-west local convenience centre Development	0.10	\$34,000	\$–	\$34,000	100%	\$34,000	\$77	\$–	\$77
Sub-total community projects		0.42	\$109,093	\$4,170,117	\$4,279,210		\$4,279,210			
ACTIVE RECREATION PROJECTS										
SR-01	Sports reserve and construction of sports pitches Development	6.00	\$1,408,001	\$8,032,817	\$9,440,817	100%	\$9,440,817	\$21,262	\$–	\$21,262
Sub-total active recreation development infrastructure projects		6.00	\$1,408,001	\$8,032,817	\$9,440,817		\$9,440,817			
SUMMARY										
TOTAL COST ALL PROJECTS			\$21,621,735	\$107,423,239	\$129,044,974		\$129,044,974			
TOTAL DEVELOPMENT INFRASTRUCTURE LEVY PER NDA			\$42,657	\$211,933	\$254,590		\$254,590			

TABLE 10 Calculation of costs – community infrastructure levy (CIL)

DCP project no.	Project & infrastructure category	Land area ha	Estimated project cost: land	Estimated project cost: construction	Total estimated project cost: land & construction	% apportioned to DCP (internal use)	Total cost attributable to DCP
CIL – SPORTS RESERVES AND INDOOR RECREATION							
SR-01p	Construction of sporting pavilions for the sports reserve Community	0.00	\$–	\$4,589,307	\$4,589,307	100%	\$4,589,307
Sub-total active recreation (community infrastructure levy)		0.00	\$–	\$4,589,307	\$4,589,307		\$4,589,307
CIL – COMMUNITY CENTRES							
CI-02c	Construction of community facility co located with north-west local convenience centre Community	0.00	\$–	\$1,628,620	\$1,628,620	100%	\$1,628,620
Sub-total active recreation (community infrastructure levy)		0.00	\$–	\$1,628,620	\$1,628,620		\$1,628,620
SUMMARY							
TOTAL COMMUNITY INFRASTRUCTURE LEVY PER DWELLING							\$1,273
TOTAL COMMUNITY INFRASTRUCTURE LEVY ESTIMATED RAISED VIA WONTHAGGI NORTH EAST DCP							\$6,217,927

5.0 IMPLEMENTATION & ADMINISTRATION

This section sets out how the DCP will be administered and covers the:

- Timing of payment
- Provision of works-in-kind
- Provision of land-in-kind, and
- How funds generated by the DCP will be managed in terms of reporting, indexation and review periods.

The development infrastructure levy applies to subdivision and/or other development of land.

The community infrastructure levy applies to the construction of dwellings.

5.1 Collecting agency (agency responsible for collecting infrastructure levy)

Bass Coast Shire Council is the collecting agency pursuant to section 46K(1)(fa) of the *Planning & Environment Act 1987*. As the collecting agency, Bass Coast Shire Council is responsible for the administration of the DCP and its enforcement pursuant to section 46QC of the *Planning & Environment Act 1987*.

Council as the collecting agency and responsible authority is required to implement and administer the 2021 DCP along with the eight existing Section 173 Agreements (Prior Agreements). Where a funding gap exists arising from the Prior Agreements, council is responsible for sourcing funding to reduce the gap.

5.2 Development agency (agency responsible for works)

Bass Coast Shire Council is the development agency and is responsible for the provision of all infrastructure projects funded by the DCP and timing of all works.

5.3 Payment of contributions and payment timing

5.3.1 Development infrastructure levy

The development infrastructure levy will be calculated in accordance with this DCP, which:

- specifies the project cost of each of the infrastructure projects
- classifies the infrastructure projects into development or community infrastructure
- specifies the proportion of the total estimated cost of the infrastructure which is to be funded by this DCP

Project costs are estimated costs except where agreed to adopt costs identified under a Prior Agreement.

For subdivision of land

A development infrastructure levy in accordance with the Wonthaggi North East DCP, must be paid to the collecting agency for each demand unit (net developable hectare – NDHa) in the subdivision within the following specified time, namely after certification of the plan of subdivision but not more than 21 days prior to the issue of a Statement of Compliance in respect to that plan under the *Subdivision Act 1988* or such other time included in an agreement under Section 173 of the *Planning & Environment Act 1987*.

Where the subdivision is to be developed in stages, the development infrastructure levy in accordance with the Wonthaggi North East DCP for the stage to be developed, may only be paid to the collecting agency for each demand unit (NDHa) in that stage within 21 days prior to the issue of a Statement of Compliance of that stage provided that a Schedule of Development Contributions is submitted with each stage of the plan of subdivision. The Schedule of Development Contributions must show the amount of the development contributions payable for each stage and value of the contributions for prior stages to the satisfaction of the collecting agency or be included in an implementation agreement under Section 173 of the *Planning & Environment Act 1987*.

If the collecting agency agrees to works and/or provision of land in lieu of the payment of the development infrastructure levy, the landowner must enter into an agreement under Section 173 of the *Planning & Environment Act 1987* in respect of the proposed works and/or provision of land-in-kind.

For development of land where no subdivision is proposed

Provided a development infrastructure levy has not already been paid for the land, a development infrastructure levy in accordance with the *Wonthaggi North East DCP* must be paid to the collecting agency for each demand unit (net developable hectare) proposed to be developed prior to the commencement of any development (i.e. development includes the area of all buildings, car parks, access ways, landscaping and ancillary components). The collecting agency may agree to a different time for payment.

If the collecting agency agrees to works and/or provision of land in lieu of the payment of the development infrastructure levy, the landowner must enter into an agreement under Section 173 of the *Planning & Environment Act 1987* or other arrangement acceptable to the collecting agency in respect of the proposed works and/or land to be provided in kind.

For development of land where no planning permit is required

Provided a development infrastructure levy has not already been paid for the land, a development infrastructure levy in accordance with the *Wonthaggi North East DCP* must be paid to the collecting agency for each demand unit (net developable hectare) proposed to be developed prior to the commencement of any development. If the development is not a subdivision, development includes the area of all buildings, car park, access ways, landscaping and ancillary components. The collecting agency may agree to a different time for payment.

For parcels subject to a Prior Agreement

Where no planning permit for subdivision or development has been issued

For land which is or was subject to a Prior Agreement that makes provision for development contributions and where a planning permit for subdivision or development has not been issued as at the date the DCP was incorporated into the *Bass Coast Planning Scheme*, the collecting agency must impose a permit condition requiring payment of the development infrastructure levy under this DCP to that land.

The development infrastructure levy is to include adjustments made as part of the calculation of the development infrastructure levy in respect of:

- "reasonable match" and "substantial change" projects identified in [Table 11](#) and [Table 12](#), and
- having regard to the contributions paid pursuant to a Prior Agreement.

Reasonable match projects

A reasonable match project is a project identified in a Prior Agreement infrastructure project list that is reasonably aligned with the cost and description of a project within [Table 11](#) of this DCP.

Where a project is contained in [Table 11](#) below, as a reasonable match project, and the contribution required to be paid in respect of this project under the Prior Agreement has been paid in full, then the "Total – Contribution per NDHa" in [Table 9](#) for that project will be reduced to \$0 to that no further amount will be levied in respect of that project under this DCP.

TABLE 11 Reasonable match projects

DCP 2023 Project ID	Project Description (2023 DCP)	Estimated project cost in Oct 2023 DCP: Land & Construction (FY23/24)	Draft 2010 / 2020 DCP Project ID	Draft 2010 DCP Project Cost (indexed to FY23/24 based on S173 specification and timing)	Summerfields Estate (AS373799K, Parcel ID 2, 3 & 4)	Bew Family (AJ534369V, Parcel ID 5)	Northern Views Estate (AT823177H, Parcel ID 6)	173 Wentworth Road (AU665007E, Parcel ID 7)	Parklands Estate (AJ338595E, Parcel ID 50 & 52)	Powlett Ridge Estate (AJ913506B, Parcel ID 65)	Klun Properties (AJ667735D, Parcel ID 98, 105, 109, 110 113, 114 & 116)
TRANSPORT PROJECTS											
RD-02	McGibbonys Road	\$300,575	R10 (2010)	\$300,575.00					\$65,614.64		
IN-07	McGibbonys Road and Korumburra–Wonthaggi Road	\$721,380	I05 (2010)	\$721,380.00					\$157,474.97		
			I05 (2010)	\$721,380.00						\$63,861.01	
CU-02	Bass Highway (east)	\$374,990	C13 (2010)	\$214,381.19							\$968.43
CU-03	McGibbonys Road (west)	\$216,525	C10 (2010)	\$216,525.00					\$39,368.98		
			C10 (2010)	\$213,325.12						\$15,965.25	
COMMUNITY PROJECTS (CLASSIFIED AS DEVELOPMENT – DIL)											
CI-01	Community facility within Village Hub	\$4,245,210	CI02 + CI03	\$4,482,276.08		\$31,607.84					
			CF02 + CF03	\$4,373,805.00					\$1,014,131.75		
			CF02 + CF03	\$4,309,167.49						\$411,259.55	

Substantial change projects

A “substantial change” project is a project identified in a Prior Agreement’s infrastructure project list that matches the location of an infrastructure project within [Table 12](#) of this DCP, but substantially differs from this DCP in terms of cost and description.

Where an infrastructure project is contained in [Table 12](#) below as a substantial change project, and the contribution required to be paid in respect of this project under the Prior Agreement has been paid in full, then the “Total – Contribution per NDHa” in [Table 9](#) for that project will be reduced by the contribution made under the Prior Agreement. This reflects the fact that the levy payable under this DCP for substantial change project is the difference between the contribution under the Prior Agreement and the value of the project in this DCP. The total amount deducted per project cannot be greater than the value identified for the project in this DCP.

TABLE 12 Substantial change projects

DCP 2023 Project ID	Project Description (2023 DCP)	Estimated project cost in Oct 2023 DCP: Land & Construction (FY23/24)	Draft 2010 / 2020 DCP Project ID	Draft 2010 DCP Project Cost (indexed to FY23/24 based on S173 specification and timing)	Summerfields Estate (AS373799K, Parcel ID 2, 3 & 4)	Bew Family (AJ534369V, Parcel ID 5)	Northern Views Estate (AT823177H, Parcel ID 6)	173 Wentworth Road (AU665007E, Parcel ID 7)	Parklands Estate (AJ338595E, Parcel ID 50 & 52)	Powlett Ridge Estate (AJ913506B, Parcel ID 65)	Klun Properties (AJ667735D, Parcel ID 98, 105, 109, 110, 113, 114 & 116)	35 Carneys Road (AT579736E, Parcel ID 127)
INTEGRATED WATER MANAGEMENT PROJECTS												
WL-01	Wetland 1	\$24,190,924.15	OS11 (2010)	\$1,732,200.00					\$401,636.29			
			OS11 (2010)	\$1,706,600.99						\$162,875.15		
WL-03	Wetland 3	\$3,414,360.55	OS13 (2010)	\$1,109,474.28		\$7,901.96						
DR-01	Western waterway – construction	\$9,583,790.39	DR1 (2010)	\$2,275,467.98						\$170,294.60		
	Western waterway – land	\$4,851,819.05	TR1 (2010)	\$866,100.00					\$200,818.61			
DR-02	Eastern waterway	\$16,579,685.18	DR-01 (2020) – Land	Land provided directly					5.51 ha	2.82 ha		
			DR3 (2010)	\$914,693.07							\$4,131.95	
CU-06	Culvert – Heslop Road west of Korumburra Road	\$382,683.05		\$375,167.08							\$2,161.21	
			C5 (2010)	\$147,929.90		\$826.21						

DCP 2023 Project ID	Project Description (2023 DCP)	Estimated project cost in Oct 2023 DCP: Land & Construction (FY23/24)	Draft 2010 / 2020 DCP Project ID	Draft 2010 DCP Project Cost (indexed to FY23/24 based on S173 specification and timing)	Summerfields Estate (AS373799K, Parcel ID 2, 3 & 4)	Bew Family (AJ534369V, Parcel ID 5)	Northern Views Estate (AT823177H, Parcel ID 6)	173 Wentworth Road (AU665007E, Parcel ID 7)	Parklands Estate (AJ338595E, Parcel ID 50 & 52)	Powlett Ridge Estate (AJ913506B, Parcel ID 65)	Klun Properties (AJ667735D, Parcel ID 98, 105, 109, 110, 113, 114 & 116)	35 Carneys Road (AT579736E, Parcel ID 127)
TRANSPORT PROJECTS												
RD-01	Heslop Road (Fuller Road to Korumburra–Wonthaggi Road) 2400m	\$5,111,260.99	R01 (2010)	\$1,627,228.94		\$4,544.04						
IN-01	Intersection at Heslop Road and Fuller Road	\$2,271,419.00	I06 (2010)	\$1,479,299.04		\$4,130.96						
			I07 (2010)	\$44,378.97		\$123.92						
			I06 (2010)	\$1,443,500.00					\$131,229.29			
			I07 (2010)	\$43,305.00					\$3,937.09			
IN-03	Heslop Road and Korumburra–Wonthaggi Road	\$3,101,928.00	I03 (2010)	\$1,109,474.28		\$6,196.46						
			I03 (2010)	\$1,082,625.00					\$196,843.93			
IN-06	Bass Highway and St Clair Boulevard	\$6,201,277.00	I02 (2010)	\$1,071,905.94							\$4,842.13	
COMMUNITY PROJECTS (CLASSIFIED AS DEVELOPMENT – DIL)												
SR-01	Sports reserve and construction of sports pitches	\$9,440,817.00	OS1a (2010)	\$3,852,094.69		\$27,445.16						
			OS1a (2010)	\$3,758,874.00					\$871,854.37			
			OS1a (2010)	\$3,703,324.14						\$353,561.53		

5.3.2 Community infrastructure levy

The community infrastructure levy must be paid by the person applying for a building permit prior to the issue of a building permit.

Community infrastructure levies for 'residential buildings' will be calculated at the rate for a single dwelling. For all other forms of accommodation, a community infrastructure levy must be paid for each dwelling within the development.

A community infrastructure levy is not payable for a dwelling on a lot which was created prior to the approval date of this DCP.

For parcels subject to a Prior Agreement

Where a planning permit for subdivision or development has been issued

For land which is subject to a Prior Agreement that makes provision for community infrastructure contributions, where a planning permit for subdivision or development has been issued before the date the DCP was incorporated into the *Bass Coast Planning Scheme*, the collecting agency will not collect the community infrastructure levies payable under this DCP for that land.

Where no planning permit for subdivision or development has been issued

For land which is subject to a Prior Agreement that makes provision for a community infrastructure levy where a planning permit for subdivision or development has not been issued, as at the date the DCP was incorporated into the *Bass Coast Planning Scheme*, the collecting agency will impose the community infrastructure levy under this DCP to that land.

5.3.3 Works-in-kind

Under Section 46P of the Act, council as the collecting agency may accept the provision of land, works, services or facilities by the applicant in part, or in full, in lieu of the amount of the development infrastructure levy payable. This can be agreed with council before or after the application for the permit is made or before the development is carried out. The agreement must include a list of the DCP infrastructure that council has agreed in writing to allow to be provided as works in lieu. As a guide, the agreement will also address:

- The works constitute projects funded by the DCP
- The collecting agency (council) agrees that the timing of the works would be consistent with priorities in the DCP
- The works are defined and agreed within a Section 173 Agreement
- The development proponent complies with appropriate tendering, documentation, supervision and related provisions as required by the responsible authority
- Works must be provided to an agreed standard that generally accords with the DCP, unless an alternative is agreed by the collecting agency and the development agency
- Detailed design must be approved by the collecting agency and the development agency and must generally accord with the standards outlined in the DCP unless an alternative is agreed by the collecting agency and the development agency
- The construction of works must be completed to the satisfaction of the collecting agency and the development agency
- There should be no negative financial impact on the DCP to the satisfaction of the collecting agency.

In particular, the works will only be accepted in lieu of a financial contribution required by the DCP to the extent that they constitute part or all of the design of the infrastructure item, to the satisfaction of the collecting agency. Temporary works will not be accepted as works-in-kind.

Where the collecting agency agrees that works are to be provided by a development proponent in lieu of cash contribution (subject to the arrangements specified above):

- The credit for the works provided (unless an alternative approach is agreed with the collecting agency) shall equal the final cost of the works up to a maximum of the amount identified in the DCP, taking into account the impact of indexation, or to an alternative figure approved by the collecting agency
- The value of works provided in accordance with the principle outlined above will be offset against the development infrastructure levy liable to be paid by the development proponent, and
- No further financial contributions will be required until the agreed value of any credits are used.

5.3.4 Credit for interim and possible permanent drainage works

Under the *Wonthaggi North East PSP* and this DCP, there is a need to provide for the effective implementation of the integrated water management system over an extended period of time.

Bass Coast Shire Council, the development agency (which is also the drainage authority), may agree to provide a credit for a Possible Permanent Integrated Water Management Project (per [Table 6](#)). In doing so, the final specification, cost and land take of WL-01, WL-02, DR-03, SB-02, SB-04 and CU08–10 may be modified, subject to detailed design.

The amount to be allowed as a credit for the Possible Permanent Integrated Water Management Project will be calculated by the collecting agency having regard to its specification and contribution to the integrated water management system and the extent to which it results in an ability to downgrade and reduce the estimated costs of downstream assets.

The amount agreed in relation to the Possible Permanent Integrated Water Management Project works, if provided as a credit in a works-in-kind arrangement, must be set out in an agreement before the commencement of construction of the Possible Permanent Integrated Water Management Project works between the collecting agency and the owner of the land concerned.

When considering the provision of a credit for any Possible Permanent Integrated Water Management Projects, consideration should be given to:

- Ensuring the overall function of the drainage strategy and the waterways
- The impact on the extent of earthworks that would otherwise be required
- Any increase in maintenance costs or requirements of the alternative works
- The impact on other land owners
- The overall impact to NDA and the development infrastructure levy.

5.3.5 Non-government schools

Where land is subdivided to enable a non-government school to be accommodated and the use of that land is subsequently for a purpose other than a non-government school, the owner of that land must pay to the collecting agency a development infrastructure levy in accordance with the provision of this DCP. The Development infrastructure levy must be paid prior to the commencement of the construction of any buildings or works for that alternative use.

5.4 Funds administration

The administration of the contributions made under the DCP will be transparent and development contributions charges will be held until required for provision of the items in that class. Details of funds received and expenditures will be held by the collecting agency in accordance with the provisions of the *Local Government Act 1989* and the *Planning and Environment Act 1987*.

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

- Amount and timing of funds collected
- Source of the funds collected
- Amount and timing of expenditure on specific projects
- Project on which the expenditure was made
- Account balances for individual project classes
- Details of works-in-kind arrangements for project provision
- Pooling or quarantining of funds to deliver specific projects, where applicable.

The collecting agency will provide for regular monitoring, reporting and review of the monies received and expended in accordance with the DCP.

The collecting agency will establish interest bearing accounts and all monies held in these accounts will be used solely for the provision of infrastructure as itemised in the DCP, as required under section 46QA of the Act.

5.5 Construction and land value costs indexation

Capital costs of all infrastructure items, including land, are in 2023 dollars and will be adjusted by the collecting agency each financial year.

In relation to the costs associated with infrastructure items other than land, the cost must be adjusted according to the following method:

Roads, intersections and bridges – indexed in line with the Australian Bureau of Statistics *Producer Prices Indexes, Road and Bridge Construction Index, Victoria*.

All other construction items – indexed in line with the Australian Bureau of Statistics *Producer Price Indexes, Non-Residential Building Construction Index, Victoria*.

In relation to the costs associated with infrastructure items in Prior Agreements, the costs must be adjusted based on the methodology specified in the Prior Agreement.

Estimates of land value will be revised annually by a registered valuer based on a PLEM methodology for each lot that includes land for a DCP project. Revisions may occur more frequently if market conditions warrant.

The collecting agency will publish the amended contributions on the collecting agency's website within 14 days of the adjustments being made.

Both the maximum levy amount and the payable dwelling amount for the community infrastructure levy will be adjusted annually using the Producer Price Index for non-residential building construction in Victoria. The index is published by the Australian Bureau of Statistics. The indexed amount will be published by the Department on or before 1 July each year.

5.6 Development contributions review period

The DCP commenced on the approval date when it was first incorporated into the *Bass Coast Planning Scheme*.

The DCP adopts a long-term outlook for future development in Wonthaggi North East precinct.

The DCP is expected to be revised and updated every five years (or more frequently if required). This may require an amendment to the *Bass Coast Planning Scheme* to replace this document with an alternative, revised document. Any review will need to have regard to any arrangements (e.g. Section 173 agreements under the Act) for the implementation of the DCP.

This review is anticipated to include:

- Updates to any aspects of the plan as required
- Review of projects required, as well as their costs and scope (as relevant) and indicative provision trigger
- Review of estimated net developable area (this will also be required in the PSP subject to a substantive amendment)
- Review of land values for land to be purchased through the DCP.

5.7 Adjustment to the infrastructure scope

The infrastructure projects in the DCP have been costed to a sufficient level of detail; however, all the projects will require a detailed design process prior to construction.

As part of detailed design, the development agency or a development proponent with the consent of the development agency and the collecting agency may amend or modify some aspects of projects, as long as they are still generally in accordance with the PSP and any direction regarding the scope outlined in the DCP.

A development proponent may also propose changes to the use and development of land from that contemplated in the PSP, provided they are generally in accordance with the PSP, leading to an increased requirement for infrastructure. In these cases, there should be no negative impact on the DCP by requirement for the developer to bear the additional costs associated with the provision of the infrastructure item over and above the standard required by the DCP.

Where the development agency or another agency seeks to change the scope of a DCP infrastructure item to meet changing standards imposed by adopted policy or a public regulatory agency, such changes of standards and the resulting cost changes should normally be made through a change to the DCP at the time of a regular review of the DCP.

Where, after the DCP has been approved, the development agency or other agency proposes changes to the scope of a DCP infrastructure item for reasons other than changes in standards imposed by policy or regulation, the net cost increases resulting from the change should normally be met by the agency requesting the change.

6.0 IMPLEMENTATION STRATEGY

This section provides further details regarding how the collecting agency intends to implement the DCP. 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 DCP to all parties.

6.1 Rationale for the implementation strategy

This implementation strategy has been included to provide certainty to both the collecting agency, the development 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 proponent and future community.

This implementation strategy has been formulated by:

- Assessing the PSP
- Having regard to the development context
- Assessing the need for finance requirements including upfront financing and pooling of funds
- Agreeing the land value and indexing it appropriately (where possible)
- 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.

6.2 Implementation mechanism

Under section 46P of the Act, 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 payment. This can be by agreement with the collecting agency before or after the application for the permit is made or before the development is carried out.

To coordinate the provision of infrastructure, Schedule 1 to the Urban Growth Zone and Schedule 1 to the General Residential Zone in the *Bass Coast Planning Scheme* for the PSP requires an application for subdivision to be accompanied by an infrastructure plan to the satisfaction of the responsible authority.

The Public Infrastructure Plan needs to show the location, type, staging and timing of infrastructure on the land as identified in the *Wonthaggi North East PSP* or reasonably required as a result of the subdivision of the land and address the following:

- Stormwater drainage works
- Road works internal or external to the land consistent with any relevant traffic report or assessment
- The reserving or encumbrance of land for infrastructure, including for community facilities, sports reserves and open space
- Any infrastructure works which an applicant proposes to provide in lieu of development contributions in accordance with the DCP
- The effects of the provision of infrastructure on the land or any other land
- Any other relevant matter related to the provision of infrastructure reasonably required by the responsible authority.

Through the approval of these agreements, Bass Coast Shire Council (acting as the collecting agency) will consider if and what infrastructure should be provided as works-in-kind under the DCP in accordance with section 46P of the Act. The agreement must include a list of the DCP infrastructure projects that the collecting agency has agreed in writing to allow to be provided as works and/or land in lieu.

7.0 APPENDICES

APPENDIX A Reasonable match or substantial change project tables

[Table 13](#) provides the list and the associated total value of works of infrastructure that are in Section 173 Agreements entered into prior to the approval of the Amendment, for both Substantial Change and Reasonable Match Projects.

[Table 14](#) provides the list and the associated equivalent value rate of works of infrastructure that are in Section 173 Agreements entered into prior to the approval of the Amendment, for both Substantial Change and Reasonable Match Projects.

[Table 15](#) lists works-in-kind projects that are in Section 173 Agreements entered into prior to the approval of the Amendment.

[Plan 8](#) shows the infrastructure identified in the DCP and their relationship with land that includes Section 173 Agreements entered into prior to the approval of the Amendment.

TABLE 13 Projects funded or partially funded by prior Section 173 agreements, by total amount, that are considered reasonable match and substantial change projects

DCP 2023 Project ID	Project Description (2023 DCP)	Estimated project cost in Oct 2023 DCP: Land & Construction (FY23/24)	Draft 2010 / 2020 DCP Project ID	Draft 2010 DCP Project Cost (indexed to FY23/24 based on S173 specification and timing)	Summerfields Estate (AS373799K, Parcel ID 2, 3 & 4)	Bew Family (AJ534369V, Parcel ID 5)	Northern Views Estate (AT823177H, Parcel ID 6)	173 Wentworth Road (AU665007E, Parcel ID 7)	Parklands Estate (AJ338595E, Parcel ID 50, 51 & 52)	Powlett Ridge Estate (AJ913506B, Parcel ID 65)	Klun Properties (AJ667735D, Parcel ID 98, 105, 109, 110, 113, 114 & 116)	35 Carneys Road (AT579736E, Parcel ID 127)
REASONABLE MATCH PROJECTS												
Transport projects												
RD-02	McGibbonys Road	\$300,575	R10 (2010)	\$300,575.00					\$65,614.64			
IN-07	McGibbonys Road and Korumburra–Wonthaggi Road	\$721,380	I05 (2010)	\$721,380.00					\$157,474.97			
			I05 (2010)	\$721,380.00					\$63,861.01			
CU-02	Bass Highway (east)	\$374,990	C13 (2010)	\$214,381.19							\$968.43	
CU-03	McGibbonys Road (west)	\$216,525	C10 (2010)	\$216,525.00					\$39,368.98			
			C10 (2010)	\$213,325.12					\$15,965.25			
Community projects (classified as development – DIL)												
CI-01	Community facility within Village Hub	\$4,245,210	CI02 + CI03	\$4,482,276.08		\$31,607.84						
			CF02 + CF03	\$4,373,805.00					\$1,014,131.75			
			CF02 + CF03	\$4,309,167.49						\$411,259.55		
SUBSTANTIAL CHANGE PROJECTS												
Integrated water management projects												
WL-01	Wetland 1	\$24,190,924.15	OS11 (2010)	\$1,732,200.00					\$401,636.29			
			OS11 (2010)	\$1,706,600.99					\$162,875.15			
WL-03	Wetland 3	\$3,414,360.55	OS13 (2010)	\$1,109,474.28		\$7,901.96						
DR-01	Western waterway – construction	\$9,583,790.39	DR1 (2010)	\$2,275,467.98						\$170,294.60		
			TR1 (2010)	\$866,100.00					\$200,818.61			
	Western waterway – land	\$4,851,819.05	DR-01 (2020) – Land	Land provided directly					5.51 ha	2.82 ha		
DR-02	Eastern waterway	\$16,579,685.18	DR3	\$914,693.07							\$4,131.95	
			TR3	\$375,167.08							\$2,161.21	

DCP 2023 Project ID	Project Description (2023 DCP)	Estimated project cost in Oct 2023 DCP: Land & Construction (FY23/24)	Draft 2010 / 2020 DCP Project ID	Draft 2010 DCP Project Cost (indexed to FY23/24 based on S173 specification and timing)	Summerfields Estate (AS373799K, Parcel ID 2, 3 & 4)	Bew Family (AJ534369V, Parcel ID 5)	Northern Views Estate (AT823177H, Parcel ID 6)	173 Wentworth Road (AU665007E, Parcel ID 7)	Parklands Estate (AJ338595E, Parcel ID 50, 51 & 52)	Powlett Ridge Estate (AJ913506B, Parcel ID 65)	Klun Properties (AJ667735D, Parcel ID 98, 105, 109, 110, 113, 114 & 116)	35 Carneys Road (AT579736E, Parcel ID 127)
CU-06	Culvert: Heslop Road west of Korumburra Road	\$382,683.05	C5 (2010)	\$134,280		\$23,537.94		\$826.21				
Transport projects												
RD-01	Heslop Road (Fuller Road to Korumburra–Wonthaggi Road) 2,400m	\$5,111,260.99	R01 (2010)	\$1,627,228.94		\$4,544.04						
IN-01	Intersection at Heslop Road and Fuller Road	\$2,271,419.00	I06 (2010)	\$1,479,299.04		\$4,130.96						
			I07 (2010)	\$44,378.97		\$123.92						
			I06 (2010)	\$1,443,500.00					\$131,229.29			
			I07 (2010)	\$43,305.00					\$3,937.09			
IN-03	Heslop Road and Korumburra–Wonthaggi Road	\$3,101,928.00	I03 (2010)	\$1,109,474.28		\$6,196.46						
			I03 (2010)	\$1,082,625.00					\$196,843.93			
IN-06	Bass Highway and St Clair Boulevard	\$6,201,277.00	I02 (2010)	\$1,071,905.94							\$4,842.13	
Community projects (classified as development – DIL)												
SR-01	Sports reserve and construction of sports pitches	\$9,440,817.00	OS1a (2010)	\$3,852,094.69		\$27,445.16						
			OS1a (2010)	\$3,758,874.00					\$871,854.37			
			OS1a (2010)	\$3,703,324.14						\$353,561.53		

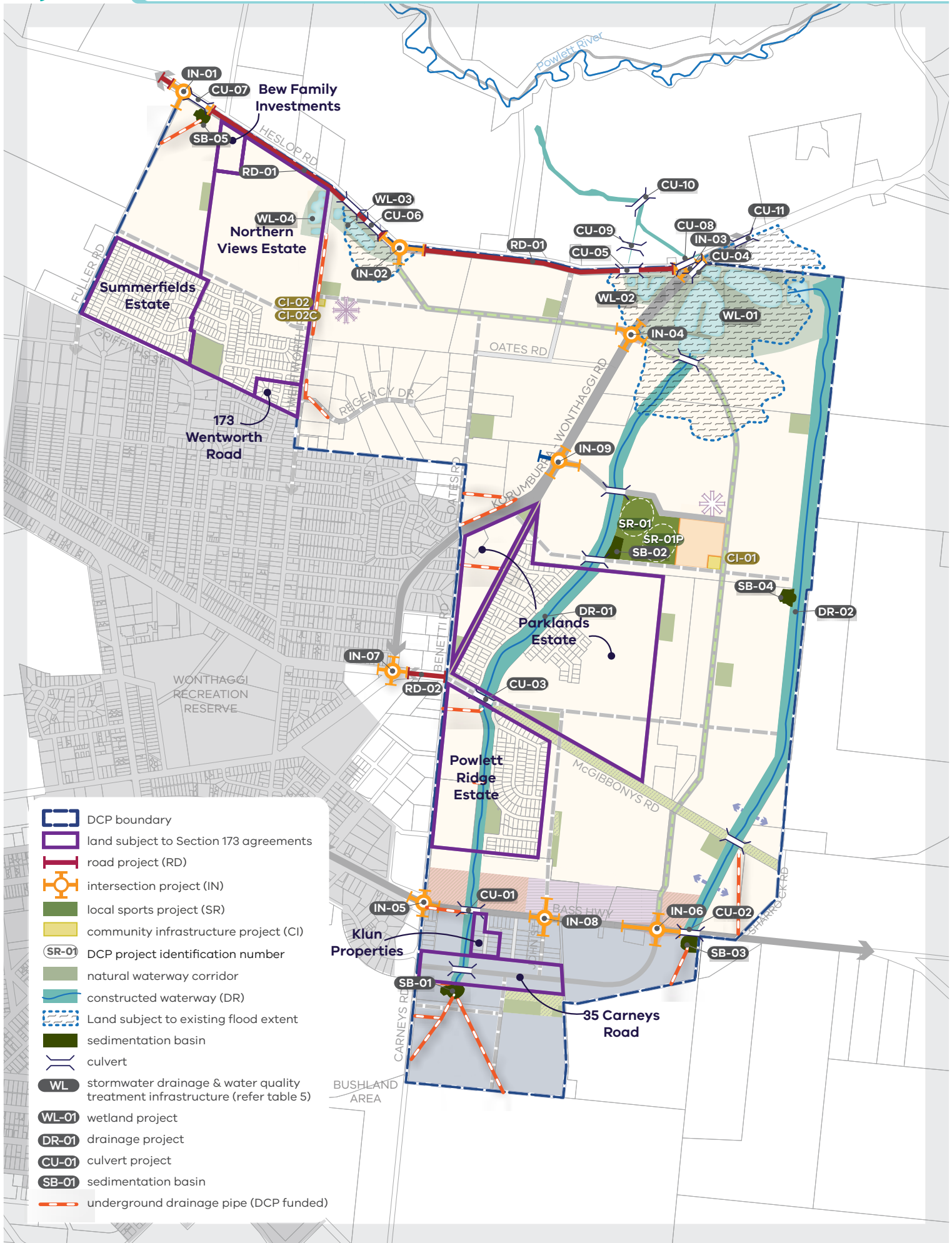
TABLE 14 Projects funded or partially funded by prior Section 173 agreements, by equivalent contribution rate amount, that are considered reasonable match and substantial change projects

DCP 2023 Project ID	Project Description (2023 DCP)	Estimated project cost in Oct 2023 DCP: Land & Construction (FY23/24)	Draft 2010 / 2020 DCP Project ID	Draft 2010 DCP Project Cost (indexed to FY23/24 based on S173 specification and timing)	Summerfields Estate (AS373799K, Parcel ID 2, 3 & 4)	Bew Family (AJ534369V, Parcel ID 5)	Northern Views Estate (AT823177H, Parcel ID 6)	173 Wentworth Road (AU665007E, Parcel ID 7)	Parklands Estate (AJ338595E, Parcel ID 50, 51 & 52)	Powlett Ridge Estate (AJ913506B, Parcel ID 65)	Klun Properties (AJ667735D, Parcel ID 98, 105, 109, 110, 113, 114 & 116)	35 Carneys Road (AT579736E, Parcel ID 127)
REASONABLE MATCH PROJECTS												
Transport projects												
RD-02	McGibbonys Road	\$300,575	R10 (2010)	\$300,575.00					\$1,133.83			
IN-07	McGibbonys Road and Korumburra–Wonthaggi Road	\$721,380	I05 (2010)	\$721,380.00					\$2,721.18			
			I05 (2010)	\$721,380.00					\$2,762.15			
CU-02	Bass Highway (east)	\$374,990	C13 (2010)	\$214,381.19							\$586.93	
CU-03	McGibbonys Road (west)	\$216,525	C10 (2010)	\$216,525.00					\$680.30			
			C10 (2010)	\$213,325.12					\$690.54			
Community projects (classified as development – DIL)												
CI-01	Community facility within Village Hub	\$4,245,210	CI02 + CI03	\$4,482,276.08		\$15,803.92						
			CF02 + CF03	\$4,373,805.00				\$17,524.31				
			CF02 + CF03	\$4,309,167.49					\$17,788.04			
SUBSTANTIAL CHANGE PROJECTS												
Integrated water management projects												
WL-01	Wetland 1	\$24,190,924.15	OS11 (2010)	\$1,732,200.00					\$6,940.32			
			OS11 (2010)	\$1,706,600.99					\$7,044.77			
WL-03	Wetland 3	\$3,414,360.55	OS13 (2010)	\$1,109,474.28		\$3,950.98						
DR-01	Western waterway – construction	\$9,583,790.39	DR1 (2010)	\$2,275,467.98						\$7,365.68		
			TR1 (2010)	\$866,100.00				\$3,470.17				
	Western waterway – land	Western waterway – land	\$4,851,819.05	DR-01 (2020) – Land	Land provided directly					5.51 ha	2.82 ha	
DR-02	Eastern waterway	\$16,579,685.18	DR3 (2010)	\$914,693.07							\$2,504.21	
			TR3 (2010)	\$375,167.08						\$1,309.83		

DCP 2023 Project ID	Project Description (2023 DCP)	Estimated project cost in Oct 2023 DCP: Land & Construction (FY23/24)	Draft 2010 / 2020 DCP Project ID	Draft 2010 DCP Project Cost (indexed to FY23/24 based on S173 specification and timing)	Summerfields Estate (AS373799K, Parcel ID 2, 3 & 4)	Bew Family (AJ534369V, Parcel ID 5)	Northern Views Estate (AT823177H, Parcel ID 6)	173 Wentworth Road (AU665007E, Parcel ID 7)	Parklands Estate (AJ338595E, Parcel ID 50, 51 & 52)	Powlett Ridge Estate (AJ913506B, Parcel ID 65)	Klun Properties (AJ667735D, Parcel ID 98, 105, 109, 110, 113, 114 & 116)	35 Carneys Road (AT579736E, Parcel ID 127)
CU-06	Culvert: Heslop Road west of Korumburra Road	\$382,683.05	C5 (2010)	\$147,929.90		\$413.11						
Transport projects												
RD-01	Heslop Road (Fuller Road to Korumburra–Wonthaggi Road) 2,400m	\$4,786,944.30	R01 (2010)	\$1,627,228.94		\$2,272.02						
IN-01	Intersection at Heslop Road and Fuller Road	\$2,126,996.13	I06 (2010)	\$1,479,299.04		\$2,065.48						
			I07 (2010)	\$44,378.97		\$61.96						
			I06 (2010)	\$1,443,500.00					\$2,267.66			
			I07 (2010)	\$43,305.00					\$68.03			
IN-03	Heslop Road and Korumburra–Wonthaggi Road	\$2,905,587.97	I03 (2010)	\$1,109,474.28		\$3,098.23						
			I03 (2010)	\$1,082,625.00					\$3,401.48			
IN-06	Bass Highway and St Clair Boulevard	\$5,840,197.21	I02 (2010)	\$1,071,905.94							\$2,934.63	
Community projects (classified as development – DIL)												
SR-01	Sports reserve and construction of sports pitches	\$8,964,792.00	OS1a (2010)	\$3,852,094.69		\$13,722.58						
			OS1a (2010)	\$3,758,874.00					\$15,065.74			
			OS1a (2010)	\$3,703,324.14						\$15,292.45		

TABLE 15 Works-in-kind arrangement in prior Section 173 agreements

DCP 2023 Project ID	Project Description (2023 DCP)	Draft 2010 / 2020 DCP Project ID	Summerfields Estate (AS373799K, Parcel ID 2, 3 & 4)	Bew Family (AJ534369V, Parcel ID 5)	Northern Views Estate (AT823177H, Parcel ID 6)	173 Wentworth Road (AU665007E, Parcel ID 7)	Parklands Estate (AJ338595E, Parcel ID 50, 51 & 52)	Powlett Ridge Estate (AJ913506B, Parcel ID 65)	Klun Properties (AJ667735D, Parcel ID 98, 105, 109, 110, 113, 114 & 116)	35 Carneys Road (AT579736E, Parcel ID 127)
Integrated water management projects										
DR-01	Western waterway – construction + land	DR1 (2010)					In part	In part		In part
WL-04	Wetland 4	WL-04 *Referenced in Northern Views Estate Section 173 agreement (AT823177H)			Full					
CU-01	Bass Highway (west)									In part
CU-03	McGibbonys Road (west)	C10 (2010)					In part	In part		
PL-09	PIPELINE DL3 – DW2 (330mm dia.)	PIPE (2020 Pipe #26-17)								In part
Transport projects										
RD-02	McGibbonys Road	R10 (2010)					Full			
IN-07	McGibbonys Road and Korumburra–Wonthaggi Road	I05 (2010)					Full			



APPENDIX B Parcel-specific land budget

Detailed information on the developable area for each parcel is included in Plan 4 – Land Use Budget and detailed land use budget (parcel-specific) included in the PSP and provided below.

TABLE 16 Parcel-specific land budget

PARCEL ID	TOTAL AREA (HA)	TRANSPORT			COMMUNITY & EDUCATION		OPEN SPACE						TOTAL NET DEVELOPABLE AREA (HA)	NET DEVELOPABLE AREA % OF PROPERTY
		ARTERIAL ROAD – EXISTING ROAD RESERVE	ARTERIAL ROAD – NEW/ WIDENING/ INTERSECTION FLARING (DCP LAND)	NON-ARTERIAL ROAD – RETAINED EXISTING ROAD RESERVE	FUTURE GOVERNMENT SCHOOL	LOCAL COMMUNITY FACILITIES (DCP LAND)	TREE RESERVE	CROWN LAND	WATERWAY & DRAINAGE RESERVE (DCP LAND)	LOCAL SPORTS RESERVE (DCP LAND)	LOCAL NETWORK PARK (VIA CL 53.01) – EMPLOYMENT AREAS	LOCAL NETWORK PARK (VIA CL 53.01) – RESIDENTIAL AREAS		
PARCELS														
1	18.52	–	–	–	–	–	–	–	0.33	–	–	0.53	17.67	95.38%
2	3.57	–	–	–	–	–	–	–	–	–	–	–	3.57	100.00%
3	2.00	–	–	–	–	–	–	–	–	–	–	–	2.00	100.00%
4	10.36	–	–	–	–	–	–	–	–	–	–	0.15	10.21	98.55%
5	2.00	–	–	–	–	–	–	–	–	–	–	–	2.00	100.00%
6	44.46	–	–	–	–	–	–	–	1.70	–	–	1.93	40.78	91.72%
7	2.01	–	–	–	–	–	–	–	–	–	–	–	2.01	100.00%
8	27.67	–	0.20	–	–	0.10	–	–	2.93	–	–	0.50	23.95	86.55%
9	0.72	–	–	–	–	–	–	–	–	–	–	–	0.72	100.00%
10	0.72	–	–	–	–	–	–	–	–	–	–	–	0.72	100.00%
11	0.70	–	–	–	–	–	–	–	–	–	–	–	0.70	100.00%
12	0.77	–	–	–	–	–	–	–	–	–	–	–	0.77	100.00%
13	0.71	–	–	–	–	–	–	–	–	–	–	–	0.71	100.00%
14	0.71	–	–	–	–	–	–	–	–	–	–	–	0.71	100.00%
15	0.71	–	–	–	–	–	–	–	–	–	–	–	0.71	100.00%
16	1.70	–	–	–	–	–	–	–	–	–	–	–	1.70	100.00%
17	0.42	–	–	–	–	–	–	–	–	–	–	–	0.42	100.00%
18	2.00	–	–	–	–	–	–	–	–	–	–	–	2.00	100.00%
19	2.33	–	–	–	–	–	–	–	–	–	–	–	2.33	100.00%
20	2.11	–	–	–	–	–	–	–	–	–	–	–	2.11	100.00%
21	0.05	–	–	–	–	–	–	–	–	–	–	–	0.05	100.00%
22	1.33	–	–	–	–	–	–	–	–	–	–	–	1.33	100.00%
23	0.76	–	–	–	–	–	–	–	–	–	–	–	0.76	100.00%
24	2.16	–	–	–	–	–	–	–	–	–	–	–	2.16	100.00%
25	1.43	–	–	–	–	–	–	–	–	–	–	–	1.43	100.00%
26	2.25	–	–	–	–	–	–	–	–	–	–	–	2.25	100.00%
27	1.63	–	–	–	–	–	–	–	–	–	–	–	1.63	100.00%
28	0.42	–	–	–	–	–	–	–	–	–	–	–	0.42	100.00%
29	0.66	–	–	–	–	–	–	–	–	–	–	–	0.66	100.00%
30	0.73	–	–	–	–	–	–	–	–	–	–	–	0.73	100.00%
31	0.78	–	–	–	–	–	–	–	–	–	–	–	0.78	100.00%
32	1.47	–	–	–	–	–	–	–	–	–	–	–	1.47	100.00%
33	0.77	–	–	–	–	–	–	–	–	–	–	–	0.77	100.00%
34	0.75	–	–	–	–	–	–	–	–	–	–	–	0.75	100.00%

PARCEL ID	TOTAL AREA (HA)	TRANSPORT			COMMUNITY & EDUCATION		OPEN SPACE						TOTAL NET DEVELOPABLE AREA (HA)	NET DEVELOPABLE AREA % OF PROPERTY
		ARTERIAL ROAD – EXISTING ROAD RESERVE	ARTERIAL ROAD – NEW/ WIDENING/ INTERSECTION FLARING (DCP LAND)	NON-ARTERIAL ROAD – RETAINED EXISTING ROAD RESERVE	FUTURE GOVERNMENT SCHOOL	LOCAL COMMUNITY FACILITIES (DCP LAND)	TREE RESERVE	CROWN LAND	WATERWAY & DRAINAGE RESERVE (DCP LAND)	LOCAL SPORT'S RESERVE (DCP LAND)	LOCAL NETWORK PARK (VIA CL 53.01) – EMPLOYMENT AREAS	LOCAL NETWORK PARK (VIA CL 53.01) – RESIDENTIAL AREAS		
35	0.76	–	–	–	–	–	–	–	–	–	–	–	0.76	100.00%
36	0.77	–	–	–	–	–	–	–	–	–	–	–	0.77	100.00%
37	0.77	–	–	–	–	–	–	–	–	–	–	–	0.77	100.00%
38	16.37	–	–	–	–	–	–	–	–	–	–	0.50	15.87	96.95%
39	12.26	–	0.12	–	–	–	–	–	2.02	–	–	–	10.12	82.56%
40	14.81	–	–	–	–	–	–	–	–	–	–	1.00	13.81	93.25%
41	1.52	–	–	–	–	–	–	–	–	–	–	–	1.52	100.00%
42	1.89	–	–	–	–	–	–	–	–	–	–	–	1.89	100.00%
43	3.88	–	0.09	–	–	–	–	–	–	–	–	–	3.79	97.74%
44	2.18	–	–	–	–	–	–	–	–	–	–	–	2.18	100.00%
45	1.76	–	–	–	–	–	–	–	–	–	–	–	1.76	100.00%
46	46.72	–	0.13	–	–	–	–	–	28.97	–	–	–	17.63	37.73%
47 – not used	–	–	–	–	–	–	–	–	–	–	–	–	0.00	–
48	1.95	–	–	–	–	–	–	–	–	–	–	–	1.95	100.00%
49	79.49	–	0.24	–	3.50	0.32	–	–	10.80	6.00	–	0.70	57.93	72.88%
50	8.90	–	–	–	–	–	–	–	–	–	–	0.89	8.01	90.00%
51	0.54	–	–	–	–	–	–	0.54	–	–	–	–	0.00	0.00%
52	56.30	–	–	–	–	–	–	–	5.15	–	–	1.29	49.86	88.56%
53	9.57	–	–	–	–	–	–	–	–	–	–	0.70	8.87	92.68%
54	1.00	–	–	–	–	–	–	–	–	–	–	–	1.00	100.00%
55	1.12	–	–	–	–	–	–	–	–	–	–	–	1.12	100.00%
56	46.09	–	–	–	–	–	–	–	7.04	–	–	0.70	38.35	83.21%
57	0.30	–	–	–	–	–	–	–	0.30	–	–	–	0.00	0.00%
58	1.80	–	–	–	–	–	–	–	–	–	–	–	1.80	100.00%
59	1.62	–	–	–	–	–	–	–	–	–	–	–	1.62	100.00%
60	3.63	–	–	–	–	–	–	–	–	–	–	–	3.63	100.00%
61	3.62	–	–	–	–	–	–	–	–	–	–	–	3.62	100.00%
62	0.39	–	–	–	–	–	–	–	0.39	–	–	–	0.00	0.00%
63-E	2.84	–	–	–	–	–	–	–	–	–	–	–	2.84	100.00%
63-R	10.47	–	0.43	–	–	–	–	–	1.83	–	–	0.70	7.51	71.78%
64-E	2.19	–	–	–	–	–	–	–	–	–	–	–	2.19	100.00%
64-R	24.27	–	–	–	–	–	0.16	–	–	–	–	0.51	23.60	97.25%
65	26.79	–	–	–	–	–	–	–	2.82	–	–	0.85	23.12	86.29%
66-E	3.24	–	0.22	–	–	–	–	–	–	–	–	–	3.02	93.19%
66-R	10.91	–	0.06	–	–	–	–	–	1.16	–	–	–	9.68	88.77%
67 – not used	–	–	–	–	–	–	–	–	–	–	–	–	0.00	–
68	14.59	–	0.42	–	–	–	–	–	0.48	–	–	–	13.70	93.85%
69	0.50	–	0.02	–	–	–	–	–	–	–	–	–	0.48	95.83%
70	0.10	–	–	–	–	–	–	–	–	–	–	–	0.10	100.00%

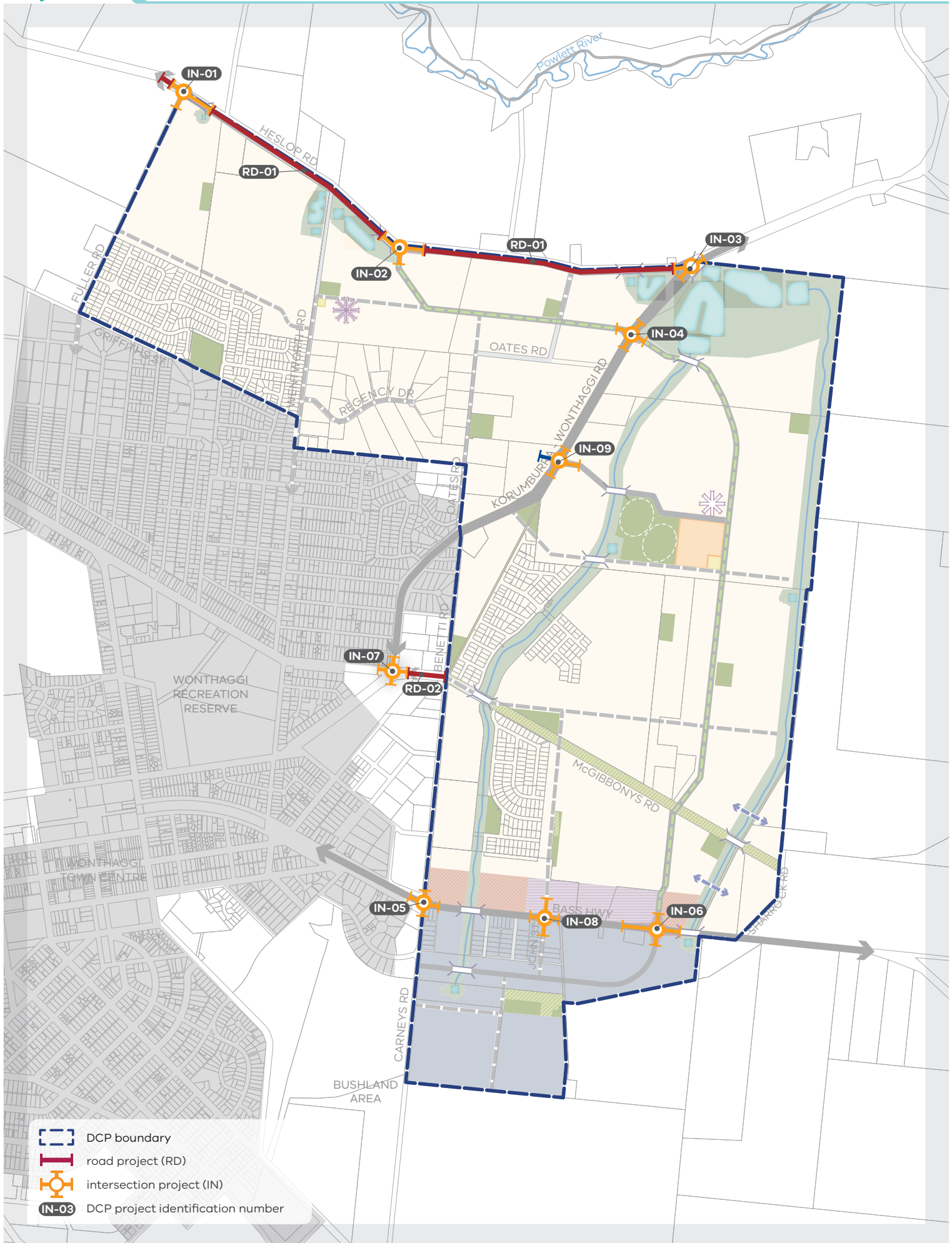
PARCEL ID	TOTAL AREA (HA)	TRANSPORT			COMMUNITY & EDUCATION		OPEN SPACE						TOTAL NET DEVELOPABLE AREA (HA)	NET DEVELOPABLE AREA % OF PROPERTY
		ARTERIAL ROAD – EXISTING ROAD RESERVE	ARTERIAL ROAD – NEW/ WIDENING/ INTERSECTION FLARING (DCP LAND)	NON-ARTERIAL ROAD – RETAINED EXISTING ROAD RESERVE	FUTURE GOVERNMENT SCHOOL	LOCAL COMMUNITY FACILITIES (DCP LAND)	TREE RESERVE	CROWN LAND	WATERWAY & DRAINAGE RESERVE (DCP LAND)	LOCAL SPORT'S RESERVE (DCP LAND)	LOCAL NETWORK PARK (VIA CL 53.01) – EMPLOYMENT AREAS	LOCAL NETWORK PARK (VIA CL 53.01) – RESIDENTIAL AREAS		
71	0.31	–	–	–	–	–	–	–	–	–	–	–	0.31	100.00%
72	0.72	–	0.05	–	–	–	–	–	–	–	–	–	0.68	93.61%
73	0.14	–	–	–	–	–	–	–	–	–	–	–	0.14	100.00%
74	0.14	–	–	–	–	–	–	–	–	–	–	–	0.14	100.00%
75	0.15	–	–	–	–	–	–	–	–	–	–	–	0.15	100.00%
76	0.08	–	0.03	–	–	–	–	–	–	–	–	–	0.05	65.33%
77	0.09	–	0.003	–	–	–	–	–	–	–	–	–	0.08	97.01%
78	0.10	–	–	–	–	–	–	–	–	–	–	–	0.10	100.00%
79	0.26	–	–	–	–	–	–	–	–	–	–	–	0.26	100.00%
80	0.10	–	–	–	–	–	–	–	–	–	–	–	0.10	100.00%
81	0.10	–	–	–	–	–	–	–	–	–	–	–	0.10	100.00%
82	0.10	–	–	–	–	–	–	–	–	–	–	–	0.10	100.00%
83	0.10	–	–	–	–	–	–	–	–	–	–	–	0.10	100.00%
84	0.10	–	–	–	–	–	–	–	–	–	–	–	0.10	100.00%
85	0.10	–	–	–	–	–	–	–	–	–	–	–	0.10	100.00%
86	0.10	–	–	–	–	–	–	–	–	–	–	–	0.10	100.00%
87	0.10	–	–	–	–	–	–	–	–	–	–	–	0.10	100.00%
88	0.10	–	–	–	–	–	–	–	–	–	–	–	0.10	100.00%
89	0.10	–	–	–	–	–	–	–	–	–	–	–	0.10	100.00%
90	0.10	–	–	–	–	–	–	–	–	–	–	–	0.10	100.00%
91	0.10	–	–	–	–	–	–	–	–	–	–	–	0.10	100.00%
92	0.09	–	–	–	–	–	–	–	–	–	–	–	0.09	100.00%
93	0.09	–	–	–	–	–	–	–	–	–	–	–	0.09	100.00%
94	0.09	–	–	–	–	–	–	–	–	–	–	–	0.09	100.00%
95	0.09	–	–	–	–	–	–	–	–	–	–	–	0.09	100.00%
96	0.09	–	–	–	–	–	–	–	–	–	–	–	0.09	100.00%
97	0.09	–	–	–	–	–	–	–	–	–	–	–	0.09	100.00%
98	0.10	–	–	–	–	–	–	–	–	–	–	–	0.10	100.00%
99	0.10	–	–	–	–	–	–	–	–	–	–	–	0.10	100.00%
100	0.10	–	–	–	–	–	–	–	–	–	–	–	0.10	100.00%
101	0.10	–	–	–	–	–	–	–	–	–	–	–	0.10	100.00%
102	0.10	–	–	–	–	–	–	–	–	–	–	–	0.10	100.00%
103	0.10	–	–	–	–	–	–	–	–	–	–	–	0.10	100.00%
104	0.10	–	–	–	–	–	–	–	–	–	–	–	0.10	100.00%
105	0.11	–	–	–	–	–	–	–	–	–	–	–	0.11	100.00%
106	0.10	–	–	–	–	–	–	–	–	–	–	–	0.10	100.00%
107	0.10	–	–	–	–	–	–	–	–	–	–	–	0.10	100.00%
108	0.10	–	–	–	–	–	–	–	–	–	–	–	0.10	100.00%
109	0.10	–	–	–	–	–	–	–	–	–	–	–	0.10	100.00%
110	0.37	–	–	–	–	–	–	–	–	–	–	–	0.37	100.00%

PARCEL ID	TOTAL AREA (HA)	TRANSPORT			COMMUNITY & EDUCATION		OPEN SPACE						TOTAL NET DEVELOPABLE AREA (HA)	NET DEVELOPABLE AREA % OF PROPERTY
		ARTERIAL ROAD – EXISTING ROAD RESERVE	ARTERIAL ROAD – NEW/ WIDENING/ INTERSECTION FLARING (DCP LAND)	NON-ARTERIAL ROAD – RETAINED EXISTING ROAD RESERVE	FUTURE GOVERNMENT SCHOOL	LOCAL COMMUNITY FACILITIES (DCP LAND)	TREE RESERVE	CROWN LAND	WATERWAY & DRAINAGE RESERVE (DCP LAND)	LOCAL SPORT'S RESERVE (DCP LAND)	LOCAL NETWORK PARK (VIA CL 53.01) – EMPLOYMENT AREAS	LOCAL NETWORK PARK (VIA CL 53.01) – RESIDENTIAL AREAS		
111	0.25	–	–	0.25	–	–	–	–	–	–	–	–	0.00	0.00%
112	0.10	–	–	–	–	–	–	–	–	–	–	–	0.10	100.00%
113	0.10	–	–	–	–	–	–	–	–	–	–	–	0.10	100.00%
114	0.10	–	–	–	–	–	–	–	–	–	–	–	0.10	100.00%
115	0.10	–	–	–	–	–	–	–	–	–	–	–	0.10	100.00%
116	0.10	–	–	–	–	–	–	–	–	–	–	–	0.10	100.00%
117	2.73	–	–	–	–	–	–	–	0.73	–	–	–	2.00	73.25%
118	0.08	–	–	–	–	–	–	–	–	–	–	–	0.08	100.00%
119	0.08	–	–	–	–	–	–	–	–	–	–	–	0.08	100.00%
120	0.08	–	0.01	–	–	–	–	–	–	–	–	–	0.07	83.77%
121	0.10	–	–	–	–	–	–	–	–	–	–	–	0.10	100.00%
122	0.10	–	–	–	–	–	–	–	–	–	–	–	0.10	100.00%
123	0.10	–	–	–	–	–	–	–	–	–	–	–	0.10	100.00%
124	0.10	–	–	–	–	–	–	–	–	–	–	–	0.10	100.00%
125	0.10	–	–	–	–	–	–	–	–	–	–	–	0.10	100.00%
126	0.10	–	–	–	–	–	–	–	–	–	–	–	0.10	100.00%
127	7.41	–	–	–	–	–	–	–	0.51	–	–	–	6.90	93.09%
128	15.19	–	–	–	–	–	1.40	–	0.51	–	1.10	–	12.17	80.14%
129	12.88	–	–	–	–	–	–	–	–	–	–	–	12.88	100.00%
SUB-TOTAL	600.44	0.00	2.01	0.25	3.50	0.42	1.56	0.54	67.71	6.00	1.10	10.95	506.52	84.34%
ROAD RESERVE														
R1	1.02	0.04	–	0.98	–	–	–	–	–	–	–	–	0.00	0.00%
R2	4.96	4.90	–	–	–	–	–	–	0.06	–	–	–	0.00	0.00%
R3	2.32	–	–	2.32	–	–	–	–	–	–	–	–	0.00	0.00%
R4	1.06	–	–	1.06	–	–	–	–	–	–	–	–	0.00	0.00%
R5	0.74	–	–	0.74	–	–	–	–	–	–	–	–	0.00	0.00%
R6	1.84	–	–	1.38	–	–	–	–	–	–	–	–	0.47	25.37%
R7	3.38	3.38	–	–	–	–	–	–	–	–	–	–	0.00	0.00%
R8	3.18	2.66	–	–	–	–	–	–	0.52	–	–	–	0.00	0.00%
R9	0.69	0.69	–	–	–	–	–	–	–	–	–	–	0.00	0.00%
R10	2.36	0.11	–	2.25	–	–	–	–	–	–	–	–	0.00	0.00%
R11	6.54	–	–	0.52	–	–	5.53	–	0.49	–	–	–	0.00	0.00%
R12	2.83	2.73	–	–	–	–	–	–	0.09	–	–	–	0.00	0.00%
R13	0.13	–	–	0.13	–	–	–	–	–	–	–	–	0.00	0.00%
R14	0.15	–	–	0.15	–	–	–	–	–	–	–	–	0.00	0.00%
R15	0.04	–	–	0.04	–	–	–	–	–	–	–	–	0.00	0.00%
R16	0.05	–	–	0.05	–	–	–	–	–	–	–	–	0.00	0.00%
R17	0.27	–	–	0.27	–	–	–	–	–	–	–	–	0.00	0.00%
R18	0.04	–	–	0.04	–	–	–	–	–	–	–	–	0.00	0.00%

PARCEL ID	TOTAL AREA (HA)	TRANSPORT			COMMUNITY & EDUCATION		OPEN SPACE						TOTAL NET DEVELOPABLE AREA (HA)	NET DEVELOPABLE AREA % OF PROPERTY
		ARTERIAL ROAD – EXISTING ROAD RESERVE	ARTERIAL ROAD – NEW/ WIDENING/ INTERSECTION FLARING (DCP LAND)	NON-ARTERIAL ROAD – RETAINED EXISTING ROAD RESERVE	FUTURE GOVERNMENT SCHOOL	LOCAL COMMUNITY FACILITIES (DCP LAND)	TREE RESERVE	CROWN LAND	WATERWAY & DRAINAGE RESERVE (DCP LAND)	LOCAL SPORT'S RESERVE (DCP LAND)	LOCAL NETWORK PARK (VIA CL 53.01) – EMPLOYMENT AREAS	LOCAL NETWORK PARK (VIA CL 53.01) – RESIDENTIAL AREAS		
R19	0.04	–	–	0.04	–	–	–	–	–	–	–	–	0.00	0.00%
R20	0.28	–	–	0.28	–	–	–	–	–	–	–	–	0.00	0.00%
R21	0.26	–	–	0.26	–	–	–	–	–	–	–	–	0.00	0.00%
SUB-TOTAL	32.17	14.51	0.00	10.50	0.00	0.00	5.53	0.00	1.16	0.00	0.00	0.00	0.47	1.45%
TOTAL	632.61	14.51	2.01	10.75	3.50	0.42	7.09	0.54	68.87	6.00	1.10	10.95	506.87	80.12%

APPENDIX C Project cost estimates & concept designs

Transport project designs and cost estimates



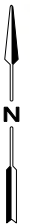
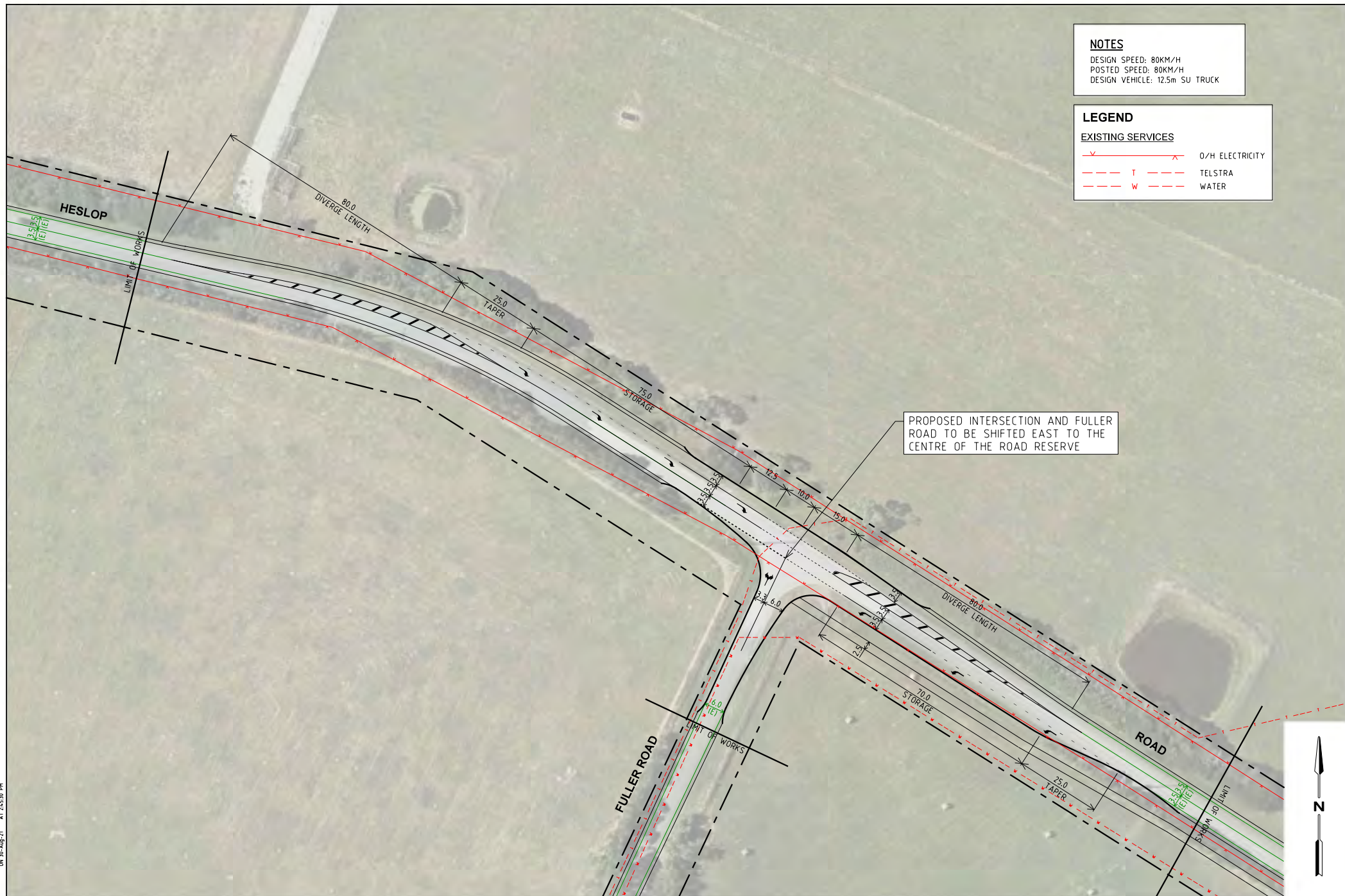
NOTES

DESIGN SPEED: 80KM/H
POSTED SPEED: 80KM/H
DESIGN VEHICLE: 12.5m SU TRUCK

LEGEND

EXISTING SERVICES

— V — O/H ELECTRICITY
— T — TELSTRA
— W — WATER



ON 30-Aug-21 AT 2:45:30 PM

53



PRELIMINARY PLAN
FOR DISCUSSION PURPOSES
ONLY SUBJECT TO CHANGE
WITHOUT NOTIFICATION

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES ARE
APPROXIMATE ONLY AND THEIR EXACT POSITION
SHOULD BE PROVEN ON SITE. NO GUARANTEE IS
GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

DESIGNED
A. VHALE

APPROVED BY
H. GIRGIN

DESIGN CHECK
H. GIRGIN

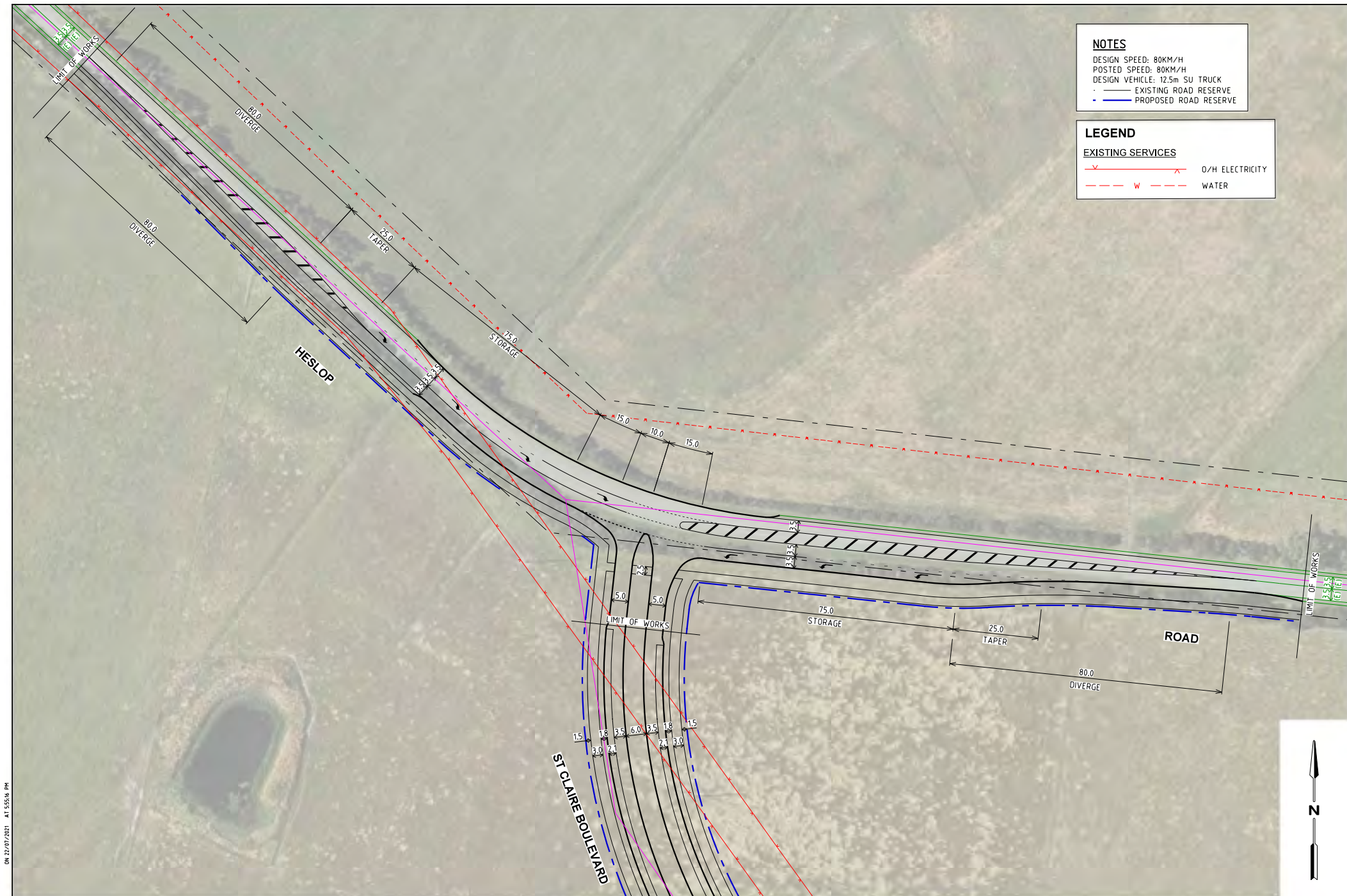
DATE ISSUED
30 AUGUST 2021

SCALE
A3
0 10 20 1:1000
CAD FILE NO.
V106370-SK01-P3.dgn

WONTHAGGI NORTH EAST PSP
HESLOP ROAD / FULLER ROAD
INTERSECTION 1
CONCEPT LAYOUT
DRAWING NO. V106370-SK01

ISSUE P3

V106370: Wonthaggi North East PSP - Heslop Rd / Fuller Rd					
Civil Construction					
Date 10/29/2021					
Basis of Estimate					
This cost estimate is based on GTA plan V106370-SK01 P3 dated 30 Aug 2021 (Taper end along Heslop Road and 50m along Fuller Road)					
Heslop Rd / Fuller Rd - Proposed T Intersection					
Item	Description of works	Quantity	Unit	Rate	Amount
1.00 SITEWORKS AND EARTHWORKS					
1.01	Site preparation	1	Item	\$ 10,000.00	\$ 10,000.00
1.02	Earthworks	1980	m³	\$ 40.00	\$ 79,200.00
1.03	Subgrade improvement	2200	m²	\$ 60.00	\$ 132,000.00
1.04	Proving existing services	1	Item	\$ 5,000.00	\$ 5,000.00
2.00 ROAD PAVEMENT					
2.01	Asphalt Pavement	4400	m²	\$ 150.00	\$ 660,000.00
3.00 CONCRETE WORKS					
3.01	Kerb and channel	320	Lm	\$ 70.00	\$ 22,400.00
3.02	Concrete footpath	540	m²	\$ 125.00	\$ 67,500.00
3.03	Concrete median works	0	m²	\$ 130.00	\$ -
3.04	Pram ramp works	4	Item	\$ 1,250.00	\$ 5,000.00
4.00 DRAINAGE					
4.01	Drainage - pipes	40	Lm	\$ 250.00	\$ 10,000.00
4.02	Drainage - pits	6	No	\$ 1,850.00	\$ 11,100.00
4.03	Drainage - Sub-soil drainage	300	Lm	\$ 55.00	\$ 16,500.00
4.04	Drainage - Miscellaneous (Description)	6	Item	\$ 1,250.00	\$ 7,500.00
5.00 TRAFFIC					
5.01	Traffic Signals	0	Item	\$ 350,000.00	\$ -
5.02	Traffic Safety (barriers etc)	1	Item	\$ 30,000.00	\$ 30,000.00
6.00 LANDSCAPE					
6.01	Tree Removals & replacement	6	No	\$ 500.00	\$ 3,000.00
6.02	Landscaping - median works		m²	\$ 50.00	\$ -
6.03	Landscaping - batter and back of kerb works	600	m²	\$ 80.00	\$ 48,000.00
7.00 STREET LIGHTING					
7.01	Street Lighting	3	No	\$ 12,800.00	\$ 38,400.00
8.00 MISCELLANEOUS					
8.01	Line marking	1	Item	\$ 3,000.00	\$ 3,000.00
8.02	Regulatory Signage	1	Item	\$ 2,500.00	\$ 2,500.00
8.03	Works maintenance - up to 1 year	1	Item	\$ 20,000.00	\$ 20,000.00
8.04	Landscape maintenance - 1yr/2 summers	1	Item	\$ 5,000.00	\$ 5,000.00
9.00 OTHER					
9.01	Telstra services relocation/ Protection works	1	Item	\$ 25,000.00	\$ 25,000.00
9.02	NBN services relocation/Protection works	1	Item	\$ 30,000.00	\$ 30,000.00
9.03	Gas services relocation/Protection works	1	Item	\$ -	\$ -
9.04	Water and Sewer services relocation/Protection works	1	Item	\$ 50,000.00	\$ 50,000.00
9.05	Electrical services relocation/Protection works	1	Item	\$ -	\$ -
SUB-TOTAL WORKS					\$ 1,281,100.00
10.00 DELIVERY					
10.01	Council Fees (Council assets only)	3.25	%		\$ 41,635.75
10.02	Department of Transport Fees	1	%		\$ 12,811.00
10.03	Traffic Management	5	%		\$ 64,055.00
10.04	Environmental Management	0.5	%		\$ 6,405.50
10.05	Survey/Design	5	%		\$ 64,055.00
10.06	Supervision & Project Management	9	%		\$ 115,299.00
10.07	Site Establishment	2.5	%		\$ 32,027.50
10.08	Contingency - Overall (Item 1.1 to 9.7)	30	%		\$ 384,330.00
SUB-TOTAL DELIVERY					\$ 720,618.75
11 TOTAL ESTIMATED COST					\$ 2,001,718.75
Assumptions and exclusions:					
1. Design and documentation fees or authority fees, charges, levies and overview including insurances and bank guarantees have been included as per VPA recommended percentages.					
2. Approximate cost of protection and/or relocation of underground services during construction is included (broad level estimate only subject to validation and confirmation)					
3. A 30% contingency has been applied to the engineer's opinion of probable costs based on the information from Concept layout and without a site inspection					
4. This engineers opinion of probable cost is based on the drawings listed above and further changes may arise following subsequent additional investigations and detailed design development.					
5. Specific construction works including rock boring, rock blasting or rock excavation and removal have been excluded as geotechnical conditions are yet to be confirmed.					
6. This estimate also excludes allowance for abnormal weather conditions.					
7. GST is excluded.					
8. Land acquisition is excluded					
9. Price escalation is excluded.					
10. The above opinion of probable costs should be considered current to the date of the document only. GTA now Stantec cannot provide any form of assurance that the costings provided will not change due to changes in design and/or future costs of materials. The future outcome may vary, and this variation may be material.					
This potential for variation should be considered in any circumstances where the costings are to be used for high level budgeting purposes, even in the short term.					
Any party requiring detailed costing for quoting or construction purposes should seek a detailed cost estimate from a suitably qualified quantity surveyor.					



NOTES

DESIGN SPEED: 80KM/H
 POSTED SPEED: 80KM/H
 DESIGN VEHICLE: 12.5m SU TRUCK
 - - - - - EXISTING ROAD RESERVE
 - - - - - PROPOSED ROAD RESERVE

LEGEND

EXISTING SERVICES

- - - - - O/H ELECTRICITY
 - - - - - W - - - - - WATER

ON 22/07/2021 AT 5:55:16 PM

55



PRELIMINARY PLAN
 FOR DISCUSSION PURPOSES
 ONLY SUBJECT TO CHANGE
 WITHOUT NOTIFICATION

WARNING
 BEWARE OF UNDERGROUND SERVICES
 THE LOCATIONS OF UNDERGROUND SERVICES ARE
 APPROXIMATE ONLY AND THEIR EXACT POSITION
 SHOULD BE PROVEN ON SITE. NO GUARANTEE IS
 GIVEN THAT ALL EXISTING SERVICES ARE SHOWN

DESIGNED
 A. WHALE
 APPROVED BY
 A. FARRAN

DESIGN CHECK
 A. DELLISOLA
 DATE ISSUED
 22 JULY 2021

SCALE
 A3
 0 5 10
 1:1000
 CAD FILE NO.
 V106373-01-P2.dgn

WONTHAGGI NORTH EAST PSP
 HESLOP ROAD / ST CLARE BOULEVARD
 INTERSECTION 2
 CONCEPT LAYOUT
 DRAWING NO. V106373-01
 ISSUE P2

V106373: Wonthaggi North East PSP - Heslop Rd / St Clair Boulevard						
Civil Construction						
Date 10/29/2021						
Basis of Estimate						
This cost estimate is based on GTA plan V106373-01 P2 dated 22 July 2021						
Heslop Rd / St Clair Boulevard - Proposed T Intersection with 50m in St Claire Blvd						
Item	Description of works	Quantity	Unit	Rate	Amount	Comments
1.00 SITEWORKS AND EARTHWORKS						
1.01	Site preparation	1	Item	\$ 10,000.00	\$ 10,000.00	
1.02	Earthworks	1620	m ³	\$ 40.00	\$ 64,800.00	
1.03	Subgrade improvement	1440	m ²	\$ 60.00	\$ 86,400.00	
1.04	Proving existing services	1	Item	\$ 2,500.00	\$ 2,500.00	
2.00 ROAD PAVEMENT						
2.01	Asphalt Pavement	3600	m ²	\$ 150.00	\$ 540,000.00	450mm deep heavy duty pavement
3.00 CONCRETE WORKS						
3.01	Kerb and channel	570	Lm	\$ 70.00	\$ 39,900.00	SM2 or Council equivalent
3.02	Concrete footpath	1230	m ²	\$ 125.00	\$ 153,750.00	
3.03	Concrete median works	0	m ²	\$ 130.00	\$ -	
3.04	Pram ramp works	4	Item	\$ 1,250.00	\$ 5,000.00	To be DDA compliant
4.00 DRAINAGE						
4.01	Drainage - pipes	120	Lm	\$ 250.00	\$ 30,000.00	300mm dia RCP Class 2, RRJ
4.02	Drainage - pits	12	No	\$ 1,850.00	\$ 22,200.00	900 x 900 side entry pits
4.03	Drainage - Sub-soil drainage	570	Lm	\$ 55.00	\$ 31,350.00	100mm dia grade 1000 AG drain with screening backfill
4.03	Drainage - Miscellaneous (Description)	8	Item	\$ 1,250.00	\$ 10,000.00	SSD Pit/ flush out riser/ outlet
5.00 TRAFFIC						
5.01	Traffic Signals	0	Item	\$ 350,000.00	\$ -	
5.02	Traffic Safety (barriers etc)	1	Item	\$ 50,000.00	\$ 50,000.00	To protect existing Electrical poles
6.00 LANDSCAPE						
6.01	Tree removals	120	No	\$ 500.00	\$ 60,000.00	
6.02	Landscaping - batter, median & back of kerb works	900	m ²	\$ 80.00	\$ 72,000.00	
7.00 STREET LIGHTING						
7.01	Street Lighting	4	No	\$ 12,800.00	\$ 51,200.00	
8.00 MISCELLANEOUS						
8.01	Line marking	1	Item	\$ 4,000.00	\$ 4,000.00	
8.02	Regulatory Signage	1	Item	\$ 3,500.00	\$ 3,500.00	
8.03	Works maintenance - up to 1 year	1	Item	\$ 20,000.00	\$ 20,000.00	
8.04	Landscape maintenance - 1yr/2 summers	1	Item	\$ 5,000.00	\$ 5,000.00	Including traffic management
9.00 OTHER						
9.01	Water and Sewer services relocation/Protection works	0	Item	\$ -	\$ -	No impact - email confirmation
9.02	Electrical services relocation/Protection works	0	Item	\$ -	\$ -	Protection may be required (Refer item 5.02)
SUB-TOTAL WORKS					\$ 1,261,600.00	
10.00 DELIVERY						
10.01	Council Fees (Council assets only)	3.25	%		\$ 41,002.00	
10.02	Department of Transport Fees	1	%		\$ 12,616.00	
10.03	Traffic Management	5	%		\$ 63,080.00	
10.04	Environmental Management	0.5	%		\$ 6,308.00	
10.05	Survey/Design	5	%		\$ 63,080.00	
10.06	Supervision & Project Management	9	%		\$ 113,544.00	
10.07	Site Establishment	2.5	%		\$ 31,540.00	
10.08	Contingency - Overall (Item 1.1 to 9.7)	30	%		\$ 378,480.00	
SUB-TOTAL DELIVERY					\$ 709,650.00	
11 TOTAL ESTIMATED COST					\$ 1,971,250.00	

Assumptions and exclusions:

- Design and documentation fees or authority fees, charges, levies and overview including insurances and bank guarantees have been included as per VPA recommended percentages.
- Approximate cost of protection and/or relocation of underground services during construction is included (broad level estimate only subject to validation and confirmation)
- A 30% contingency has been applied to the engineer's opinion of probable costs based on the information from Concept layout without a site inspection
- This engineers opinion of probable cost is based on the drawings listed above and further changes may arise following subsequent additional investigations and detailed design development.
- Specific construction works including rock boring, rock blasting or rock excavation and removal have been excluded as geotechnical conditions are yet to be confirmed.
- This estimate also excludes allowance for abnormal weather conditions.
- GST is excluded.
- Land acquisition is excluded
- Price escalation is excluded.
- The above opinion of probable costs should be considered current to the date of the document only. GTA now Stantec cannot provide any form of assurance that the costings provided will not change due to changes in design and/or future costs of materials. The future outcome may vary, and this variation may be material. This potential for variation should be considered in any circumstances where the costings are to be used for high level budgeting purposes, even in the short term. Any party requiring detailed costing for quoting or construction purposes should seek a detailed cost estimate from a suitably qualified quantity surveyor.



V106370: Wonthaggi North East PSP - Heslop Rd / Fuller Rd					
Civil Construction					
Date 10/29/2021					
Basis of Estimate					
This cost estimate is based on GTA plan V106370-SK01 P3 dated 30 Aug 2021 (Taper end along Heslop Road and 50m along Fuller Road)					
Heslop Rd / Fuller Rd - Proposed T intersection					
Item	Description of works	Quantity	Unit	Rate	Amount
1.00 SITEWORKS AND EARTHWORKS					
1.01	Site preparation	1	Item	\$ 10,000.00	\$ 10,000.00
1.02	Earthworks	1980	m ³	\$ 40.00	\$ 79,200.00
1.03	Subgrade improvement	2200	m ²	\$ 60.00	\$ 132,000.00
1.04	Proving existing services	1	Item	\$ 5,000.00	\$ 5,000.00
2.00 ROAD PAVEMENT					
2.01	Asphalt Pavement	4400	m ²	\$ 150.00	\$ 660,000.00
3.00 CONCRETE WORKS					
3.01	Kerb and channel	320	Lm	\$ 70.00	\$ 22,400.00
3.02	Concrete footpath	540	m ²	\$ 125.00	\$ 67,500.00
3.03	Concrete median works	0	m ²	\$ 130.00	\$ -
3.04	Pram ramp works	4	Item	\$ 1,250.00	\$ 5,000.00
4.00 DRAINAGE					
4.01	Drainage - pipes	40	Lm	\$ 250.00	\$ 10,000.00
4.02	Drainage - pits	6	No	\$ 1,850.00	\$ 11,100.00
4.03	Drainage - Sub-soil drainage	300	Lm	\$ 55.00	\$ 16,500.00
4.04	Drainage - Miscellaneous (Description)	6	Item	\$ 1,250.00	\$ 7,500.00
5.00 TRAFFIC					
5.01	Traffic Signals	0	Item	\$ 350,000.00	\$ -
5.02	Traffic Safety (barriers etc)	1	Item	\$ 30,000.00	\$ 30,000.00
6.00 LANDSCAPE					
6.01	Tree Removals & replacement	6	No	\$ 500.00	\$ 3,000.00
6.02	Landscaping - median works		m ²	\$ 50.00	\$ -
6.03	Landscaping - batter and back of kerb works	600	m ²	\$ 80.00	\$ 48,000.00
7.00 STREET LIGHTING					
7.01	Street Lighting	3	No	\$ 12,800.00	\$ 38,400.00
8.00 MISCELLANEOUS					
8.01	Line marking	1	Item	\$ 3,000.00	\$ 3,000.00
8.02	Regulatory Signage	1	Item	\$ 2,500.00	\$ 2,500.00
8.03	Works maintenance - up to 1 year	1	Item	\$ 20,000.00	\$ 20,000.00
8.04	Landscape maintenance - 1yr/2 summers	1	Item	\$ 5,000.00	\$ 5,000.00
9.00 OTHER					
9.01	Telstra services relocation/ Protection works	1	Item	\$ 25,000.00	\$ 25,000.00
9.02	NBN services relocation/Protection works	1	Item	\$ 30,000.00	\$ 30,000.00
9.03	Gas services relocation/Protection works	1	Item	\$ -	\$ -
9.04	Water and Sewer services relocation/Protection works	1	Item	\$ 50,000.00	\$ 50,000.00
9.05	Electrical services relocation/Protection works	1	Item	\$ -	\$ -
SUB-TOTAL WORKS					\$ 1,281,100.00
10.00 DELIVERY					
10.01	Council Fees (Council assets only)	3.25	%		\$ 41,635.75
10.02	Department of Transport Fees	1	%		\$ 12,811.00
10.03	Traffic Management	5	%		\$ 64,055.00
10.04	Environmental Management	0.5	%		\$ 6,405.50
10.05	Survey/Design	5	%		\$ 64,055.00
10.06	Supervision & Project Management	9	%		\$ 115,299.00
10.07	Site Establishment	2.5	%		\$ 32,027.50
10.08	Contingency - Overall (Item 1.1 to 9.7)	30	%		\$ 384,330.00
SUB-TOTAL DELIVERY					\$ 720,618.75
11 TOTAL ESTIMATED COST					\$ 2,001,718.75
Assumptions and exclusions:					
1. Design and documentation fees or authority fees, charges, levies and overview including insurances and bank guarantees have been included as per VPA recommended percentages.					
2. Approximate cost of protection and/or relocation of underground services during construction is included (broad level estimate only subject to validation and confirmation)					
3. A 30% contingency has been applied to the engineer's opinion of probable costs based on the information from Concept layout and without a site inspection					
4. This engineers opinion of probable cost is based on the drawings listed above and further changes may arise following subsequent additional investigations and detailed design development.					
5. Specific construction works including rock boring, rock blasting or rock excavation and removal have been excluded as geotechnical conditions are yet to be confirmed.					
6. This estimate also excludes allowance for abnormal weather conditions.					
7. GST is excluded.					
8. Land acquisition is excluded					
9. Price escalation is excluded.					
10. The above opinion of probable costs should be considered current to the date of the document only. GTA now Stantec cannot provide any form of assurance that the costings provided will not change due to changes in design and/or future costs of materials. The future outcome may vary, and this variation may be material.					
This potential for variation should be considered in any circumstances where the costings are to be used for high level budgeting purposes, even in the short term.					
Any party requiring detailed costing for quoting or construction purposes should seek a detailed cost estimate from a suitably qualified quantity surveyor.					

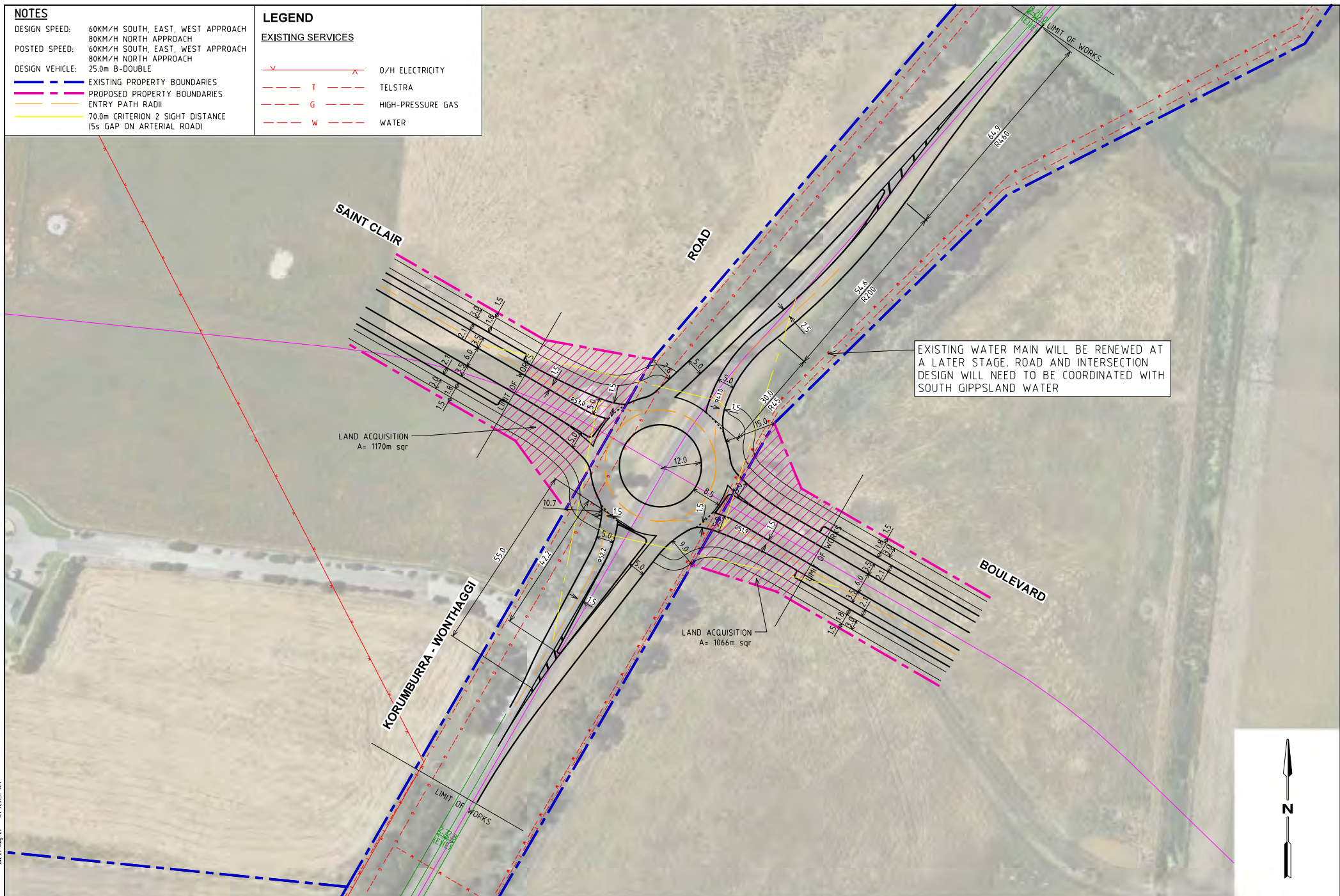
NOTES

DESIGN SPEED: 60KM/H SOUTH, EAST, WEST APPROACH
80KM/H NORTH APPROACH
POSTED SPEED: 60KM/H SOUTH, EAST, WEST APPROACH
80KM/H NORTH APPROACH
DESIGN VEHICLE: 25.0m B-DOUBLE
EXISTING PROPERTY BOUNDARIES
PROPOSED PROPERTY BOUNDARIES
ENTRY PATH RADII
70.0m CRITERION 2 SIGHT DISTANCE
(5s GAP ON ARTERIAL ROAD)

LEGEND

EXISTING SERVICES

— V — O/H ELECTRICITY
— T — TELSTRA
— G — HIGH-PRESSURE GAS
— W — WATER



ON 27-Aug-21 AT 13:57 AM

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PRELIMINARY PLAN

FOR DISCUSSION PURPOSES
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WARNING

BEWARE OF UNDERGROUND SERVICES
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APPROXIMATE ONLY AND THEIR EXACT POSITION
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GIVEN THAT ALL EXISTING SERVICES ARE SHOWN

DESIGNED
A. WHALE

APPROVED BY
A. FARRAN

DESIGN CHECK
A. DELLISOLA

DATE ISSUED
27 AUGUST 2021

SCALE
A3



CAD FILE NO.
V106370-SK10-P5.dgn

WONTHAGGI NORTH EAST PSP
KORUMBURRA - WONTHAGGI RD / ST CLARE BLVD
INTERSECTION 4 - OPTION 2
CONCEPT LAYOUT

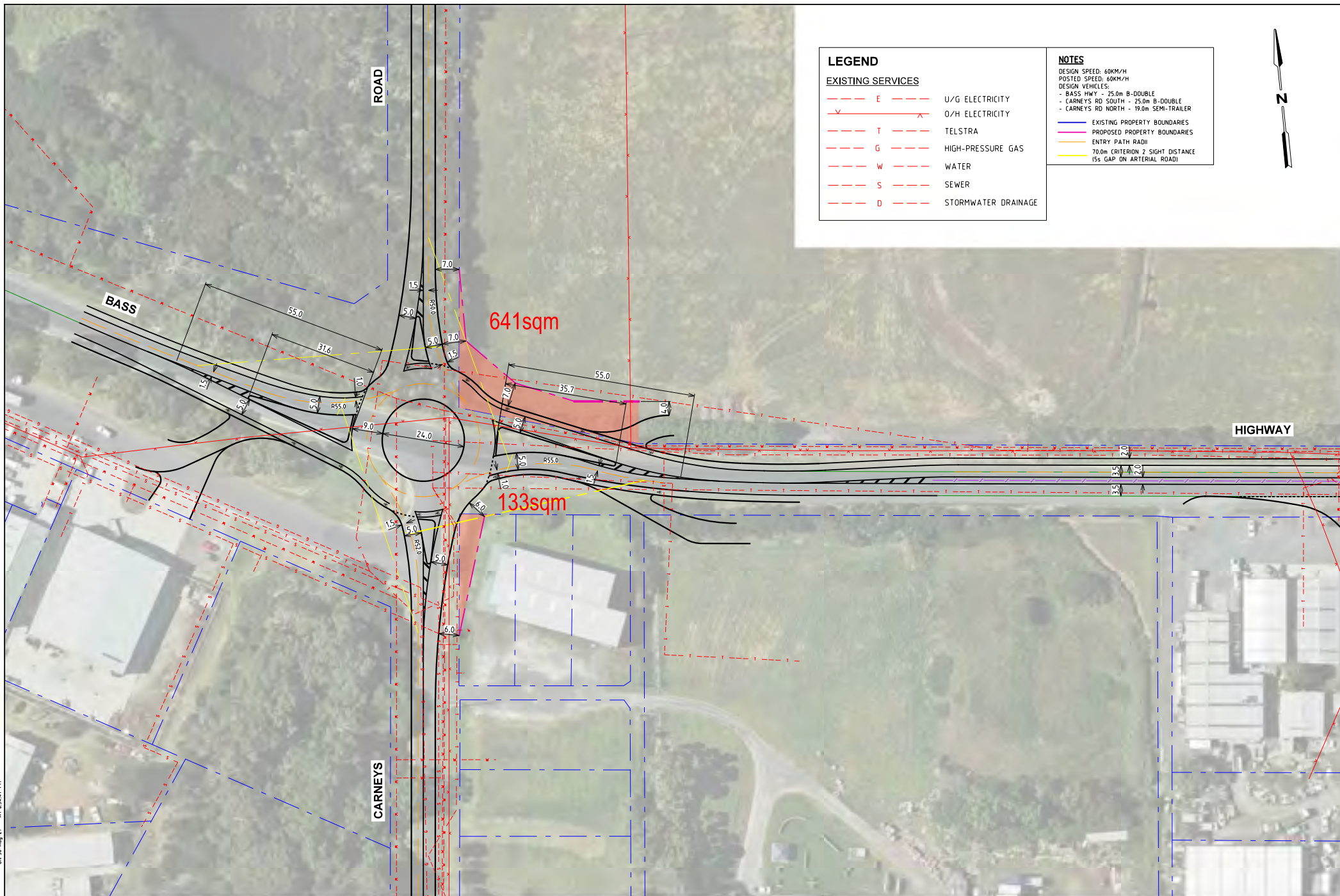
DRAWING NO. V106370-SK10

ISSUE P5

V106370: Wonthaggi North East PSP - Korumburra-Wonthaggi Rd / St Clair Blvd					
Civil Construction					
Date 10/13/2021					
Basis of Estimate					
This cost estimate is based on GTA plan V106370-SK10 P5 dated 27 August 2021 (Limit of works as highlighted)					
Korumburra-Wonthaggi Rd / St Clair Blvd - Proposed Roundabout - Option 2					
Item	Description of works	Quantity	Unit	Rate	Amount
1.00 SITEWORKS AND EARTHWORKS					
1.01	Site preparation	1	Item	\$ 15,000.00	\$ 15,000.00
1.02	Earthworks	2065	m ³	\$ 40.00	\$ 82,600.00
1.03	Subgrade improvement	1180	m ²	\$ 60.00	\$ 70,800.00
1.04	Proving existing services	1	Item	\$ 10,000.00	\$ 10,000.00
2.00 ROAD PAVEMENT					
2.01	Asphalt Pavement	2950	m ²	\$ 150.00	\$ 442,500.00
2.02	Asphalt resheet works with type V or H asphalt	200	m ²	\$ 50.00	\$ 10,000.00
3.00 CONCRETE WORKS					
3.01	Kerb and channel	1120	Lm	\$ 70.00	\$ 78,400.00
3.02	Concrete footpath	360	m ²	\$ 125.00	\$ 45,000.00
3.03	Concrete median works	1500	m ²	\$ 130.00	\$ 195,000.00
3.04	Pram ramp works	8	Item	\$ 1,250.00	\$ 10,000.00
4.00 DRAINAGE					
4.01	Drainage - pipes	160	Lm	\$ 250.00	\$ 40,000.00
4.02	Drainage - pits	20	No	\$ 1,850.00	\$ 37,000.00
4.03	Drainage - Sub-soil drainage	1380	Lm	\$ 55.00	\$ 75,900.00
4.03	Drainage - Miscellaneous (Description)	8	Item	\$ 1,250.00	\$ 10,000.00
5.00 TRAFFIC					
5.01	Traffic Signals	0	Item	\$ 350,000.00	\$ -
5.02	Traffic Safety (barriers etc)	0	Item	\$ 50,000.00	\$ -
6.00 LANDSCAPE					
6.01	Tree removals & replacements	120	No	\$ 500.00	\$ 60,000.00
6.02	Landscaping - batter, median & back of kerb works	1150	m ²	\$ 80.00	\$ 92,000.00
7.00 STREET LIGHTING					
7.01	Street Lighting	8	No	\$ 12,800.00	\$ 102,400.00
8.00 MISCELLANEOUS					
8.01	Line marking	1	Item	\$ 5,000.00	\$ 5,000.00
8.02	Regulatory Signage	1	Item	\$ 4,000.00	\$ 4,000.00
8.03	Works maintenance - up to 1 year	1	Item	\$ 20,000.00	\$ 20,000.00
8.04	Landscape maintenance - 1yr/2 summers	1	Item	\$ 5,000.00	\$ 5,000.00
9.00 OTHER					
9.01	Telstra services relocation/Protection works	1	Item	\$ 450,000.00	\$ 450,000.00
9.02	NBN services relocation/Protection works	1	Item	\$ 100,000.00	\$ 100,000.00
9.03	Gas services relocation/Protection works	1	Item	\$ 50,000.00	\$ 50,000.00
9.04	Water and Sewer services relocation/Protection works	1	Item	\$ 50,000.00	\$ 50,000.00
9.05	Electrical services relocation/Protection works	0	Item	\$ -	\$ -
SUB-TOTAL WORKS					\$ 2,010,600.00
10.00 DELIVERY					
10.01	Council Fees (Council assets only)	3.25	%		\$ 65,344.50
10.02	Department of Transport Fees	1	%		\$ 20,106.00
10.03	Traffic Management	5	%		\$ 100,530.00
10.04	Environmental Management	0.5	%		\$ 10,053.00
10.05	Survey/Design	5	%		\$ 100,530.00
10.06	Supervision & Project Management	9	%		\$ 180,954.00
10.07	Site Establishment	2.5	%		\$ 50,265.00
10.08	Contingency - Overall (Item 1.1 to 9.7)	30	%		\$ 603,180.00
SUB-TOTAL DELIVERY					\$ 1,130,962.50
11 TOTAL ESTIMATED COST					\$ 3,141,562.50

Assumptions and exclusions:

- Design and documentation fees or authority fees, charges, levies and overview including insurances and bank guarantees have been included as per VPA recommended percentages.
 - Approximate cost of protection and/or relocation of underground services during construction is included (broad level estimate only subject to validation and confirmation)
 - A 30% contingency has been applied to the engineer's opinion of probable costs based on the information from Concept layout and without a site inspection
 - This engineers opinion of probable cost is based on the drawings listed above and further changes may arise following subsequent additional investigations and detailed design development.
 - Specific construction works including rock boring, rock blasting or rock excavation and removal have been excluded as geotechnical conditions are yet to be confirmed.
 - This estimate also excludes allowance for abnormal weather conditions.
 - GST is excluded.
 - Land acquisition is excluded
 - Price escalation is excluded.
 - The above opinion of probable costs should be considered current to the date of the document only. GTA now Stantec cannot provide any form of assurance that the costings provided will not change due to changes in design and/or future costs of materials. The future outcome may vary, and this variation may be material. This potential for variation should be considered in any circumstances where the costings are to be used for high level budgeting purposes, even in the short term.
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ON 30-Aug-21 AT 6:34:17 PM

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PRELIMINARY PLAN
FOR DISCUSSION PURPOSES
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WARNING
BEWARE OF UNDERGROUND SERVICES
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APPROXIMATE ONLY AND THEIR EXACT POSITION
SHOULD BE PROVEN ON SITE. NO GUARANTEE IS
GIVEN THAT ALL EXISTING SERVICES ARE SHOWN

DESIGNED
A. VHALE

APPROVED BY
A. FARRAN

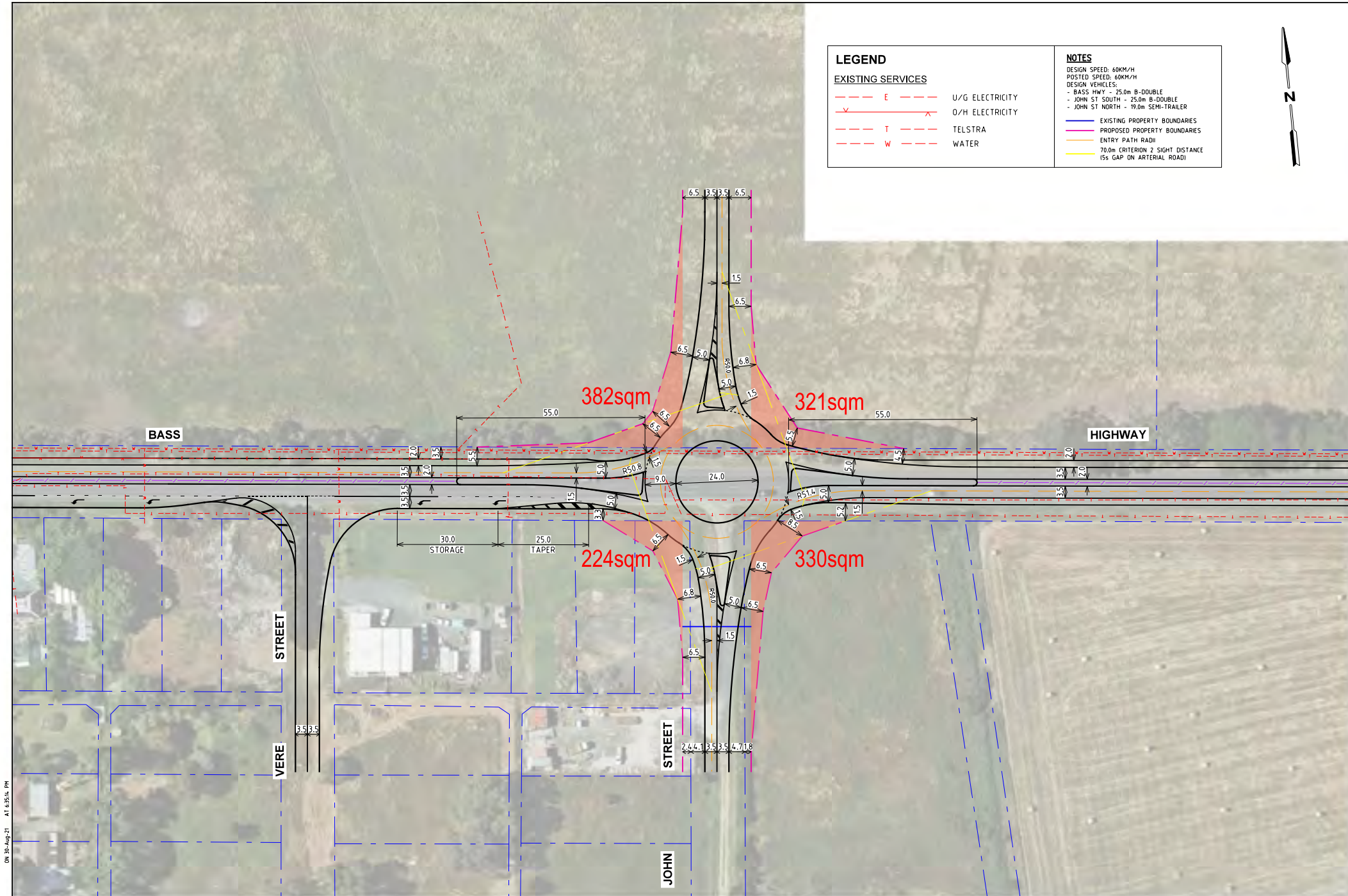
DESIGN CHECK
A. DELLISOLA

DATE ISSUED
30 AUGUST 2021

SCALE
A3
0 10 20 1:1000
CAD FILE NO.
V106372-01-P7.dgn

WONTHAGGI NORTH EAST PSP
BASS HIGHWAY ROAD WIDENING
BASS HIGHWAY & CARNEYS ROAD PROPOSED ROUNDABOUT
CONCEPT LAYOUT
DRAWING NO. V106370-01-01
SHEET 01 OF 03
ISSUE P7

V106370: Wonthaggi North East PSP - Bass Hwy / Carneys Rd					
Civil Construction					
Date 10/13/2021					
Basis of Estimate					
This cost estimate is based on GTA plan V106370-01-01-P7 dated 30 Aug 2021 (approximately 55m of each leg)					
Bass Hwy / Carneys Rd - Proposed Roundabout					
Item	Description of works	Quantity	Unit	Rate	Amount
1.00 SITEWORKS AND EARTHWORKS					
1.01	Site preparation	1	Item	\$ 15,000.00	\$ 15,000.00
1.02	Earthworks	1260	m ³	\$ 40.00	\$ 50,400.00
1.03	Subgrade improvement	1680	m ²	\$ 60.00	\$ 100,800.00
1.04	Proving existing services	1	Item	\$ 20,000.00	\$ 20,000.00
2.00 ROAD PAVEMENT					
2.01	Asphalt Pavement	2100	m ²	\$ 150.00	\$ 315,000.00
2.02	Asphalt resheet works with type V or H asphalt	1240	m ²	\$ 50.00	\$ 62,000.00
3.00 CONCRETE WORKS					
3.01	Kerb and channel	610	Lm	\$ 70.00	\$ 42,700.00
3.02	Concrete footpath	600	m ²	\$ 125.00	\$ 75,000.00
3.03	Concrete median works	1450	m ²	\$ 130.00	\$ 188,500.00
3.04	Pram ramp works	8	Item	\$ 1,250.00	\$ 10,000.00
4.00 DRAINAGE					
4.01	Drainage - pipes	120	Lm	\$ 250.00	\$ 30,000.00
4.02	Drainage - pits	14	No	\$ 1,850.00	\$ 25,900.00
4.03	Drainage - Sub-soil drainage	610	Lm	\$ 55.00	\$ 33,550.00
4.04	Drainage - Miscellaneous (Description)	8	Item	\$ 1,250.00	\$ 10,000.00
4.05	Drainage - Miscellaneous (Description)	4	Item	\$ 3,000.00	\$ 12,000.00
5.00 TRAFFIC					
5.01	Traffic Signals	0	Item	\$ 350,000.00	\$ -
5.02	Traffic Safety (barriers etc)	0	Item	\$ 50,000.00	\$ -
6.00 LANDSCAPE					
6.01	Tree removals & replacements	40	No	\$ 500.00	\$ 20,000.00
6.02	Landscaping - batter, median & back of kerb works	650	m ²	\$ 80.00	\$ 52,000.00
7.00 STREET LIGHTING					
7.01	Street Lighting	8	No	\$ 12,800.00	\$ 102,400.00
8.00 MISCELLANEOUS					
8.01	Line marking	1	Item	\$ 6,000.00	\$ 6,000.00
8.02	Regulatory Signage	1	Item	\$ 5,000.00	\$ 5,000.00
8.03	Works maintenance - up to 1 year	1	Item	\$ 25,000.00	\$ 25,000.00
8.04	Landscape maintenance - 1yr/2 summers	1	Item	\$ 6,000.00	\$ 6,000.00
9.00 OTHER					
9.01	Telstra services relocation/ Protection works	1	Item	\$ 500,000.00	\$ 500,000.00
9.02	NBN services relocation/Protection works	1	Item	\$ 150,000.00	\$ 150,000.00
9.03	Gas services relocation/Protection works	1	Item	\$ 100,000.00	\$ 100,000.00
9.04	Water and Sewer services relocation/Protection works	1	Item	\$ 100,000.00	\$ 100,000.00
9.05	Electrical services relocation/Protection works	1	Item	\$ 250,000.00	\$ 250,000.00
SUB-TOTAL WORKS					\$ 2,307,250.00
10.00 DELIVERY					
10.01	Council Fees (Council assets only)	3.25	%		\$ 74,985.63
10.02	Department of Transport Fees	1	%		\$ 23,072.50
10.03	Traffic Management	7	%		\$ 161,507.50
10.04	Environmental Management	0.5	%		\$ 11,536.25
10.05	Survey/Design	5	%		\$ 115,362.50
10.06	Supervision & Project Management	9	%		\$ 207,652.50
10.07	Site Establishment	2.5	%		\$ 57,681.25
10.08	Contingency - Overall (Item 1.1 to 9.7)	30	%		\$ 692,175.00
SUB-TOTAL DELIVERY					\$ 1,343,973.13
11 TOTAL ESTIMATED COST					\$ 3,651,223.13
Assumptions and exclusions:					
1. Design and documentation fees or authority fees, charges, levies and overview including insurances and bank guarantees have been included as per VPA recommended percentages.					
2. Approximate cost of protection and/or relocation of underground services during construction is included (broad level estimate only subject to validation and confirmation)					
3. A 30% contingency has been applied to the engineer's opinion of probable costs based on the information from Concept layout without a site inspection					
4. This engineers opinion of probable cost is based on the drawings listed above and further changes may arise following subsequent additional investigations and detailed design development.					
5. Specific construction works including rock boring, rock blasting or rock excavation and removal have been excluded as geotechnical conditions are yet to be confirmed.					
6. This estimate also excludes allowance for abnormal weather conditions.					
7. GST is excluded.					
8. Land acquisition is excluded					
9. Price escalation is excluded.					
10. The above opinion of probable costs should be considered current to the date of the document only. GTA now Stantec cannot provide any form of assurance that the costings provided will not change due to changes in design and/or future costs of materials. The future outcome may vary, and this variation may be material. This potential for variation should be considered in any circumstances where the costings are to be used for high level budgeting purposes, even in the short term. Any party requiring detailed costing for quoting or construction purposes should seek a detailed cost estimate from a suitably qualified quantity surveyor.					



LEGEND

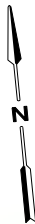
EXISTING SERVICES

--- E ---	U/G ELECTRICITY
--- V ---	O/H ELECTRICITY
--- T ---	TELSTRA
--- W ---	WATER

NOTES

DESIGN SPEED: 60KM/H
 POSTED SPEED: 60KM/H
 DESIGN VEHICLES:
 - BASS HWY - 25.0m B-DOUBLE
 - JOHN ST SOUTH - 25.0m B-DOUBLE
 - JOHN ST NORTH - 19.0m SEMI-TRAILER

EXISTING PROPERTY BOUNDARIES
 PROPOSED PROPERTY BOUNDARIES
 ENTRY PATH RADI
 70.0m CRITERION 2 SIGHT DISTANCE
 (55 GAP ON ARTERIAL ROAD)



ON 30-Aug-21 AT 6:35:14 PM

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PRELIMINARY PLAN

FOR DISCUSSION PURPOSES
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WARNING

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DESIGNED
 A. WHALE

APPROVED BY
 A. FARRAN

DESIGN CHECK
 A. DELLISOLA

DATE ISSUED
 30 AUGUST 2021

SCALE
 A3



CAD FILE NO.
 V106372-01-P7.dgn

WONTHAGGI NORTH EAST PSP
 BASS HIGHWAY ROAD WIDENING
 BASS HIGHWAY & JOHN STREET - PROPOSED ROUNDABOUT
 CONCEPT LAYOUT

DRAWING NO. V106370-01-02

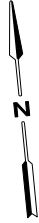
SHEET 02 OF 03

ISSUE P7

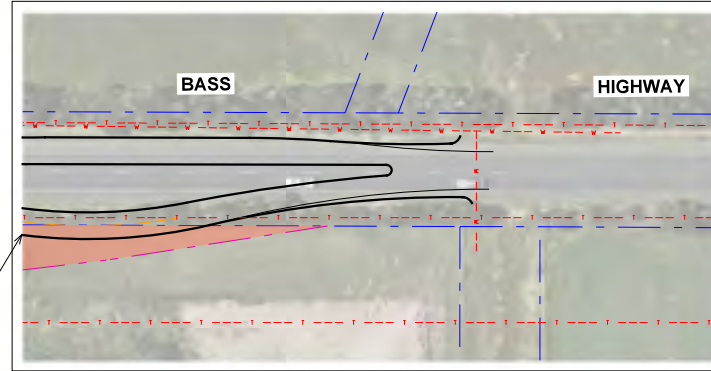
V106370: Wonthaggi North East PSP - John Street/Bass Highway						
Civil Construction						
Date 10/13/2021						
Basis of Estimate						
This cost estimate is based on GTA plan V106370-01-02-P7 dated 27 August 2021 (approximately 55m of each leg)						
John Street/Bass Highway - Proposed Roundabout						
Item	Description of works	Quantity	Unit	Rate	Amount	Comments
1.00 SITEWORKS AND EARTHWORKS						
1.01	Site preparation	1	Item	\$ 15,000.00	\$ 15,000.00	
1.02	Earthworks	1356	m ³	\$ 40.00	\$ 54,240.00	
1.03	Subgrade improvement	1130	m ²	\$ 60.00	\$ 67,800.00	
1.04	Proving existing services	1	Item	\$ 10,000.00	\$ 10,000.00	
2.00 ROAD PAVEMENT						
2.01	Asphalt Pavement	2260	m ²	\$ 150.00	\$ 339,000.00	600mm deep heavy duty pavement
2.02	Asphalt resheet works with type V or H asphalt	1040	m ²	\$ 50.00	\$ 52,000.00	
3.00 CONCRETE WORKS						
3.01	Kerb and channel	770	Lm	\$ 70.00	\$ 53,900.00	SM2 or Council equivalent
3.02	Concrete footpath	420	m ²	\$ 125.00	\$ 52,500.00	
3.03	Concrete median works	860	m ²	\$ 130.00	\$ 111,800.00	
3.04	Pram ramp works	8	Item	\$ 1,250.00	\$ 10,000.00	To be DDA compliant
4.00 DRAINAGE						
4.01	Drainage - pipes	80	Lm	\$ 250.00	\$ 20,000.00	375mm dia RCP Class 2, RRI
4.02	Drainage - pits	8	No	\$ 1,850.00	\$ 14,800.00	750 x 1000 side entry pits
4.03	Drainage - Sub-soil drainage	770	Lm	\$ 55.00	\$ 42,350.00	100mm dia grade 1000 AG drain with screening backfill
4.04	Drainage - Miscellaneous (Description)	8	Item	\$ 1,250.00	\$ 10,000.00	SSD Pit/ flush out riser/ outlet
5.00 TRAFFIC						
5.01	Traffic Signals	0	Item	\$ 350,000.00	\$ -	
5.02	Traffic Safety (barriers etc)	0	Item	\$ 50,000.00	\$ -	
6.00 LANDSCAPE						
6.01	Tree removals	0	No	\$ 160.00	\$ -	
6.02	Landscaping - batter, median & back of kerb works	850	m ²	\$ 50.00	\$ 42,500.00	
7.00 STREET LIGHTING						
7.01	Street Lighting	8	No	\$ 12,800.00	\$ 102,400.00	
8.00 MISCELLANEOUS						
8.01	Line marking	1	Item	\$ 5,000.00	\$ 5,000.00	
8.02	Regulatory Signage	1	Item	\$ 4,000.00	\$ 4,000.00	
8.03	Works maintenance - up to 1 year	1	Item	\$ 20,000.00	\$ 20,000.00	
8.04	Landscape maintenance - 1yr/2 summers	1	Item	\$ 6,000.00	\$ 6,000.00	Including traffic management
9.00 OTHER						
9.01	Telstra services relocation/ Protection works	1	Item	\$ 450,000.00	\$ 450,000.00	This is a broad level estimate only - email confirmation
9.02	NBN services relocation/Protection works	1	Item	\$ 150,000.00	\$ 50,000.00	This is a broad level estimate only - email confirmation
9.03	Water and Sewer services relocation/Protection works	1	Item	\$ 50,000.00	\$ 50,000.00	Email confirmation
9.04	Electrical services relocation/Protection works	0	Item		\$ -	
SUB-TOTAL WORKS					\$ 1,583,290.00	
10.00 DELIVERY						
10.01	Council Fees (Council assets only)	3.25	%		\$ 51,456.93	
10.02	Department of Transport Fees	1	%		\$ 15,832.90	
10.03	Traffic Management	7	%		\$ 110,830.30	
10.04	Environmental Management	0.5	%		\$ 7,916.45	
10.05	Survey/Design	5	%		\$ 79,164.50	
10.06	Supervision & Project Management	9	%		\$ 142,496.10	
10.07	Site Establishment	2.5	%		\$ 39,582.25	
10.08	Contingency - Overall (Item 1.1 to 9.7)	30	%		\$ 474,987.00	
SUB-TOTAL DELIVERY					\$ 922,266.43	
11 TOTAL ESTIMATED COST					\$ 2,505,556.43	
Assumptions and exclusions:						
1. Design and documentation fees or authority fees, charges, levies and overview including insurances and bank guarantees have been included as per VPA recommended percentages.						
2. Approximate cost of protection and/or relocation of underground services during construction is included (broad level estimate only subject to validation and confirmation)						
3. A 30% contingency has been applied to the engineer's opinion of probable costs based on the information from Concept layout without a site inspection						
4. This engineers opinion of probable cost is based on the drawings listed above and further changes may arise following subsequent additional investigations and detailed design development.						
5. Specific construction works including rock boring, rock blasting or rock excavation and removal have been excluded as geotechnical conditions are yet to be confirmed.						
6. This estimate also excludes allowance for abnormal weather conditions.						
7. GST is excluded.						
8. Land acquisition is excluded						
9. Price escalation is excluded.						
10. The above opinion of probable costs should be considered current to the date of the document only. GTA now Stantec cannot provide any form of assurance that the costings provided will not change due to changes in design and/or future costs of materials. The future outcome may vary, and this variation may be material. This potential for variation should be considered in any circumstances where the costings are to be used for high level budgeting purposes, even in the short term. Any party requiring detailed costing for quoting or construction purposes should seek a detailed cost estimate from a suitably qualified quantity surveyor.						

NOTES

- DESIGN SPEED:
- BASS HWY - 80KM/H
- ST CLAIRE BLVD - 60KM/H
POSTED SPEED:
- BASS HWY - 80KM/H
- ST CLAIRE BLVD - 60KM/H
DESIGN VEHICLE:
- BASS HWY - 25.0m 8-DOUBLE
- ST CLAIRE BLVD - 19.0m SEMI-TRAILER
- EXISTING PROPERTY BOUNDARIES
PROPOSED PROPERTY BOUNDARIES
ENTRY PATH RADI
70.0m CRITERION 2 SIGHT DISTANCE
(5% GAP ON ARTERIAL ROAD)



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TO RIGHT OF PAGE

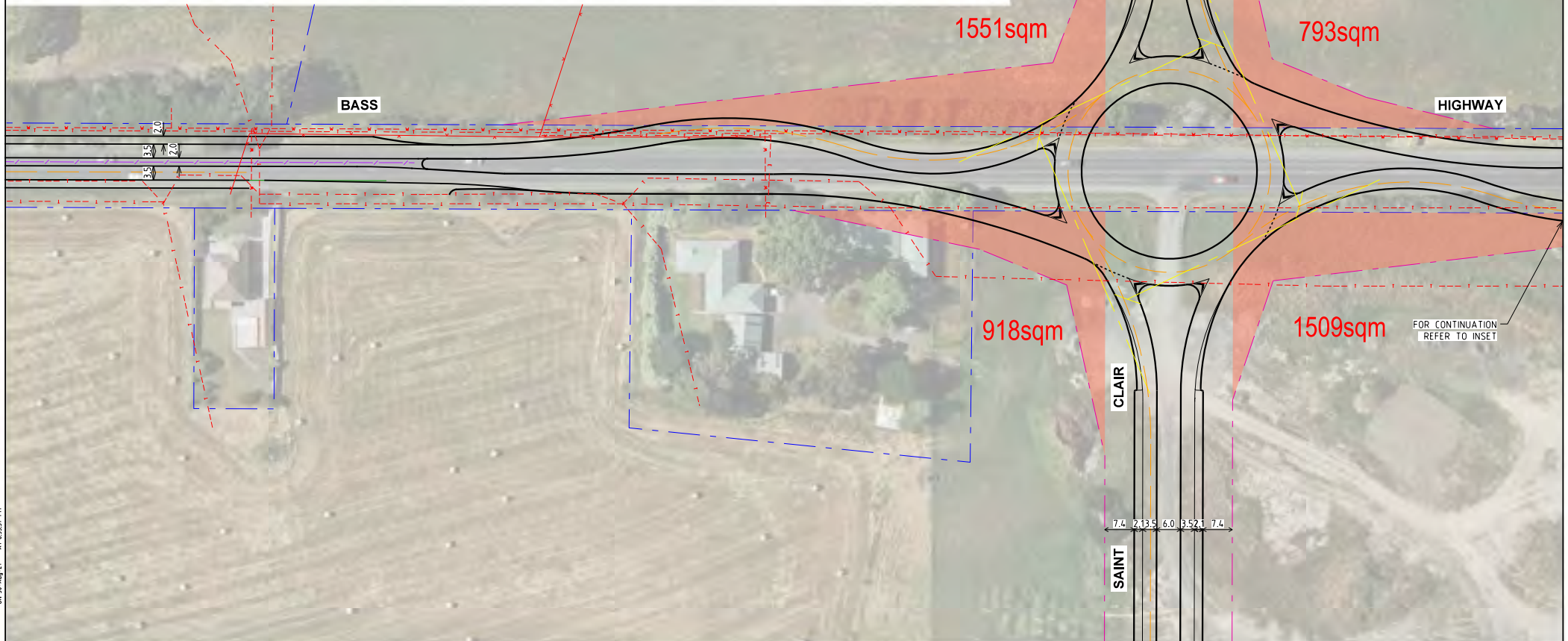


INSET

LEGEND

EXISTING SERVICES

- E --- U/G ELECTRICITY
--- V --- O/H ELECTRICITY
--- T --- TELSTRA
--- W --- WATER



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ON 30-Aug-21 AT 6:35:57 PM

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PRELIMINARY PLAN
FOR DISCUSSION PURPOSES
ONLY SUBJECT TO CHANGE
WITHOUT NOTIFICATION

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES ARE
APPROXIMATE ONLY AND THEIR EXACT POSITION
SHOULD BE PROVEN ON SITE. NO GUARANTEE IS
GIVEN THAT ALL EXISTING SERVICES ARE SHOWN

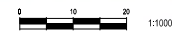
DESIGNED
B. KLINKO

APPROVED BY
A. FARRAN

DESIGN CHECK
A. DELLUSOLA

DATE ISSUED
30 AUGUST 2021

SCALE
A3



CAD FILE NO.
V106372-01-P7.dgn

WONTHAGGI NORTH EAST PSP
BASS HIGHWAY ROAD WIDENING
BASS HWY & ST CLAIRE BLVD - PROPOSED ROUNDABOUT
CONCEPT LAYOUT
DRAWING NO. V106370-01-03
SHEET 03 OF 03
ISSUE P7



V106370: Wonthaggi North East PSP - Bass Hwy / St Clair Blvd						
Civil Construction						
Date 10/13/2021						
Basis of Estimate						
This cost estimate is based on GTA plan V106370-01-03-P7 dated 27 Aug 2021 (Approximately 150m of the Bass Highway legs and 50m of the Saint Claire Boulevard legs)						
Bass Hwy / St Clair Blvd - Proposed Roundabout						
Item	Description of works	Quantity	Unit	Rate	Amount	Comments
1.00 SITEWORKS AND EARTHWORKS						
1.01	Site preparation	1	Item	\$ 15,000.00	\$ 15,000.00	
1.02	Earthworks	2568	m ³	\$ 40.00	\$ 102,720.00	
1.03	Subgrade improvement	2140	m ²	\$ 60.00	\$ 128,400.00	
1.04	Proving existing services	1	Item	\$ 10,000.00	\$ 10,000.00	
2.00 ROAD PAVEMENT						
2.01	Asphalt Pavement	4280	m ²	\$ 150.00	\$ 642,000.00	600mm deep heavy duty pavement
2.02	Asphalt resheet works with type V or H asphalt	1400	m ²	\$ 50.00	\$ 70,000.00	
3.00 CONCRETE WORKS						
3.01	Kerb and channel	1550	Lm	\$ 70.00	\$ 108,500.00	SM2 or Council equivalent
3.02	Concrete footpath	1080	m ²	\$ 125.00	\$ 135,000.00	
3.03	Concrete median works	4230	m ²	\$ 130.00	\$ 549,900.00	
3.04	Pram ramp works	8	Item	\$ 1,250.00	\$ 10,000.00	To be DDA compliant
4.00 DRAINAGE						
4.01	Drainage - pipes	150	Lm	\$ 250.00	\$ 37,500.00	375mm dia RCP Class 2, RRJ
4.02	Drainage - pits	12	No	\$ 1,850.00	\$ 22,200.00	750 x 1000 side entry pits
4.03	Drainage - Sub-soil drainage	950	Lm	\$ 55.00	\$ 52,250.00	100mm dia grade 1000 AG drain with screening backfill
4.04	Drainage - Miscellaneous (Description)	12	Item	\$ 1,250.00	\$ 15,000.00	SSD Pit/ flush out riser/ outlet
5.00 TRAFFIC						
5.01	Traffic Signals	0	Item	\$ 350,000.00	\$ -	
5.02	Traffic Safety (barriers etc)	0	Item	\$ 50,000.00	\$ -	
6.00 LANDSCAPE						
6.01	Tree removals & replacements	20	No	\$ 500.00	\$ 10,000.00	
6.02	Landscaping - batter, median & back of kerb works	3550	m ²	\$ 80.00	\$ 284,000.00	
7.00 STREET LIGHTING						
7.01	Street Lighting	16	No	\$ 12,800.00	\$ 204,800.00	
8.00 MISCELLANEOUS						
8.01	Line marking	1	Item	\$ 6,000.00	\$ 6,000.00	
8.02	Regulatory Signage	1	Item	\$ 5,000.00	\$ 5,000.00	
8.03	Works maintenance - up to 1 year	1	Item	\$ 25,000.00	\$ 25,000.00	
8.04	Landscape maintenance - 1yr/2 summers	1	Item	\$ 7,000.00	\$ 7,000.00	Including traffic management
9.00 OTHER						
9.01	Telstra services relocation/ Protection works	1	Item	\$ 500,000.00	\$ 500,000.00	This is a broad level estimate only - email confirmation
9.02	NBN services relocation/Protection works	1	Item	\$ 150,000.00	\$ 50,000.00	This is a broad level estimate only - email confirmation
9.03	Water and Sewer services relocation/Protection works	1	Item	\$ 100,000.00	\$ 100,000.00	High-level estimate only
9.04	Electrical services relocation/Protection works	1	Item	\$ 180,000.00	\$ 180,000.00	Verbal confirmation for full works only
SUB-TOTAL WORKS					\$ 3,270,270.00	
10.00 DELIVERY						
10.01	Council Fees (Council assets only)	3.25	%		\$ 106,283.78	
10.02	Department of Transport Fees	1	%		\$ 32,702.70	
10.03	Traffic Management	7	%		\$ 228,918.90	
10.04	Environmental Management	0.5	%		\$ 16,351.35	
10.05	Survey/Design	5	%		\$ 163,513.50	
10.06	Supervision & Project Management	9	%		\$ 294,324.30	
10.07	Site Establishment	2.5	%		\$ 81,756.75	
10.08	Contingency - Overall (Item 1.1 to 9.7)	30	%		\$ 981,081.00	
SUB-TOTAL DELIVERY					\$ 1,904,932.28	
11 TOTAL ESTIMATED COST					\$ 5,175,202.28	

Assumptions and exclusions:

- Design and documentation fees or authority fees, charges, levies and overview including insurances and bank guarantees have been included as per VPA recommended percentages.
- Approximate cost of protection and/or relocation of underground services during construction is included (broad level estimate only subject to validation and confirmation)
- A 30% contingency has been applied to the engineer's opinion of probable costs based on the information from Concept layout and without a site inspection
- This engineers opinion of probable cost is based on the drawings listed above and further changes may arise following subsequent additional investigations and detailed design development.
- Specific construction works including rock boring, rock blasting or rock excavation and removal have been excluded as geotechnical conditions are yet to be confirmed.
- This estimate also excludes allowance for abnormal weather conditions.
- GST is excluded.
- Land acquisition is excluded
- Price escalation is excluded.
- The above opinion of probable costs should be considered current to the date of the document only. GTA now Stantec cannot provide any form of assurance that the costings provided will not change due to changes in design and/or future costs of materials. The future outcome may vary, and this variation may be material. This potential for variation should be considered in any circumstances where the costings are to be used for high level budgeting purposes, even in the short term. Any party requiring detailed costing for quoting or construction purposes should seek a detailed cost estimate from a suitably qualified quantity surveyor.



PROJECT:	Wonthaggi North East PSP
LOCATION:	Korumburra-Wonthaggi Rd / Proposed Connector Street, Intersection 09
DATE:	11/03/2022

BROAD LEVEL CONSTRUCTION COST ESTIMATE

IN09 - 3 Leg Roundabout, Local Access Street Omitted

Basis of Quantities and Estimate:

This Schedule of Quantities is based on revision P2 design drawings, dated 09/03/2022, drawing V214020-01-02-P2

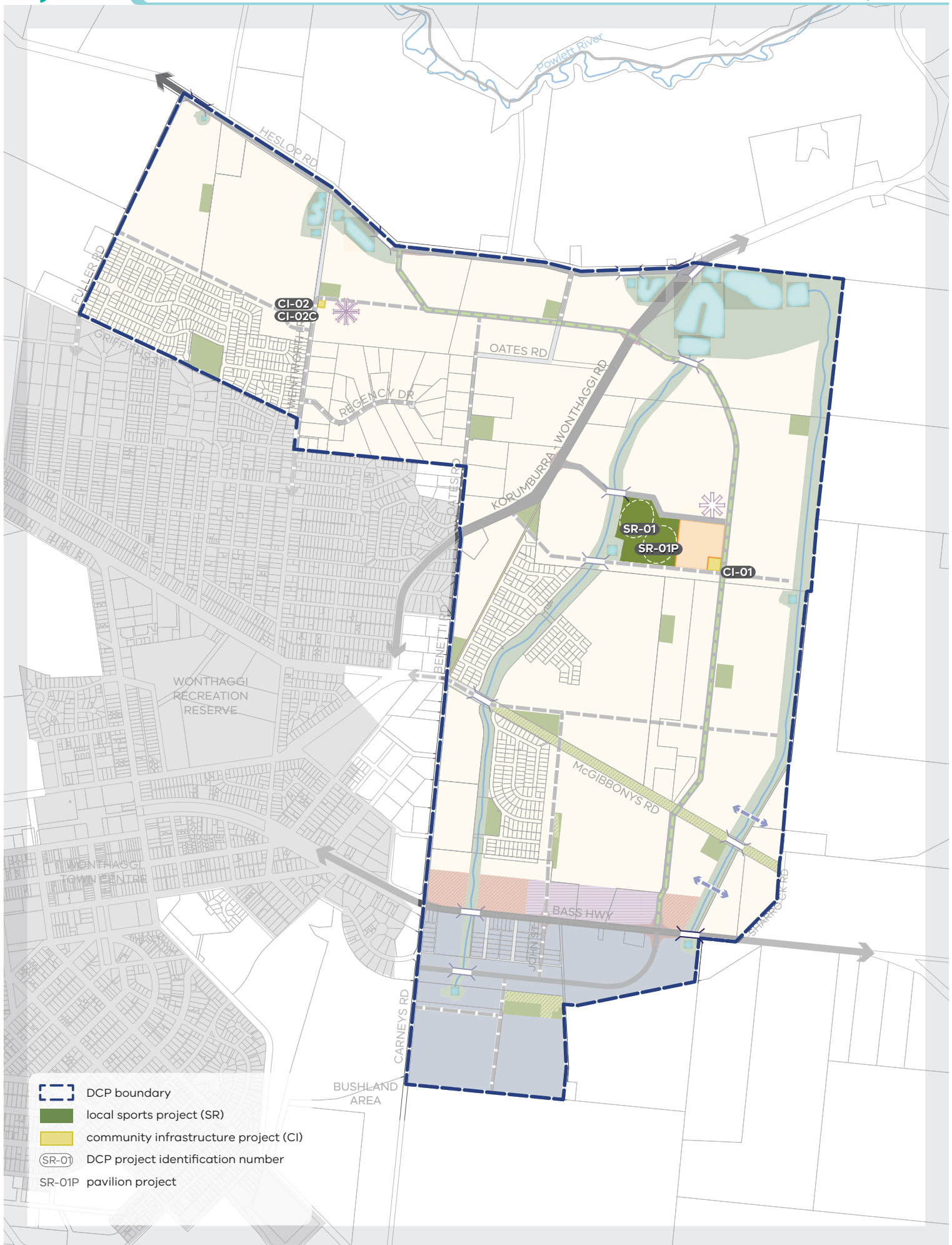
ITEM	ITEM DESCRIPTION	QTY	UNIT	\$/UNIT	TOTAL	REMARKS
1.0	SITEWORKS AND DEMOLITION					
1.01	Site Preparation	1	Item	\$ 15,000.00	\$ 15,000.00	
1.02	Earthworks	1785	m ³	\$ 40.00	\$ 71,400.00	
1.03	Subgrade Improvement	2760	m ²	\$ 60.00	\$ 165,600.00	Lime and cement stabilisation for new asphalt pavement area. The m ² unit cost accounts for an average depth.
1.04	Proving Existing Services	1	Item	\$ 10,000.00	\$ 10,000.00	
1.05	Clearing and Grubbing	5910	m ²	\$ 15.00	\$ 88,650.00	
2.0	ASPHALT PAVEMENT WORKS					
2.01	Asphalt Pavement (Full Depth)	2550	m ²	\$ 150.00	\$ 382,500.00	600mm deep heavy duty pavement
2.02	Asphalt Resheet Works (Wearing Course Type V or H)	670	m ²	\$ 50.00	\$ 33,500.00	
3.0	CONCRETE WORKS					All concrete works items are inclusive of crushed rock base.
3.01	Kerb and Channel	860	Lm	\$ 70.00	\$ 60,200.00	SM2 or Council equivalent
3.02	Concrete Footpath	1270	m ²	\$ 125.00	\$ 158,750.00	
3.03	Concrete Median & Roundabout Infill	870	m ²	\$ 130.00	\$ 113,100.00	
3.04	Concrete Kerb Ramps	12	No.	\$ 1,250.00	\$ 15,000.00	To be DDA compliant
4.0	STORMWATER DRAINAGE WORKS					
4.01	Drainage - Pipes	570	Lm	\$ 250.00	\$ 142,500.00	
4.02	Drainage - Pits	13	No.	\$ 3,000.00	\$ 39,000.00	
4.03	Drainage - Sub-soil Drainage	1220	Lm	\$ 55.00	\$ 67,100.00	Assumed behind all kerb and underneath all pavement joints.
4.04	Drainage - Miscellaneous	8	Item	\$ 1,250.00	\$ 10,000.00	SSD Pit, Flush Out Riser, Outlet
5.0	TRAFFIC					
5.01	Safety Barriers	1	Item	\$ 100,000.00	\$ 100,000.00	Allowance to contain run-off-road hazards such as trees and existing open channel drain
6.0	LANDSCAPE					
6.01	Tree removals and replacements	120	No.	\$ 500.00	\$ 60,000.00	
6.02	Landscaping - Batter to existing , back of kerb works, topsoil and seed area, etc.	2200	m ²	\$ 80.00	\$ 176,000.00	Batter assumed 3.0m from back of kerb, with topsoil and seed areas around shared paths and footpaths. Blended unit cost to account for these.
7.0	STREET LIGHTING					
7.01	Street Lighting	8	No.	\$ 12,800.00	\$ 102,400.00	

ITEM	ITEM DESCRIPTION	QTY	UNIT	\$/UNIT	TOTAL	REMARKS
8.0 MISCELLANEOUS						
8.01	Pavement Markings	1	Item	\$ 5,000.00	\$ 5,000.00	
8.02	Regulatory Signage	1	Item	\$ 5,000.00	\$ 5,000.00	
8.03	Works maintenance - up to 1 year	1	Item	\$ 20,000.00	\$ 20,000.00	
8.04	Landscaping maintenance - 1 year / 2 summers	1	Item	\$ 5,000.00	\$ 5,000.00	Including traffic management
9.0 SERVICES						
9.01	Telstra services relocation/ Protection works	1	Item	\$ 450,000.00	\$ 450,000.00	This is a broad level estimate only - confirmation from service authorities is required at detailed design.
9.02	NBN services relocation/Protection works	1	Item	\$ 50,000.00	\$ 50,000.00	This is a broad level estimate only - confirmation from service authorities is required at detailed design.
9.03	Gas services relocation/Protection works	1	Item	\$ 50,000.00	\$ 50,000.00	This is a broad level estimate only - confirmation from service authorities is required at detailed design.
9.04	Water and Sewer services relocation/Protection works	1	Item	\$ 75,000.00	\$ 75,000.00	This is a broad level estimate only, subject to verification by authority. SGW are highly likely to arrange to renew this main and divert around roundabout instead (timing dependant).
9.04	Electrical services relocation/Protection works	1	Item	\$ 250,000.00	\$ 250,000.00	Pole and overhead wires on north-west corner of roundabout to be relocated.
SUB-TOTAL WORKS					\$ 2,720,700.00	
10.0 DELIVERY						
10.01	Council Fees (Council assets only)	3.25	%		\$ 88,422.75	
10.02	Department of Transport Fees	1	%		\$ 27,207.00	
10.03	Traffic Management	5	%		\$ 136,035.00	
10.04	Environmental Management	0.5	%		\$ 13,603.50	
10.05	Survey/Design	5	%		\$ 136,035.00	
10.06	Supervision & Project Management	9	%		\$ 244,863.00	
10.07	Site Establishment	2.5	%		\$ 68,017.50	
10.08	Contingency - Overall (Item 1.1 to 9.7)	30	%		\$ 816,210.00	
SUB-TOTAL DELIVERY					\$ 1,530,393.75	
TOTAL ESTIMATE COST					\$ 4,251,093.75	

ASSUMPTIONS AND EXCLUSIONS:

- Design, documentation fees or authority fees, charges, levies and overview including insurances and bank guarantees have been included as per VPA recommended percentages.
- Approximate cost of protection and/or relocation of underground services during construction is included (broad level estimate only subject to validation and confirmation)
- A 30% contingency has been applied to the engineer's opinion of probable costs based on the information from Concept layout and without a site inspection
- This broad level engineers opinion of probable cost is based on the drawings listed above and further changes may arise following subsequent additional investigations and detailed design development.
- Specific construction works including rock boring, rock blasting or rock excavation and removal have been excluded as geotechnical conditions are yet to be confirmed.
- This estimate also excludes allowance for abnormal weather conditions.
- GST is excluded.
- Land acquisition is excluded
- Price escalation is excluded.
- The above opinion of probable costs should be considered current to the date of the document only. GTA now Stantec cannot provide any form of assurance that the costings provided will not change due to changes in design and/or future costs of materials. The future outcome may vary, and this variation may be material. This potential for variation should be considered in any circumstances where the costings are to be used for high level budgeting purposes, even in the short term. Any party requiring detailed costing for quoting or construction purposes should seek a detailed cost estimate from a suitably qualified quantity surveyor.

Community & recreation project cost estimates



Costs – Wonthaggi North East Community Centre Level 1

Scope of works: Multipurpose community centre, double kindergarten with car parking, maternal health and childcare, reception and outdoors areas in Village Hub

Site area: 0.32 hectares

Building total area: 1,000 square metres

Community centre CI-01	Area m ²	Rate \$/m ²	Total Cost
Dual room kindergarten	200.00	\$2,200.00	\$440,000.00
Kitchen/kiosk	50.00	\$3,500.00	\$175,000.00
MCH room	50.00	\$2,700.00	\$135,000.00
Community meeting space	150.00	\$2,000.00	\$300,000.00
Breastfeeding room	16.00	\$2,650.00	\$42,400.00
Meeting/interview room	20.00	\$2,200.00	\$44,000.00
Offices general	25.00	\$2,200.00	\$55,000.00
Staff room for 12 staff	25.00	\$2,400.00	\$60,000.00
Toilets for staff and children	64.00	\$2,600.00	\$166,400.00
Waiting area	50.00	\$2,100.00	\$105,000.00
Storage	50.00	\$1,900.00	\$95,000.00
Foyer, lobby and corridors	180.00	\$2,000.00	\$360,000.00
Entry canopy and verandah	120.00	\$1,514.00	\$181,680.00
Landscaping, carparking areas	2,000.00	\$120.00	\$240,000.00
Outdoor area for kindergarten	300.00	\$220.00	\$66,000.00
Services for buildings item		\$50,000.00	\$50,000.00
Sub-total			\$2,515,480.00
Survey and design		5%	\$123,274.00
Overheads (supervision)		10%	\$246,548.00
Total contingency		35%	\$862,918.00
TOTAL ESTIMATED COST			\$3,748,220.00
TOTAL ESTIMATED COST INDEXED TO JULY 2023			\$4,170,116.80

Notes:

- Costs based on estimates from previous community centres across metropolitan Melbourne and regional Victoria, as compiled from councils and VPA strategic costing estimates.
- Rates per square metre are based on Rawlinsons Construction Cost Guide, as at November 2018.
- Pre-design phase therefore 35% contingency, due to long timeframe before design and delivery.
- This opinion of probable costs should not be interpreted as a cost estimate or bill of quantities. It has been prepared in accordance and level of detail of the master plan and is based on quotes, current contractor rates, annual supply rates for estimating/budgetary purposes. Further detailed design and cost estimates are required prior to commencement of any actions or tasks.

Costs – Wonthaggi North East Community Hall

Scope of works: Community meeting and hall spaces

Site area: 0.10 hectares

Community centre CI-02	Area m ²	Rate \$/m ²	Total Cost
Community meeting space	230	\$2,000.00	\$460,000.00
Hall space	50	\$2,500.00	\$125,000.00
Facility storage	50	\$1,500.00	\$75,000.00
Toilets	20	\$2,600.00	\$52,000.00
Administration area	50	\$2,250.00	\$112,500.00
Entry canopy and verandah	100	\$1,514.00	\$151,400.00
Sub-total			\$975,900.00
Survey and design		5%	\$48,795.00
Overheads (supervision)		10%	\$97,590.00
Total contingency		35%	\$341,565.00
TOTAL ESTIMATED COST			\$1,463,850.00
TOTAL ESTIMATED COST INDEXED TO JULY 2023			\$1,628,619.85

Notes:

- Costs based on estimates from previous community centres across metropolitan Melbourne and regional Victoria, as compiled from councils and VPA strategic costing estimates.
- Rates per square metre are based on Rawlinsons Construction Cost Guide, as at November 2018.
- Pre-design phase therefore 35% contingency, due to long timeframe before design and delivery.

Costs – Wonthaggi North East Sporting Reserve (SR-01)

Project: Sporting reserve

Scope of works: 2× AFL, 2× netball, skate park and playground

Site area: 11.60 hectares

Sporting Reserve SR-01	Area m ²	Rate \$/m ²	Total Cost
Sporting oval ×2	35,000.00	\$60.00	\$2,100,000.00
Netball courts ×2	1,600.00	\$200.00	\$320,000.00
Netball courts Lights	2.00	\$50,000.00	\$100,000.00
Sporting oval lights	2.00	\$150,000.00	\$300,000.00
Landscaping	2,000.00	\$25.00	\$50,000.00
Carparking pavement	3,000.00	\$100.00	\$300,000.00
Carparking kerb and channel	500.00	\$50.00	\$25,000.00
Carparking drainage pipes	500.00	\$180.00	\$90,000.00
Carparking drainage pits	20.00	\$2,500.00	\$50,000.00
Allowance for external works incl. landscaping and civil	1.00	\$50,000.00	\$50,000.00
Servicing (water, gas, sewer, light and power)	1.00	\$350,000.00	\$350,000.00
Allowance for tiered seating (lightweight construction)	1.00	\$60,000.00	\$60,000.00
Playground	1.00	\$600,000.00	\$600,000.00
Skate park	1.00	\$500,000.00	\$500,000.00
Sub-total			\$4,895,000.00
Survey and design		100%	\$489,500.00
Overheads (supervision)		2.5%	\$122,375.00
Total contingency		35.0%	\$1,713,250.00
TOTAL ESTIMATED COST			\$7,220,125.00
TOTAL ESTIMATED COST INDEXED TO JULY 2023			\$8,032,816.80

Notes:

- Costs based on estimates from previous sporting reserves across metropolitan Melbourne and regional Victoria, as compiled from councils and VPA strategic costing estimates.
- Pre-design phase therefore 35% contingency, due to long timeframe before design and delivery.
- Costs prepared in February 2020.

Costs – Wonthaggi North East Sporting Reserve (SR-01)**Project:** Sports pavilion**Scope of works:** 6–8 change rooms, umpire rooms/canteen, club room

Sports pavilion	Area m ²	Rate \$/m ²	Total Cost
Sports pavilion	1,000	\$2,750.00	\$2,750,000.00
Sub-total			\$2,750,000.00
Survey and design		100%	\$137,500.00
Overheads (supervision)		2.5%	\$275,000.00
Total contingency		35.0%	\$962,500.00
TOTAL ESTIMATED COST			\$4,125,000.00
TOTAL ESTIMATED COST INDEXED TO JULY 2023			\$4,589,306.87

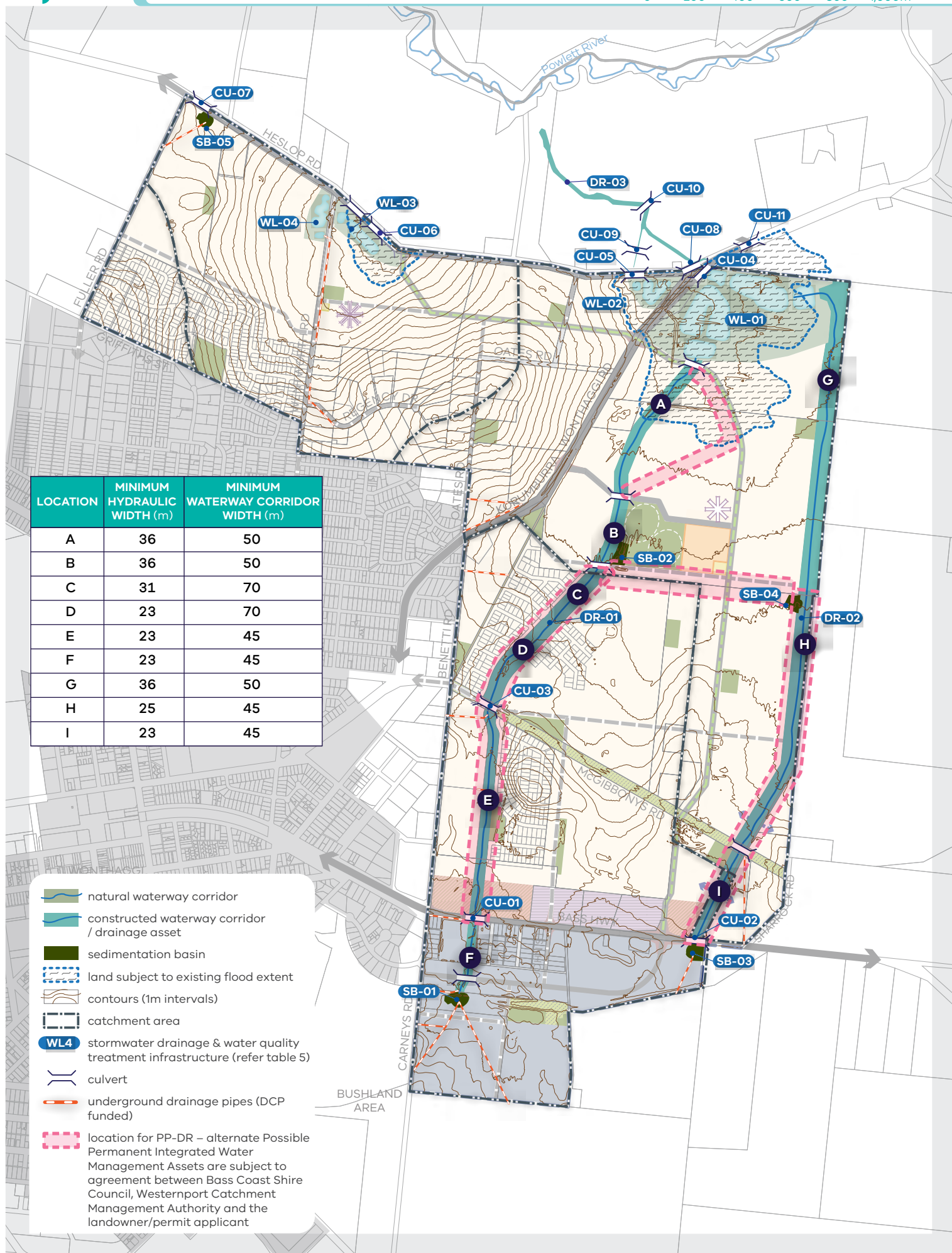
Notes:

- Costs based on estimates from previous sports pavilions across metropolitan Melbourne and regional Victoria, as compiled from councils and VPA strategic costing estimates.

Drainage project cost estimates

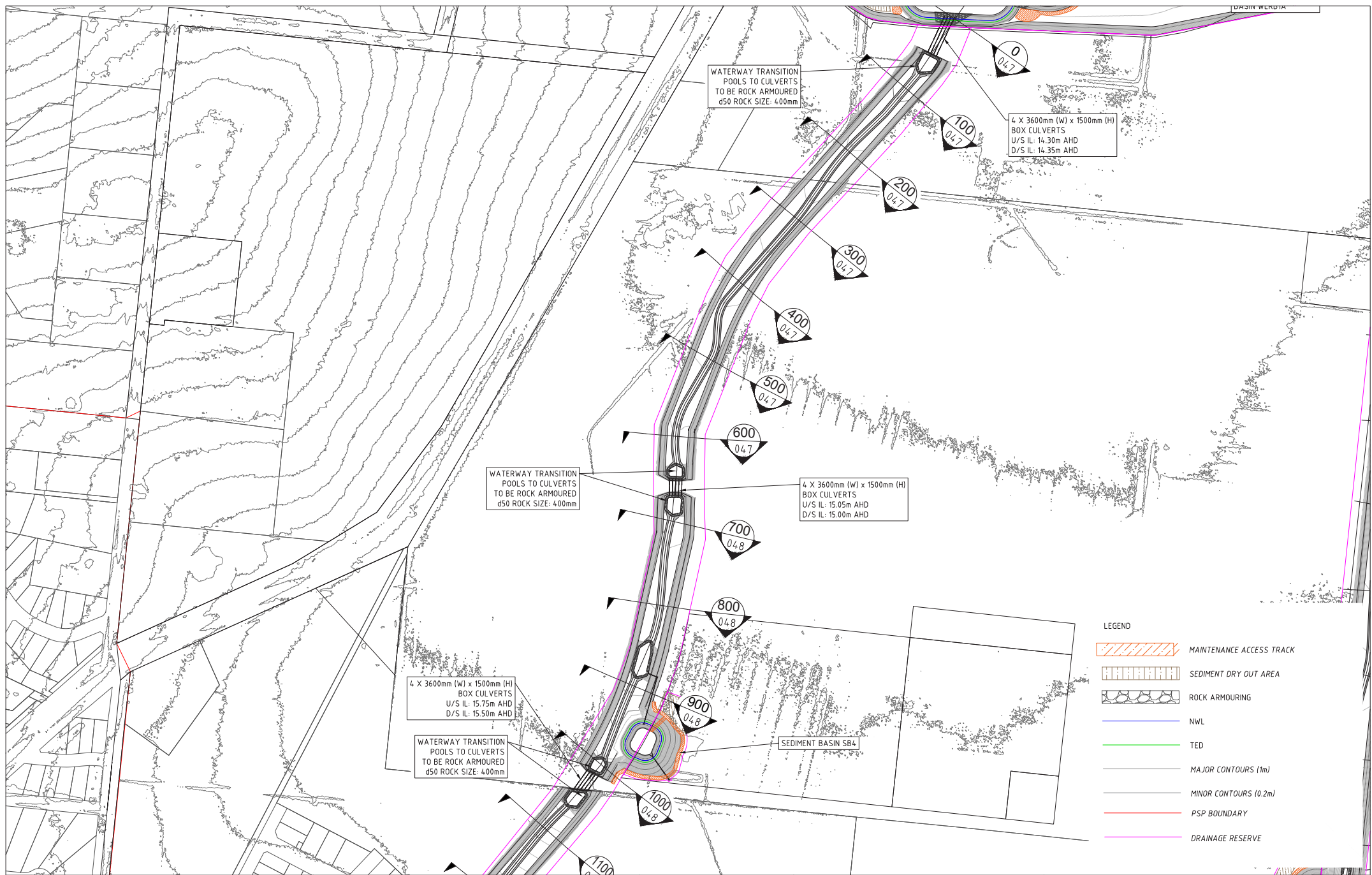
LOCATION	MINIMUM HYDRAULIC WIDTH (m)	MINIMUM WATERWAY CORRIDOR WIDTH (m)
A	36	50
B	36	50
C	31	70
D	23	70
E	23	45
F	23	45
G	36	50
H	25	45
I	23	45

- natural waterway corridor
- constructed waterway corridor / drainage asset
- sedimentation basin
- land subject to existing flood extent
- contours (1m intervals)
- catchment area
- WL4 stormwater drainage & water quality treatment infrastructure (refer table 5)
- culvert
- underground drainage pipes (DCP funded)
- location for PP-DR – alternate Possible Permanent Integrated Water Management Assets are subject to agreement between Bass Coast Shire Council, Westernport Catchment Management Authority and the landowner/permit applicant



West Waterway (W-WW) DCP (DR-01)

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	COMMENTS
1	SITE WORKS					
1.1	Site preparation	1	Item	\$10,000	\$10,000	
1.2	Diversion works	1	Item	\$20,000	\$20,000	
1.3	Waterway re-shaping	1	Item	\$20,000	\$20,000	
1.4	Stripping of topsoil	477,310	m3	\$1.30	\$620,503	MW reimbursement rates for south east region (stripping)
2	EARTHWORKS					MW reimbursement rates for south east region (earthworks rates)
2.1	Bulk excavation	84,357	m3	\$10.90	\$919,491	Excavation in broad greenfield land, excavated material to be reused on site for filling, allowance of 95% reuse on site for filling
2.2	Reuse of onsite cut for filling	80,139	m3	\$11.70	\$937,628	Assumed 95% of bulk excavation for reuse
2.3	Disposal of excess cut	4,218	m3	\$19.20	\$80,983	Assumed 5% of bulk excavation
3	DRAINAGE					
3.1	Rockwork for waterway pool formation					
3.1.1	Supply and install D50=400mm rock, 800 mm thick to form pool No 1.	118	m3	\$197	\$23,246	MW reimbursement rates for south east region (rockwork rate)
3.1.2	Supply and install D50=400mm rock, 800 mm thick to form Bass Hwy Inlet Pool.	88	m3	\$197	\$17,336	MW reimbursement rates for south east region (rockwork rate)
3.1.3	Supply and install D50=400mm rock, 800 mm thick to form Bass Hwy Outlet Pool.	104	m3	\$197	\$20,488	MW reimbursement rates for south east region (rockwork rate)
3.1.4	Supply and install D50=400mm rock, 800 mm thick to form pool No 2.	96	m3	\$197	\$18,912	MW reimbursement rates for south east region (rockwork rate)
3.1.5	Supply and install D50=400mm rock, 800 mm thick to form Culvert 4 Inlet Pool.	150	m3	\$197	\$29,550	MW reimbursement rates for south east region (rockwork rate)
3.1.6	Supply and install D50=400mm rock, 800 mm thick to form Culvert 4 Outlet Pool.	129	m3	\$197	\$25,413	MW reimbursement rates for south east region (rockwork rate)
3.1.7	Supply and install D50=400mm rock, 800 mm thick to form SB4 outlet Transition Pool.	224	m3	\$197	\$44,128	MW reimbursement rates for south east region (rockwork rate)
3.1.8	Supply and install D50=400mm rock, 800 mm thick to form Culvert 5 Inlet Pool.	155	m3	\$197	\$30,535	MW reimbursement rates for south east region (rockwork rate)
3.1.9	Supply and install D50=400mm rock, 800 mm thick to form Culvert 5 Outlet Pool.	123	m3	\$197	\$24,231	MW reimbursement rates for south east region (rockwork rate)
3.1.10	Supply and install D50=400mm rock, 800 mm thick to form Culvert 6 Inlet Pool.	168	m3	\$197	\$33,096	MW reimbursement rates for south east region (rockwork rate)
3.1.11	Supply and install geofabric for all rock work	449	lm	\$25	\$11,225	
4	LANDSCAPING					
4.1	Re-spread 200 mm topsoil for planting areas	453,445	m2	\$3.30	\$1,496,367	Allowance of 95% of topsoil stripped from site, 5% assumed as unsuitable for reuse MW reimbursement rates for south east region (Topsoiling (80% from stockpile and 20% imported))
4.2	Aquatic revegetation of the low flow waterway	14,015	m2	\$14.50	\$203,218	MW reimbursement rates for south east region (Aquatic revegetation)
4.3	Terrestrial revegetation of the high flow waterway	61,494	m2	\$16.80	\$1,033,099	MW reimbursement rates for south east region (terrestrial revegetation)
4.4	Supply and install heavy jute mat (800gsm) pre-slit at density 6/m2 to channel benches.	23,052	m2	\$7	\$161,364	MW reimbursement rates for south east region (weed control matting)
4.5	Supply and install coir logs along channel for temporary erosion control.	3,978	lm	\$20	\$79,560	
	SUB-TOTAL WORKS			\$5,860,373		
5	DELIVERY					
5.1	Council fees	3.25	%		\$190,462	
5.2	VicRoads fees	–	%		\$–	
5.3	Traffic management	2	%		\$117,207	
5.4	Environmental management	0.5	%		\$29,302	
5.5	Survey & design	5	%		\$293,019	
5.6	Supervision & project management	4	%		\$234,415	
5.7	Site establishment	2.5	%		\$146,509	
5.8	Contingency	35	%		\$2,051,130	
	SUB-TOTAL DELIVERY				\$3,062,045	
6	TOTAL ESTIMATED COST				\$8,922,417	



- LEGEND
- MAINTENANCE ACCESS TRACK
 - SEDIMENT DRY OUT AREA
 - ROCK ARMOURING
 - NWL
 - TED
 - MAJOR CONTOURS (1m)
 - MINOR CONTOURS (0.2m)
 - PSP BOUNDARY
 - DRAINAGE RESERVE

REV	DESCRIPTION	APP'D	DATE
E	REVISED ISSUE - POST PANEL SAC RECOMMENDATIONS	DB	29.08.23
D	REVISED ISSUE	CC	22.04.22
C	REVISED ISSUE	CC	06.04.22
B	REVISED ISSUE	CC	05.11.21
A	PRELIMINARY ISSUE	CC	15.10.21

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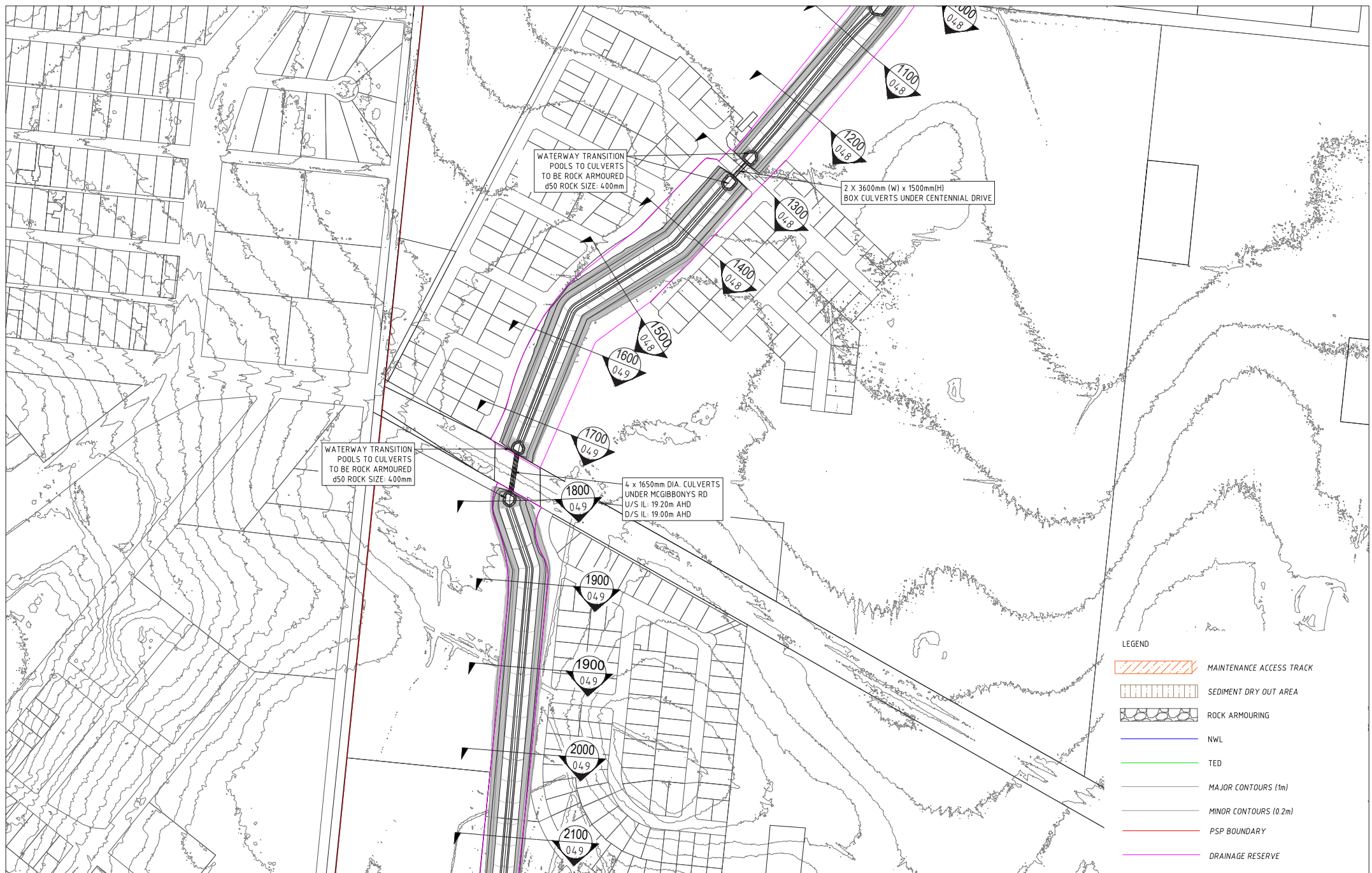
Alluvium Consulting Australia
Pty. Ltd.
ABN 76 151 119 792
Lvl 1, 105-115 Dover Street
Cremorne Vic 3121
T 61 3 9421 2532
www.alluvium.com.au

DESIGNED: D.BRAND
DRAWN: D.BRAND
CHECKED: C.CARVALHO
APPROVED: S.CLEVEN
PROJECT No: 0121128

VICTORIAN PLANNING AUTHORITY
WONTHAGGI NORTH EAST PSP
FUNCTIONAL DESIGN DRAWINGS
WESTERN WATERWAY DESIGN (SHEET 1 OF 3) (DCP REF. DR-01)

REVISION: E
SHEET No: 43 of 55
ORIGINAL SIZE: A1
SCALE: 12,000
DATUM: m AHD (MGA 255)

20 40 80 120m












REV	DESCRIPTION	APP'D	DATE
E	REVISED ISSUE - POST PANEL SAC RECOMMENDATIONS	DB	29.08.23
D	REVISED ISSUE	CC	22.04.22
C	REVISED ISSUE	CC	06.04.22
B	REVISED ISSUE	CC	05.11.21
A	PRELIMINARY ISSUE	CC	15.10.21

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DESIGNED: D.BRAND	DRAWN: D.BRAND	CHECKED: C.CARVALHO	APPROVED: S.CLEVEN
PROJECT No: 0121128		REVISION: E	SHEET No.: 44 of 55

VICTORIAN PLANNING AUTHORITY WONTHAGGI NORTH EAST PSP FUNCTIONAL DESIGN DRAWINGS WESTERN WATERWAY DESIGN (SHEET 2 OF 3) (DCP REF. DR-01)			
ORIGINAL SIZE: A1	SCALE: 12,000	DATUM: m AHD (MGA 255)	20 0 40 80 120m



- LEGEND
-  MAINTENANCE ACCESS TRACK
 -  SEDIMENT DRY OUT AREA
 -  ROCK ARMOURING
 -  NWL
 -  TED
 -  MAJOR CONTOURS (1m)
 -  MINOR CONTOURS (0.2m)
 -  PSP BOUNDARY
 -  DRAINAGE RESERVE

REV	DESCRIPTION	APP'D	DATE
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Pty. Ltd.
ABN 76 151 119 792
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T 61 3 9421 2532
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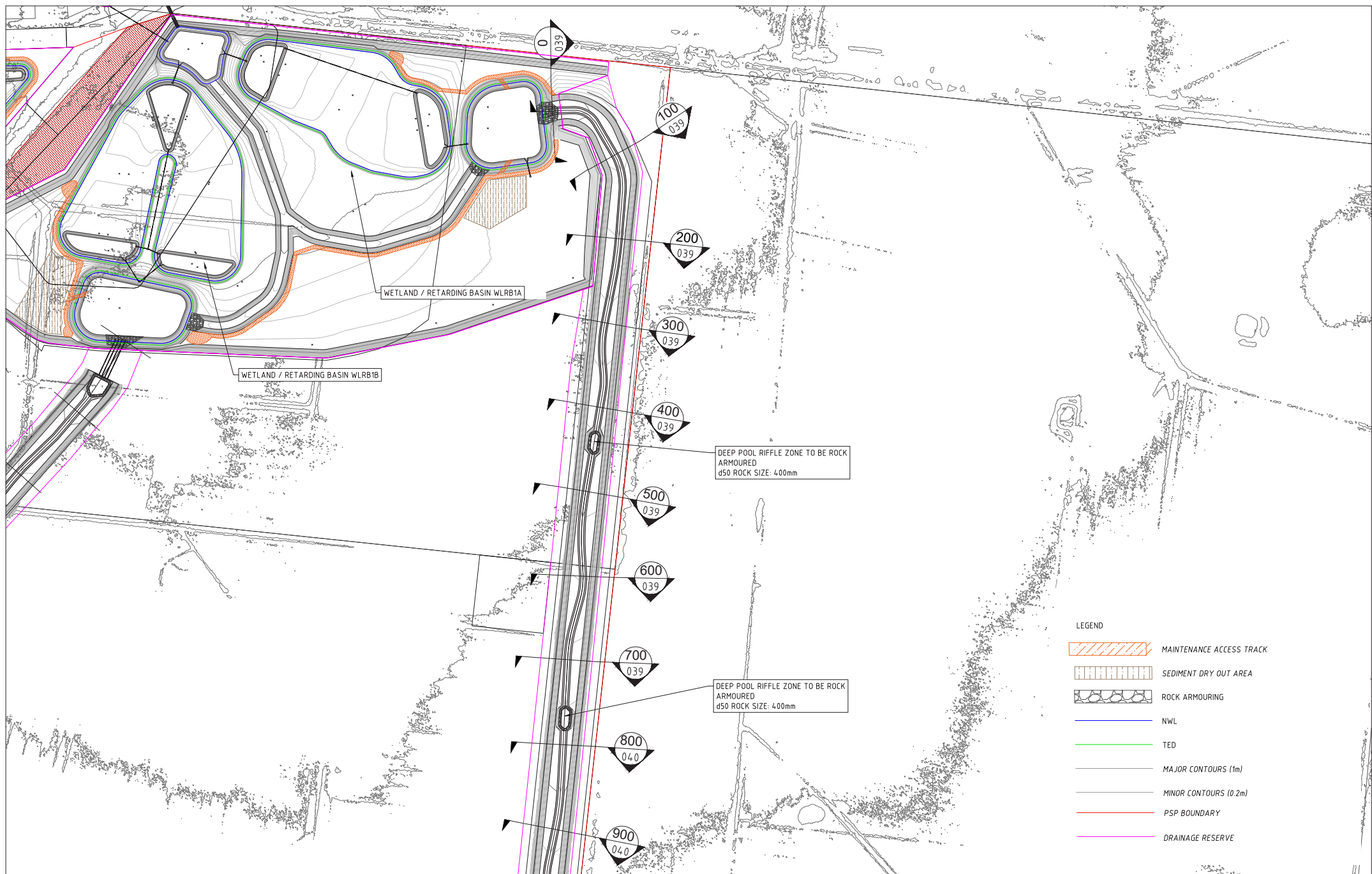
DESIGNED: D.BRAND	DRAWN: D.BRAND	CHECKED: C.CARVALHO	APPROVED: S.CLEVEN	PROJECT No: 0121128
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VICTORIAN PLANNING AUTHORITY
WONTHAGGI NORTH EAST PSP
FUNCTIONAL DESIGN DRAWINGS
WESTERN WATERWAY DESIGN (SHEET 3 OF 3) (DCP REF. DR-01)

REVISION: E	SHEET No.: 45 of 55	ORIGINAL SIZE: A1 DATUM: m AHD (MGA 255)	SCALE: 12,000 0 40 80 120m 20
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East Waterway (E-WW) DCP– DR-02

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	COMMENTS
1	SITE WORKS					
1.1	Site preparation	1	Item	\$10,000	\$10,000	
1.2	Diversion works	1	Item	\$20,000	\$20,000	
1.3	Waterway re-shaping	1	Item	\$20,000	\$20,000	
1.4	Stripping of topsoil	34,083	m3	\$1.30	\$44,308	MW reimbursement rates for south east region (stripping)
2	EARTHWORKS					MW reimbursement rates for south east region (earthworks rates)
2.1	Bulk excavation	178,994	m3	\$10.90	\$1,951,035	Excavation in broad greenfield land, excavated material to be reused on site for filling, allowance of 95% reuse on site for filling
2.2	Reuse of onsite cut for filling	170,044	m3	\$11.70	\$1,989,518	Assumed 95% of bulk excavation for reuse
2.3	Disposal of excess cut	8,950	m3	\$19.20	\$171,834	Assumed 5% of bulk excavation
3	DRAINAGE					
3.1	Rockwork for waterway pool formation					
3.1.1	Supply and install D50=400mm rock, 800 mm thick to form Bass Hwy Outlet Pool	116	m3	\$197	\$22,852	MW reimbursement rates for south east region (rockwork rate)
3.1.2	Supply and install D50=400mm rock, 800 mm thick to form McGibbonys Rd Inlet Pool	134	m3	\$197	\$26,398	MW reimbursement rates for south east region (rockwork rate)
3.1.3	Supply and install D50=400mm rock, 800 mm thick to form McGibbonys Rd Outlet Pool	101	m3	\$197	\$19,897	MW reimbursement rates for south east region (rockwork rate)
3.1.4	Supply and install D50=400mm rock, 800 mm thick to form pool No 1.	140	m3	\$197	\$27,580	MW reimbursement rates for south east region (rockwork rate)
3.1.5	Supply and install D50=400mm rock, 800 mm thick to form pool No 2.	101	m3	\$197	\$19,897	MW reimbursement rates for south east region (rockwork rate)
3.1.6	Supply and install D50=400mm rock, 800 mm thick to form pool No 3.	142	m3	\$197	\$27,974	MW reimbursement rates for south east region (rockwork rate)
3.1.7	Supply and install D50=400mm rock, 800 mm thick to form pool No 4.	131	m3	\$197	\$25,807	MW reimbursement rates for south east region (rockwork rate)
3.1.8	Supply and install geofabric(Bidim A44 or equivalent) for all rock work	343	m3	\$25	\$8,575	
4	LANDSCAPING					
4.1	Re-spread 200 mm topsoil for planting areas	32,379	m2	\$3.30	\$106,850	Allowance of 95% of topsoil stripped from site, 5% assumed as unsuitable for reuse MW reimbursement rates for south east region (Topsoiling (80% from stockpile and 20% imported))
4.2	Aquatic revegetation of the low flow waterway	22,908	m2	\$14.50	\$332,166	MW reimbursement rates for south east region (Aquatic revegetation)
4.3	Terrestrial revegetation of the high flow waterway	95,245	m2	\$16.80	\$1,600,116	MW reimbursement rates for south east region (terrestrial revegetation)
4.4	Supply and install heavy jute mat (800gsm) pre-slit at density 6/m2 to channel benches.	38,519	m2	\$7	\$269,633	MW reimbursement rates for south east region (weed control matting)
4.5	Supply and install coir logs along channel for temporary erosion control.	5,736	lm	\$20	\$114,720	
SUB-TOTAL WORKS				\$6,809,160		
5	DELIVERY					
5.1	Council fees	3.25	%		\$221,298	
5.2	VicRoads fees	–	%		\$–	
5.3	Traffic management	2	%		\$136,183	
5.4	Environmental management	0.5	%		\$34,046	
5.5	Survey & design	5	%		\$340,458	
5.6	Supervision & project management	4	%		\$272,366	
5.7	Site establishment	2.5	%		\$170,229	
5.8	Contingency	35	%		\$2,383,206	
SUB-TOTAL DELIVERY					\$3,557,786	
6	TOTAL ESTIMATED COST				\$10,366,946	



- LEGEND
-  MAINTENANCE ACCESS TRACK
 -  SEDIMENT DRY OUT AREA
 -  ROCK ARMOURING
 -  NWL
 -  TED
 -  MAJOR CONTOURS (1m)
 -  MINOR CONTOURS (0.2m)
 -  PSP BOUNDARY
 -  DRAINAGE RESERVE

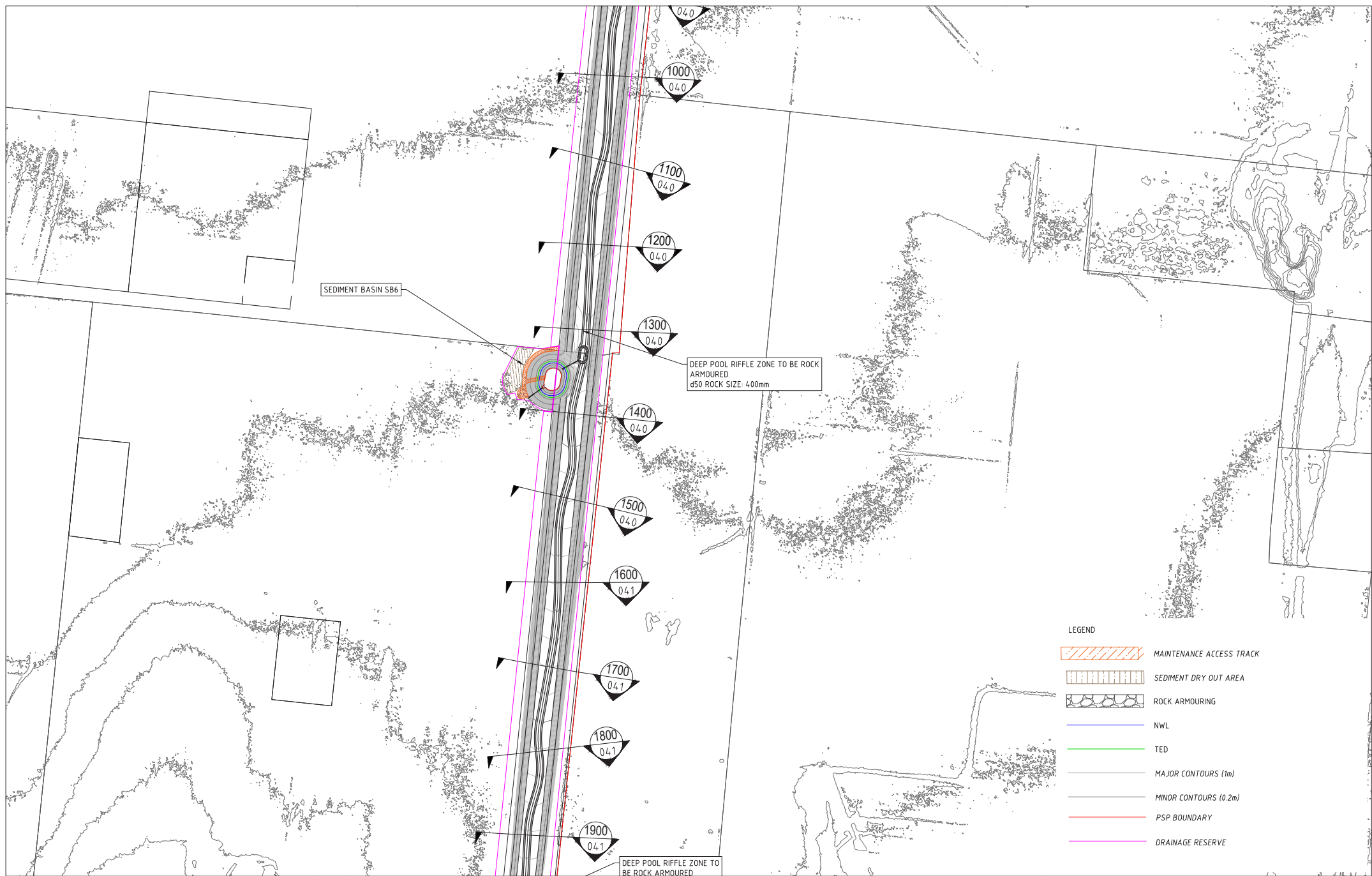
REV	DESCRIPTION	APP'D	DATE
E	REVISED ISSUE - POST PANEL SAC RECOMMENDATIONS	DB	29.08.23
D	REVISED ISSUE	CC	22.04.22
C	REVISED ISSUE	CC	06.04.22
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Pty. Ltd.
ABN 76 151 119 792
Lvl 1, 105-115 Dover Street
Cremorne Vic 3121
T 61 3 9421 2532
www.alluvium.com.au

DESIGNED:	DRAWN:	CHECKED:	APPROVED:	PROJECT No:
D.BRAND	D.BRAND	C.CARVALHO	S.CLEVEN	0121128

VICTORIAN PLANNING AUTHORITY WONTHAGGI NORTH EAST PSP FUNCTIONAL DESIGN DRAWINGS EASTERN WATERWAY DESIGN (SHEET 1 OF 3) (DCP REF. DR-02)			
REVISION: E	SHEET No.: 35 of 55	ORIGINAL SIZE: A1 DATUM: m AHD (MGA 255)	SCALE: 1:2,000 0 40 80 120m



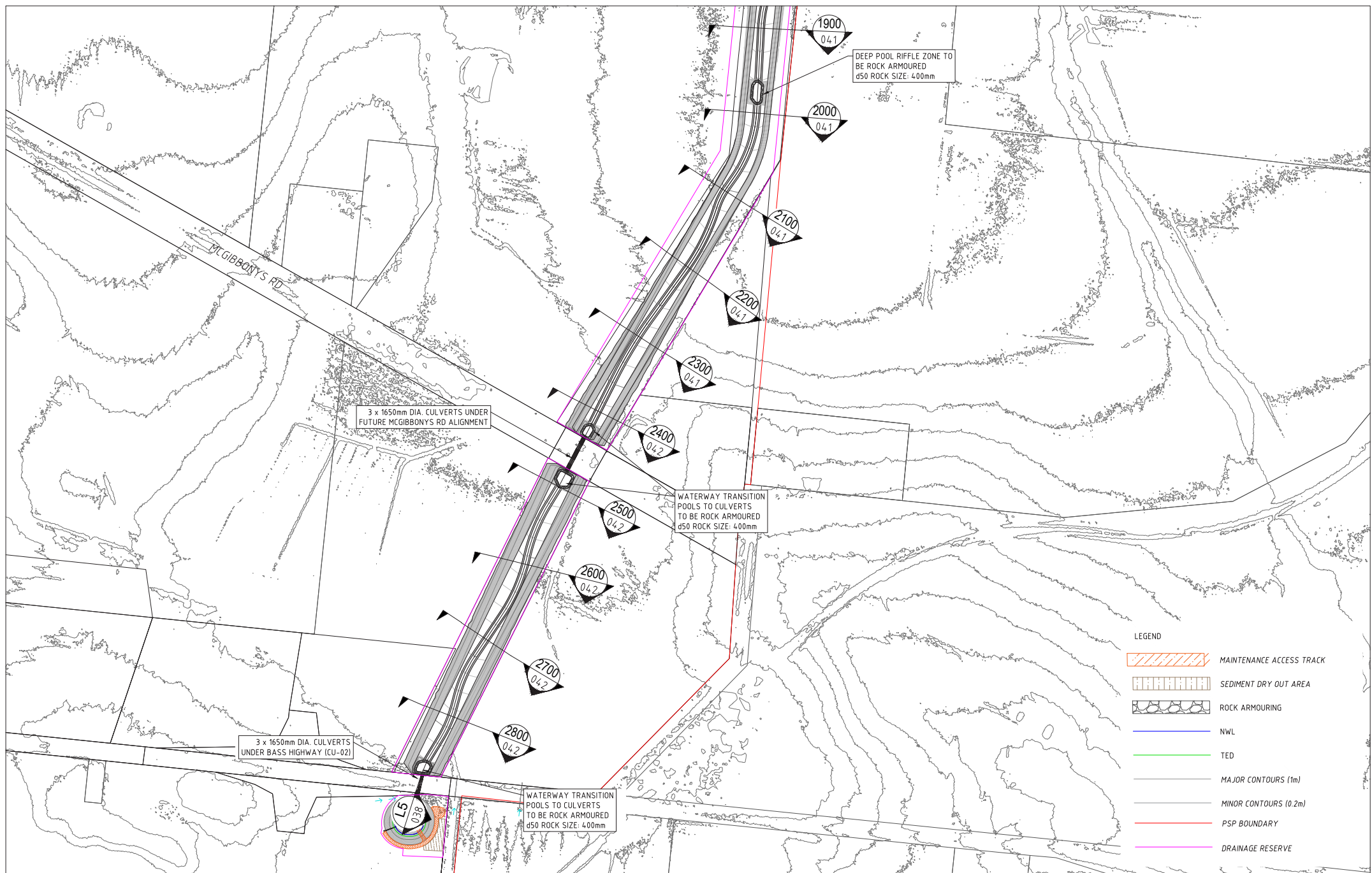
LEGEND

- MAINTENANCE ACCESS TRACK
- SEDIMENT DRY OUT AREA
- ROCK ARMOURING
- NWL
- TED
- MAJOR CONTOURS (1m)
- MINOR CONTOURS (0.2m)
- PSP BOUNDARY
- DRAINAGE RESERVE

REV	DESCRIPTION	APP'D	DATE
E	REVISED ISSUE - POST PANEL SAC RECOMMENDATIONS	DB	29.08.23
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B	REVISED ISSUE	CC	05.11.21
A	PRELIMINARY ISSUE	CC	15.10.21

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DESIGNED: D.BRAND	DRAWN: D.BRAND	CHECKED: C.CARVALHO	APPROVED: S.CLEVEN
PROJECT No: 0121128		REVISION: E	

VICTORIAN PLANNING AUTHORITY WONTHAGGI NORTH EAST PSP FUNCTIONAL DESIGN DRAWINGS EASTERN WATERWAY DESIGN (SHEET 2 OF 3) (DCP REF. DR-02)			
SHEET No.: 36 of 55	ORIGINAL SIZE: A1 DATUM: m AHD (MGA z55)	SCALE: 1:2,000 0 40 80 120m	



REV	DESCRIPTION	APP'D	DATE
E	REVISED ISSUE - POST PANEL SAC RECOMMENDATIONS	DB	29.08.23
D	REVISED ISSUE	CC	22.04.22
C	REVISED ISSUE	CC	06.04.22
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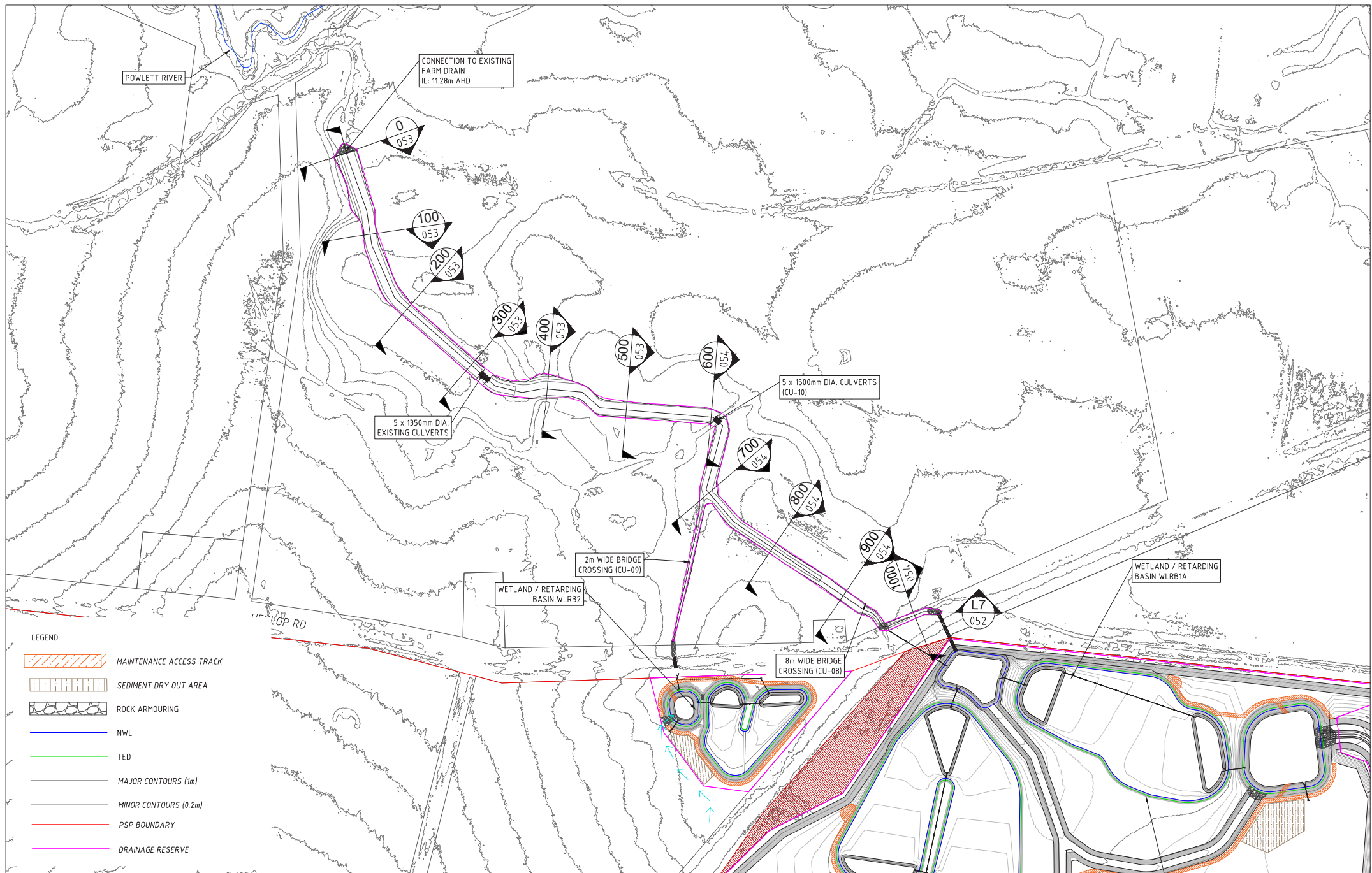
DESIGNED:	D.BRAND	DRAWN:	D.BRAND	CHECKED:	C.CARVALHO	APPROVED:	S.CLEVEN	PROJECT No:	0121128
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VICTORIAN PLANNING AUTHORITY
WONTHAGGI NORTH EAST PSP
FUNCTIONAL DESIGN DRAWINGS
EASTERN WATERWAY DESIGN (SHEET 3 OF 3) (DCP REF. DR-02)

REVISION:	E	SHEET No:	37 of 55	ORIGINAL SIZE:	A1	SCALE:	1:2,000
				DATUM:	m AHD (MGA 255)		

Main Outfall to Powlett River (MOP) DCP – DR-03

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	COMMENTS
1	SITE WORKS					
1.1	Site preparation	1	Item	\$10,000	\$10,000	
1.2	Diversion works	1	Item	\$20,000	\$20,000	
1.3	Waterway re-shaping	1	Item	\$20,000	\$20,000	
1.4	Stripping of topsoil	3,486	m3	\$1.30	\$4,532	MW reimbursement rates for south east region (stripping)
2	EARTHWORKS					MW reimbursement rates for south east region (earthworks rates)
2.1	Bulk excavation	16,910	m3	\$10.90	\$184,319	Excavation in broad greenfield land, excavated material to be reused on site for filling, allowance of 95% reuse on site for filling
2.2	Reuse of onsite cut for filling	16,065	m3	\$11.70	\$187,955	Assumed 95% of bulk excavation for reuse
2.3	Disposal of excess cut	846	m3	\$19.20	\$16,234	Assumed 5% of bulk excavation
3	DRAINAGE					
3.1	Rockwork for waterway pool formation					
3.1.1	Supply and install D50=400mm rock, 800 mm thick to form WLRB1 Outlet Pool	151	m3	\$197	\$29,747	MW reimbursement rates for south east region (rockwork rate)
3.1.2	Supply and install D50=400mm rock, 800 mm thick to form WLRB2 Outlet Pool	60	m3	\$197	\$11,820	MW reimbursement rates for south east region (rockwork rate)
3.1.3	Supply and install D50=400mm rock, 800 mm thick to form connection to existing downstream drain	154	m3	\$197	\$30,338	MW reimbursement rates for south east region (rockwork rate)
3.1.4	Supply and install geofabric (Bidim A44 or equivalent) for all rock work	80	m3	\$25	\$2,000	
4	LANDSCAPING					
4.1	Re spread 200 mm topsoil for planting areas	3,312	m2	\$3.30	\$10,929	Allowance of 95% of topsoil stripped from site, 5% assumed as unsuitable for reuse MW reimbursement rates for south east region (Topsoiling (80% from stockpile and 20% imported))
4.2	Terrestrial revegetation of the high flow waterway	17,430	m2	\$16.80	\$292,824	MW reimbursement rates for south east region (terrestrial revegetation)
4.3	Supply and install heavy jute mat (800gsm) pre-slit at density 6/m2 to channel benches.	17,430	m2	\$7	\$122,010	MW reimbursement rates for south east region (weed control matting)
SUB-TOTAL WORKS				\$942,707		
5	DELIVERY					
5.1	Council fees	3.25	%		\$30,638	
5.2	VicRoads fees	–	%		\$–	
5.3	Traffic management	2	%		\$18,854	
5.4	Environmental management	0.5	%		\$4,714	
5.5	Survey & design	5	%		\$47,135	
5.6	Supervision & project management	4	%		\$37,708	
5.7	Site establishment	2.5	%		\$23,568	
5.8	Contingency	35	%		\$329,947	
SUB-TOTAL DELIVERY					\$492,564	
6	TOTAL ESTIMATED COST				\$1,435,271	



REV	DESCRIPTION	APP'D	DATE
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Alluvium Consulting Australia
Pty. Ltd.
ABN 76 151 119 792
Lvl 1, 105-115 Dover Street
Cremorne Vic 3121
T 61 3 9421 2532
www.alluvium.com.au

DESIGNED: D.BRAND	DRAWN: D.BRAND	CHECKED: C.CARVALHO	APPROVED: S.CLEVEN	PROJECT No: 012128
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VICTORIAN PLANNING AUTHORITY
WONTHAGGI NORTH EAST PSP
FUNCTIONAL DESIGN DRAWINGS
MAIN OUTFALL DESIGN (DCP REF. DR-03)

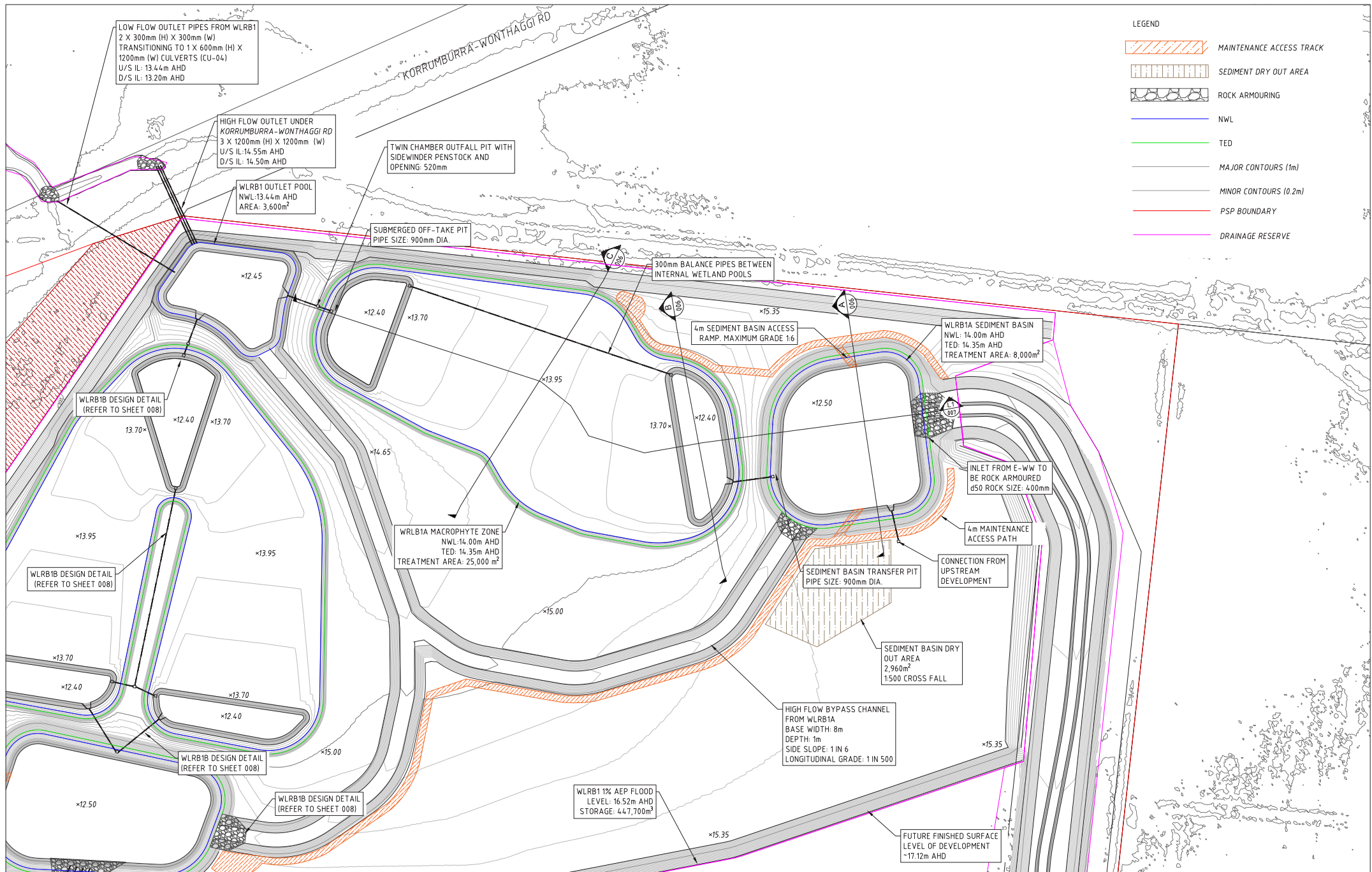
REVISION: E	SHEET No.: 51 of 55	ORIGINAL SIZE: A1 DATUM: m AHD (MGA z55)	SCALE: 12000
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Wetland/Retarding Basin 1 (WLRB-1A & WLRB-1B) DCP – WL-01

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	COMMENTS
1	SITE WORKS					
1.1	Site preparation	1	Item	\$20,000	\$20,000	
1.2	Diversion works	1	Item	\$40,000	\$40,000	
1.3	Geotechnical Investigation	1	Item	\$50,000	\$50,000	
1.4	Cultural Heritage Assessment	1	Item	\$50,000	\$50,000	
1.5	Flora and Fauna Study	1	Item	\$30,000	\$30,000	
1.6	Safety Assessment	1	Item	\$20,000	\$20,000	
1.7	Stripping of topsoil	45,940	m3	\$1.30	\$59,722	MW reimbursement rates for south east region (stripping)
2	EARTHWORKS					MW reimbursement rates for south east region (earthworks rates)
2.1	Bulk excavation	297,854	m3	\$10.90	\$3,246,609	Excavation in broad greenfield land, excavated material to be reused on site for filling, allowance of 95% reuse on site for filling
2.2	Reuse of onsite cut for filling	282,961	m3	\$11.70	\$3,310,647	Assumed 95% of bulk excavation for reuse
2.3	Disposal of excess cut	14,893	m3	\$19.20	\$285,940	Assumed 5% of bulk excavation
3	DRAINAGE – WLRB-1A					
3.1	Rockwork					
3.1.1	Supply and install D50=400mm rock, 800 mm thick to form WL1A Wetland inlet	438	m3	\$197	\$86,286	MW reimbursement rates for south east region (rockwork rate)
3.1.2	Supply and install D50=400mm rock, 800 mm thick to form WL1A Wetland overflow spillway	155	m3	\$197	\$30,535	MW reimbursement rates for south east region (rockwork rate)
3.2	Concrete					
3.2.1	Supply and install reinforced N32 grade concrete weir to form WL1A Wetland spillway weir	1	Item	\$10,000	\$10,000	
3.2.2	Supply and install reinforced N32 grade concrete, 150 mm deep to form WL1A sedimentation basin base	911	m3	\$322	\$293,342	Reinforced concrete slab 150mm thick (Rawlinsons publication)
3.3	Drainage					
3.3.1	Supply and install 900 mm dia RRJ sediment pond transfer pipe incl excavation, 20% crushed rock back fill (WL1A wetland)	22	m	\$561	\$12,342	MW reimbursement rates for south east region (900mm RRJ 20% FCR backfill)
3.3.2	Supply and install submerged offtake pit (WL1A wetland)	1	No.	\$6,710	\$6,710	
3.3.3	Supply and install 300 mm dia RRJ 20% backfill balance pipes (WL1A wetland)	160	m	\$170	\$27,200	MW reimbursement rates for south east region (300mm RRJ 20% FCR backfill)
3.3.4	Supply and install submerged offtake pits for balance pipes (WL1A wetland)	2	No.	\$6,710	\$13,420	
3.3.5	Supply and install 900 mm dia RRJ wetland outfall pipe incl excavation, 20% crushed rock back fill (WL1A wetland)	25	m	\$561	\$14,025	MW reimbursement rates for south east region (900mm RRJ 20% FCR backfill)
3.3.6	Supply and install twin chamber outfall pit with penstock and concrete weir (WL1A wetland)	1	No.	\$15,000	\$15,000	
3.4	Access path					
3.4.1	Supply and install N32 grade concrete to form 4m wide sediment pond maintenance access ramp WL1A wetland	160	m2	\$61.90	\$9,904	MW reimbursement rates for south east region (concrete access track)
3.4.2	Supply and install D50=200mm with Class 2 FCR backfill to form 4m wide maintenance access around WL1A wetland	3,440	m2	\$33.10	\$113,864	MW reimbursement rates for south east region (crushed rock access track)
4	DRAINAGE – WLRB-1B					
4.1	Rockwork					
4.1.1	Supply and install D50=400mm rock, 800 mm thick to form WL1B Wetland inlet channel	342	m3	\$197	\$67,374	MW reimbursement rates for south east region (rockwork rate)
4.1.2	Supply and install D50=400mm rock, 800 mm thick to form WL1B Wetland overflow spillway	249	m3	\$197	\$49,053	MW reimbursement rates for south east region (rockwork rate)
4.2	Concrete					
4.2.1	Supply and install reinforced N32 grade concrete weir to form WL1B Wetland spillway weir	1	Item	\$10,000	\$10,000	
4.2.2	Supply and install reinforced N32 grade concrete, 150 mm deep to form WL1B sedimentation basin base	1,026	m3	\$322	\$330,372	Reinforced concrete slab 150mm thick (Rawlinsons publication)

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	COMMENTS
4.3	Drainage					
4.3.1	Supply and install 900 mm dia RRJ sediment pond transfer pipe incl excavation, 20% crushed rock back fill (WL1B wetland)	60	m	\$561	\$33,660	MW reimbursement rates for south east region (900mm RRJ 20% FCR backfill)
4.3.2	Supply and install submerged offtake pit (WL1B wetland)	1	No.	\$6,710	\$6,710	
4.3.3	Supply and install 300 mm dia RRJ 20% backfill balance pipes (WL1B wetland)	141	m	\$170	\$23,970	MW reimbursement rates for south east region (300mm RRJ 20% FCR backfill)
4.3.4	Supply and install submerged offtake pits for balance pipes (WL1B wetland)	4	No.	\$6,710	\$26,840	
4.3.5	Supply and install 1050 mm dia wetland outfall pipe incl excavation, crushed rock bedding and back fill (WL1B wetland)	21	m	\$696	\$14,616	MW reimbursement rates for south east region (1050mm RRJ 20% FCR backfill)
4.3.6	Supply and install twin chamber outfall pit with penstock and concrete weir (WL1B wetland)	1	No.	\$15,000	\$15,000	
4.4	Access path					
4.4.1	Supply and install N32 grade concrete to form 4m wide sediment pond maintenance access ramp WL1B wetland	82	m2	\$61.90	\$5,076	MW reimbursement rates for south east region (concrete access track)
4.4.2	Supply and install D50=200mm with Class 2 FCR backfill to form 4m wide maintenance access around WL1B wetland	1,127	m2	\$33.10	\$37,304	MW reimbursement rates for south east region (crushed rock access track)
5	LANDSCAPING – WLRB-1A					
5.1	Re spread 200 mm topsoil for planting areas	21,822	m2	\$3.30	\$72,011	Allowance of 95% of topsoil stripped from site, 5% assumed as unsuitable for reuse MW reimbursement rates for south east region (Topsoiling (80% from stockpile and 20% imported))
5.2	Placement of 300 mm compacted clay liners for sedimentation basin and wetland (clay sourced onsite)	45,167	m2	\$8.00	\$361,336	MW reimbursement rates for south east region (clay lining)
5.3	Supply and install submerged marsh planting.	748	m2	\$14.50	\$10,846	MW reimbursement rates for south east region (Aquatic revegetation)
5.4	Supply and install deep marsh planting (60cm3 tube, 2/m2).	13,439	m2	\$14.50	\$194,866	MW reimbursement rates for south east region (Aquatic revegetation)
5.5	Supply and install shallow marsh planting (60cm3 tube, 2/m2).	7,451	m2	\$14.50	\$108,040	MW reimbursement rates for south east region (Aquatic revegetation)
5.6	Supply and install wet ephemeral planting (90cm3 tube, 6/m2).	2,179	m2	\$14.50	\$31,596	MW reimbursement rates for south east region (Aquatic revegetation)
5.7	Supply and install dry ephemeral planting (90cm3 tube, 6/m2).	5,723	m2	\$16.80	\$96,146	MW reimbursement rates for south east region (terrestrial revegetation)
5.8	Supply and install sediment drying area planting (virocell planting, 6/m2).	2,960	m2	\$16.80	\$49,728	MW reimbursement rates for south east region (terrestrial revegetation)
5.9	Supply and install heavy jute mat (800gsm) pre-slit at density 6/m2 to TED to 350mm below NWL as specified for all Wet Ephemeral Planting	23,069	m2	\$7	\$161,483	MW reimbursement rates for south east region (weed control matting)
5.10	Supply, install and maintain plant protection netting for a selected species in the aquatic zones.	2	No.	\$20,000	\$40,000	
6	LANDSCAPING – WLRB-1B					
6.1	Re spread 200 mm topsoil for planting areas	21,822	m2	\$3.30	\$72,011	Allowance of 95% of topsoil stripped from site, 5% assumed as unsuitable for reuse MW reimbursement rates for south east region (Topsoiling (80% from stockpile and 20% imported))
6.2	Placement of 300 mm compacted clay liners for sedimentation basin and wetland (clay sourced onsite)	46,378	m2	\$8.00	\$371,024	MW reimbursement rates for south east region (clay lining)
6.3	Supply and install submerged marsh planting (60cm3 tube, 1/m2).	1,020	m2	\$14.50	\$14,790	MW reimbursement rates for south east region (Aquatic revegetation)
6.4	Supply and install deep marsh planting (60cm3 tube, 2/m2).	17,590	m2	\$14.50	\$255,055	MW reimbursement rates for south east region (Aquatic revegetation)
6.5	Supply and install shallow marsh planting (60cm3 tube, 2/m2).	9,820	m2	\$14.50	\$142,390	MW reimbursement rates for south east region (Aquatic revegetation)
6.6	Supply and install wet ephemeral planting (90cm3 tube, 6/m2).	7,378	m2	\$14.50	\$106,981	MW reimbursement rates for south east region (Aquatic revegetation)
6.7	Supply and install dry ephemeral planting (90cm3 tube, 6/m2).	6,520	m2	\$16.80	\$109,536	MW reimbursement rates for south east region (terrestrial revegetation)
6.8	Supply and install sediment drying area planting (virocell planting, 6/m2).	3,741	m2	\$16.80	\$62,849	MW reimbursement rates for south east region (terrestrial revegetation)

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	COMMENTS
6.9	Supply and install heavy jute mat (800gsm) pre-slit at density 6/m2 to TED to 350mm below NWL as specified for all Wet Ephemeral Planting	32,802	m2	\$7	\$229,614	MW reimbursement rates for south east region (weed control matting)
6.10	Supply, install and maintain plant protection netting for a selected species in the aquatic zones.	2	No.	\$20,000	\$40,000	
7	MISCELLANEOUS					
7.1	Allowance for timber bollards	1	Item	\$3,000	\$3,000	
7.2	Allowance for seats	1	Item	\$35,000	\$35,000	
	SUB-TOTAL WORKS				\$10,933,821	
8	DELIVERY					
8.1	Council fees	3.25	%		\$355,349	
8.2	VicRoads fees	1	%		\$109,338	
8.3	Traffic management	2	%		\$218,676	
8.4	Environmental management	1	%	\$50,000	\$50,000	
8.5	Erosion control management	0.5	%		\$54,669	
8.6	Survey & design	5	%		\$546,691	
8.7	Supervision & project management	4	%		\$437,353	
8.8	Site establishment	2.5	%		\$273,346	
8.9	Contingency	35			\$3,826,837	
	SUB-TOTAL DELIVERY				\$5,872,260	
6	TOTAL ESTIMATED COST				\$16,806,080	



REV	DESCRIPTION	APP'D	DATE
E	REVISED ISSUE - POST PANEL SAC RECOMMENDATIONS	DB	29.08.23
D	REVISED ISSUE	CC	22.04.22
C	REVISED ISSUE	CC	06.04.22
B	REVISED ISSUE	CC	05.11.21
A	PRELIMINARY ISSUE	CC	15.10.21

alluvium
Alluvium Consulting Australia
Pty. Ltd.
ABN 76 151 119 792
Lvl 1, 105-115 Dover Street
Cremorne Vic 3121
T 61 3 9421 2532
www.alluvium.com.au

DESIGNED: D.BRAND	DRAWN: D.BRAND	CHECKED: C.CARVALHO	APPROVED: S.CLEVEN	PROJECT No: 0121128
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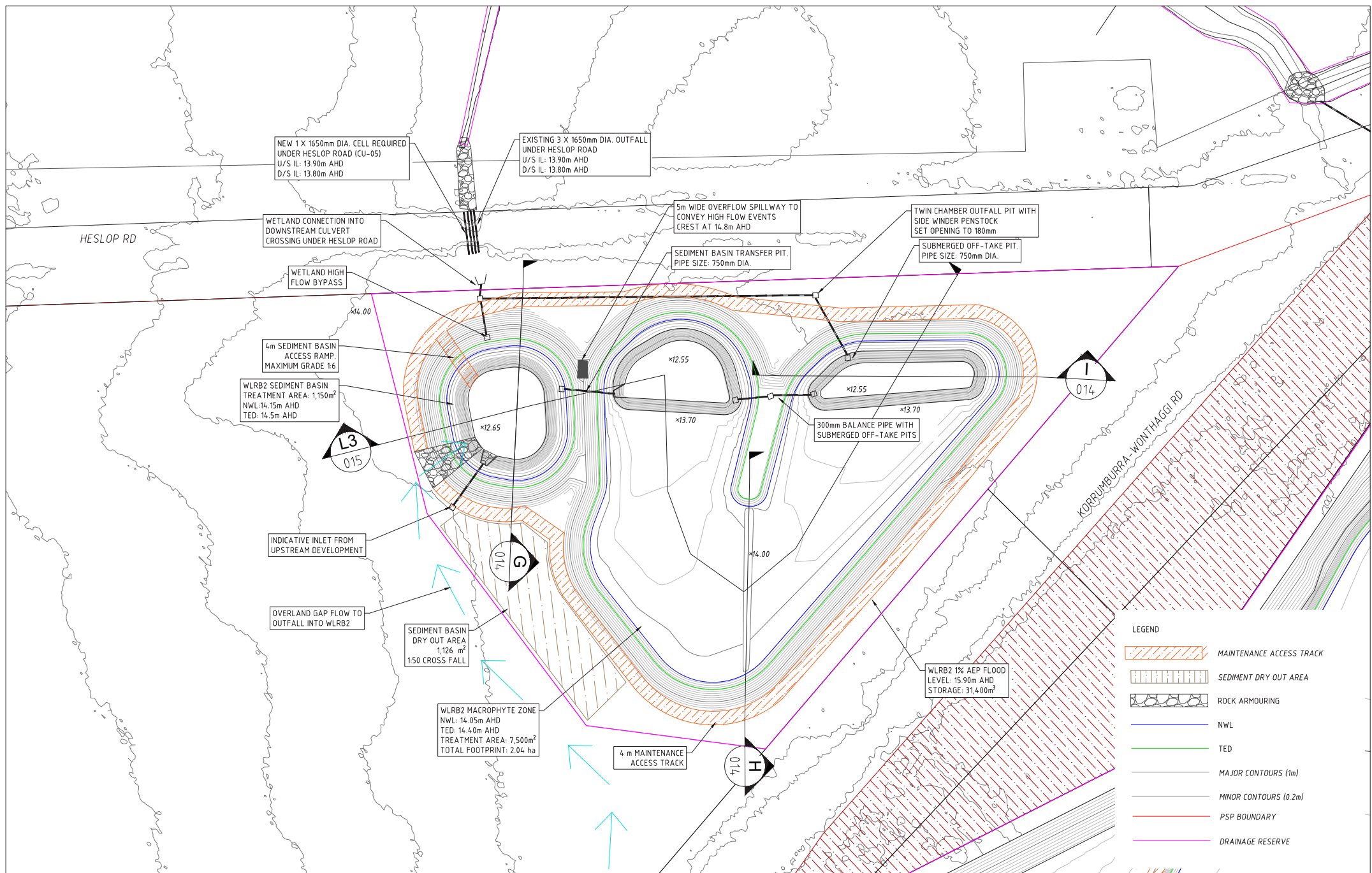
VICTORIAN PLANNING AUTHORITY
WONTHAGGI NORTH EAST PSP
FUNCTIONAL DESIGN DRAWINGS
WLRB1A DESIGN PLAN (DCP REF. WL-01)

REVISION: E	SHEET No.: 4 of 55	ORIGINAL SIZE: A1 DATUM: m AHD (MGA 255)	SCALE: 1:1,000 0 20 40 60 m
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Wetland/Retarding Basin 2 (WLRB2) DCP – WL-02

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	COMMENTS
1	SITE WORKS					
1.1	Site preparation	1	Item	\$20,000	\$20,000	
1.2	Diversion works	1	Item	\$40,000	\$40,000	
1.3	Geotechnical Investigation	1	Item	\$50,000	\$50,000	
1.4	Cultural Heritage Assessment	1	Item	\$50,000	\$50,000	
1.5	Flora and Fauna Study	1	Item	\$30,000	\$30,000	
1.6	Safety Assessment	1	Item	\$20,000	\$20,000	
1.7	Stripping of topsoil	4,089	m3	\$1.30	\$5,316	MW reimbursement rates for south east region (stripping)
2	EARTHWORKS					MW reimbursement rates for south east region (earthworks rates)
2.1	Bulk excavation	9,505	m3	\$10.90	\$103,605	Excavation in broad greenfield land, excavated material to be reused on site for filling, allowance of 95% reuse on site for filling
2.2	Reuse of onsite cut for filling	9,030	m3	\$11.70	\$105,648	Assumed 95% of bulk excavation for reuse
2.3	Disposal of excess cut	475	m3	\$19.20	\$9,125	Assumed 5% of bulk excavation
3	DRAINAGE					
3.1	Rockwork					
3.1.1	Supply and install D50=400mm rock, 800 mm thick to form WL2 Wetland inlet	133	m3	\$197	\$26,201	MW reimbursement rates for south east region (rockwork rate)
3.1.2	Supply and install D50=400mm rock, 800 mm thick to form WL2 Wetland overflow spillway	82	m3	\$197	\$16,154	MW reimbursement rates for south east region (rockwork rate)
3.2	Concrete					
3.2.1	Supply and install reinforced N32 grade concrete weir to form WL2 Wetland spillway weir	1	Item	\$10,000	\$10,000	
3.2.2	Supply and install reinforced N32 grade concrete, 150 mm deep to form WL2 sedimentation basin base	77	m3	\$322	\$24,794	Reinforced concrete slab 150mm thick (Rawlinsons publication)
3.3	Drainage					
3.3.1	Supply and install 600 mm dia RRJ sediment pond transfer pipe incl excavation, 20% crushed rock back fill (WL2 wetland)	14	m	\$337	\$4,718	MW reimbursement rates for south east region (600mm RRJ 20% FCR backfill)
3.3.2	Supply and install submerged offtake pit	1	No.	\$6,710	\$6,710	
3.3.3	Supply and install 300 mm dia RRJ 20% backfill balance pipes (WL2 wetland)	20	m	\$219	\$4,380	MW reimbursement rates for south east region (300mm RRJ 20% FCR backfill)
3.3.4	Supply and install submerged offtake pits for balance pipes	3	No.	\$6,710	\$20,130	
3.3.5	Supply and install 900 mm dia RRJ wetland high flow bypass pipeline incl excavation, 20% crushed rock back fill (WL2)	10	m	\$561	\$5,610	MW reimbursement rates for south east region (900mm RRJ 20% FCR backfill)
3.3.6	Supply and install submerged offtake pit for high flow bypass	1	No.	\$6,710	\$6,710	
3.3.7	Supply and install 750 mm dia RRJ wetland outfall pipe incl excavation, 20% crushed rock back fill	135	m	\$441	\$59,535	MW reimbursement rates for south east region (750mm RRJ 20% FCR backfill)
3.3.8	Supply and install twin chamber outfall pit with penstock and concrete weir	1	No.	\$15,000	\$15,000	
3.4	Access path					
3.4.1	Supply and install N32 grade concrete to form 4m wide sediment pond maintenance access ramp WL2 wetland	70	m2	\$61.90	\$4,333	MW reimbursement rates for south east region (concrete access track)
3.4.2	Supply and install D50=200mm with Class 2 FCR backfill to form 4m wide maintenance access around WL2 wetland	1971	m2	\$33.10	\$65,240	MW reimbursement rates for south east region (crushed rock access track)
4	LANDSCAPING					
4.1	Re-spread 200 mm topsoil for planting areas	3,885	m2	\$3.30	\$12,819	Allowance of 95% of topsoil stripped from site, 5% assumed as unsuitable for reuse MW reimbursement rates for south east region (Topsoiling (80% from stockpile and 20% imported))
4.2	Placement of 300 mm compacted clay liners for sedimentation basin and wetland (clay sourced onsite)	9,714	m2	\$8.00	\$77,712	MW reimbursement rates for south east region (clay lining)
4.3	Supply and install submerged marsh planting.	346	m2	\$14.50	\$5,017	MW reimbursement rates for south east region (Aquatic revegetation)
4.4	Supply and install deep marsh planting (60cm3 tube, 2/m2).	2,876	m2	\$14.50	\$41,702	MW reimbursement rates for south east region (Aquatic revegetation)

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	COMMENTS
4.5	Supply and install shallow marsh planting (60cm3 tube, 2/m2).	3,412	m2	\$14.50	\$49,474	MW reimbursement rates for south east region (Aquatic revegetation)
4.6	Supply and install wet ephemeral planting (90cm3 tube, 6/m2).	1,082	m2	\$14.50	\$15,689	MW reimbursement rates for south east region (Aquatic revegetation)
4.7	Supply and install dry ephemeral planting (90cm3 tube, 6/m2).	3,960	m2	\$16.80	\$66,528	MW reimbursement rates for south east region (terrestrial revegetation)
4.8	Supply and install sediment drying area planting (virocell planting, 6/m2).	1,112	m2	\$16.80	\$18,682	MW reimbursement rates for south east region (terrestrial revegetation)
4.9	Supply and install heavy jute mat (800gsm) pre-slit at density 6/m2 to TED to 350mm below NWL as specified for all Wet Ephemeral Planting	7,370	m2	\$7	\$51,590	MW reimbursement rates for south east region (weed control matting)
4.10	Supply, install and maintain plant protection netting for a selected species in the aquatic zones.	2	No.	\$20,000	\$40,000	
5	MISCELLANEOUS					
5.1	Allowance for timber bollards	1	Item	\$3,000	\$3,000	
5.2	Allowance for seats	1	Item	\$35,000	\$35,000	
	SUB-TOTAL WORKS				\$1,120,421	
6	DELIVERY					
6.1	Council fees	3.25	%		\$36,414	
6.2	VicRoads fees	0	%		\$-	
6.3	Traffic management	2	%		\$22,408	
6.4	Environmental management	1	Item	\$50,000	\$50,000	
6.5	Erosion control management	0.5	%		\$5,602	
6.6	Survey & design	5	%		\$56,021	
6.7	Supervision & project management	4	%		\$44,817	
6.8	Site establishment	2.5	%		\$28,011	
6.9	Contingency	35	%		\$392,147	
	SUB-TOTAL DELIVERY				\$635,420	
7	TOTAL ESTIMATED COST				\$1,755,841	



- LEGEND
- MAINTENANCE ACCESS TRACK
 - SEDIMENT DRY OUT AREA
 - ROCK ARMOURING
 - NWL
 - TED
 - MAJOR CONTOURS (1m)
 - MINOR CONTOURS (0.2m)
 - PSP BOUNDARY
 - DRAINAGE RESERVE

REV	DESCRIPTION	APP'D	DATE
E	REVISED ISSUE - POST PANEL SAC RECOMMENDATIONS	DB	29.08.23
D	REVISED ISSUE	CC	22.04.22
C	REVISED ISSUE	CC	06.04.22
B	REVISED ISSUE	CC	05.11.21
A	PRELIMINARY ISSUE	CC	15.10.21

alluvium

Alluvium Consulting Australia Pty. Ltd.
ABN 76 151 119 792
Lvl 1, 105-115 Dover Street
Cremorne Vic 3121
T 61 3 9421 2532
www.alluvium.com.au

DESIGNED: D.BRAND	DRAWN: D.BRAND	CHECKED: C.CARVALHO	APPROVED: S.CLEVEN	PROJECT No: 0121128
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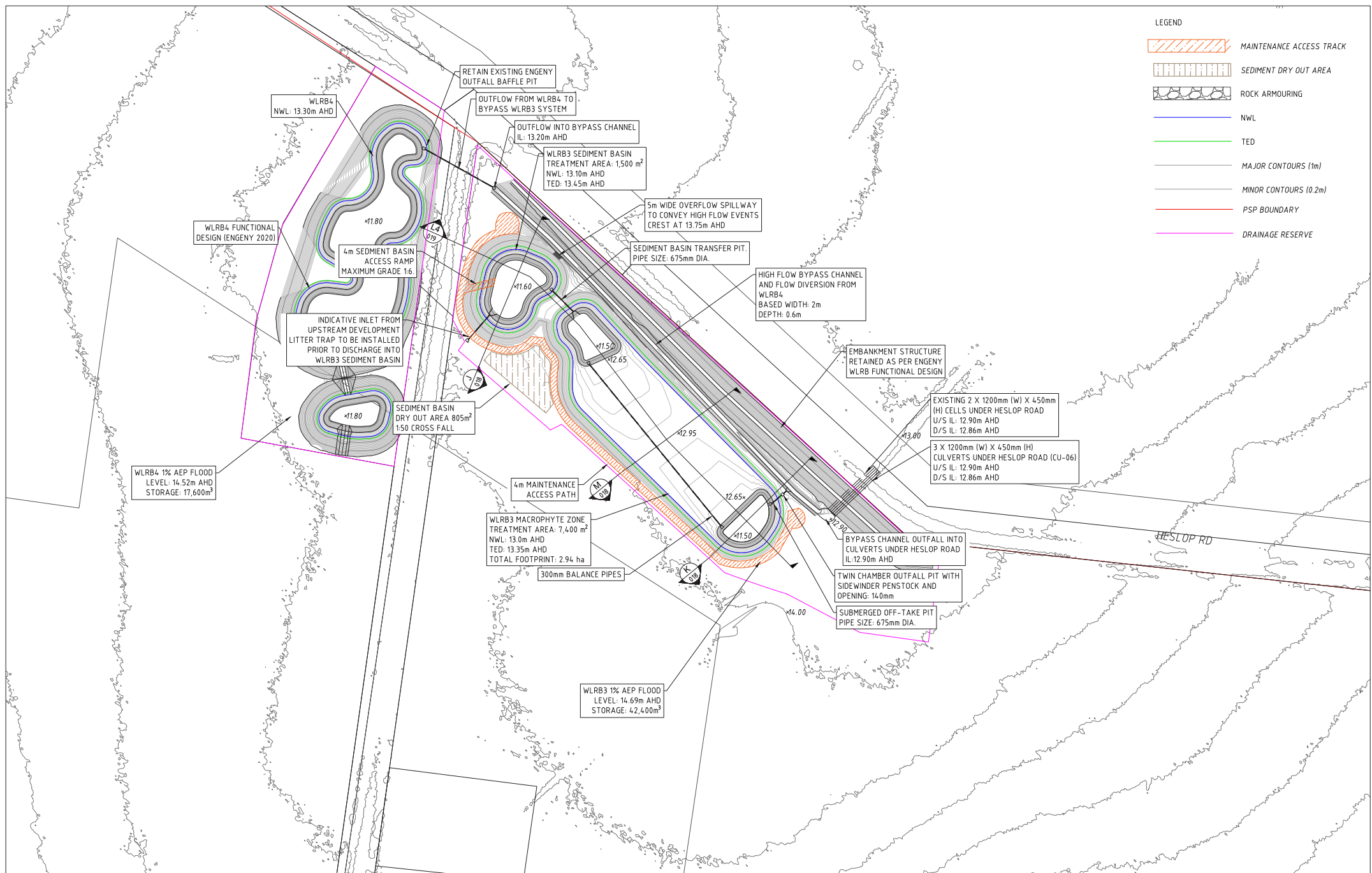
VICTORIAN PLANNING AUTHORITY
WONTHAGGI NORTH EAST PSP
FUNCTIONAL DESIGN DRAWINGS
WLRB2 DESIGN PLAN (DCP REF. WL-02)

REVISION:	SHEET No:	ORIGINAL SIZE:	SCALE:
E	12 of 55	A1	1:500
		DATUM: m AHD (MGA 255)	5 10 20 30m

Wetland/Retarding Basin 3 (WLRB3) DCP – WL-03

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	COMMENTS
1	SITE WORKS					
1.1	Site preparation	1	Item	\$20,000	\$20,000	
1.2	Diversion works	1	Item	\$40,000	\$40,000	
1.3	Geotechnical Investigation	1	Item	\$50,000	\$50,000	
1.4	Cultural Heritage Assessment	1	Item	\$50,000	\$50,000	
1.5	Flora and Fauna Study	1	Item	\$30,000	\$30,000	
1.6	Safety Assessment	1	Item	\$20,000	\$20,000	
1.7	Stripping of topsoil	5,908	m3	\$1.30	\$7,680	MW reimbursement rates for south east region (stripping)
2	EARTHWORKS					MW reimbursement rates for south east region (earthworks rates)
2.1	Bulk excavation	15,455	m3	\$10.90	\$168,460	Excavation in broad greenfield land, excavated material to be reused on site for filling, allowance of 95% reuse on site for filling
2.2	Reuse of onsite cut for filling	14,682	m3	\$11.70	\$171,782	Assumed 95% of bulk excavation for reuse
2.3	Disposal of excess cut	773	m3	\$19.20	\$14,837	Assumed 5% of bulk excavation
3	DRAINAGE					
3.1	Rockwork					
3.1.1	Supply and install D50=400mm rock, 800 mm thick to form WL3 Wetland inlet	96	m3	\$197	\$18,912	MW reimbursement rates for south east region (rockwork rate)
3.1.2	Supply and install D50=400mm rock, 800 mm thick to form WL3 Wetland overflow spillway	115	m3	\$197	\$22,655	MW reimbursement rates for south east region (rockwork rate)
3.2	Concrete					
3.2.1	Supply and install reinforced N32 grade concrete weir to form WL3 Wetland spillway weir	1	Item	\$10,000	\$10,000	
3.2.2	Supply and install reinforced N32 grade concrete, 150 mm deep to form WL3 sedimentation basin base	108	m3	\$322	\$34,776	Reinforced concrete slab 150mm thick (Rawlinsons publication)
3.3	Drainage					
3.3.1	Supply and install 675 mm dia RRJ sediment pond transfer pipe incl excavation, 20% crushed rock back fill (WL2 wetland)	35	m	\$387	\$13,545	MW reimbursement rates for south east region (675mm RRJ 20% FCR backfill)
3.3.2	Supply and install submerged offtake pit	1	No.	\$6,710	\$6,710	
3.3.3	Supply and install 300 mm dia RRJ 20% backfill balance pipes (WL3 wetland)	122	m	\$219	\$26,718	MW reimbursement rates for south east region (300mm RRJ 20% FCR backfill)
3.3.4	Supply and install submerged offtake pits for balance pipes	2	No.	\$6,710	\$13,420	
3.3.5	Supply and install 2x 900 mm dia RRJ wetland high flow bypass pipeline incl excavation, 20% crushed rock back fill (WL3)	368	m	\$561	\$206,448	MW reimbursement rates for south east region (900mm RRJ 20% FCR backfill)
3.3.6	Supply and install submerged offtake pit for high flow bypass	1	No.	\$6,710	\$6,710	
3.3.7	Supply and install 675 mm dia RRJ wetland outfall pipe incl excavation, 20% crushed rock backfill	16	m	\$387	\$6,192	MW reimbursement rates for south east region (675mm RRJ 20% FCR backfill)
3.3.8	Supply and install twin chamber outfall pit with penstock and concrete weir	1	No.	\$15,000	\$15,000	
3.4	Access path					
3.4.1	Supply and install N32 grade concrete to form 4m wide sediment pond maintenance access ramp WL3 wetland	70	m2	\$61.90	\$4,333	MW reimbursement rates for south east region (concrete access track)
3.4.2	Supply and install D50=200mm with Class 2 FCR backfill to form 4m wide maintenance access around WL3 wetland	2,404	m2	\$33.10	\$79,572	MW reimbursement rates for south east region (crushed rock access track)
4	LANDSCAPING					
4.1	Re-spread 200 mm topsoil for planting areas	5,613	m2	\$3.30	\$18,522	Allowance of 95% of topsoil stripped from site, 5% assumed as unsuitable for reuse MW reimbursement rates for south east region (Topsoiling (80% from stockpile and 20% imported))
4.2	Placement of 300 mm compacted clay liners for sedimentation basin and wetland (clay sourced onsite)	10,090	m2	\$8.00	\$80,720	MW reimbursement rates for south east region (clay lining)
4.3	Supply and install submerged marsh planting	343	m2	\$14.50	\$4,974	MW reimbursement rates for south east region (Aquatic revegetation)
4.4	Supply and install deep marsh planting (60cm3 tube, 2/m2).	2,939	m2	\$14.50	\$42,616	MW reimbursement rates for south east region (Aquatic revegetation)

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	COMMENTS
4.5	Supply and install shallow marsh planting (60cm3 tube, 2/m2).	3,359	m2	\$14.50	\$48,706	MW reimbursement rates for south east region (Aquatic revegetation)
4.6	Supply and install wet ephemeral planting (90cm3 tube, 6/m2).	1,190	m2	\$14.50	\$17,255	MW reimbursement rates for south east region (Aquatic revegetation)
4.7	Supply and install dry ephemeral planting (90cm3 tube, 6/m2).	2,810	m2	\$16.80	\$47,208	MW reimbursement rates for south east region (terrestrial revegetation)
4.8	Supply and install sediment drying area planting (virocell planting, 6/m2).	1,112	m2	\$16.80	\$18,682	MW reimbursement rates for south east region (terrestrial revegetation)
4.9	Supply and install heavy jute mat (800gsm) pre-slit at density 6/m2 to TED to 350mm below NWL as specified for all Wet Ephemeral Planting	7,488	m2	\$7	\$52,416	MW reimbursement rates for south east region (weed control matting)
4.10	Supply, install and maintain plant protection netting for a selected species in the aquatic zones.	2	No.	\$20,000	\$40,000	
5	MISCELLANEOUS					
5.1	Allowance for timber bollards	1	Item	\$3,000	\$3,000	
5.2	Allowance for seats	1	Item	\$35,000	\$35,000	
	SUB-TOTAL WORKS				\$1,446,847	
6	DELIVERY					
6.1	Council fees	3.25	%		\$47,023	
6.2	VicRoads fees	0	%		\$-	
6.3	Traffic management	2	%		\$28,937	
6.4	Environmental management	1	Item	\$50,000	\$50,000	
6.5	Erosion control management	0.5	%		\$7,234	
6.6	Survey & design	5	%		\$72,342	
6.7	Supervision & project management	4	%		\$57,874	
6.8	Site establishment	2.5	%		\$36,171	
6.9	Contingency	35	%		\$506,396	
	SUB-TOTAL DELIVERY				\$805,978	
7	TOTAL ESTIMATED COST				\$2,252,825	



REV	DESCRIPTION	APP'D	DATE
E	REVISED ISSUE - POST PANEL SAC RECOMMENDATIONS	DB	29.08.23
D	REVISED ISSUE	CC	22.04.22
C	REVISED ISSUE	CC	06.04.22
B	REVISED ISSUE	CC	05.11.21
A	PRELIMINARY ISSUE	CC	15.10.21

alluvium

Alluvium Consulting Australia Pty. Ltd.
ABN 76 151 119 792
Lvl 1, 105-115 Dover Street
Cremorne Vic 3121
T 61 3 9421 2532
www.alluvium.com.au

DESIGNED:	D.BRAND	DRAWN:	D.BRAND	CHECKED:	C.CARVALHO	APPROVED:	S.CLEVEN	PROJECT No:	0121128
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VICTORIAN PLANNING AUTHORITY
WONTHAGGI NORTH EAST PSP
FUNCTIONAL DESIGN DRAWINGS
WLRB3 DESIGN PLAN (DCP REF. WL-03)

REVISION:	E	SHEET No.:	16 of 55	ORIGINAL SIZE:	A1	SCALE:	1:1,000
				DATUM:	m AHD (MGA 255)		

Wetland/Retarding Basin 4 (WLRB4) DCP – WL-04

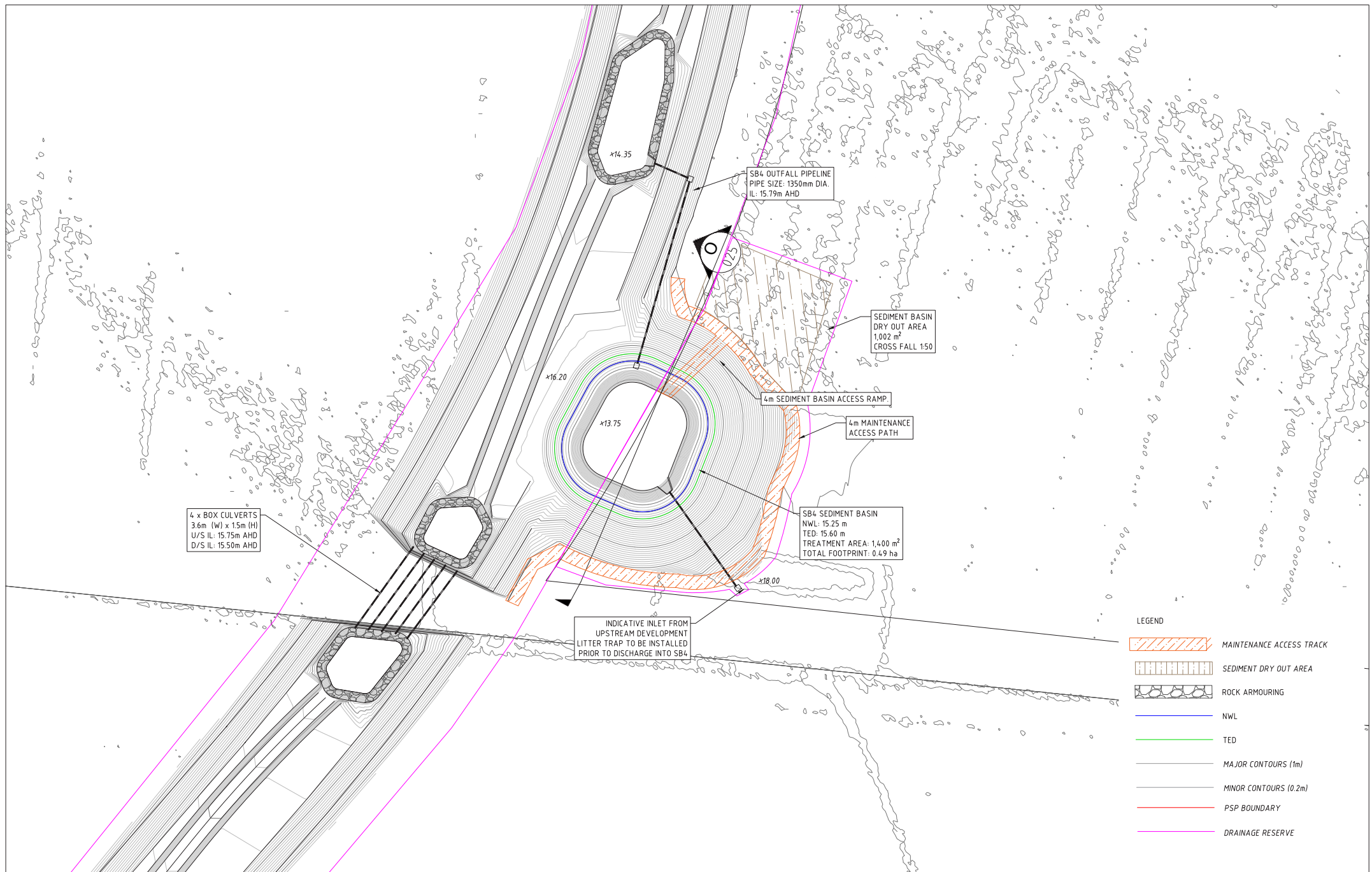
ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	COMMENTS
1	SITE WORKS					
1.1	Site preparation	1	Item	\$20,000	\$20,000	
1.2	Diversion works	1	Item	\$40,000	\$40,000	
1.3	Geotechnical Investigation	1	Item	\$50,000	\$50,000	
1.4	Cultural Heritage Assessment	1	Item	\$50,000	\$50,000	
1.5	Flora and fauna study	1	Item	\$30,000	\$30,000	
1.6	Safety assessment	1	Item	\$20,000	\$20,000	
1.7	Stripping of topsoil	3,408	m3	\$1.30	\$4,430	MW reimbursement rates for south east region (stripping)
2	EARTHWORKS					MW reimbursement rates for south east region (earthworks rates)
2.1	Bulk excavation	31,007	m3	\$10.90	\$337,976	Excavation in broad greenfield land, excavated material to be reused on site for filling, allowance of 95% reuse on site for filling
2.2	Reuse of onsite cut for filling	29,457	m3	\$11.70	\$344,643	Assumed 95% of bulk excavation for reuse
2.3	Disposal of excess cut	1,550	m3	\$19.20	\$29,767	Assumed 5% of bulk excavation
3	DRAINAGE					
3.1	Rockwork					
3.1.1	Supply and install D50=400mm rock, 800 mm thick to form WL4 Wetland inlet	88	m3	\$197	\$17,336	MW reimbursement rates for south east region (rockwork rate)
3.1.2	Supply and install D50=400mm rock, 800 mm thick to form WL4 Wetland overflow spillway	136	m3	\$197	\$26,792	MW reimbursement rates for south east region (rockwork rate)
3.2	Concrete					
3.2.1	Supply and install reinforced N32 grade concrete weir to form WL4 Wetland spillway weir	1	Item	\$10,000	\$10,000	
3.2.2	Supply and install reinforced N32 grade concrete, 150 mm deep to form WL4 sedimentation basin base	275	m3	\$322	\$88,550	Reinforced concrete slab 150mm thick (Rawlinsons publication)
3.3	Drainage					
3.3.1	Supply and install 600 mm dia RRJ sediment pond transfer pipe incl excavation, 20% crushed rock back fill (WL4 wetland)	40	m	\$337	\$13,480	MW reimbursement rates for south east region (600mm RRJ 20% FCR backfill)
3.3.2	Supply and install submerged offtake pit	3	No.	\$6,710	\$20,130	
3.3.3	Supply and install 300 mm dia RRJ 20% backfill balance pipes (WL4 wetland)	97	m	\$219	\$21,243	MW reimbursement rates for south east region (300mm RRJ 20% FCR backfill)
3.3.4	Supply and install submerged offtake pits for balance pipes	2	No.	\$6,710	\$13,420	
3.3.5	Supply and install 675 mm dia RRJ wetland outfall pipe incl excavation, 20% crushed rock back fill	22	m	\$387	\$8,514	MW reimbursement rates for south east region (675mm RRJ 20% FCR backfill)
3.3.6	Supply and install twin chamber outfall pit with penstock and concrete weir	1	No.	\$15,000	\$15,000	
3.4	Access path					
3.4.1	Supply and install N32 grade concrete to form 4m wide sediment pond maintenance access ramp WL4 wetland	88	m2	\$61.90	\$5,447	MW reimbursement rates for south east region (concrete access track)
3.4.2	Supply and install D50=200mm with Class 2 FCR backfill to form 4m wide maintenance access around WL4 wetland	433	m2	\$33.10	\$14,332	MW reimbursement rates for south east region (crushed rock access track)
4	LANDSCAPING					
4.1	Re spread 200 mm topsoil for planting areas	3,238	m2	\$3.30	\$10,684	Allowance of 95% of topsoil stripped from site, 5% assumed as unsuitable for reuse MW reimbursement rates for south east region (Topsoiling (80% from stockpile and 20% imported))
4.2	Placement of 300 mm compacted clay liners for sedimentation basin and wetland (clay sourced onsite)	7,433	m2	\$8.00	\$59,464	MW reimbursement rates for south east region (clay lining)
4.3	Supply and install submerged marsh planting.	271	m2	\$14.50	\$3,930	MW reimbursement rates for south east region (Aquatic revegetation)
4.4	Supply and install deep marsh planting (60cm3 tube, 2/m2).	1,668	m2	\$14.50	\$24,186	MW reimbursement rates for south east region (Aquatic revegetation)
4.5	Supply and install shallow marsh planting (60cm3 tube, 2/m2).	3,525	m2	\$14.50	\$51,113	MW reimbursement rates for south east region (Aquatic revegetation)
4.6	Supply and install wet ephemeral planting (90cm3 tube, 6/m2).	689	m2	\$14.50	\$9,991	MW reimbursement rates for south east region (Aquatic revegetation)
4.7	Supply and install dry ephemeral planting (90cm3 tube, 6/m2).	4,978	m2	\$16.80	\$83,630	MW reimbursement rates for south east region (terrestrial revegetation)

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	COMMENTS
4.8	Supply and install sediment drying area planting (virocell planting, 6/m2).	524	m2	\$16.80	\$8,803	MW reimbursement rates for south east region (terrestrial revegetation)
4.9	Supply and install heavy jute mat (800gsm) pre-slit at density 6/m2 to TED to 350mm below NWL as specified for all Wet Ephemeral Planting	5,882	m2	\$7	\$41,174	MW reimbursement rates for south east region (weed control matting)
4.10	Supply, install and maintain plant protection netting for a selected species in the aquatic zones.	2	No.	\$20,000	\$40,000	
5	MISCELLANEOUS					
5.1	Allowance for timber bollards	1	Item	\$3,000	\$3,000	
5.2	Allowance for seats	1	Item	\$35,000	\$35,000	
	SUB-TOTAL WORKS				\$1,552,035	
6	DELIVERY					
6.1	Council fees	3.25	%		\$50,441	
6.2	VicRoads fees	0	%		\$-	
6.3	Traffic management	2	%		\$31,041	
6.4	Environmental management	1	Item	\$50,000	\$50,000	
6.5	Erosion control management	0.5	%		\$7,760	
6.6	Survey & design	5	%		\$77,602	
6.7	Supervision & project management	4	%		\$62,081	
6.8	Site establishment	2.5	%		\$38,801	
6.9	Contingency	35	%		\$543,212	
	SUB-TOTAL DELIVERY				\$860,938	
7	TOTAL ESTIMATED COST				\$2,412,973	

Sedimentation basin 1 (SB1) DCP – SB-01

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	COMMENTS
1	SITE WORKS & EARTHWORKS					
1.1	Site preparation	1	Item	\$20,000	\$20,000	
1.2	Diversion works	1	Item	\$40,000	\$40,000	
1.3	Geotechnical investigation	1	Item	\$50,000	\$50,000	
1.4	Cultural Heritage Assessment	1	Item	\$50,000	\$50,000	
1.5	Flora and fauna study	1	Item	\$30,000	\$30,000	
1.6	Safety assessment	1	Item	\$20,000	\$20,000	
1.7	Stripping of topsoil	1,047	m3	\$1.30	\$1,361	MW reimbursement rates for south east region (stripping)
2	EARTHWORKS					MW reimbursement rates for south east region (earthworks rates)
2.1	Bulk excavation	6,466	m3	\$10.90	\$70,479	Excavation in broad greenfield land, excavated material to be reused on site for filling, allowance of 95% reuse on site for filling
2.2	Reuse of onsite cut for filling	6,143	m3	\$11.70	\$71,870	Assumed 95% of bulk excavation for reuse
2.3	Disposal of excess cut	323	m3	\$19.20	\$6,207	Assumed 5% of bulk excavation
3	DRAINAGE					
3.1	Rockwork					
3.1.1	Supply and install D50=400mm rock, 800 mm thick to form SB1 inlet	22	m3	\$197	\$4,334	MW reimbursement rates for south east region (rockwork rate)
3.2	Concrete					
3.2.1	Supply and install reinforced N32 grade concrete, 150 mm deep to form SB1 sedimentation basin base	58	Item	\$322	\$18,676	Reinforced concrete slab 150mm thick (Rawlinsons publication)
3.3	Drainage					
3.3.1	Supply and install 600 mm dia RRJ sediment pond transfer pipe incl excavation, 20% crushed rock back fill (SB1)	30	m	\$337	\$10,110	MW reimbursement rates for south east region (600mm RRJ 20% FCR backfill)
3.3.2	Supply and install submerged offtake pit	1	No.	\$6,710	\$6,710	
3.4	Access path					
3.4.1	Supply and install N32 grade concrete to form 4m wide sediment pond maintenance access ramp SB1	91	m2	\$61.90	\$5,633	MW reimbursement rates for south east region (concrete access track)
3.4.2	Supply and install D50=200mm with Class 2 FCR backfill to form 4m wide maintenance access around SB1	497	m2	\$33.10	\$16,451	MW reimbursement rates for south east region (crushed rock access track)
4	LANDSCAPING					
4.1	Re spread 200 mm topsoil for planting areas	995	m2	\$3.30	\$3,282	Allowance of 95% of topsoil stripped from site, 5% assumed as unsuitable for reuse MW reimbursement rates for south east region (Topsoiling (80% from stockpile and 20% imported))
4.2	Placement of 300 mm compacted clay liners for sedimentation basin and wetland (clay sourced onsite)	1,198	m2	\$8.00	\$9,584	MW reimbursement rates for south east region (clay lining)
4.3	Supply and install submerged marsh planting.	93	m2	\$14.50	\$1,349	MW reimbursement rates for south east region (Aquatic revegetation)
4.4	Supply and install shallow marsh planting (60cm3 tube, 2/m2).	285	m2	\$14.50	\$4,133	MW reimbursement rates for south east region (Aquatic revegetation)
4.5	Supply and install wet ephemeral planting (90cm3 tube, 6/m2).	246	m2	\$14.50	\$3,567	MW reimbursement rates for south east region (Aquatic revegetation)
4.6	Supply and install dry ephemeral planting (90cm3 tube, 6/m2).	2,047	m2	\$16.80	\$34,390	MW reimbursement rates for south east region (terrestrial revegetation)
4.7	Supply and install sediment drying area planting (virocell planting, 6/m2).	660	m2	\$16.80	\$11,088	MW reimbursement rates for south east region (terrestrial revegetation)
4.8	Supply and install heavy jute mat (800gsm) pre-slit at density 6/m2 to TED to 350mm below NWL as specified for all Wet Ephemeral Planting	531	m2	\$7	\$3,717	MW reimbursement rates for south east region (weed control matting)
4.9	Supply, install and maintain plant protection netting for a selected species in the aquatic zones.	1	No.	\$20,000	\$20,000	
5	MISCELLANEOUS					
5.1	Allowance for timber bollards	1	Item	\$3,000	\$3,000	
5.2	Allowance for seats	1	Item	\$35,000	\$35,000	
SUB-TOTAL WORKS					\$550,940	

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	COMMENTS
6	DELIVERY					
6.1	Council fees	3.25	%		\$17,906	
6.2	VicRoads fees	0	%		\$-	
6.3	Traffic management	2	%		\$11,019	
6.4	Environmental management	1	Item	\$50,000	\$50,000	
6.5	Erosion control management	0.5	%		\$2,755	
6.6	Survey & design	5	%		\$27,547	
6.7	Supervision & project management	4	%		\$22,038	
6.8	Site establishment	2.5	%		\$13,773	
6.9	Contingency	35	%		\$192,829	
	SUB-TOTAL DELIVERY				\$337,866	
7	TOTAL ESTIMATED COST				\$888,806	



LEGEND	
	MAINTENANCE ACCESS TRACK
	SEDIMENT DRY OUT AREA
	ROCK ARMOURING
	NWL
	TED
	MAJOR CONTOURS (1m)
	MINOR CONTOURS (0.2m)
	PSP BOUNDARY
	DRAINAGE RESERVE

REV	DESCRIPTION	APP'D	DATE
E	REVISED ISSUE - POST PANEL SAC RECOMMENDATIONS	DB	29.08.23
D	REVISED ISSUE	CC	22.04.22
C	REVISED ISSUE	CC	06.04.22
B	REVISED ISSUE	CC	05.11.21
A	PRELIMINARY ISSUE	CC	15.10.21

					Alluvium Consulting Australia Pty. Ltd. ABN 76 151 119 792 Lvl 1, 105-115 Dover Street Cremorne Vic 3121 T 61 3 9421 2532 www.alluvium.com.au	
DESIGNED: D.BRAND	DRAWN: D.BRAND	CHECKED: C.CARVALHO	APPROVED: S.CLEVEN	PROJECT No: 0121128	REVISION: E	SHEET No.: 23 of 55

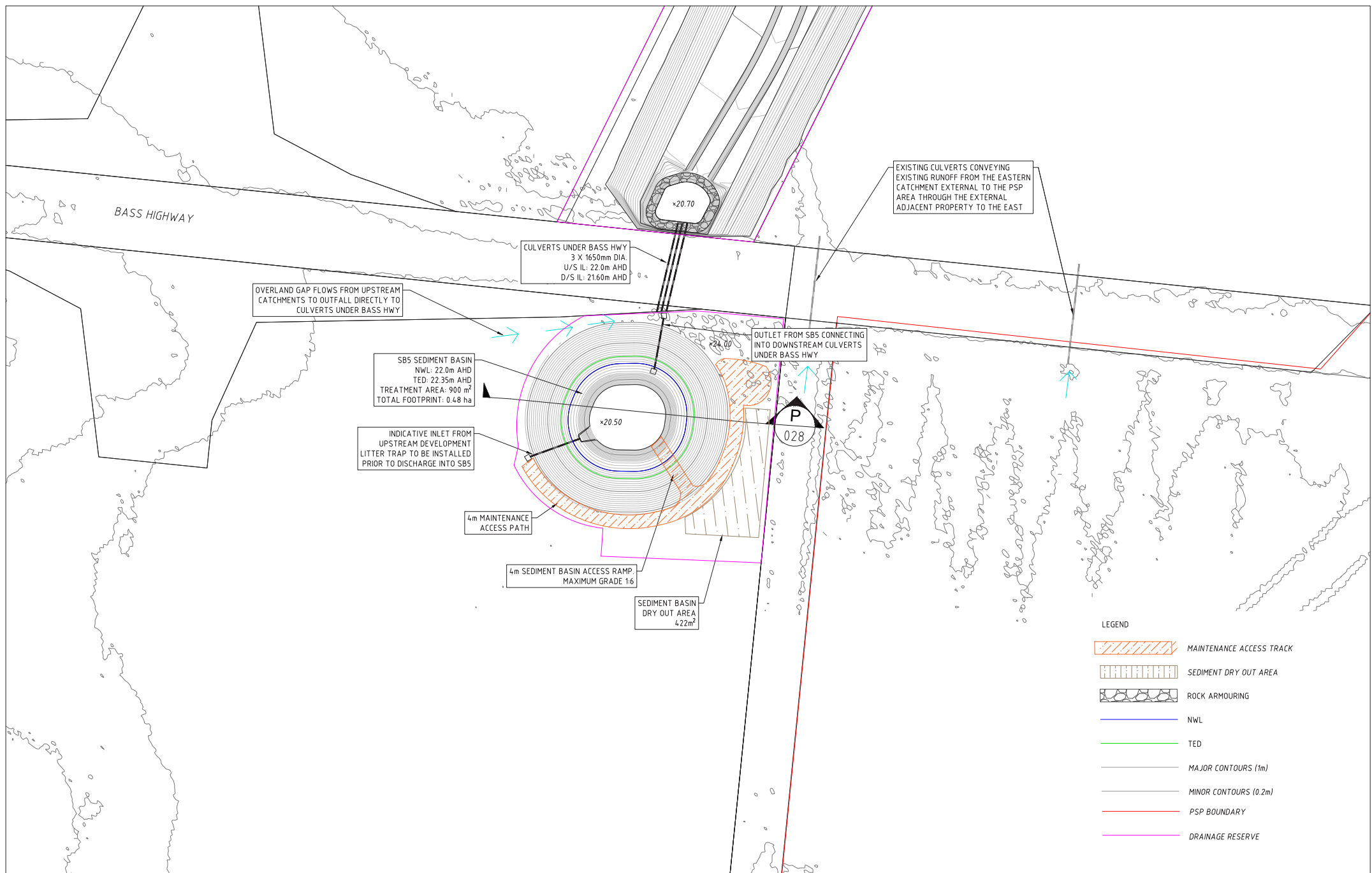
VICTORIAN PLANNING AUTHORITY
WONTHAGGI NORTH EAST PSP
FUNCTIONAL DESIGN DRAWINGS
SB4 DESIGN (DCP REF. SB-02)

ORIGINAL SIZE: A1	SCALE: 1500
DATUM: m AHD (MGA 255)	

Sedimentation basin 4 (SB4) DCP – SB-02

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	COMMENTS
1	SITE WORKS & EARTHWORKS					
1.1	Site preparation	1	Item	\$20,000	\$20,000	
1.2	Diversion works	1	Item	\$40,000	\$40,000	
1.3	Geotechnical investigation	1	Item	\$50,000	\$50,000	
1.4	Cultural Heritage Assessment	1	Item	\$50,000	\$50,000	
1.5	Flora and fauna study	1	Item	\$30,000	\$30,000	
1.6	Safety assessment	1	Item	\$20,000	\$20,000	
1.7	Stripping of topsoil	977	m3	\$1.30	\$1,270	MW reimbursement rates for south east region (stripping)
2	EARTHWORKS					MW reimbursement rates for south east region (earthworks rates)
2.1	Bulk excavation	8,138	m3	\$10.90	\$88,704	Excavation in broad greenfield land, excavated material to be reused on site for filling, allowance of 95% reuse on site for filling
2.2	Reuse of onsite cut for filling	7,731	m3	\$11.70	\$90,454	Assumed 95% of bulk excavation for reuse
2.3	Disposal of excess cut	407	m3	\$19.20	\$7,812	Assumed 5% of bulk excavation
3	DRAINAGE					
3.1	Rockwork					
3.1.1	Supply and install D50=400mm rock, 800 mm thick to form SB4 inlet	32	m3	\$197	\$6,304	MW reimbursement rates for south east region (rockwork rate)
3.2	Concrete					
3.2.1	Supply and install reinforced N32 grade concrete, 150 mm deep to form SB4 sedimentation basin base	106	Item	\$322	\$34,132	Reinforced concrete slab 150mm thick (Rawlinsons publication)
3.3	Drainage					
3.3.1	Supply and install 1350 mm dia RRJ sediment pond transfer pipe incl excavation, 20% crushed rock back fill (SB4)	120	m	\$1,005	\$120,600	MW reimbursement rates for south east region (1350mm RRJ 20% FCR backfill)
3.3.2	Supply and install submerged offtake pit	1	No.	\$6,710	\$6,710	
3.4	Access path					
3.4.1	Supply and install N32 grade concrete to form 4m wide sediment pond maintenance access ramp SB4	91	m2	\$61.90	\$5,633	MW reimbursement rates for south east region (concrete access track)
3.4.2	Supply and install D50=200mm with Class 2 FCR backfill to form 4m wide maintenance access around SB4	729	m2	\$33.10	\$24,130	MW reimbursement rates for south east region (crushed rock access track)
4	LANDSCAPING					
4.1	Re spread 200 mm topsoil for planting areas	928	m2	\$3.30	\$3,063	Allowance of 95% of topsoil stripped from site, 5% assumed as unsuitable for reuse MW reimbursement rates for south east region (Topsoiling (80% from stockpile and 20% imported))
4.2	Placement of 300 mm compacted clay liners for sedimentation basin and wetland (clay sourced onsite)	1,742	m2	\$8.00	\$13,936	MW reimbursement rates for south east region (clay lining)
4.3	Supply and install submerged marsh planting.	120	m2	\$14.50	\$1,740	MW reimbursement rates for south east region (Aquatic revegetation)
4.4	Supply and install shallow marsh planting (60cm3 tube, 2/m2).	355	m2	\$14.50	\$5,148	MW reimbursement rates for south east region (Aquatic revegetation)
4.5	Supply and install wet ephemeral planting (90cm3 tube, 6/m2).	313	m2	\$14.50	\$4,539	MW reimbursement rates for south east region (Aquatic revegetation)
4.6	Supply and install dry ephemeral planting (90cm3 tube, 6/m2).	2,414	m2	\$16.80	\$40,555	MW reimbursement rates for south east region (terrestrial revegetation)
4.7	Supply and install sediment drying area planting (virocell planting, 6/m2).	974	m2	\$16.80	\$16,363	MW reimbursement rates for south east region (terrestrial revegetation)
4.8	Supply and install heavy jute mat (800gsm) pre-slit at density 6/m2 to TED to 350mm below NWL as specified for all Wet Ephemeral Planting	668	m2	\$7	\$4,676	MW reimbursement rates for south east region (weed control matting)
4.9	Supply, install and maintain plant protection netting for a selected species in the aquatic zones.	1	No.	\$20,000	\$20,000	
5	MISCELLANEOUS					
5.1	Allowance for timber bollards	1	Item	\$3,000	\$3,000	
5.2	Allowance for seats	1	Item	\$35,000	\$35,000	
SUB-TOTAL WORKS					\$743,769	

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	COMMENTS
6	DELIVERY					
6.1	Council fees	3.25	%		\$24,172	
6.2	VicRoads fees	0	%		\$–	
6.3	Traffic management	2	%		\$14,875	
6.4	Environmental management	1	Item	\$50,000	\$50,000	
6.5	Erosion control management	0.5	%		\$3,719	
6.6	Survey & design	5	%		\$37,188	
6.7	Supervision & project management	4	%		\$29,751	
6.8	Site establishment	2.5	%		\$18,594	
6.9	Contingency	35	%		\$260,319	
	SUB-TOTAL DELIVERY				\$438,619	
7	TOTAL ESTIMATED COST				\$1,182,388	



REV	DESCRIPTION	APP'D	DATE
E	REVISED ISSUE - POST PANEL SAC RECOMMENDATIONS	DB	29.08.23
D	REVISED ISSUE	CC	22.04.22
C	REVISED ISSUE	CC	06.04.22
B	REVISED ISSUE	CC	05.11.21
A	PRELIMINARY ISSUE	CC	15.10.21



Alluvium Consulting Australia
Pty. Ltd.
ABN 76 151 119 792
Lvl 1, 105-115 Dover Street
Cremorne Vic 3121
T 61 3 9421 2532
www.alluvium.com.au

DESIGNED: D.BRAND	DRAWN: D.BRAND	CHECKED: C.CARVALHO	APPROVED: S.CLEVEN	PROJECT No: 0121128
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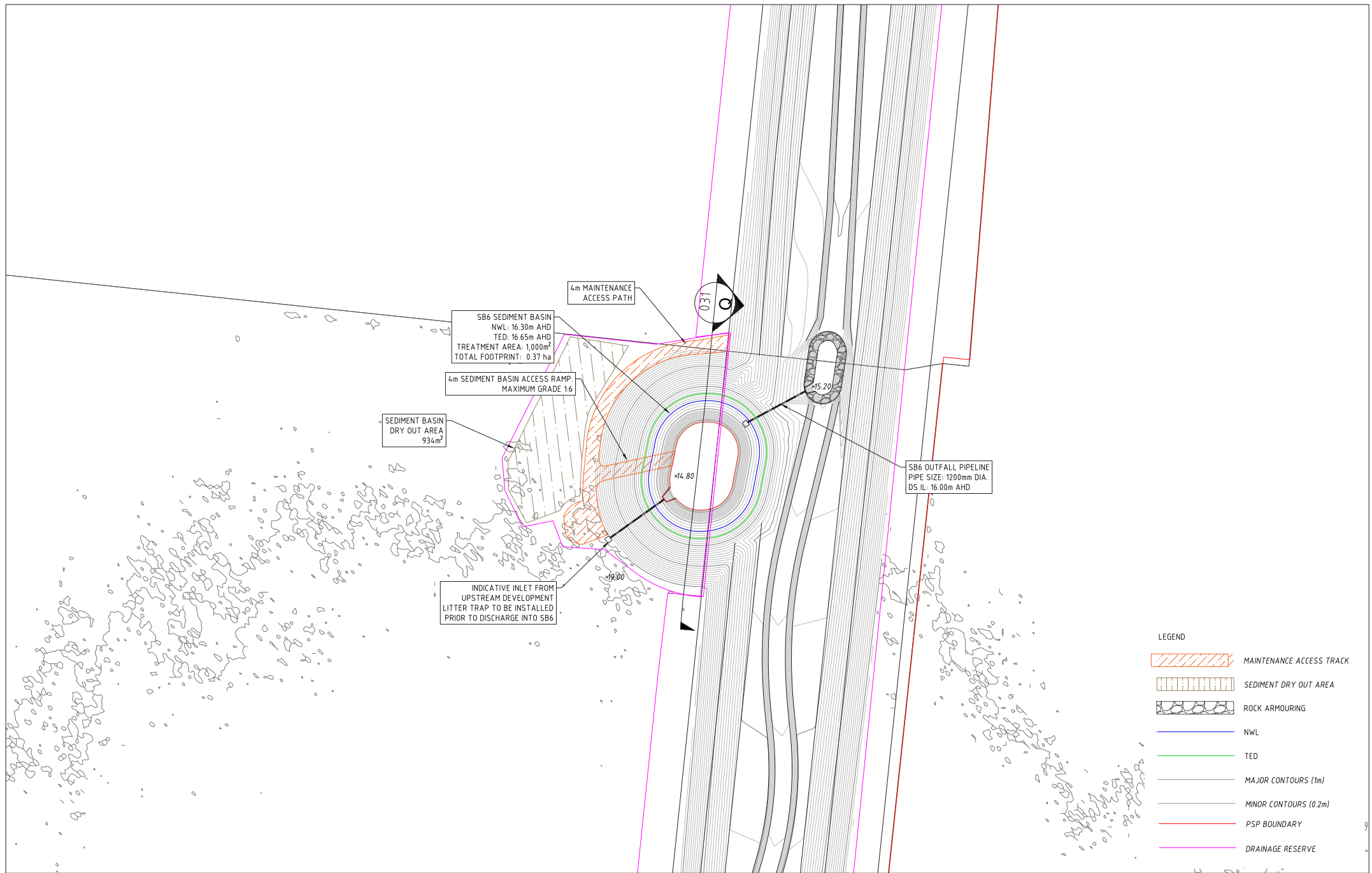
VICTORIAN PLANNING AUTHORITY
WONTHAGGI NORTH EAST PSP
FUNCTIONAL DESIGN DRAWINGS
SB5 DESIGN (DCP REF. SB-03)

REVISION: E	SHEET No.: 26 of 55	ORIGINAL SIZE: A1 DATUM: m AHD (MGA z55)	SCALE: 1:500 0 10 20 30m
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Sedimentation basin 5 (SB5) DCP – SB-03

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	COMMENTS
1	SITE WORKS & EARTHWORKS					
1.1	Site preparation	1	Item	\$20,000	\$20,000	
1.2	Diversion works	1	Item	\$40,000	\$40,000	
1.3	Geotechnical investigation	1	Item	\$50,000	\$50,000	
1.4	Cultural Heritage Assessment	1	Item	\$50,000	\$50,000	
1.5	Flora and fauna study	1	Item	\$30,000	\$30,000	
1.6	Safety assessment	1	Item	\$20,000	\$20,000	
1.7	Stripping of topsoil	976	m3	\$1.30	\$1,269	MW reimbursement rates for south east region (stripping)
2	EARTHWORKS					MW reimbursement rates for south east region (earthworks rates)
2.1	Bulk excavation	5,814	m3	\$10.90	\$63,373	Excavation in broad greenfield land, excavated material to be reused on site for filling, allowance of 95% reuse on site for filling
2.2	Reuse of onsite cut for filling	5,523	m3	\$11.70	\$64,623	Assumed 95% of bulk excavation for reuse
2.3	Disposal of excess cut	291	m3	\$19.20	\$5,581	Assumed 5% of bulk excavation
3	DRAINAGE					
3.1	Rockwork					
3.1.1	Supply and install D50=400mm rock, 800 mm thick to form SB5 inlet	17	m3	\$197	\$3,349	MW reimbursement rates for south east region (rockwork rate)
3.2	Concrete					
3.2.1	Supply and install reinforced N32 grade concrete, 150 mm deep to form SB5 sedimentation basin base	53	m3	\$322	\$17,066	Reinforced concrete slab 150mm thick (Rawlinsons publication)
3.3	Drainage					
3.3.1	Supply and install 1350 mm dia RRJ sediment pond transfer pipe incl excavation, 20% crushed rock back fill (SB5)	20	m	\$1,005	\$20,100	MW reimbursement rates for south east region (1350mm RRJ 20% FCR backfill)
3.3.2	Supply and install submerged offtake pit	1	No.	\$6,710	\$6,710	
3.4	Access path					
3.4.1	Supply and install N32 grade concrete to form 4m wide sediment pond maintenance access ramp SB5	91	m2	\$61.90	\$5,633	MW reimbursement rates for south east region (concrete access track)
3.4.2	Supply and install D50=200mm with Class 2 FCR backfill to form 4m wide maintenance access around SB5	515	m2	\$33.10	\$17,047	MW reimbursement rates for south east region (crushed rock access track)
4	LANDSCAPING					
4.1	Re spread 200 mm topsoil for planting areas	927	m2	\$3.30	\$3,060	Allowance of 95% of topsoil stripped from site, 5% assumed as unsuitable for reuse MW reimbursement rates for south east region (Topsoiling (80% from stockpile and 20% imported))
4.2	Placement of 300 mm compacted clay liners for sedimentation basin and wetland (clay sourced onsite)	1,138	m2	\$8.00	\$9,104	MW reimbursement rates for south east region (clay lining)
4.3	Supply and install submerged marsh planting.	90	m2	\$14.50	\$1,305	MW reimbursement rates for south east region (Aquatic revegetation)
4.4	Supply and install shallow marsh planting (60cm3 tube, 2/m2).	274	m2	\$14.50	\$3,973	MW reimbursement rates for south east region (Aquatic revegetation)
4.5	Supply and install wet ephemeral planting (90cm3 tube, 6/m2).	239	m2	\$14.50	\$3,466	MW reimbursement rates for south east region (Aquatic revegetation)
4.6	Supply and install dry ephemeral planting (90cm3 tube, 6/m2).	1,604	m2	\$16.80	\$26,947	MW reimbursement rates for south east region (terrestrial revegetation)
4.7	Supply and install sediment drying area planting (virocell planting, 6/m2).	771	m2	\$16.80	\$12,953	MW reimbursement rates for south east region (terrestrial revegetation)
4.8	Supply and install heavy jute mat (800gsm) pre-slit at density 6/m2 to TED to 350mm below NWL as specified for all Wet Ephemeral Planting	513	m2	\$7	\$3,591	MW reimbursement rates for south east region (weed control matting)
4.9	Supply, install and maintain plant protection netting for a selected species in the aquatic zones.	1	No.	\$20,000	\$20,000	
5	MISCELLANEOUS					
5.1	Allowance for timber bollards	1	Item	\$3,000	\$3,000	
5.2	Allowance for seats	1	Item	\$35,000	\$35,000	
SUB-TOTAL WORKS					\$537,148	

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	COMMENTS
6	DELIVERY					
6.1	Council fees	3.25	%		\$17,457	
6.2	VicRoads fees	0	%		\$-	
6.3	Traffic management	2	%		\$10,743	
6.4	Environmental management	1	Item	\$50,000	\$50,000	
6.5	Erosion control management	0.5	%		\$2,686	
6.6	Survey & design	5	%		\$26,857	
6.7	Supervision & project management	4	%		\$21,486	
6.8	Site establishment	2.5	%		\$13,429	
6.9	Contingency	35	%		\$188,002	
	SUB-TOTAL DELIVERY				\$330,660	
7	TOTAL ESTIMATED COST				\$867,808	



REV	DESCRIPTION	APP'D	DATE
A	PRELIMINARY ISSUE	CC	15.10.21
B	REVISED ISSUE	CC	05.11.21
C	REVISED ISSUE	CC	06.04.22
D	REVISED ISSUE	CC	22.04.22
E	REVISED ISSUE - POST PANEL SAC RECOMMENDATIONS	DB	29.08.23

alluvium

Alluvium Consulting Australia Pty. Ltd.
ABN 76 151 119 792
Lvl 1, 105-115 Dover Street
Cremorne Vic 3121
T 61 3 9421 2532
www.alluvium.com.au

DESIGNED: D.BRAND	DRAWN: D.BRAND	CHECKED: C.CARVALHO	APPROVED: S.CLEVEN	PROJECT No: 0121128
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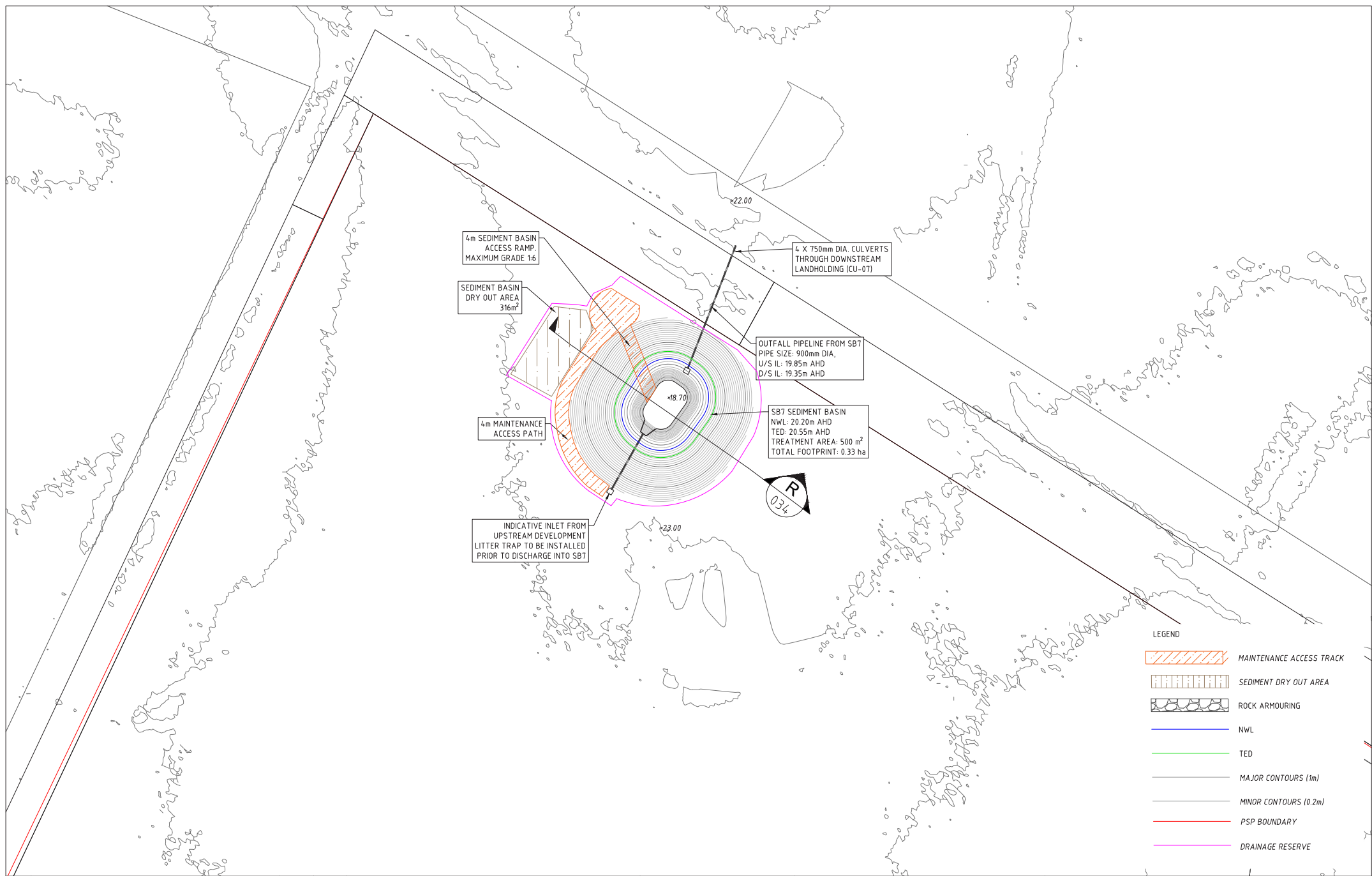
VICTORIAN PLANNING AUTHORITY
WONTHAGGI NORTH EAST PSP
FUNCTIONAL DESIGN DRAWINGS
SB6 DESIGN (DCP REF. SB-04)

REVISION: E	SHEET No.: 29 of 55	ORIGINAL SIZE: A1 DATUM: m AHD (MGA 255)	SCALE: 1500 0 10 20 30m 5
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Sedimentation basin 6 (SB6) DCP – SB-04

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	COMMENTS
1	SITE WORKS & EARTHWORKS					
1.1	Site preparation	1	Item	\$20,000	\$20,000	
1.2	Diversion works	1	Item	\$40,000	\$40,000	
1.3	Geotechnical investigation	1	Item	\$50,000	\$50,000	
1.4	Cultural Heritage Assessment	1	Item	\$50,000	\$50,000	
1.5	Flora and fauna study	1	Item	\$30,000	\$30,000	
1.6	Safety assessment	1	Item	\$20,000	\$20,000	
1.7	Stripping of topsoil	597	m3	\$1.30	\$776	MW reimbursement rates for south east region (stripping)
2	EARTHWORKS					MW reimbursement rates for south east region (earthworks rates)
2.1	Bulk excavation	2,720	m3	\$10.90	\$29,648	Excavation in broad greenfield land, excavated material to be reused on site for filling, allowance of 95% reuse on site for filling
2.2	Reuse of onsite cut for filling	2,584	m3	\$11.70	\$30,233	Assumed 95% of bulk excavation for reuse
2.3	Disposal of excess cut	136	m3	\$19.20	\$2,611	Assumed 5% of bulk excavation
3	DRAINAGE					
3.1	Rockwork					
3.1.1	Supply and install D50=400mm rock, 800 mm thick to form SB6 inlet	29	m3	\$197	\$5,713	MW reimbursement rates for south east region (rockwork rate)
3.2	Concrete					
3.2.1	Supply and install reinforced N32 grade concrete, 150 mm deep to form SB6 sedimentation basin base	63	m3	\$322	\$20,286	Reinforced concrete slab 150mm thick (Rawlinsons publication)
3.3	Drainage					
3.3.1	Supply and install 1200 mm dia RRJ sediment pond transfer pipe incl excavation, 20% crushed rock back fill (SB6)	9	m	\$844	\$7,596	MW reimbursement rates for south east region (1200mm RRJ 20% FCR backfill)
3.3.2	Supply and install submerged offtake pit	1	No.	\$6,710	\$6,710	
3.4	Access path					
3.4.1	Supply and install N32 grade concrete to form 4m wide sediment pond maintenance access ramp SB6	91	m2	\$61.90	\$5,633	MW reimbursement rates for south east region (concrete access track)
3.4.2	Supply and install D50=200mm with Class 2 FCR backfill to form 4m wide maintenance access around SB6	411	m2	\$33.10	\$13,604	MW reimbursement rates for south east region (crushed rock access track)
4	LANDSCAPING					
4.1	Re spread 200 mm topsoil for planting areas	567	m2	\$3.30	\$1,872	Allowance of 95% of topsoil stripped from site, 5% assumed as unsuitable for reuse MW reimbursement rates for south east region (Topsoiling (80% from stockpile and 20% imported))
4.2	Placement of 300 mm compacted clay liners for sedimentation basin and wetland (clay sourced onsite)	1,257	m2	\$8.00	\$10,056	MW reimbursement rates for south east region (clay lining)
4.3	Supply and install submerged marsh planting.	97	m2	\$14.50	\$1,407	MW reimbursement rates for south east region (Aquatic revegetation)
4.4	Supply and install shallow marsh planting (60cm3 tube, 2/m2).	293	m2	\$14.50	\$4,249	MW reimbursement rates for south east region (Aquatic revegetation)
4.5	Supply and install wet ephemeral planting (90cm3 tube, 6/m2).	252	m2	\$14.50	\$3,654	MW reimbursement rates for south east region (Aquatic revegetation)
4.6	Supply and install dry ephemeral planting (90cm3 tube, 6/m2).	1,280	m2	\$16.80	\$21,504	MW reimbursement rates for south east region (terrestrial revegetation)
4.7	Supply and install sediment drying area planting (virocell planting, 6/m2).	736	m2	\$16.80	\$12,365	MW reimbursement rates for south east region (terrestrial revegetation)
4.8	Supply and install heavy jute mat (800gsm) pre-slit at density 6/m2 to TED to 350mm below NWL as specified for all Wet Ephemeral Planting	545	m2	\$7.00	\$3,815	MW reimbursement rates for south east region (weed control matting)
4.9	Supply, install and maintain plant protection netting for a selected species in the aquatic zones.	1	No.	\$20,000	\$20,000	
5	MISCELLANEOUS					
5.1	Allowance for timber bollards	1	Item	\$3,000	\$3,000	
5.2	Allowance for seats	1	Item	\$35,000	\$35,000	
SUB-TOTAL WORKS					\$449,730	

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	COMMENTS
6	DELIVERY					
6.1	Council fees	3.25	%		\$14,616	
6.2	VicRoads fees	0	%		\$-	
6.3	Traffic management	2	%		\$8,995	
6.4	Environmental management	1	Item	\$50,000	\$50,000	
6.5	Erosion control management	0.5	%		\$2,249	
6.6	Survey & design	5	%		\$22,487	
6.7	Supervision & project management	4	%		\$17,989	
6.8	Site establishment	2.5	%		\$11,243	
6.9	Contingency	35	%		\$157,406	
	SUB-TOTAL DELIVERY				\$284,984	
7	TOTAL ESTIMATED COST				\$734,715	



REV	DESCRIPTION	APP'D	DATE
E	REVISED ISSUE - POST PANEL SAC RECOMMENDATIONS	DB	29.08.23
D	REVISED ISSUE	CC	22.04.22
C	REVISED ISSUE	CC	06.04.22
B	REVISED ISSUE	CC	05.11.21
A	PRELIMINARY ISSUE	CC	15.10.21



Alluvium Consulting Australia
Pty. Ltd.
ABN 76 151 119 792
Lvl 1, 105-115 Dover Street
Cremorne Vic 3121
T 61 3 9421 2532
www.alluvium.com.au

DESIGNED: D.BRAND	DRAWN: D.BRAND	CHECKED: C.CARVALHO	APPROVED: S.CLEVEN	PROJECT No: 0121128
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VICTORIAN PLANNING AUTHORITY
WONTHAGGI NORTH EAST PSP
FUNCTIONAL DESIGN DRAWINGS
SB7 DESIGN (DCP REF. SB-05)

REVISION: E	SHEET No.: 32 of 55	ORIGINAL SIZE: A1 DATUM: m AHD (MGA 255)	SCALE: 1500 0 10 20 30m
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Sedimentation basin 7 (SB7) DCP – SB-05

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	COMMENTS
1	SITE WORKS & EARTHWORKS					
1.1	Site preparation	1	Item	\$20,000	\$20,000	
1.2	Diversion works	1	Item	\$40,000	\$40,000	
1.3	Geotechnical investigation	1	Item	\$50,000	\$50,000	
1.4	Cultural Heritage Assessment	1	Item	\$50,000	\$50,000	
1.5	Flora and fauna study	1	Item	\$30,000	\$30,000	
1.6	Safety assessment	1	Item	\$20,000	\$20,000	
1.7	Stripping of topsoil	652	m3	\$1.30	\$848	MW reimbursement rates for south east region (stripping)
2	EARTHWORKS					MW reimbursement rates for south east region (earthworks rates)
2.1	Bulk excavation	3,178	m3	\$10.90	\$34,640	Excavation in broad greenfield land, excavated material to be reused on site for filling, allowance of 95% reuse on site for filling
2.2	Reuse of onsite cut for filling	3,019	m3	\$11.70	\$35,323	Assumed 95% of bulk excavation for reuse
2.3	Disposal of excess cut	159	m3	\$19.20	\$3,051	Assumed 5% of bulk excavation
3	DRAINAGE					
3.1	Rockwork					
3.1.1	Supply and install D50=400mm rock, 800 mm thick to form SB7 inlet	28	m3	\$197	\$5,516	MW reimbursement rates for south east region (rockwork rate)
3.2	Concrete					
3.2.1	Supply and install reinforced N32 grade concrete, 150 mm deep to form SB7 sedimentation basin base	19	m3	\$322	\$6,118	Reinforced concrete slab 150mm thick (Rawlinsons publication)
3.3	Drainage					
3.3.1	Supply and install 900 mm dia RRJ sediment pond transfer pipe incl excavation, 20% crushed rock back fill (SB7)	110	m	\$561	\$61,710	MW reimbursement rates for south east region (900mm RRJ 20% FCR backfill)
3.3.2	Supply and install submerged offtake pit	1	No.	\$6,710	\$6,710	
3.4	Access path					
3.4.1	Supply and install N32 grade concrete to form 4m wide sediment pond maintenance access ramp SB7	86	m2	\$61.90	\$5,323	MW reimbursement rates for south east region (concrete access track)
3.4.2	Supply and install D50=200mm with Class 2 FCR backfill to form 4m wide maintenance access around SB7	358	m2	\$33.10	\$11,850	MW reimbursement rates for south east region (crushed rock access track)
4	LANDSCAPING					
4.1	Re spread 200 mm topsoil for planting areas	619	m2	\$3.30	\$2,044	Allowance of 95% of topsoil stripped from site, 5% assumed as unsuitable for reuse MW reimbursement rates for south east region (Topsoiling (80% from stockpile and 20% imported))
4.2	Placement of 300 mm compacted clay liners for sedimentation basin and wetland (clay sourced onsite)	701	m2	\$8.00	\$5,608	MW reimbursement rates for south east region (clay lining)
4.3	Supply and install submerged marsh planting.	66	m2	\$14.50	\$957	MW reimbursement rates for south east region (Aquatic revegetation)
4.4	Supply and install shallow marsh planting (60cm3 tube, 2/m2).	202	m2	\$14.50	\$2,929	MW reimbursement rates for south east region (Aquatic revegetation)
4.5	Supply and install wet ephemeral planting (90cm3 tube, 6/m2).	193	m2	\$14.50	\$2,799	MW reimbursement rates for south east region (Aquatic revegetation)
4.6	Supply and install dry ephemeral planting (90cm3 tube, 6/m2).	1,523	m2	\$16.80	\$25,586	MW reimbursement rates for south east region (terrestrial revegetation)
4.7	Supply and install sediment drying area planting (virocell planting, 6/m2).	314	m2	\$16.80	\$5,275	MW reimbursement rates for south east region (terrestrial revegetation)
4.8	Supply and install heavy jute mat (800gsm) pre-slit at density 6/m2 to TED to 350mm below NWL as specified for all Wet Ephemeral Planting	395	m2	\$7	\$2,765	MW reimbursement rates for south east region (weed control matting)
4.9	Supply, install and maintain plant protection netting for a selected species in the aquatic zones.	1	No.	\$20,000	\$20,000	
5	MISCELLANEOUS					
5.1	Allowance for timber bollards	1	Item	\$3,000	\$3,000	
5.2	Allowance for seats	1	Item	\$35,000	\$35,000	
SUB-TOTAL WORKS					\$487,052	

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	COMMENTS
6	DELIVERY					
6.1	Council fees	3.25	%		\$15,829	
6.2	VicRoads fees	0	%		\$-	
6.3	Traffic management	2	%		\$9,741	
6.4	Environmental management	1	Item	\$50,000	\$50,000	
6.5	Erosion control management	0.5	%		\$2,435	
6.6	Survey & design	5	%		\$24,353	
6.7	Supervision & project management	4	%		\$19,482	
6.8	Site establishment	2.5	%		\$12,176	
6.9	Contingency	35	%		\$170,468	
	SUB-TOTAL DELIVERY				\$304,485	
7	TOTAL ESTIMATED COST				\$791,537	

Culverts

Culvert ID	Culvert size	No. of cells	Length (m)	Cost rate (\$/m)	Culvert cost (\$)	Base slab rate (\$/m)	Base slab cost (\$)	Link slab rate (\$/m)	Link slab cost (\$)	Headwall & endwall volume (m3)	Headwall & endwall cost rate (\$/m3)	Headwall & endwall cost (\$)	Traffic management cost (\$)	Total cost (\$)	Total cost (plus contingency) (\$)
CU-01	1500	4	30	\$1,583	\$189,960	\$–	\$–	\$–	\$–	19.84	\$3,037	\$60,254	\$11,680	\$261,894	\$353,557
CU-02	1650	3	30	\$1,840	\$165,600	\$–	\$–	\$–	\$–	25.80	\$3,037	\$78,355	\$11,680	\$255,635	\$345,107
CU-03	Costed by VPA	–	–	\$–	\$–	\$–	\$–	\$–	\$–	–	\$–	\$–	\$–	\$216,525	\$292,309
CU-04a	300×300	2	45	\$205	\$18,450	\$110	\$9,900	\$–	\$–	1.44	\$3,037	\$4,373	\$11,680	\$44,403	\$59,944
CU-04b	600×1200	1	50	\$837	\$41,850	\$250	\$12,500	\$–	\$–	2.74	\$3,037	\$8,321	\$11,680	\$74,351	\$100,374
CU-05	1650	1	45	\$1,840	\$82,800	\$–	\$–	\$–	\$–	8.60	\$3,037	\$26,118	\$11,680	\$120,598	\$162,808
CU-06	1200×600	3	45	\$837	\$112,995	\$618	\$83,430	\$618	\$27,810	8.22	\$3,037	\$24,964	\$11,680	\$260,879	\$352,187
CU-07	750	4	50	\$586	\$117,200	\$–	\$–	\$–	\$–	6.96	\$3,037	\$21,138	\$11,680	\$150,018	\$202,524
CU-08	Costed by Cardno	–	–	\$–	\$–	\$–	\$–	\$–	\$–	–	\$3,037	\$–	\$–	\$–	\$225,967
CU-09	Costed by Cardno	–	–	\$–	\$–	\$–	\$–	\$–	\$–	–	\$3,037	\$–	\$–	\$–	\$114,026
CU-10	Costed by Cardno	–	–	\$–	\$–	\$–	\$–	\$–	\$–	–	\$3,037	\$–	\$–	\$–	\$554,320
CU-11	1200×1200	3	50	\$1,063	\$106,300	\$618	\$92,700	\$618	\$30,900	9.18	\$3,037	\$27,880	\$11,680	\$269,460	\$363,771
TOTAL															\$3,112,749

CULVERTS

****Note - Input values only in the blue cells**

SCHEME NAME: Wonthaggi East

SCHEME NO: 0

COUNCIL: Bass Coast Shire

REGION: South East Region

CAUTION - Please be aware that VicRoads do not allow open cut in their roads - use Pipe Culverts instead of Box Culverts unless there are design constraints that necessitate the use of Box Culverts.

FOR BOX CULVERT ONLY (USE OTHER TABLE BELOW FOR PIPE CULVERT)

Location	Description	Quantity		Unit	Unit Rate	Estimated Basic Cost
		Equiv. No.	Dimension			\$
Heslop Road (41-42 downstream of WL3) CU-10						
	Design ARI	100				
	Design Flow (m ³ /s)	3.03				
	Supply - Crown Units	1200 x 450	2	40	m	\$ 622
	Supply - Base Slab		3	40	m	\$ 505
	Supply - Link Slab		1	40	m	\$ 505
	Installation (Laying)		3	40	m	\$ 1,632
	Headwalls & Endwalls		6	1.31	m ³	\$ 2,676
	Installation (Road, Rail factors)	Major Council Roads				\$ 65,606
	Allowance for Service Alterations	No	Factor		1.00	\$ -
	Traffic management		item			\$ 10,290
Subtotal						\$315,537
Subtotal (incl.35% contingency)						\$426,000
CU-05 (23-23A)						
	Design ARI	100				
	Design Flow (m ³ /s)					
	Supply - Crown Units	3600 X 1500	3	22	m	\$ 3,436
	Supply - Base Slab		4	22	m	\$ 2,080
	Supply - Link Slab		1	22	m	\$ 2,080
	Installation (Laying)		4	22	m	\$ 7,596
	Headwalls & Endwalls		8	12.06	m ³	\$ 2,676
	Installation (Road, Rail factors)	Greenfields				\$ -
	Allowance for Service Alterations	No	Factor		1.00	\$ -
	Traffic management		item			\$ -
Subtotal						\$934,344
Subtotal (incl.35% contingency)						\$1,261,000
CU-06 (23B-23C)						
	Design ARI	100				
	Design Flow (m ³ /s)					
	Supply - Crown Units	3600 X 1500	3	27	m	\$ 3,436
	Supply - Base Slab		4	27	m	\$ 2,080
	Supply - Link Slab		1	27	m	\$ 2,080
	Installation (Laying)		4	27	m	\$ 7,596
	Headwalls & Endwalls		8	12.06	m ³	\$ 2,676
	Installation (Road, Rail factors)	Greenfields				\$ -
	Allowance for Service Alterations	No	Factor		1.00	\$ -
	Traffic management		item			\$ -
Subtotal						\$1,088,018
Subtotal (incl.35% contingency)						\$1,469,000

CULVERTS

CU-07 (24)								
	Design ARI	100						
	Design Flow (m³/s)							
	Supply - Crown Units	3600 X 1500	3	32	m	\$ 3,436	\$ 329,856	
	Supply - Base Slab		4	32	m	\$ 2,080	\$ 266,240	
	Supply - Link Slab		1	32	m	\$ 2,080	\$ 66,560	
	Installation (Laying)		4	32	m	\$ 7,596	\$ 320,855	
	Headwalls & Endwalls		8	12.06	m³	\$ 2,676	\$ 258,180	
	Installation (Road, Rail factors)	Greenfields					\$ -	
	Allowance for Service Alterations	No	Factor			1.00	\$ -	
Traffic management		item				\$ -		
							Subtotal	\$1,241,692
							Subtotal (incl.35% contingency)	\$1,676,000
Korumburra-Wonthaggi Road (23B-23C) CU-08								
	Design ARI	100						
	Design Flow (m³/s)							
	Supply - Crown Units	1200 X 900	3	16	m	\$ 777	\$ 37,296	
	Supply - Base Slab		4	16	m	\$ 505	\$ 32,320	
	Supply - Link Slab		1	16	m	\$ 505	\$ 8,080	
	Installation (Laying)		4	16	m	\$ 1,787	\$ 37,741	
	Headwalls & Endwalls		8	1.45	m³	\$ 2,676	\$ 31,042	
	Installation (Road, Rail factors)	VicRoads Roads - Box Culvert					\$ 427,119	
	Allowance for Service Alterations	No	Factor			1.00	\$ -	
Traffic management		item				\$ 51,470		
							Subtotal	\$625,068
							Subtotal (incl.35% contingency)	\$844,000

CULVERTS

Bass Coast Highway (Location 18-19) CU-02							
	Design ARI	100					
	Design Flow (m³/s)	13.9					
	Pipe diameter (mm)	1500					
	Installation (Laying)	RRJ-100% FCR	4	32	m	\$ 1,779	\$227,712.00
	Headwalls & Endwalls		8	2.48	m³	\$ 2,676	\$53,091.84
	Installation (Road, Rail factors)	VicRoads Roads - Pipe					\$842,534.40
	Allowance for Service Alterations	No	Factor			1.00	\$0.00
	Traffic management		item				\$0.00
	Minor regrading of channel d/s of culverts					item	
Subtotal							\$1,123,338
Subtotal (incl.35% contingency)							\$1,517,000

McGibbonys Rd (Location 21-22) CU-04							
	Design ARI	100					
	Design Flow (m³/s)	18.32					
	Pipe diameter (mm)	1650					
	Installation (Laying)	RRJ-100% FCR	4	48	m	\$ 2,127	\$408,384.00
	Headwalls & Endwalls		8	4.3	m³	\$ 2,676	\$92,054.40
	Installation (Road, Rail factors)	Major Council Roads					\$122,515.20
	Allowance for Service Alterations	Yes	Factor			1.25	\$102,096.00
	Traffic management		item				\$10,290.00
	Minor regrading of channel d/s of culverts					item	
						Subtotal	\$735,340
						Subtotal (incl. 35% contingency)	\$993,000

Bass Coast Highway (2-3) CU-03							
	Design ARI	100					
	Design Flow (m³/s)	13.3					
	Pipe diameter (mm)	1500					
	Installation (Laying)	RRJ-100% FCR	3	20	m	\$ 1,779	\$106,740.00
	Headwalls & Endwalls		6	2.48	m³	\$ 2,676	\$39,818.88
	Installation (Road, Rail factors)	VicRoads Roads - Pipe					\$394,938.00
	Allowance for Service Alterations	No	Factor			1.00	\$0.00
	Traffic management		item				\$0.00
	Minor regrading of channel d/s of culverts					item	
Subtotal							\$541,497
Subtotal (incl.35% contingency)							\$731,000

CULVERTS

Heslops Road (Location 49-50 downstream of WL4)							
	Design ARI	>5yr					
	Design Flow (m³/s)	2.0					
	Pipe diameter (mm)	1050					
	Installation (Laying)	RRJ-100% FCR	1	65	m	\$ 955	\$62,075.00
	Headwalls & Endwalls		2	1.52	m³	\$ 2,676	\$8,135.04
	Installation (Road, Rail factors)	Major Council Roads					\$18,622.50
	Allowance for Service Alterations	Yes	Factor			1.25	\$15,518.75
	Traffic management		item				\$10,290.00
	Minor regrading of channel d/s of culverts					item	
						Subtotal	\$114,641
Subtotal (incl. 35% contingency)							\$155,000

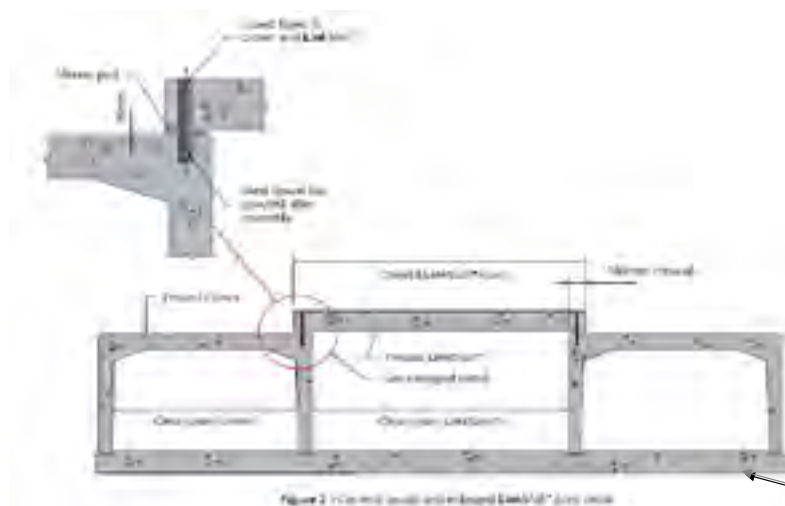
Heslops Road (Location 45-46) downstream of SB12							
	Design ARI	100					
	Design Flow (m ³ /s)	3.14					
	Pipe diameter (mm)	750					
	Installation (Laying)	RRJ-100% FCR	4	20	m	\$ 528	\$42,240.00
	Headwalls & Endwalls		8	0.87	m ³	\$ 2,676	\$18,624.96
	Installation (Road, Rail factors)	Major Council Roads					\$12,672.00
	Allowance for Service Alterations	Yes	Factor			1.25	\$10,560.00
	Traffic management		item				\$10,290.00
	Minor regrading of channel d/s of culverts					item	
Subtotal						\$94,387	
Subtotal (incl. 35% contingency)						\$127,000	

CULVERTS

Total Estimated Basic Cost **\$6,973,268**
\$9,414,000

NOTES:

BOX CULVERT (Multiple Cells)



Base Slab



**WONTHAGGI NORTH EAST
DEVELOPMENT CONTRIBUTIONS PLAN**

JANUARY 2024