Leneva & Baranduda

Development Contributions Plan

October 2018
Amended December 2023

CITY OF WODONGA VIC

Victorian Planning Authority

VICTORIA State Government

Contents

Amended by VC249

Plans

Tables

Version	Date	Incorporated into the planning scheme by amendment	Description of changes
1	October 2018		Gazettal
2	December 2023	VC249	Incorporate changes associated with small second dwelling exemption

Table 1 Summary of charges

SUMMARY - NET DEVELOPABLE AREA (NDA) BY CHARGE AREA		
CHARGE AREA	TOTAL COST OF CONTRIBUTION	CONTRIBUTION PER NET DEVELOPABLE HECTARE (NDHA)
Residential	$119,553,565	$217,822

SUMMARY - DEVELOPMENT INFRASTRUCTURE LEVY		
PROJECTS	TOTAL COST OF PROJECTS	CONTRIBUTION PER NET DEVELOPABLE HECTARE (NDHA)
Transport	$55,161,604	$100,503
Recreation	$22,761,820	$41,471
Community	$13,866,842	$25,265
Drainage	$27,763,299	$50,584
Total	$119,553,565	$217,822

SUMMARY - BREAKDOWN OF DEVELOPMENT INFRASTRUCTURE LEVY		
PROJECTS	TOTAL COST OF PROJECTS	CONTRIBUTION PER NET DEVELOPABLE HECTARE (NDHA)
Land	$6,734,511	$12,270
Construction	$112,819,054	$205,552
Total	$119,553,565	$217,822

SUMMARY - COMMUNITY INFRASTRUCTURE LEVY		
	ESTIMATED DWELLINGS	ESTIMATED TOTAL CONTRIBUTION
Capped at $1,150 per dwelling	6,037	$6,943,054

The above table provides an overview of the project categories and charges included within this Development Contributions Plan (DCP). A more detailed explanation of apportionment, methods of calculation, and the description and costs of individual projects is included within the document.

1.0 INTRODUCTION

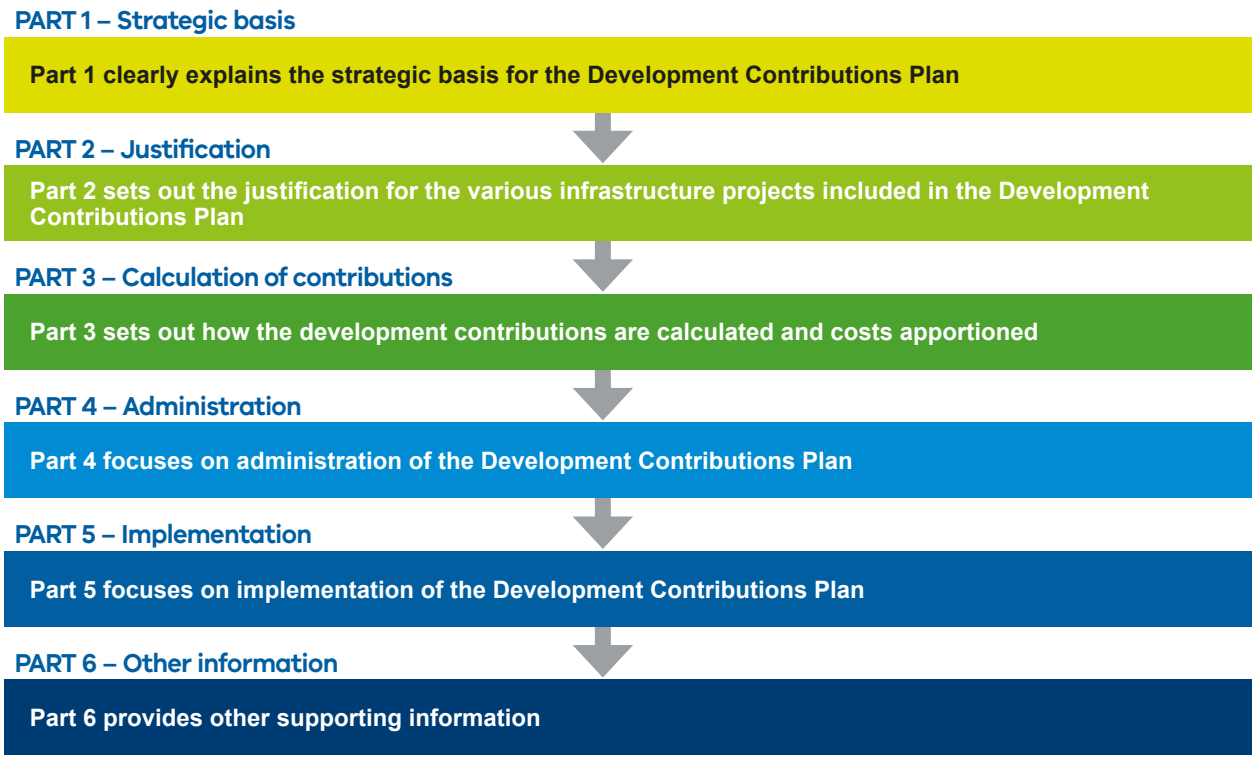
The Leneva–Baranduda DCP has been prepared by the City of Wodonga and the Victorian Planning Authority.

The DCP:

- Outlines projects required to ensure that future residents, visitors and workers in the area 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 the identified infrastructure projects.;
- Ensures that the cost of providing new infrastructure and services is shared equitably between various development proponents and the wider community; and
- Provides the details of the calculation of financial contributions that must be made by future developments towards the nominated projects. In this way, it provides developers, investors and local communities with certainty about development contributions requirements and how these will be administered.

1.1 Report structure

The DCP comprises six parts:



1.2 Strategic basis

The strategic basis for the DCP is established by the State and Local Planning Policy Framework and of the Wodonga Planning Scheme and the following documents:

- Plan Melbourne and Plan Melbourne Refresh;
- Hume Regional Growth Plan;
- Wodonga Growth Strategy; and
- Leneva–Baranduda Precinct Structure Plan and supporting technical documents.

Combined, the above sets out a broad, long term vision for the sustainable development of the DCP area and its surrounds.

1.3 Planning & Environment Act 1987

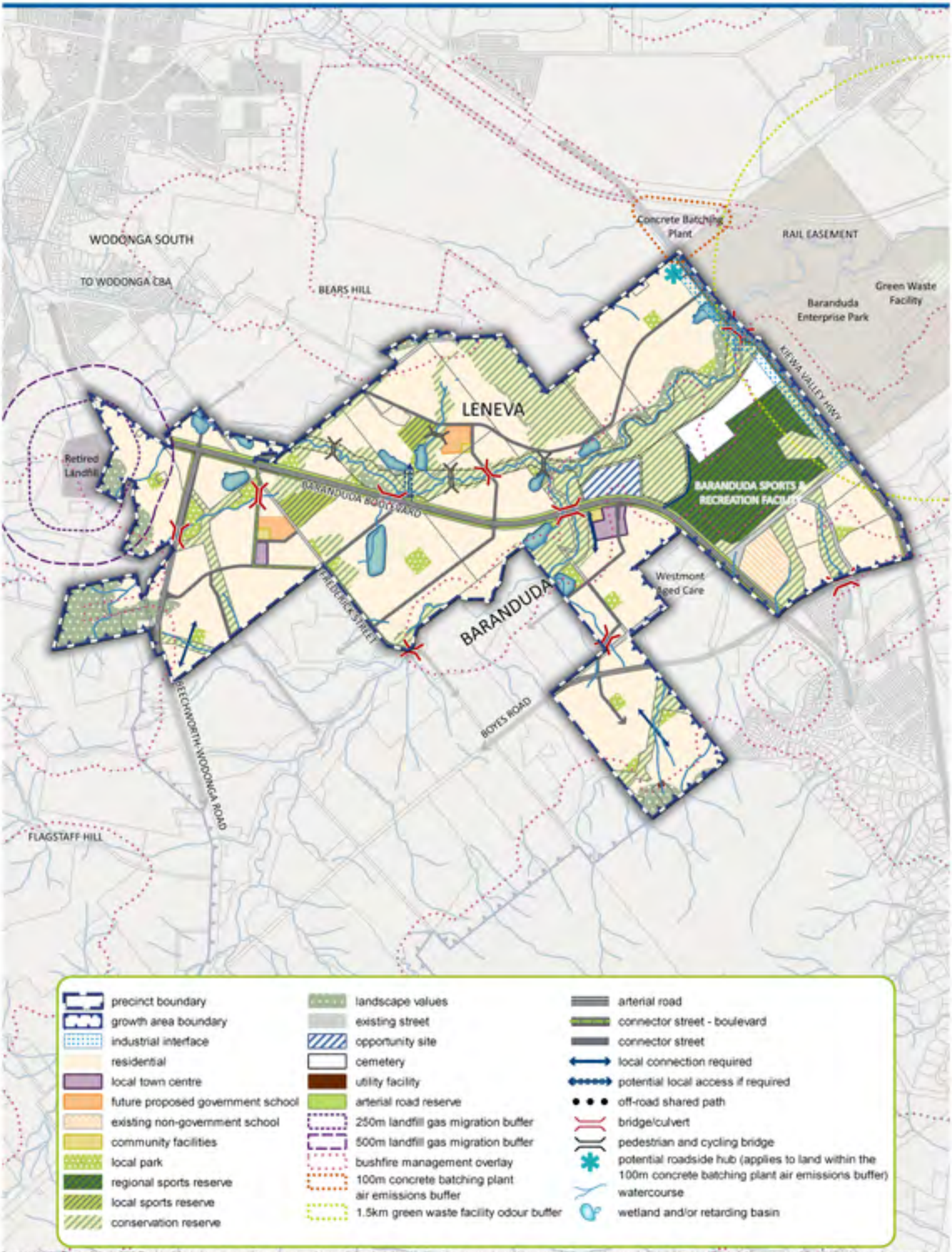
The DCP has been prepared in accordance with Part 3B of the Planning and Environment Act 1987 (Act) as well as other relevant legislation and has been developed in line with the State and Local Planning Policy Framework of the Wodonga Planning Scheme. It is consistent with the Ministerial Direction on Development Contributions made under section 46M(1) of the Act and has had regards to the Victorian Government's Development Contributions Plan Guidelines (the DCP Guidelines).

The DCP provides for the charging of a Development Infrastructure Levy pursuant to Section 46J(a) of the Act towards works, services and facilities. It also provides for the charging of a Community Infrastructure Levy pursuant to section 46J(b) of the Act as some infrastructure projects funded by the DCP are classified as community infrastructure by reference to the Act, the Ministerial Direction on Development Contributions and the DCP Guidelines.

The DCP forms part of the Wodonga Planning Scheme pursuant to Section 46I of the Act and is an incorporated document under Clause 81 of the Wodonga Planning Scheme.

The DCP is implemented in the Wodonga Planning Scheme through Schedule 1 to the Development Contributions Plan Overlay which applies to the DCP area shown in Plan 1.

Plan 1 - Future Urban Structure
Leneva-Baranduda Precinct Structure



1.4 Strategic planning for Leneva–Baranduda

The need for the infrastructure included within the DCP has been determined according to the anticipated development as described in the Leneva–Baranduda Precinct Structure Plan (the PSP). 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.

The Leneva–Baranduda Background Report dated October 2018 provides and overview of the planning process.

1.5 Leneva–Baranduda Precinct Structure Plan

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

The PSP enables urban development and the future urban structure of the new community is depicted through a number of networks, including transport, open space and sporting reserves, social infrastructure, centres and housing.

The Leneva–Baranduda precinct will deliver approximately 6,037 dwellings to accommodate approximately 15,395 residents.

1.6 The area to which the Development Contribution Plan applies

In accordance with section 46K(1)(a) of the Act the DCP applies to land shown on Plan 1. The area is also shown on Development Contributions Plan Overlay Schedule 1 in the Wodonga Planning Scheme.

The DCP applies to approximately 548.86 Net Developable Hectares of land.

1.7 Related infrastructure agreements

There is one s173 Agreement over parcels 24 and 33 however it does not collect funds for any DCP items.

1.8 Project and property identification

1.8.1 Project identification

The project identification system used in the DCP has been designed to assist the understanding of and navigation through the document. Road, bridge, intersection and community facility projects use the identification system of project category and a sequential project number.

The project categories are labelled as:

- IN – intersections;
- RD – roads;
- BD – bridges;
- SR - sporting reserves;
- LP - local parks;
- CI – community facilities;
- WCL – walking/cycling link;
- W – wetlands; and
- WRB – wetland and retarding basins.

1.8.2 Property identification

Each of the properties in the Leneva–Baranduda precinct has been given a unique property identification number that reflects the property numbers included in the PSP.

2.0 INFRASTRUCTURE PROJECT JUSTIFICATION

Items can be included in a DCP if they will be used by the future community of an area. New development does not have to trigger the need for new infrastructure projects in its own right. The development is charged in line with its projected share of use. 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 infrastructure projects have been assessed to ensure they have a relationship or nexus to proposed development within the DCP area. The cost apportionment methodology adopted in the DCP relies on the nexus principle. A new development is deemed to have a nexus with an infrastructure project if its future residents or employees are expected to make use of that infrastructure project.

A summary of how each infrastructure project is related to proposed development within the DCP area is set out below and individual infrastructure project apportionments are identified in Tables 10 and 11.

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 across a broad cross-section of the community;
- They reflect the vision and objectives expressed in the PSP;
- They are not recurrent items; and
- They are the basis for the future development of an integrated network.

2.1 Infrastructure not included in the Development Contributions Plan

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 in implementing the PSPs:

- Internal streets including creek and drainage line crossings and associated traffic management measures (except where nominated in this DCP);
- Waterway management works and drainage systems (except where nominated in this DCP);
- Intersections connecting the development to the existing road network (except where nominated in 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 master plans 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 an agreement under Section 173 of the Act and/or conditions in planning permits.

2.2 Infrastructure projects

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

- Transport;
- Recreation;
- Community; and
- Drainage.

2.2.1 Transport projects

Transport projects are based on the transport network illustrated in Plan 1 and include a combination of:

- Construction of controlled intersections and associated works;
- Road construction;
- Construction of a waterway crossing; and
- Land for the above.

The intersection projects funded by the DCP are shown on Plan 2 and described in Table 2.

The road projects funded by the DCP are shown on Plan 3 and described in Table 3.

The bridge projects funded by the DCP are shown on Plan 4 and described in Table 4.

Plan 2 - Intersection Projects
Leneva-Baranduda Precinct Structure

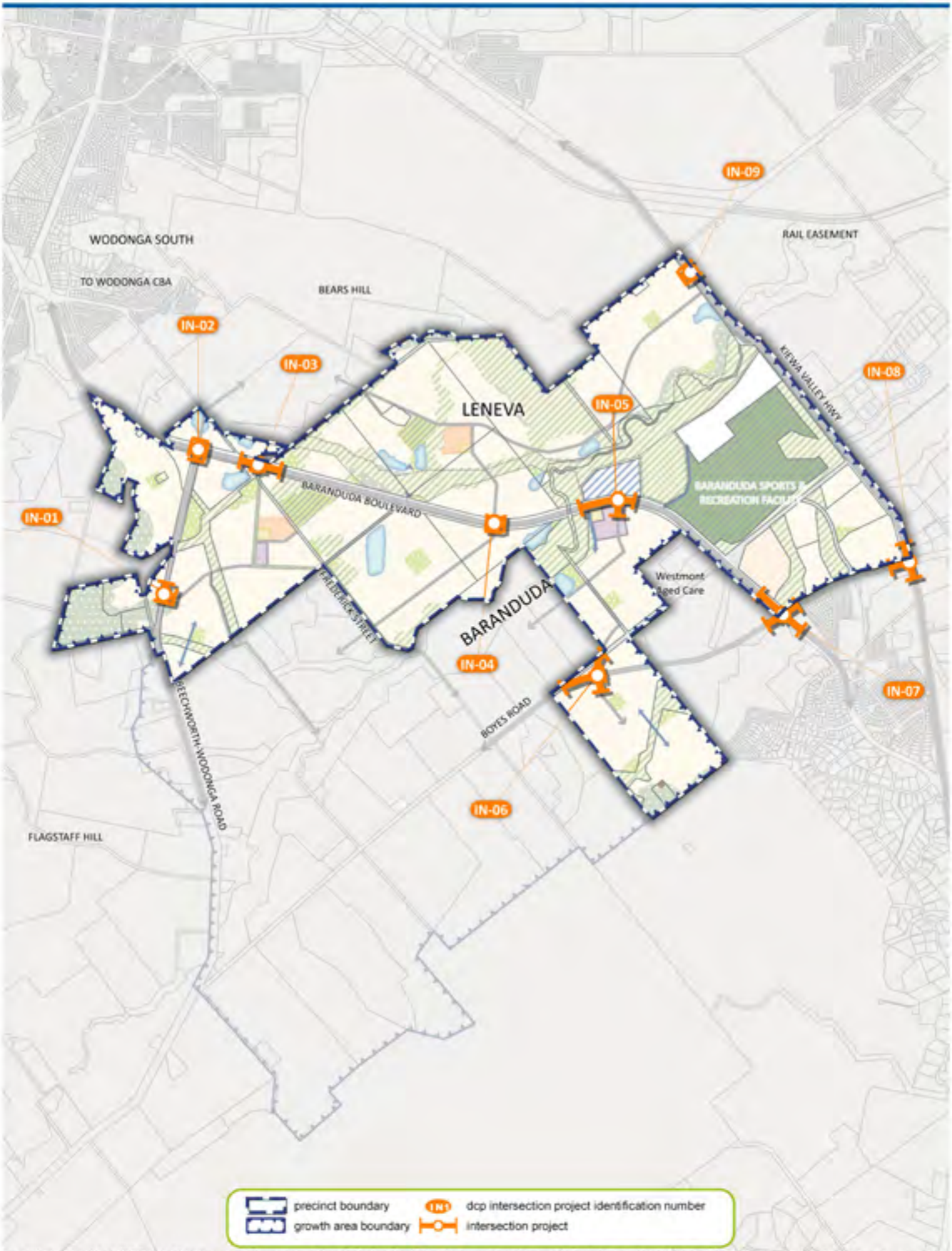


Table 2 Intersection projects

DCP PROJECT ID	PROJECT TITLE PROJECT DESCRIPTION	INDICATIVE PROVISION TRIGGER
IN-01	Beechworth-Wodonga Road / Connector road Land for an ultimate 3 way roundabout	At time of subdivision / access requirement demand, subject to availability of DCP funding
IN-01c	Beechworth-Wodonga Road / Connector road Construction of an interim 3 way roundabout	At time of subdivision / access requirement demand, subject to availability of DCP funding
IN-02	Beechworth-Wodonga Road / Baranduda Boulevard Land for an ultimate 4 way roundabout	At time of subdivision / access requirement demand, subject to availability of DCP funding
IN-02c	Beechworth-Wodonga Road / Baranduda Boulevard Construction of an interim/ultiamte 4 way roundabout (Beechworth-Wodonga Road interim/ Baranduda Boulevard ultimate)	At time of subdivision / access requirement demand, subject to availability of DCP funding
IN-03	Baranduda Boulevard / Frederick Street Road Land for an ultimate 3 way signalised intersection	At time of subdivision / access requirement demand, subject to availability of DCP funding
IN-03c	Baranduda Boulevard / Frederick Street Road Construction of an ultimate 3 way signalised intersection	At time of subdivision / access requirement demand, subject to availability of DCP funding
IN-04	Baranduda Boulevard / Connector road Land for an ultimate 4 way roundabout	At time of subdivision / access requirement demand, subject to availability of DCP funding
IN-04c	Baranduda Boulevard / Connector road Construction of an ultimate 4 way roundabout	At time of subdivision / access requirement demand, subject to availability of DCP funding
IN-05	Baranduda Boulevard / Connector road (Baranduda Town Centre) Land for an ultimate 4 way signalised intersection	At time of subdivision / access requirement demand, subject to availability of DCP funding
IN-05c	Baranduda Boulevard / Connector road (Baranduda Town Centre) Construction of an ultimate 4 way signalised intersection	At time of subdivision / access requirement demand, subject to availability of DCP funding
IN-06	Boyes Road / Connector road Land for an ultimate 4 way roundabout	At time of subdivision / access requirement demand, subject to availability of DCP funding
IN-06c	Boyes Road / Connector road Construction of an interim 4 way roundabout	At time of subdivision / access requirement demand, subject to availability of DCP funding
IN-07c	Boyes Road / Baranduda Boulevard Construction of an interim 4 way signalised intersection	At time of subdivision / access requirement demand, subject to availability of DCP funding
IN-08c	Boyes Road-John Schubert Drive / Kiewa Valley Highway Construction of an interim/ultimate 4 way signalised intersection (Boyes Road inteirm / Kiewa Valley Highway ultimate)	At time of subdivision / access requirement demand, subject to availability of DCP funding
IN-09	Kiewa Valley Highway / Connector road Purchase of land for an ultimate 3 way roundabout	At time of subdivision / access requirement demand, subject to availability of DCP funding
IN-09c	Kiewa Valley Highway / Connector road Construction of an ultimate 3 way roundabout	At time of subdivision / access requirement demand, subject to availability of DCP funding

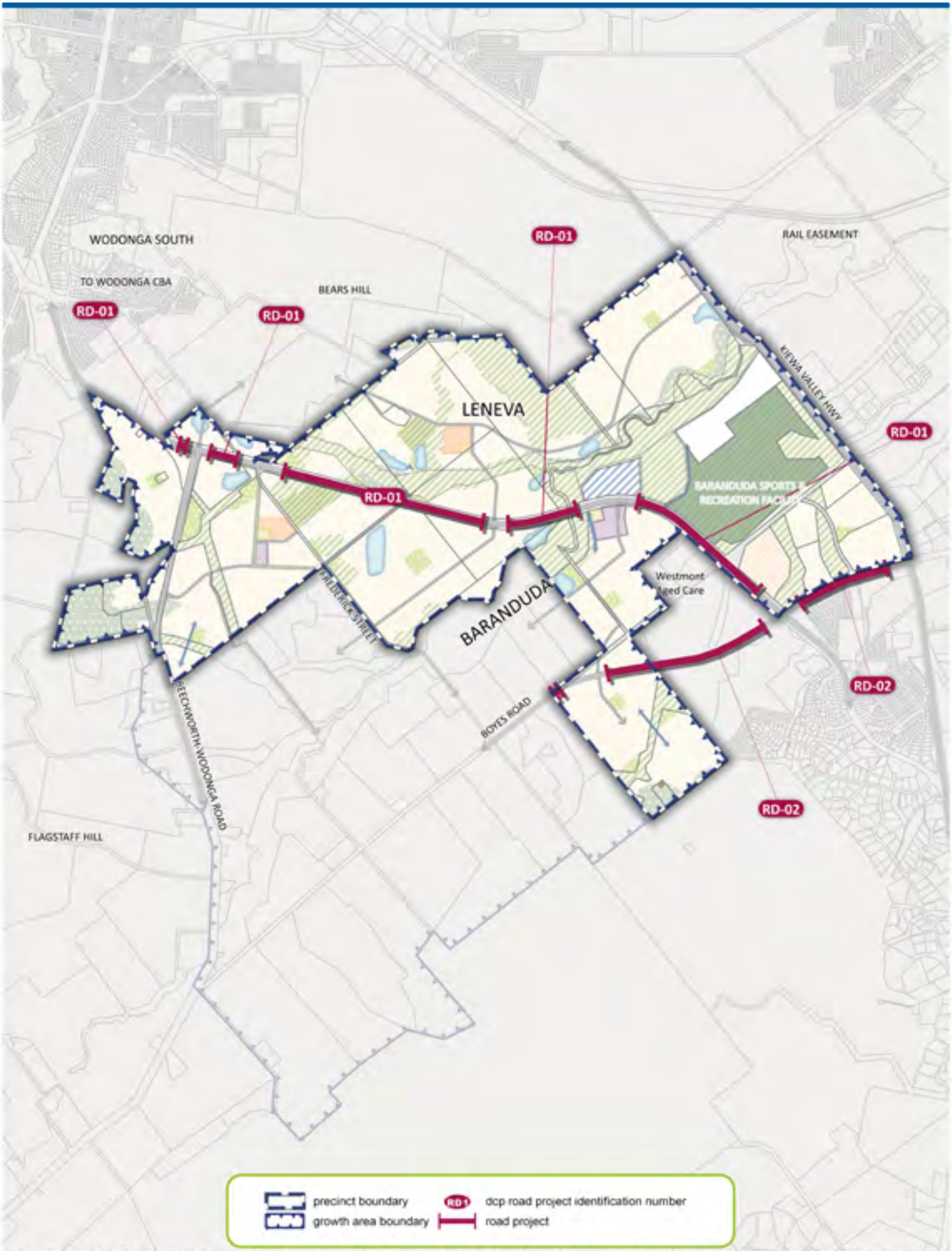


Table 3 Road projects

DCP PROJECT ID	PROJECT TITLE PROJECT DESCRIPTION	INDICATIVE PROVISION TRIGGER
RD-01	Baranduda Boulevard Purchase of land	At time of subdivision / access requirement demand, subject to availability of DCP funding
RD-01c	Baranduda Boulevard Construction of an ultimate 4-lane secondary arterial between the northern edge of the PSP boundary south towards the Baranduda Town Centre. South of the Baranduda Town Centre interim upgrades to the existing road (pedestrian/cycling paths and street lighting)	At time of subdivision / access requirement demand, subject to availability of DCP funding
RD-02	Boyes Road Purchase of land for an ultimate 4-lane secondary arterial (that is within the PSP)	At time of subdivision / access requirement demand, subject to availability of DCP funding
RD-02c	Boyes Road Construction of an interim secondary arterial (2-lane) inside and outside of the PSP (Note: construction of interim road outside the PSP only includes land within Baranduda Range Estate)	At time of subdivision / access requirement demand, subject to availability of DCP funding

Plan 4 - Bridge Projects
Leneva-Baranduda Precinct Structure

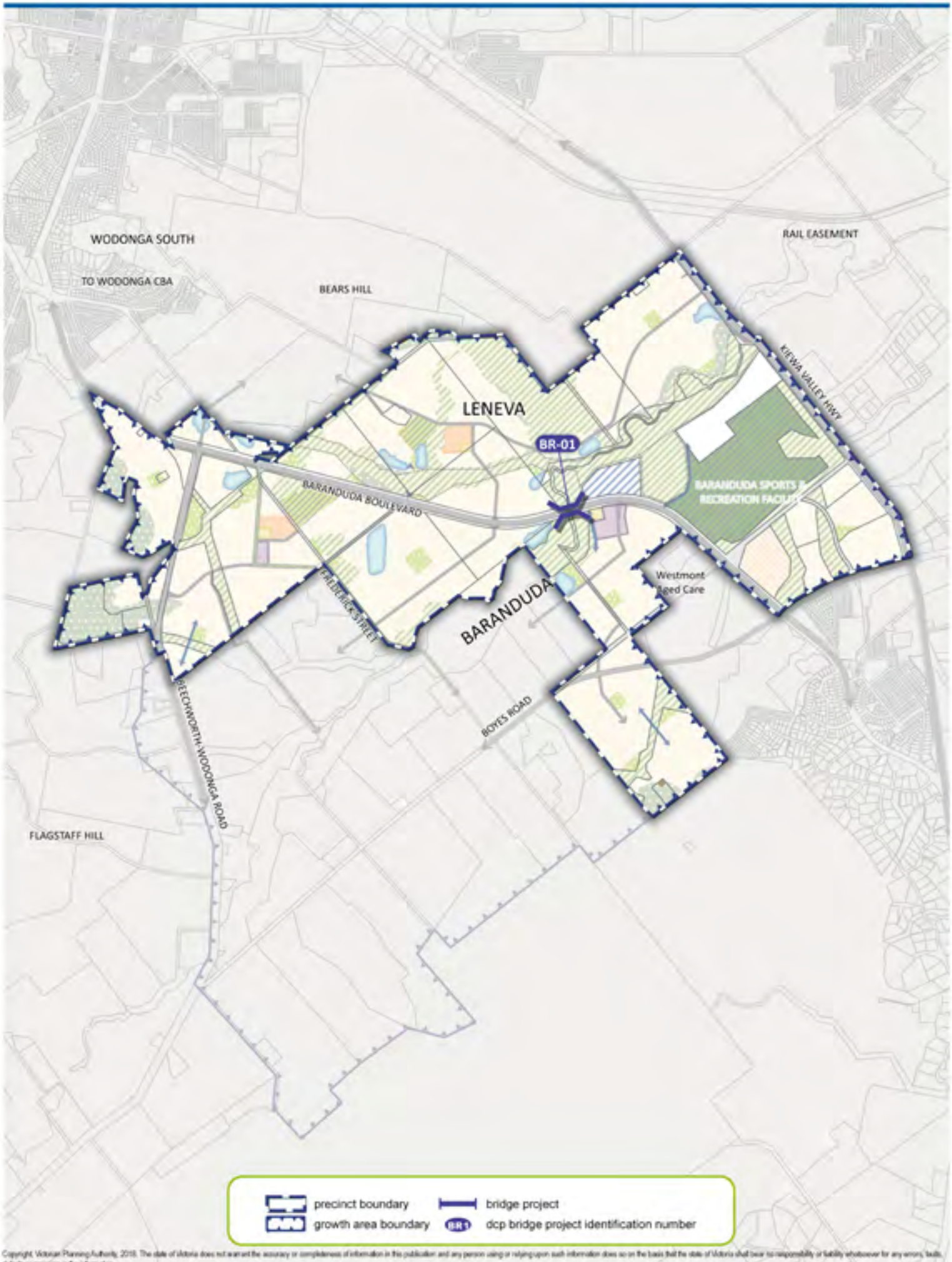


Table 4 Bridge projects

DCP PROJECT ID	PROJECT TITLE PROJECT DESCRIPTION	INDICATIVE PROVISION TRIGGER
BR-01	Baranduda Boulevard over Middle Creek Duplication of existing bridge associated with the construction of the ultimate 4-lane secondary arterial	At time of subdivision / access requirement demand, subject to availability of DCP funding

2.2.2 Recreation projects

Recreation projects includes a contribution towards land required for and construction of facilities in sporting reserves. Land for sporting reserves is dealt with under this DCP however land for passive open space is dealt with under the requirements set out in Clause 53.01.

In determining the final scope of DCP funded recreation projects within each sporting reserve, Council in its capacity as Development Agency 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 respond to these matters.

The recreation projects funded by the DCP are shown on Plan 5 and described in Table 5.

2.2.3 Passive open space

All land owners must provide a public open space contribution equal to 3.96% of the Net Developable Area (NDA) upon subdivision of land in accordance with Clause 53.01 of the Wodonga Planning Scheme (as outlined in the PSP). Purchase of land for local open space reserves has therefore not been included in the DCP.

2.2.4 Community facility projects

Community projects include land and construction of community centres varying in size.

The community projects are based on the population projections determined through the development of the Wodonga Growth Strategy. The community facilities defined in this group of infrastructure projects are the best estimates of the future requirements and specifications of the future communities of Leneva–Baranduda precinct.

The detailed design and scope (as defined in Table 6) of each of the community projects will be determined 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 changing provision standards and models, the immediate needs of the community, current regulations and best practice and may adjust and refine the scope of the infrastructure project to respond to these matters.

The Development Agency may also adjust and refine the scope of an infrastructure project to reflect the availability of any non-DCP funds that can be made available (for example a grant or other funding streams).

The community facility projects funded by the DCP are shown on Plan 5 and described in Table 6.

Plan 5 - Recreation & Community Facilities
Leneva-Baranduda Precinct Structure

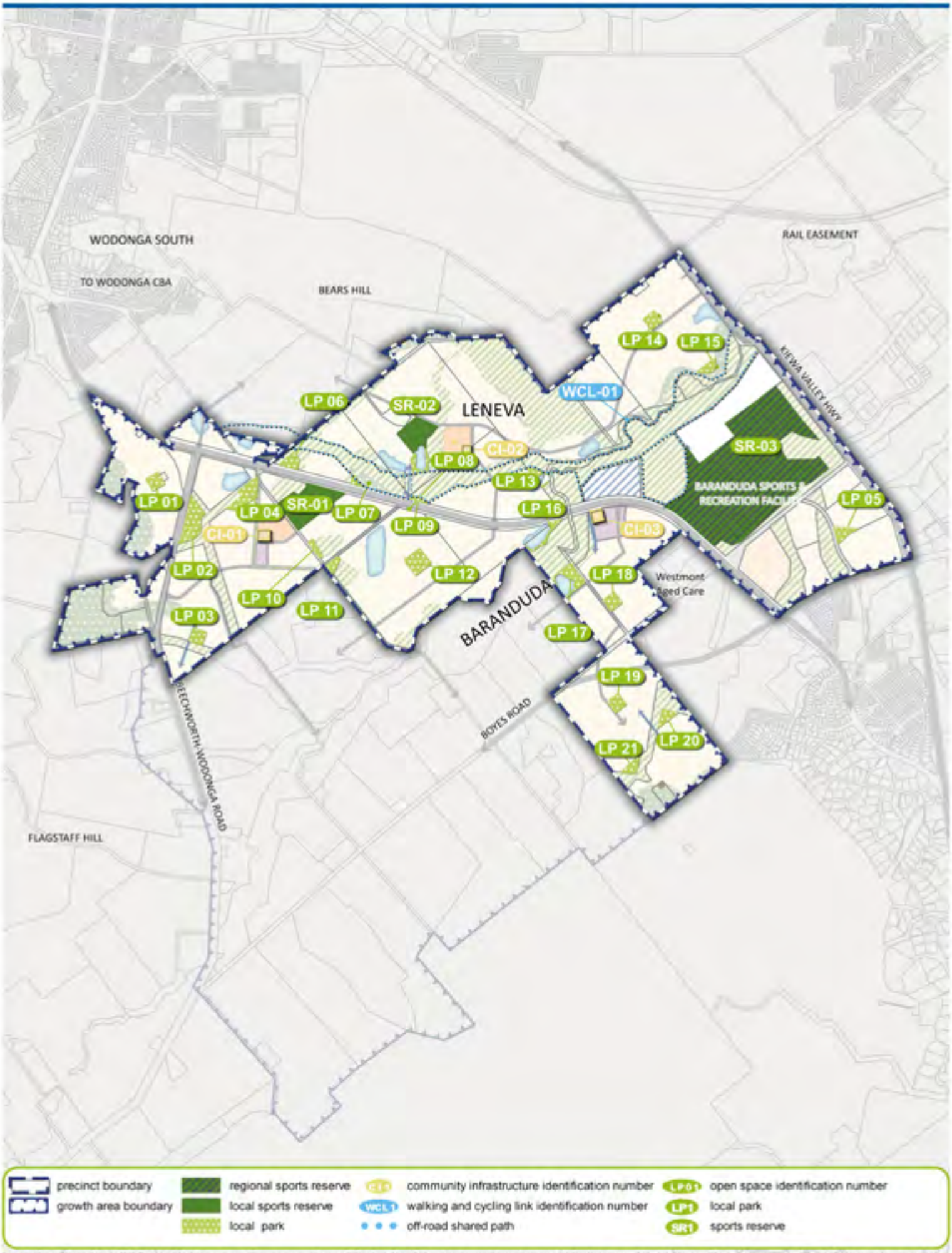


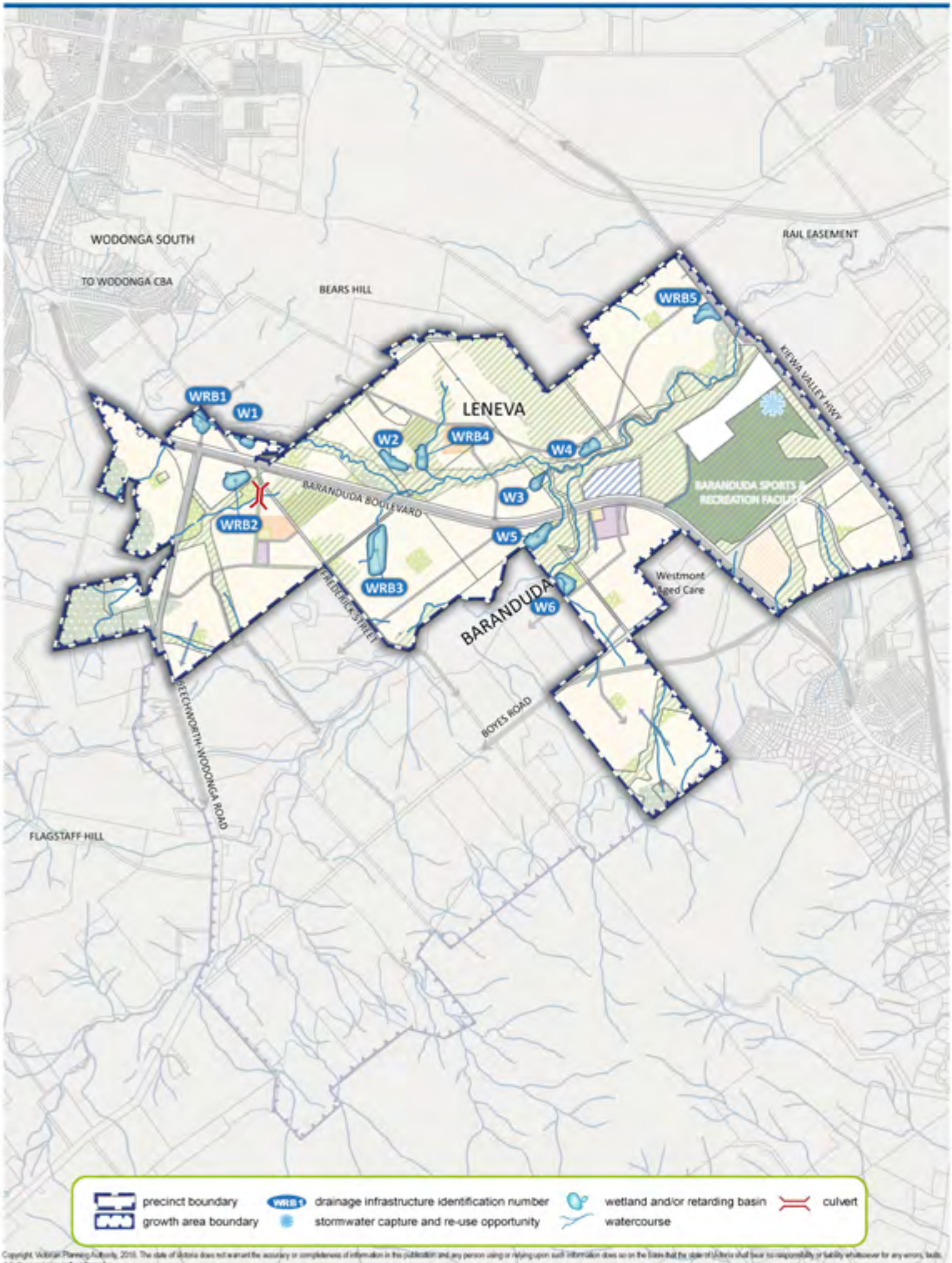
Table 5 Recreation projects

DCP PROJECT NUMBER	PROJECT TITLE PROJECT DESCRIPTION	INDICATIVE PROVISION TRIGGER
SR-01	Leneva Sporting Reserve Purchase of land for a 8ha sporting reserve	At time of subdivision, as required according to demand levels
SR-01c	Leneva Sporting Reserve Construction of a sporting oval, 4 outdoor netball courts, a playground, associated carparking and landscaping	At time of subdivision, as required according to demand levels and subject to DCP funding
SR-01p	Leneva Sporting Reserve Construction of a sports pavilion.	At time of subdivision, as required according to demand levels and subject to DCP funding
SR-02	Bears Hill Sporting Reserve Purchase of land for a 4ha sporting reserve	At time of subdivision, as required according to demand levels
SR-02c	Bears Hill Sporting Reserve Construction of two sporting ovals and associated carparking and landscaping	At time of subdivision, as required according to demand levels and subject to DCP funding
SR-02p	Bears Hill Sporting Reserve Construction of a sports pavilion.	At time of subdivision, as required according to demand levels and subject to DCP funding
SR-03c	Baranduda Sports and Recreation Facility Construction of 4 sporting ovals, cricket facility, outdoor netball courts, soccer pitches and tennis courts, passive recreation, carparking, roads and lighting, pavement an landscaping	At time of subdivision, as required according to demand levels and subject to DCP funding
SR-03p	Baranduda Sports and Recreation Facility Construction of an indoor stadium	At time of subdivision, as required according to demand levels and subject to DCP funding

Table 6 Community facility projects

DCP PROJECT NUMBER	PROJECT TITLE PROJECT DESCRIPTION	INDICATIVE PROVISION TRIGGER
CI-01	Leneva Community Centre Purchase of land for a level 2 multipurpose community centre	At time of subdivision, as required according to demand levels
CI-01c	Leneva Community Centre Construction of a level 2 multipurpose community centre	At time of subdivision, as required according to demand levels and subject to DCP funding
CI-02	Bears Hill Community Centre Purchase of land for a level 1 multipurpose community centre	At time of subdivision, as required according to demand levels
CI-02c	Bears Hill Community Centre Construction of a level 1 multipurpose community centre	At time of subdivision, as required according to demand levels and subject to DCP funding
CI-03	Baranduda Community Centre Purchase of land for a level 2 multipurpose community centre	At time of subdivision, as required according to demand levels
CI-03c	Baranduda Community Centre Construction of a level 2 multipurpose community centre	At time of subdivision, as required according to demand levels and subject to DCP funding
WCL-01	N1 walking and cycling link Construction of a walking and cycling network along the N1 including parths (2.5m wide) and 3 pedestrian/cycling crossings	At time of subdivision, as required according to demand levels and subject to DCP funding

Plan 6 - Drainage Projects
Leneva-Baranduda Precinct Structure



2.2.5 Drainage projects

The drainage related infrastructure projects included in the DCP comprise of:

- Stormwater quality treatment;
- Retarding basins and wetlands designed to treat stormwater generated from the development area to best practice standards prior to discharge into the N1 Tributary and Middle Creek; and
- Land for the above.

The drainage infrastructure projects funded by the DCP are shown on Plan 6 and described in Table 7.

Temporary and interim drainage works are not infrastructure projects in the DCP

Table 7 Drainage projects

DCP PROJECT ID	PROJECT TITLE	AREA (HA)	PROVISION TRIGGER
W1	Wetland	0.88	As determined by Council and subject to DCP funding
W2	Wetland	1.57	As determined by Council and subject to DCP funding
W3	Wetland	1.24	As determined by Council and subject to DCP funding
W4	Wetland	1.27	As determined by Council and subject to DCP funding
W5	Wetland	1.27	As determined by Council and subject to DCP funding
W6	Wetland	1.69	As determined by Council and subject to DCP funding
WRB1	Wetland and retarding basin	1.55	As determined by Council and subject to DCP funding
WRB2	Wetland and retarding basin	1.95	As determined by Council and subject to DCP funding
WRB3	Wetland and retarding basin	4.46	As determined by Council and subject to DCP funding
WRB4	Wetland and retarding basin	1.37	As determined by Council and subject to DCP funding
WRB5	Wetland and retarding basin	1.71	As determined by Council and subject to DCP funding

2.3 Project timing

Each infrastructure project in the DCP has been given an assumed indicative provision trigger specified in Tables 2 to 7. The timing of the provision of the items is consistent with information available at the time that the DCP was prepared. The Development Agency will monitor and assess the required timing for individual items and have regard to its capital works programme, the staging of the PSP and areas external to the precinct and the indicative provision trigger within Tables 2 to 7.

Indicative provision triggers for each infrastructure project are provided in Tables 2 to 7. Despite the indicative provision trigger, the Development Agency may, in consultation with the Collection Agency, determine 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; and
- Community needs determine the delivery of works or land for community facilities or open space.

All items in the DCP will be provided as soon as practicable and as soon as sufficient contributions are available, consistent with Section 4.3 and acknowledging the Development Agency's capacities to provide the balance of funds not recovered by the DCP.

2.4 Distinction between development and community infrastructure

In accordance with the Act and the Ministerial Direction on Development Contributions, the DCP makes a distinction between 'development' and 'community' infrastructure.

The Community Infrastructure Levy is paid by the home builder at the time a building approval is sought (unless an alternative time is agreed between the collecting agency and a development proponent). The Community Infrastructure Levy is paid at a 'per-dwelling' rate. The Planning and Environment Act 1987 fixes the maximum amount that may be charged as a Community Infrastructure Levy. At the current time, the maximum amount is $1,150 per dwelling. The Governor in Council may, from time to time, by Order published in the Government Gazette vary the maximum amount that may be collected by the Community Infrastructure Levy. If in the future the Community Infrastructure Levy is varied, then the levy applicable to the release of the remaining dwellings may be adjusted in accordance with the revised legislative and regulatory approach.

The infrastructure projects listed in Table 8 are assessed as community infrastructure and will be funded by the Community Infrastructure Levy. All other infrastructure projects assessed as development infrastructure and funded by the Development Infrastructure Levy.

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 works.

Table 8 Community Infrastructure Levy projects

DCP PROJECT ID	PROJECT TITLE PROJECT DESCRIPTION
SR-01p	Leneva Sporting Reserve Construction of a sports pavilion.
SR-02p	Bears Hill Sporting Reserve Construction of a sports pavilion.
SR-03p	Baranduda Sports and Recreation Facility Construction of an indoor stadium

3.0 CALCULATION OF CONTRIBUTIONS

The general cost apportionment method includes the following steps:

- Calculation of the Net Developable Area (NDA) and demand units (refer to Table 9);
- Calculation of infrastructure project costs (refer to Tables 10 and 11);
- Identification and allowance for external use (refer to Tables 10 and 11);
- Cost apportionment and catchments (refer to Tables 10 and 11);
- Identification of development types required to pay the levy (refer to Tables 10 and 11);
- Summary of costs payable for each infrastructure project (refer to Tables 10 and 11); and
- The Development Infrastructure Levy per hectare for each development type (refer to Table 10) and the Community Infrastructure Levy per dwelling (refer to Table 11).

3.1 Calculation of Net Developable Area and demand units

The following section sets out how NDA is calculated and outlines the development projections anticipated for the area. Calculations of NDA for each individual property is outlined in the property specific land budget included within the PSP and is then to be assumed as correct and applied for that property unless the Collecting Agency agrees to a different NDA for that property.

3.1.1 Net Developable Area

In this DCP, the Development Infrastructure Levy is payable based on the NDA of land on any given development site as derived from the property specific land budget included in the Appendix A.

For the purpose of this DCP the NDA is defined as the total amount of land within the precinct that is available for development of housing and employment buildings, including lots and all local streets. It is the total precinct area minus community facilities, educational facilities, open space, encumbered land, existing road reserves and arterial roads. Any additional small local parks defined at the subdivision stage are included in the NDA.

The number of Net Developable Hectares in each charge area is based on the land budget and outlined in Table 9. The ‘per Net Developable Hectare’ contributions will not and must not be amended to respond to minor changes in land budgets that may result from the subdivision process. In other words, the DCP is permanently linked to the calculation of Net Developable Area set out in Table 9.

The property specific land budget included in the PSP is to be used to determine the number of Net Developable Hectares on individual properties. Calculations of NDA for each individual property is outlined in Appendix A.

Table 9 Summary land use budget

DESCRIPTION	PSP		
	HECTARES	% OF TOTAL	% OF NDA
TOTAL PRECINCT AREA (HA)	**1,062.49**		
TRANSPORT			
Arterial Road - Within Existing Road Reserve	35.16	3.31%	6.41%
Arterial Road - Widening and Intersection Flaring (DCP land)	3.46	0.33%	0.63%
Non-Arterial Road - Existing Road Reserve	19.07	1.79%	3.47%
Arterial Road Reserve	30.20	2.84%	5.50%
Sub-total Transport	87.88	8.3%	16.01%
COMMUNITY & EDUCATION			
Future Proposed Government School	7.00	0.66%	1.28%
Existing Non-Government School	12.19	1.15%	2.22%
Local Community Facility (DCP land)	2.00	0.19%	0.36%
Sub-total Education	21.20	2.0%	3.9%
OPEN SPACE			
UNCREDITED OPEN SPACE			
Conservation Reserve	210.44	19.81%	38.34%
Drainage Infrastructure (DCP land)	19.75	1.86%	3.60%
Cemetery / Memorial Park	20.00	1.88%	3.64%
Landscape Values	53.93	5.08%	9.82%
Sub-total Uncredited Open Space	304.12	28.62%	55.41%
CREDITED OPEN SPACE			
Local Sports Reserve (DCP land)	12.00	1.1%	2.19%
Local Park (via Cl 52.01)	21.75	2.0%	3.96%
Sub-total Credited Open Space	33.75	3.2%	6.15%
Total All Open Space	337.77	31.8%	61.56%
OTHER			
Regional Sports Reserve	66.50	6.3%	12.12%
Utility Facility	0.18	0.02%	0.03%
Sub-total	66.69	6.28%	12.15%
TOTAL NET DEVELOPABLE AREA (NDA) HA	**548.86**	**51.66%**	
NET DEVELOPABLE AREA - RESIDENTIAL (NDA-R) HA	**548.86**	**51.66%**	

3.1.2 Land budget and demand units

Net Developable Hectare (NDH) is the demand unit for the DCP.

Based on the PSP, there is one development type included in this DCP: urban development. Urban Development is defined to include all forms of development, including residential subdivision, development within centres and employment areas. Urban development includes any non-residential uses within the residential area such as place of worship, education centre, retirement village, nursing home, child care centre, medical centre, convenience store or any other approved use. A development Infrastructure Levy is not charged on exempt development. There are a total of 549.05 Net Developable Hectares in the DCP area.

3.2 Calculation of contribution charges

3.2.1 Calculation of costs

Each infrastructure project has been assigned a land and/or construction cost. These costs are listed in Tables 10 and 11. The costs are expressed in 2017 dollars and will be indexed in accordance with the indexation method specified in Section 4.5.

3.2.2 Road construction and intersection works

The scope for arterial intersection projects was established by the City of Wodonga, VicRoads and the VPA. The design and costing of these intersections was also undertaken by ARUP.

A number of standardised intersections were developed for local roads by the City of Wodonga and the VPA for use in the DCP. The design and costing of these intersections was also undertaken by ARUP.

Road reserves required for arterial and connector roads have been calculated consistent with the road cross sections provided in the Leneva–Baranduda PSP. Per metre road construction rates were developed by ARUP and were used to calculate road construction costs. Minor culverts have been factored into road construction costs estimations.

Rates for the works have been established by using current road construction estimated rates as of June 2017.

The intersection layout was agreed with the relevant road authority as were the scope of works. The general assumptions used were:

The intersection layout was agreed with the relevant road authority as were the scope of works. The general assumptions used were:

- No land acquisition costs have been allowed for unless stated (these were separately identified in each DCP project costing in Table 10);
- No trunk services have been allowed for;
- Drainage allowance is for ‘road reserve or project lane’ areas however major drainage such as culverts or bridges consistent with the PSP have been included as separate projects;
- A standard excavation depth has been allowed for. Final pavement requirements will be determined at construction stage responding to actual ground conditions; and
- Where required an allowance has been made for existing services adjustment or relocation (e.g. electricity poles, water fittings, manholes etc).

Additional percentage based costs tailored to each individual project have been included for:

- Traffic management;
- Site establishment;
- Survey and design;
- Supervision and project management;
- Council and VicRoads fees; and
- Contingency.

The level of contingency for each project reflects the level of design resolution achieved at the time the DCP was prepared.

With respect to road/intersection construction:

- Design generally follows natural terrain and/or existing road reserves;
- Existing service alterations have been included and would be minimal; and
- Major cost items such as bridges have been allowed for as separate items.

3.2.3 Bridge and culvert works

Where there is a bridge crossing of a waterway the cost estimated has been prepared on a site by site basis. Minor culverts have been factored into the estimated construction cost of relevant roads.

Refer to Appendix B for the bridge cost estimate and concept design.

3.2.4 Recreation works

Open space contribution is based on cost estimates for facilities prepared by Aquenta Consulting Pty Ltd.

Refer to Appendix B for cost estimates.

3.2.5 Community centre projects

The costing of community centre projects is based on cost estimates prepared by Aquenta Consulting Pty ltd.

Refer to Appendix B for cost estimates.

3.2.6 Temporary works

Temporary works are not factored in as a cost in this DCP unless expressly listed in the DCP.

3.2.7 Drainage

The costing of drainage infrastructure was undertaken by ARUP.

3.2.8 Valuation of land

The area of land to be acquired for each DCP project on each property was identified from the property specific land budget prepared for the PSP. A description of the land was provided to Urbis as a registered valuer to prepare an estimate of value. A value for each infrastructure project comprising land is then included in the DCP.

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

Public land contributions on a property that are less than or equal to the precinct average have an estimate of value using a per property broadhectare method. Any component of public land contributions that exceed the precinct average have an estimate of value using a site specific method. For more information, refer to the *Infrastructure Contributions Plan Guidelines* October 2016 as published by the Department of Envirnment, Land, Water and Planning.

Per property broadhectare estimate of value

The per property broadhectare 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.

Site specific value estimate

The site specific approach prepares an estimate of value for each separate 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 of value would be prepared for all three items separately.

Site specific estimates of 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.

3.3 Cost apportionment

The DCP apportions a charge in respect to each infrastructure project to new development according to its projected share of use of identified infrastructure items.

The cost apportionment is expressed as a percentage in Table 10 and 11. Projects that are 100% 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% apportioned to the DCP area are shared with other areas outside the Leneva–Baranduda precinct and other funding sources.

3.3.1 Charge areas

The DCP contains one charge area for the entire PSP.

The DCP clearly demonstrates the infrastructure required to service the Leneva–Baranduda area. The charge area also defines the Main Catchment Area (MCA) for the various infrastructure projects. The MCA is the geographic area from which a given item of infrastructure will draw most of its use.

3.3.2 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 this DCP.

3.3.3 Social and affordable housing

The Collecting Agency may on an individual basis consider any request for an exemption or discount of the Development Infrastructure Levy and the Community Infrastructure Levy for the development of social and affordable housing.

3.3.4 Schedule of costs

Tables 10 and 11 calculate the amount of contributions payable by each charge area for each infrastructure category.

3.3.5 Summary of charges per hectare

Tables 10 and 11 show the quantum of funds to be contributed by each charge area towards each infrastructure project. This adds up to the total amount of funds recoverable under the DCP.

Tables 10 and 11 set out a summary of costs for each charge area.

3.3.6 Small second dwelling

Amended by VC249

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 this DCP.

Table 10 Calculation of costs – Development Infrastructure Levy

DCP PROJECT NO.	PROJECT	INFRASTRUCTURE CATEGORY	LAND AREA (HA)	ESTIMATED PROJECT COST: LAND	ESTIMATED PROJECT COST: CONSTRUCTION	TOTAL ESTIMATED PROJECT COST: LAND & CONSTRUCTION	TOTAL COST RECOVERED BY DCP	RESIDENTIAL - CONTRIBUTION PER NDHA
ROAD PROJECTS								
RD-01	Baranduda Boulevard Purchase of land	Development	0.09	$17,000	$-	$17,000	$17,000	$31
RD-01c	Baranduda Boulevard Construction of an ultimate 4-lane secondary arterial between the northern edge of the PSP boundary south towards the Baranduda Town Centre. South of the Baranduda Town Centre interim upgrades to the existing road (pedestrian/ cycling paths and street lighting)	Development	0.00	$-	$17,502,000	$17,502,000	$17,502,000	$31,888
RD-02	Boyes Road Purchase of land for an ultimate 4-lane secondary arterial (that is within the PSP)	Development	0.94	$108,634	$-	$108,634	$108,634	$198
RD-02c	Boyes Road Construction of an interim secondary arterial (2-lane) inside and outside of the PSP (Note: construction of interim road outside the PSP only includes land within Baranduda Range Estate)	Development	0.00	$-	$8,767,000	$8,767,000	$8,767,000	$15,973
Sub-total road projects			1.03	$125,634	$26,269,000	$26,394,634	$26,394,634	**$48,090**
INTERSECTION PROJECTS								
IN-01	Beechworth-Wodonga Road / Connector road Land for an ultimate 3 way roundabout	Development	0.34	$34,263	$-	$34,263	$34,263	$62
IN-01c	Beechworth-Wodonga Road / Connector road Construction of an interim 3 way roundabout	Development	0.00	$-	$1,762,000	$1,762,000	$1,762,000	$3,210
IN-02	Beechworth-Wodonga Road / Baranduda Boulevard Land for an ultimate 4 way roundabout	Development	0.10	$22,340	$-	$22,340	$22,340	$41
IN-02c	Beechworth-Wodonga Road / Baranduda Boulevard Construction of an interim/ ultiamte 4 way roundabout (Beechworth-Wodonga Road interim/ Baranduda Boulevard ultimate)	Development	0.00	$-	$1,156,000	$1,156,000	$1,156,000	$2,106

DCP PROJECT NO.	PROJECT	INFRASTRUCTURE CATEGORY	LAND AREA (HA)	ESTIMATED PROJECT COST: LAND	ESTIMATED PROJECT COST: CONSTRUCTION	TOTAL ESTIMATED PROJECT COST: LAND & CONSTRUCTION	TOTAL COST RECOVERED BY DCP	RESIDENTIAL - CONTRIBUTION PER NDHA
IN-03	Baranduda Boulevard / Frederick Street Road Land for an ultimate 3 way signalised intersection	Development	0.01	$3,127	$-	$3,127	$3,127	$6
IN-03c	Baranduda Boulevard / Frederick Street Road Construction of an ultimate 3 way signalised intersection	Development	0.00	$-	$3,323,000	$3,323,000	$3,323,000	$6,054
IN-04	Baranduda Boulevard / Connector road Land for an ultimate 4 way roundabout	Development	0.13	$22,497	$-	$22,497	$22,497	$41
IN-04c	Baranduda Boulevard / Connector road Construction of an ultimate 4 way roundabout	Development	0.00	$-	$1,921,000	$1,921,000	$1,921,000	$3,499
IN-05	Baranduda Boulevard / Connector road (Baranduda Town Centre) Land for an ultimate 4 way signalised intersection	Development	0.19	$24,369	$-	$24,369	$24,369	$44
IN-05c	Baranduda Boulevard / Connector road (Baranduda Town Centre) Construction of an ultimate 4 way signalised intersection	Development	0.00	$-	$3,645,000	$3,645,000	$3,645,000	$6,641
IN-06	Boyes Road / Connector road Land for an ultimate 4 way roundabout	Development	1.52	$175,332	$-	$175,332	$175,332	$319
IN-06c	Boyes Road / Connector road Construction of an interim 4 way roundabout	Development	0.00	$-	$3,849,000	$3,849,000	$3,849,000	$7,013
IN-07c	Boyes Road / Baranduda Boulevard Construction of an interim 4 way signalised intersection	Development	0.00	$-	$3,862,000	$3,862,000	$3,862,000	$7,036
IN-08c	Boyes Road-John Schubert Drive / Kiewa Valley Highway Construction of an interim/ ultimate 4 way signalised intersection (Boyes Road inteirm/Kiewa Valley Highway ultimate)	Development	0.00	$-	$4,319,000	$4,319,000	$4,319,000	$7,869
IN-09	Kiewa Valley Highway / Connector road Purchase of land for an ultimate 3 way roundabout	Development	0.15	$17,042	$-	$17,042	$17,042	$31
IN-09c	Kiewa Valley Highway / Connector road Construction of an ultimate 3 way roundabout	Development	0.00	$-	$1,816,000	$1,816,000	$1,816,000	$3,309
Sub-total intersection projects			2.43	$298,970	$25,653,000	$25,951,970	$25,951,970	$47,284

DCP PROJECT NO.	PROJECT	INFRASTRUCTURE CATEGORY	LAND AREA (HA)	ESTIMATED PROJECT COST: LAND	ESTIMATED PROJECT COST: CONSTRUCTION	TOTAL ESTIMATED PROJECT COST: LAND & CONSTRUCTION	TOTAL COST RECOVERED BY DCP	RESIDENTIAL - CONTRIBUTION PER NDHA
BRIDGE PROJECTS								
BR-01	Baranduda Boulevard over Middle Creek	Development	0.00	$-	$2,815,000	$2,815,000	$2,815,000	$5,129
Sub-total bridge projects			0.00	$-	$2,815,000	$2,815,000	$2,815,000	$5,129
COMMUNITY FACILITIES								
CI-01	Leneva Community Centre Purchase of land for a level 2 multipurpose community centre	Development	0.80	$72,007	$-	$72,007	$72,007	$131
CI-01c	Leneva Community Centre Construction of a level 2 multipurpose community centre	Development	0.00	$-	$5,294,000	$5,294,000	$5,294,000	$9,645
CI-02	Bears Hill Community Centre Purchase of land for a level 1 multipurpose community centre	Development	0.40	$72,835	$-	$72,835	$72,835	$133
CI-02c	Bears Hill Community Centre Construction of a level 1 multipurpose community centre	Development	0.00	$-	$3,030,000	$3,030,000	$3,030,000	$5,521
CI-03	Baranduda Community Centre Purchase of land for a level 2 multipurpose community centre	Development	0.80	$104,000	$-	$104,000	$104,000	$189
CI-03c	Baranduda Community Centre Construction of a level 2 multipurpose community centre	Development	0.00	$-	$5,294,000	$5,294,000	$5,294,000	$9,645
Sub-total community facilities			2.00	$248,842	$13,618,000.00	$13,866,842	$13,866,842	$25,265
ACTIVE RECREATION RESERVES								
SR-01	Leneva Sporting Reserve Purchase of land for a 8ha sporting reserve	Development	8.00	$1,603,017	$-	$1,603,017	$1,603,017	$2,921
SR-01c	Leneva Sporting Reserve Construction of a sporting oval, 4 outdoor netball courts, a playground, associated carparking and landscaping	Development	0.00	$-	$2,620,000	$2,620,000	$2,620,000	$4,774
SR-02	Bears Hill Sporting Reserve Purchase of land for a 4ha sporting reserve	Development	4.00	$743,332	$-	$743,332	$743,332	$1,354
SR-02c	Bears Hill Sporting Reserve Construction of two sporting ovals and associated carparking and landscaping	Development	0.00	$-	$1,810,000	$1,810,000	$1,810,000	$3,298

DCP PROJECT NO.	PROJECT	INFRASTRUCTURE CATEGORY	LAND AREA (HA)	ESTIMATED PROJECT COST: LAND	ESTIMATED PROJECT COST: CONSTRUCTION	TOTAL ESTIMATED PROJECT COST: LAND & CONSTRUCTION	TOTAL COST RECOVERED BY DCP	RESIDENTIAL - CONTRIBUTION PER NDHA
SR-03c	Baranduda Sports and Recreation Facility Construction of 4 sporting ovals, cricket facility, outdoor netball courts, soccer pitches and tennis courts, passive recreation, carparking, roads and lighting, pavement an landscaping	Development	0.00	$-	$14,881,250	$14,881,250	$14,881,250	$27,113
WCL-01	N1 walking and cycling link Construction of a walking and cycling network along the N1 including parths (2.5m wide) and 3 pedestrian/cycling crossings	Development	0.00	$-	$1,104,221	$1,104,221	$1,104,221	$2,012
Sub-total active recreation development infrastructure projects			12.00	$2,346,349	$20,415,471	$22,761,820	$22,761,820	$41,471
DRAINAGE PROJECTS								
W1	Purchase of land for a wetland	Development	0.88	$204,914	$-	$204,914	$204,914	$373
W1c	Construction of wetland	Development	0.00	$-	$974,000	$974,000	$974,000	$1,775
W2	Purchase of land for a wetland	Development	1.57	$291,233	$-	$291,233	$291,233	$531
W2c	Construction of wetland	Development	0.00	$-	$1,678,000	$1,678,000	$1,678,000	$3,057
W3	Purchase of land for a wetland	Development	1.24	$275,898	$-	$275,898	$275,898	$503
W3c	Construction of wetland	Development	0.00	$-	$991,000	$991,000	$991,000	$1,806
W4	Purchase of land for a wetland	Development	1.27	$173,904	$-	$173,904	$173,904	$317
W4c	Construction of wetland	Development	0.00	$-	$1,325,000	$1,325,000	$1,325,000	$2,414
W5	Purchase of land for a wetland	Development	2.06	$517,874	$-	$517,874	$517,874	$944
W5c	Construction of wetland	Development	0.00	$-	$2,283,000	$2,283,000	$2,283,000	$4,160
W6	Purchase of land for a wetland	Development	1.69	$398,929	$-	$398,929	$398,929	$727
W6c	Construction of wetland	Development	0.00	$-	$1,907,000	$1,907,000	$1,907,000	$3,474
WRB1	Purchase of land for a wetland and retarding basin	Development	1.55	$363,733	$-	$363,733	$363,733	$663
WRB1c	Construction of wetland and regarding basin	Development	0.00	$-	$2,128,000	$2,128,000	$2,128,000	$3,877
WRB2	Purchase of land for a wetland and retarding basin	Development	1.95	$481,571	$-	$481,571	$481,571	$877
WRB2c	Construction of wetland and regarding basin	Development	0.00	$-	$3,271,000	$3,271,000	$3,271,000	$5,960
WRB3	Purchase of land for a wetland and retarding basin	Development	4.46	$555,906	$-	$555,906	$555,906	$1,013
WRB3c	Construction of wetland and regarding basin	Development	0.00	$-	$5,784,000	$5,784,000	$5,784,000	$10,538

DCP PROJECT NO.	PROJECT	INFRASTRUCTURE CATEGORY	LAND AREA (HA)	ESTIMATED PROJECT COST: LAND	ESTIMATED PROJECT COST: CONSTRUCTION	TOTAL ESTIMATED PROJECT COST: LAND & CONSTRUCTION	TOTAL COST RECOVERED BY DCP	RESIDENTIAL - CONTRIBUTION PER NDHA
WRB4	Purchase of land for a wetland and retarding basin	Development	1.37	$254,579	$-	$254,579	$254,579	$464
WRB4c	Construction of wetland and regarding basin	Development	0.00	$-	$1,619,000	$1,619,000	$1,619,000	$2,950
WRB5	Purchase of land for a wetland and retarding basin	Development	1.71	$196,175	$-	$196,175	$196,175	$357
WRB5c	Construction of wetland and regarding basin	Development	0.00	$-	$2,088,583	$2,088,583	$2,088,583	$3,805
Sub-total drainage projects			19.75	$3,714,716.05	$24,048,583.00	$27,763,299.05	$27,763,299.05	$50,583.7
SUMMARY								
Total cost all projects							**$119,553,565**	
Total Development Infrastructure Levy per NDA								**$217,822**

Table 11 Calculation of costs – Community Infrastructure Levy

DCP PROJECT NO.	PROJECT	INFRASTRUCTURE CATEGORY	LAND AREA HA	ESTIMATED PROJECT COST: LAND	ESTIMATED PROJECT COST: CONSTRUCTION	TOTAL ESTIMATED PROJECT COST: LAND & CONSTRUCTION	TOTAL COST ATTRIBUTED TO DCP
SR-01p	Leneva Sporting Reserve Construction of a sports pavilion.	Community	0.00	$-	$2,700,000	$2,700,000	$2,700,000
SR-02p	Bears Hill Sporting Reserve Construction of a sports pavilion.	Community	0.00	$-	$1,715,000	$1,715,000	$1,715,000
SR-03p	Baranduda Sports and Recreation Facility Construction of an indoor stadium	Community	0.00	$-	$5,425,000	$5,425,000	$5,425,000
Sub-total active recreation (community infrastructure levy)			0.00	$0	$9,840,000	$9,840,000	$9,840,000
SUMMARY							
Total Community Infrastructure Levy per Dwelling							**$1,150**
Total Community Infrastructure Levy Estimated Raised Via the Leneva–Baranduda DCP							**$6,943,054**

4.0 IMPLEMENTATION & ADMINISTRATION

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

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

The Development Infrastructure Levy applies to subdivision and/or development of land.

The Community Infrastructure Levy applies to the construction of dwellings.

4.1 Collecting agency (agency responsible for collecting infrastructure levy)

The City of Wodonga is the Collecting Agency pursuant to section 46K(1)(fa) of the Planning and Environment Act 1987 which means that it is the public authority to whom all levies are payable. As the Collecting Agency, the City of Wodonga is also responsible for the administration of the DCP and also its enforcement pursuant to Section 46QC of the Act.

4.2 Development agency (agency responsible for works)

The City of Wodonga is the Development Agency and is responsible for the provision of all infrastructure projects funded by the DCP.

4.3 Payment of contribution levies and payment timing

4.3.1 Development infrastructure

For subdivision of land

A Development Infrastructure Levy in accordance with the Leneva–Baranduda Development Contributions Plan must be paid to Wodonga City Council (Council) for each demand unit (Net Developable Hectare) in the subdivision within the following specified time, namely after certification of the relevant plan of subdivision but not more than 21 days prior to the issue of a Statement of Compliance with respect to that plan under the Subdivision Act 1988; and

Where the subdivision is to be developed in stages, the Development Infrastructure Levy in accordance with the Leneva–Baranduda DCP for the stage to be developed may only be paid to Council for each demand unit (Net Developable Hectare) in the stage within 21 days prior to the issue of a Statement of Compliance for that stage provided that a Schedule of Development Contributions is submitted within each stage of plan of subdivision. The Schedule of Development Contributions must show the amount of the development contributions payable for each stage and the value of the contributions for prior stages to the satisfaction of Council.

If Council agrees to works or provision of land in lieu of the payment of the Development Infrastructure Levy, the owner must enter into an agreement under Section 173 of the *Planning and Environment Act 1987* in respect of the proposed works or provision of land in kind to specific requirements.

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 Leneva–Baranduda DCP must be paid to Council for each demand unit (Net Developable Hectare) proposed to be developed prior to the commencement of any development. 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 Council agrees to works or provision of land in lieu of payment of the infrastructure levy, the owner must enter into an agreement under Section 173 of the Act in respect of the proposed works or provision of land in lieu.

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 Leneva–Baranduda DCP must be paid to Council 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 parks, access ways, landscaping and ancillary components. The Collecting Agency may agree to a different time for payment.

4.3.2 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 Approval Date of this DCP.

4.3.3 Works in kind

Under Section 46P of the Act, 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 levy payable. This can be agreed with the Collecting Agency 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 project(s) funded by the DCP;
- Council agrees that the timing of the works would be consistent with priorities in this DCP;
- The works are defined and agreed in a Section 173 agreement;
- Works must be provided to a standard that accords with the DCP to the satisfaction of Council, unless an alternative is agreed to by Council;
- Detailed design must be approved by Council and must generally accord with the expectations outlined in this DCP less an alternative is agreed by Council;
- The construction of works must be completed to the satisfaction of Council;
- There should be no negative financial impact on the DCP to the satisfaction of Council; and
- In particular, the works will only be accepted in lieu of a financial contribution required by this DCP to the extent that they constitute part or all of the design of the infrastructure item and reduce the cost to complete that design, to Council's satisfaction. 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 contributions (subject to the arrangements specified above):

- The credit for the works (unless an alternative approach is agreed with Council) provided shall equal the value identified in the DCP, taking into account the impact of indexation;
- The value of the works provided in accordance with the principle outlined above, will be off-set against the development contributions liable to be paid by the development proponent; and
- Credit for the provision of works in kind shall be at a time to be negotiated between the development proponent and Council.

4.3.4 Non-government schools

Where land is subdivided or developed for the purpose of a government school, non-government school or any other use that is partly or wholly exempt from development contributions and the land is subsequently used for a purpose other than as one of those exempt uses, the owner of that land must pay to Council development contributions in accordance with the provisions of the DCP.

4.4 Funds administration

The administration of the contributions made under the DCP including reporting requirements relating to development contributions will be transparent and development contributions will be held in accounts for each class of infrastructure until required for provision of items in that class. Details of funds received and expenditures will be held by Council in accordance with the provisions of the *Local Government Act 1989* and the Act.

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

- The amount and timing of funds collected;
- The sources of funds collected;
- The amount and timing of expenditure on specific projects;
- The project on which the expenditure was made;
- The account classes or individual project classes;
- Details of any works in kind arrangements for project provision; and
- Any pooling or quarantining of funds to deliver specific projects where applicable.

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

Council will establish interest bearing accounts and all monies held in these accounts will be used solely for the provision of infrastructure as specified in the DCP.

Should Council achieve savings on any project, or resolve not to proceed with any of the infrastructure projects listed in this DCP, the funds collected for these items will be used for alternative works in the same infrastructure class as specified by the DCP. Such funds may also be used for the provision of additional works, services or facilities where approved by the Minister responsible for theAct, or will be refunded to developers and/or owners of land subject to these infrastructure charges.

4.5 Construction and land value costs indexation

Capital costs of all infrastructure items are in 2017 dollars and will be indexed by Council annually to take account of inflation.

The cost base of the amount of the development contribution allocated to community and recreation construction must be indexed using the P*roducer Price Index Numbers for Non-Residential Building Construction – Victoria* published by the Australian Bureau of Statistics (Catalogue 6427.0, Table 17, Output of the Construction Industries, subdivision and class index numbers) for the June, September, December and March quarters occurring immediately before the beginning of the financial year in respect of which the indexed rate is being determined.

The cost base of the amount of the development contribution allocated to transport related construction must be indexed using the *Producer Price Index Numbers for Road and Bridge Construction – Victoria* published by the Australian Bureau of Statistics (Catelogue 6247.0, Table 17, Output of the Construction Industries, subdivision and class index numbers) for the June, September, December and March quarters occurring immediately before the beginning of the financial year in respect of which the indexed rate is being determined.

The cost base of the amount of the development contribution allocated to all land will be re-valued annually by a registered valuer based on the PLEM methodology for each lot that includes land for an infrastructure project.

Within 14 days of the indexation/adjustments being made, Council will publish the amended capital costs for each infrastructure item and the adjusted Development Infrastructure Levy and Community Infrastructure Levy (if any) on Council's website.

If the capped amount of the Community Infrastructure Levy is amended, then the Community Infrastructure Levy will be increased to the indexed amount subject to the revised capped amount.

4.6 Development contributions plan review period

This DCP adopts a long-term outlook for development. It takes into account planned future development in the Leneva–Baranduda precinct. A 'full development' horizon of land within the PSP within 40 years of gazettal of the DCP has been adopted.

The DCP commences on the Approval Date and will end when development within the precinct is complete, which is projected to be 30 years after gazettal.

The DCP should be reviewed and if necessary updated every 5 years (or more frequently if required).

The 5 yearly review is anticipated to include:

- Updates to any aspect 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 is subject to a substantive amendment); and
- Review of land values for land to be purchased through the plan.

4.7 Adjustment to infrastructure scope

During the implementation of the DCP a development may propose material changes to the use and development of land from that contemplated in the PSP, leading to increased requirement for infrastructure. In these cases there must be no negative impact on the DCP. The developer must pay the additional costs associated with the provision of the infrastructure item over and above the standard required by the DCP.

Appendix A Parcel specific land budget

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

Plan 7 - Land Use Budget
Leneva-Baranduda Precinct Structure

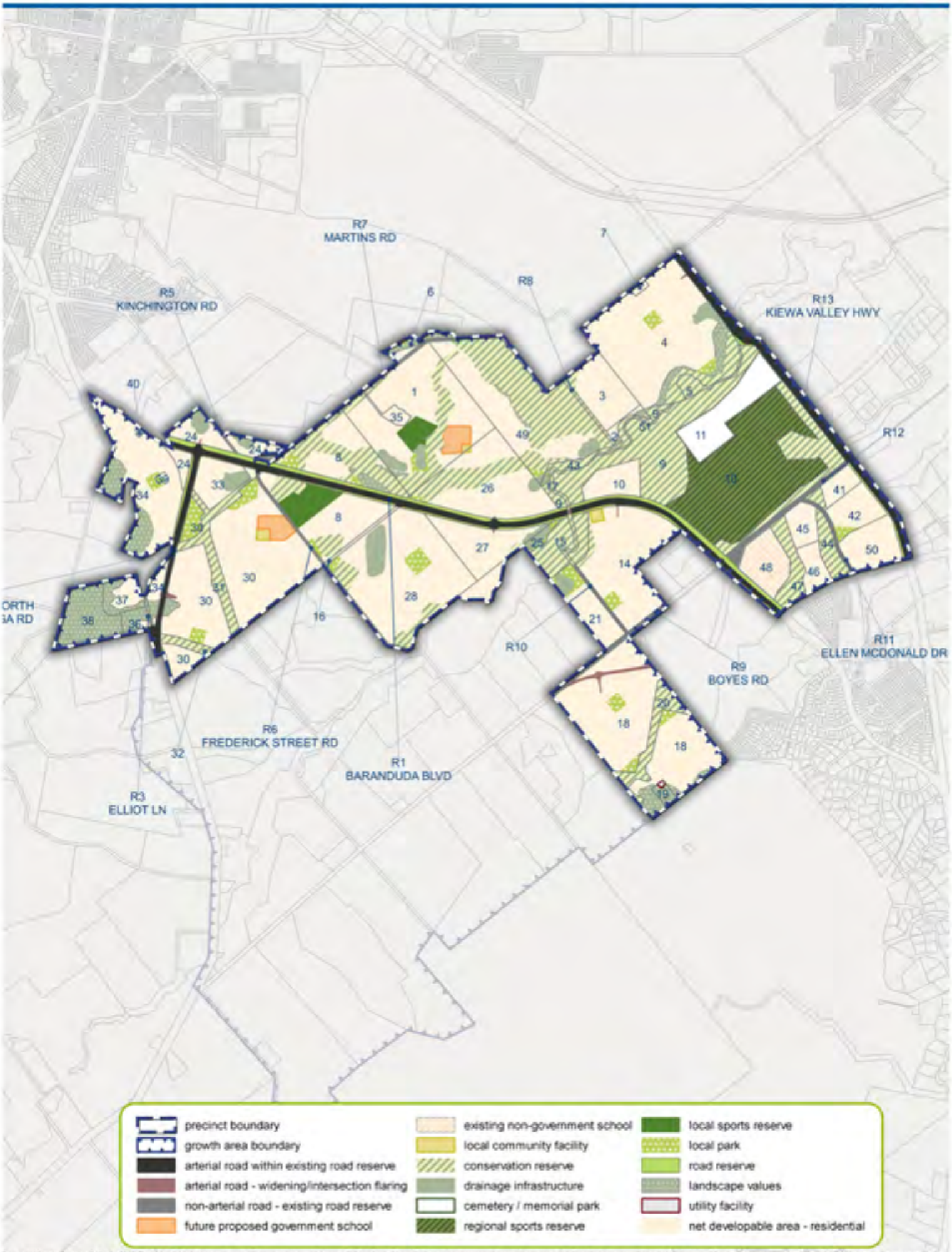


Table 12 Parcel specific land budget

LENEVA AND BARANDUDA																		
PSP PROPERTY ID	TOTAL AREA (HECTARES)	TRANSPORT				COMMUNITY & EDUCATION			OPEN SPACE						OTHER		TOTAL NET DEVELOPABLE AREA (HECTARES)	NET DEVELOPABLE AREA % OF PROPERTY
									UNCREDITED OPEN SPACE				CREDITED OPEN SPACE					
		ARTERIAL ROAD WITHIN EXISTING ROAD RESERVE	ARTERIAL ROAD - WIDENING AND INTERSECTION FLARING (DCP LAND)	NON-ARTERIAL ROAD - EXISTING ROAD RESERVE	ARTERIAL ROAD RESERVE	FUTURE PROPOSED GOVERNMENT SCHOOL	EXISTING NON-GOVERNMENT SCHOOL	LOCAL COMMUNITY FACILITIES (DCP LAND)	CONSERVATION RESERVE	DRAINAGE INFRASTRUCTURE (DCP LAND)	CEMETERY / MEMORIAL PARK	LANDSCAPE VALUES	LOCAL SPORTS RESERVE (DCP LAND)	LOCAL PARK (VIA CL53.01)	REGIONAL SPORTS RESERVE	UTILITIES FACILITY		
Property																		
1	63.17	-	-	-	-	3.50	-	0.31	11.49	2.94	-	0.43	4.00	0.67	-	-	39.83	63.05%
2	1.80	-	-	-	-	-	-	-	-	-	-	0.65	-	-	-	-	1.15	63.86%
3	16.12	-	-	-	-	-	-	-	0.87	-	-	0.12	-	-	-	-	15.14	93.87%
4	73.35	-	0.15	-	-	-	-	-	6.45	1.71	-	5.25	-	1.72	-	-	58.07	79.17%
5	3.08	-	-	-	-	-	-	-	3.08	-	-	-	-	-	-	-	0.00	0.00%
6	2.43	-	-	-	-	-	-	-	-	-	-	1.53	-	-	-	-	0.90	36.93%
7	0.80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.80	100.00%
8	56.71	-	-	-	-	-	-	-	19.06	-	-	2.10	8.00	1.81	-	-	25.73	45.38%
9	57.43	-	-	-	-	-	-	-	57.43	-	-	-	-	-	-	-	0.00	0.00%
10	75.58	-	-	-	-	-	-	-	-	-	-	-	-	-	66.50	-	9.07	12.01%
11	20.00	-	-	-	-	-	-	-	-	-	20.00	-	-	-	-	-	0.00	0.00%
14	40.09	-	0.19	-	-	-	-	0.80	1.33	-	-	-	-	1.00	-	-	36.77	91.73%
15	11.43	-	-	-	-	-	-	-	11.43	-	-	-	-	-	-	-	0.00	0.00%
16	1.36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.36	100.00%
17	2.13	-	0.09	-	-	-	-	-	2.04	-	-	-	-	-	-	-	0.00	0.00%
18	71.59	-	2.47	-	-	-	-	-	-	-	-	4.42	-	2.60	-	-	62.10	86.75%
19	1.80	-	-	-	-	-	-	-	-	-	-	1.61	-	-	-	0.18	0.00	0.00%
20	8.69	-	-	-	-	-	-	-	8.69	-	-	-	-	-	-	-	0.00	0.00%
21	12.74	-	-	-	-	-	-	-	-	1.69	-	-	-	1.69	-	-	9.35	73.43%
24	15.28	-	0.10	-	-	-	-	-	-	2.43	-	1.15	-	-	-	-	11.61	75.94%
25	1.86	-	-	-	-	-	-	-	-	1.40	-	-	-	0.46	-	-	0.00	0.00%
26	38.89	-	0.05	-	-	-	-	0.09	10.65	0.61	-	-	-	0.33	-	-	27.16	69.83%
27	17.73	-	0.08	-	-	-	-	-	0.47	0.65	-	-	-	0.03	-	-	16.50	93.07%

LENEVA AND BARANDUDA

PSP PROPERTY ID	TOTAL AREA (HECTARES)	TRANSPORT				COMMUNITY & EDUCATION			OPEN SPACE						OTHER		TOTAL NET DEVELOPABLE AREA (HECTARES)	NET DEVELOPABLE AREA % OF PROPERTY
									UNCREDITED OPEN SPACE				CREDITED OPEN SPACE					
		ARTERIAL ROAD WITHIN EXISTING ROAD RESERVE	ARTERIAL ROAD - WIDENING AND INTERSECTION FLARING (DCP LAND)	NON-ARTERIAL ROAD - EXISTING ROAD RESERVE	ARTERIAL ROAD RESERVE	FUTURE PROPOSED GOVERNMENT SCHOOL	EXISTING NON-GOVERNMENT SCHOOL	LOCAL COMMUNITY FACILITIES (DCP LAND)	CONSERVATION RESERVE	DRAINAGE INFRASTRUCTURE (DCP LAND)	CEMETERY / MEMORIAL PARK	LANDSCAPE VALUES	LOCAL SPORTS RESERVE (DCP LAND)	LOCAL PARK (VIA CL53.01)	REGIONAL SPORTS RESERVE	UTILITIES FACILITY		
28	67.31	-	-	-	-	-	-	-	6.13	4.46	-	-	-	2.59	-	-	54.12	80.41%
30	83.36	-	0.24	-	-	3.50	-	0.80	-	-	-	0.99	-	6.39	-	-	71.44	85.71%
31	11.22	-	0.01	-	-	-	-	-	10.74	-	-	-	-	-	-	-	0.48	4.26%
32	2.50	-	-	-	-	-	-	-	2.50	-	-	-	-	-	-	-	0.00	0.00%
33	10.10	-	-	-	-	-	-	-	-	1.95	-	-	-	-	-	-	8.15	80.68%
34	43.34	-	0.10	-	-	-	-	-	-	-	-	10.74	-	0.77	-	-	31.73	73.21%
35	2.19	-	-	-	-	-	-	-	0.05	-	-	-	-	-	-	-	2.14	97.61%
36	2.99	-	-	-	-	-	-	-	-	-	-	2.48	-	-	-	-	0.52	17.28%
37	7.07	-	-	-	-	-	-	-	-	-	-	3.22	-	-	-	-	3.86	54.51%
38	13.74	-	-	-	-	-	-	-	-	-	-	13.74	-	-	-	-	0.00	0.00%
39	0.46	-	-	-	-	-	-	-	-	-	-	-	-	0.23	-	-	0.23	50.04%
40	0.23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.23	100.00%
41	4.83	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.83	100.00%
42	10.17	-	-	-	-	-	-	-	-	-	-	-	-	1.00	-	-	9.17	90.17%
43	4.19	-	-	-	-	-	-	-	3.77	0.32	-	0.05	-	0.05	-	-	0.00	0.00%
44	6.87	-	-	-	-	-	-	-	6.87	-	-	-	-	-	-	-	0.00	0.00%
45	6.21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.21	100.00%
46	5.67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.67	100.00%
47	7.84	-	-	-	-	-	-	-	7.84	-	-	-	-	-	-	-	0.00	0.00%
48	12.19	-	-	-	-	-	12.19	-	-	-	-	-	-	-	-	-	0.00	0.00%
49	61.45	-	-	-	-	-	-	-	36.52	1.59	-	1.16	-	0.41	-	-	21.77	35.43%
50	12.71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.71	100.00%
51	1.36	-	-	-	-	-	-	-	1.36	-	-	-	-	-	-	-	0.00	0.00%
SUB-TOTAL	972.08	-	3.46	-	-	7.00	12.19	2.00	208.78	19.74	20.00	49.66	12.00	21.75	66.50	0.18	548.82	56.46%

LENEVA AND BARANDUDA

PSP PROPERTY ID	TOTAL AREA (HECTARES)	TRANSPORT				COMMUNITY & EDUCATION			OPEN SPACE						OTHER		TOTAL NET DEVELOPABLE AREA (HECTARES)	NET DEVELOPABLE AREA % OF PROPERTY
									UNCREDITED OPEN SPACE				CREDITED OPEN SPACE					
		ARTERIAL ROAD WITHIN EXISTING ROAD RESERVE	ARTERIAL ROAD - WIDENING AND INTERSECTION FLARING (DCP LAND)	NON-ARTERIAL ROAD - EXISTING ROAD RESERVE	ARTERIAL ROAD RESERVE	FUTURE PROPOSED GOVERNMENT SCHOOL	EXISTING NON-GOVERNMENT SCHOOL	LOCAL COMMUNITY FACILITIES (DCP LAND)	CONSERVATION RESERVE	DRAINAGE INFRASTRUCTURE (DCP LAND)	CEMETERY / MEMORIAL PARK	LANDSCAPE VALUES	LOCAL SPORTS RESERVE (DCP LAND)	LOCAL PARK (VIA CL53.01)	REGIONAL SPORTS RESERVE	UTILITIES FACILITY		
Road Reserve																		
R1-BARANDUDA BLVD	39.25	16.75	-	-	22.46	-	-	-	0.03	0.01	-	-	-	-	-	-	0.00	0.00%
R2-BEECHWORTH-WODONGA RD	7.90	5.67	-	-	2.23	-	-	-	-	-	-	-	-	-	-	-	0.00	0.00%
R3-ELLIOT LN	0.48	-	-	0.18	-	-	-	-	-	-	-	0.30	-	-	-	-	0.00	0.00%
R4-DRAPERS DR	2.35	-	-	0.16	-	-	-	-	-	-	-	2.19	-	-	-	-	0.00	0.00%
R5-KINCHINGTON RD	0.52	-	-	0.52	-	-	-	-	-	-	-	-	-	-	-	-	0.00	0.00%
R6-FREDERICK STREET RD	3.46	0.06	-	3.36	-	-	-	-	0.00	-	-	-	-	-	-	-	0.04	1.23%
R7-MARTINS RD	5.58	-	-	3.80	-	-	-	-	-	-	-	1.78	-	-	-	-	0.00	0.00%
R8	1.30	-	-	-	-	-	-	-	1.30	-	-	-	-	-	-	-	0.00	0.00%
R9-BOYES RD	6.62	-	-	6.62	-	-	-	-	-	-	-	-	-	-	-	-	0.00	0.00%
R10	1.66	-	-	1.34	-	-	-	-	0.32	-	-	-	-	-	-	-	0.00	0.00%
R11-ELLEN MCDONALD DR	1.77	-	-	1.77	-	-	-	-	-	-	-	-	-	-	-	-	0.00	0.00%
R12	1.32	-	-	1.32	-	-	-	-	-	-	-	-	-	-	-	-	0.00	0.00%
R13-KIEWA VALLEY HWY	18.19	12.68	-	-	5.51	-	-	-	-	-	-	-	-	-	-	-	0.00	0.00%
SUB-TOTAL	90.41	35.16	-	19.07	30.20	-	-	-	1.66	0.01	-	4.27	-	-	-	-	0.04	0.05%
TOTALS PSP 1105	**1,062.49**	**35.16**	**3.46**	**19.07**	**30.20**	**7.00**	**12.19**	**2.00**	**210.44**	**19.75**	**20.00**	**53.92**	**12.00**	**21.75**	**66.50**	**0.18**	**548.86**	**51.66%**

Appendix B Project cost estimates and concept designs

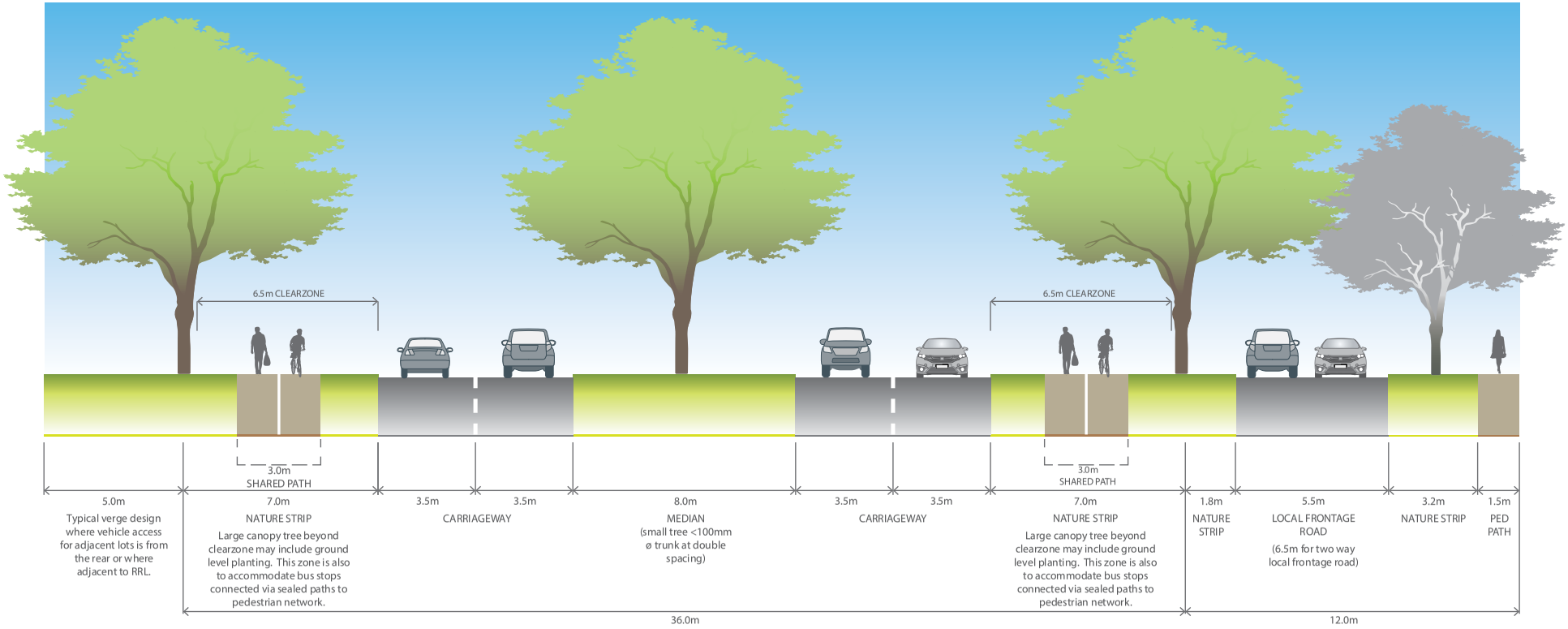
The following cost estimates and designs are provided for information purposes only to provide an indication about how the DCP project costs were calculated. The transport and drainage project cost estimates and concept designs were prepared by ARUP in collaboration with the City of Wodonga, the VPA and VicRoads. The community infrastructure cost estimates were prepared by Aquenta Consulting Pty Ltd in collaboration with the City of Wodonga and the VPA. All projects will be subject to detailed design prior to delivery.

For information in addition to what is included in this Appendix refer to:

- *Wodonga PSP Leneva & Baranduda Functional Design and Costing of Road and Drainage Infrastructure* – prepared by ARUP (07 June 2017); and *PSP 1105 Leneva Baranduda - Additional Wetland / Retarding basin* - Technical Note (September 2018)
- *Infrastructure Costings – Community Infrastructure* - prepared by Aquenta Consulting Pty Ltd (15 June 2017).

TRANSPORT PROJECT COST ESTIMATES AND FUNCTIONAL LAYOUT PLANS

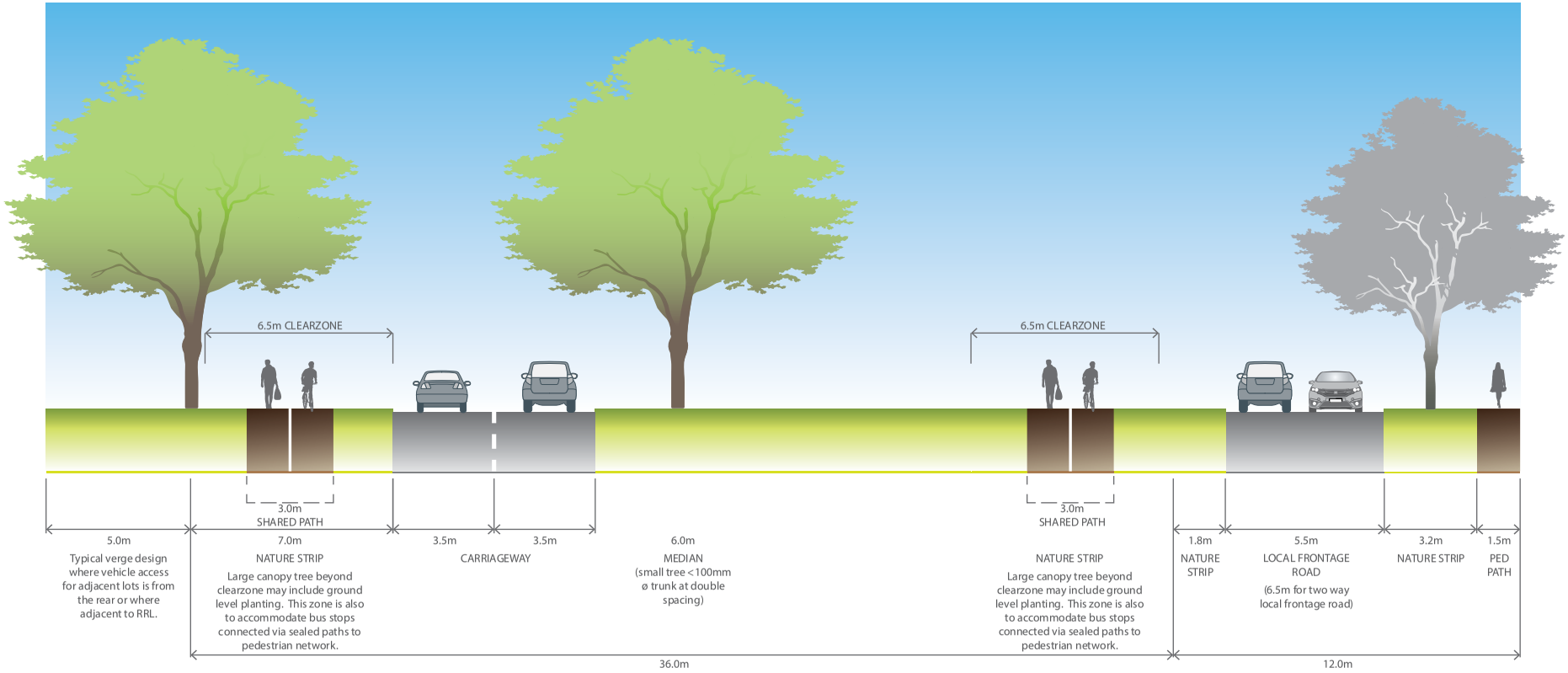
Plan 8 - Transport Infrastructure Projects
Leneva-Baranduda Precinct Structure



NOTES:

- Includes typical residential interface both sides
- Minimum street tree mature height 15 metres
- Kerbs for arterial carriageways are to be SM2 Semi-Mountable Kerb, and local frontage roads are to be B2 Barrier Kerb as per Figure 008 in Engineering Design and Construction Manual for Subdivision in Growth Areas.
- 6.5m Clearzone assumes 80km/hr speed limit - where required clearzones are to be consistent with VicRoads guidelines
- Configuration of ultimate cross section in response to existing vegetation and 80m road reserve to occur at the detailed design stage prior to delivery.
- Street plantings should consider infrastructure placement.

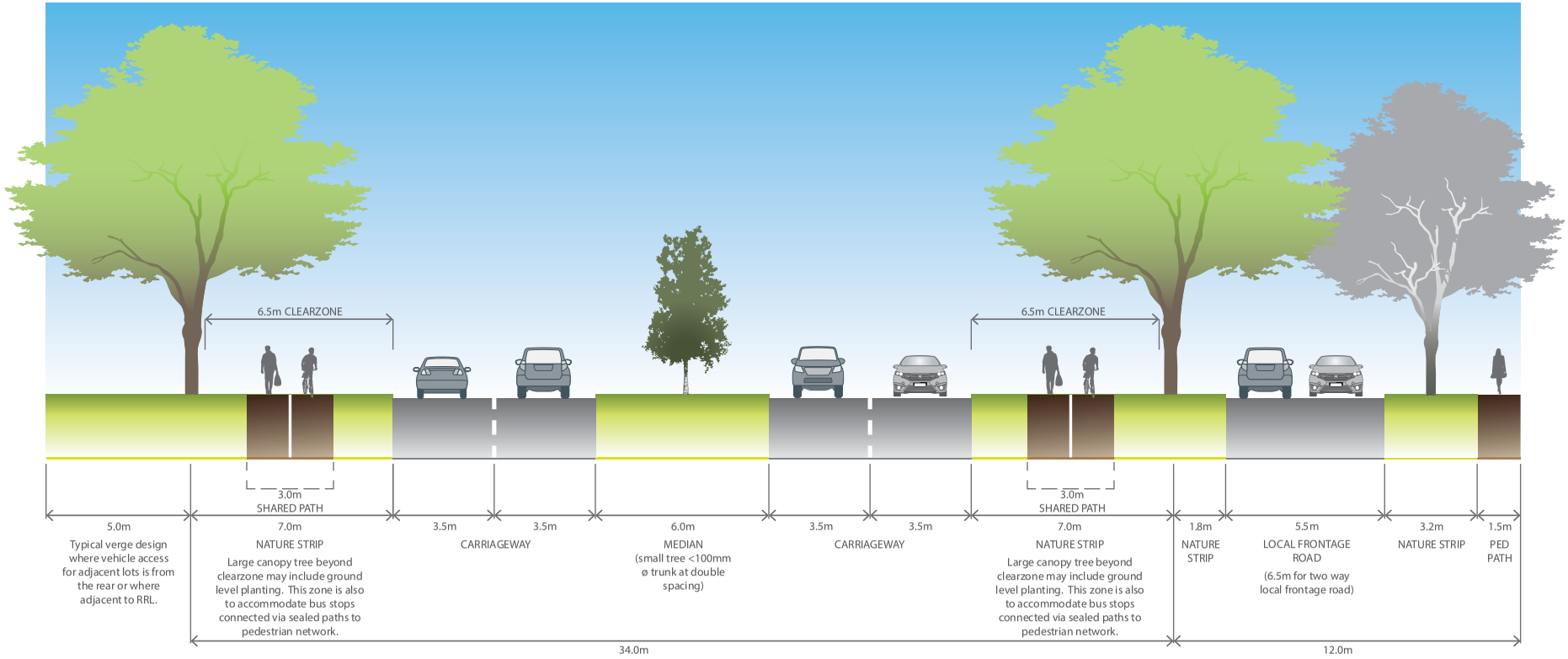
Secondary Arterial Road 4 lane (36.0m)
Baranduba Boulevard (Ultimate)



NOTES:

- Includes typical residential interface both sides
- Minimum street tree mature height 15 metres
- Kerbs for arterial carriageways are to be SM2 Semi-Mountable Kerb, and local frontage roads are to be B2 Barrier Kerb as per Figure 008 in Engineering Design and Construction Manual for Subdivision in Growth Areas.
- 6.5m Clearzone assumes 80km/hr speed limit - where required clearzones are to be consistent with VicRoads guidelines
- Configuration of ultimate cross section in response to existing vegetation and 80m road reserve to occur at the detailed design stage prior to delivery.
- Street plantings should consider infrastructure placement.

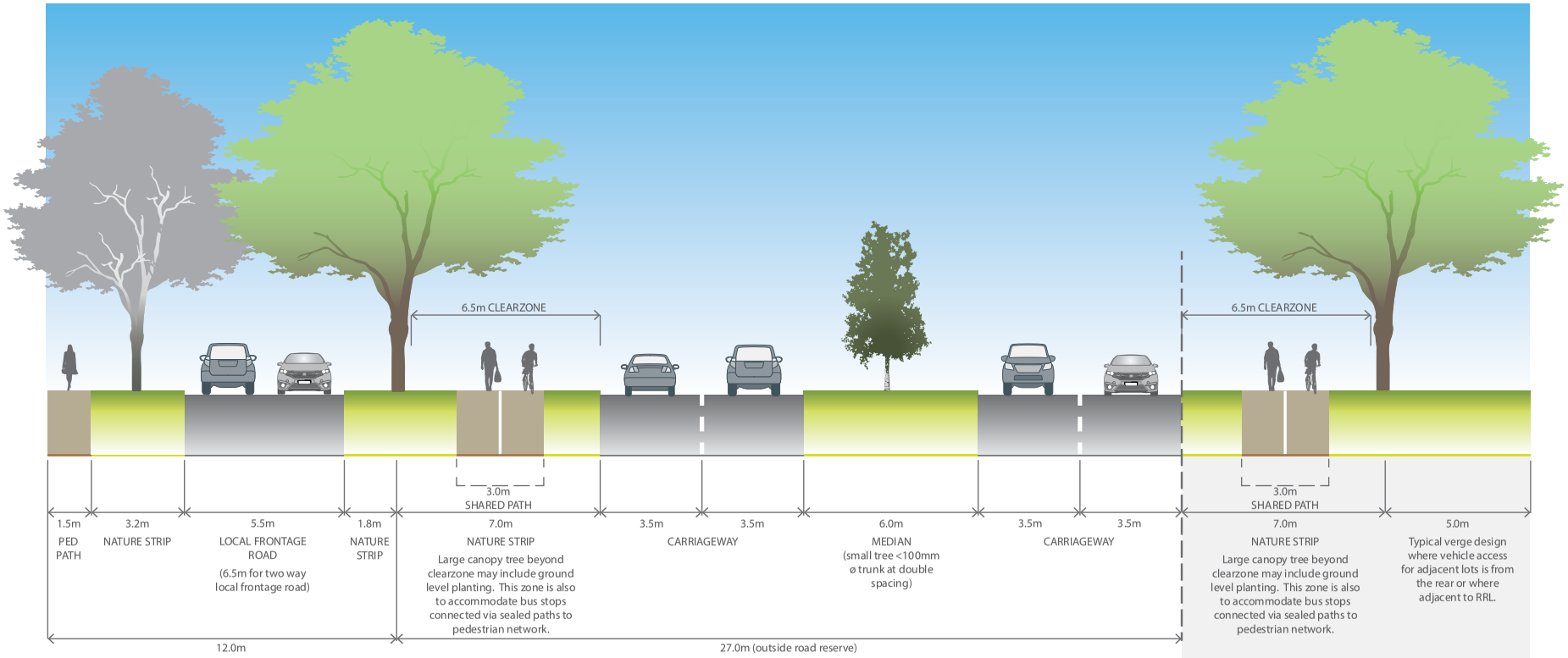
Secondary Arterial Road 2 lane (36.0m)
Baranduda Boulevard (Interim)



NOTES:

- Includes typical residential interface both sides (outside road reserve)
- Minimum street tree mature height 15 metres
- Kerbs for arterial carriageways are to be SM2 Semi-Mountable Kerb, and local frontage roads are to be B2 Barrier Kerb as per Figure 008 in Engineering Design and Construction Manual for Subdivision in Growth Areas.
- 6.5m Clearzone assumes 80km/hr speed limit - where required clearzones are to be consistent with VicRoads guidelines
- Configuration of ultimate cross section in response to native vegetation and 60m road reserve to occur at detailed design stage prior to delivery.
- Street plantings should consider infrastructure placement.

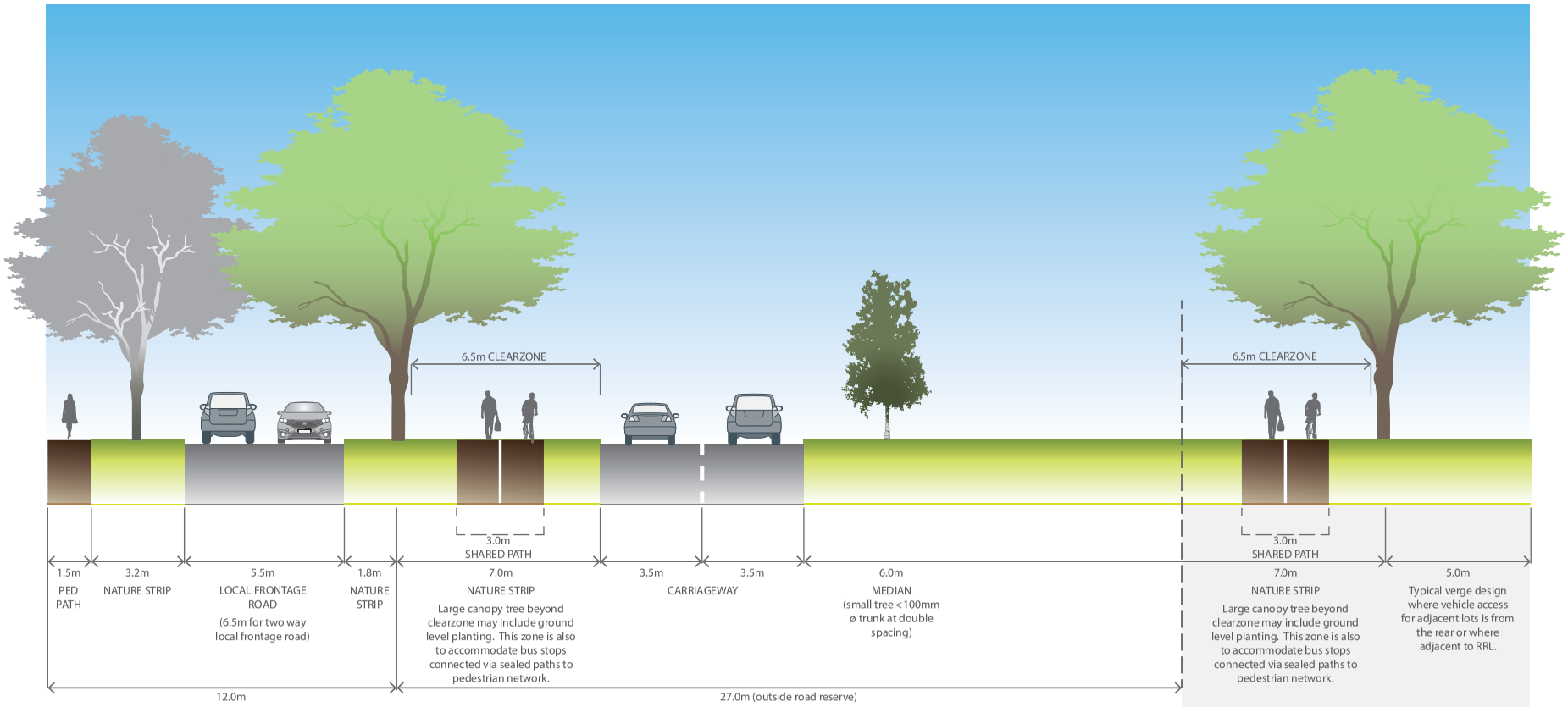
Secondary Arterial Road 4 lane (60.0m Road Reserve)
Kiewa Valley Highway (Ultimate)



NOTES:

- Includes typical residential interface both sides (outside road reserve)
- Minimum street tree mature height 15 metres
- Kerbs for arterial carriageways are to be SM2 Semi-Mountable Kerb, and local frontage roads are to be B2 Barrier Kerb as per Figure 008 in Engineering Design and Construction Manual for Subdivision in Growth Areas.
- 6.5m Clearzone assumes 80km/hr speed limit - where required clearzones are to be consistent with VicRoads guidelines
- Street plantings should consider infrastructure placement.

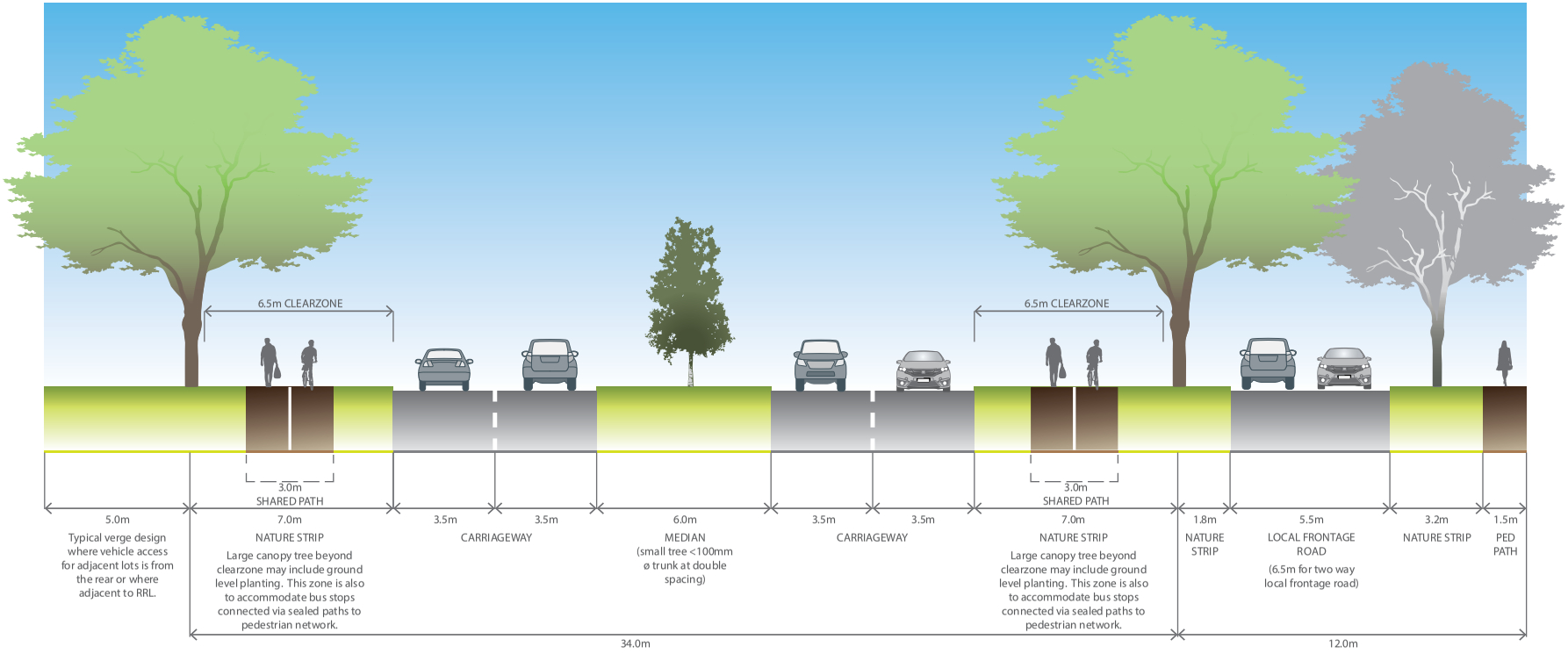
Secondary Arterial Road 4 lane (60.0m including Road Reserve, 27.0m Outside Road Reserve)
Boyes Road - Adjacent to existing road reserve (Ultimate)



NOTES:

- Includes typical residential interface both sides (outside road reserve)
- Minimum street tree mature height 15 metres
- Kerbs for arterial carriageways are to be SM2 Semi-Mountable Kerb, and local frontage roads are to be B2 Barrier Kerb as per Figure 008 in Engineering Design and Construction Manual for Subdivision in Growth Areas.
- 6.5m Clearzone assumes 80km/hr speed limit - where required clearzones are to be consistent with VicRoads guidelines
- Street plantings should consider infrastructure placement.

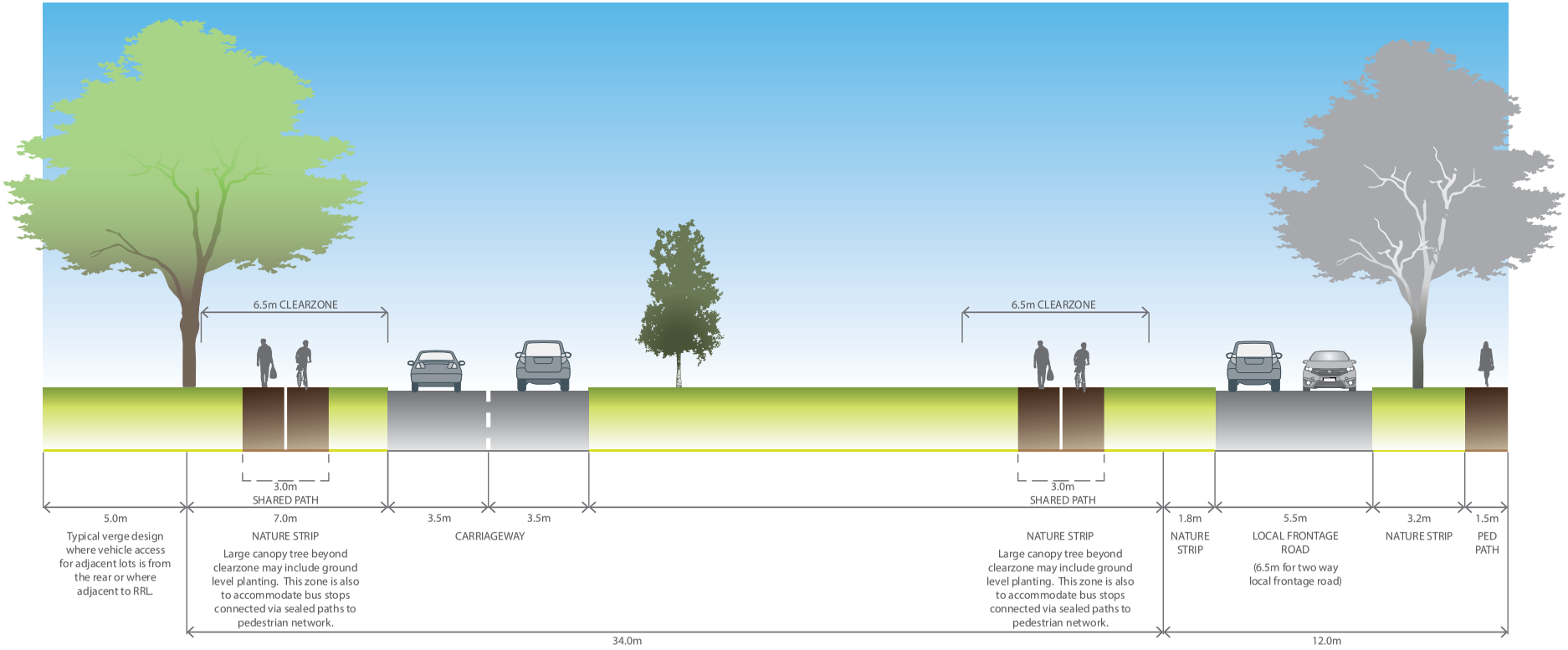
Secondary Arterial Road 4 lane (27m Outside Road Reserve, 60m incl. Road Reserve)
Boyes Road - adjacent to existing road reserve (Interim)



NOTES:

- Includes typical residential interface both sides (outside road reserve)
- Minimum street tree mature height 15 metres
- Kerbs for arterial carriageways are to be SM2 Semi-Mountable Kerb, and local frontage roads are to be B2 Barrier Kerb as per Figure 008 in Engineering Design and Construction Manual for Subdivision in Growth Areas.
- 6.5m Clearzone assumes 80km/hr speed limit - where required clearzones are to be consistent with VicRoads guidelines
- Configuration of ultimate cross section in response to native vegetation and 60m road reserve to occur at detailed design stage prior to delivery.
- Street plantings should consider infrastructure placement.

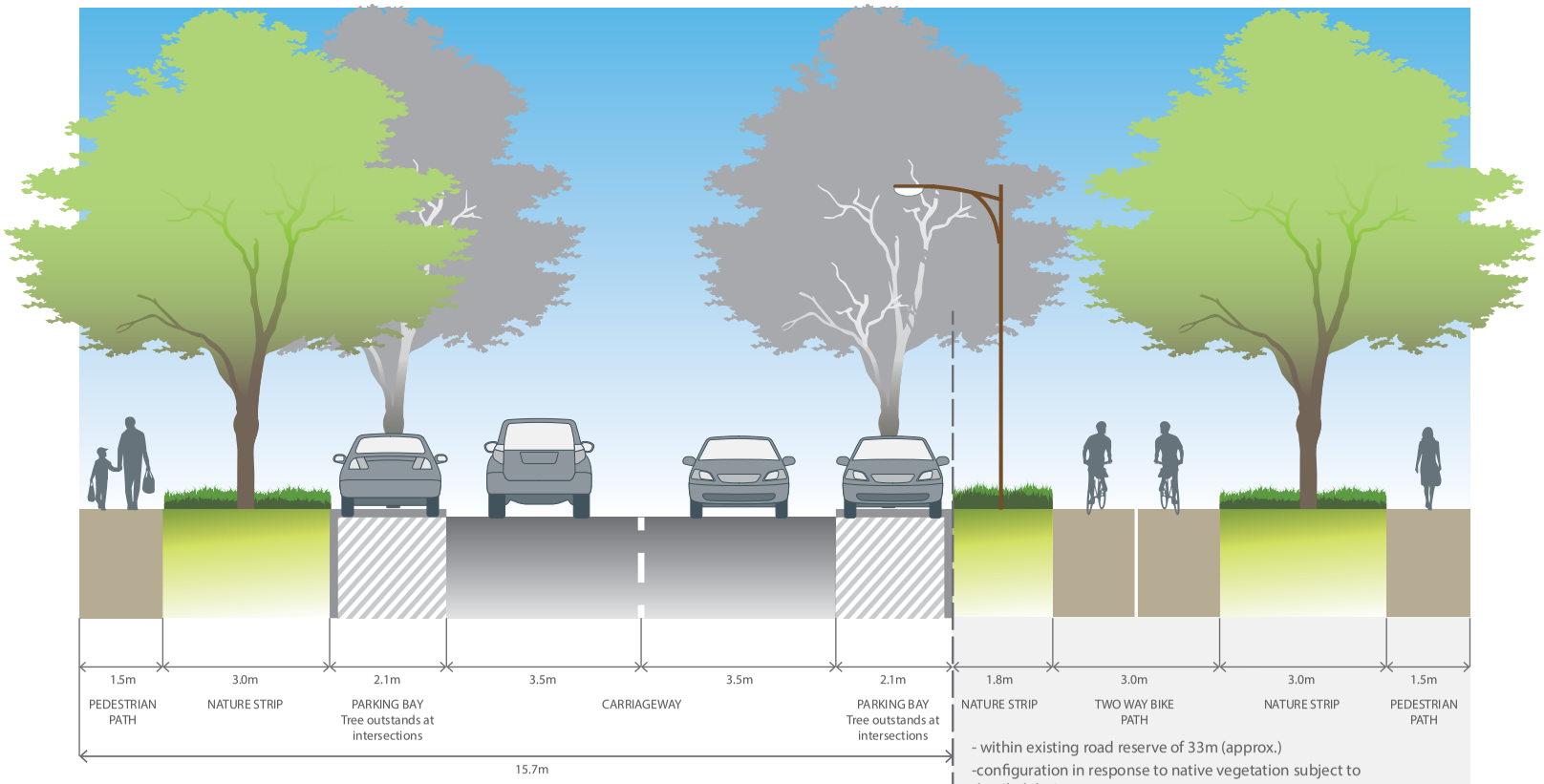
Secondary Arterial Road 4 lane (60.0m Road Reserve)
Boyes Road (Ultimate)



NOTES:

- Includes typical residential interface both sides (outside road reserve)
- Minimum street tree mature height 15 metres
- Kerbs for arterial carriageways are to be SM2 Semi-Mountable Kerb, and local frontage roads are to be B2 Barrier Kerb as per Figure 008 in Engineering Design and Construction Manual for Subdivision in Growth Areas.
- 6.5m Clearzone assumes 80km/hr speed limit - where required clearzones are to be consistent with VicRoads guidelines
- Configuration of interim cross section in response to native vegetation and existing road reserves/roads to occur at detailed design stage prior to delivery.
- Street plantings should consider infrastructure placement.

Secondary Arterial Road 4 lane (34.0m Standard)
Boyes Road (Interim)



NOTES:

- Minimum street tree mature height 15 metres
- Where roads abut school drop-off zones and thoroughfares, grassed nature strip should be replaced with pavement. Canopy tree planting must in incorporated into any additional pavement.
- Verge widths may be reduced where roads abut open space with the consent of the responsible authority.
- Street plantings should consider infrastructure placement.

Connector Street (15.7m Outside Road Reserve, 48.7m incl. Road Reserve)
Boyes Road (Option)

ARUP	Job No.	Sheet No.	Rev.
	246965-00		
	Element	Cost Schedule	
Job Title: PSP 1105 Leneva - Baranduda	Drg. Ref.	N/A	
Calculation: Construction Cost Estimate	Made by	Date 19/12/2016	Chd.

COST ESTIMATE FOR PROPOSED ROADS

RD01-1 Baranduda Boulevard (West of IT02)

Length (m): 84

SECTION	ITEM	DESCRIPTION	QUANTITY	UNIT	ORIGINAL RATE	AMOUNT	SUBTOTAL
A		**Site Clearance**					**$ 6,192**
	A1	General Site Clearance	1,596	m^2	$ 2.00	$ 3,192	
	A2	Trees - Girth between 300mm and 1000mm	6	No.	$ 500.00	$ 3,000	
B		**Earthworks**					**$ 25,452**
	B1	Stripping site topsoil to stockpile on site (assume 150mm thick)	1,596	m^2	$ 5.00	$ 7,980	
	B2	Excavate to subgrade including offsite disposal	437	m^3	$ 30.00	$ 13,104	
	B3	Subgrade preparation, trimming and compaction	1,092	m^2	$ 4.00	$ 4,368	
C		**Road Pavement**					**$ 58,800**
	C1	New pavement	588	m^2	$ 100.00	$ 58,800	
D		**Concrete Works**					**$ 75,600**
	D1	SM2 type kerb	336	m	$ 45.00	$ 15,120	
	D2	Shared pavement	504	m^2	$ 120.00	$ 60,480	
E		**Drainage**					**$ 64,400**
		Pipes and Box Culverts: Excavation Depth <1.5m					
	E1	RCP - 375mm Class 3 RRJ (incl subsoil)	168	m	$ 300.00	$ 50,400	
	E2	Drainage Pit (1000x750)	4	No.	$ 3,500.00	$ 14,000	
F		**Guard Fence (Not Used)**					**$ -**
G		**Signs and Linemarking**					**$ 2,268**
	G1	Continuous/edge line	336	m	$ 4.00	$ 1,344	
	G2	Intermittent continuity line (incl SUP)	336	m	$ 2.50	$ 840	
	G3	RRPM's	21	No.	$ 4.00	$ 84	
H		**Street Lighting**					**$ 40,000**
	H1	SB pole, 6m bracket arm, 150W luminaires, electrical transformers and electrical works. Design and construction by Powercor (incl design and management)	4	Item	$ 10,000.00	$ 40,000	
I		**Utility Services (Not Used)**					**$ -**
J		**Landscaping**					**$ 2,520**
	J1	Remove topsoil from stockile and spread 100mm thick on road batters, swales and adjacent areas disturbed by construction.	504	m^2	$ 5.00	$ 2,520	
K		**Misc Works**					**$ 2,520**
	K1	Right of way fencing - 1.2m post and wire	168	m	$ 15.00	$ 2,520	
L		**Sub-total Works (A-K)**					**$ 277,752**
M		**Delivery**					
	M1	Site Establishment	2.5	%		$ 6,943.80	
	M2	Survey/Design	10	%		$ 27,775.20	
	M3	Supervision & Project Management	5	%		$ 13,887.60	
	M4	Contingency	20	%		$ 55,550.40	
	M5	Traffic/Environmental Management	5.5	%		$ 15,276.36	
	M6	Council Fees	3.25	%		$ 9,026.94	
N		**Sub-total Delivery (M)**					**$ 128,460**
O		**PROJECT BUDGET**					**$ 406,212**

ARUP	Job No.	Sheet No.	Rev.
	246965-00		
	Element	Cost Schedule	
Job Title PSP 1105 Leneva - Baranduda	Drg. Ref.	N/A	
Calculation Construction Cost Estimate	Made by	Date 19/12/2016	Chd.

COST ESTIMATE FOR PROPOSED ROADS

RD01-2 Baranduda Boulevard (IT02-IT03)

Length (m): 232

SECTION	ITEM	DESCRIPTION	QUANTITY	UNIT	ORIGINAL RATE	AMOUNT	SUBTOTAL
A		**Site Clearance**					**$ 16,578**
	A1	General Site Clearance	6,289	m^2	$ 2.00	$ 12,578	
	A2	Trees - Girth between 300mm and 1000mm	8	No.	$ 500.00	$ 4,000	
B		**Earthworks**					**$ 84,457**
	B1	Stripping site topsoil to stockpile on site (assume 150mm thick)	6,289	m^2	$ 5.00	$ 31,445	
	B2	Excavate to subgrade including offsite disposal	1,334	m^3	$ 30.00	$ 40,020	
	B3	Subgrade preparation, trimming and compaction	3,248	m^2	$ 4.00	$ 12,992	
C		**Road Pavement**					**$ 204,079**
	C1	New pavement	1,856	m^2	$ 100.00	$ 185,600	
	C2	Wearing Course Overlay - Asphalt - 40mm, including	1,087	m^2	$ 17.00	$ 18,479	
D		**Concrete Works**					**$ 208,800**
	D1	SM2 type kerb	928	m	$ 45.00	$ 41,760	
	D2	Shared pavement	1,392	m^2	$ 120.00	$ 167,040	
E		**Drainage**					**$ 94,143**
		Pipes and Box Culverts: Excavation Depth <1.5m					
	E2	RCP - 375mm Class 3 RRJ (incl subsoil)	232	m	$ 300.00	$ 69,643	
	E17	Drainage Pit (1000x750)	7	No.	$ 3,500.00	$ 24,500	
F		**Guard Fence (Not Used)**					**$ -**
G		**Signs and Linemarking**					**$ 6,414**
	G1	Continuous/edge line	928	m	$ 4.00	$ 3,712	
	G2	Intermittent continuity line (incl SUP)	928	m	$ 2.50	$ 2,320	
	G3	Intermittent lane line	75	m	$ 2.00	$ 150	
	G4	RRPM's	58	No.	$ 4.00	$ 232	
H		**Street Lighting**					**$ 90,000**
	H1	SB pole, 6m bracket arm, 150W luminaires, electrical transformers and electrical works. Design and construction by Powercor (incl design and management)	9	Item	$ 10,000.00	$ 90,000	
I		**Utility Services (Not Used)**					**$ -**
J		**Landscaping**					**$ 15,205**
	J1	Remove topsoil from stockile and spread 100mm thick on road batters, swales and adjacent areas disturbed by construction.	3,041	m^2	$ 5.00	$ 15,205	
K		**Misc Works**					**$ 6,960**
	K1	Right of way fencing - 1.2m post and wire	464	m	$ 15.00	$ 6,960	
L		**Sub-total Works (A-K)**					**$ 726,636**
M		**Delivery**					
	M1	Site Establishment	2.5	%		$ 18,165.90	
	M2	Survey/Design	10	%		$ 72,663.59	
	M3	Supervision & Project Management	5	%		$ 36,331.79	
	M4	Contingency	20	%		$ 145,327.17	
	M5	Traffic/Environmental Management	5.5	%		$ 39,964.97	
	M6	Council Fees	3.25	%		$ 23,615.67	
N		**Sub-total Delivery (M)**					**$ 336,069**
O		**PROJECT BUDGET**					**$ 1,062,705**

ARUP	Job No.	Sheet No.	Rev.
	246965-00		
	Element	Cost Schedule	
Job Title PSP 1105 Leneva - Baranduda	Drg. Ref.	N/A	
Calculation Construction Cost Estimate	Made by	Date 19/12/2016	Chd.

COST ESTIMATE FOR PROPOSED ROADS

RD01-3 Baranduda Boulevard (IT03-IT04)

Length (m): 1,545

SECTION	ITEM	DESCRIPTION	QUANTITY	UNIT	ORIGINAL RATE	AMOUNT	SUBTOTAL
A		**Site Clearance**					**$ 87,578**
	A1	General Site Clearance	42,789	m^2	$ 2.00	$ 85,578	
	A2	Trees - Girth between 300mm and 1000mm	4	No.	$ 500.00	$ 2,000	
B		**Earthworks**					**$ 535,305**
	B1	Stripping site topsoil to stockpile on site (assume 150mm thick)	42,789	m^2	$ 5.00	$ 213,945	
	B2	Excavate to subgrade including offsite disposal	8,034	m^3	$ 30.00	$ 241,020	
	B3	Subgrade preparation, trimming and compaction	20,085	m^2	$ 4.00	$ 80,340	
C		**Road Pavement**					**$ 1,265,355**
	C1	New pavement	10,815	m^2	$ 100.00	$ 1,081,500	
	C2	Wearing Course Overlay - Asphalt - 40mm, including	10,815	m^2	$ 17.00	$ 183,855	
D		**Concrete Works**					**$ 1,390,500**
	D1	SM2 type kerb	6,180	m	$ 45.00	$ 278,100	
	D2	Shared pavement	9,270	m^2	$ 120.00	$ 1,112,400	
E		**Drainage**					**$ 1,602,836**
		Pipes and Box Culverts: Excavation Depth <1.5m					
	E1	RCP - 375mm Class 3 RRJ (incl subsoil)	1,829	m	$ 300.00	$ 548,585	
	E2	RCP - 450mm Class 3 RRJ (incl subsoil)	1,348	m	$ 400.00	$ 539,194	
	E4	RCP - 525mm Class 3 RRJ	1,025	m	$ 400.00	$ 410,057	
	E5	Drainage Pit (1000x750)	30	No.	$ 3,500.00	$ 105,000	
F		**Guard Fence (Not Used)**					**$ -**
G		**Signs and Linemarking**					**$ 41,715**
	G1	Continuous/edge line	6180	m	$ 4.00	$ 24,720	
	G2	Intermittent continuity line (incl SUP)	6180	m	$ 2.50	$ 15,450	
	G3	RRPM's	386	No.	$ 4.00	$ 1,545	
H		**Street Lighting**					**$ 620,000**
	H1	SB pole, 6m bracket arm, 150W luminaires, electrical transformers and electrical works. Design and construction by Powercor (incl design and management)	62	Item	$ 10,000.00	$ 620,000	
I		**Utility Services (Not Used)**					**$ -**
J		**Landscaping**					**$ 113,520**
	J1	Remove topsoil from stockile and spread 100mm thick on road batters, swales and adjacent areas disturbed by construction.	22,704	m^2	$ 5.00	$ 113,520	
K		**Misc Works**					**$ 46,350**
	K1	Right of way fencing - 1.2m post and wire	3,090	m	$ 15.00	$ 46,350	
L		**Sub-total Works (A-K)**					**$ 5,703,159**
M		**Delivery**					
	M1	Site Establishment	2.5	%		$ 142,578.97	
	M2	Survey/Design	10	%		$ 570,315.88	
	M3	Supervision & Project Management	5	%		$ 285,157.94	
	M4	Contingency	20	%		$ 1,140,631.77	
	M5	Traffic/Environmental Management	5.5	%		$ 313,673.74	
	M6	Council Fees	3.25	%		$ 185,352.66	
N		**Sub-total Delivery (M)**					**$ 2,637,711**
O		**PROJECT BUDGET**					**$ 8,340,870**

ARUP	Job No. 246965-00	Sheet No.	Rev.
	Element Cost Schedule		
Job Title PSP 1105 Leneva - Baranduda	Drg. Ref. N/A		
Calculation Construction Cost Estimate	Made by	Date 19/12/2016	Chd.

COST ESTIMATE FOR PROPOSED ROADS

RD01-4 Baranduda Boulevard (IT04-IT05)

Length (m): 523

SECTION	ITEM	DESCRIPTION	QUANTITY	UNIT	ORIGINAL RATE	AMOUNT	SUBTOTAL
A		**Site Clearance**					**$ 29,706**
	A1	General Site Clearance	14,853	m^2	$ 2.00	$ 29,706	
B		**Earthworks**					**$ 187,580**
	B1	Stripping site topsoil to stockpile on site (assume 150mm thick)	14,853	m^2	$ 5.00	$ 74,265	
	B2	Excavate to subgrade including offsite disposal	2,841	m^3	$ 30.00	$ 85,235	
	B3	Subgrade preparation, trimming and compaction	7,020	m^2	$ 4.00	$ 28,080	
C		**Road Pavement**					**$ 448,108**
	C1	New pavement	3,882	m^2	$ 100.00	$ 388,200	
	C7	Wearing Course Overlay - Asphalt - 40mm, including	3,524	m^2	$ 17.00	$ 59,908	
D		**Concrete Works**					**$ 470,700**
	D1	SM2 type kerb	2,092	m	$ 45.00	$ 94,140	
	D2	Shared pavement	3,138	m^2	$ 120.00	$ 376,560	
E		**Drainage**					**$ 384,279**
		Pipes and Box Culverts: Excavation Depth <1.5m					
	E1	RCP - 375mm Class 3 RRJ (incl subsoil)	1,007	m	$ 300.00	$ 302,179	
	E2	RCP - 450mm Class 3 RRJ (incl subsoil)	39	m	$ 400.00	$ 15,600	
	E3	Drainage Pit (1000x750)	19	No.	$ 3,500.00	$ 66,500	
F		**Guard Fence (Not Used)**					**$ -**
G		**Signs and Linemarking**					**$ 14,121**
	G1	Continuous/edge line	2092	m	$ 4.00	$ 8,368	
	G2	Intermittent continuity line (incl SUP)	2092	m	$ 2.50	$ 5,230	
	G3	RRPM's	131	No.	$ 4.00	$ 523	
H		**Street Lighting**					**$ 210,000**
	H1	SB pole, 6m bracket arm, 150W luminaires, electrical transformers and electrical works. Design and construction by Powercor (incl design and management)	21	Item	$ 10,000.00	**$ 210,000**	
I		**Utility Services (Not Used)**					**$ -**
J		**Landscaping**					**$ 39,165**
	J1	Remove topsoil from stockile and spread 100mm thick on road batters, swales and adjacent areas disturbed by construction.	7,833	m^2	$ 5.00	$ 39,165	
K		**Misc Works**					**$ 15,690**
	K1	Right of way fencing - 1.2m post and wire	1,046	m	$ 15.00	$ 15,690	
L		**Sub-total Works (A-K)**					**$ 1,799,349**
M		**Delivery**					
	M1	Site Establishment	2.5	%		$ 44,983.72	
	M2	Survey/Design	10	%		$ 179,934.87	
	M3	Supervision & Project Management	5	%		$ 89,967.43	
	M4	Contingency	20	%		$ 359,869.74	
	M5	Traffic/Environmental Management	5.5	%		$ 98,964.18	
	M6	Council Fees	3.25	%		$ 58,478.83	
N		**Sub-total Delivery (M)**					**$ 832,199**
O		**PROJECT BUDGET**					**$ 2,631,547**

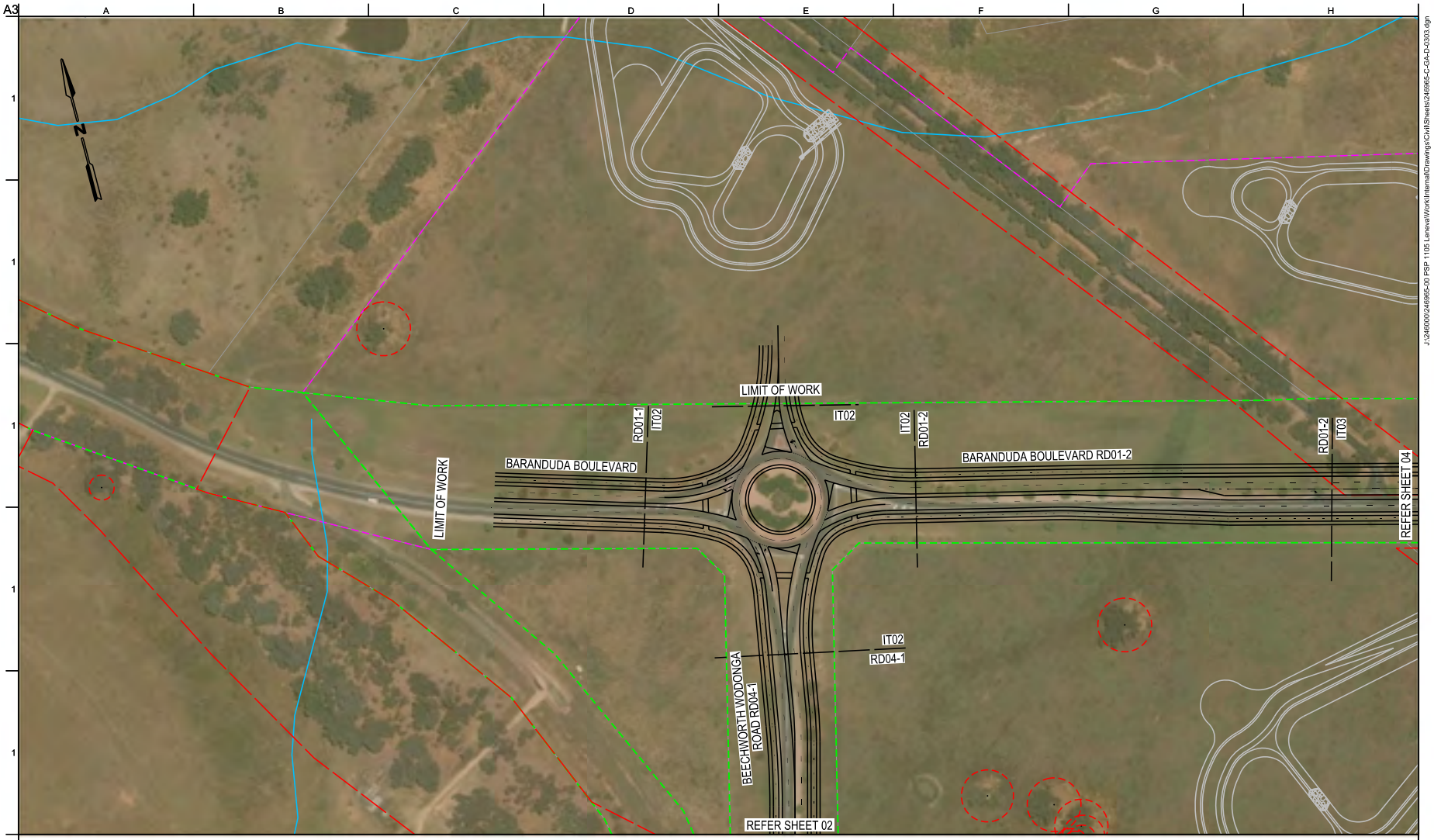
ARUP	Job No.	Sheet No.	Rev.
	246965-00		
	Element	Cost Schedule	
Job Title PSP 1105 Leneva - Baranduda	Drg. Ref.	N/A	
Calculation Construction Cost Estimate	Made by	Date 19/12/2016	Chd.

COST ESTIMATE FOR PROPOSED ROADS

RD01-5 Baranduda Boulevard (IT05-IT06)

Length (m): 1,127

SECTION	ITEM	DESCRIPTION	QUANTITY	UNIT	ORIGINAL RATE	AMOUNT	SUBTOTAL
A		**Site Clearance**					**$ 47,088**
	A1	General Site Clearance	20,544	m^2	$ 2.00	$ 41,088	
	A2	Trees - Girth between 300mm and 1000mm	12	No.	$ 500.00	$ 6,000	
B		**Earthworks**					**$ 340,218**
	B1	Stripping site topsoil to stockpile on site (assume 150mm thick)	20,544	m^2	$ 5.00	$ 102,720	
	B2	Excavate to subgrade including offsite disposal	5,880	m^3	$ 30.00	$ 176,394	
	B3	Subgrade preparation, trimming and compaction	15,276	m^2	$ 4.00	$ 61,104	
	B4	Imported Type B general fill, spread and compact in layers		m^3	$ 25.00	$ -	
C		**Road Pavement**					**$ 815,044**
	C1	New pavement	7,516	m^2	$ 100.00	$ 751,600	
	C2	Wearing Course Overlay - Asphalt - 40mm, including	3,732	m^2	$ 17.00	$ 63,444	
D		**Concrete Works**					**$ 1,051,170**
	D1	SM2 type kerb	2,666	m	$ 45.00	$ 119,970	
	D2	Shared pavement	7,760	m^2	$ 120.00	$ 931,200	
E		**Drainage**					**$ 781,710**
		Pipes and Box Culverts: Excavation Depth <1.5m					
	E1	RCP - 375mm Class 3 RRJ (incl subsoil)	1,754	m	$ 300.00	$ 526,140	
	E3	RCP - 450mm Class 3 RRJ	500	m	$ 350.00	$ 175,070	
	E2	Drainage Pit (1000x750)	23	No.	$ 3,500.00	$ 80,500	
F		**Guard Fence (Not Used)**					**$ -**
G		**Signs and Linemarking**					**$ 24,324**
	G1	Continuous/edge line	3,381	m	$ 4.00	$ 13,524	
	G2	Intermittent continuity line (incl SUP)	3,945	m	$ 2.50	$ 9,861	
	G3	RRPM's	235	No.	$ 4.00	$ 939	
H		**Street Lighting**					**$ 340,000**
	H1	SB pole, 6m bracket arm, 150W luminaires, electrical transformers and electrical works. Design and construction by Powercor (incl design and management)	34	Item	$ 10,000.00	$ 340,000	
I		**Utility Services (Not Used)**					**$ -**
J		**Landscaping**					**$ 26,340**
	J1	Remove topsoil from stockile and spread 100mm thick on road batters, swales and adjacent areas disturbed by construction.	5,268	m^2	$ 5.00	$ 26,340	
K		**Misc Works**					**$ 33,810**
	K1	Right of way fencing - 1.2m post and wire	2,254	m	$ 15.00	$ 33,810	
L		**Sub-total Works (A-K)**					**$ 3,459,704**
M		**Delivery**					
	M1	Site Establishment	2.5	%		$ 86,492.61	
	M2	Survey/Design	10	%		$ 345,970.44	
	M3	Supervision & Project Management	5	%		$ 172,985.22	
	M4	Contingency	20	%		$ 691,940.89	
	M5	Traffic/Environmental Management	5.5	%		$ 190,283.74	
	M6	Council Fees	3.25	%		$ 112,440.39	
N		**Sub-total Delivery (M)**					**$ 1,600,113**
O		**PROJECT BUDGET**					**$ 5,059,818**



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- PROJECT SITE BOUNDARY
- ROAD RESERVE BOUNDARY
- TREE PROTECTION ZONE
- VEGETATION PROTECTION OVERLAY
- CADASTRAL WATERCOURSE
- CADASTRAL LOT BOUNDARY

Issue	Date	By	Chkd	Appd
P01	29/03/16	SBM	MRB	BJS
FOR INFORMATION				

Client
Metropolitan Planning Authority - Melbourne

Job Title
PSP 1105
Leneva - Baranduda

Scale at A3 1:2000

Discipline Civil

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Melbourne, Victoria 3000
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Drawing Title
Functional Layout Plan
Ultimate Works
Sheet 3 of 20

Drawing Status
Preliminary

Job No	Drawing No	Issue
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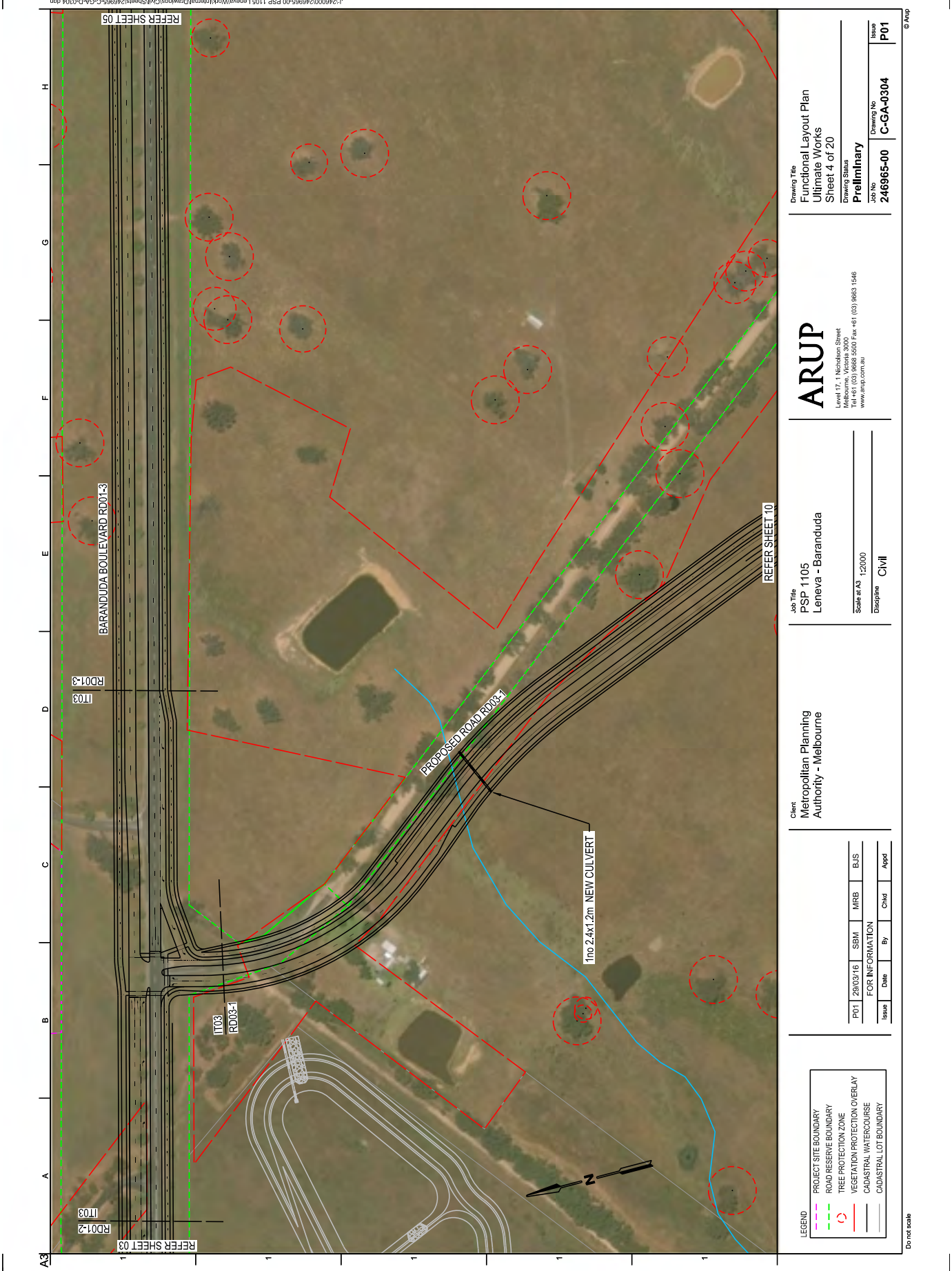
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RD01-3
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IT03
RD03-1
IT03
RD01-2
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ROAD RESERVE BOUNDARY
TREE PROTECTION ZONE
VEGETATION PROTECTION OVERLAY
CADASTRAL WATERCOURSE
CADASTRAL LOT BOUNDARY
Issue Date By Chkd Appd
P01 29/03/16 SBM MRB BJS
FOR INFORMATION
Client
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Job Title
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Drawing Title
Functional Layout Plan
Ultimate Works
Sheet 4 of 20
Drawing Status
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Job No 246965-00
Drawing No C-GA-0304
Issue P01
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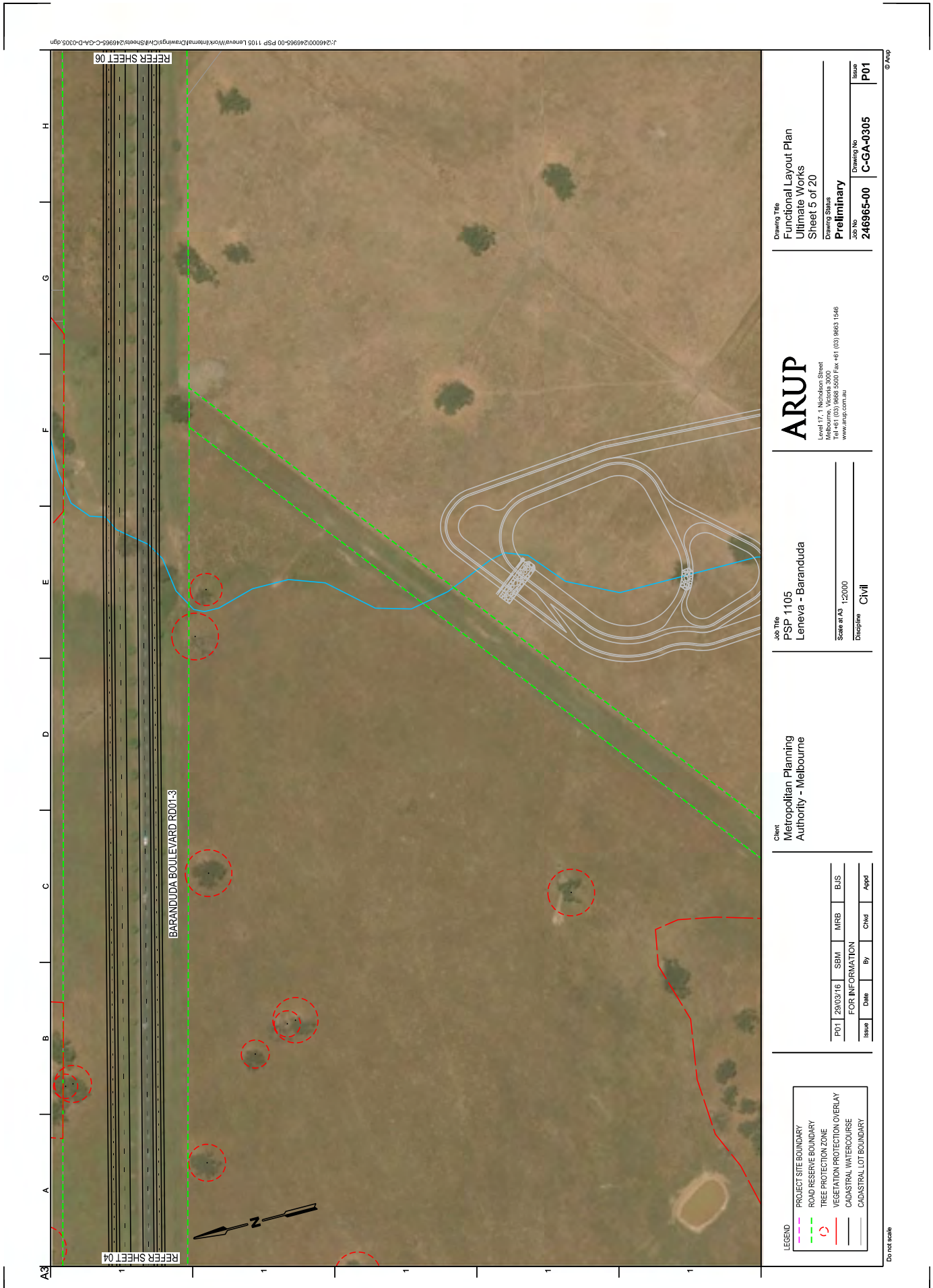
A3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LEGEND
PROJECT SITE BOUNDARY
ROAD RESERVE BOUNDARY
TREE PROTECTION ZONE
VEGETATION PROTECTION OVERLAY
CADASTRAL WATERCOURSE
CADASTRAL LOT BOUNDARY
Issue | Date | By | Chkd | Appd
P01 | 29/03/16 | SBM | MRB | BJS
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Client
Metropolitan Planning Authority - Melbourne
Job Title
PSP 1105
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Drawing Title
Functional Layout Plan
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Sheet 5 of 20
Drawing Status
Preliminary
Job No 246965-00
Drawing No C-GA-0305
Issue P01
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LEGEND

- PROJECT SITE BOUNDARY
- ROAD RESERVE BOUNDARY
- TREE PROTECTION ZONE
- VEGETATION PROTECTION OVERLAY
- CADASTRAL WATERCOURSE
- CADASTRAL LOT BOUNDARY

Issue	Date	By	Chkd	Appd
P01	29/03/16	SBM	MRB	BJS
FOR INFORMATION				

Client
Metropolitan Planning Authority - Melbourne

Job Title
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Drawing Title
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Ultimate Works
Sheet 6 of 20

Drawing Status
Preliminary

Job No	Drawing No	Issue
246965-00	C-GA-0306	P01

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REFER SHEET 08
REFER SHEET 06
IT05
BD01
BD01
RD01-4
BARANDUDA BOULEVARD RD01-4
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LEGEND
PROJECT SITE BOUNDARY
ROAD RESERVE BOUNDARY
TREE PROTECTION ZONE
VEGETATION PROTECTION OVERLAY
CADASTRAL WATERCOURSE
CADASTRAL LOT BOUNDARY
Issue | Date | By | Chkd | Appd
P01 | 29/03/16 | SBM | MRB | BJS
FOR INFORMATION
Client
Metropolitan Planning Authority - Melbourne
Job Title
PSP 1105
Leneva - Baranduda
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Drawing Title
Functional Layout Plan
Ultimate Works
Sheet 7 of 20
Drawing Status
Preliminary
Job No
246965-00
Drawing No
C-GA-0307
Issue
P01
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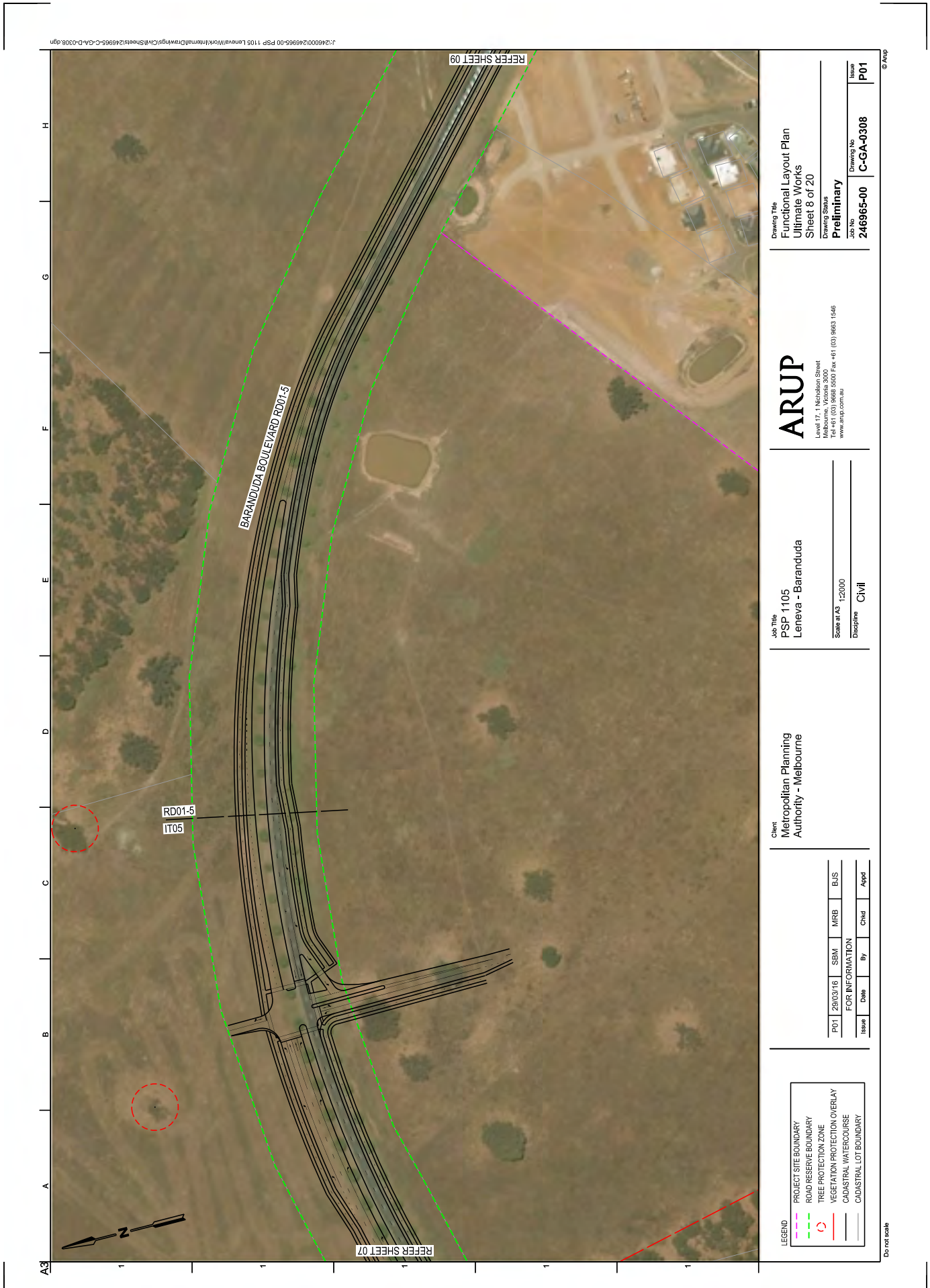
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TREE PROTECTION ZONE
VEGETATION PROTECTION OVERLAY
CADASTRAL WATERCOURSE
CADASTRAL LOT BOUNDARY
Issue | Date | By | Chkd | Appd
P01 | 29/03/16 | SBM | MRB | BJS
FOR INFORMATION
Client
Metropolitan Planning Authority - Melbourne
Job Title
PSP 1105
Leneva - Baranduda
Scale at A3 1:2000
Discipline Civil
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Drawing Status
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Job No 246965-00
Drawing No C-GA-0308
Issue P01
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A3


REFER SHEET 14
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ROAD CONFIGURATION
BARANDUDA BOULEVARD RD01-5
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BOYES ROAD
REFER SHEET 08
LEGEND
PROJECT SITE BOUNDARY
ROAD RESERVE BOUNDARY
TREE PROTECTION ZONE
VEGETATION PROTECTION OVERLAY
CADASTRAL WATERCOURSE
CADASTRAL LOT BOUNDARY
Issue | Date | By | Chkd | Appd
P01 | 29/03/16 | SBM | MRB | BJS
FOR INFORMATION
Client
Metropolitan Planning
Authority - Melbourne
Job Title
PSP 1105
Leneva - Baranduda
Scale at A3 1:2000
Discipline Civil
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Drawing Title
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Ultimate Works
Sheet 9 of 20
Drawing Status
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Job No
246965-00
Drawing No
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Issue
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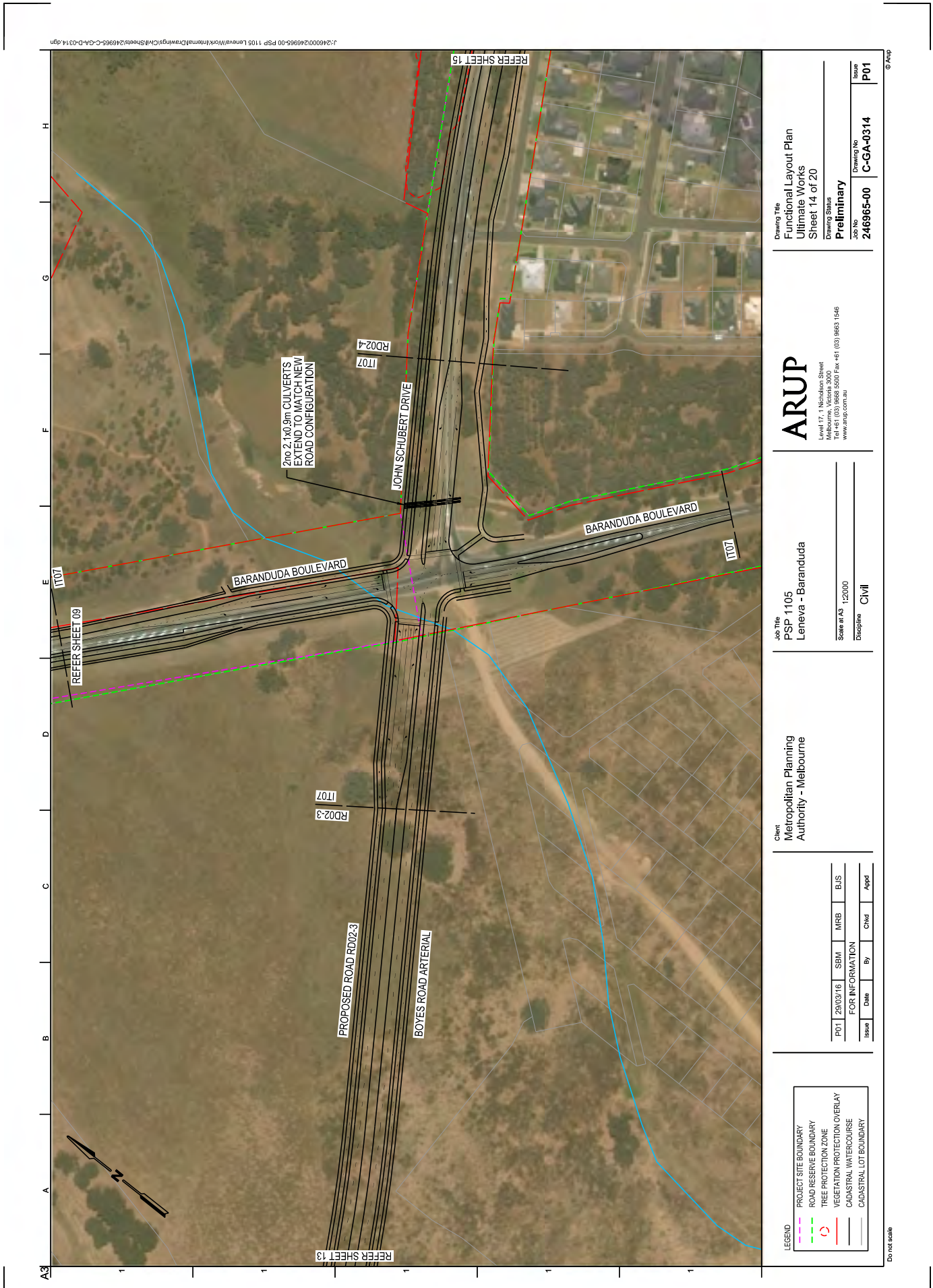
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RD02-4
IT07
2no 2.1x0.9m CULVERTS
EXTEND TO MATCH NEW
ROAD CONFIGURATION
JOHN SCHUBERT DRIVE
BARANDUDA BOULEVARD
IT07
BARANDUDA BOULEVARD
IT07
REFER SHEET 09
RD02-3
IT07
PROPOSED ROAD RD02-3
BOYES ROAD ARTERIAL
REFER SHEET 13
N
LEGEND
PROJECT SITE BOUNDARY
ROAD RESERVE BOUNDARY
TREE PROTECTION ZONE
VEGETATION PROTECTION OVERLAY
CADASTRAL WATERCOURSE
CADASTRAL LOT BOUNDARY
Issue Date By Chkd Appd
P01 29/03/16 SBM MRB BJS
FOR INFORMATION
Client
Metropolitan Planning Authority - Melbourne
Job Title
PSP 1105
Leneva - Baranduda
Scale at A3 1:2000
Discipline Civil
ARUP
Level 17, 1 Nicholson Street
Melbourne Victoria 3000
Tel +61 (0) 9668 5000 Fax +61 (0) 9663 1546
www.arup.com.au
Drawing Title
Functional Layout Plan
Ultimate Works
Sheet 14 of 20
Drawing Status
Preliminary
Job No 246965-00
Drawing No C-GA-0314
Issue P01
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Do not scale
A3

ARUP	Job No.	Sheet No.	Rev.
	246965-00		
	Element	Cost Schedule	
Job Title PSP 1105 Leneva - Baranduda	Drg. Ref.	N/A	
Calculation Construction Cost Estimate	Made by	Date 19/12/2016	Chd.

COST ESTIMATE FOR PROPOSED ROADS

RD02-1 Boyes Road Arterial (West of IT06)

Length (m): 120

SECTION	ITEM	DESCRIPTION	QUANTITY	UNIT	ORIGINAL RATE	AMOUNT	SUBTOTAL
A		**Site Clearance**					**$ 7,874**
	A1	General Site Clearance	3,187	m^2	$ 2.00	$ 6,374	
	A2	Trees - Girth between 300mm and 1000mm	3	No.	$ 500.00	$ 1,500	
B		**Earthworks**					**$ 46,000**
	B1	Stripping site topsoil to stockpile on site (assume 150mm thick)	3,187	m^2	$ 5.00	$ 15,935	
	B2	Excavate to subgrade and stockpile material on mine site (assume not reusable)	761	m^3	$ 30.00	$ 22,829	
	B3	Subgrade preparation, trimming and compaction	1,809	m^2	$ 4.00	$ 7,236	
C		**Road Pavement**					**$ 118,947**
	C1	New pavement	1,089	m^2	$ 100.00	$ 108,900	
	C2	Wearing Course Overlay - Asphalt - 40mm, including	591	m^2	$ 17.00	$ 10,047	
D		**Concrete Works**					**$ 108,000**
	D1	SM2 type kerb	480	m	$ 45.00	$ 21,600	
	D2	Shared pavement	720	m^2	$ 120.00	$ 86,400	
E		**Drainage**					**$ 210,880**
		Pipes and Box Culverts: Excavation Depth <1.5m					
	E1	RCP - 375mm Class 3 RRJ (incl subsoil)	240	m	$ 300.00	$ 72,000	
	E2	RCBC 2x1800 x 900mm	22	m	$ 5,000.00	$ 110,000	
	E3	RC Endwall (BC 2x1800 x 900mm)	2	No.	$ 6,500.00	$ 13,000	
	E4	Drainage Pit (1000x750)	4	No.	$ 3,500.00	$ 14,000	
	E5	Stone beaching (Allow 4x5=20m2 avg per new endwall)	40	m^2	$ 47.00	$ 1,880	
F		**Guard Fence (Not Used)**					**$ -**
G		**Signs and Linemarking**					**$ 3,240**
	G1	Continuous/edge line	480	m	$ 4.00	$ 1,920	
	G2	Intermittent continuity line (incl SUP)	480	m	$ 2.50	$ 1,200	
	G3	RRPM's	30	No.	$ 4.00	$ 120	
H		**Street Lighting**					**$ 50,000**
	H1	SB pole, 6m bracket arm, 150W luminaires, electrical transformers and electrical works. Design and construction by Powercor (incl design and management)	5	Item	$ 10,000.00	$ 50,000	
I		**Utility Services (Not Used)**					**$ -**
J		**Landscaping**					**$ 6,890**
	J1	Remove topsoil from stockile and spread 100mm thick on road batters, swales and adjacent areas disturbed by construction.	1,378	m^2	$ 5.00	$ 6,890	
K		**Misc Works**					**$ 3,600**
	K1	Right of way fencing - 1.2m post and wire	240	m	$ 15.00	$ 3,600	
M		**PROJECT COST (TOTAL A - K)**					**$ 555,431**
M		**Delivery**					
	M1	Site Establishment	2.5	%		$ 13,885.76	
	M2	Survey/Design	10	%		$ 55,543.05	
	M3	Supervision & Project Management	5	%		$ 27,771.53	
	M4	Contingency	20	%		$ 111,086.10	
	M5	Traffic/Environmental Management	5.5	%		$ 30,548.68	
	M6	Council Fees	3.25	%		$ 18,051.49	
N		**Sub-total Delivery (M)**					**$ 256,887**
O		**PROJECT BUDGET**					**$ 812,317**

ARUP	Job No.	Sheet No.	Rev.
	246965-00		
	Element	Cost Schedule	
Job Title: PSP 1105 Leneva - Baranduda	Drg. Ref.	N/A	
Calculation: Construction Cost Estimate	Made by	Date 19/12/2016	Chd.

COST ESTIMATE FOR PROPOSED ROADS

RD02-2 INTERIM Boyes Rd Arterial (IT06-280m East)

Length (m): 280

SECTION	ITEM	DESCRIPTION	QUANTITY	UNIT	ORIGINAL RATE	AMOUNT	SUBTOTAL
A		**Site Clearance**					**$ 8,884**
	A1	General Site Clearance	4,192	m^2	$ 2.00	$ 8,384	
	A2	Trees - Girth between 300mm and 1000mm	1	No.	$ 500.00	$ 500	
B		**Earthworks**					**$ 79,616**
	B1	Stripping site topsoil to stockpile on site (assume 150mm thick)	4,192	m^2	$ 5.00	$ 20,960	
	B2	Excavate to subgrade including offsite disposal	1,466	m^3	$ 30.00	$ 43,992	
	B3	Subgrade preparation, trimming and compaction	3,666	m^2	$ 4.00	$ 14,664	
C		**Road Pavement**					**$ 197,400**
	C1	New pavement	1,974	m^2	$ 100.00	$ 197,400	
D		**Concrete Works**					**$ 228,240**
	D1	SM2 type kerb	560	m	$ 45.00	$ 25,200	
	D2	Shared pavement	1,692	m^2	$ 120.00	$ 203,040	
E		**Drainage**					**$ 189,000**
		Pipes and Box Culverts: Excavation Depth <1.5m					
	E1	RCP - 375mm Class 3 RRJ (incl subsoil)	560	m	$ 300.00	$ 168,000	
	E6	Drainage Pit (1000x750)	6	No.	$ 3,500.00	$ 21,000	
F		**Guard Fence**					**$ 48,000**
	F1	Install new W beam guard fence, incl terminal treatmer	400	m	$ 120.00	$ 48,000	
G		**Signs and Linemarking**					**$ 4,480**
	G1	Continuous/edge line	560	m	$ 4.00	$ 2,240	
	G2	Intermittent continuity line (incl SUP)	840	m	$ 2.50	$ 2,100	
	G3	RRPM's	35	No.	$ 4.00	$ 140	
H		**Street Lighting**					**$ 60,000**
	H1	SB pole, 6m bracket arm, 150W luminaires, electrical transformers and electrical works. Design and construction by Powercor (incl design and management)	6	Item	$ 10,000.00	$ 60,000	
I		**Utility Services (Not Used)**					**$ -**
J		**Landscaping**					**$ 2,630**
	J1	Remove topsoil from stockile and spread 100mm thick on road batters, swales and adjacent areas disturbed by construction	526	m^2	$ 5.00	$ 2,630	
K		**Misc Works**					**$ 8,400**
	K1	Right of way fencing - 1.2m post and wire	560	m	$ 15.00	$ 8,400	
L		**Sub-total Works (A-K)**					**$ 826,650**
M		**Delivery**					
	M1	Site Establishment	2.5	%		$ 100,000.00	
	M2	Survey/Design	10	%		$ 82,665.00	
	M3	Supervision & Project Management	5	%		$ 41,332.50	
	M4	Contingency	20	%		$ 165,330.00	
	M5	Traffic/Environmental Management	5.5	%		$ 45,465.75	
	M6	Council Fees	3.25	%		$ 26,866.13	
N		**Sub-total Delivery (M)**					**$ 461,659**
O		**PROJECT BUDGET**					**$ 1,288,309**

ARUP	Job No.	Sheet No.	Rev.
	246965-00		
	Element	Cost Schedule	
Job Title PSP 1105 Leneva - Baranduda	ef.	N/A	
Calculation Construction Cost Estimate	lade by	Date 19/12/2016	Chd.

COST ESTIMATE FOR PROPOSED ROADS

RD02-3 INTERIM Boyes Rd Arterial (IT07-900m West)

Length (m): 900

SECTION	ITEM	DESCRIPTION	QUANTITY	UNIT	ORIGINAL RATE	AMOUNT	SUBTOTAL
A		**Site Clearance**					**$ 27,454**
	A1	General Site Clearance	13,477	m^2	$ 2.00	$ 26,954	
	A2	Trees - Girth between 300mm and 1000mm	1	No.	$ 500.00	$ 500	
B		**Earthworks**					**$ 254,398**
	B1	Stripping site topsoil to stockpile on site (assume 150mm thick)	13,477	m^2	$ 5.00	$ 67,385	
	B2	Excavate to subgrade including offsite disposal	4,675	m^3	$ 30.00	$ 140,261	
	B3	Subgrade preparation, trimming and compaction	11,688	m^2	$ 4.00	$ 46,752	
C		**Road Pavement**					**$ 629,400**
	C1	New pavement	6,294	m^2	$ 100.00	$ 629,400	
D		**Concrete Works**					**$ 728,280**
	D1	SM2 type kerb	1,800	m	$ 45.00	$ 81,000	
	D2	Shared pavement	5,394	m^2	$ 120.00	$ 647,280	
E		**Drainage**					**$ 698,000**
		Pipes and Box Culverts: Excavation Depth <1.5m					
	E1	RCP - 375mm Class 3 RRJ (incl subsoil)	1,800	m	$ 300.00	$ 540,000	
	E3	RCBC 2x1800 x 900mm	22	m	$ 5,000.00	$ 110,000	
	E4	RC Endwall (BC 2x1800 x 900mm)	2	No.	$ 6,500.00	$ 13,000	
	E5	Drainage Pit (1000x750)	10	No.	$ 3,500.00	$ 35,000	
F		**Guard Fence**					**$ 48,000**
	F1	Install new W beam guard fence, incl terminal treatme	400	m	$ 120.00	$ 48,000	
G		**Signs and Linemarking**					**$ 14,400**
	G1	Continuous/edge line	1,800	m	$ 4.00	$ 7,200	
	G2	Intermittent continuity line (incl SUP)	2,700	m	$ 2.50	$ 6,750	
	G3	RRPM's	113	No.	$ 4.00	$ 450	
H		**Street Lighting**					**$ 180,000**
	H1	SB pole, 6m bracket arm, 150W luminaires, electrical transformers and electrical works. Design and construction by Powercor (incl design and management)	18	Item	$ 10,000.00	$ 180,000	
I		**Utility Services (Not Used)**					**$ -**
J		**Landscaping**					**$ 8,945**
	J1	Remove topsoil from stockile and spread 100mm thick on road batters, swales and adjacent areas disturbed by construction.	1,789	m^2	$ 5.00	$ 8,945	
K		**Misc Works**					**$ 27,000**
	K1	Right of way fencing - 1.2m post and wire	1,800	m	$ 15.00	$ 27,000	
L		**Sub-total Works (A-K)**					**$ 2,615,877**
M		**Delivery**					
	M1	Site Establishment	2.5	%		$ 100,000.00	
	M2	Survey/Design	10	%		$ 261,587.65	
	M3	Supervision & Project Management	5	%		$ 130,793.83	
	M4	Contingency	20	%		$ 523,175.30	
	M5	Traffic/Environmental Management	5.5	%		$ 143,873.21	
	M6	Council Fees	3.25	%		$ 85,015.99	
N		**Sub-total Delivery (M)**					**$ 1,244,446**
O		**PROJECT BUDGET**					**$ 3,860,322**

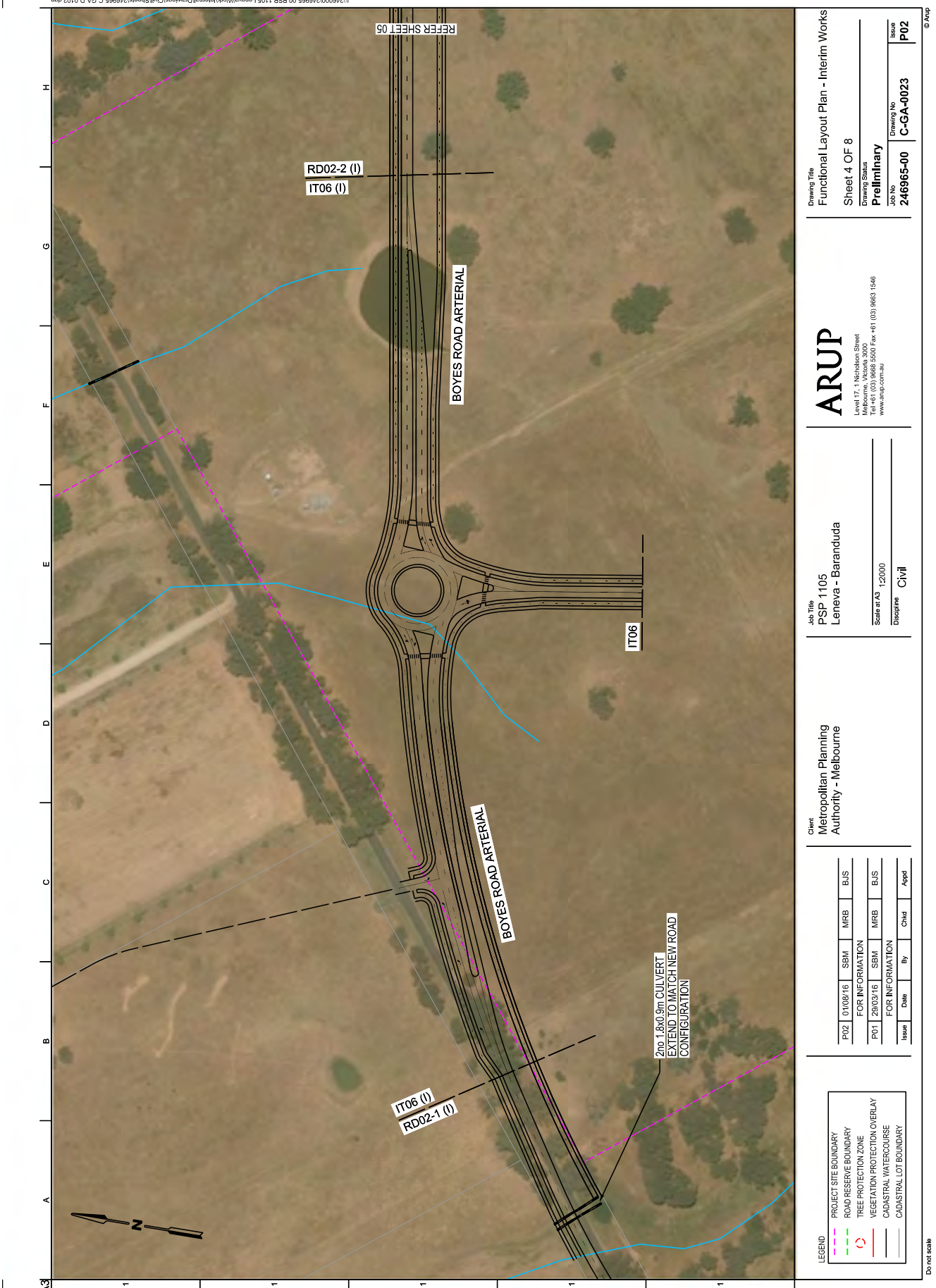
ARUP	Job No.	Sheet No.	Rev.
	246965-00		
	Element	Cost Schedule	
Job Title PSP 1105 Leneva - Baranduda	. Ref.	N/A	
Calculation Construction Cost Estimate	Made by	Date 19/12/2016	Chd.

COST ESTIMATE FOR PROPOSED ROADS

RD02-4 INTERIM Boyes Rd Arterial (IT07-IT08)

Length (m): 735

SECTION	ITEM	DESCRIPTION	QUANTITY	UNIT	ORIGINAL RATE	AMOUNT	SUBTOTAL
A		**Site Clearance**					**$ 25,654**
	A1	General Site Clearance	12,827	m^2	$ 2.00	$ 25,654	
B		**Earthworks**					**$ 224,409**
	B1	Stripping site topsoil to stockpile on site (assume 150mm thick)	12,827	m^2	$ 5.00	$ 64,135	
	B2	Excavate to subgrade including offsite disposal	1,659	m^3	$ 30.00	$ 49,782	
	B3	Subgrade preparation, trimming and compaction	5,623	m^2	$ 4.00	$ 22,492	
	B4	Imported Type B general fill, spread and compact in layers (Dam Backfill)	3,520	m^3	$ 25.00	$ 88,000	
C		**Road Pavement**					**$ 189,759**
	C1	New pavement	1,213	m^2	$ 100.00	$ 121,300	
	C2	Wearing Course Overlay - Asphalt - 40mm, including	4,027	m^2	$ 17.00	$ 68,459	
D		**Concrete Works**					**$ 607,140**
	D1	SM2 type kerb	1,732	m	$ 45.00	$ 77,940	
	D2	Shared pavement	4,410	m^2	$ 120.00	$ 529,200	
E		**Drainage**					**$ 528,488**
		Pipes and Box Culverts: Excavation Depth <1.5m					
	E1	RCP - 375mm Class 3 RRJ (incl subsoil)	1,121	m	$ 300.00	$ 336,388	
	E2	RCP - 450mm Class 3 RRJ (incl subsoil)	349	m	$ 400.00	$ 139,600	
	E3	Drainage Pit (1000x750)	15	No.	$ 3,500.00	$ 52,500	
F		**Guard Fence**					**$ 24,000**
	F1	Install new W beam guard fence, incl terminal treatmer	200	m	$ 120.00	$ 24,000	
G		**Signs and Linemarking**					**$ 11,760**
	G1	Continuous/edge line	1470	m	$ 4.00	$ 5,880	
	G2	Intermittent continuity line (incl SUP)	2205	m	$ 2.50	$ 5,513	
	G3	RRPM's	92	No.	$ 4.00	$ 368	
H		**Street Lighting**					**$ 150,000**
	H1	SB pole, 6m bracket arm, 150W luminaires, electrical transformers and electrical works. Design and construction by Powercor (incl design and management)	15	Item	$ 10,000.00	$ 150,000	
I		**Utility Services**					**$100,000**
	I1	Provisional Sum				$100,000	
J		**Landscaping**					**$ 36,020**
	J1	Remove topsoil from stockile and spread 100mm thick on road batters, swales and adjacent areas disturbed by construction.	7,204	m^2	$ 5.00	$ 36,020	
K		**Misc Works**					**$ 22,050**
	K1	Right of way fencing - 1.2m post and wire	1,470	m	$ 15.00	$ 22,050	
L		**Sub-total Works (A-K)**					**$ 1,919,280**
M		**Delivery**					
	M1	Site Establishment	2.5	%		$ 47,982.00	
	M2	Survey/Design	10	%		$ 191,928.01	
	M3	Supervision & Project Management	5	%		$ 95,964.01	
	M4	Contingency	20	%		$ 383,856.03	
	M5	Traffic/Environmental Management	5.5	%		$ 105,560.41	
	M6	Council Fees	3.25	%		$ 62,376.60	
N		**Sub-total Delivery (M)**					**$ 887,667**
O		**PROJECT BUDGET**					**$ 2,806,947**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IT06 (I)
BOYES ROAD ARTERIAL
IT06
BOYES ROAD ARTERIAL
2no 1.8x0.9m CULVERT
EXTEND TO MATCH NEW ROAD
CONFIGURATION
IT06 (I)
RD02-1 (I)
N
LEGEND
PROJECT SITE BOUNDARY
ROAD RESERVE BOUNDARY
TREE PROTECTION ZONE
VEGETATION PROTECTION OVERLAY
CADASTRAL WATERCOURSE
CADASTRAL LOT BOUNDARY
P02 01/08/16 SBM MRB BJS
FOR INFORMATION
P01 29/03/16 SBM MRB BJS
FOR INFORMATION
Issue Date By Chkd Appd
Client
Metropolitan Planning Authority - Melbourne
Job Title
PSP 1105
Leneva - Baranduda
Scale at A3 1:2000
Discipline Civil
ARUP
Level 17, 1 Nicholson Street
Melbourne, Victoria 3000
Tel +61 (0)3 9668 3500 Fax +61 (0)3 9663 1546
www.arup.com.au
Drawing Title
Functional Layout Plan - Interim Works
Sheet 4 OF 8
Drawing Status
PrelImInary
Job No 246965-00
Drawing No C-GA-0023
Issue P02
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Do not scale
A3
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LEGEND

- PROJECT SITE BOUNDARY
- ROAD RESERVE BOUNDARY
- TREE PROTECTION ZONE
- VEGETATION PROTECTION OVERLAY
- CADASTRAL WATERCOURSE
- CADASTRAL LOT BOUNDARY

Issue	Date	By	Chkd	Appd
P02	01/08/16	SBM	MRB	BJS
	FOR INFORMATION			
P01	29/03/16	SBM	MRB	BJS
	FOR INFORMATION			

Client
Metropolitan Planning Authority - Melbourne

Job Title
PSP 1105
Leneva - Baranduda

Scale at A3 1:2000

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Level 17, 1 Nicholson Street
Melbourne, Victoria 3000
Tel +61 (03) 9668 5500 Fax +61 (03) 9663 1546
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Drawing Title
Functional Layout Plan - Interim Works

Sheet 5 OF 8

Drawing Status
Preliminary

Job No	Drawing No	Issue
246965-00	C-GA-0024	P02

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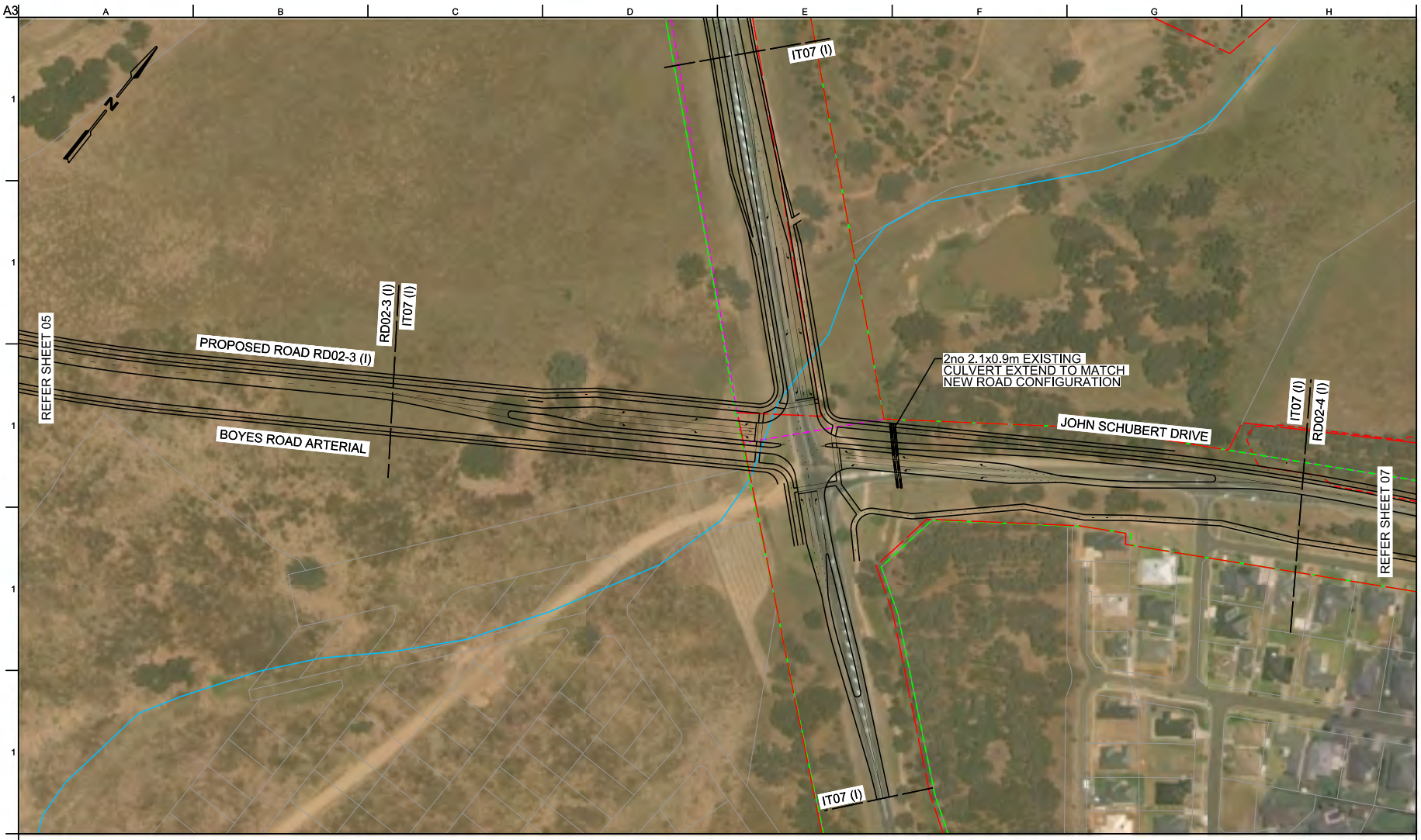

LEGEND

- PROJECT SITE BOUNDARY
- ROAD RESERVE BOUNDARY
- TREE PROTECTION ZONE
- VEGETATION PROTECTION OVERLAY
- CADASTRAL WATERCOURSE
- CADASTRAL LOT BOUNDARY

Issue	Date	By	Chkd	Appd
P02	01/08/16	SBM	MRB	BJS
	FOR INFORMATION			
P01	29/03/16	SBM	MRB	BJS
	FOR INFORMATION			

Client
Metropolitan Planning Authority - Melbourne

Job Title
PSP 1105
Leneva - Baranduda

Scale at A3 1:2000

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Melbourne, Victoria 3000
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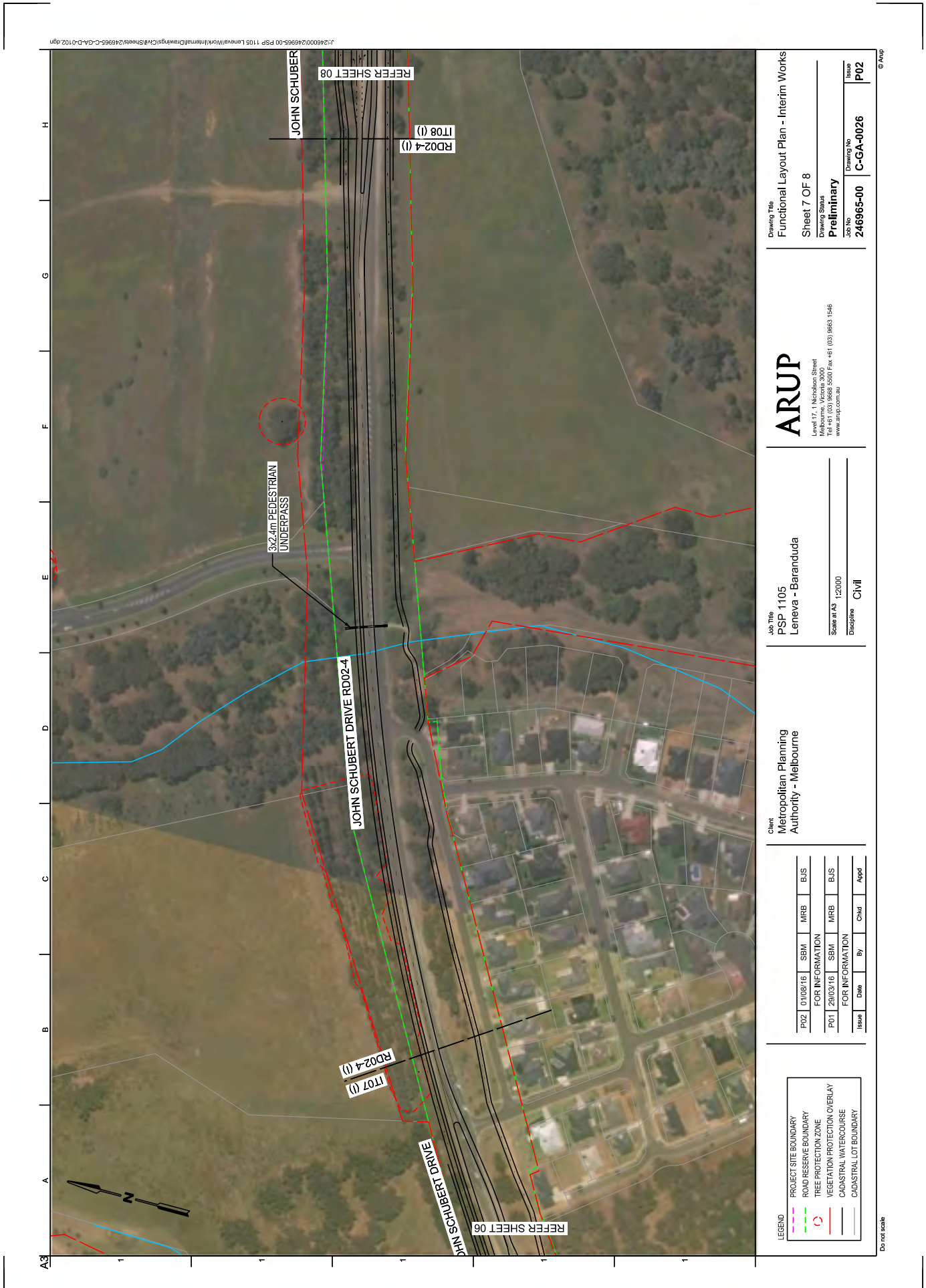
Drawing Title
Functional Layout Plan - Interim Works

Sheet 6 OF 8

Drawing Status
Preliminary

Job No	Drawing No	Issue
246965-00	C-GA-0025	P02

Do not scale


JOHN SCHUBERT
REFER SHEET 08
RD02-4 (I)
IT08 (I)
3x2.4m PEDESTRIAN UNDERPASS
JOHN SCHUBERT DRIVE RD02-4
RD02-4 (I)
IT07 (I)
JOHN SCHUBERT DRIVE
REFER SHEET 06
N
LEGEND
PROJECT SITE BOUNDARY
ROAD RESERVE BOUNDARY
TREE PROTECTION ZONE
VEGETATION PROTECTION OVERLAY
CADASTRAL WATERCOURSE
CADASTRAL LOT BOUNDARY
Issue | Date | By | Chkd | Appd
P02 | 01/08/16 | SBM | MRB | BJS
FOR INFORMATION
P01 | 29/03/16 | SBM | MRB | BJS
FOR INFORMATION
Client
Metropolitan Planning Authority - Melbourne
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Drawing Title
Functional Layout Plan - Interim Works
Sheet 7 OF 8
Drawing Status
Preliminary
Job No
246965-00
Drawing No
C-GA-0026
Issue
P02
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Do not scale
A3
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J:\246000\246965-00 PSP 1105 Leneva\Working\Internal\Drawings\Civil\Sheets\246965-C-GA-D-0102.dgn
JOHN SCHUBERT DRIVE
JOHN BOYES DRIVE
REFER SHEET 07
RD02-4 (I)
IT08 (I)
IT08
IT08 (I)
IT08 (I)
N
A3
LEGEND
PROJECT SITE BOUNDARY
ROAD RESERVE BOUNDARY
TREE PROTECTION ZONE
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CADASTRAL WATERCOURSE
CADASTRAL LOT BOUNDARY
Issue | Date | By | Chkd | Appd
P01 | 29/03/16 | SBM | MRB | BJS
FOR INFORMATION
P02 | 01/08/16 | SBM | MRB | BJS
FOR INFORMATION
Client
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Drawing Title
Functional Layout Plan - Interim Works
Sheet 8 OF 8
Drawing Status
Preliminary
Job No
246965-00
Drawing No
C-GA-0027
Issue
P02
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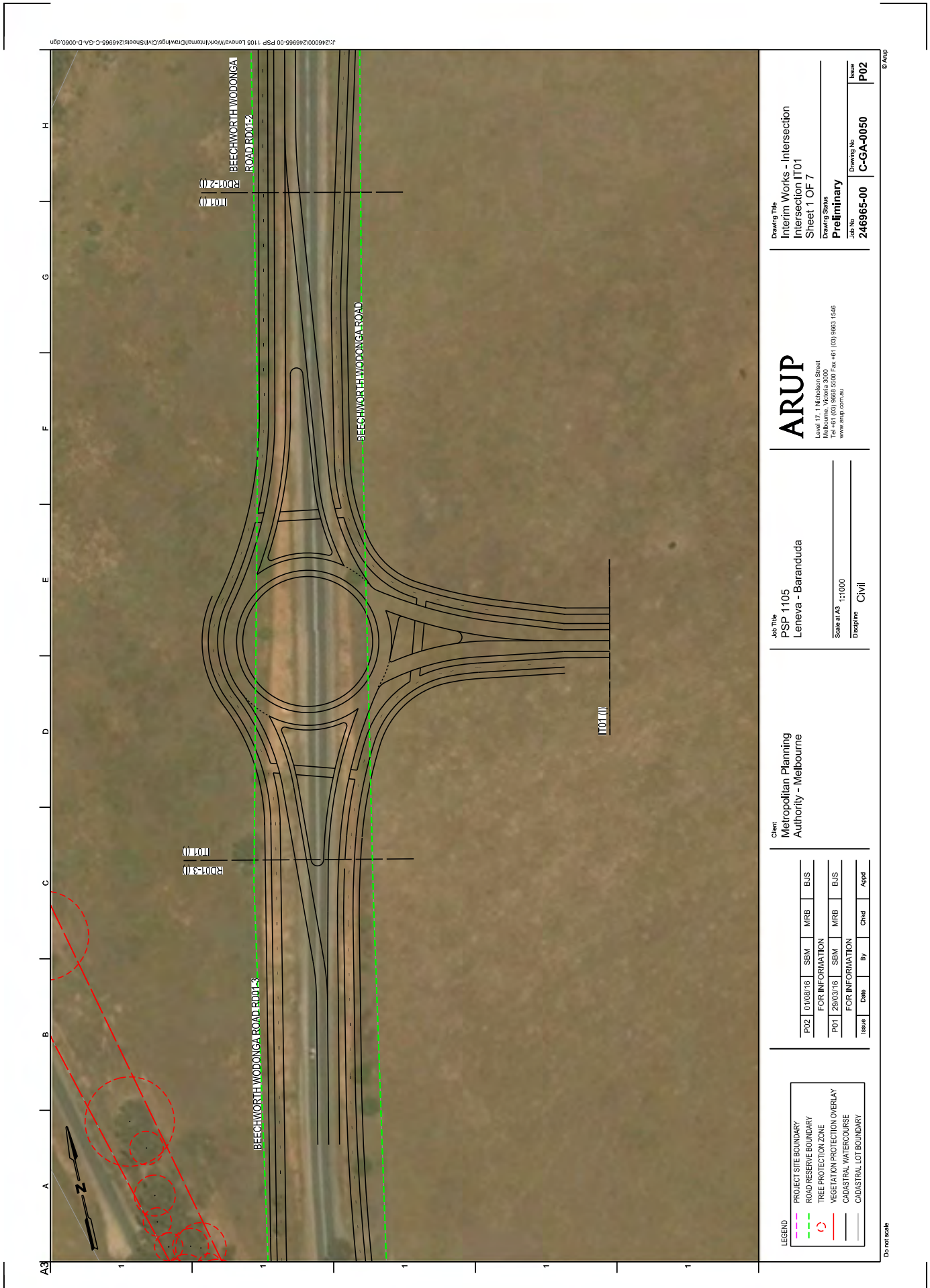
Do not scale

ARUP	Job No.	Sheet No.	Rev.
	246965-00		
	Element	Cost Schedule	
Job Title PSP 1105 Leneva - Baranduda	Drg. Ref.	N/A	
Calculation Construction Cost Estimate	Made by	Date 19/12/2016	Chd.

COST ESTIMATE FOR PROPOSED INTERSECTIONS

IT01 INTERIM Beechworth-Wodonga Road and Connector Road T-Roundabout

SECTION	ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A		**Site Clearance**					**$ 18,740**
	A1	General Site Clearance	9120	m^2	$ 2.00	$ 18,240	
	A2	Trees - Girth between 300mm and 1000mm	1	No.	$ 500.00	$ 500	
B		**Earthworks**					**$ 128,806**
	B1	Stripping site topsoil to stockpile on site (assume 150mm thick)	9,120	m^2	$ 5.00	$ 45,600	
	B2	Excavate to subgrade including offsite disposal	2,137	m^3	$ 30.00	$ 64,098	
	B3	Subgrade preparation, trimming and compaction	4,777	m^2	$ 4.00	$ 19,108	
C		**Road Pavements**					**$ 359,370**
	C1	New pavement	3,267	m^2	$ 110.00	$ 359,370	
D		**Concrete Works**					**$ 233,265**
	D1	SM2 type kerb	1,157	m	$ 45.00	$ 52,065	
	D2	Footpath/Shared User Path - 150mm concrete on 75mm CR base	1,510	m^2	$ 120.00	$ 181,200	
E		**Drainage**					**$ 227,500**
		Pipes and Box Culverts: Excavation Depth <1.5m					
	E1	RCP - 375mm Class 3 RRJ (incl subsoil)	560	m	$ 300.00	$ 168,000	
	E2	Drainage Pit (1000x750)	17	No.	$ 3,500.00	$ 59,500	
F		**Guard Fence (Not Used)**					**$ -**
G		**Signs and Linemarking**					**$ 38,711**
	G1	Install new signs	18	No.	$ 400.00	$ 7,200	
	G2	Zebra crossing	6	No.	$ 5,000.00	$ 30,000	
	G3	Continuous/edge line	178	m	$ 4.00	$ 712	
	G4	Give Way/STOP line	55	m	$ 4.00	$ 221	
	G5	RRPM's	145	No.	$ 4.00	$ 579	
H		**Street Lighting**					**$ 160,000**
	H1	SB pole, 6m bracket arm, 150W luminaires, electrical transformers and electrical works. Design and construction by Powercor (incl design and management)	16	no	$ 10,000.00	$ 160,000	
I		**Utility Services (Not Used)**					**$ -**
J		**Landscaping**					**$ 21,715**
	J1	Remove topsoil from stockile and spread 100mm thick on road verges, medians and adjacent areas disturbed by construction.	4,343	m^2	$ 5.00	$ 21,715	
K		**Misc Works**					**$ 8,700.00**
	K1	Right of way fencing - 1.2m post and wire	580	m	$ 15.00	$ 8,700	
L		**Sub-total Works (A-K)**					**$ 1,196,807**
M		**Delivery**					
	M1	Site Establishment	2.5	%		$ 29,920.18	
	M2	Survey/Design	10	%		$ 119,680.73	
	M3	Supervision & Project Management	5	%		$ 59,840.37	
	M4	Contingency	20	%		$ 239,361.46	
	M5	Traffic/Environmental Management	5.5	%		$ 65,824.40	
	M6	Council Fees	3.25	%		$ 38,896.24	
	M7	VicRoads Fees	1	%		$ 11,968.07	
N		**Sub-total Delivery (M)**					**$ 565,491**
O		**PROJECT BUDGET**					**$ 1,762,299**


BEECHWORTH WODONGA ROAD RD01-2
BEECHWORTH WODONGA ROAD
BEECHWORTH WODONGA ROAD RD01-3
RD01-2 (I)
IT01 (I)
RD01-3 (I)
IT02 (I)
IT01 (I)
N
LEGEND
PROJECT SITE BOUNDARY
ROAD RESERVE BOUNDARY
TREE PROTECTION ZONE
VEGETATION PROTECTION OVERLAY
CADASTRAL WATERCOURSE
CADASTRAL LOT BOUNDARY
Issue | Date | By | Chkd | Appd
P02 | 01/08/16 | SBM | MRB | BJS
FOR INFORMATION
P01 | 29/03/16 | SBM | MRB | BJS
FOR INFORMATION
Client
Metropolitan Planning Authority - Melbourne
Job Title
PSP 1105
Leneva - Baranduda
Scale at A3 1:1000
Discipline Civil
ARUP
Level 17, 1 Nicholson Street
Melbourne, Victoria 3000
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Drawing Title
Interim Works - Intersection
Intersection IT01
Sheet 1 OF 7
Drawing Status
Preliminary
Job No 246965-00
Drawing No C-GA-0050
Issue P02
© Arup
Do not scale
A3
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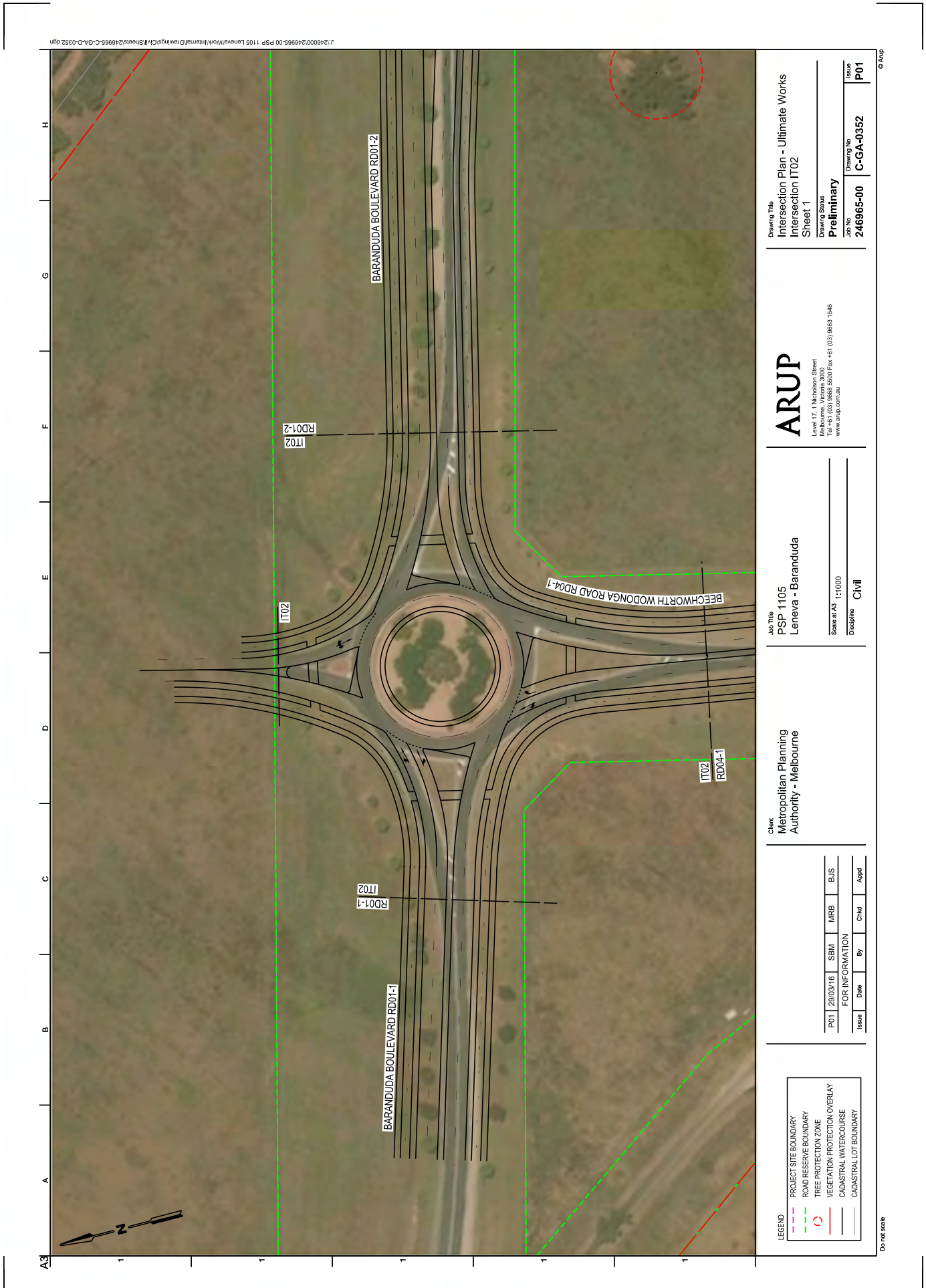
ARUP	Job No.	Sheet No.	Rev.
	246965-00		
	Element	Cost Schedule	
Job Title PSP 1105 Leneva - Baranduda	Drg. Ref.	N/A	
Calculation Construction Cost Estimate	Made by	Date 19/12/2016	Chd.

COST ESTIMATE FOR PROPOSED INTERSECTIONS

IT02 INTERIM Beechworth-Wodonga Road and Baranduda Boulevard Roundabout

SECTION	ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A		**Site Clearance**					**$ 12,446**
	A1	General Site Clearance	6,223	m^2	$ 2.00	$ 12,446	
B		**Earthworks**					**$ 46,703**
	B1	Stripping site topsoil to stockpile on site (assume 150mm thick)	6,223	m^2	$ 5.00	$ 31,115	
	B2	Excavate to subgrade including offsite disposal	326	m^3	$ 30.00	$ 9,788	
	B3	Subgrade preparation, trimming and compaction	1,450	m^2	$ 4.00	$ 5,800	
C		**Road Pavements**					**$ 53,108**
	C7	Wearing Course Overlay - Asphalt - 40mm, including	3,124	m^2	$ 17.00	$ 53,108	
D		**Concrete Works**					**$ 182,325**
	D1	SM2 type kerb	185	m	$ 45.00	$ 8,325	
	D2	Footpath/Shared User Path - 150mm concrete on 75mm CR base	1,450	m^2	$ 120.00	$ 174,000	
E		**Drainage**					**$ 208,900**
		Pipes and Box Culverts: Excavation Depth <1.5m					
	E1	RCP - 375mm Class 3 RRJ (incl subsoil)	428	m	$ 300.00	$ 128,400	
	E2	Drainage Pit (1000x750)	23	No.	$ 3,500.00	$ 80,500	
F		**Guard Fence (Not Used)**					**$ -**
G		**Signs and Linemarking**					**$ 50,949**
	G1	Install new signs	24	No.	$ 400.00	$ 9,600	
	G2	Zebra crossing	8	No.	$ 5,000.00	$ 40,000	
	G3	Continuous/edge line	246	m	$ 4.00	$ 984	
	G4	Give Way/STOP line	68	m	$ 4.00	$ 272	
	G5	RRPM's	23	No.	$ 4.00	$ 93	
H		**Street Lighting**					**$ 200,000**
	H1	SB pole, 6m bracket arm, 150W luminaires, electrical transformers and electrical works. Design and construction by Powercor (incl design and management)	20	no	$ 10,000.00	$ 200,000	
I		**Utility Services (Not Used)**					**$ -**
J		**Landscaping**					**$ 23,865**
	J1	Remove topsoil from stockile and spread 100mm thick on road verges, medians and adjacent areas disturbed by construction.	4,773	m^2	$ 5.00	$ 23,865	
K		**Misc Works**					**$ 6,750.00**
	K1	Right of way fencing - 1.2m post and wire	450	m	$ 15.00	$ 6,750	
L		**Sub-total Works (A-K)**					**$ 785,045**
M		**Delivery**					
	M1	Site Establishment	2.5	%		$ 19,626.13	
	M2	Survey/Design	10	%		$ 78,504.50	
	M3	Supervision & Project Management	5	%		$ 39,252.25	
	M4	Contingency	20	%		$ 157,009.00	
	M5	Traffic/Environmental Management	5.5	%		$ 43,177.48	
	M6	Council Fees	3.25	%		$ 25,513.96	
	M7	VicRoads Fees	1	%		$ 7,850.45	
N		**Sub-total Delivery (M)**					**$ 370,934**
O		**PROJECT BUDGET**					**$ 1,155,979**


BARANDUDA BOULEVARD RD01-2
BEECHWORTH WODONGA ROAD RD04-1
BARANDUDA BOULEVARD RD01-1
RD01-2
IT02
RD01-1
IT02
IT02
IT02
RD04-1
LEGEND
PROJECT SITE BOUNDARY
ROAD RESERVE BOUNDARY
TREE PROTECTION ZONE
VEGETATION PROTECTION OVERLAY
CADASTRAL WATERCOURSE
CADASTRAL LOT BOUNDARY
Issue Date By Chkd Appd
P01 29/03/16 SBM MRB BJS
FOR INFORMATION
Client
Metropolitan Planning Authority - Melbourne
Job Title
PSP 1105
Leneva - Baranduda
Scale at A3 1:1000
Discipline Civil
ARUP
Level 17, 1 Nicholson Street
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Tel +61 (03) 9668 5000 Fax +61 (03) 9663 1546
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Drawing Title
Intersection Plan - Ultimate Works
Intersection IT02
Sheet 1
Drawing Status
Preliminary
Job No
246965-00
Drawing No
C-GA-0352
Issue
P01
© Arup
Do not scale
A3

ARUP	Job No.	Sheet No.	Rev.
	246965-00		
	Element	Cost Schedule	
Job Title: PSP 1105 Leneva - Baranduda	Drg. Ref.	N/A	
Calculation: Construction Cost Estimate	Made by	Date 19/12/2016	Chd.

COST ESTIMATE FOR PROPOSED INTERSECTIONS

IT03 Baranduda Boulevard and Frederick Street Road T-Intersection

SECTION	ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A		**Site Clearance**					**$ 29,700**
	A1	General Site Clearance	11350	m^2	$ 2.00	$ 22,700	
	A2	Trees - Girth between 300mm and 1000mm	14	No.	$ 500.00	$ 7,000	
B		**Earthworks**					**$ 211,708**
	B1	Stripping site topsoil to stockpile on site (assume 150mm thick)	11,350	m^2	$ 5.00	$ 56,750	
	B2	Excavate to subgrade including offsite disposal	4,022	m^3	$ 30.00	$ 120,674	
	B3	Subgrade preparation, trimming and compaction	8,571	m^2	$ 4.00	$ 34,284	
C		**Road Pavements**					**$ 708,730**
	C1	New pavement	6,443	m^2	$ 110.00	$ 708,730	
D		**Concrete Works**					**$ 325,380**
	D1	SM2 type kerb	1,556	m	$ 45.00	$ 70,020	
	D2	Footpath/Shared User Path - 150mm concrete on 75mm CR base	2,128	m^2	$ 120.00	$ 255,360	
E		**Drainage**					**$ 351,500**
		Pipes and Box Culverts: Excavation Depth <1.5m					
	E2	RCP - 375mm Class 3 RRJ (incl subsoil)	880	m	$ 300.00	$ 264,000	
	E17	Drainage Pit (1000x750)	25	No.	$ 3,500.00	$ 87,500	
F		**Guard Fence (Not Used)**					**$ -**
G		**Signs and Linemarking**					**$ 417,425**
	G1	Install new signs	10	No.	$ 400.00	$ 4,000	
	G2	Traffic signal intersection - 3 way, including controller and associated pits and cabling	1	No.	$ 400,000.00	$ 400,000	
	G3	Zebra crossing	1	No.	$ 5,000.00	$ 5,000	
	G4	Continuous/edge line	1,556	m	$ 4.00	$ 6,224	
	G5	Intermittent continuity line	739	m	$ 2.50	$ 1,848	
	G6	Intermittent lane line	20	m	$ 2.00	$ 40	
	G7	Give Way/STOP line	25	m	$ 4.00	$ 98	
	G8	RRPM's	54	No.	$ 4.00	$ 215	
H		**Street Lighting**					**$ 200,000**
	H1	SB pole, 6m bracket arm, 150W luminaires, electrical transformers and electrical works. Design and construction by Powercor (incl design and management)	20	no	$ 10,000.00	$ 200,000	
I		**Utility Services (Not Used)**					**$ -**
J		**Landscaping**					**$ 13,895**
	J1	Remove topsoil from stockile and spread 100mm thick on road verges, medians and adjacent areas disturbed by construction.	2,779	m^2	$ 5.00	$ 13,895	
K		**Misc Works**					**$ 13,500.00**
	K1	Right of way fencing - 1.2m post and wire	900	m	$ 15.00	$ 13,500	
L		**Sub-total Works (A-K)**					**$ 2,271,837**
M		**Delivery**					
	M1	Site Establishment	2.5	%		$ 56,795.93	
	M2	Survey/Design	10	%		$ 227,183.70	
	M3	Supervision & Project Management	5	%		$ 113,591.85	
	M4	Contingency	20	%		$ 454,367.40	
	M5	Traffic/Environmental Management	5.5	%		$ 124,951.04	
	M6	Council Fees	3.25	%		$ 73,834.70	
N		**Sub-total Delivery (M)**					**$ 1,050,725**
O		**PROJECT BUDGET**					**$ 3,322,562**


IT03
RD01-3
PROPOSED ROAD RD03
IT03
RD03-1
BARANDUDA BOULEVARD
IT03
RD01-2
LEGEND
PROJECT SITE BOUNDARY
ROAD RESERVE BOUNDARY
TREE PROTECTION ZONE
VEGETATION PROTECTION OVERLAY
CADASTRAL WATERCOURSE
CADASTRAL LOT BOUNDARY
Issue Date By Chkd Appd
P01 29/03/16 SBM MRB BJS
FOR INFORMATION
Client
Metropolitan Planning Authority - Melbourne
Job Title
PSP 1105
Leneva - Baranduda
Scale at A3 1:1000
Discipline Civil
ARUP
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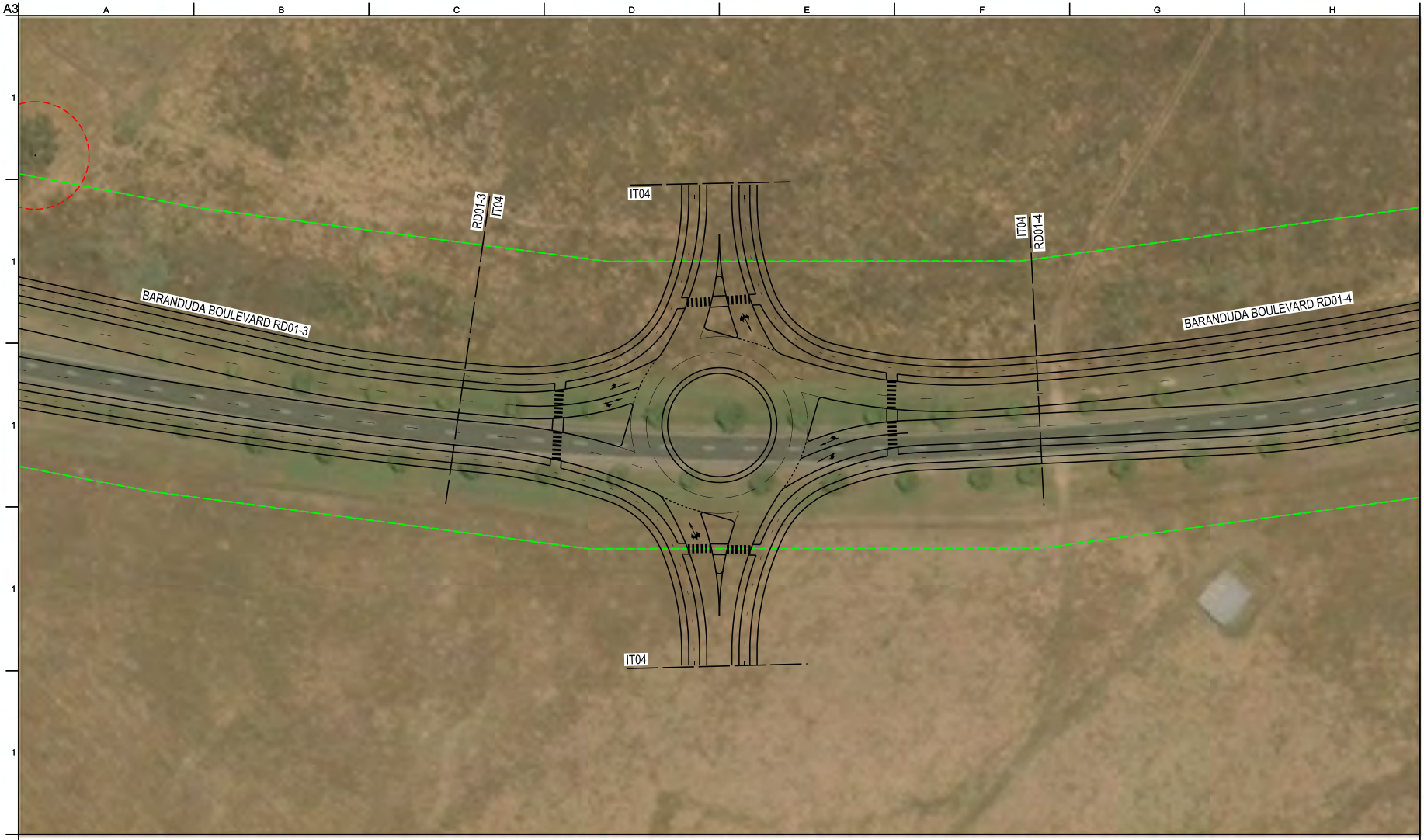
Drawing Title
Intersection Plan - Ultimate Works
Intersection IT03
Sheet 1
Drawing Status
Preliminary
Job No
246965-00
Drawing No
C-GA-0353
Issue
P01
© Arup
Do not scale
A3

ARUP	Job No.	Sheet No.	Rev.
	246965-00		
	Element	Cost Schedule	
Job Title: PSP 1105 Leneva - Baranduda	Drg. Ref.	N/A	
Calculation: Construction Cost Estimate	Made by	Date: 19/12/2016	Chd.

COST ESTIMATE FOR PROPOSED INTERSECTIONS

IT04 Baranduda Boulevard and Connector Roundabout 4-way

SECTION	ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A		**Site Clearance**					**$ 20,622**
	A1	General Site Clearance	6811	m^2	$ 2.00	$ 13,622	
	A2	Trees - Girth between 300mm and 1000mm	14	No.	$ 500.00	$ 7,000	
B		**Earthworks**					**$ 134,907**
	B1	Stripping site topsoil to stockpile on site (assume 150mm thick)	6,811	m^2	$ 5.00	$ 34,055	
	B2	Excavate to subgrade including offsite disposal	2,616	m^3	$ 30.00	$ 78,476	
	B3	Subgrade preparation, trimming and compaction	5,594	m^2	$ 4.00	$ 22,376	
C		**Road Pavements**					**$ 459,360**
	C1	New pavement	4,176	m^2	$ 110.00	$ 459,360	
D		**Concrete Works**					**$ 220,740**
	D1	SM2 type kerb	1124	m	$ 45.00	$ 50,580	
	D2	Footpath/Shared User Path - 150mm concrete on 75mm CR base	1418	m^2	$ 120.00	$ 170,160	
E		**Drainage**					**$ 177,800**
		Pipes and Box Culverts: Excavation Depth <1.5m					
	E1	RCP - 375mm Class 3 RRJ (incl subsoil)	406	m	$ 300.00	$ 121,800	
	E2	Drainage Pit (1000x750)	16	No.	$ 3,500.00	$ 56,000	
F		**Guard Fence (Not Used)**					**$ -**
G		**Signs and Linemarking**					**$ 57,433**
	G1	Install new signs	24	No.	$ 400.00	$ 9,600	
	G2	Zebra crossing	8	No.	$ 5,000.00	$ 40,000	
	G3	Continuous/edge line	1124	m	$ 4.00	$ 4,496	
	G4	Intermittent continuity line	318	m	$ 2.50	$ 795	
	G5	Intermittent lane line	837	m	$ 2.00	$ 1,674	
	G6	Give Way/STOP line	76	m	$ 4.00	$ 304	
	G7	RRPM's	141	No.	$ 4.00	$ 564	
H		**Street Lighting**					**$ 230,000**
	H1	SB pole, 6m bracket arm, 150W luminaires, electrical transformers and electrical works. Design and construction by Powercor (incl design and management)	23	no	$ 10,000.00	$ 230,000	
I		**Utility Services**					**$ -**
J		**Landscaping**					**$ 6,085**
	J1	Remove topsoil from stockile and spread 100mm thick on road verges, medians and adjacent areas disturbed by construction.	1,217	m^2	$ 5.00	$ 6,085	
K		**Misc Works**					**$ 6,450.00**
	K1	Right of way fencing - 1.2m post and wire	430	m	$ 15.00	$ 6,450	
L		**Sub-total Works (A-K)**					**$ 1,313,397**
M		**Delivery**					
	M1	Site Establishment	2.5	%		$ 32,834.91	
	M2	Survey/Design	10	%		$ 131,339.65	
	M3	Supervision & Project Management	5	%		$ 65,669.83	
	M4	Contingency	20	%		$ 262,679.30	
	M5	Traffic/Environmental Management	5.5	%		$ 72,236.81	
	M6	Council Fees	3.25	%		$ 42,685.39	
N		**Sub-total Delivery (M)**					**$ 607,446**
O		**PROJECT BUDGET**					**$ 1,920,842**



LEGEND

- PROJECT SITE BOUNDARY
- ROAD RESERVE BOUNDARY
- TREE PROTECTION ZONE
- VEGETATION PROTECTION OVERLAY
- CADASTRAL WATERCOURSE
- CADASTRAL LOT BOUNDARY

Issue	Date	By	Chkd	Appd
P01	29/03/16	SBM	MRB	BJS
FOR INFORMATION				

Client
Metropolitan Planning Authority - Melbourne

Job Title
PSP 1105
Leneva - Baranduda

Scale at A3 1:1000

Discipline Civil

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Drawing Title
Intersection Plan - Ultimate Works
Intersection IT04
Sheet 1

Drawing Status
Preliminary

Job No	Drawing No	Issue
246965-00	C-GA-0354	P01

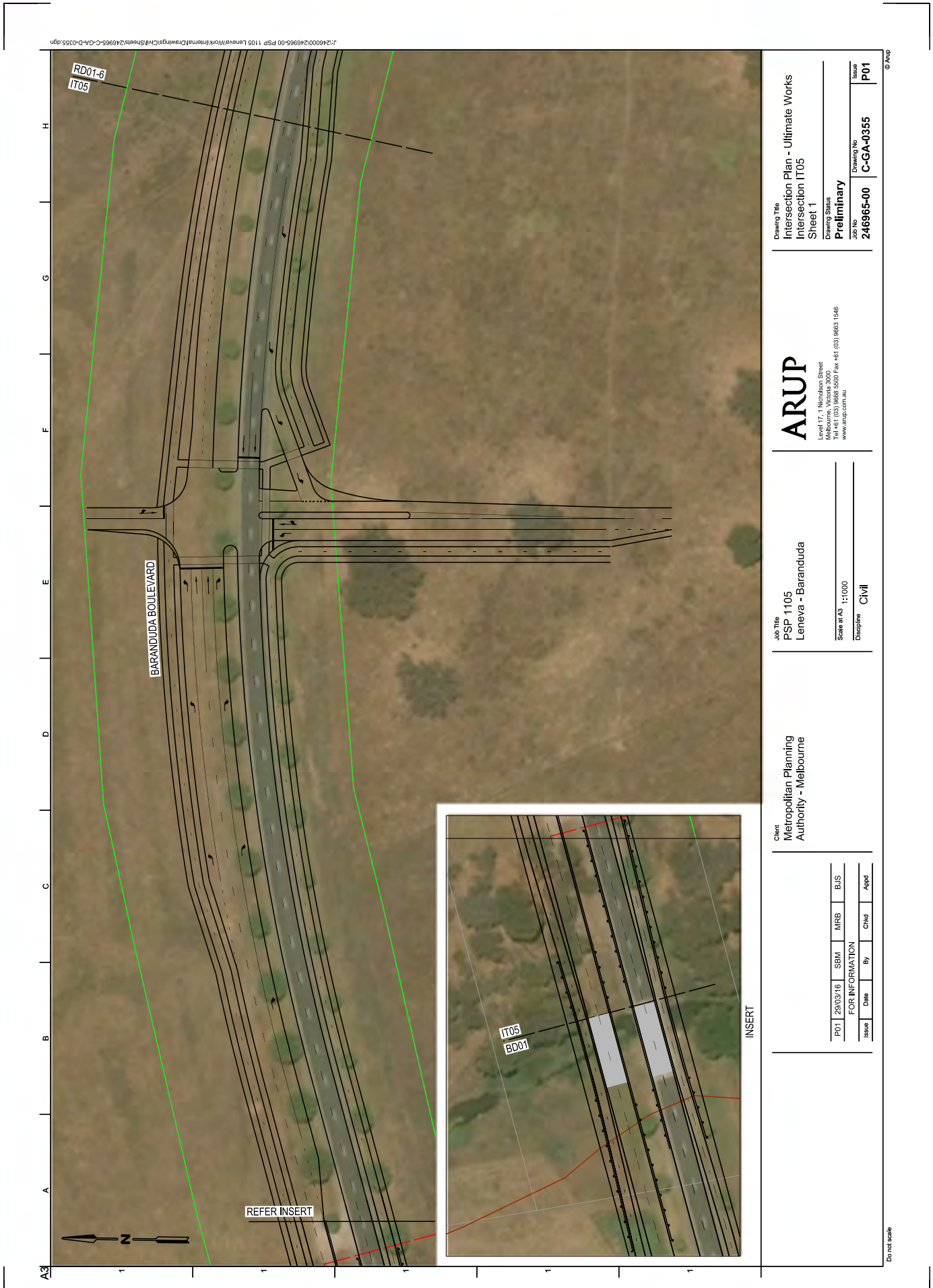
Do not scale

ARUP	Job No.	Sheet No.	Rev.
	246965-00		
	Element	Cost Schedule	
Job Title PSP 1105 Leneva - Baranduda	Drg. Ref.	N/A	
Calculation Construction Cost Estimate	Made by	Date 19/12/2016	Chd.

COST ESTIMATE FOR PROPOSED INTERSECTIONS

IT05 Baranduda Boulevard and Connector Signalised Intersection

SECTION	ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A		**Site Clearance**					**$ 36,228**
	A1	General Site Clearance	15614	m^2	$ 2.00	$ 31,228	
	A2	Trees - Girth between 300mm and 1000mm	10	No.	$ 500.00	$ 5,000	
B		**Earthworks**					**$ 231,497**
	B1	Stripping site topsoil to stockpile on site (assume 150mm thick)	15,614	m^2	$ 5.00	$ 78,070	
	B2	Excavate to subgrade including offsite disposal	3,925	m^3	$ 30.00	$ 117,739	
	B3	Subgrade preparation, trimming and compaction	8,922	m^2	$ 4.00	$ 35,688	
C		**Road Pavements**					**$ 648,890**
	C1	New pavement	5,899	m^2	$ 110.00	$ 648,890	
D		**Concrete Works**					**$ 445,830**
	D1	SM2 type kerb	1846	m	$ 45.00	$ 83,070	
	D2	Footpath/Shared User Path - 150mm concrete on 75mm CR base	3023	m^2	$ 120.00	$ 362,760	
E		**Drainage**					**$ 369,200**
		Pipes and Box Culverts: Excavation Depth <1.5m					
	E1	RCP - 375mm Class 3 RRJ (incl subsoil)	1,009	m	$ 300.00	$ 302,700	
	E2	Drainage Pit (1000x750)	19	No.	$ 3,500.00	$ 66,500	
F		**Guard Fence (Not Used)**					**$ -**
G		**Signs and Linemarking**					**$ 411,598**
	G1	Install new signs	10	No.	$ 400.00	$ 4,000	
	G2	Traffic signal intersection - 3 way, including controller	1	No.	$ 400,000.00	$ 400,000	
	G3	Continuous/edge line	1009	m	$ 4.00	$ 4,036	
	G4	Intermittent continuity line	836	m	$ 2.50	$ 2,090	
	G5	Intermittent lane line	462	m	$ 2.00	$ 924	
	G6	Give Way/STOP line	33	m	$ 4.00	$ 132	
	G7	RRPM's	104	No.	$ 4.00	$ 416	
H		**Street Lighting**					**$ 300,000**
	H1	SB pole, 6m bracket arm, 150W luminaires, electrical transformers and electrical works. Design and construction by Powercor (incl design and management)	30	no	$ 10,000.00	$ 300,000	
	H2	Meter cabinet	Incl	no	$ -	-	
I		**Utility Services (Not Used)**					**$ -**
J		**Landscaping**					**$ 33,460**
	J1	Remove topsoil from stockile and spread 100mm thick on road verges, medians and adjacent areas disturbed by construction.	6,692	m^2	$ 5.00	$ 33,460	
K		**Misc Works**					**$ 15,450.00**
	K1	Right of way fencing - 1.2m post and wire	1,030	m	$ 15.00	$ 15,450	
L		**Sub-total Works (A-K)**					**$ 2,492,152**
M		**Delivery**					
	M1	Site Establishment	2.5	%		$ 62,303.81	
	M2	Survey/Design	10	%		$ 249,215.23	
	M3	Supervision & Project Management	5	%		$ 124,607.61	
	M4	Contingency	20	%		$ 498,430.45	
	M5	Traffic/Environmental Management	5.5	%		$ 137,068.37	
	M6	Council Fees	3.25	%		$ 80,994.95	
N		**Sub-total Delivery (M)**					**$ 1,152,620**
O		**PROJECT BUDGET**					**$ 3,644,773**


RD01-6
IT05
BARANDUDA BOULEVARD
REFER INSERT
INSERT
IT05
BD01
Client
Metropolitan Planning Authority - Melbourne
Job Title
PSP 1105
Leneva - Baranduda
Scale at A3 1:1000
Discipline Civil
ARUP
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Melbourne Victoria 3000
Tel +61 (03) 9668 5000 Fax +61 (03) 9663 1546
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Drawing Title
Intersection Plan - Ultimate Works
Intersection IT05
Sheet 1
Drawing Status
Preliminary
Job No
246965-00
Drawing No
C-GA-0355
Issue
P01
Issue | Date | By | Chkd | Appd
P01 | 29/03/16 | SBM | MRB | BJS
FOR INFORMATION
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Do not scale
A3

ARUP	Job No.	Sheet No.	Rev.
	246965-00		
	Element	Cost Schedule	
Job Title PSP 1105 Leneva - Baranduda	Drg. Ref.	N/A	
Calculation Construction Cost Estimate	Made by	Date 19/12/2016	Chd.

COST ESTIMATE FOR PROPOSED INTERSECTIONS

IT06 INTERIM Boyes Road Arterial and Boyes Road Connector Roundabout 4-way

SECTION	ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A		**Site Clearance**					$ 30,332
	A1	General Site Clearance	13,416	m^2	$ 2.00	$ 26,832	
	A2	Trees - Girth between 300mm and 1000mm	7	No.	$ 500.00	$ 3,500	
B		**Earthworks**					$ 263,789
	B1	Stripping site topsoil to stockpile on site (assume 150mm thick)	13,416	m^2	$ 5.00	$ 67,080	
	B2	Excavate to subgrade including offsite disposal	5,072	m^3	$ 30.00	$ 152,161	
	B3	Subgrade preparation, trimming and compaction	11,137	m^2	$ 4.00	$ 44,548	
C		**Road Pavements**					$ 877,145
	C1	New pavement	7,896	m^2	$ 110.00	$ 868,560	
	C2	Wearing Course- Asphalt Overlay - 40mm	505	m^2	$ 17.00	$ 8,585	
D		**Concrete Works**					$ 523,065
	D1	SM2 type kerb	2981	m	$ 45.00	$ 134,145	
	D2	Footpath/Shared User Path - 150mm concrete on 75mm CR base	3,241	m^2	$ 120.00	$ 388,920	
E		**Drainage**					$ 525,600
	E1	RCP - 375mm Class 3 RRJ (incl subsoil)	1,472	m	$ 300.00	$ 441,600	
	E2	Drainage Pit (1000x750)	24	No.	$ 3,500.00	$ 84,000	
F		**Guard Fence (Not Used)**					$ -
G		**Signs and Linemarking**					$ 65,369
	G1	Install new signs	24	No.	$ 400.00	$ 9,600	
	G2	Zebra crossing	8	No.	$ 5,000.00	$ 40,000	
	G4	Continuous/edge line	2146	m	$ 4.00	$ 8,584	
	G6	Intermittent lane line (incl SUP)	2327	m	$ 2.00	$ 4,654	
	G7	Give Way/STOP line	81	m	$ 4.00	$ 324	
	G8	Lane arrows	11	No.	$ 65.00	$ 715	
	G9	RRPM's	373	No.	$ 4.00	$ 1,492	
H		**Street Lighting**					$ 300,000
	H1	SB pole, 6m bracket arm, 150W luminaires, electrical transformers and electrical works. Design and construction by Powercor (incl design and management)	30	no	$ 10,000.00	$ 300,000	
	H2	Meter cabinet	Incl	no	$ -	-	
I		**Utility Services (Not Used)**					$ -
J		**Landscaping**					$ 8,870
	J1	Remove topsoil from stockile and spread 100mm thick on road verges, medians and adjacent areas disturbed by construction.	1,774	m^2	$ 5.00	$ 8,870	
K		**Misc Works**					$ 19,950.00
	K1	Right of way fencing - 1.2m post and wire	1330	m	$ 15.00	$ 19,950	
L		**Sub-total Works (A-K)**					$ 2,614,120
M		**Delivery**					
	M1	Site Establishment	2.5	%		$ 65,352.99	
	M2	Survey/Design	10	%		$ 261,411.98	
	M3	Supervision & Project Management	5	%		$ 130,705.99	
	M4	Contingency	20	%		$ 522,823.95	
	M5	Traffic/Environmental Management	5.5	%		$ 143,776.59	
	M6	Council Fees	3.25	%		$ 84,958.89	
	M7	VicRoads Fees	1	%		$ 26,141.20	
N		**Sub-total Delivery (M)**					$ 1,235,172
O		**PROJECT BUDGET**					$ 3,849,291


BOYES ROAD
BOYES ROAD
BOYES ROAD R002-4 (I)
R002-4 (I)
N
LEGEND
PROJECT SITE BOUNDARY
ROAD RESERVE BOUNDARY
TREE PROTECTION ZONE
VEGETATION PROTECTION OVERLAY
CADASTRAL WATERCOURSE
CADASTRAL LOT BOUNDARY
P02 01/08/16 SBM MRB BJS
FOR INFORMATION
P01 29/03/16 SBM MRB BJS
FOR INFORMATION
Issue Date By Chkd Appd
Client
Metropolitan Planning Authority - Melbourne
Job Title
PSP 1105
Leneva - Baranduda
Scale at A3 1:1000
Discipline Civil
ARUP
Level 17, 1 Nicholson Street
Melbourne Victoria 3000
Tel +61 (0)3 9668 5000 Fax +61 (0)3 9663 1546
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Drawing Title
Interim Works - Intersection
Intersection IT06
Sheet 3 OF 7
Drawing Status
Preliminary
Job No
246965-00
Drawing No
C-GA-0052
Issue
P02
© Arup
Do not scale
A3
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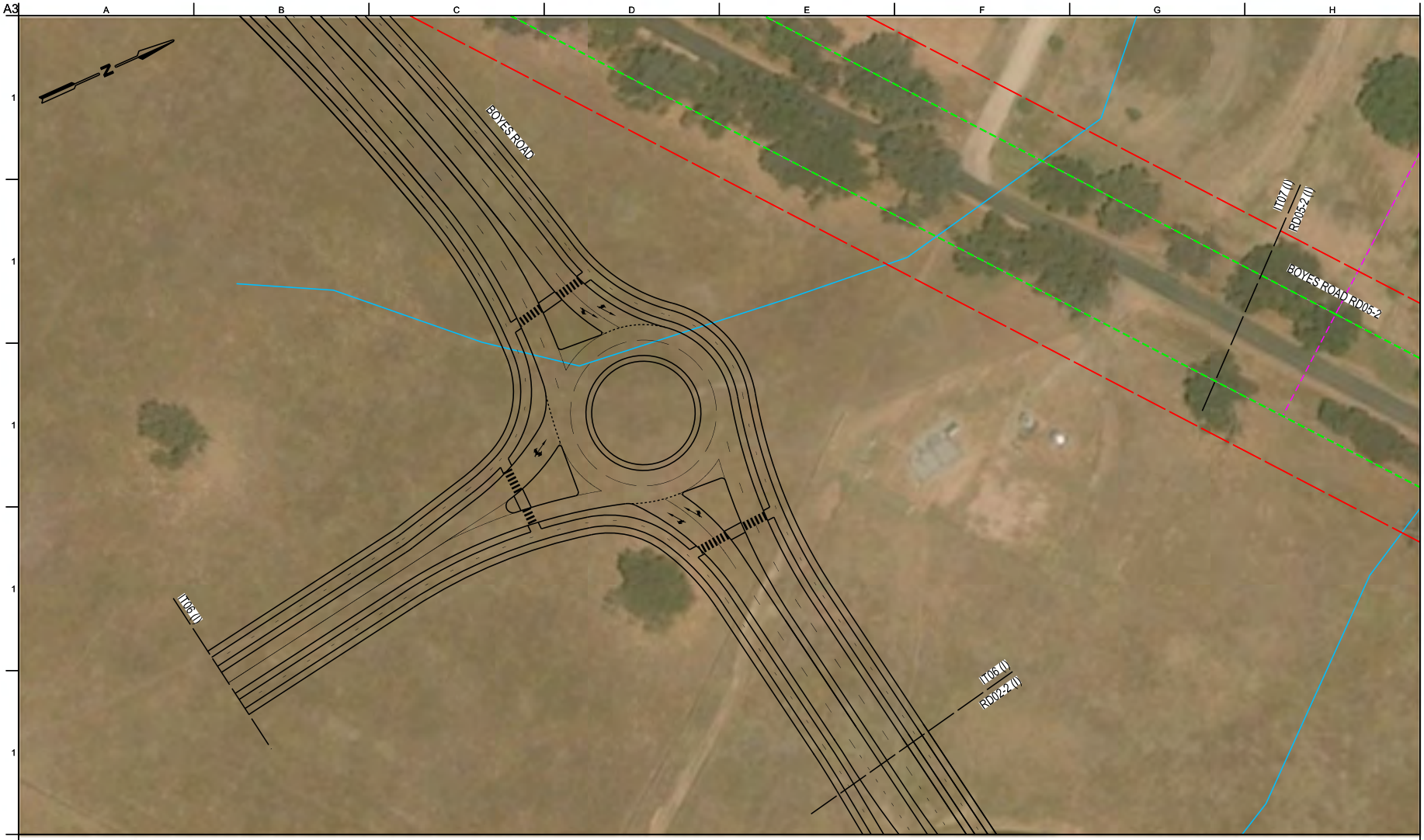

LEGEND

- PROJECT SITE BOUNDARY
- ROAD RESERVE BOUNDARY
- TREE PROTECTION ZONE
- VEGETATION PROTECTION OVERLAY
- CADASTRAL WATERCOURSE
- CADASTRAL LOT BOUNDARY

Issue	Date	By	Chkd	Appd
P02	01/08/16	SBM	MRB	BJS
	FOR INFORMATION			
P01	29/03/16	SBM	MRB	BJS
	FOR INFORMATION			

Client
Metropolitan Planning Authority - Melbourne

Job Title
PSP 1105
Leneva - Baranduda

Scale at A3 1:1000

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Drawing Title
Interim Works - Intersection
Intersection IT06
Sheet 4 OF 7

Drawing Status
Preliminary

Job No	Drawing No	Issue
246965-00	C-GA-0053	P02

Do not scale

ARUP	Job No. 246965-00	Sheet No.	Rev.
	Element Cost Schedule		
Job Title PSP 1105 Leneva - Baranduda	Org. Ref. N/A		
Calculation Construction Cost Estimate	Made by	Date 19/12/2016	Chd.

COST ESTIMATE FOR PROPOSED INTERSECTIONS

IT07 INTERIM Baranduda Boulevard and John Schubert Drive 4-way Intersection

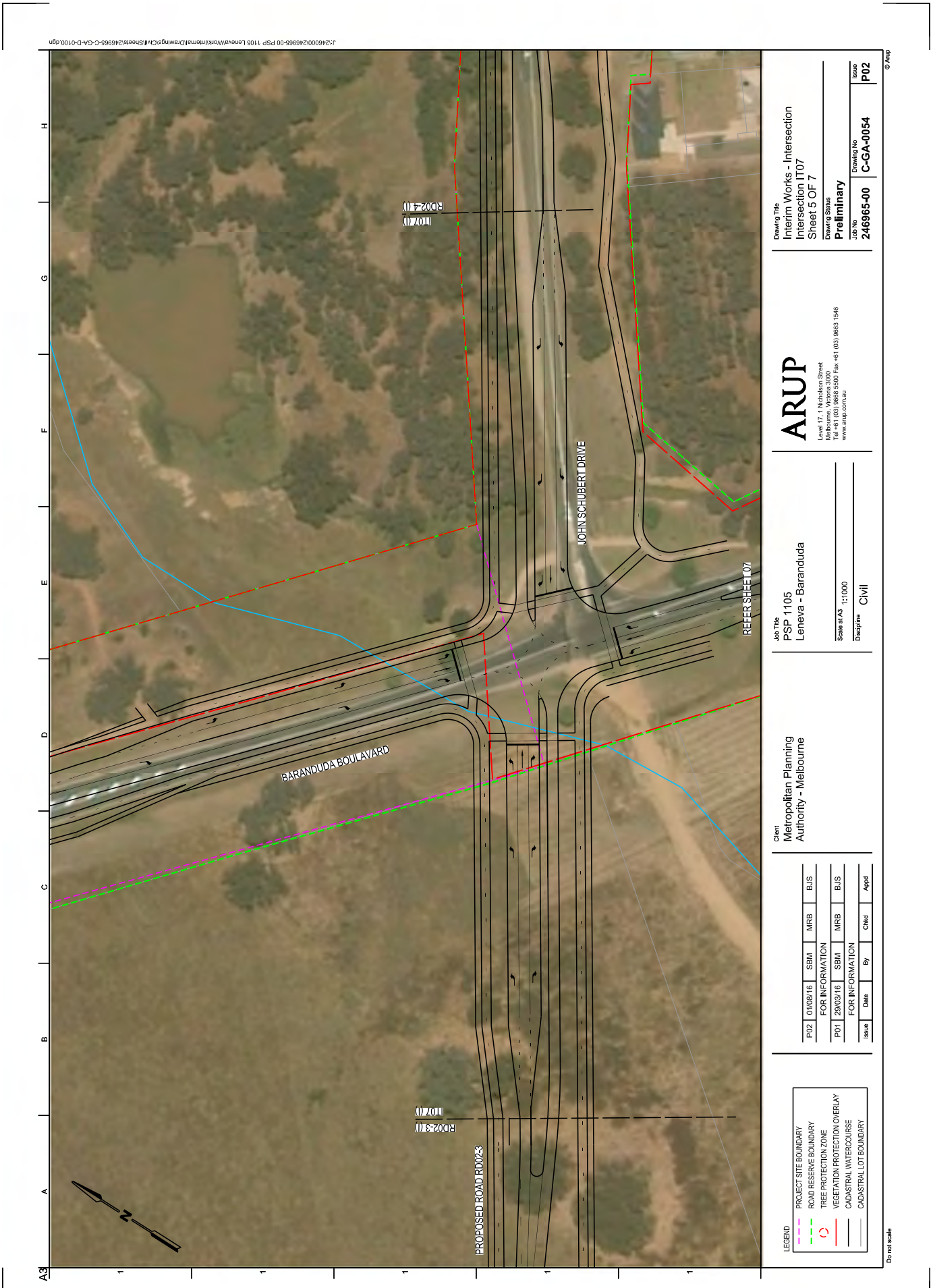
SECTION	ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A		**Site Clearance**					**$ 26,234**
	A1	General Site Clearance	12,067	m^2	$ 2.00	$ 24,134	
	A2	Trees - Girth between 300mm and 1000mm	3	No.	$ 500.00	$ 1,500	
	A3	Take up and dispose of existing sign assemblies	6	No.	$ 100.00	$ 600	
B		**Earthworks**					**$ 162,567**
	B1	Stripping site topsoil to stockpile on site (assume 150mm thick)	12,067	m^2	$ 5.00	$ 60,335	
	B2	Excavate to subgrade including offsite disposal	2,657	m^3	$ 30.00	$ 79,716	
	B3	Subgrade preparation, trimming and compaction	5,629	m^2	$ 4.00	$ 22,516	
C		**Road Pavements**					**$ 538,520**
	C1	New pavement	4,279	m^2	$ 110.00	$ 470,690	
	C2	Wearing Course Overlay - Asphalt - 40mm, including	3,990	m^2	$ 17.00	$ 67,830	
D		**Concrete Works**					**$ 252,000**
	D1	SM2 type kerb	2000	m	$ 45.00	$ 90,000	
	D2	Footpath/Shared User Path - 150mm concrete on 75mm CR base	1,350	m^2	$ 120.00	$ 162,000	
E		**Drainage**					**$ 519,900**
		Pipes and Box Culverts: Excavation Depth <1.5m					
	E1	RCP - 375mm Class 3 RRJ (incl subsoil)	1,058	m	$ 300.00	$ 317,400	
	E2	RCBC 2x2100 x 900mm	22	m	$ 4,500.00	$ 99,000	
	E3	RC Endwall (BC 2x2100 x 900mm)	1	No.	$ 5,000.00	$ 5,000	
	E4	Drainage Pit (1000x750)	27	No.	$ 3,500.00	$ 94,500	
	E5	Stone beaching (Allow 4x5=20m2 avg per new endwall)	40	m^2	$ 100.00	$ 4,000	
F		**Guard Fence**					**$ 28,000.00**
	F1	Install new W beam guard fence, incl terminal treatments	200	m	$ 140.00	$ 28,000	
G		**Signs and Linemarking**					**$ 517,465**
	G1	Install new signs	16	No.	$ 400.00	$ 6,400	
	G2	Traffic signal intersection - 4 way, including controller and associated pits and cabling	1	No.	$ 500,000.00	$ 500,000	
	G3	Continuous/edge line	1263	m	$ 4.00	$ 5,052	
	G4	Intermittent continuity line	1137	m	$ 2.50	$ 2,843	
	G5	Intermittent lane line	244	m	$ 2.00	$ 488	
	G6	Give Way/STOP line	50	m	$ 4.00	$ 200	
	G7	Lane arrows	26	No.	$ 65.00	$ 1,690	
	G8	RRPM's	198	No.	$ 4.00	$ 792	
H		**Street Lighting**					**$ 330,000**
	H1	SB pole, 6m bracket arm, 150W luminaires, electrical transformers and electrical works. Design and construction by Powercor (incl design and management)	33	no	$ 10,000.00	$ 330,000	
	H2	Meter cabinet	Incl	no	$ -	-	
I		**Utility Services**					**$ 200,000.00**
	I1	Provisional Sum				$ 200,000	
J		**Landscaping**					**$ 32,190**
	J1	Remove topsoil from stockile and spread 100mm thick on road verges, medians and adjacent areas disturbed by construction	6,438	m^2	$ 5.00	$ 32,190	
K		**Misc Works**					**$ 16,200.00**
	K1	Right of way fencing - 1.2m post and wire	1080	m	$ 15.00	$ 16,200	
L		**PROJECT COST (TOTAL A - K)**					**$ 2,623,076**
M		**Delivery**					**$ 1,239,403.17**
	M1	Site Establishment	2.5	%		$ 65,576.89	
	M2	Survey/Design	10	%		$ 262,307.55	
	M3	Supervision & Project Management	5	%		$ 131,153.78	
	M4	Contingency	20	%		$ 524,615.10	
	M5	Traffic/Environmental Management	5.5	%		$ 144,269.15	
	M6	Council Fees	3.25	%		$ 85,249.95	
	M7	VicRoads Fees	1	%		$ 26,230.76	
N		**Delivery**					**$ 1,239,403**
O		**PROJECT BUDGET**					**$ 3,862,479**

ARUP	Job No. 246965-00	Sheet No.	Rev.
	Element Cost Schedule		
Job Title PSP 1105 Leneva - Baranduda	Drg. Ref. N/A		
Calculation Construction Cost Estimate	Made by	Date 19/12/2016	Chd.

COST ESTIMATE FOR PROPOSED INTERSECTIONS

IT08 INTERIM Boyes Road and Kiewa Valley Highway Signalised Intersection

SECTION	ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A		**Site Clearance**					**$ 30,686**
	A1	General Site Clearance	13,943	m^2	$ 2.00	$ 27,886	
	A2	Trees - Girth between 300mm and 1000mm	4	No.	$ 500.00	$ 2,000	
	A3	Take up and dispose of existing sign assemblies	8	No.	$ 100.00	$ 800	
B		**Earthworks**					**$ 200,696**
	B1	Stripping site topsoil to stockpile on site (assume 150mm thick)	13,943	m^2	$ 5.00	$ 69,715	
	B2	Excavate to subgrade including offsite disposal	3,321	m^3	$ 30.00	$ 99,629	
	B3	Subgrade preparation, trimming and compaction	7,838	m^2	$ 4.00	$ 31,352	
C		**Road Pavements**					**$ 614,636**
	C1	New pavement	4,792	m^2	$ 110.00	$ 527,120	
	C2	Wearing Course Overlay - Asphalt - 40mm, including	5,148	m^2	$ 17.00	$ 87,516	
D		**Concrete Works**					**$ 510,555**
	D1	SM2 type kerb	3223	m	$ 45.00	$ 145,035	
	D2	Footpath/Shared User Path - 150mm concrete on 75mm CR base	3,046	m^2	$ 120.00	$ 365,520	
E		**Drainage**					**$ 524,600**
		Pipes and Box Culverts: Excavation Depth <1.5m					
	E1	RCP - 375mm Class 3 RRJ (incl subsoil)	1,352	m	$ 300.00	$ 405,600	
	E2	Drainage Pit (1000x750)	34	No.	$ 3,500.00	$ 119,000	
F		**Guard Fence (Not Used)**					**$ -**
G		**Signs and Linemarking**					**$ 526,880**
	G1	Install new signs	16	No.	$ 400.00	$ 6,400	
	G2	Traffic signal intersection - 4 way, including controller and associated pits and cabling	1	No.	$ 500,000.00	$ 500,000	
	G3	Continuous/edge line	3993	m	$ 4.00	$ 15,972	
	G4	Intermittent continuity line	915	m	$ 2.50	$ 2,288	
	G5	Intermittent lane line	567	m	$ 2.00	$ 1,134	
	G6	Give Way/STOP line	46.2	m	$ 4.00	$ 185	
	G7	RRPM's	225	No.	$ 4.00	$ 901	
H		**Street Lighting**					**$ 480,000**
	H1	SB pole, 6m bracket arm, 150W luminaires, electrical transformers and electrical works. Design and construction by Powercor (incl design and management)	48	no	$ 10,000.00	$ 480,000	
	H2	Meter cabinet	Incl	no	$ -	-	
I		**Utility Services (Not Used)**					**$ -**
J		**Landscaping**					**$ 30,525**
	J1	Remove topsoil from stockile and spread 100mm thick on road verges, medians and adjacent areas disturbed by construction.	6,105	m^2	$ 5.00	$ 30,525	
K		**Misc Works**					**$ 14,250.00**
	K1	Right of way fencing - 1.2m post and wire	950	m	$ 15.00	$ 14,250	
L		**Sub-total Works (A-K)**					**$ 2,932,827**
M		**Delivery**					
	M1	Site Establishment	2.5	%		$ 73,320.68	
	M2	Survey/Design	10	%		$ 293,282.71	
	M3	Supervision & Project Management	5	%		$ 146,641.36	
	M4	Contingency	20	%		$ 586,565.43	
	M5	Traffic/Environmental Management	5.5	%		$ 161,305.49	
	M6	Council Fees	3.25	%		$ 95,316.88	
	M7	VicRoads Fees	1	%		$ 29,328.27	
N		**Sub-total Delivery (M)**					**$ 1,385,761**
O		**PROJECT BUDGET**					**$ 4,318,588**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A3
A
B
C
D
E
F
G
H
1
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5
6
BARANDUDA BOULAVARD
JOHN SCHUBERT DRIVE
PROPOSED ROAD RD023
RD02-3 (1)
TIO7 (1)
RD02-4 (1)
TIO7 (1)
REFER SHEET 07
N
LEGEND
PROJECT SITE BOUNDARY
ROAD RESERVE BOUNDARY
TREE PROTECTION ZONE
VEGETATION PROTECTION OVERLAY
CADASTRAL WATERCOURSE
CADASTRAL LOT BOUNDARY
Issue Date By Chkd Appd
P02 01/08/16 SBM MRB BJS
FOR INFORMATION
P01 29/03/16 SBM MRB BJS
FOR INFORMATION
Client
Metropolitan Planning Authority - Melbourne
Job Title
PSP 1105
Leneva - Baranduda
Scale at A3 1:1000
Discipline Civil
ARUP
Level 17, 1 Nicholson Street
Melbourne Victoria 3000
Tel +61 (03) 9668 5000 Fax +61 (03) 9663 1546
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Drawing Title
Interim Works - Intersection
Intersection IT07
Sheet 5 OF 7
Drawing Status
Preliminary
Job No
246965-00
Drawing No
C-GA-0054
Issue
P02
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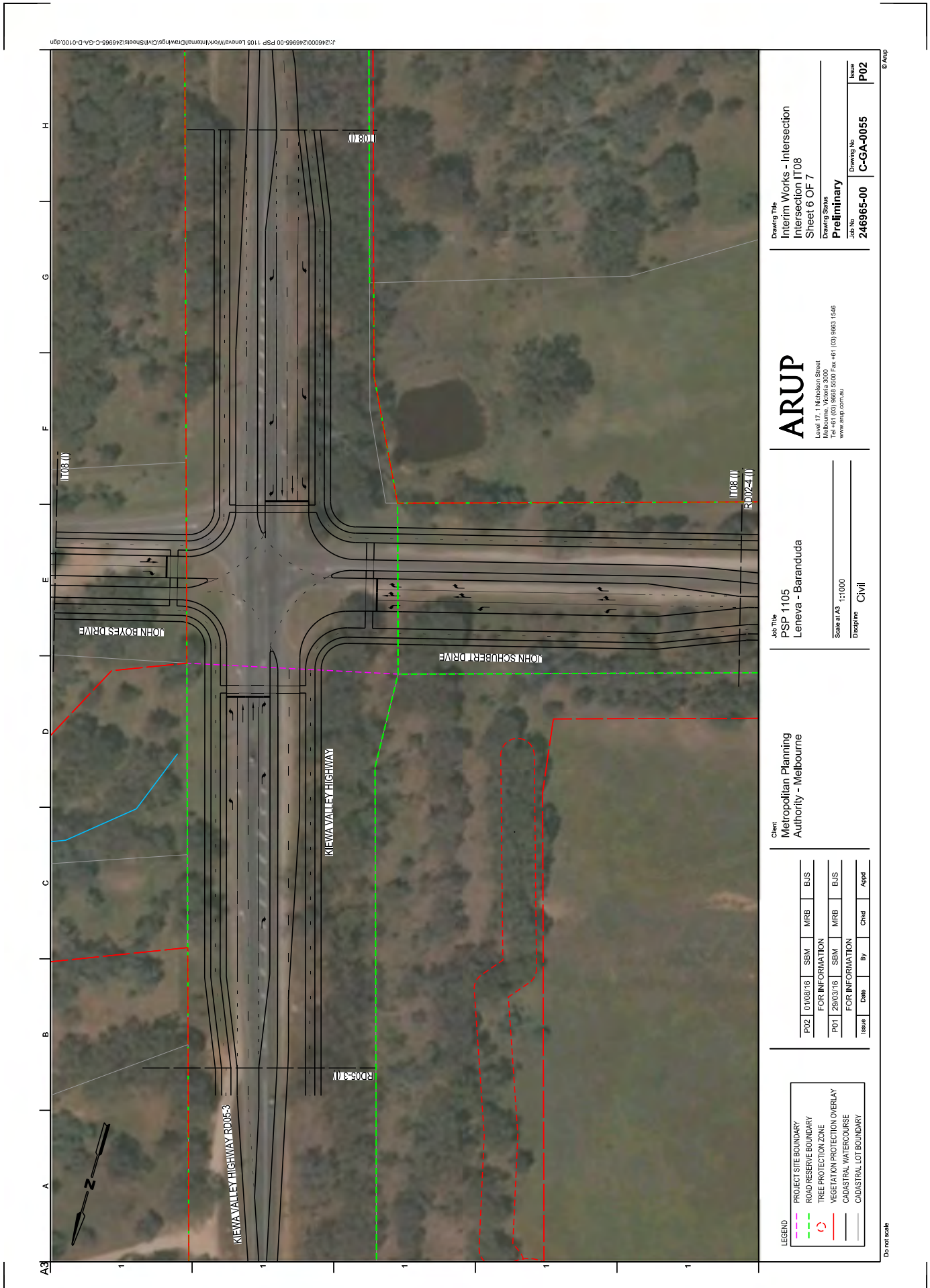
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RD06-3 (I)
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JOHN SCHUBERT DRIVE
KIEWA VALLEY HIGHWAY
KIEWA VALLEY HIGHWAY RD05-3
N
LEGEND
PROJECT SITE BOUNDARY
ROAD RESERVE BOUNDARY
TREE PROTECTION ZONE
VEGETATION PROTECTION OVERLAY
CADASTRAL WATERCOURSE
CADASTRAL LOT BOUNDARY
Issue | Date | By | Chkd | Appd
P02 | 01/08/16 | SBM | MRB | BJS
FOR INFORMATION
P01 | 29/03/16 | SBM | MRB | BJS
FOR INFORMATION
Client
Metropolitan Planning Authority - Melbourne
Job Title
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Drawing Title
Interim Works - Intersection
Intersection IT08
Sheet 6 OF 7
Drawing Status
Preliminary
Job No 246965-00
Drawing No C-GA-0055
Issue P02
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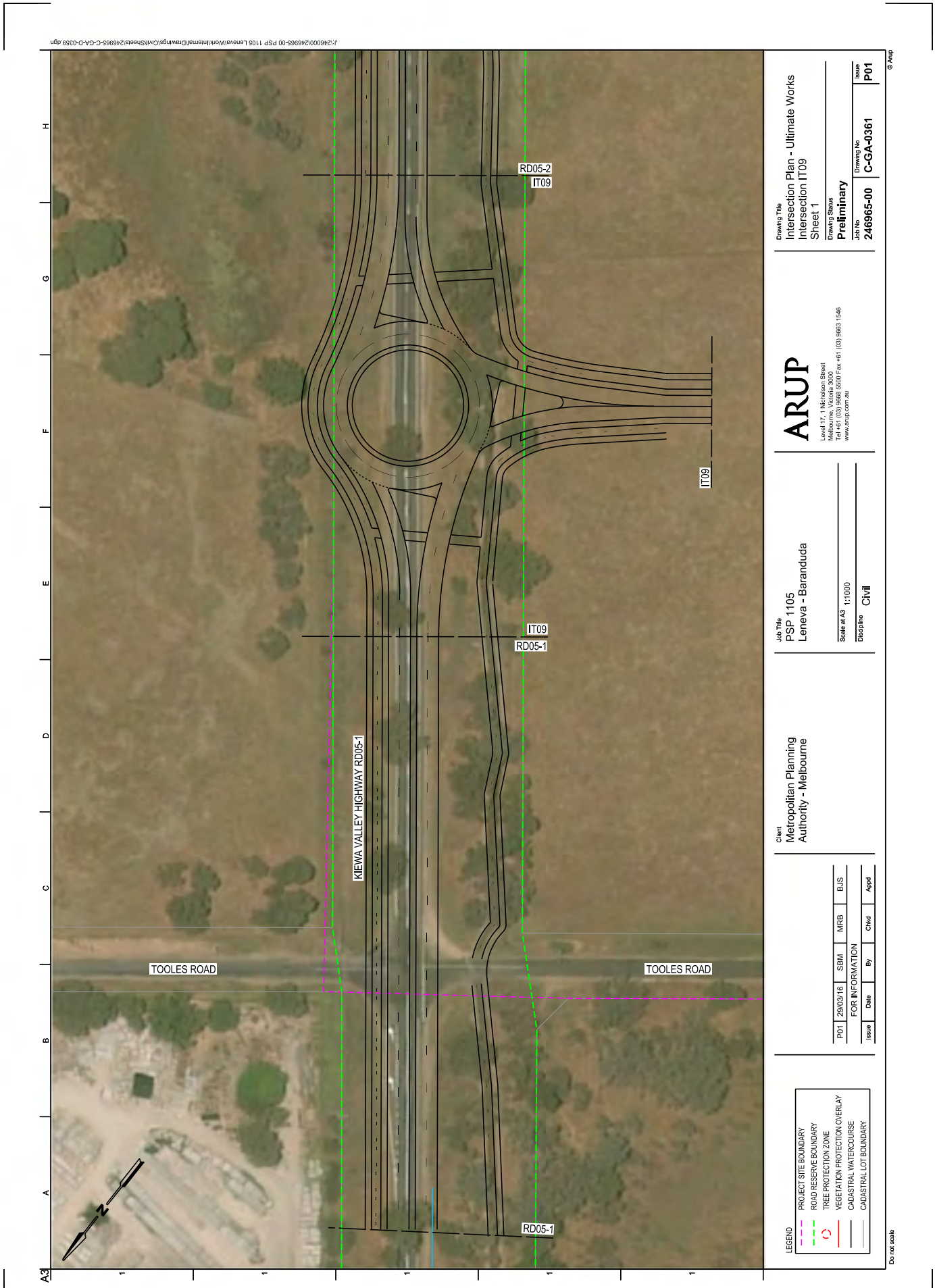
ARUP	Job No.	Sheet No.	Rev.
	246965-00		
	Element	Cost Schedule	
Job Title: PSP 1105 Leneva - Baranduda	Drg. Ref.	N/A	
Calculation: Construction Cost Estimate	Made by	Date: 19/12/2016	Chd.

COST ESTIMATE FOR PROPOSED INTERSECTIONS

IT09 Kiewa Valley Highway and Connector T-Roundabout

SECTION	ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A		**Site Clearance**					**$ 17,830**
	A1	General Site Clearance	7415	m^2	$ 2.00	$ 14,830	
	A2	Trees - Girth between 300mm and 1000mm	6	No.	$ 500.00	$ 3,000	
B		**Earthworks**					**$ 120,460**
	B1	Stripping site topsoil to stockpile on site (assume 150mm thick)	7,415	m^2	$ 5.00	$ 37,075	
	B2	Excavate to subgrade including offsite disposal	2,156	m^3	$ 30.00	$ 64,693	
	B3	Subgrade preparation, trimming and compaction	4,673	m^2	$ 4.00	$ 18,692	
C		**Road Pavements**					**$ 374,000**
	C1	New pavement	3,400	m^2	$ 110.00	$ 374,000	
D		**Concrete Works**					**$ 190,155**
	D1	SM2 type kerb	831	m	$ 45.00	$ 37,395	
	D2	Footpath/Shared User Path - 150mm concrete on 75mm CR base	1273	m^2	$ 120.00	$ 152,760	
E		**Drainage**					**$ 170,100**
		Pipes and Box Culverts: Excavation Depth <1.5m					
	E1	RCP - 375mm Class 3 RRJ (incl subsoil)	427	m	$ 300.00	$ 128,100	
	E2	Drainage Pit (1000x750)	12	No.	$ 3,500.00	$ 42,000	
F		**Guard Fence (Not Used)**					**$ -**
G		**Signs and Linemarking**					**$ 194,415**
	G2	Install new signs	17	No.	$ 400.00	$ 6,800	
	G4	Signalised pedestrian crossing	3	No.	$ 60,000.00	$ 180,000	
	G6	Continuous/edge line	1241	m	$ 4.00	$ 4,964	
	G7	Intermittent continuity line	810	m	$ 2.50	$ 2,025	
	G8	Intermittent lane line	51	m	$ 2.00	$ 102	
	G12	RRPM's	131	No.	$ 4.00	$ 524	
H		**Street Lighting**					**$ 140,000**
	H1	SB pole, 6m bracket arm, 150W luminaires, electrical transformers and electrical works. Design and construction by Powercor (incl design and management)	14	no	$ 10,000.00	$ 140,000	
I		**Utility Services (Not Used)**					**$ -**
J		**Landscaping**					**$ 13,710**
	J1	Remove topsoil from stockile and spread 100mm thick on road verges, medians and adjacent areas disturbed by construction.	2,742	m^2	$ 5.00	$ 13,710	
K		**Misc Works**					**$ 12,750.00**
	K1	Right of way fencing - 1.2m post and wire	850	m	$ 15.00	$ 12,750	
L		**Sub-total Works (A-K)**					**$ 1,233,420**
M		**Delivery**					
	M1	Site Establishment	2.5	%		$ 30,835.49	
	M2	Survey/Design	10	%		$ 123,341.98	
	M3	Supervision & Project Management	5	%		$ 61,670.99	
	M4	Contingency	20	%		$ 246,683.95	
	M5	Traffic/Environmental Management	5.5	%		$ 67,838.09	
	M6	Council Fees	3.25	%		$ 40,086.14	
	M7	VicRoads Fees	1	%		$ 12,334.20	
N		**Sub-total Delivery (M)**					**$ 582,791**
O		**PROJECT BUDGET**					**$ 1,816,211**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IT09
IT09
IT09
RD05-1
KIEWA VALLEY HIGHWAY RD05-1
TOOLES ROAD
TOOLES ROAD
RD05-1
LEGEND
PROJECT SITE BOUNDARY
ROAD RESERVE BOUNDARY
TREE PROTECTION ZONE
VEGETATION PROTECTION OVERLAY
CADASTRAL WATERCOURSE
CADASTRAL LOT BOUNDARY
Issue Date By Chkd Appd
P01 29/03/16 SBM MRB BJS
FOR INFORMATION
Client
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Drawing Title
Intersection Plan - Ultimate Works
Intersection IT09
Sheet 1
Drawing Status
Preliminary
Job No
246965-00
Drawing No
C-GA-0361
Issue
P01
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Do not scale
A3

RECREATION AND COMMUNITY FACILITY COST ESTIMATES

COST PLAN DETAIL

PROJECT	LENEVA - BARANDUDA COMMUNITY INFRASTRUCTURE
CLIENT	MPA
DATE	15/03/2017
REVISION	02

	WORKS AREA M2	WORKS RATE $/M2	COST TOTAL $
LEVEL 1 MULTIPURPOSE COMMUNITY CENTRE			
Early Years - Double Room Kindergarten to cater for 66 licensed places children			
Dual room kindergarten	240	$ 2,500.00	$ 600,000
Community meeting space	110	$ 2,400.00	$ 264,000
Group room	30	$ 2,500.00	$ 75,000
MCH room	20	$ 2,650.00	$ 53,000
Breastfeeding room	16	$ 2,650.00	$ 42,400
Meeting/interview rooms	20	$ 2,405.00	$ 48,100
Teacher office	20	$ 2,500.00	$ 50,000
Staff room for 12 staff	25	$ 2,400.00	$ 60,000
Kitchen	26	$ 3,800.00	$ 98,800
Toilets for staff and children	64	$ 2,950.00	$ 188,800
Cleaners cupboard	9	$ 1,800.00	$ 16,200
Waiting area	12	$ 2,100.00	$ 25,200
Equipment storage	40	$ 1,900.00	$ 76,000
Foyer, lobby and corridors	260	$ 2,200.00	$ 572,000
Entry canopy and verandah	150	$ 1,514.00	$ 227,100
TOTAL	**1,042**	**$ 2,300.00**	**$ 2,396,600**
Allowance for External Carparking, Civil, Landscape and Irrigation Works	2,000	$ 120.00	$ 240,000
Outdoor Area for Kindergarten and Community	1,124	$ 350.00	$ 393,400
SUBTOTAL			**$ 3,030,000**
LEVEL 2 MULTIPURPOSE COMMUNITY CENTRE			
Dual room kindergarten	240	$ 2,500.00	$ 600,000
Group room	30	$ 2,500.00	$ 75,000
Community meeting incl toilets	800	$ 2,600.00	$ 2,080,000
MCH room	20	$ 2,650.00	$ 53,000
Breastfeeding room	16	$ 2,650.00	$ 42,400
Meeting/interview rooms	20	$ 2,400.00	$ 48,000
Teacher office/admin	20	$ 2,500.00	$ 50,000
Staff room for 12 staff	25	$ 2,400.00	$ 60,000
Kitchen - commercial	30	$ 4,200.00	$ 126,000
Kitchenette	16	$ 3,500.00	$ 56,000
Toilets for staff and children	65	$ 2,950.00	$ 191,750
Cleaners cupboard	10	$ 1,710.00	$ 17,100
Waiting area	12	$ 2,100.00	$ 25,200
Equipment storage	165	$ 1,750.00	$ 288,750
Foyer, lobby and corridors	260	$ 2,200.00	$ 572,000
Entry canopy and verandah	150	$ 1,496.00	$ 224,400
TOTAL	**1,879**	**$ 2,400.00**	**$ 4,509,600**
Allowance for External Carparking, Civil, Landscape and Irrigation Works	2,500	$ 120.00	$ 300,000
Outdoor Area for Kindergarten and Community	1,384	$ 350.00	$ 484,400
SUBTOTAL			**$ 5,294,000**

COST PLAN DETAIL

PROJECT	LENEVA - BARANDUDA COMMUNITY INFRASTRUCTURE
CLIENT	MPA
DATE	15/03/2017
REVISION	02

	WORKS AREA M2		WORKS RATE $/M2		COST TOTAL $
SPORTING RESERVE - SR2					
Sporting Oval (2 Soccer Fields / 1 Cricket Pitch) - assume to incl flood lights	22,000	$	60.00	$	1,320,000
Carparking and Lighting - assumed area	2,500	$	120.00	$	300,000
Sports Pavilion - Incl. 4 Change Rooms, Umpire Rooms, Kitchen / Canteen, Club Room, etc.	700	$	2,450.00	$	1,715,000
Allowance for tiered seating - assume lightweight construction	1	$	100,000.00	$	100,000
Allowance for External Works incl Landscaping and Civil (excludes vehicular hard landscape)	1	$	40,000.00	$	40,000
Allowance for Feature Entrance	1	$	50,000.00	$	50,000
SUBTOTAL				**$**	**3,525,000**
SPORTING RESERVE - SR1					
Sporting Oval (AFL / 1 Cricket Pitch) - assume to incl flood lights	22,000	$	60.00	$	1,320,000
4 Outdoor Netball Courts - assume sports surfacing required	3,200	$	150.00	$	480,000
Carparking and Lighting - assumed area	3,500	$	120.00	$	420,000
Sports Pavilion to AFL guidelines - assume effiiciencies can be achieved	1,000	$	2,700.00	$	2,700,000
Playground	1	$	150,000.00	$	150,000
Allowance for tiered seating - assume lightweight construction	1	$	150,000.00	$	150,000
Allowance for External Works incl Landscaping and Civil (excludes vehicular hard landscape)	1	$	50,000.00	$	50,000
Allowance for Feature Entrance	1	$	50,000.00	$	50,000
SUBTOTAL				**$**	**5,320,000**

COST PLAN DETAIL

PROJECT	LENEVA - BARANDUDA COMMUNITY INFRASTRUCTURE
CLIENT	MPA
DATE	15/03/2017
REVISION	02

	WORKS AREA M2		WORKS RATE $/M2		COST TOTAL $
BARANDUDA FIELDS SPORTING COMPLEX					
4x Sporting Ovals - AFL	72,000	$	60.00	$	4,320,000
Pavilion - Standard construction with club rooms and change rooms	1,100	$	2,450.00	$	2,695,000
Paving Works	1,830	$	120.00	$	219,600
Cricket Facility					
2 Turfs - included within ovals					INCL
1 Turn - independent	11,000	$	60.00	$	660,000
4 Synthetic Cricket Wickets - fully enclosed cage	4	$	25,000.00	$	100,000
Cycling Cirterium Track - Assume included within shared path around fields					INCL
Indoor Stadium - Three Courts assumed with amenities, circulation and reception	3,100	$	1,750.00	$	5,425,000
Lawn Bowls - Two Floodlit Greens, Pavilion and Parking for expansion to Four Greens					
Floodlit Greens including lighting	2	$	250,000.00	$	500,000
Pavilion - Standard construction with club rooms and change rooms (assumed area)	1,250	$	2,450.00	$	3,062,500
Future expansion - Land Allocation (grassing only)	3,050	$	5.00	$	15,250
Outdoor Netball Courts - with Floodlighting adjacent to the Indoor Stadium (4no.)	3,200	$	200.00	$	640,000
Rugby League					
2 Fields	22,000	$	60.00	$	1,320,000
Pavilion - Standard construction with club rooms and change rooms (assumed area)	1,100	$	2,450.00	$	2,695,000
Car Parking	1,050	$	120.00	$	126,000
Soccer - 2 Pitch (local level facility)					
Pitch	14,500	$	60.00	$	870,000
Pavilion / Amenities / Specator Areas	1,750	$	2,450.00	$	4,287,500
Tennis					
8 Court (local level) with Floodlighting	8	$	70,000.00	$	560,000
Pavilion - Standard construction with club rooms and change rooms	1,050	$	2,450.00	$	2,572,500
Passive Recreation - Wetlands (assume existing) / Passive Park Precinct Area and Playground					EXCL
Carparking, Roads and Lighting	62,150	$	100.00	$	6,215,000
Pavement and Footpath	10,800	$	120.00	$	1,296,000
Allowance for External Works incl Landscaping and Civil (excludes vehicular hard landscape)					EXCL
Rounding				$	650
SUBTOTAL				**$**	**37,580,000**
CONSTRUCTION COST - TOTAL				$	64,876,500

COST PLAN DETAIL

PROJECT	LENEVA - BARANDUDA COMMUNITY INFRASTRUCTURE
CLIENT	MPA
DATE	15/03/2017
REVISION	02

	WORKS AREA M2	WORKS RATE $/M2	COST TOTAL $
OTHER WORKS			
Site Services & Infrastructure			$ 1,000,000
Site Signage			$ 100,000
Site Fencing			$ 250,000
Demolitions			EXCL
Preliminaries		12%	$ 7,785,000
NETT CONSTRUCTION COST			$ 74,011,500
SPECIAL PROVISIONS			
Staging			EXCL
ESD Initiatives			EXCL
Design Contingency		12%	$ 8,882,000
Construction Contingency		5%	$ 4,145,000
TOTAL CONSTRUCTION COST			$ 87,038,500
OTHER PROJECT COSTS			
FF&E			EXCL
ICT			EXCL
Consultant Fees		7%	$ 6,093,000
Authority Charges		0.25%	$ 233,000
Relocation Costs			EXCL
Temporary Accomodation			EXCL
TOTAL PROJECT COST (EXCL. GST)			$ 93,365,000
ESCALATION			
To Construction Commencement			EXCL
To Construction Completion			EXCL
TOTAL PROJECT END COST (EXCL. GST)			$ 93,365,000

Clarifications and Exclusions

- *GST*
- *Legal & holding costs*
- *Adverse soil conditions*
- *Allowance for removal of any contamination / hazardous materials*
- *Any electrical and lighting costs unless noted within the cost plan*
- *Any stormwater and hydraulic cost unless noted within cost plan*
- *Soft landscaping maintenance*
- *Escalation*
- *ESD Initiatives / Allowances*

DRAINAGE PROJECT COST AND FUNCTIONAL LAYOUT PLANS

ARUP	Job No.	Sheet No.	Rev.
	246965-00		
	Element	Cost Schedule	
Job Title PSP 1105 Leneva - Baranduda	Drg. Ref.	N/A	
Calculatior Wetland Cost Estimate	Made by	Date 19/12/2016	Chd.

COST ESTIMATE FOR WETLANDS

WRB1 (N1j) Combined Wetland/Retarding Basin

Areas (sq m)
Total 18381

Assumptions No GPT; no inlet pipe; no fencing or gate (public recreational space)

SECTION	ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A		**Siteworks and Earthworks**					$ 1,138,971
	A1	Preconstruction - General Site Clearance	18,381	m^2	$ 2.00	36,762	
	A2	Stripping site topsoil to stockpile on site (assume 150mm thick)	18,381	m^2	$ 5.00	$ 91,905	
	A3	Excavate to subgrade include off-site disposal	31,226	m^3	$ 30.00	$ 936,780	
	A4	Subgrade preparation, trimming and compaction	18,381	m^2	$ 4.00	$ 73,524	
B		**Drainage Structures**					$ 14,100
	B1	Drawndown Drainage Pit (1000 x 750) with overflow inlet	1	No.	$ 5,000.00	$ 5,000	
	B2	Outlet pipe - RCP 450mm Class 3 RRJ	26	m	$ 350.00	$ 9,100	
C		**Access Paths**					$ 88,344
	C1	Vehicle access	3,272	m^2	$ 27.00	$ 88,344	
D		**Rock Works**					$ 70,057
	D1	Inlet/weir between sediment basin and macrophyte zone	86	m^2	$ 212.00	$ 18,232	
	D2	Inlet/weir geoxtile supply and placement	86	m^2	$ 9.00	$ 774	
	D3	Extreme event overflow	231	m^2	$ 212.00	$ 48,972	
	D4	Extreme event overflow geotextile supply and placement	231	m^2	$ 9.00	$ 2,079	
E		**Clay Liner**					$ 119,108
	E1	Grassed area (minus verge)	10,828	m^2	$ 11.00	$ 119,108	
F		**Signs**					$ 5,000
	F1	Install new signs	1	Item	$ 5,000.00	$ 5,000	
G		**Aquatic Planting**					$ 19,712
	G1	Planting	1,408	m^2	$ 14.00	$ 19,712	
H		**Sub-total Works (A-G)**					$ 1,455,292
I		**Delivery**					
	I1	Traffic/Environmental Management	5.5	%		$ 80,041.06	
	I2	Survey/Design	5	%		$ 72,764.60	
	I3	Supervision & Project Management	10	%		$ 145,529.20	
	I4	Site Establishment	2.5	%		$ 36,382.30	
	I5	Contingency	20	%		$ 291,058.40	
	I6	Council Fees	3.25	%		$ 47,296.99	
J		**Sub-total Delivery (I)**					$ 673,073
K		**PROJECT BUDGET**					$ 2,128,365

ARUP	Job No.	Sheet No.	Rev.
	246965-00		
	Element	Cost Schedule	
Job Title PSP 1105 Leneva - Baranduda	Drg. Ref.	N/A	
Calculation Wetland Cost Estimate	Made by	Date 19/12/2016	Chd.

COST ESTIMATE FOR WETLANDS

WRB2 (N1g) Combined Wetland/Retarding Basin

Areas (sq m)
Total 24096

Assumptions No GPT; no inlet pipe; no fencing or gate (public recreational space)

SECTION	ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A		**Siteworks and Earthworks**					$ 1,788,486
	A1	Preconstruction - General Site Clearance	24,096	m^2	$ 2.00	48,192	
	A2	Stripping site topsoil to stockpile on site (assume 150mm thick)	24,096	m^2	$ 5.00	$ 120,480	
	A3	Excavate to subgrade include off-site disposal	50,781	m^3	$ 30.00	$ 1,523,430	
	A4	Subgrade preparation, trimming and compaction	24,096	m^2	$ 4.00	$ 96,384	
B		**Drainage Structures**					$ 14,275
	B1	Drawndown Drainage Pit (1000 x 750) with overflow inlet	1	No.	$ 5,000.00	$ 5,000	
	B2	Outlet pipe - RCP 450mm Class 3 RRJ	27	m	$ 350.00	$ 9,275	
C		**Access Paths**					$ 102,816
	C1	Vehicle access (Composite rate)	3,808	m^2	$ 27.00	$ 102,816	
D		**Rock Works**					$ 70,057
	D1	Inlet/weir between sediment basin and macrophyte zone	86	m^2	$ 212.00	$ 18,232	
	D2	Inlet/weir geoxtile supply and placement	86	m^2	$ 9.00	$ 774	
	D3	Extreme event overflow	231	m^2	$ 212.00	$ 48,972	
	D4	Extreme event overflow geotextile supply and placement	231	m^2	$ 9.00	$ 2,079	
E		**Clay Liner**					$ 178,310
	E1	Grassed area (minus verge)	16,210	m^2	$ 11.00	$ 178,310	
F		**Signs**					$ 5,000
	F1	Install new signs	1	Item	$ 5,000.00	$ 5,000	
G		**Aquatic Planting**					$ 77,910
	G1	Planting	5,565	m^2	$ 14.00	$ 77,910	
H		**Sub-total Works (A-G)**					$ 2,236,854
I		**Delivery**					
	I1	Traffic/Environmental Management	5.5	%		$ 123,027	
	I2	Survey/Design	5	%		$ 111,843	
	I3	Supervision & Project Management	10	%		$ 223,685	
	I4	Site Establishment	2.5	%		$ 55,921	
	I5	Contingency	20	%		$ 447,371	
	I6	Council Fees	3.25	%		$ 72,698	
J		**Sub-total Delivery (I)**					$ 1,034,545
K		**PROJECT BUDGET**					$ 3,271,399

ARUP	Job No. 246965-00	Sheet No.	Rev.
	Element	Cost Schedule	
Job Title PSP 1105 Leneva - Baranduda	Drg. Ref.	N/A	
Calculation Wetland Cost Estimate	Made by	Date 19/12/2016	Chd.

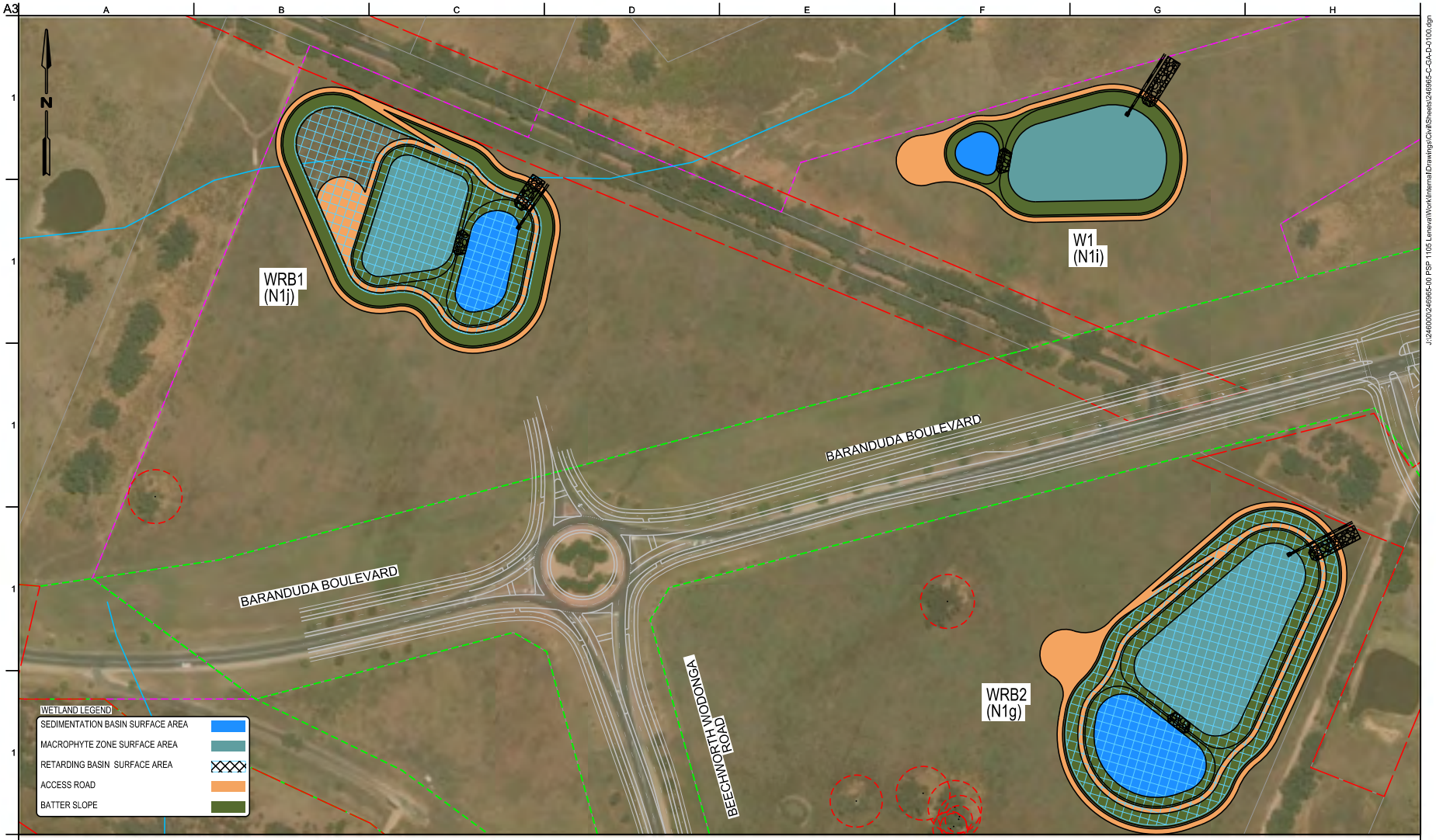
COST ESTIMATE FOR WETLANDS

W1 (N1i) Constructed Wetland

Areas (sq m)
Total 8,752

Assumptions No GPT; no inlet pipe; no fencing or gate (public recreational space)

SECTION	ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A		**Siteworks and Earthworks**					**$ 412,682**
	A1	Preconstruction - General Site Clearance	8,752	m^2	$ 2.00	17,504	
	A2	Stripping site topsoil to stockpile on site (assume 150mm thick)	8,752	m^2	$ 5.00	$ 43,760	
	A3	Excavate to subgrade include off-site disposal	10,547	m^3	$ 30.00	$ 316,410	
	A4	Subgrade preparation, trimming and compaction	8,752	m^2	$ 4.00	$ 35,008	
B		**Drainage Structures**					**$ 10,250**
	B1	Drawndown Drainage Pit (1000 x 750) with overflow inlet	1	No.	$ 5,000.00	$ 5,000	
	B2	Outlet pipe - RCP 450mm Class 3 RRJ	15	m	$ 350.00	$ 5,250	
C		**Access Paths**					**$ 45,387**
	C1	Vehicle access (composite rate)	1,681	m^2	$ 27.00	$ 45,387	
D		**Rock Works**					**$ 70,057.00**
	D1	Inlet/weir between sediment basin and macrophyte zone	86	m^2	$ 212.00	$ 18,232	
	D2	Inlet/weir geoxtile supply and placement	86	m^2	$ 9.00	$ 774	
	D3	Extreme event overflow	231	m^2	$ 212.00	$ 48,972	
	D4	Extreme event overflow geotextile supply and placement	231	m^2	$ 9.00	$ 2,079	
E		**Clay Liner**					**$ 68,013**
	E1	Grassed area (minus verge)	6,183	m^2	$ 11.00	$ 68,013	
F		**Signs**					**$ 5,000**
	F1	Install new signs	1	Item	$ 5,000.00	$ 5,000	
G		**Aquatic Planting**					**$ 54,782**
	G1	Planting	3,913	m^2	$ 14.00	$ 54,782	
H		**Sub-total Works (A-G)**					**$ 666,171**
I		**Delivery**					
	I1	Traffic/Environmental Management	5.5	%		$ 36,639	
	I2	Survey/Design	5	%		$ 33,309	
	I3	Supervision & Project Management	10	%		$ 66,617	
	I4	Site Establishment	2.5	%		$ 16,654	
	I5	Contingency	20	%		$ 133,234	
	I6	Council Fees	3.25	%		$ 21,651	
J		**Sub-total Delivery (I)**					**$ 308,104**
K		**PROJECT BUDGET**					**$ 974,275**



LEGEND

- PROJECT SITE BOUNDARY
- ROAD RESERVE BOUNDARY
- TREE PROTECTION ZONE
- VEGETATION PROTECTION OVERLAY
- CADASTRAL WATERCOURSE
- CADASTRAL LOT BOUNDARY

Issue	Date	By	Chkd	Appd
P01	29/03/16	SBM	MRB	BJS
FOR INFORMATION				

Client
Metropolitan Planning Authority - Melbourne

Job Title
PSP 1105
Leneva - Baranduda

Scale at A3 1:2000

Discipline Civil

ARUP
Level 17, 1 Nicholson Street
Melbourne, Victoria 3000
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Drawing Title
Functional Layout Plan
Wetlands W1, WRB1, WRB2
Sheet 1 OF 5

Drawing Status
Preliminary

Job No	Drawing No	Issue
246965-00	C-GA-0181	P02

Do not scale

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ARUP	Job No.	Sheet No.	Rev.
	246965-00		
	Element	Cost Schedule	
Job Title PSP 1105 Leneva - Baranduda	Drg. Ref.	N/A	
Calculatio Wetland Cost Estimate	Made by	Date 19/12/2016	Chd.

COST ESTIMATE FOR WETLANDS

WRB4 (N1c) Combined Wetland/Retarding Basin

Areas (sq m)
Total 13,698

Assumptions No GPT; no inlet pipe; no fencing or gate (public recreational space)

SECTION	ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A		**Siteworks and Earthworks**					$ 759,243
	A1	Preconstruction - General Site Clearance	13,698	m^2	$ 2.00	27,396	
	A2	Stripping site topsoil to stockpile on site (assume 150mm thick)	13,698	m^2	$ 5.00	$ 68,490	
	A3	Excavate to subgrade and stockpile material on site (assume reusable by Developer - no disposal cost)	20,286	m^3	$ 30.00	$ 608,565	
	A4	Subgrade preparation, trimming and compaction	13,698	m^2	$ 4.00	$ 54,792	
B		**Drainage Structures**					$ 14,100
	B1	Drawndown Drainage Pit (1000 x 750) with overflow inlet	1	No.	$ 5,000.00	$ 5,000	
	B2	Outlet pipe - RCP 450mm Class 3 RRJ	26	m	$ 350.00	$ 9,100	
C		**Access Paths**					$ 52,920
	C1	Vehicle access (Composite rate)	1,960	m^2	$ 27.00	$ 52,920	
D		**Rock Works**					$ 70,057
	D1	Inlet/weir between sediment basin and macrophyte zone	86	m^2	$ 212.00	$ 18,232	
	D2	Inlet/weir geoxtile supply and placement	86	m^2	$ 9.00	$ 774	
	D3	Extreme event overflow	231	m^2	$ 212.00	$ 48,972	
	D4	Extreme event overflow geotextile supply and placement	231	m^2	$ 9.00	$ 2,079	
E		**Clay Liner**					$ 122,980
	E1	Grassed area (minus verge)	11,180	m^2	$ 11.00	$ 122,980	
F		**Signs**					$ 5,000
	F1	Install new signs	1	Item	$ 5,000.00	$ 5,000	
G		**Aquatic Planting**					$ 82,516
	G1	Planting	5,894	m^2	$ 14.00	$ 82,516	
H		**Sub-total Works (A-G)**					$ 1,106,816
I		**Delivery**					
	I1	Traffic/Environmental Management	5.5	%		$ 60,874.88	
	I2	Survey/Design	5	%		$ 55,340.80	
	I3	Supervision & Project Management	10	%		$ 110,681.60	
	I4	Site Establishment	2.5	%		$ 27,670.40	
	I5	Contingency	20	%		$ 221,363.20	
	I6	Council Fees	3.25	%		$ 35,971.52	
J		**Sub-total Delivery (I)**					$ 511,902
K		**PROJECT BUDGET**					$ 1,618,718

ARUP	Job No. 246965-00	Sheet No.	Rev.
	Element Cost Schedule		
Job Title PSP 1105 Leneva - Baranduda	Drg. Ref. N/A		
Calculation Wetland Cost Estimate	Made by	Date 19/12/2016	Chd.

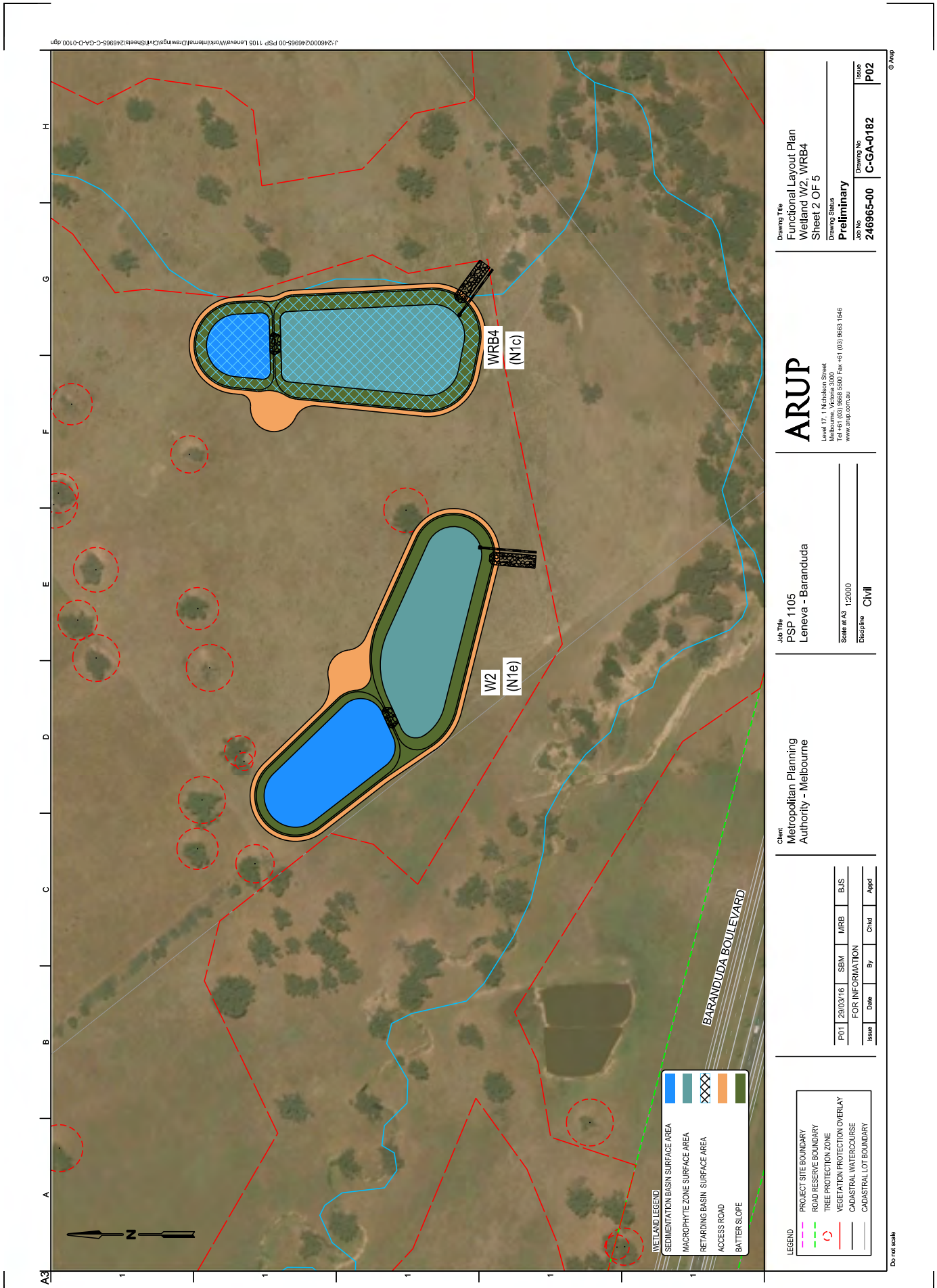
COST ESTIMATE FOR WETLANDS

W2 (N1e) Constructed Wetland

Areas (sq m)
Total 15672

Assumptions No GPT; no inlet pipe; no fencing or gate (public recreational space)

SECTION	ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A		**Siteworks and Earthworks**					**$ 788,112**
	A1	Preconstruction - General Site Clearance	15,672	m^2	$ 2.00	31,344	
	A2	Stripping site topsoil to stockpile on site (assume 150mm thick)	15,672	m^2	$ 5.00	$ 78,360	
	A3	Excavate to subgrade include off-site disposal	20,524	m^3	$ 30.00	$ 615,720	
	A4	Subgrade preparation, trimming and compaction	15,672	m^2	$ 4.00	$ 62,688	
B		**Drainage Structures**					**$ 10,250**
	B1	Drawndown Drainage Pit (1000 x 750) with overflow inlet	1	No.	$ 5,000.00	$ 5,000	
	B2	Outlet pipe - RCP 450mm Class 3 RRJ	15	m	$ 350.00	$ 5,250	
C		**Access Paths**					**$ 61,668**
	C1	Vehicle access (composite rate)	2,284	m^2	$ 27.00	$ 61,668	
D		**Rock Works**					**$ 70,057.00**
	D1	Inlet/weir between sediment basin and macrophyte zone	86	m^2	$ 212.00	$ 18,232	
	D2	Inlet/weir geoxtile supply and placement	86	m^2	$ 9.00	$ 774	
	D3	Extreme event overflow	231	m^2	$ 212.00	$ 48,972	
	D4	Extreme event overflow geotextile supply and placement	231	m^2	$ 9.00	$ 2,079	
E		**Clay Liner**					**$ 138,787**
	E1	Grassed area (minus verge)	12,617	m^2	$ 11.00	$ 138,787	
F		**Signs**					**$ 5,000**
	F1	Install new signs	1	Item	$ 5,000.00	$ 5,000	
G		**Aquatic Planting**					**$ 73,528**
	G1	Planting	5,252	m^2	$ 14.00	$ 73,528	
H		**Sub-total Works (A-G)**					**$ 1,147,402**
I		**Delivery**					
	I1	Traffic/Environmental Management	5.5	%		$ 63,107	
	I2	Survey/Design	5	%		$ 57,370	
	I3	Supervision & Project Management	10	%		$ 114,740	
	I4	Site Establishment	2.5	%		$ 28,685	
	I5	Contingency	20	%		$ 229,480	
	I6	Council Fees	3.25	%		$ 37,291	
J		**Sub-total Delivery (I)**					**$ 530,673**
K		**PROJECT BUDGET**					**$ 1,678,075**


WRB4
(N1c)
W2
(N1e)
BARANDUDA BOULEVARD
WETLAND LEGEND
SEDIMENTATION BASIN SURFACE AREA
MACROPHYTE ZONE SURFACE AREA
RETARDING BASIN SURFACE AREA
ACCESS ROAD
BATTER SLOPE
LEGEND
PROJECT SITE BOUNDARY
ROAD RESERVE BOUNDARY
TREE PROTECTION ZONE
VEGETATION PROTECTION OVERLAY
CADASTRAL WATERCOURSE
CADASTRAL LOT BOUNDARY
Issue Date By Chkd Appd
P01 29/03/16 SBM MRB BJS
FOR INFORMATION
Client
Metropolitan Planning Authority - Melbourne
Job Title
PSP 1105
Leneva - Baranduda
Scale at A3 1:2000
Discipline Civil
ARUP
Level 17, 1 Nicholson Street
Melbourne Victoria 3000
Tel +61 (0)3 9668 5000 Fax +61 (03) 9663 1546
www.arup.com.au
Drawing Title
Functional Layout Plan
Wetland W2, WRB4
Sheet 2 OF 5
Drawing Status
Preliminary
Job No
246965-00
Drawing No
C-GA-0182
Issue
P02
© Arup
Do not scale
A3
J:\246000\246965-00 PSP 1105 Leneva\Working\Internal\Drawings\Civil\Sheets\246965-C-GA-D-0100.dgn

ARUP	Job No.	Sheet No.	Rev.
	246965-00		
	Element	Cost Schedule	
Job Title: PSP 1105 Leneva - Baranduda	Drg. Ref.	N/A	
Calculation: Wetland Cost Estimate	Made by	Date: 19/12/2016	Chd.

COST ESTIMATE FOR WETLANDS

WRB3 (N1f) Combined Wetland/Retarding Basin

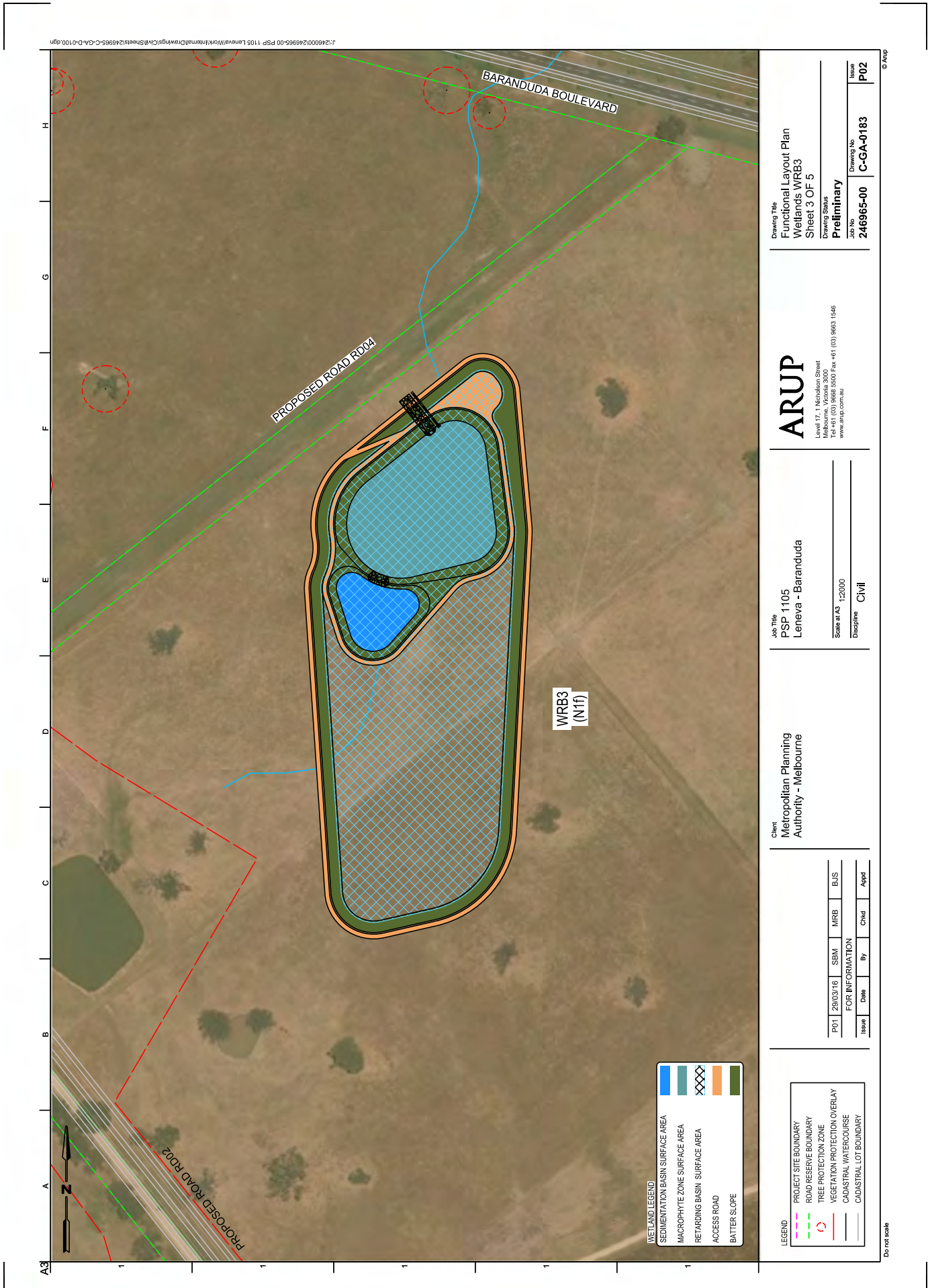
Areas (sq m)

Total 47624

Assumptions No GPT; no inlet pipe; no fencing or gate (public recreational space)

SECTION	ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A		**Siteworks and Earthworks**					**$ 3,244,084**
	A1	Preconstruction - General Site Clearance	47,624	m^2	$ 2.00	95,248	
	A2	Stripping site topsoil to stockpile on site (assume 150mm thick)	47,624	m^2	$ 5.00	$ 238,120	
	A3	Excavate to subgrade include off-site disposal	90,674	m^3	$ 30.00	$ 2,720,220	
	A4	Subgrade preparation, trimming and compaction	47,624	m^2	$ 4.00	$ 190,496	
B		**Drainage Structures**					**$ 14,100**
	B1	Drawndown Drainage Pit (1000 x 750) with overflow inlet	1	No.	$ 5,000.00	$ 5,000	
	B2	Outlet pipe - RCP 450mm Class 3 RRJ	26	m	$ 350.00	$ 9,100	
C		**Access Paths**					**$ 133,650**
	C1	Vehicle access (Composite rate)	4,950	m^2	$ 27.00	$ 133,650	
D		**Rock Works**					**$ 70,057**
	D1	Inlet/weir between sediment basin and macrophyte zone	86	m^2	$ 212.00	$ 18,232	
	D2	Inlet/weir geoxtile supply and placement	86	m^2	$ 9.00	$ 774	
	D3	Extreme event overflow	231	m^2	$ 212.00	$ 48,972	
	D4	Extreme event overflow geotextile supply and placement	231	m^2	$ 9.00	$ 2,079	
E		**Clay Liner**					**$ 389,026**
	E1	Grassed area (minus verge)	35,366	m^2	$ 11.00	$ 389,026	
F		**Signs**					**$ 5,000**
	F1	Install new signs	1	Item	$ 5,000.00	$ 5,000	
G		**Aquatic Planting**					**$ 99,064**
	G1	Planting	7,076	m^2	$ 14.00	$ 99,064	
H		**Sub-total Works (A-G)**					**$ 3,954,981**
I		**Delivery**					
	I1	Traffic/Environmental Management	5.5	%		$ 217,524	
	I2	Survey/Design	5	%		$ 197,749	
	I3	Supervision & Project Management	10	%		$ 395,498	
	I4	Site Establishment	2.5	%		$ 98,875	
	I5	Contingency	20	%		$ 790,996	
	I6	Council Fees	3.25	%		$ 128,537	
J		**Sub-total Delivery (I)**					**$ 1,829,179**
K		**PROJECT BUDGET**					**$ 5,784,160**

$ 121


BARANDUDA BOULEVARD
PROPOSED ROAD RD04
PROPOSED ROAD RD02
WRB3
(N1f)
N
WETLAND LEGEND
SEDIMENTATION BASIN SURFACE AREA
MACROPHYTE ZONE SURFACE AREA
RETARDING BASIN SURFACE AREA
ACCESS ROAD
BATTER SLOPE
LEGEND
PROJECT SITE BOUNDARY
ROAD RESERVE BOUNDARY
TREE PROTECTION ZONE
VEGETATION PROTECTION OVERLAY
CADASTRAL WATERCOURSE
CADASTRAL LOT BOUNDARY
Issue | Date | By | Chkd | Appd
P01 | 29/03/16 | SBM | MRB | BJS
FOR INFORMATION
Client
Metropolitan Planning Authority - Melbourne
Job Title
PSP 1105
Leneva - Baranduda
Scale at A3 1:2000
Discipline Civil
ARUP
Level 17, 1 Nicholson Street
Melbourne VIC 3000
Tel +61 (03) 9668 5000 Fax +61 (03) 9663 1546
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Drawing Title
Functional Layout Plan
Wetlands WRB3
Sheet 3 OF 5
Drawing Status
Preliminary
Job No
246965-00
Drawing No
C-GA-0183
Issue
P02
Do not scale
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A3

ARUP	Job No.	Sheet No.	Rev.
	246965-00		
	Element	Cost Schedule	
Job Title PSP 1105 Leneva - Baranduda	Drg. Ref.	N/A	
Calculation Wetland Cost Estimate	Made by	Date 19/12/2016	Chd.

COST ESTIMATE FOR WETLANDS

W3 (N1b) Constructed Wetland

Areas (sq m)
Total 9196

Assumptions No GPT; no inlet pipe; no fencing or gate (public recreational space)

SECTION	ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A		**Siteworks and Earthworks**					**$ 424,256**
	A1	Preconstruction - General Site Clearance	9,196	m^2	$ 2.00	18,392	
	A2	Stripping site topsoil to stockpile on site (assume 150mm thick)	9,196	m^2	$ 5.00	$ 45,980	
	A3	Excavate to subgrade include off-site disposal	10,770	m^3	$ 30.00	$ 323,100	
	A4	Subgrade preparation, trimming and compaction	9,196	m^2	$ 4.00	$ 36,784	
B		**Drainage Structures**					**$ 10,250**
	B1	Drawndown Drainage Pit (1000 x 750) with overflow inlet	1	No.	$ 5,000.00	$ 5,000	
	B2	Outlet pipe - RCP 450mm Class 3 RRJ	15	m	$ 350.00	$ 5,250	
C		**Access Paths**					**$ 49,545**
	C1	Vehicle access (composite rate)	1,835	m^2	$ 27.00	$ 49,545	
D		**Rock Works**					**$ 70,057.00**
	D1	Inlet/weir between sediment basin and macrophyte zone	86	m^2	$ 212.00	$ 18,232	
	D2	Inlet/weir geoxtile supply and placement	86	m^2	$ 9.00	$ 774	
	D3	Extreme event overflow	231	m^2	$ 212.00	$ 48,972	
	D4	Extreme event overflow geotextile supply and placement	231	m^2	$ 9.00	$ 2,079	
E		**Clay Liner**					**$ 74,932**
	E1	Grassed area (minus verge)	6,812	m^2	$ 11.00	$ 74,932	
F		**Signs**					**$ 5,000**
	F1	Install new signs	1	Item	$ 5,000.00	$ 5,000	
G		**Aquatic Planting**					**$ 43,890**
	G1	Planting	3,135	m^2	$ 14.00	$ 43,890	
H		**Sub-total Works (A-G)**					**$ 677,930**
I		**Delivery**					
	I1	Traffic/Environmental Management	5.5	%		$ 37,286	
	I2	Survey/Design	5	%		$ 33,897	
	I3	Supervision & Project Management	10	%		$ 67,793	
	I4	Site Establishment	2.5	%		$ 16,948	
	I5	Contingency	20	%		$ 135,586	
	I6	Council Fees	3.25	%		$ 22,033	
J		**Sub-total Delivery (I)**					**$ 313,543**
K		**PROJECT BUDGET**					**$ 991,473**

ARUP	Job No.	Sheet No.	Rev.
	246965-00		
	Element	Cost Schedule	
Job Title PSP 1105 Leneva - Baranduda	Drg. Ref.	N/A	
Calculation Wetland Cost Estimate	Made by	Date 19/12/2016	Chd.

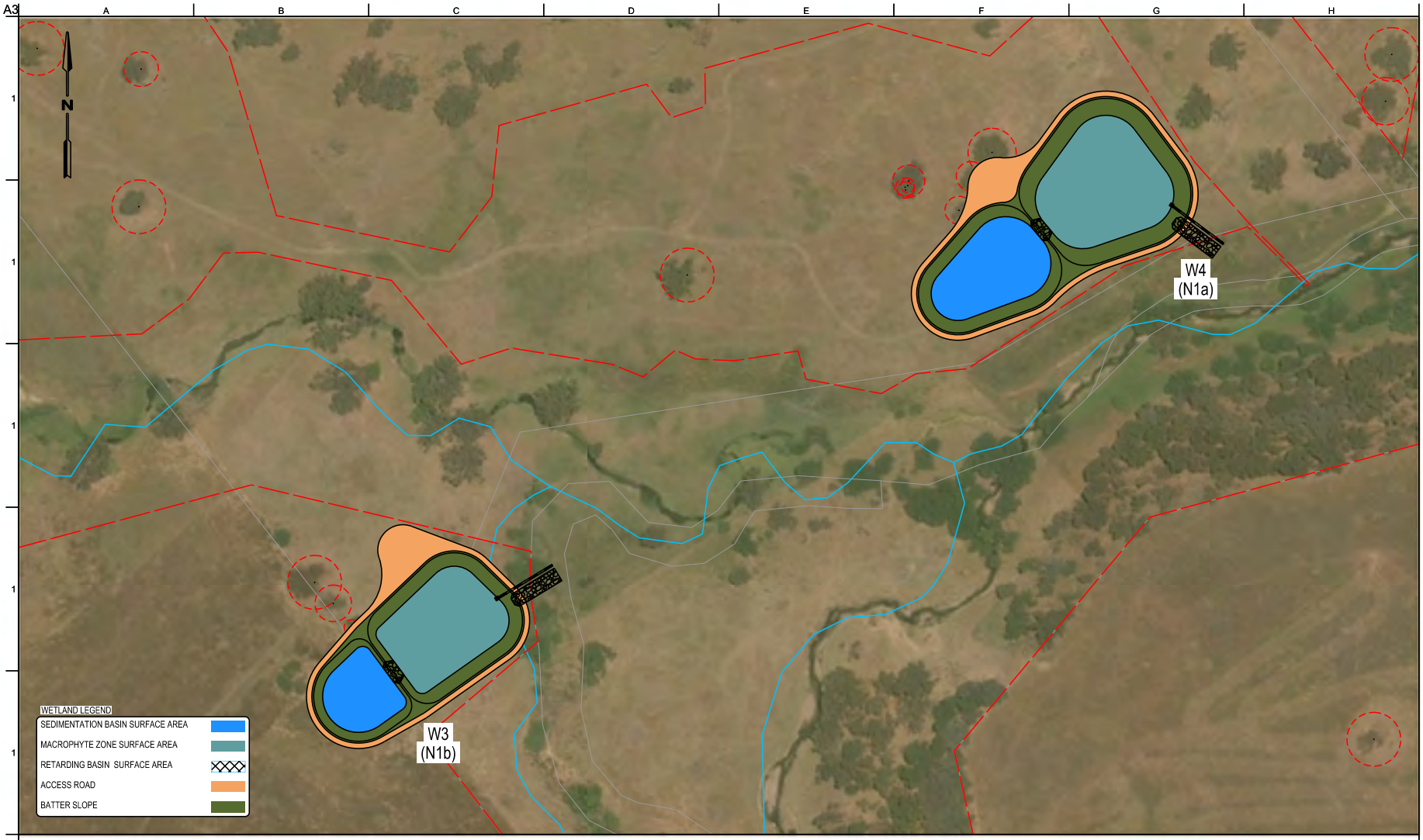
COST ESTIMATE FOR WETLANDS

W4 (N1a) Constructed Wetland

Areas (sq m)
Total 12,728

Assumptions No GPT; no inlet pipe; no fencing or gate (public recreational space)

SECTION	ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A		**Siteworks and Earthworks**					**$ 600,088**
	A1	Preconstruction - General Site Clearance	12,728	m^2	$ 2.00	$ 25,456	
	A2	Stripping site topsoil to stockpile on site (assume 150mm thick)	12,728	m^2	$ 5.00	$ 63,640	
	A3	Excavate to subgrade include off-site disposal	15,336	m^3	$ 30.00	$ 460,080	
	A4	Subgrade preparation, trimming and compaction	12,728	m^2	$ 4.00	$ 50,912	
B		**Drainage Structures**					**$ 10,950**
	B1	Drawndown Drainage Pit (1000 x 750) with overflow inlet	1	No.	$ 5,000.00	$ 5,000	
	B2	Outlet pipe - RCP 450mm Class 3 RRJ	17	m	$ 350.00	$ 5,950	
C		**Access Paths**					**$ 53,109**
	C1	Vehicle access (composite rate)	1,967	m^2	$ 27.00	$ 53,109	
D		**Rock Works**					**$ 70,057.00**
	D1	Inlet/weir between sediment basin and macrophyte zone	86	m^2	$ 212.00	$ 18,232	
	D2	Inlet/weir geoxtile supply and placement	86	m^2	$ 9.00	$ 774	
	D3	Extreme event overflow	231	m^2	$ 212.00	$ 48,972	
	D4	Extreme event overflow geotextile supply and placement	231	m^2	$ 9.00	$ 2,079	
E		**Clay Liner**					**$ 111,331**
	E1	Grassed area (minus verge)	10,121	m^2	$ 11.00	$ 111,331	
F		**Signs**					**$ 5,000**
	F1	Install new signs	1	Item	$ 5,000.00	$ 5,000	
G		**Aquatic Planting**					**$ 55,678**
	G1	Planting	3,977	m^2	$ 14.00	$ 55,678	
H		**Sub-total Works (A-G)**					**$ 906,213**
I		**Delivery**					
	I1	Traffic/Environmental Management	5.5	%		$ 49,842	
	I2	Survey/Design	5	%		$ 45,311	
	I3	Supervision & Project Management	10	%		$ 90,621	
	I4	Site Establishment	2.5	%		$ 22,655	
	I5	Contingency	20	%		$ 181,243	
	I6	Council Fees	3.25	%		$ 29,452	
J		**Sub-total Delivery (I)**					**$ 419,124**
K		**PROJECT BUDGET**					**$ 1,325,337**



LEGEND

- PROJECT SITE BOUNDARY
- ROAD RESERVE BOUNDARY
- TREE PROTECTION ZONE
- VEGETATION PROTECTION OVERLAY
- CADASTRAL WATERCOURSE
- CADASTRAL LOT BOUNDARY

Issue	Date	By	Chkd	Appd
P01	29/03/16	SBM	MRB	BJS
FOR INFORMATION				

Client
Metropolitan Planning Authority - Melbourne

Job Title
PSP 1105
Leneva - Baranduda

Scale at A3 1:2000

Discipline Civil

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Level 17, 1 Nicholson Street
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Drawing Title
Functional Layout Plan
Wetland W3, W4
Sheet 4 OF 5

Drawing Status
Preliminary

Job No	Drawing No	Issue
246965-00	C-GA-0184	P02

Do not scale

ARUP	Job No. 246965-00	Sheet No.	Rev.
	Element Cost Schedule		
Job Title PSP 1105 Leneva - Baranduda	Drg. Ref. N/A		
Calculation Wetland Cost Estimate	Made by	Date 19/12/2016	Chd.

COST ESTIMATE FOR WETLANDS

W5 (N2) Constructed Wetland

Areas (sq m)
Total 20618

Assumptions No GPT; no inlet pipe; no fencing or gate (public recreational space)

SECTION	ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A		**Siteworks and Earthworks**					**$ 1,105,228**
	A1	Preconstruction - General Site Clearance	20,618	m^2	$ 2.00	$ 41,236	
	A2	Stripping site topsoil to stockpile on site (assume 150mm thick)	20,618	m^2	$ 5.00	$ 103,090	
	A3	Excavate to subgrade include off-site disposal	29,281	m^3	$ 30.00	$ 878,430	
	A4	Subgrade preparation, trimming and compaction	20,618	m^2	$ 4.00	$ 82,472	
B		**Drainage Structures**					**$ 10,600**
	B1	Drawndown Drainage Pit (1000 x 750) with overflow inlet	1	No.	$ 5,000.00	$ 5,000	
	B2	Outlet pipe - RCP 450mm Class 3 RRJ	16	m	$ 350.00	$ 5,600	
C		**Access Paths**					**$ 61,128**
	C1	Vehicle access (composite rate)	2,264	m^2	$ 27.00	$ 61,128	
D		**Rock Works**					**$ 70,057.00**
	D1	Inlet/weir between sediment basin and macrophyte zone	86	m^2	$ 212.00	$ 18,232	
	D2	Inlet/weir geoxtile supply and placement	86	m^2	$ 9.00	$ 774	
	D3	Extreme event overflow	231	m^2	$ 212.00	$ 48,972	
	D4	Extreme event overflow geotextile supply and placement	231	m^2	$ 9.00	$ 2,079	
E		**Clay Liner**					**$ 189,651**
	E1	Grassed area (minus verge)	17,241	m^2	$ 11.00	$ 189,651	
F		**Signs**					**$ 5,000**
	F1	Install new signs	1	Item	$ 5,000.00	$ 5,000	
G		**Aquatic Planting**					**$ 119,616**
	G1	Planting	8,544	m^2	$ 14.00	$ 119,616	
H		**Sub-total Works (A-G)**					**$ 1,561,280**
I		**Delivery**					
	I1	Traffic/Environmental Management	5.5	%		$ 85,870.40	
	I2	Survey/Design	5	%		$ 78,064.00	
	I3	Supervision & Project Management	10	%		$ 156,128.00	
	I4	Site Establishment	2.5	%		$ 39,032.00	
	I5	Contingency	20	%		$ 312,256.00	
	I6	Council Fees	3.25	%		$ 50,741.60	
J		**Sub-total Delivery (I)**					**$ 722,092**
K		**PROJECT BUDGET**					**$ 2,283,372**

ARUP	Job No.	Sheet No.	Rev.
	246965-00		
	Element	Cost Schedule	
Job Title: PSP 1105 Leneva - Baranduda	Drg. Ref.	N/A	
Calculation: Wetland Cost Estimate	Made by	Date 19/12/2016	Chd.

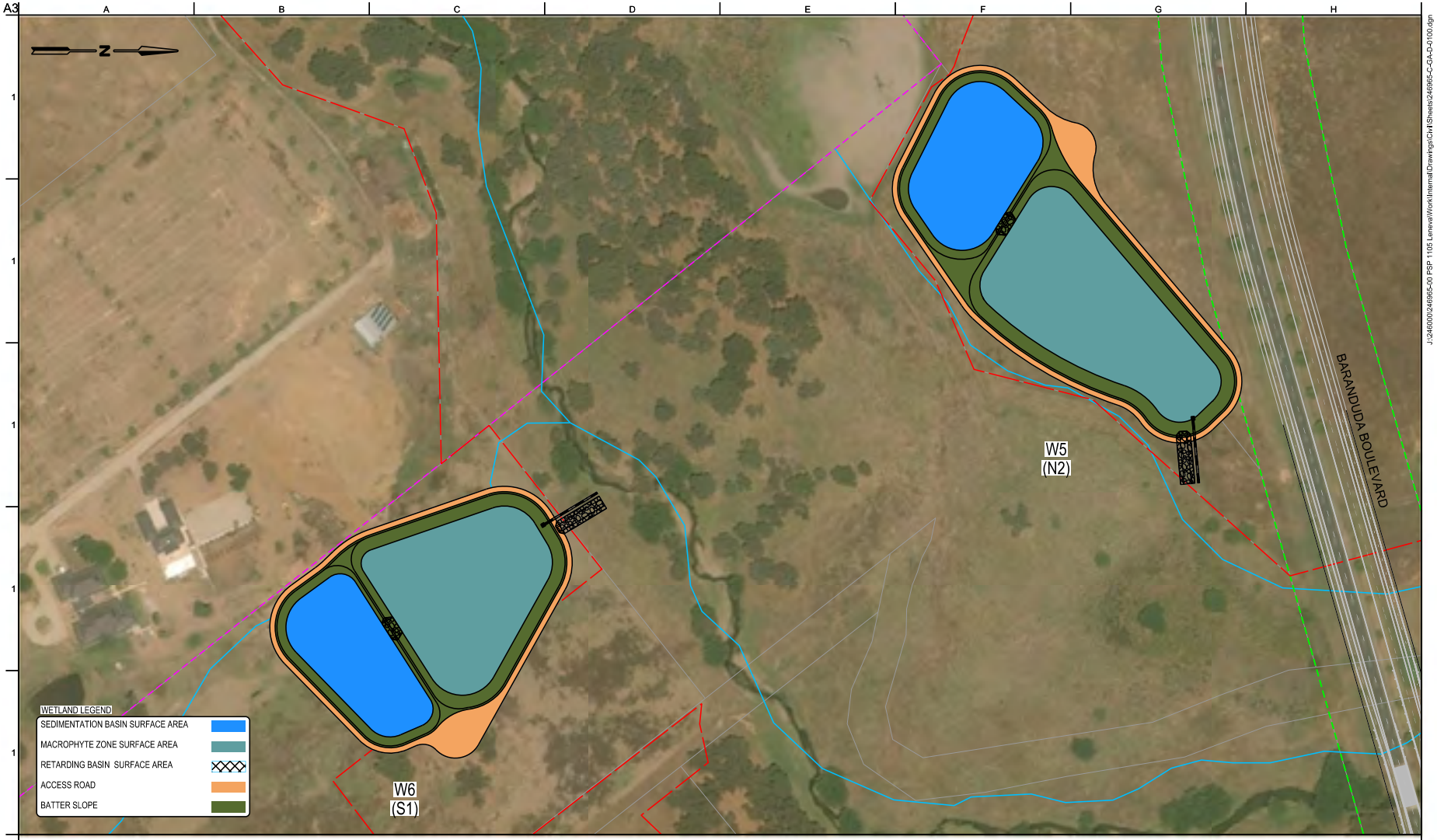
COST ESTIMATE FOR WETLANDS

W6 (S1) Constructed Wetland

Areas (sq m)
Total 16918

Assumptions No GPT; no inlet pipe; no fencing or gate (public recreational space)

SECTION	ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A		**Siteworks and Earthworks**					**$ 910,058**
	A1	Preconstruction - General Site Clearance	16,918	m^2	$ 2.00	33,836	
	A2	Stripping site topsoil to stockpile on site (assume 150mm thick)	16,918	m^2	$ 5.00	$ 84,590	
	A3	Excavate to subgrade include off-site disposal	24,132	m^3	$ 30.00	$ 723,960	
	A4	Subgrade preparation, trimming and compaction	16,918	m^2	$ 4.00	$ 67,672	
B		**Drainage Structures**					**$ 9,900**
	B1	Drawndown Drainage Pit (1000 x 750) with overflow inlet	1	No.	$ 5,000.00	$ 5,000	
	B2	Outlet pipe - RCP 450mm Class 3 RRJ	14	m	$ 350.00	$ 4,900	
C		**Access Paths**					**$ 54,378**
	C1	Vehicle access (composite rate)	2,014	m^2	$ 27.00	$ 54,378	
D		**Rock Works**					**$ 70,057**
	D1	Inlet/weir between sediment basin and macrophyte zone	86	m^2	$ 212.00	$ 18,232	
	D2	Inlet/weir geoxtile supply and placement	86	m^2	$ 9.00	$ 774	
	D3	Extreme event overflow	231	m^2	$ 212.00	$ 48,972	
	D4	Extreme event overflow geotextile supply and placement	231	m^2	$ 9.00	$ 2,079	
E		**Clay Liner**					**$ 156,321**
	E1	Grassed area (minus verge)	14,211	m^2	$ 11.00	$ 156,321	
F		**Signs**					**$ 5,000**
	F1	Install new signs	1	Item	$ 5,000.00	$ 5,000	
G		**Aquatic Planting**					**$ 97,972**
	G1	Planting	6,998	m^2	$ 14.00	$ 97,972	
H		**Sub-total Works (A-G)**					**$ 1,303,686**
I		**Delivery**					
	I1	Traffic/Environmental Management	5.5	%		$ 71,703	
	I2	Survey/Design	5	%		$ 65,184	
	I3	Supervision & Project Management	10	%		$ 130,369	
	I4	Site Establishment	2.5	%		$ 32,592	
	I5	Contingency	20	%		$ 260,737	
	I6	Council Fees	3.25	%		$ 42,370	
J		**Sub-total Delivery (I)**					**$ 602,955**
K		**PROJECT BUDGET**					**$ 1,906,641**



LEGEND

- PROJECT SITE BOUNDARY
- ROAD RESERVE BOUNDARY
- TREE PROTECTION ZONE
- VEGETATION PROTECTION OVERLAY
- CADASTRAL WATERCOURSE
- CADASTRAL LOT BOUNDARY

Issue	Date	By	Chkd	Appd
P01	29/03/16	SBM	MRB	BJS
FOR INFORMATION				

Client
Metropolitan Planning Authority - Melbourne

Job Title
PSP 1105
Leneva - Baranduda

Scale at A3 1:2000

Discipline Civil

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Drawing Title
Functional Layout Plan
Wetlands W5, W6
Sheet 5 OF 5

Drawing Status
Preliminary

Job No	Drawing No	Issue
246965-00	C-GA-0185	P02

Do not scale

ARUP	Job No. 246965-00	Sheet No.	Rev.
	Element	Cost Schedule	
Job Title PSP 1105 Leneva - Baranduda	Drg. Ref.	N/A	
Calculation Wetland Cost Estimate - WBR5	Made by	Date 31/08/2018	Chd.

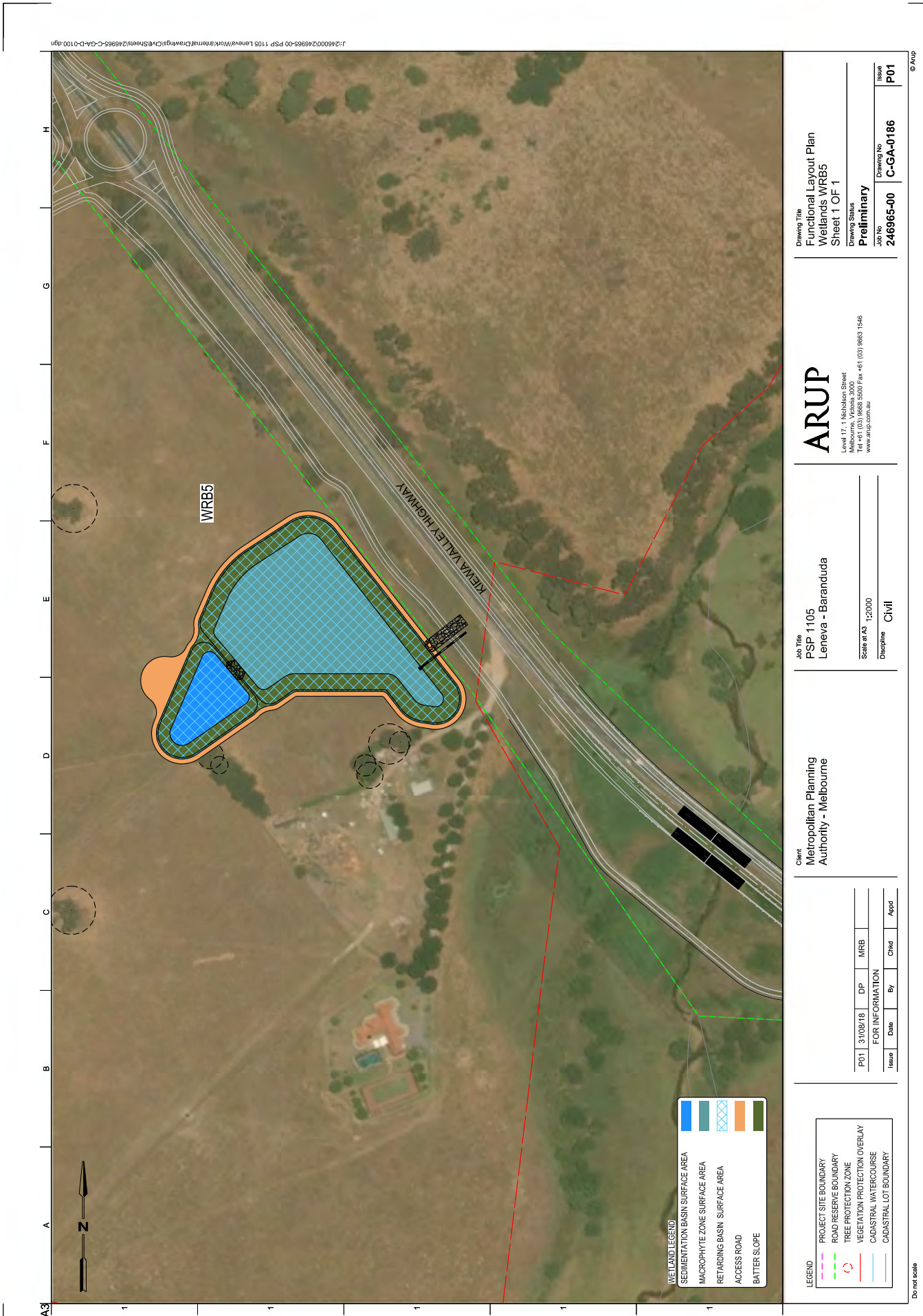
COST ESTIMATE FOR WETLAND / RETARDING BASIN (MIDDLE CREEK NORTH SIDE CATCHMENT)

WRB5 Combined Wetland/Retarding Basin

Areas (sq m)
Total 17167

Assumptions No GPT; no inlet pipe; no fencing or gate (public recreational space)

SECTION	ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	SUBTOTAL
A		**Siteworks and Earthworks**					**$ 1,010,927**
	A1	Preconstruction - General Site Clearance	17,167	m^2	$ 2.00	34,334	
	A2	Stripping site topsoil to stockpile on site (assume 150mm thick)	17,167	m^2	$ 5.00	$ 85,835	
	A3	Excavate to subgrade include off-site disposal	27,403	m^3	$ 30.00	$ 822,090	
	A4	Subgrade preparation, trimming and compaction	17,167	m^2	$ 4.00	$ 68,668	
B		**Drainage Structures**					**$ 18,300**
	B1	Drawndown Drainage Pit (1000 x 750) with overflow inlet	1	No.	$ 5,000.00	$ 5,000	
	B2	Outlet pipe - RCP 450mm Class 3 RRJ	38	m	$ 350.00	$ 13,300	
C		**Access Paths**					**$ 59,400**
	C1	Vehicle access	2,200	m^2	$ 27.00	$ 59,400	
D		**Rock Works**					**$ 70,057**
	D1	Inlet/weir between sediment basin and macrophyte zone	86	m^2	$ 212.00	$ 18,232	
	D2	Inlet/weir geoxtile supply and placement	86	m^2	$ 9.00	$ 774	
	D3	Extreme event overflow	231	m^2	$ 212.00	$ 48,972	
	D4	Extreme event overflow geotextile supply and placement	231	m^2	$ 9.00	$ 2,079	
E		**Clay Liner**					**$ 157,377**
	E1	Grassed area (minus verge)	14,307	m^2	$ 11.00	$ 157,377	
F		**Signs**					**$ 5,000**
	F1	Install new signs	1	Item	$ 5,000.00	$ 5,000	
G		**Aquatic Planting**					**$ 107,030**
	G1	Planting	7,645	m^2	$ 14.00	$ 107,030	
H		**Sub-total Works (A-G)**					**$ 1,428,091**
I		**Delivery**					
	I1	Traffic/Environmental Management	5.5	%		$ 78,545.01	
	I2	Survey/Design	5	%		$ 71,404.55	
	I3	Supervision & Project Management	10	%		$ 142,809.10	
	I4	Site Establishment	2.5	%		$ 35,702.28	
	I5	Contingency	20	%		$ 285,618.20	
	I6	Council Fees	3.25	%		$ 46,412.96	
J		**Sub-total Delivery (I)**					**$ 660,492**
K		**PROJECT BUDGET**					**$ 2,088,583**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WRB5
KIEWA VALLEY HIGHWAY
N
WETLAND LEGEND
SEDIMENTATION BASIN SURFACE AREA
MACROPHYTE ZONE SURFACE AREA
RETARDING BASIN SURFACE AREA
ACCESS ROAD
BATTER SLOPE
LEGEND
PROJECT SITE BOUNDARY
ROAD RESERVE BOUNDARY
TREE PROTECTION ZONE
VEGETATION PROTECTION OVERLAY
CADASTRAL WATERCOURSE
CADASTRAL LOT BOUNDARY
Issue Date By Chkd Appd
P01 31/08/18 DP MRB
FOR INFORMATION
Client
Metropolitan Planning Authority - Melbourne
Job Title
PSP 1105
Leneva - Baranduda
Scale at A3 1:2000
Discipline Civil
ARUP
Level 17, 1 Nicholson Street
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Tel +61 (0)3 9668 5500 Fax +61 (0)3 9663 1546
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Drawing Title
Functional Layout Plan
Wetlands WRB5
Sheet 1 OF 1
Drawing Status
Preliminary
Job No 246965-00
Drawing No C-GA-0186
Issue P01
© Arup
Do not scale
A3
A B C D E F G H
1 1 1 1 1

Appendix C Glossary of terms

TERM	DEFINITION
Activity centre	Provide the focus for services, employment and social interaction. They are where people shop, work, meet, relax and live. Usually well-serviced by public transport, they range in size and intensity of use.
Affordable housing	Housing that is appropriate for the needs of a range of very low to moderate income households, and priced (whether mortgage repayments or rent) so these households are able to meet their other essential basic living costs.
Arterial road	A higher-order road providing for moderate to high volumes at relatively high speeds. Declared arterial roads are identified under the Road Management Act 2004 and managed by the State Government.
Category 1 Land	Land that is identified in the Leneva Valley and Baranduda Native Vegetation Precinct Plan as containing vegetation that may be removed without a permit subject to the conditions and requirements of the native vegetation precinct plan.
Category 2 Land	Land that is identified in the Leneva Valley and Baranduda Native Vegetation Precinct Plan as containing vegetation that should be retained, but may be removed subject to a planning permit and will require offsets.
Category 3 Land	Refers to areas identified in the Leneva Valley and Baranduda Native Vegetation Precinct Plan to be vested in Council and containing vegetation to be retained and permanently protected to offset native vegetation removed from Category 1 land.
Co-location	Adjoining land uses to enable complementary programs, activities and services as well as shared use of resources and facilities, for example, the co-location of schools and sporting fields.
Community facilities	Infrastructure provided by government or non-government organisations for accommodating a range of community support services, programs and activities. This includes facilities for education and learning (e.g. government and non-government schools, universities, adult learning centres); early years (e.g. preschool, maternal and child health, childcare); health and community services (e.g. hospitals, aged care, doctors, dentists, family and youth services, specialist health services); community (e.g. civic centres, libraries, neighbourhood houses); arts and culture (e.g. galleries, museums, performance space); sport, recreation and leisure (e.g. swimming pools); justice (e.g. law courts); voluntary and faith (e.g. places of worship) and emergency services (e.g. police, fire and ambulance stations).
Connector street	A lower order street providing for low to moderate volumes and moderate speeds linking local streets to the arterial road network and managed by the relevant local council.
Encumbered land	Land that is constrained for development purposes, including easements for power/transmission lines, sewer, gas, waterways/drainage; retarding basins/wetlands; landfill; conservation, protected vegetation and heritage areas. This land may be used for a range of activities (e.g. walking trails, sports fields) and is not credited. However, regard is taken to the availability of encumbered land when determining the open space requirement.
Fire Threat Edge	The interface between urban development and an area which presents a permanent potential for fire to impact on a community.
Frontage	The road alignment at the front of a lot. If a lot abuts two or more roads, the one to which the building, or proposed building faces.
Gross Developable Area	Total precinct area excluding encumbered land, arterial roads and other roads with four or more lanes.
High density housing	Housing with an average density of more than 30 dwellings per net developable hectare.
Housing density (gross)	The number of houses divided by gross developable area.
Housing density (net)	The number of houses divided by net developable area.
Infrastructure Design Manual (IDM)	Design manual of standardised engineering and landscape works specifications and is a living document. The IDM documents Council's requirements for the design and development of Infrastructure that is or will become Council's Infrastructure and ensures that a minimum design criteria are met in regard to the design and construction of Infrastructure within the Wodonga municipality regardless of whether it is constructed by Council or a developer.
Linear open space network	Corridors of open space, mainly along waterways that link together forming a network.
Land use budget table	A table setting out the total precinct area, gross developable area, net developable area and constituent land uses proposed within the precinct.
Local centre	An activity centre smaller than a neighbourhood activity centre which may include a small limited line supermarket or convenience store of between 599 square metres and 1,500 square metres, plus non-retail uses.
Lot	A part (consisting of one or more pieces) of any land (except a road, a reserve, or common property) shown on a plan, which can be disposed of separately and includes a unit or accessor unit on a registered plan of strata subdivision and a lot or accessory lot on a registered cluster plan.
Lower density housing	Housing with an average density of less than 10 dwellings per net developable hectare
Main street	A function of an activity centre, where vitality and activity are created by orienting uses towards the street and ensuring that the primary address of all retail stores is the street. This would normally be a connector street rather than an arterial road.

TERM	DEFINITION
Medium density housing	Housing with an average density of 18 to 30 dwellings per net developable hectare.
Native vegetation	Plants that are indigenous to Victoria, including trees, shrubs, herbs and grasses.
Native vegetation precinct plan	A plan, as specified in Clause 52.16 of the Wodonga Planning Scheme, relating to native vegetation within a defined area that may form part of the precinct structure plan. Native vegetation precinct plans are incorporated into local planning schemes and listed in the schedule to Clause 52.16. A native vegetation precinct plan can form part of a precinct structure plan.
Neighbourhood activity centre	Activity centres that are an important community focal point and have a mix of uses to meet local needs. Accessible to a viable user population by walking, cycling and by local bus services and public transport links to one or more principal or major activity centres. This should be sufficient size to accommodate a supermarket.
Net developable area	Land within a precinct available for development. This excludes encumbered land, arterial roads, railway corridors, government schools and community facilities and public open space. It includes lots, local streets and connector streets. Net Developable Area may be expressed in terms of hectare units (i.e. NDHa).
Passive open space	Open space that is set aside for parks, gardens, linear corridors, conservation bushlands, nature reserves, public squares and community gardens that are made available for passive recreation, play and unstructured physical activity including walking, cycling, hiking, revitalisation, contemplation and enjoying nature.
Precinct infrastructure plan	Section within the precinct structure plan that defines the priority regional and local infrastructure requirements of future planning and investment by council and government agencies.
Precinct structure plan	A statutory document that describes how a precinct or series of sites within a growth area will be developed over time. A precinct structure plan sets out the broad environmental, social and economic parameters for the use and development of land within the precinct.
Principal public transport network	A high-quality public transport network that connects activity centres.
Public open space	Land that is set aside in the precinct structure plan for public recreation that incorporates active and passive open space.
Small office home office (SOHO)	A small office, which would usually include a home, where the business is too large to be accommodated within a standard home, perhaps because of parking or storage requirements. Normally employs up to 10 staff.
Social housing	A type of rental housing that is provided and/or managed by the government or by a not-for-profit organisation. Social housing is an overarching term that covers both public housing and community housing.
Sensitive response	A design or engineered response that does not significantly contrast with the existing landform.
Unencumbered	Land that is not constrained by uses required to enable development (including easements for power/transmission lines, sewer, gas, waterways/drainage: retarding basins/wetlands; landfill; conservation protection vegetation and heritage areas).
Urban growth zone	Statutory zone that applies to land that has been identified for future urban development. The UGZ has four purposes: (1) to manage transition of non-urban land into urban land; (2) to encourage development of well-planned and well-served new urban communities in accordance with an overall plan; (3) to reduce the number of development approvals needed in areas where an agreed plan is in place; and (4) to safeguard non-urban land from use and development that could prejudice its future urban development.
Waterway	Rivers, tributaries, drainage lines and an existing route that water travels along.
Water sensitive urban design	A sustainable water management approach that aims to provide water-quality, flood management and green landscapes. Key principles include minimising water resistant areas; recharging natural groundwater aquifers (where appropriate) by increasing the amount of rain absorbed into the ground; encouraging onsite reuse of rain and incorporation of rain gardens' encouraging onsite treatment to improve water quality and remove pollution, and using temporary rainfall storage (regarding basins/wetlands) to reduce the load on drains.
Wodonga Retained Environment Network (WREN)	*The Wodonga Retained Environment Network – A Threatened Species and Habitat Conservation Strategy* was prepared in 2006 for the Albury-Wodonga Corporation and City of Wodonga. An ecological study across Leneva and Baranduda, the strategy set out a vision for the network of reserves, protected areas and developable land that was the basis for the *Leneva Valley and Baranduda Native Vegetation Precinct Plan*. The areas reserved in accordance with these two documents are commonly referred to as 'WREN reserves'.

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Victorian Planning Authority

Leneva–Baranduda Development Contributions Plan
October 2018 – Amended December 2023

VICTORIA State Government