



2 December 2010

Director General
NSW Department of Planning
23-33 Bridge Street
Sydney NSW 2000
Attention: Chris Ritchie

Dear Chris

Re: Bungaribee Industrial Estate – Infrastructure (MP 08_0225) – response to submissions

We refer to our letter on 26 November 2010, which provided a detailed response to the submissions made regarding the abovementioned application. Subsequent to this submission we have since consulted further with Blacktown Council on 1 December in relation to the issues raised.

The following updated table is a summary of the outcome of those discussions:



<i>Issues Raised</i>	<i>Goodman Response 26 Nov 2010</i>	<i>Resolution following Meeting w Council 1 Dec 2010</i>
Developer Contributions		
<p>Council's position remains that in order to adequately assess whether the 'local' developer contributions proposed by the Applicant adequately address the demand or increased demand for local infrastructure created by the proposed development, that Council requires a clearly defined section that deals with 'Local Infrastructure' or a letter of offer to enter into a Voluntary Planning Agreement (VPA) with the Minister, Blacktown Council and Western Sydney Parklands to formalise these commitments as referred to above.</p>	<p>The approved Concept Plan (MP 06_0203) included a number of contribution items which are now the subject of this application, namely:</p> <ul style="list-style-type: none"> • Construction of a new 4 way intersection to Great Western Highway to provide access to the site and the Parklands to the north; • Upgrades to the Great Western Highway / Brabham Drive intersection; • Construction of a new Park edge Road; • Construction of a new wetland to manage stormwater from the site and the 20 hectare upstream catchment; • New cyclepath for the full length of the western boundary of the site and of the central estate spine road • Cash contribution of \$3.6m to the RTA for regional roads. <p>Goodman is seeking to formalise these contributions in a Voluntary Planning Agreement (VPA) – refer letter to the Department dated 5 November in order to formalise the contributions for the estate.</p>	<p>Formal letter of offer to be submitted by Goodman to Council and Parklands with detailed appendix setting out:</p> <ul style="list-style-type: none"> • Contribution items • Details of Contribution items • Specifications • Timing • Maintenance arrangements. <p>The Draft Appendix and associated diagram is included in Appendix A.</p>



Landscaping		
<p>The Project Description Report of the Application has addressed the issues previously raised by Council. Whilst these responses generally satisfied Council's concerns regarding landscaping, the issue of street tree species remains.</p> <p>Council currently does not accept new street tree plantings to be of Eucalyptus species (including Corymbia species). The Project Description Report states that the species selection is in accordance with the approved concept plan, and the Landscape Statement has identified <i>Eucalyptus molucanna</i> and <i>Corymbia maculate</i> to be planted as street trees along the Entry Boulevard.</p> <p>The Landscape Statement also states that a key landscape design principle is for the <i>"new landscape to be acceptable to Blacktown City Council and their maintenance capabilities"</i>. This statement is in conflict with the Eucalyptus species selection for street trees, as Council has resolved to not plant Eucalyptus species as street trees. The Applicant should refer to Council's Street Tree Strategy for alternative species, or make an alternative suggestion.</p>	<p>The street trees nominated were selected from the Blacktown Street Tree Policy, however we note that Council subsequently resolved to remove this tree from the list.</p> <p>Goodman will continue to liaise with Council to determine an appropriate alternative which is satisfactory to both parties.</p>	<p>Council and Goodman to liaise during detailed design to select appropriate alternate street tree species.</p>
Stormwater & Drainage		
<p>Council's Development and Drainage Engineering Sections have reviewed the Application and provided a number of</p>	<p>The following responses have been prepared in conjunction with AECOM and</p>	<p>Agreed with Goodman and Council that the approved Concept plan WSUD Strategy is</p>



<p>conditions Council requests to be included in the Development Consent, should it be forthcoming. Please find these conditions attached in the Appendix to this correspondence.</p> <p>Furthermore, it is noted that the following errors are included in the exhibition document (Appendix F) containing the Water Sensitive Urban Design Strategy, prepared by EDAW/AECOM dated 27 October 2009, Council requests that these matters be amended as per the following:</p>	<p>GHD. Generally, we do not consider the issues raised by Council to be errors by rather largely requests to retrospectively update text in the 2009 strategy with text from Council's IWCM DCP (2010).</p>	<p>the appropriate design reference.</p>
<p>a) On page 8, Section 4.02 the final dot point on the page shall be amended as follows, "... be used for appropriately matched uses such as ... rainwater tank top up or bypass. Rainwater is to be used for cooling tower make-up water, toilet flushing ...";</p>	<p>a) The change requested can be made to clarify that the eco-median is no longer a component of the strategy – note that this section was quoting previous commitments therefore not necessary to be adjusted.</p>	<p>No change required.</p>
<p>b) On page 8, Section 4.02 the end of the third last paragraph shall be amended to insert "In the draft Blacktown City Council 2010 IWCM DCP the stream erosion index is set to 3.5.";</p>	<p>b) This section of the 2009 strategy (dot points on p.8) summarises a range of targets that were established in four specific policies, including BCC Stormwater Management Policy (2000). We do not believe it is an appropriate representation of these policies by updating the text with that suggested by Council. We would also disagree with Council stipulating rainwater be used for</p>	<p>No change required</p>



	toilet flushing because there may be other better suited alternative water sources available for toilet flushing (e.g. treated wastewater or centrally reticulated stormwater) leaving higher quality rainwater available for more suitable demands (e.g. cooling towers & hot water demands).	
c) On page 8, Section 4.02 the second last paragraph shall be amended to replace "50" with "80" and insert "... demands, unless physically impossible." after the final sentence;	c) Whilst we support waterway stability targets (peak flow attenuation for 1.5 year ARI and stream erosion index), retrospectively inserting the target from the 2010 IWCM DCP is considered inappropriate relative to the approved Concept Plan.	No change required
d) On page 8, Section 4.02 the last paragraph shall be amended to delete the phrase "... not the required targets for the detailed WSUD strategy for the West Huntingwood Employment Lands. They are considered as stretch targets, to be met where possible ..." and replace with "... are to be met unless completely impractical or physically impossible ...";	d) This retrospective change is considered inappropriate. Whilst the intent for potable water savings and water reuse is supported, the proposed text is overly prescriptive in requiring rainwater to be the alternative water source to meet 80% of the non potable demands and it is noted that it will be difficult to demonstrate that this target can be met as demands within the site are very hard to estimate until the tenants for the site are known and the details of occupancy & cooling tower design is developed.	No change required
e) On page 10, Section 5.01, at the last	e) The 2009 strategy (p8) outlined a range	No change required



paragraph shall be amended to replace the figure “50” with “80” and insert “...BCC, unless physically impossible.” following the final sentence; and

of targets that were established in policy at the time and that were identified as revised targets in draft policy documents. The revised targets were noted to be **“considered as stretch targets to be met where possible through the planning and design development”**, but **“not the required targets”** for the site. Whilst we are pursuing these stretch targets, there is no firm basis for a change from the Concept Plan strategy.

f) On page 13, Section 5.02.02 an additional dot point shall be inserted stating “A proprietary water quality device is to treat a minimum of the 3 month flow from the surface of the site, targeting TSS and free oil, before discharge to the Council system.”

f) The 2009 strategy noted the detailed information needed to develop a harvesting scheme and proposed considering meeting (at a minimum) 50% of the non potable demands. The increase in the target to **“80% unless physically impossible”** may be considered inappropriate. This target may in some cases focus expenditure on small lot scale reuse infrastructure within the site – thereby limiting opportunities for larger scale reuse collaboration with the Western Sydney Parklands (e.g. Pikes Lane Urban Farming). We have commenced water balance modelling and will be better able to estimate the percentage of demands likely to be met with rainwater / stormwater harvesting following detailed design.

Goodman and Council agreed that 80% could become the revised target ‘unless impractical’



g) On page 13, Section 5.02.02 an additional dot point shall be inserted stating "A proprietary water quality device is to treat a minimum of the 3 month flow from the surface of the site, targeting TSS and free oil, before discharge to the Council system."	g) It is noted that for industrial sites, an oil/grease separator on each lot can provide Council with some protection from potentially poor water management practices (even as ownership and industrial business uses change over time). The use of oil/grease separators is consistent with the intent of Council's target for a 90% reduction in the average annual load of total hydrocarbons. The text proposed is more prescriptive – in requiring a proprietary device to be used to target TSS and free oil. It should be noted that sedimentation control is proposed at a site wide scale at the inlet basins upstream of the wetland and bioretention basins and therefore could be considered a duplication of requirements. Notwithstanding this, Goodman will accord with this strategy.	Goodman and Council agree to Goodman proposed change.
---	---	---

Title Restriction		
Due to the limited access opportunities for Proposed Lot 5b at the major intersection with the Great Western Highway, it is recommended that a restriction, pursuant to Section 88B of the Conveyancing Act 1919 be imposed limiting access to the southern most point away from the intersection on the frontage of Proposed Lot 5b to the internal collector road. Furthermore, Proposed Lots 5b, 5d and 5e	We have no objection to a restriction preventing direct access from Great Western Highway. Regarding the extent to which access is limited to the southern extent of the new access road, this should be determined at the time of future development applications since Austroads and Australian Standard requirements will prevent provision of access which is too close to the Great	Goodman and Council agreed



shall have an access denial provision to the Great Western Highway, pursuant to Section 88B of the Conveyancing Act 1919.

Western Highway Intersection from a safety point of view.

Engineering Conditions

Council has provided a list of engineering compliance conditions – Refer Appendix A.

Goodman to consult with Council with respect to their engineering requirements prior to construction to the satisfaction of the Director General. However the points listed below require further resolution:

Goodman and Council agreed

Advisory Notes:

Noted, however the following points are not agreed:

- 1.7.2, dot point 2 is not agreed. Sediment basins will be provided to cater for flows during construction and prior to completion of development sites as per Landcom Blue Book requirements. On-site detention at the completion of each lot will not be provided on a lot-by-lot basis as the Wetlands provide the Water Quality treatment requirements prior to discharge to Eastern Creek.
- 1.7.2, dot point 12. Assessment of the final drainage plans by an independent engineering consultant is not required. Goodman have appointed GHD and AECOM to prepare and certify the design both of whom are appropriately certified engineering firms.
- 1.7.2, dot point 13. The design standard

1.7.2, dot point 2. Agreed however Council noted that bonds will be required for the GPT maintenance period.

1.7.2, dot point 12. Goodman to consult with Parklands to finalise if any hydraulic conductivity testing is required.

All other items agreed between Goodman and Council



	<p>is to clean and maintain all the stormwater treatment devised including wetlands until 80% completed not 90%.</p> <ul style="list-style-type: none"> • 1.7.2, dot point 15. A bond or bank guarantee should not be required as maintenance will be by Goodman / Wester Sydney Parklands. • 1.7.2, dot point 16. In-situ hydraulic conductivity testing after a 3yr period is considered impractical and likely to be subject to unacceptable inaccuracies. Based on a well designed and established system the surface will be covered in vegetation after three years and any testing with methods such as twin ring will be difficult to be representative. Extensive research has demonstrated that if the system is constructed in accordance with guidelines (filter media specification and construction methodology) the long term infiltration rates will be in accordance with design. Monitoring of event responses with a gauged staff and recording of drawdown will confirm. • 1.7.2, dot point 17 - Overall approval by Council is not agreed to. Goodman will consult with Council and design to Council standards as appropriate. 	
General:	<ul style="list-style-type: none"> • 2.4.1.1. Goodman intends to utilise a Private certifier for the road and 	All items agreed between Goodman and Council however noting the following:



drainage works.

- 2.4.6.1. The Principal certifying authority may be a private certifier or the Minister.
 - 5.2.1. Similar to the stormwater design, suggest that the roads are designed in consultation with Council to Council standards, however not requiring Council approval.
 - 5.16.1.5. the existing depression / watercourse through the site is draining the upstream existing Huntingwood catchment. We are piping the 20yr flows to the northern portion of our Wetland basin. The 100yr ARI event does not enter the existing site overland.
 - 5.16.1.9. No roundabout is intended to this intersection. Prior discussions with Council indicated that a roundabout was desirable if the intersection was to be 4-way. The Metcash development layout does not enable the space for a roundabout to be incorporated. GHD is currently preparing a Road Safety Audit to support the proposed configuration.
 - 5.16.3.1. Temporary fencing will separate the site from sediment basins, however no fencing will be provided to the Wetland basins or inlet zones other than specific fall prevention to areas of vertical drop / height.
- GHD to provide further details of the 1in100yr flow path down Brabham drive to Council during detailed design.
 - Goodman to provide further information to support deletion of the roundabout. Council had no objection to Goodman conducting a road safety audit (RSA) to ensure that the intersection would operate safely without a roundabout.
-



Prior to Development Works

- 10.14.5.3. It is our preference to place concrete paths in front of development sites as completed.

Agreed between Goodman and Council

Subdivision Boundary Clarification

Further to the above, it is also noted that the delineation of stormwater management works has been agreed in principle with both affected parties – Parklands and Blacktown City Council. The proposed 'inlet basins' are intended to be created as part lots and to be dedicated to Parklands not Council as stated in the EA. The proposed boundary is included in Appendix B and would ensure that the wetland system as a whole (including the inlet basins) would ultimately be managed by Western Sydney Parklands.

Should you wish to discuss further please do not hesitate to contact the undersigned on (02) 9230 7297.

Yours sincerely

Richard Seddon
Planning Manager

Encl.

- ***Appendix A: Draft Schedule of Contribution Obligations***
- ***Appendix B: Proposed Parklands land dedication***



Copy to:

- ***Judith Portelli, Manager Development Services and Administration, Blacktown Council***
- ***Dennis Bagnell, Contributions & Expenditure Accountant, Blacktown Council***
- ***Aneesh Singh, Senior Development Services Engineer, Blacktown Council***
- ***Yolanda Gill, Western Sydney Parklands***



APPENDIX A: DRAFT INFRASTRUCTURE CONTRIBUTIONS SCHEDULE

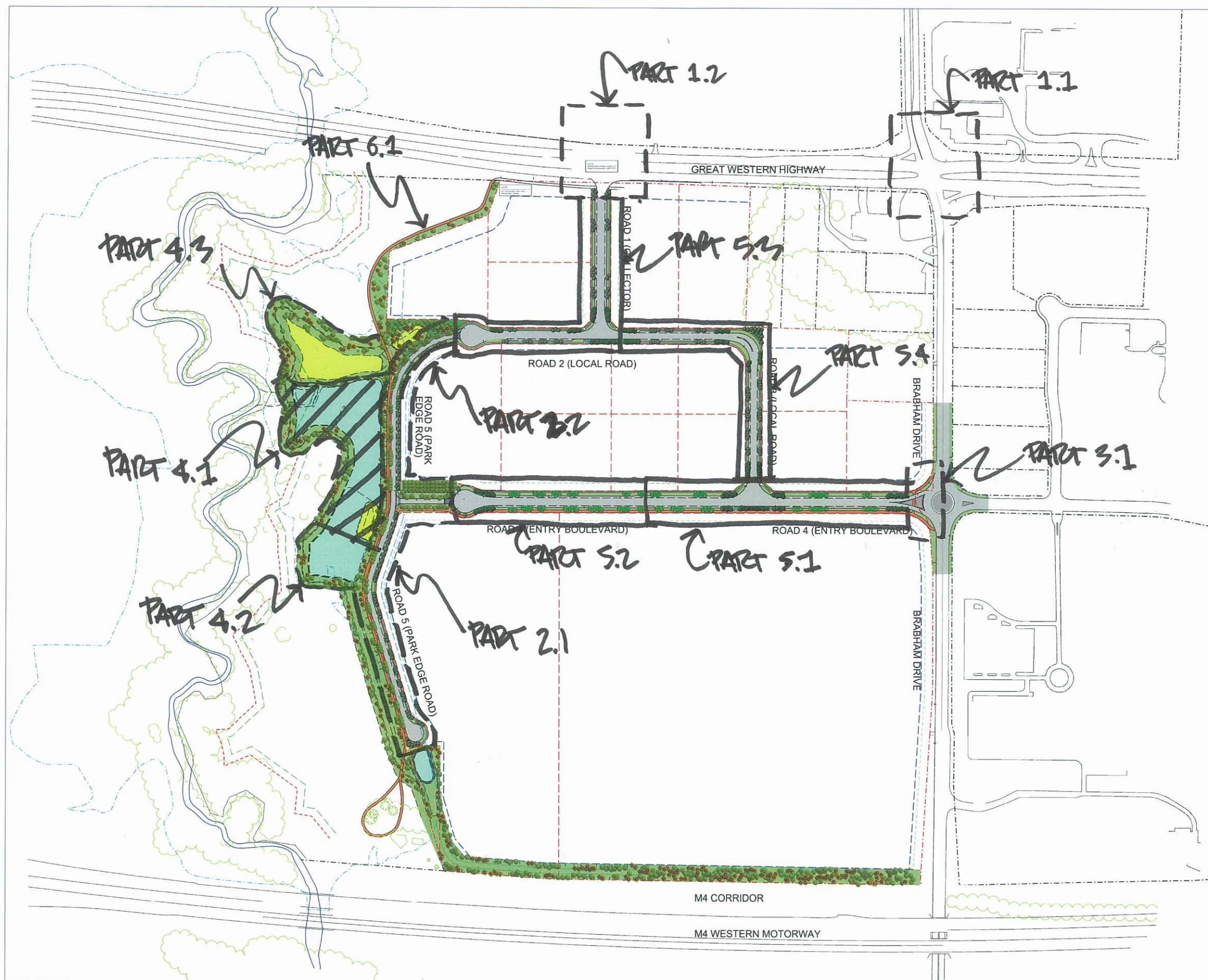
APPENDIX 1

TOTAL LIST OF INFRASTRUCTURE CONTRIBUTIONS WORKS IN KIND OFFERED AS COMMITMENTS IN THE CP 06_0203

No.	Item	Detail	Description	Specification	Commencement	Completion	Maintenance
1	GWH New Intersection Works	<p>Means all works required to carry out the construction of an intersection on the Great Western Highway as contemplated by, and in accordance with, the Concept Plan Approval;</p> <ul style="list-style-type: none"> to provide access to the site comprising the <i>property</i> and the Other Properties, the Wetlands Land and the Parklands located to the north and south of the Great Western Highway; to improve performance of the existing Great Western Highway / Brabham Drive intersection; and to provide a safe and convenient pedestrian and cycle crossing connecting the Parklands areas located north and south of the Great Western Highway. 	Part 1.1 (Brabham Drive / GWH Modifications)	<ul style="list-style-type: none"> RTA Road Design Guide RTA Works Specifications Concept Plan Approval 	Prior to Metcash Occupation Certificate		<ul style="list-style-type: none"> Goodman responsible for maintenance during Defects Liability Period (12 months from Practical Completion on a staged basis)
			Part 1.2 (Signalised Intersection)	<ul style="list-style-type: none"> RTA Traffic Signal Design Manual RTA Works Specifications Concept Plan Approval 	Subject to Development on Lot 5		<ul style="list-style-type: none"> Goodman responsible for maintenance during Defects Liability Period (12 months from Practical Completion on a staged basis)
2	Park-Edge Road Works	<p>Means all works required to carry out the construction of the park edge road as contemplated by, and in accordance with, the Concept Plan Approval;</p> <ul style="list-style-type: none"> to provide a transition between an active employment environment and more natural and contemplative surroundings; and which will be limited to cars and light vehicles only, thus creating an appropriate interface with the Parklands. 	Part 2.1 (South – Approx. 300m in length)	<ul style="list-style-type: none"> Blacktown City Council Guide for Development 2005 Blacktown City Council Works Specification 2005 Concept Plan Approval 	Subject to Development on Lots 1 & 2		<ul style="list-style-type: none"> Goodman responsible for maintenance during Defects Liability Period (12 months from Practical Completion on a staged basis)
			Part 2.2 (North – Approx. 250m in length)	<ul style="list-style-type: none"> Blacktown City Council Guide for Development 2005 Blacktown City Council Works Specification 2005 Concept Plan Approval 	Subject to Development on Lots 4,5 & 6		<ul style="list-style-type: none"> Goodman responsible for maintenance during Defects Liability Period (12 months from Practical Completion on a staged basis)
3	Roundabout Works	<p>Means all works required to carry out the construction of the upgrade of the roundabout at Brabham Drive and Huntingwood Drive (as contemplated by, and in accordance with, the Concept Plan Approval):</p> <ol style="list-style-type: none"> to provide accessibility and connectivity to and from the existing Industrial zone and the Development; in conjunction with the new intersection on the Great Western Highway, to reduce the traffic impacts on the existing intersection; to feature an eco-median that incorporates stormwater management with a landscape setting; to create green streetscapes with strong visual identity, retaining existing trees and supporting an integrated network of access links catering for pedestrian and cycle links; and to create a visual corridor to the Parklands. 	<p>Part 3.1 – Construct to standard suitable for the commencement of Metcash operations.</p> <p>Note: Completion of these roundabout works to a standard suitable for dedication to Council will be subject to consultation.</p>	<ul style="list-style-type: none"> RTA Road Design Guide RTA Works Specifications Blacktown City Council Guide for Development 2005 Blacktown City Council Works Specification 2005 Concept Plan Approval 		Prior to Metcash Occupation Certificate	<ul style="list-style-type: none"> Goodman responsible for maintenance during Defects Liability Period (12 months from Practical Completion on a staged basis)

4	Wetland and Bioretention Works	Means all works required to carry out the construction of a wetland and bioretention landscape feature for the Parklands that incorporates a pedestrian access link between the Parklands and Huntingwood West on the Wetlands Land and site comprising the <i>property</i> and the Other Properties (as contemplated by, and in accordance with, the Concept Plan Approval); a) to protect water quality and flood storage; b) to overcome the higher risk of damage to on-site measures such as street bio-retention systems in an industrial precinct; c) to provide a cost effective way to meet flood storage requirements; d) to provide the potential to treat stormwater runoff from the site and adjoining industrial upstream catchments that drain through the site; and e) to provide passive recreation opportunities for employees.	Part 4.1 – Area of Wetlands marked on Plan which services the North Metcash Catchment, Estate Road and part of Lots 1 & 2 will be constructed to a standard suitable for water quality and quantity requirements to be achieved.	<ul style="list-style-type: none"> EDAW / AECOM WSUD Strategy dated 27 October 2009 Landcom's WSUD Policy (2005) Blacktown City Council Stormwater Management Policy (2000) 		Prior to Metcash Occupation Certificate	<ul style="list-style-type: none"> Goodman responsible for maintenance for a period of 2 years following Practical Completion or Final Planting Works. Final Planting cannot take place until the estate is 80% developed. A site specific Establishment and Maintenance Plan to be developed based on the approach within Landcom's WSUD Book 4 – Operation & Maintenance
			Part 4.2 – Area of Wetlands marked on Plan which services the South Metcash Catchment and part of Lots 1 & 2 will be constructed to a standard suitable for water quality and quantity requirements to be achieved.	<ul style="list-style-type: none"> EDAW / AECOM WSUD Strategy dated 27 October 2009 Landcom's WSUD Policy (2005) Blacktown City Council Stormwater Management Policy (2000) 		Prior to Metcash Occupation Certificate	<ul style="list-style-type: none"> Goodman responsible for maintenance for a period of 2 years following Practical Completion or Final Planting Works. Final Planting cannot take place until the estate is 80% developed. A site specific Establishment and Maintenance Plan to be developed based on the approach within Landcom's WSUD Book 4 – Operation & Maintenance
			Part 4.3 – Area of Wetlands and Bioretention marked on Plan which services Lots 4,5 & 6 will be constructed to a standard suitable for water quality and quantity requirements to be achieved. Note: Staging of the wetland and bioretention areas will be integrated with temporary sedimentation control requirements and broader objectives to protect the receiving environment and established water quality treatment areas.	<ul style="list-style-type: none"> EDAW / AECOM WSUD Strategy dated 27 October 2009 Landcom's WSUD Policy (2005) Blacktown City Council Stormwater Management Policy (2000) FAWB Guidelines 	Subject to Development on Lots 4,5 & 6		<ul style="list-style-type: none"> Goodman responsible for maintenance for a period of 2 years following Practical Completion or Final Planting Works. Final Planting cannot take place until the estate is 80% developed. A site specific Establishment and Maintenance Plan to be developed based on the approach within Landcom's WSUD Book 4 – Operation & Maintenance
5	Central Spine Road & internal estate roads	Construction and dedication of land for internal estate road	Part 5.1 – Construct to a suitable standard for the commencement of Metcash Operations the portion marked on the Plan which is from Brabham Drive to the extent of the Metcash entry.	<ul style="list-style-type: none"> Blacktown City Council Guide for Development 2005 Blacktown City Council Works Specification 2005 Concept Plan Approval 		Prior to Metcash Occupation Certificate	<ul style="list-style-type: none"> Goodman responsible for maintenance during Defects Liability Period (12 months from Practical Completion on a staged basis)
			Part 5.2 – Construct to a suitable standard the remaining length of the Huntingwood Drive extension which is marked on the Plan.	<ul style="list-style-type: none"> Blacktown City Council Guide for Development 2005 Blacktown City Council Works Specification 2005 Concept Plan Approval 	Prior to Metcash Occupation Certificate		<ul style="list-style-type: none"> Goodman responsible for maintenance during Defects Liability Period (12 months from Practical Completion on a staged basis)
			Part 5.3 – Construct to a suitable standard the estate access road from the GWH as marked on Plan	<ul style="list-style-type: none"> Blacktown City Council Guide for Development 2005 Blacktown City Council Works Specification 2005 Concept Plan Approval 	Subject to Development on Lots 4,5 & 6		<ul style="list-style-type: none"> Goodman responsible for maintenance during Defects Liability Period (12 months from Practical Completion on a staged basis)
			Part 5.4 – Construct to a suitable standard the estate access road linking Part 5.3 with the Huntingwood Drive extension as marked on Plan. Note: Completion of these roundabout works to a standard suitable for dedication to Council will be subject to consultation.	<ul style="list-style-type: none"> Blacktown City Council Guide for Development 2005 Blacktown City Council Works Specification 2005 Concept Plan Approval 	Subject to Development on Lots 4,5 & 6		<ul style="list-style-type: none"> Goodman responsible for maintenance during Defects Liability Period (12 months from Practical Completion on a staged basis)
6	Cyclepath (N/S)	Construction of approximately 700m long, 3m wide pedestrian / cycle path on Western Sydney Parklands land	Part 6.1 – to a design prepared in consultation with WSPT and subject to confirmation of maintenance and ownership details.	<ul style="list-style-type: none"> Western Sydney Parklands Guidelines Blacktown City Council Guide for Development 2005 Blacktown City Council Works Specification 2005 Concept Plan Approval 	Prior to Metcash Occupation Certificate		<ul style="list-style-type: none"> Goodman responsible for maintenance during Defects Liability Period (12 months from Practical Completion on a staged basis)

7	RTA Contributions	Cash contribution of in accordance with RTA Infrastructure Deed.	Calculation to be agreed as per the RTA deed.		Payment made prior to Metcash Occupation Certificate		
---	----------------------	---	--	--	--	--	--



**BUNGARRIBEE ESTATE
INFRASTRUCTURE
CONTRIBUTIONS.**

Rev No	Description	Date	Drawn	Approved
00	Issued for Development Application	21/07/09	AM	ME
01	Amendments to reflect design review panel comments	20/01/10	ME	ME
02	Amendments to reflect design review panel comments	1/09/10	ABS	ME

**DEVELOPMENT
APPLICATION**

TRACT CONSULTANTS PTY LTD
ACN 055 213 842
LEVEL 8, 80 MOUNT STREET
NORTH SYDNEY
NEW SOUTH WALES 1585 AUSTRALIA
TELEPHONE 02 9554 3733
FACSIMILE 02 9554 3825
E-mail: sydney@tract.net.au

Client

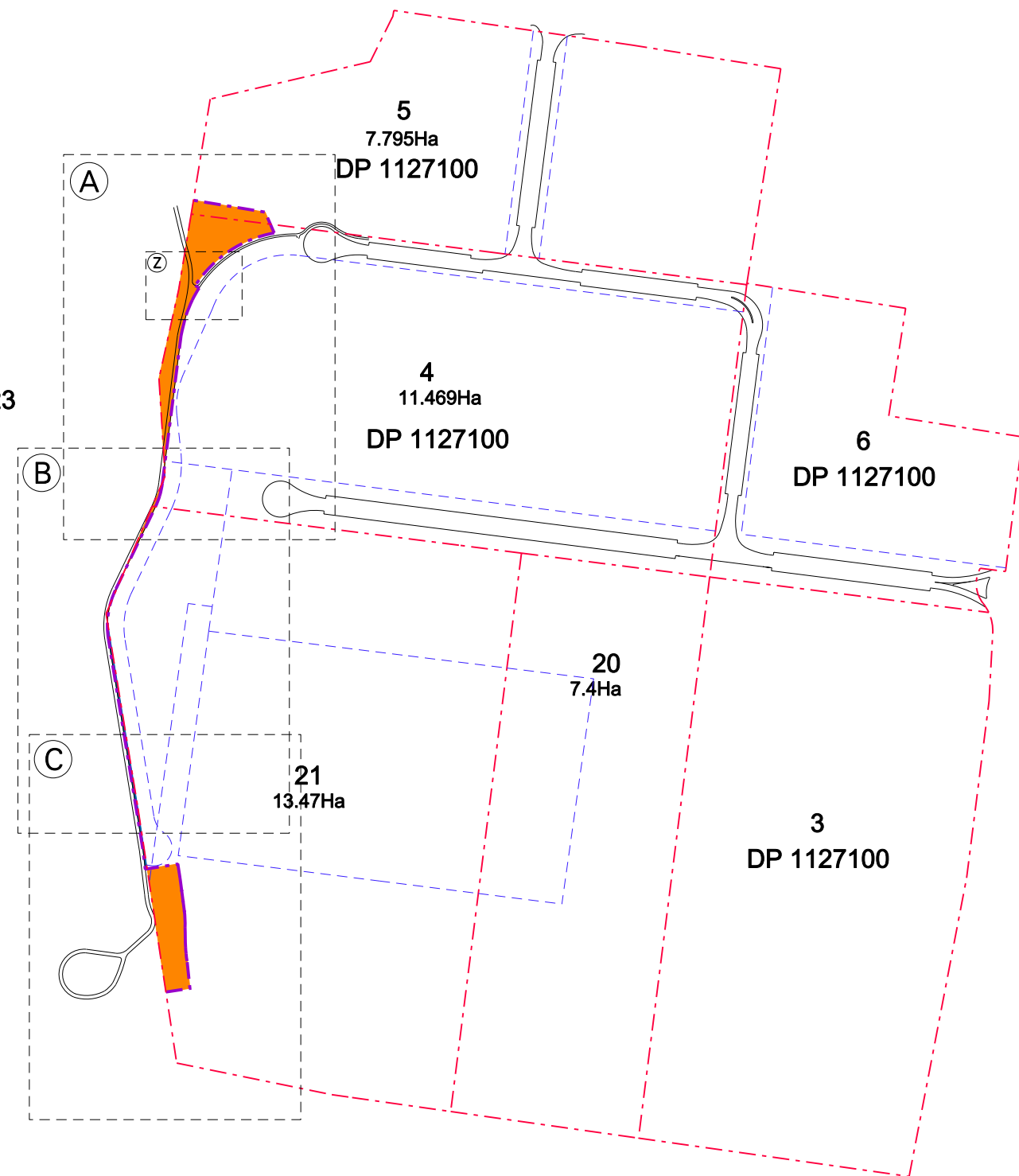
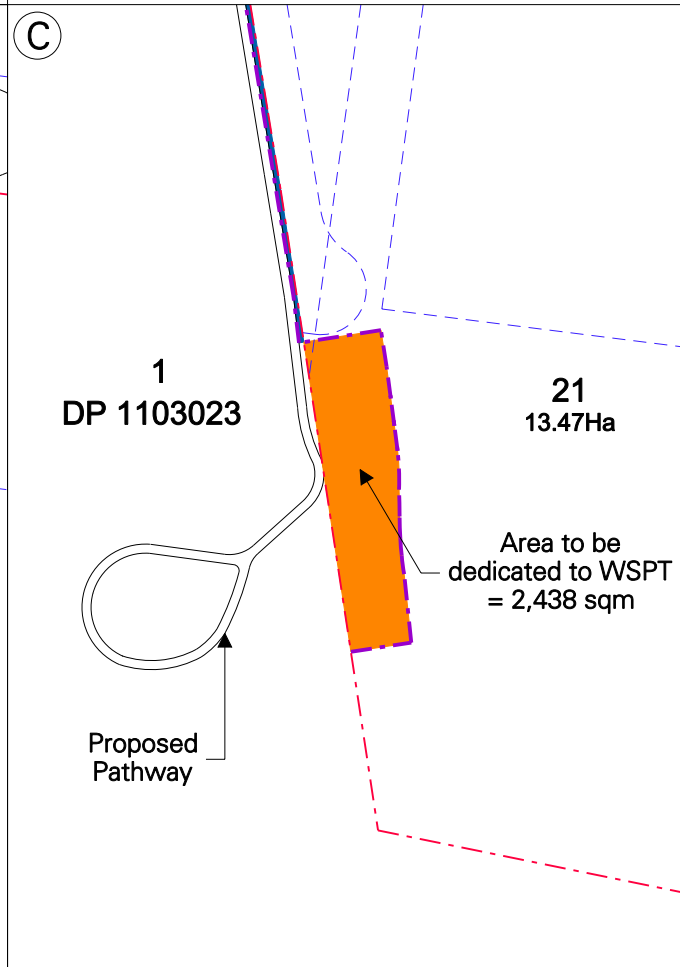
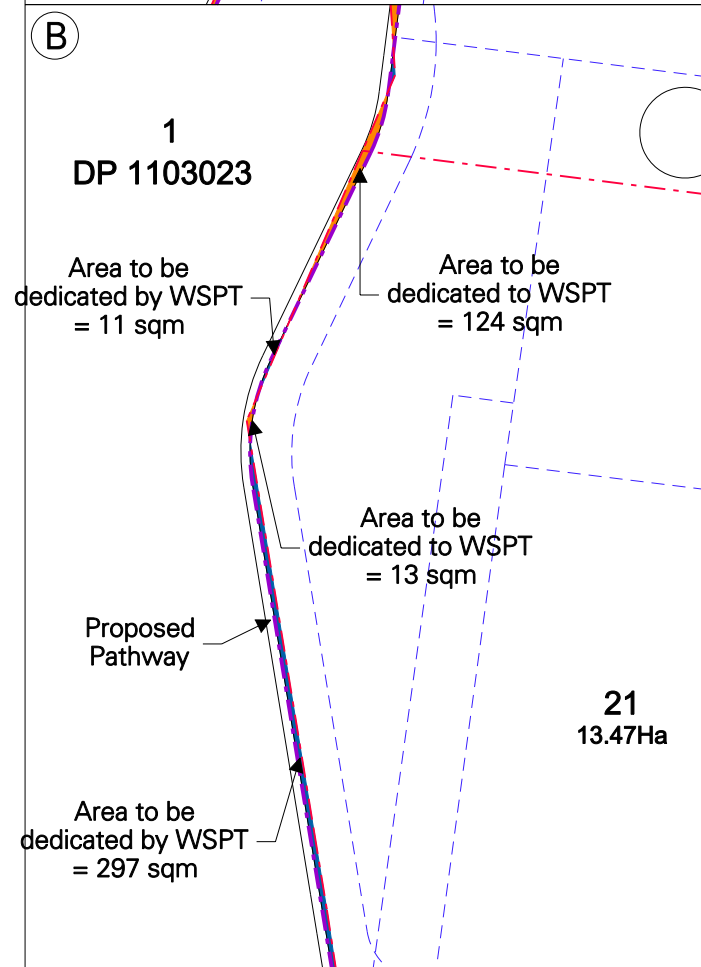
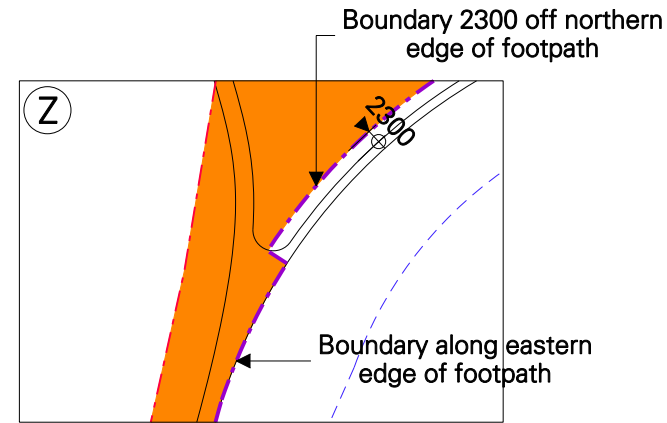
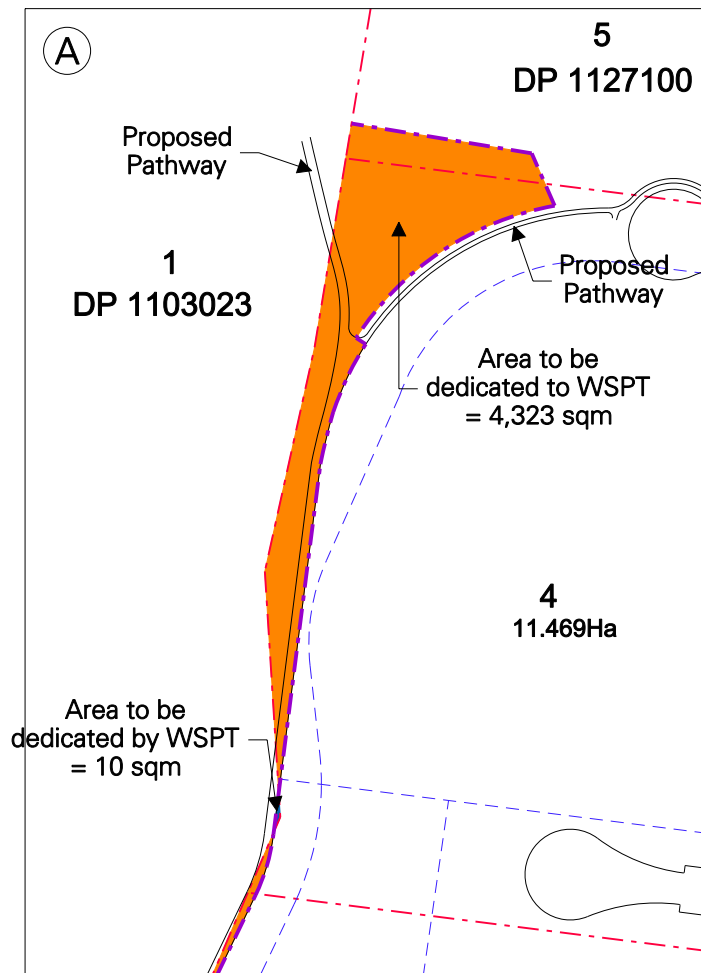
Goodman

BUNGARRIBEE INDUSTRIAL ESTATE
INFRASTRUCTURE WORKS
MASTERPLAN
Development Application
Drawn: ABS, Checked: ME, Approved: GG, Scale: 1:2500 @ A1, Date: 01/09/10
Project Number: 208027, Drawing Number: LD DA 1002, Revision: 02



APPENDIX B: WESTERN SYDNEY PARKLANDS LAND DEDICATION

* Areas to be confirmed by surveyor.



Total area to be dedicated to WSPT = 6,898 sqm

Total area to be dedicated by WSPT = 318 sqm

