



Department of Infrastructure,  
Local Government and Planning

Our reference: SPD-1216-033062

9 January 2017

The Chief Executive Officer  
Rockhampton Regional Council  
[enquiries@rrc.qld.gov.au](mailto:enquiries@rrc.qld.gov.au)

Dear Sir/Madam,

**Notice about request for permissible change—relevant entity**  
300 Yeppoon Road, Norman Gardens, QLD  
(Given under section 373(1) of the *Sustainable Planning Act 2009*)

The Department of Infrastructure, Local Government and Planning received a copy of the request for a permissible change under section 372(1) of the *Sustainable Planning Act 2009* on 22 December 2016 advising the department, as a relevant entity, of the request for a permissible change made to the responsible entity under section 369 of the *Sustainable Planning Act 2009*.

The department understands that the proposed changes are as follows:

- Change Item 8 and assessment manager condition 2.1 of D/279-2013 to reflect the new lot layout plan to "Reconfiguration of a Lot, Stages 3B, 9 10A, 10B and 11," Plan No. 5782-03-ROL Revision B, dated 20 December 2016.

The department has considered the proposed changes to the development approval and advises that it has no objection to the change being made.

If you require any further information, please contact Vickie Wood, Senior Planning Officer, on 07 4898 6825, or via email [RockhamptonSARA@dilgp.qld.gov.au](mailto:RockhamptonSARA@dilgp.qld.gov.au) who will be able to assist.

Yours sincerely

A handwritten signature in black ink, appearing to be "CP" or similar initials.

Carl Porter  
**A/Manager (Planning)**  
**Fitzroy and Central**

cc. Keppel Developments Pty Ltd C/- Capricorn Survey Group, [reception@csgcq.com.au](mailto:reception@csgcq.com.au)



Department of Infrastructure,  
Local Government and Planning

Our reference: SPD-0216-025454  
Your reference: 5782  
Assessment manager reference: D/279-2013

24 March 2016

Crestwood Land Pty Ltd  
C/- Capricorn Survey Group (CQ) Pty Ltd  
PO Box 1391  
Rockhampton Qld 4700

Attention: Richard Ford

Dear Sir/Madam,

**Changed concurrence agency response (with conditions)**

830-850 Norman Road, Norman Gardens (Lot 900 on SP275164)

(Given under section 376 of the *Sustainable Planning Act 2009*)

The Department of Infrastructure, Local Government and Planning received representations under section 369 of the *Sustainable Planning Act 2009* on for the original concurrence agency response described below.

**Applicant details**

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Applicant name:	Crestwood Land Pty Ltd
Applicant contact details:	C/- Capricorn Survey Group (CQ) Pty Ltd PO Box 1391 Rockhampton Qld 4700

**Site details**

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Street address:	830-850 Norman Road, Norman Gardens
Lot on plan:	Lot 900 on SP275164
Local government area:	Rockhampton Regional Council



### Application details

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Proposed development: Permissible change to a development permit for Reconfiguring a Lot (2 lots into 83 lots)

### Nature of the changes

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The nature of the changes agreed to in this request are:

1. Condition 7(a), 8(a) and 8(b) to be amended to reflect an updated Traffic Noise Assessment Report.

The nature of the changes not agreed to in this request are:

2. Condition 9 (a) to be amended to remove reference to the Department of Transport and Main Road's '*Standard Drawings Road Manual – Part 13 (Noise Barriers)*' and insert reference to '*Council's required standard*'.
3. Condition 9 (e) to be inserted to reflect '*The 2m and 1.8m high fences are to be constructed to Council's standards as they do not front Yeppoon Road*'.

### Original concurrence agency response

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Date of original concurrence agency response: 15 November 2013 (the Department of Transport and Main Roads)

Original concurrence agency response details: Approved subject to conditions

### Amended concurrence agency response

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Date of amended concurrence agency response: 13 December 2013 (the Department of Transport and Main Roads)

Amended concurrence agency response details: Approved subject to conditions

### Changed concurrence agency response

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Date of changed concurrence agency response: 24 March 2016 (the Department of Infrastructure, Local Government and Planning)

Changed concurrence agency response details: Approved in part, subject to conditions

## Conditions

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This approval is subject to:

- the changed concurrence agency conditions in Attachment 1

The department has, for particular conditions of this approval, nominated an entity to be the assessing authority for that condition under section 255D(3) of the *Sustainable Planning Act 2009*.

## Reasons for part refusal

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The reasons for part refusal are:

- the requested changes to conditions 7(a), 8(a) and 8(b) to reference the amended acoustics report conflict with the requested change to condition 9(a) and the insertion of additional condition 9(e).

*Findings on material questions of fact:*

- the acoustics report has been undertaken on an assessment and basis of proposing a Department of Transport and Main Roads technical standard of the of acoustic barrier to mitigate the impacts of road noise;
- any fence to a lesser standard is not in accordance with the acoustics report;
- the acoustics report has been undertaken on an assessment of transport noise including and associated with the State-controlled road.

*Evidence or other material on which the findings were based*

Laws, code and policies applicable when the original application was made:

- The Department of Transport and Main Roads jurisdiction for the assessment of State-controlled road transport noise relates to the objectives of the *Transport Infrastructure Act 1994*, in accordance with section 2(b)(iv), to establish a regime under which the impacts on the development from environmental emissions generated by State-controlled roads are addressed by the development.
- Section 49A of the *Transport Infrastructure Act 1994* provides that the Department of Transport and Main Roads must consider the extent to which the development addresses impacts on the development from environmental emissions generated by State-controlled roads.

## Further advice

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The department offers additional advice about the application to the assessment manager – see Attachment 2.

## Rights of appeal

The rights of applicants to appeal to the Planning and Environment Court against decisions about a development application are set out in chapter 7, part 1, division 8 of the *Sustainable Planning Act 2009*. For particular applications, there may also be a right to appeal to the Building and Development Dispute Resolution Committee (see chapter 7, part 2 of the *Sustainable Planning Act 2009*).

Copies of the relevant appeal provisions are attached.

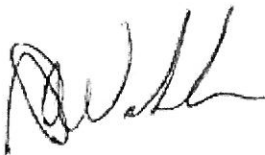
## Amended approved plans and specifications

Copies of the following amended approved plans and specifications are attached:

Drawing/Report Title	Prepared by	Date	Reference no.	Version/Issue
<b>Aspect of development: Permissible change to a development permit for Reconfiguring a Lot (2 lots into 83 lots)</b>				
Reconfiguration of a Lot - Stages 3B, 9, 10A, 10B & 11	Capricorn Survey Group (CQ)	13 March 2013	5782-03-ROL	Revision A
Stormwater Management Report	Brown Consulting (QLD) Pty Ltd	13 September 2013	R12063	Issue B
Environmental Traffic Noise Level Study for Proposed Residential Subdivision, Crestwood Estate Stages 3B, 5, 6, 9, 10A, 10B and 11 Rockhampton – Yeppoon and Norman Road, Norman Gardens	David Moore & Associates	<del>4 October 2013</del> 3 August 2015	<del>R13092/D2837</del> R15059/D2837	Revision 1

For further information please contact Rebecca Curtis, Planning Officer on (07) 4924 2915 or via email at [RockhamptonSARA@dilgp.qld.gov.au](mailto:RockhamptonSARA@dilgp.qld.gov.au) who will be pleased to assist.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'A. Walsh', with a stylized flourish at the end.

Anthony Walsh  
A/Manager (Planning)  
Fitzroy and Central Region

enc: Attachment 1 - Changed Concurrence agency conditions  
Attachment 2 - Further advice  
Attachment 3 - Approved plans and specifications  
Attachment 4 - SPA appeal provisions

cc: Rockhampton Regional Council, [enquiries@rrc.qld.gov.au](mailto:enquiries@rrc.qld.gov.au)



Our reference: SPD-0216-025454  
 Your reference: 5782  
 Assessment manager reference: D/279-2013

### Attachment 1 - Changed concurrence agency conditions

No.	Conditions of development approval	Condition timing
<b>Aspect of development: Permissible change to a development permit for Reconfiguring a Lot (2 lots into 83 lots)</b>		
<i>Development impacting a State-controlled road and State transport infrastructure</i> - Pursuant to section 255D of the <i>Sustainable Planning Act 2009</i> , the chief executive administering the Act nominates the Director-General of the Department of Transport and Main Roads to be the assessing authority for the development to which this development approval relates for the administration and enforcement of any matter relating to the following condition(s):		
1.	Development must be carried out generally in accordance with the following plan, except as modified by these concurrence agency conditions: <ul style="list-style-type: none"> <li>Plan of Reconfiguration of a lot Stages 3B, 9, 10A, 10B &amp; 11, prepared by Capricorn Survey Group (CQ), plan number 5782-03-ROL, Revision A, dated 13-03-2013</li> </ul>	Prior to submitting the Plan of Survey to the local government for approval for Stage 3B, Stage 9, Stage 10A, Stage 10B and Stage 11.
2.	Direct access is not permitted between the Rockhampton – Yeppoon Road and Lot 300 on SP216105.	To be maintained at all times.
3.	The applicant must provide a vehicle proof barrier along the State-controlled road frontage of Rockhampton-Yeppoon Road for any allotments created as part of this development that share a boundary with the SCR (this will include any Public Use Land or Reserves).	Prior to submitting the Plan of Survey to the local government for approval for Stage 3B, Stage 9, Stage 10A, Stage 10B and Stage 11.
4.	(a) The development must be in accordance with the Brown Consulting (QLD) Pty Ltd's Stormwater Management Report, Project Number R12063, and Issue B, dated 13 September 2013. Stormwater management for the development must ensure no worsening or actionable nuisance to the state-controlled road network caused by peak discharges, flood levels, frequency/duration of flooding, flow velocities, water quality, sedimentation and scour effects in all events up to and including the ARI 50 year event.  (b) Any excavation, filling, paving, landscaping, construction or any other works to the land must not: <ol style="list-style-type: none"> <li>create any new discharge points for stormwater runoff onto the State-controlled road;</li> <li>interfere with and/or cause damage to the existing stormwater drainage on the State-controlled road;</li> <li>surcharge any existing culvert or drain on the State-</li> </ol>	(a) – (c): Prior to submitting the Plan of Survey to the local government for approval for Stage 3B, Stage 9, Stage 10A, Stage 10B and Stage 11.



No.	Conditions of development approval	Condition timing
	<p>controlled road;</p> <p>iv. reduce the quality of stormwater discharge onto the State-controlled road.</p> <p>(c) The applicant must provide RPEQ certification to the Department of Transport and Main Roads that the development has been designed and constructed in accordance with parts (a) and (b) of this condition.</p>	
5.	No works shall be undertaken within the State-controlled road reserve (Rockhampton – Yeppoon Road) without the express written consent of the Department of Transport and Main Roads.	To be maintained at all times.
6.	No dust/debris from the subject site must enter the Rockhampton – Yeppoon Road during the construction phase of the development.	To be maintained at all times during construction.
7.	<p><b>Amended 24 March 2016</b></p> <p>In accordance with Road Traffic Noise Assessment Report:</p> <p>(a) The development must incorporate noise attenuation treatments as detailed in the report <i>Environmental Traffic Noise Level Study for Proposed Residential Subdivision, Crestwood Estate Stages 3B, 5, 6, 9, 10A, 10B and 11, Rockhampton – Yeppoon and Norman Road, Norman Gardens</i> (<del>David Moore &amp; Associates, Report No. R13092/D2837/Rev.1 dated 1 October 2013</del>), <b>prepared by David Moore &amp; Associates Pty Ltd, Referenced R15059/D2837 (Revision 1), and dated 3 August 2015.</b></p> <p>In particular, this includes:</p> <ul style="list-style-type: none"> <li>the noise barriers further detailed in these concurrence agency conditions.</li> </ul> <p>(b) The applicant must provide RPEQ certification to the Department of Transport and Main Roads that the development has been designed and constructed in accordance with part (a) of this condition.</p>	<p>(a) – (b):</p> <p>Prior to submitting the Plan of Survey to the local government for approval for Stage 3B, Stage 9, Stage 10A, Stage 10B and Stage 11.</p>
8.	<p><b>Amended 24 March 2016</b></p> <p>Location and height of noise fence / noise barrier</p> <p>(a) A noise fence barrier of at least 3 m in height with 2 m high returns must be located where shown in Figure 6 of the report <i>Environmental Traffic Noise Level Study for Proposed Residential Subdivision, Crestwood Estate Stages 3B, 5, 6, 9, 10A, 10B and 11, Rockhampton – Yeppoon and Norman Road, Norman Gardens</i> (<del>David Moore &amp; Associates, Report No. R13092/D2837/Rev.1 dated 1 October 2013</del>), <b>prepared by David Moore &amp; Associates Pty Ltd, Referenced R15059/D2837 (Revision 1), and dated 3 August 2015.</b></p>	<p>(a) Prior to submitting the Plan of Survey to the local government for approval for Stage 3B, Stage 9, Stage 10A, Stage 10B and Stage 11.</p>

No.	Conditions of development approval	Condition timing
	<p>(b) A noise fences barrier of at least 2 m in height and at least 1.8 m in height with 1.8 m high returns must be located where shown in Figure 10 of the report Environmental Traffic Noise Level Study for Proposed Residential Subdivision, Crestwood Estate Stages 3B, 5, 6, 9, 10A, 10B and 11, Rockhampton – Yeppoon and Norman Road, Norman Gardens (<del>David Moore &amp; Associates, Report No. R13092/D2837/Rev.1 dated 1 October 2013</del>), prepared by <b>David Moore &amp; Associates Pty Ltd, Referenced R15059/D2837 (Revision 1), and dated 3 August 2015.</b></p>	<p>(b) Prior to submitting the Plan of Survey to the local government for approval for Stage 11.</p>
9.	<p><b>Amended 24 March 2016</b></p> <p>Standards for noise fence / noise barrier</p> <p>(a) Noise fences must be provided in accordance with the Department of Transport and Main Roads':</p> <ul style="list-style-type: none"> <li>• <i>Road Traffic Noise Management: Code of Practice</i>, Chapter 5;</li> <li>• Technical Standard MRTS15 and Specification MRS15 – Noise Fences; and</li> <li>• Standard Drawings Road Manual – Part 13, Noise Barriers.</li> </ul> <p>(b) The applicant must provide RPEQ certification of structural drawings to the Department of Transport and Main Roads that the noise fences have been designed in accordance with part (a) of this condition prior to commencing the construction.</p> <p>(c) The applicant must provide RPEQ certification of "as constructed" drawings to the Department of Transport and Main Roads indicating that the noise fences have been constructed in accordance with parts (a) and (b) of this condition.</p> <p>(d) The "as constructed" noise fences will be inspected by a Department of Transport and Main Roads officer(s) prior to final acceptance being given.</p>	<p>(a) Prior to submitting the Plan of Survey to the local government for approval for Stage 3B, Stage 9, Stage 10A, Stage 10B and Stage 11.</p> <p>(b) Prior to submitting the drawings to the local government for approval.</p> <p>(c) Prior to submitting the "as constructed" drawings to the local government for approval.</p> <p>(d) Prior to submitting the Plan of Survey to the local government for approval for Stage 3B, Stage 9, Stage 10A, Stage 10B and Stage 11.</p>
10.	<p>Noise Attenuating Structure Efficiency</p> <p>(a) The assumed noise sensitive receiver heights are based on the pad levels in Tables 2 and 7 of the approved Road Traffic Noise Management Report.</p> <p>(b) The building pad levels shall not increase by more than 200mm and/or the effective noise attenuating structure height shall not be reduced by more than 200 mm compared to the assumptions made in the approved Road Traffic Noise Management Report.</p>	<p>(a) – (c)</p> <p>To be maintained at all times.</p>

No.	Conditions of development approval	Condition timing
	<p>(c) If designed or as-constructed receiver heights and/or effective noise attenuating structure heights do not meet this requirement, then a revised Road Traffic Noise Management Report acceptable to Transport and Main Roads shall be submitted to Transport and Main Roads. A request to Transport and Main Roads to alter its Referral Agency response may also be required.</p>	
11.	<p>Standards for earth mounds</p> <p>(a) Earth mound/s must have a batter slope no steeper than 1:2 on either side, a flat top with a minimum width of 2 metres and be in accordance with the Department of Transport and Main Roads':</p> <ul style="list-style-type: none"> <li>• <i>Road Traffic Noise Management: Code of Practice</i>, Chapter 5; and</li> <li>• Technical Standards MRTS04 and Specifications MRS04 – General Earthworks.</li> </ul> <p>(b) Earth mound/s must be landscaped in accordance with the Department of Transport and Main Roads':</p> <ul style="list-style-type: none"> <li>• <i>Road Landscape Manual</i>;</li> <li>• Technical Standard and Specifications:               <ul style="list-style-type: none"> <li>o MRTS16 and MRS16 – General Requirements Landscape and Revegetation Works;</li> <li>o MRTS16B and MRS16B – Vegetation GroundWorks;</li> <li>o MRTS16C and MRS16C – Vegetation Works;</li> <li>o MRTS16D and MRS16D – Hardscape Works; and</li> <li>o MRTS16E and MRS16E – Establishment and Monitoring Works.</li> </ul> </li> </ul> <p>(c) The applicant must provide RPEQ certification of drawings to the Department of Transport and Main Roads that the earthmound has been designed in accordance with parts (a) and (b) of this condition prior to commence the construction.</p> <p>(d) The applicant must provide RPEQ certification of "as constructed" drawings to the Department of Transport and Main Roads that the earthmound has been constructed in accordance with parts (a), (b) and (c) of this condition.</p> <p>(e) The "as constructed" earthmound will be inspected by a Department of Transport and Main Roads officer(s) prior to final acceptance being given.</p>	<p>(a) Prior to submitting the Plan of Survey to the local government for approval for Stage 3B, Stage 9, Stage 10A, Stage 10B and Stage 11.</p> <p>(b) Prior to submitting the Plan of Survey to the local government for approval for Stage 3B, Stage 9, Stage 10A, Stage 10B and Stage 11 and to be maintained during the relevant monitoring period stipulated in MRTS16E and MRS16E</p> <p>(c) Prior to submitting the Plan of Survey to the local government for approval for Stage 3B, Stage 9, Stage 10A, Stage 10B and Stage 11.</p> <p>(d) Prior to submitting the "as constructed" drawings to the local government for approval for Stage 3B, Stage 9, Stage 10A, Stage 10B and Stage 11.</p> <p>(e) Prior to submitting the "as constructed" drawings to the local government for</p>

No.	Conditions of development approval	Condition timing
		approval for Stage 3B, Stage 9, Stage 10A, Stage 10B and Stage 11.

Our reference: SPD-0216-025454  
 Your reference: 5782  
 Assessment manager reference: D/279-2013

## **Attachment 2 – Further advice**

### **General Advice – Inserted 26 March 2016**

1. **Property note for proposed lots with frontage to Rockhampton – Yeppoon Road**  
 No direct access to/from the State-controlled road (Rockhampton – Yeppoon Road) shall be permitted for the individual lots including the balance lot. All access to/from the lots (including the balance lot) shall be via the internal subdivisional roads.
2. **Property Note for proposed Lots 233, 234, 235, 236, 237 and 238**  
 Proposed Lots 233, 234, 235, 236, 237 and 238 as shown on the subdivision drawing Plan of Reconfiguration of a lot Stages 3B, 9, 10A, 10B & 11, prepared by Capricorn Survey Group (CQ), Drawing Number 5782-03-ROL, Revision A, and dated 13 March 2013, will be affected by road traffic noise. A noise covenant controls the construction of dwellings and building pad levels to noise sensitive residential house dwellings only on these lots. Details of the noise covenant can be found in the Standard Terms document No. 710249856 registered in the Queensland Land Registry.
3. **Property Note for proposed Lots 233, 234, 235, 236, 237 and 238**  
 Prior to the issue of a Building Permit (for any dwelling) by Council or a private building certifier for the carrying out of building work for the development the applicant/landowner shall provide certification from a licensed surveyor that the ground levels (building pad levels) of the dwellings are unchanged from the AHD levels as utilised in Addendum Environmental Traffic Noise Level Study for Proposed Residential Subdivision, Crestwood Estate Stages 3B, 5, 6, 9, 10A, 10B and 11, Rockhampton – Yeppoon Road and Norman Road, Norman Gardens, prepared by David Moore & Associates Pty Ltd, Report No. R15059/D2837/Rev.1/3.08.15, Revision 1, and dated 3 August 2015 (or from the altered levels as agreed by the Department of Transport and Main Roads).









Our reference: SPD-0216-025454  
Your reference: 5782  
Assessment manager reference: D/279-2013

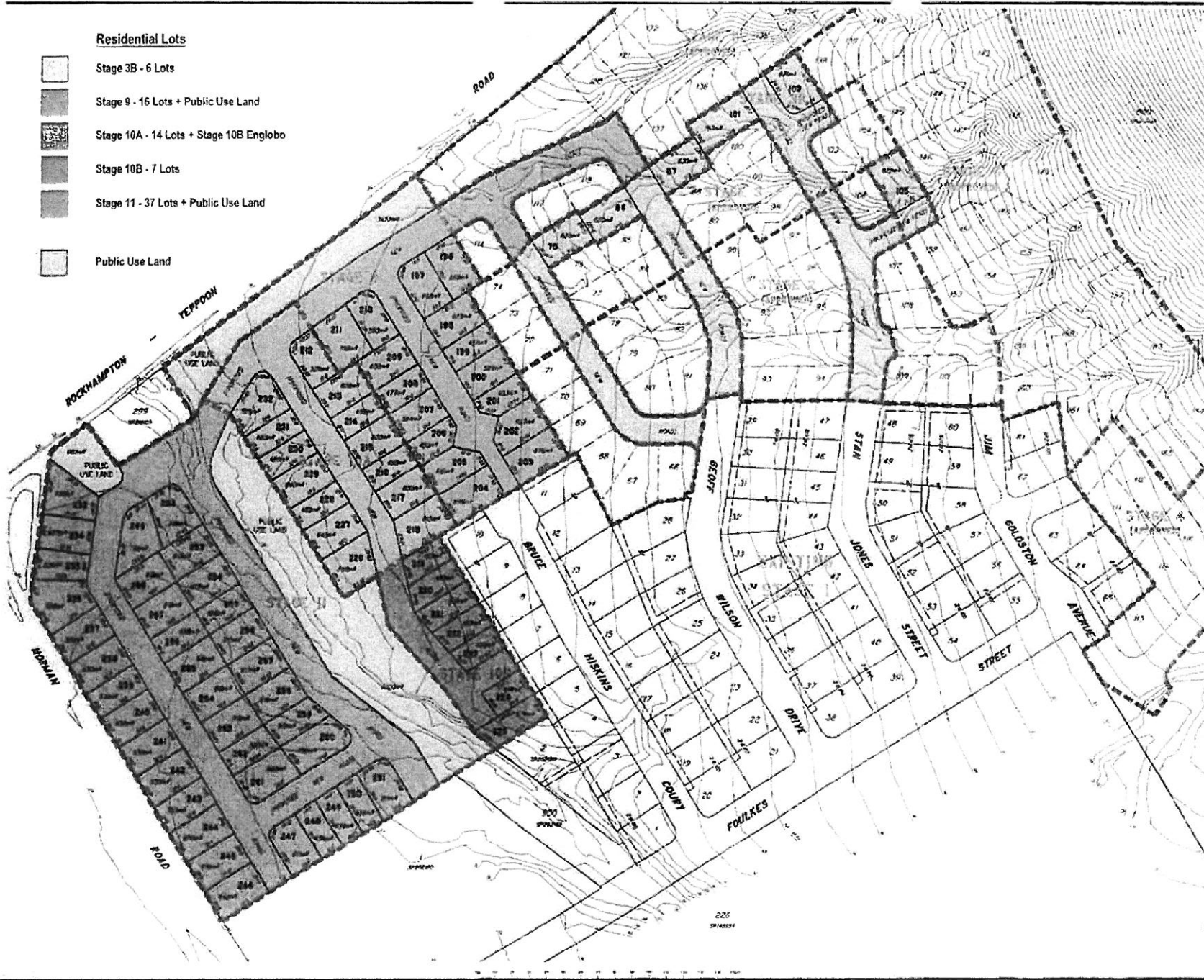
### **Attachment 3 – Amended plans and specifications**

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# Residential Lots

-  Stage 3B - 6 Lots
-  Stage 9 - 16 Lots + Public Use Land
-  Stage 10A - 14 Lots + Stage 10B Englobo
-  Stage 10B - 7 Lots
-  Stage 11 - 37 Lots + Public Use Land
-  Public Use Land



## IMPORTANT NOTE

This plan was prepared to accompany a reconstruction of a lot subdivision in Rockhampton Regional Council and should not be used for any other purpose.

The dimensions and areas shown herein are subject to field survey and shall be the responsibility of the owner and any other authority which may have responsibility under any relevant legislation.

In particular, no reliance should be placed on the information on this plan for any specific design involving the land.

This is not a site plan or a site plan.

## Cititmark Properties

Crestwood Estate  
Geoff Wilson Drive,  
Norman Gardens

Reconfiguration of a Lot  
Stages 3B, 9, 10A, 10B & 11

Lot 300 on SP218105  
& Lot 1 on RP618770  
Parish of Murchison  
County of Livingstone

Rockhampton Regional Council

DATE	BY	REVISION	DATE
10/11/2011	CSG	1	10/11/2011

CSG  
capricorn survey group (cc)

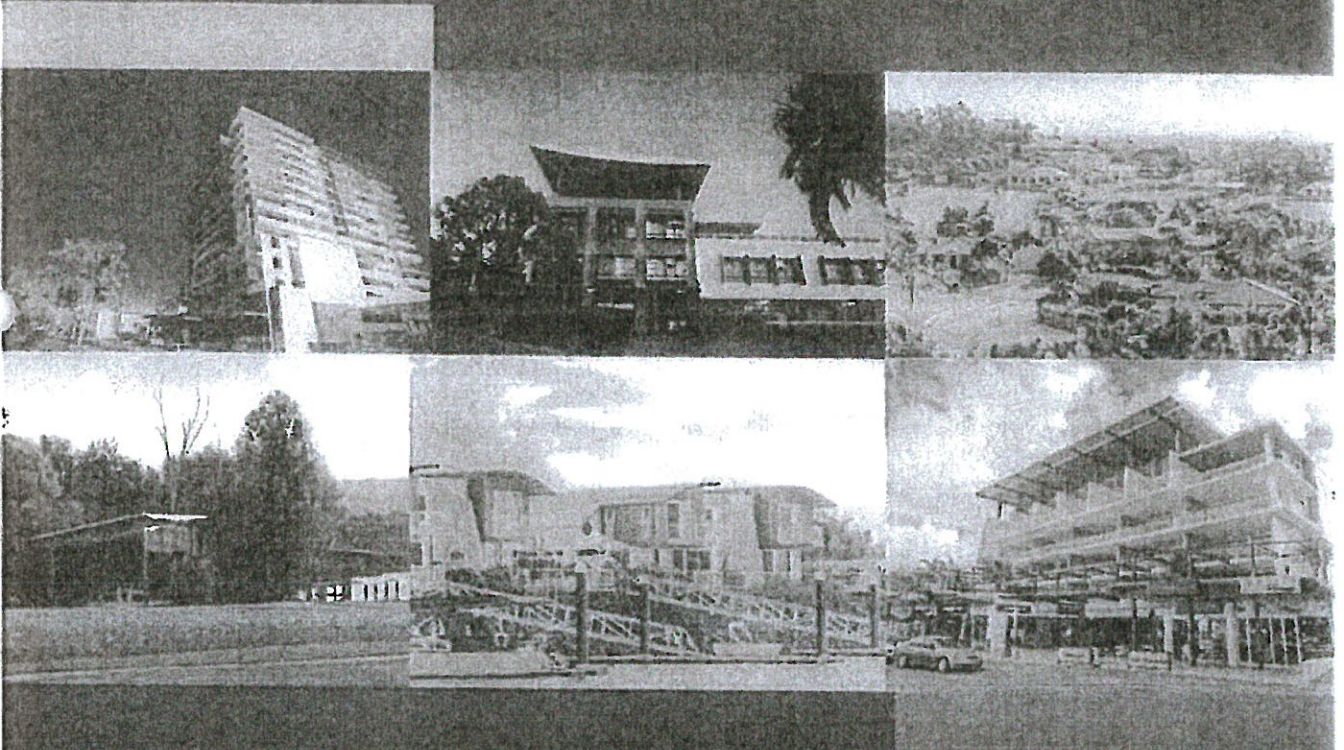
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plan no.  
5782-03-ROL

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AHD  
5782-03-ROL-A  
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ROCKHAMPTON REGIONAL COUNCIL  
These plans are approved subject to the current  
conditions of approval associated with  
Development Permit No. 57179-2  
Dated 10.03.2014

**BROWN**  
*Smart Consulting*



## Engineering Infrastructure Report

Crestwood Estate – Corner Rockhampton – Yeppoon Road &  
Norman Road, Norman Gardens

Residential Development – Stages 3B, 9, 10A, 10B and 11 (80 Lots)

Prepared for Citimark Properties

Report No / Project No. R12063  
September 2013



**COMMERCIAL IN CONFIDENCE**

All intellectual property rights, including copyright, in designs developed and documents created Brown Consulting (QLD) Pty Ltd remain the property of this company. Any use made of such design or document without the prior written approval of Brown Consulting (QLD) Pty Ltd will constitute an infringement of the rights of the company which reserves all legal rights and remedies in respect of any such infringement.

The information, including any intellectual property, contained in this proposal is confidential and proprietary to the Company. It may only be used by the person to whom it is provided for the stated purpose for which it is provided and must not be imparted to any third person without the prior written approval of the Company. The Company reserves all legal rights and remedies in relation to any infringement of its rights in respect of its confidential information.


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Brown Consulting (QLD) Pty Ltd

2012

**DOCUMENT CONTROL**

Engineering Report - 2013

Issue	Date	Issue Details	Author	Checked	Approved
A		Original Issue	MD	RS	
B	13 September 2013	Revised Issue	RS	JD	 Jeff Dacey RPEQ 8386

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### APPENDICES

- A Development Plans
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- C2 CMDG Erosion Requirements
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- F2 Road Hierarchy Plans
- F3 Intersection Sight Distance Plans
- F4 Roadworks Preliminary Longitudinal Sections
- F5 Roadworks Typical Sections
- G Preliminary Electrical Layout Plans

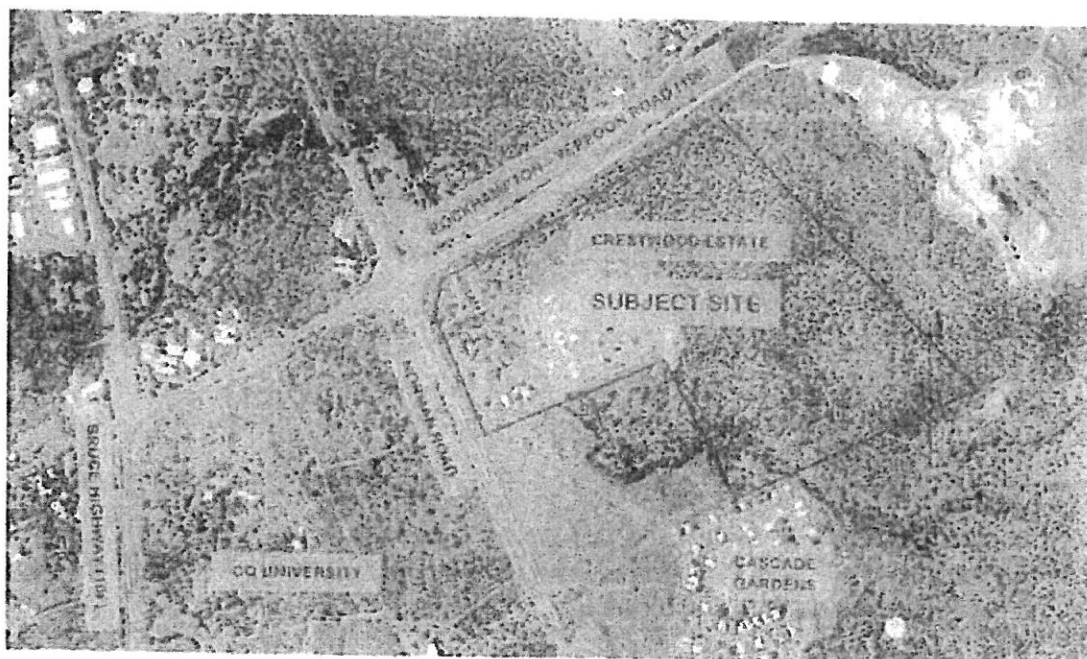


## 1. INTRODUCTION

*Brown Consulting (QLD) Pty Ltd* has prepared the following report to address the civil engineering issues associated with the "Development Permit for Reconfiguration of a Lot" Application for stages 3B, 9, 10A, 10B and 11 of Crestwood Estate. Stages 3B, 9, 10A, 10B and 11 consist of 80 allotments and are a continuation of existing approvals or applications comprising of the fully constructed stage 1 from the formally known Chancellors Estate and stages 2, 3A, 4, 5, 6, 7 and 8 of Crestwood Estate.

This residential subdivision is proposed for development on existing Lot 300 on SP216105 and has previously received Reconfiguration of a Lot approval for stages 2, 3A and 4. An extension of time and permissible change to the approval for stages 5 and 6 has been submitted to Rockhampton Regional Council for assessment and approval. Further to this, an amendment to the Reconfiguration of a Lot approval for stages 7 and 8 is currently under assessment. Operational Works applications have been completed and submitted to the Rockhampton Regional Council for assessment of stages 2, 3A, and 4 in separate applications.

Stages 3B, 9, 10A, 10B and 11 are located to the north of Foulkes Street continuing on from previously constructed stages of Chancellors Estate and the Crestwood Development. The Crestwood Development is located adjacent to CQ University as well as other residential developments along the Norman Road growth corridor in the popular Norman Gardens suburb. The locality of the subject site can be seen in the following illustration.



## 2. STAGING

This proposal is for an 80 lot residential subdivision to be constructed over 5 stages (Stages 3B, 9, 10A, 10B and 11) (refer Appendix B). These proposed 80 allotments are a continuation of existing approvals or applications comprising of the fully constructed stage 1 of the former Chancellors Estate and stage 2, 3A, 4, 5, 6, 7 and 8 of Crestwood Estate. Stage 1 of the formally known Chancellors Estate consists of 65 residential allotments many of which are currently occupied with new homes. Stage 2 of Crestwood Estate comprises of 25 allotments, stage 3A consists of 14 allotments and stage 4 consists of 7 allotments all of which are for residential purposes. In addition, there are 20 allotments in stage 5, 28 allotments in stage 6, 20 allotments in stage 7 and 11 allotments as part of stage 8.

With the proposed 80 allotments included as part of this application for Reconfiguration of a Lot for stages 3B, 9 10A, 10B and 11, stage 3B comprises of 6 allotments, stage 9 includes 16 allotments, stage 10A consists of 14 allotments, stage 10B includes 7 allotments and stage 11 comprises of 37 allotments. In the entire Crestwood development, there are 205 residential allotments excluding the existing 65 allotments as part of the former Chancellors Estate.

A development plan prepared by Capricorn Survey Group is included in Appendix A and a staging plan prepared by Brown Consulting is enclosed in Appendix B.

## 3. GOOD PRACTICE URBAN DESIGN PRINCIPLES

The proposed development has been designed to incorporate best practices for urban developments, which are as follows:

- A mixture of gentle graded blocks, sloping allotments and elevated allotments will be incorporated into the proposed development. This ensures that the majority of the community is catered for from first home owners, to investors to luxury dwellings.
- Single access to Norman Road (Sub-Arterial Road) for the entire development with suitable approaches and sight distances. No allotments will gain access from either Norman Road or Foulkes Street (Major Collector Road). In particular, stage 3B of the development accesses from Geoff Wilson Drive and Stan Jones Street. Geoff Wilson Drive is classified as a Minor Urban Collector standard road and will be extended to provide access to all allotments in stages 9, 10A, 10B and 11 of the Crestwood development.
- Loop/ring and short cul-de-sac roads are used throughout the layout providing short, safe access and manoeuvrability around the development.

- Pedestrian links are strategically positioned throughout the development joining roadways, while providing good access to amenities within the development and also to external roadway networks.
- Stormwater drainage strategies will be incorporated and consist of natural vegetated swales and channels and bio-retention systems, providing low maintenance stormwater polishing and ensuring runoff is managed and discharged with minimal impact to the environment, whilst adding to the appearance of the development.

#### 4. SITEWORKS/EROSION CONTROL/GROUND CONDITION

Siteworks for the development will consist of the following stages:

- Clearing and grubbing
- Bulk earthworks
- Underground services installation
- Roadworks and stormwater drainage works
- Final detailed works
- Vegetation establishment and landscaping

Preliminary earthworks plans for the development have been included in Appendix C1 of this report.

All stockpiles are to be segregated into topsoil, pavements, sands and protected with appropriate silt traps and fences. All stockpiles are to be accessed from the upstream side to reduce erosion and maintain consistency throughout the project construction phase. Erosion control measures are to be implemented during construction in accordance with the Capricorn Municipal Development Guidelines requirements (refer Appendix C2). All erosion control measures are to be closely monitored by the Principal Contractor and re-established after all rain events or due to any vandalism.



## 5. SEWERAGE RETICULATION

A sewerage reticulation strategy has been prepared for the proposed residential development (Refer Appendix D).

Existing gravity sewer reticulation is located within the vicinity of the proposed stages 3B, 9, 10A, 10B and 11 of the Crestwood development. A gravity sewer network is currently installed and operational to service existing allotments in stage 1 of the former Chancellors estate. This gravity sewer network flows into a sewage pump station completed as part of the stage 1 operational works. The sewage pump station has been commissioned by Rockhampton Regional Council and has the capacity to service the entire Crestwood development.

Stages 3B, 9, 10A, 10B and 11 will connect into existing gravity reticulation mains completed as part of the existing stage 1 flowing into the existing sewage pump station. New gravity sewer mains will be installed to service all proposed lots in these stages as shown in Appendix D of this report. No upgrades will be required to existing sewer infrastructure associated with providing sewer reticulation to these particular stages of the development.

With the existing sewage pump station in close proximity to stages 3B, 9, 10A, 10B and 11 of the development, and the pump station having the capacity to service the entire development, a Sewerage Network Analysis has not been requested from Rockhampton Regional Council. If council require a Sewerage Network Analysis, this can be completed as part of the future operational works application.

Appendix D includes concept plans of the proposed sewer reticulation strategy for stages 3B, 9, 10A, 10B and 11. The digital terrain model of the development site completed by Capricorn Survey Group indicates that the site generally has steep terrain, especially on the north eastern side of the development with a natural slope of 1 in 4 in various areas. Gentle grades are more prominent on the north western corner of the site with the entire site generally falling towards the road reserve of Norman Road. Therefore based on the data provided, there appears to be no engineering difficulties with obtaining sufficient grades and cover for the proposed reticulation network to service stages 3B, 9, 10A, 10B and 11 of the development.

## 6. WATER RETICULATION

A water reticulation strategy has been prepared for the subject land (refer Appendix E1).

All internal allotments will be serviced by new reticulation mains situated in all new road reserves and designed to provide good loop connections throughout the site. Internal fire hydrants will be installed on all new watermains at 80m centres and in accordance with the requirements of the Capricorn Municipal Development Guidelines.

The development will connect into the water reticulation mains in Geoff Wilson Drive and Stan Jones Street completed as part of the existing stage 1 of the former Chancellors Estate. New reticulation mains will be constructed from the existing water mains on Geoff Wilson Drive and Stan Jones Street to service stage 3B of the development. New water mains will be extended in the Geoff Wilson Drive road corridor to service stages 9, 10 and 11. Ultimately, the development is serviced by an existing reticulation main in the Foulkes Street road reserve which is serviced by the Norman Road water network.

A water supply network analysis has been requested from Rockhampton Regional Council to ensure that the proposed development does not adversely affect the pressure and flow rates to existing surrounding allotments and infrastructure. The letter requesting this analysis is included in Appendix E2.

## 7. STORMWATER MANAGEMENT

The aim of the stormwater strategy is to try to maintain the natural flowpaths that flow through the development site with minimal realignment. Water quantity and quality objectives are to be met in accordance with the QUDM, CMDG & Healthy Waterways ensuring the surrounding environment, allotments and infrastructure are not adversely affected due to this residential subdivision. Please refer to the Stormwater Management Report for details regarding water quantity and quality measures to be implemented in the development works.



## 8. ROADWORKS/PEDESTRIAN NETWORKS

### 8.1. Roadworks/Road Hierarchy

The proposed development will be accessed from Geoff Wilson Drive and Stan Jones Street (refer Appendix F).

The entire Crestwood development is accessed from Foulkes Street which is classified as a Major Urban Collector Road in accordance with the Capricorn Municipal Development Guidelines. Foulkes Street has an estimated traffic flow of between 3000 – 6000 AADT and has the capacity to adequately cater for the entire Crestwood development.

Stage 3B receives access from Geoff Wilson Drive and Stan Jones Street which services a number of existing allotments and is proposed to service stages 9, 10A, 10B and 11 as well as other stages of the Crestwood development. Geoff Wilson Drive is classified as a Minor Urban Collector road and will ultimately have a traffic flow catchment of approximately 120 – 130 allotments generating 1200 – 1300 AADT. Geoff Wilson Drive will be extended to service allotments in stage 3B and further extensions will be completed to adequately cater for stages 9, 10A, 10B and 11 of the development.

Geoff Wilson Drive will be constructed at 7.5m wide (invert to invert) in a minimum 18.0m wide road reserve. A 1.2m pathway will be constructed along the full length of the proposed section of Geoff Wilson Drive in accordance with the Capricorn Municipal Development Guidelines.

To monitor and control speed environments through the residential subdivision and in particular on large sweeping bends, the horizontal curve on Geoff Wilson Drive in stage 11 (crossing the stormwater culverts) has been assigned an advisory speed environment of 40km/h around the curve. Advisory signs for a 40km/h speed will be installed at suitable distances from the curve and in accordance with the requirements of the Manual of Uniform Traffic Control Devices (MUTCD). By implementing the advisory speed for the horizontal curve on Geoff Wilson Drive, safe intersection sight distance can be adequately achieved and the safety of residents and pedestrians taken into consideration.

Stan Jones Street will be extended as part of the roadworks for stage 3B of the development. The existing portion of Stan Jones Street in stage 1 is classified as a Minor Urban Collector as it will have an overall catchment of greater than 75 allotments. The proposed extension of Stan Jones Street will be constructed as an Urban Access Street standard and will service between 25 and 75 allotments and will therefore generate an AADT of between 250 and 750. This proposed road will be 7.5m wide (invert to invert) and be constructed in a minimum 16.0m wide road reserve. No pathway will be constructed along the proposed roadway.

It is proposed that Road H in stage 11 will be constructed as an Urban Access Street standard road in accordance with the Capricorn Municipal Development Guidelines. In this development, Road H will service around 25 allotments and generate 250 AADT. With an Urban Access Street capable of servicing 25 – 75 allotments, Road H will have the capacity for extension to service future allotments as part of neighbouring developments. Road H will be constructed at 7.5m wide (invert to invert) in a minimum 16.0m road reserve. No pathway is required for this roadway.

Roads B, C, E, F, G and I will be constructed as an Urban Access Place in accordance with the Capricorn Municipal Development Guidelines. These roadways will service under 25 allotments and have a traffic flow no greater than 250 AADT allowing an Urban Access Place standard road to be adequate. They will be constructed at 5.5m wide (invert to invert) in a minimum 16.0m wide road reserve. No pathway is required for these roads.

It is proposed that allotments 203 and 204 as part of stage 9 of the development will access from Bruce Hiskins Court which was constructed as part of the existing stage 1 of the former Chancellors Estate. Bruce Hiskins Court is currently an Urban Access Street standard road and services 20 allotments generating an AADT of 200. Therefore, Bruce Hiskins Court can adequately cater for the accesses of two additional allotments as part of stage 9 of the Crestwood development. Two separate accesses will be constructed to service lots 203 and 204 at the head of the cul-de-sac in Bruce Hiskins Court. Furthermore, allotments 202 and 205 will access from the Y head at the end of Road F in stage 9 of the development.

## 8.2. Intersection Sight Distance

The intersection of Geoff Wilson Drive and Road G in Stage 10 has been strategically designed and planned to comply with the sight distance requirements in accordance with the Department of Transport and Main Roads Queensland, Road Planning Design Manual (RPDM), Section 13 – Intersections at Grade. With Road G intersecting Geoff Wilson Drive in close proximity to a horizontal curve, the intersection and subsequent road corridors have been modelled and designed in order to meet the sight distance requirements of the RPDM. With Geoff Wilson Drive being a Minor Urban Collector road, a design speed of 50km/h is implemented for the road corridor as per the Capricorn Municipal Development Guidelines.

As per Table 13.5 of Section 13 – Intersections at Grade from the RPDM, the Safe Intersection Sight Distance (SISD) for a road with a design speed of 50km/h and a desirable 2.5 second reaction time is 96.0m. Geoff Wilson Drive has a longitudinal grade towards the intersection of Road G of approximately 0.5% – 3.0%. In accordance with Table 13.6 of Section 13 – Intersections at Grade from the RPDM, no correction has been applied to the Safe Intersection Sight Distance (SISD) due to the minimal longitudinal grade of the roadway within the vicinity of the intersection. Therefore, for the Geoff Wilson Drive and Road G intersection, the Safe Intersection Sight Distance (SISD) for the North Eastern leg on Geoff Wilson Drive is 96.0m.

As stated in section 8.1 – Roadworks/Road Hierarchy of this Engineering Infrastructure Report, it is proposed that an advisory speed environment of 40km/h be implemented for the large horizontal curve on Geoff Wilson Drive crossing the culverts in stage 11 of the development. Therefore, this will reduce the Safe Intersection Sight Distance (SISD) in the south western direction for vehicles performing a right hand turn from Road G onto Geoff Wilson Drive. This allows adequate sight distance to be achieved for the south western leg of Geoff Wilson Drive for the Road G intersection. As per the requirements of Section 13 – Intersections at Grade from the RPDM, the Safe Intersection Sight Distance (SISD) for a 40km/h design speed and a 2.5 second desirable reaction time is 72.0m.

This intersection has been designed to meet these requirements for sight distance in horizontal geometry with the minimum distance from the lip of kerb of Geoff Wilson Drive to the vehicle's driver set at 3.0m as per Section 13 – Intersections at Grade from the RPDM and this is illustrated in Appendix F of this report. With Geoff Wilson Drive having a longitudinal grade of around 0.5% – 3.0% on the approaches of the intersection, there is no difficulties with obtaining sight distance in relation to the vertical geometry of the intersecting Geoff Wilson Drive and Road G. This is detailed on the Geoff Wilson Drive longitudinal section included in Appendix F.



Furthermore, the other prominent intersection for sight distance issues within this stage of the development is that of the intersection of Geoff Wilson Drive and Road I in stage 11. This intersection has been checked to comply with the sight distance requirements as outlined in the Road Planning Design Manual (RPDM). With Geoff Wilson Drive classified as a Minor Urban Collector standard road and therefore having a speed environment of 50km/h, the Safe Intersection Sight Distance (SISD) required for this intersection is 96.0m in both directions. The vertical geometry of Geoff Wilson Drive is minimal within the vicinity of the intersection; therefore no correction of this distance is required as per the requirements outlined in the RPDM. Included in Appendix F of this Engineering Infrastructure Report is a plan detailing the sight distance available for this intersection. Road I has been strategically designed and planned to intersect with Geoff Wilson Drive at a suitable horizontal and vertical geometry and therefore meets the requirements for Safe Intersection Sight Distance (SISD) as indicated.



### 8.3. Summary

Preliminary longitudinal sections of all roads are illustrated in Appendix F. All proposed roads will be built in accordance with the Capricorn Municipal Development Guidelines with all public roads having a maximum slope of 1:6. Private driveways will have a maximum longitudinal grade of 1:5 in accordance with the Capricorn Municipal Development Guidelines. The cross sectional profiles of each road will be as per standard drawings in the Capricorn Municipal Development Guidelines. Detailed longitudinal and cross sections will be included in the future Operational Works Application.

The proposed road hierarchy plan, roadworks plan, sight distance detail plans, preliminary typical sections and longitudinal sections of all roads are included in Appendix F of this engineering report.

## 9. ELECTRICAL AND TELECOMMUNICATION

Existing underground electrical and underground telecommunication services were installed as part of stage 1 of the former Chancellors Estate. These existing services could be utilised to service stages 3B, 9, 10A, 10B and 11 of this development (refer Appendix G). Extensions of the electrical and telecommunication services can be completed to service stage 3B and further extensions can be completed in the road reserve of Geoff Wilson Drive to services stages 9, 10A, 10B and 11. Electrical reticulation design plans will be completed by Ergon Energy, which will be included with the future Operational Works Applications. NBN Co will be engaged to supply a telecommunications offer of supply for ensuring the most up to date services are available for this development.

## 10. CONCLUSION

There appears to be no engineering infrastructure difficulties with the proposed stages 3B, 9, 10A, 10B and 11 of the residential subdivision 'Crestwood Estate' located on the corner of Rockhampton – Yeppoon Road and Norman Road, Norman Gardens. A review of the services proposed for this development and their impact on surrounding services, indicates that there is no impediment to development.







There is a workable design strategy for traffic and access, stormwater drainage, sewerage reticulation, water supply, electricity and telecommunications. Minor alterations in design may eventuate from future applications, however the fundamentals of the design strategy ensures that service provisions will not pose a serious constraint to development.

If you should have any questions regarding this report, please do not hesitate to contact the Brown Consulting Office in Rockhampton.

## APPENDIX A – Development Plans



# **Residential Lots**

-  Stage 3B - 6 Lots
-  Stage 9 - 16 Lots + Public Use Land
-  Stage 10A - 14 Lots + Stage 10B Englebo
-  Stage 10B - 7 Lots
-  Stage 11 - 37 Lots + Public Use Land
-  Public Use Land

## **IMPORTANT NOTE**

This plan was prepared to accompany a notification of a Sub Application to Rockhampton Regional Council and should not be used for any other purpose.

The dimensions and area shown on this plan are for information only and do not constitute a guarantee of accuracy. The Council is not responsible for any errors or omissions on this plan. The Council is not responsible for any errors or omissions on this plan. The Council is not responsible for any errors or omissions on this plan.

This is a site plan and does not show the location of the subject land.

## **Citilmark Properties**

**Crustwood Estate**  
Geoff Wilson Drive,  
Norman Gardens

## **Reconfiguration of a Lot** Stages 3B, 9, 10A, 10B & 11

Lot 300 on SP216105  
& Lot 1 on RP518770  
Parish of Murchison  
County of Livingstone

Rockhampton Regional Council

DATE	DESCRIPTION	APPROVED BY

**CSG**  
CITILMARK PROPERTY GROUP (Pty) Ltd

1:1000 @ A1

1 of 1

5782-03-ROL

AHD

5782-03-ROL-A

A

## APPENDIX B – Staging Plan



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# BROWN

*Smart Consulting*

INCORPORATING GRAHAM SCOTT & ASSOCIATES

## CRESTWOOD ESTATE STAGES 3B, 9, 10 AND 11

R12063 - Staging Plan

NOT TO SCALE

### LEGEND

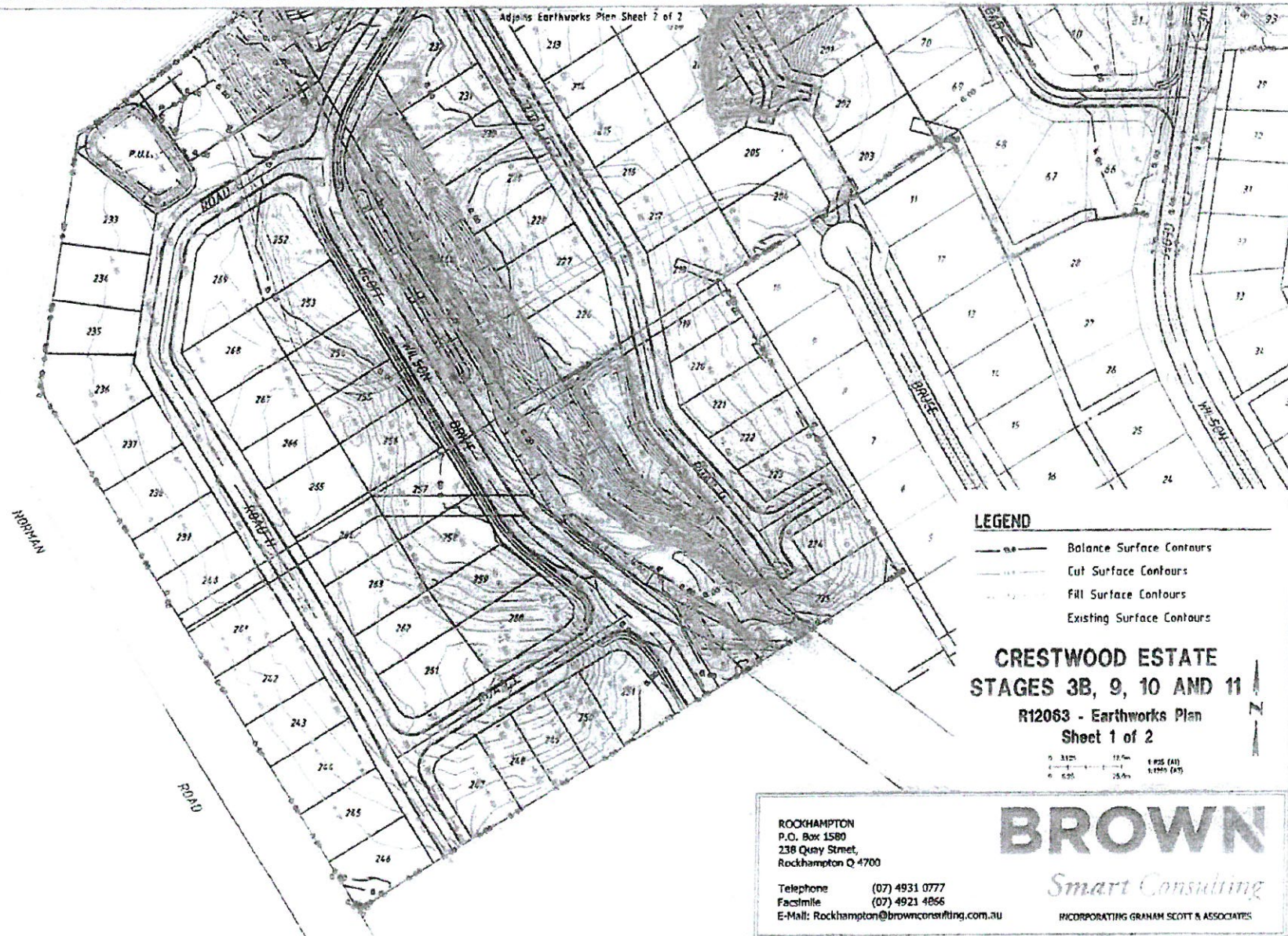
-  New Roadwork  
 Stage Boundaries

STAGE	ALLOTMENTS
3B	5
9	16
10A	14
10B	7
11	38



## APPENDIX C1 – Preliminary Earthworks Plans







- Balance Surface Contours
- Cut Surface Contours
- Fill Surface Contours
- Existing Surface Contours

**R12063 - Earthworks Plan**  
**Sheet 2 of 2**

0 5125 12.5m 0.62% (A1)  
 1 5125 12.5m 0.62% (A1)  
 2 5125 12.5m 0.62% (A1)

ROCKHAMPTON - YEPPOON

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## APPENDIX C2 – CMDG Erosion Requirements

# **CAPRICORN MUNICIPAL DEVELOPMENT GUIDELINES**

## **CONTROL OF EROSION AND SEDIMENTATION**

**C211**

### **CONSTRUCTION SPECIFICATION**

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### Keeping the Capricorn Municipal Development Guidelines up-to-date

The Capricorn Municipal Development Guidelines are living documents which reflect progress of municipal works in the Capricorn Region. To maintain a high level of currency that reflects the current municipal environment, all guidelines are periodically reviewed with new editions published and the possibility of some editions to be removed. Between the publishing of these editions, amendments may be issued. It is important that readers assure themselves they are using current guideline, which should include any amendments which may have been published since the guideline was printed. A guideline will be deemed current at the date of development approval for construction works.

## GENERAL

### C211.01 SCOPE

1. The work to be executed under this Specification consists of the construction of structures and the implementation of measures to control erosion and sedimentation. These may be temporary or permanent.
2. The Contractor shall plan and carry out the whole of the Works to avoid erosion and sedimentation of the site, surrounding country, watercourses, waterbodies and wetlands in compliance with the requirements of the Environmental Protection Act, 1994 and Amendments, Regulations and Policies, and Local Government's Adopted Policies where available.

### C211.02 REFERENCE DOCUMENTS

1. Documents referenced in this Specification are listed in full below whilst being cited in the text in the abbreviated form or code indicated.

**Documents  
Standards Test  
Methods**

#### (a) Council Specifications

- |      |   |                       |
|------|---|-----------------------|
| C212 | - | Clearing and Grubbing |
| C213 | - | Earthworks            |
| C273 | - | Landscaping           |

#### (b) QLD State Legislation

The Environmental Protection Act, 1994 and Amendments, Regulations and Policies

#### (c) Other

- Institution of Engineers Australia, Queensland Division (IEAQ)
- Soil Erosion and Sediment Control - Engineering Guidelines for Queensland Construction Sites, 1996.
- Brisbane City Council (BCC)
- Integrated Environmental Management System Manual, 1997.

### C211.03 EROSION AND SEDIMENTATION CONTROL STRATEGY

1. For consideration of erosion and sedimentation control measures, the site shall be divided into sections based on the catchment area draining to each permanent drainage structure in the works. In addition to the area bounded by the road reserve, the sections shall include:

**Site Sections**

- (a) access and haulage tracks,
- (b) borrow pits and
- (c) compound areas, such as Contractor's facilities and concrete batching areas.



## **CONTROL OF EROSION AND SEDIMENTATION**

2. Prior to pre-start meeting, the Contractor shall submit to Local Government an Erosion and Sedimentation Control Strategy for each of the nominated sections. This Strategy shall be superimposed on half-sized Erosion Control and Stormwater Management drawings of the works and shall be detailed for each catchment area of the works. The Strategy should incorporate the measures included on the plan to protect adjoining landowners, significant areas and receiving waters. The contractor shall incorporate into the Strategy those additional measures deemed necessary to accommodate the proposed construction methods and construction sequence to be employed for the construction of the works. **Section Plan**
3. The Strategy shall consist of scale diagrams indicating: **Plan Inclusions**
- (a) features of the site including contours and drainage paths,
  - (b) relevant construction details of all erosion and sedimentation control structures to be employed,
  - (c) all permanent and temporary erosion and sedimentation control measures, including the control measures to be implemented in advance of, or in conjunction with, clearing and grubbing operations as required under the Specification for CLEARING AND GRUBBING C212,
  - (d) an order of works based upon construction and stabilisation of all culverts and surface drainage works at the earliest practical stage, and
  - (e) proposed time schedules for construction of structures and implementation of measures to control erosion and sedimentation.
  - (f) Strategies for identification and protection of vegetation as required by Local Government.
4. The IEAQ Guidelines and the Brisbane City Council Manual provides guidance on typical permanent and temporary erosion and sedimentation control measures which may be required and guidance in the preparation of an Erosion and Sedimentation Control Plan. **Guidance**
5. No work shall commence until Local Government has approved the Erosion and Sedimentation Control Strategy. Such approval shall not relieve the Contractor of the full responsibility to provide whatever measures are required for effective erosion and sedimentation control at all times. The strategy shall be provided to Local Government prior to the pre-start meeting. **Contractor's Responsibility**
6. The Contractor shall adhere to the approved Erosion and Sedimentation Control Strategy. The Contractor shall submit a revised Strategy for approval by Local Government in advance of intended variation from the approved Strategy. **Adherence to Plan**

### **C211.04 EROSION AND SEDIMENTATION CONTROL MEASURES**

1. Erosion and sedimentation control measures shall include, but shall not be limited to, the following: **Scope**
- (a) The minimisation of disturbance of the natural ground and retention of vegetation.
  - (b) The installation of permanent drainage structures before the removal of topsoil and commencement of earthworks for formation within the catchment area of each structure.
  - (c) The prompt completion of all permanent and temporary drainage works, once commenced, to minimise the period of exposure of disturbed areas.
  - (d) The stabilisation of diversion and catch drains to divert uncontaminated runoff from outside the site, clear of the site. Catch drains shall be installed and lined before the adjacent ground is disturbed and the excavation is commenced.

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## CONTROL OF EROSION AND SEDIMENTATION

- (e) The passage of uncontaminated water through the site without mixing with contaminated runoff from the site.
- (f) The provision of contour and diversion drains across exposed areas before, during and immediately after clearing and the re-establishment and maintenance of these drains during soil removal and earthworks operations.
- (g) The provision of sediment filtering or sediment traps, in advance of and in conjunction with earthworks operations, to prevent contaminated water leaving the site.
- (h) The restoration of the above drainage and sedimentation control works on a day to day basis to ensure that no disturbed area is left without adequate means of containment and treatment of contaminated water.
- (i) The limitation of areas of erodible material exposed at any time to those areas being actively worked.
- (j) The minimisation of sediment loss during construction of embankments by means such as temporary or reverse superelevations during fill placement, constructing berms along the edge of the formation leading to temporary batter flumes and short term sediment traps.
- (k) The progressive vegetation of the site, in accordance with the Specification for LANDSCAPING, as work proceeds.

### PERMANENT EROSION AND SEDIMENTATION CONTROL

#### C211.05 EARTHWORKS FOR PERMANENT EROSION AND SEDIMENTATION CONTROL BASINS

1. Earthworks for permanent erosion and sedimentation control basins shall be constructed to the planned levels and dimensions shown on the Drawings or such levels and dimensions as determined by the Superintendent. *Planned Levels*
2. The entire storage and embankment foundation area of permanent erosion and sedimentation control basins shall be cleared in accordance with the Specification for CLEARING AND GRUBBING C212 and shall be stripped of topsoil and any unsuitable material under embankments removed in accordance with the Specification for EARTHWORKS C213. *Site Preparation*
3. The embankments shall be constructed in accordance with the Specification for EARTHWORKS C213. *Compaction Requirements*

#### C211.06 INLETS, SPILLWAYS AND LOW FLOW OUTLETS FOR SEDIMENTATION CONTROL BASINS AND SEDIMENT TRAPS

1. Inlets and spillways shall be constructed using rock filled woven galvanised steel mattresses laid on a needle punched, mechanically bonded, non-woven geotextile filter fabric, unless detailed otherwise shown on the Drawings. The rock filled mattresses shall be laid in accordance with the manufacturer's instructions and Specification. *Rock Mattresses*
2. A low flow outlet consisting of a 150 mm diameter plastic pipe shall be installed unless detailed otherwise as shown in the Drawings. *Plastic Pipe Outlet*

## **CONTROL OF EROSION AND SEDIMENTATION**

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### **C211.07 CLEANING SEDIMENTATION CONTROL STRUCTURES**

1. The Contractor shall clean out permanent sedimentation control structures, cleaning out whenever the accumulated sediment has reduced the capacity of the structure by 50 per cent or more, or whenever the sediment has built up to a point where it is less than 300 mm below the spillway crest. All permanent sedimentation control structures shall be cleaned out by the Contractor prior to Practical Completion of the Works.

**Contractor's  
Responsibility**

2. Accumulated sediment shall be removed from permanent sedimentation control structures in such a manner as not to damage the structures. The sediment removed shall be disposed of in such locations that the sediment will not be conveyed back into the construction areas or into watercourses. The Contractor shall provide and maintain suitable access to permanent sedimentation control structures to allow cleaning out in all weather conditions.

**Removal of  
Sediment**

### **TEMPORARY EROSION AND SEDIMENTATION CONTROL**

#### **C211.08 GENERAL**

1. The Contractor shall ensure that effective erosion and sedimentation control is provided at all times.

**Contractor's  
Responsibility**

2. Runoff from all areas where the natural surface is disturbed by construction, including access roads, depots and stockpile sites, shall be free of pollutants before it is either dispersed to stable areas or directed to natural watercourses. The Contractor shall be responsible for all temporary erosion and sedimentation control measures required for this purpose.

**Pollutant Free**

3. The Contractor shall provide and maintain slopes, crowns and drains on all excavations and embankments to ensure satisfactory drainage at all times. Water shall not be allowed to pond on the works unless such ponding is part of an approved Erosion and Sedimentation Control Strategy.

**Maintenance  
by Contractor**

#### **C211.09 TEMPORARY DRAINS**

1. Runoff from areas exposed during the work shall be controlled by construction of temporary contour drains and/or temporary diversion drains. Generally, a temporary contour drain or temporary diversion drain takes the form of a channel constructed across a slope with a ridge on its lower side. They may require progressive implementation and frequent alteration as the work progresses.

**Control of  
Runoff**

2. Contour drains, which follow points on the natural surface of approximately the same elevation, shall be provided immediately after a construction site is cleared to intercept and divert runoff from the site to nearby stable areas at non-erosive velocities. Contour drains shall be formed with a grade of neither less than 1 per cent nor more than 1.5 per cent and shall be spaced at intervals of neither less than 20 m nor more than 50 m, depending on the erodibility of the exposed soil.

**Contour  
Drains**

3. Diversion drains shall be provided across haul roads and access tracks when such roads and access tracks are identified as constituting an erosion hazard due to their steepness, soil erodibility or potential for concentrating runoff flow. Diversion drains shall be formed to intercept and divert runoff from the road or track to stable outlets. Spacing of diversion drains shall not be greater than that required to maintain runoff at non-erosive velocities.

**Diversion  
Drains**

---

## CONTROL OF EROSION AND SEDIMENTATION

### C211.10 TEMPORARY SEDIMENT TRAPS

1. Temporary sediment-trapping devices shall be provided during construction to remove sediment from sediment-laden runoff flowing from areas of 0.5 hectares or more before the runoff enters natural watercourses or adjacent land.

***Sediment  
Traps***

### C211.11 BATTER PROTECTION

1. The Contractor shall take all necessary action to protect batters from erosion.
2. Scour of newly-formed fill batters during and after embankment construction shall be minimised by diverting runoff from the formation away from the batter until vegetation is established.

***Contractor's  
Responsibility***

***Scour Control***

### C211.12 MAINTENANCE AND INSPECTION

1. The Contractor shall inspect all temporary erosion and sedimentation control works after each rain period and during periods of prolonged rainfall. Any defects revealed by such inspections shall be rectified immediately and these works shall be cleaned, repaired and augmented as required, to ensure effective erosion and sedimentation control thereafter.

***Contractor's  
Responsibility***

2. The Contractor shall provide and maintain access for cleaning out sedimentation control works.

***Access***

### C211.13 REMOVAL

1. All temporary erosion and sedimentation control works shall be removed by the Contractor when revegetation is established on formerly exposed areas before the end of the Contract. All materials used for the temporary erosion and sedimentation control works shall be removed from the site or otherwise disposed by the Contractor.

***Contractor's  
Responsibility***



APPENDIX D – Preliminary Sewerage Layout  
Plans

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# LEGEND

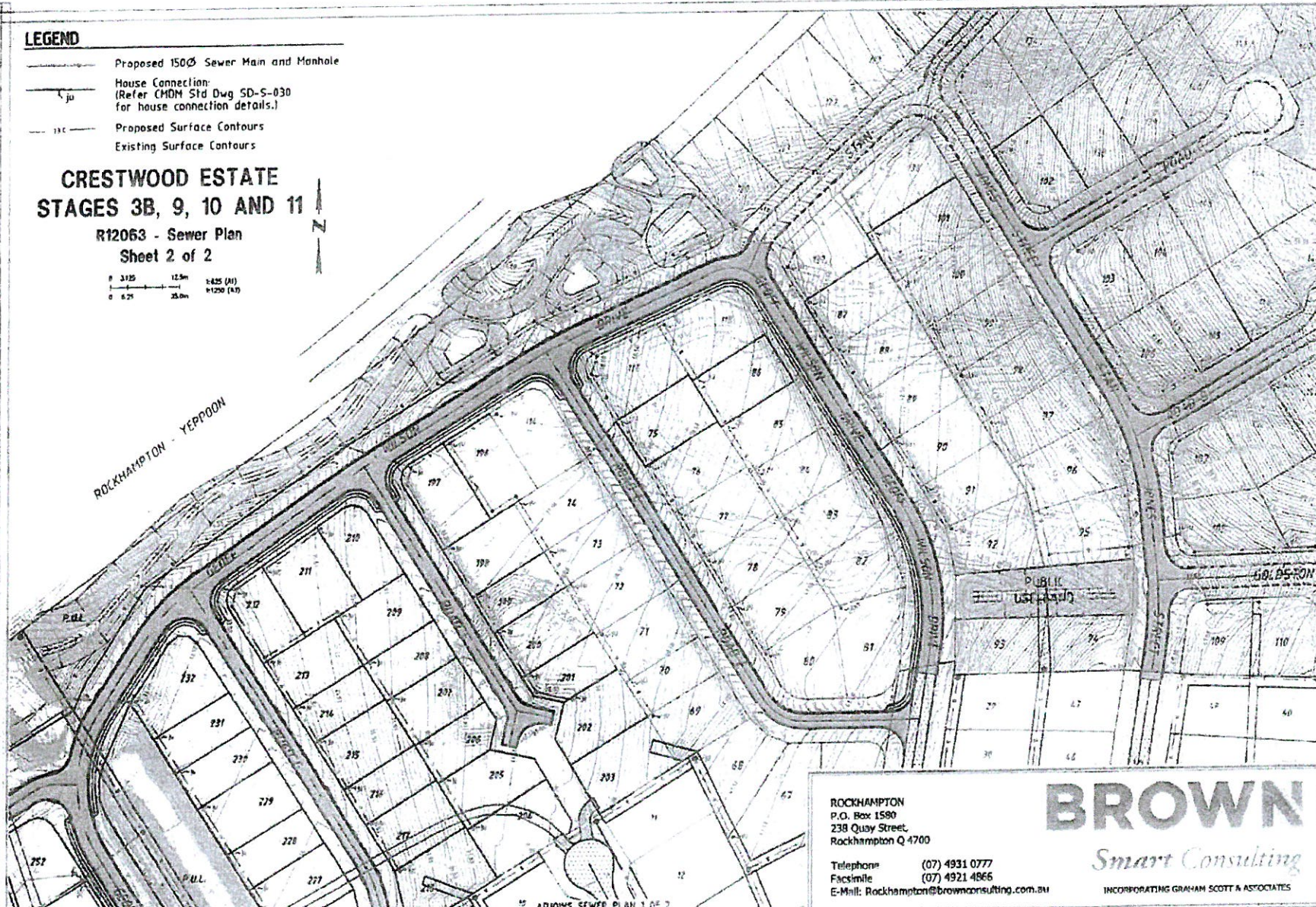
- Proposed 150Ø Sewer Main and Manhole
- House Connection:  
(Refer CDM Std Dwg SD-S-030  
for house connection details.)
- Proposed Surface Contours
- Existing Surface Contours

## CRESTWOOD ESTATE STAGES 3B, 9, 10 AND 11

R12063 - Sewer Plan  
Sheet 2 of 2

1:125 (A1)  
1:1250 (A3)

ROCKHAMPTON - YEPPON



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# BROWN

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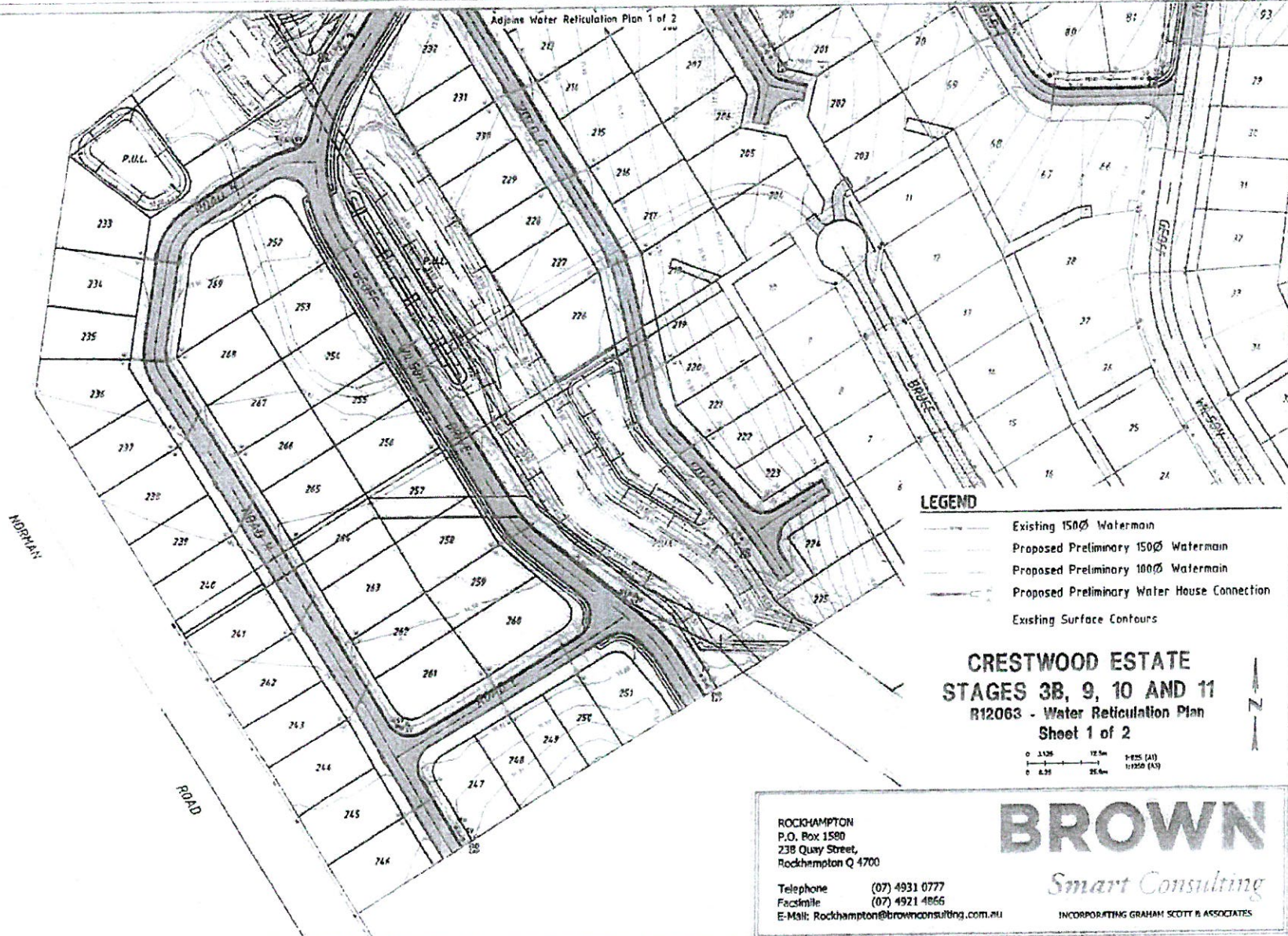
INCORPORATING GRAHAM SCOTT & ASSOCIATES

ADJOINS SEWER PLAN 1 OF 2

APPENDIX E1 – Preliminary Water Reticulation  
Plans

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- LEGEND**
- Existing 150Ø Watermain
  - Proposed Preliminary 150Ø Watermain
  - Proposed Preliminary 100Ø Watermain
  - Proposed Preliminary Water House Connection
  - Existing Surface Contours

**CRESTWOOD ESTATE  
STAGES 3B, 9, 10 AND 11  
R12063 - Water Reticulation Plan  
Sheet 1 of 2**

0 1:125 12.5m  
0 1:250 25.0m  
1:125 (A1)  
1:250 (A2)



ROCKHAMPTON  
P.O. Box 1580  
238 Quay Street,  
Rockhampton Q 4700  
  
Telephone (07) 4931 0777  
Facsimile (07) 4921 4866  
E-Mail: Rockhampton@brownconsulting.com.au

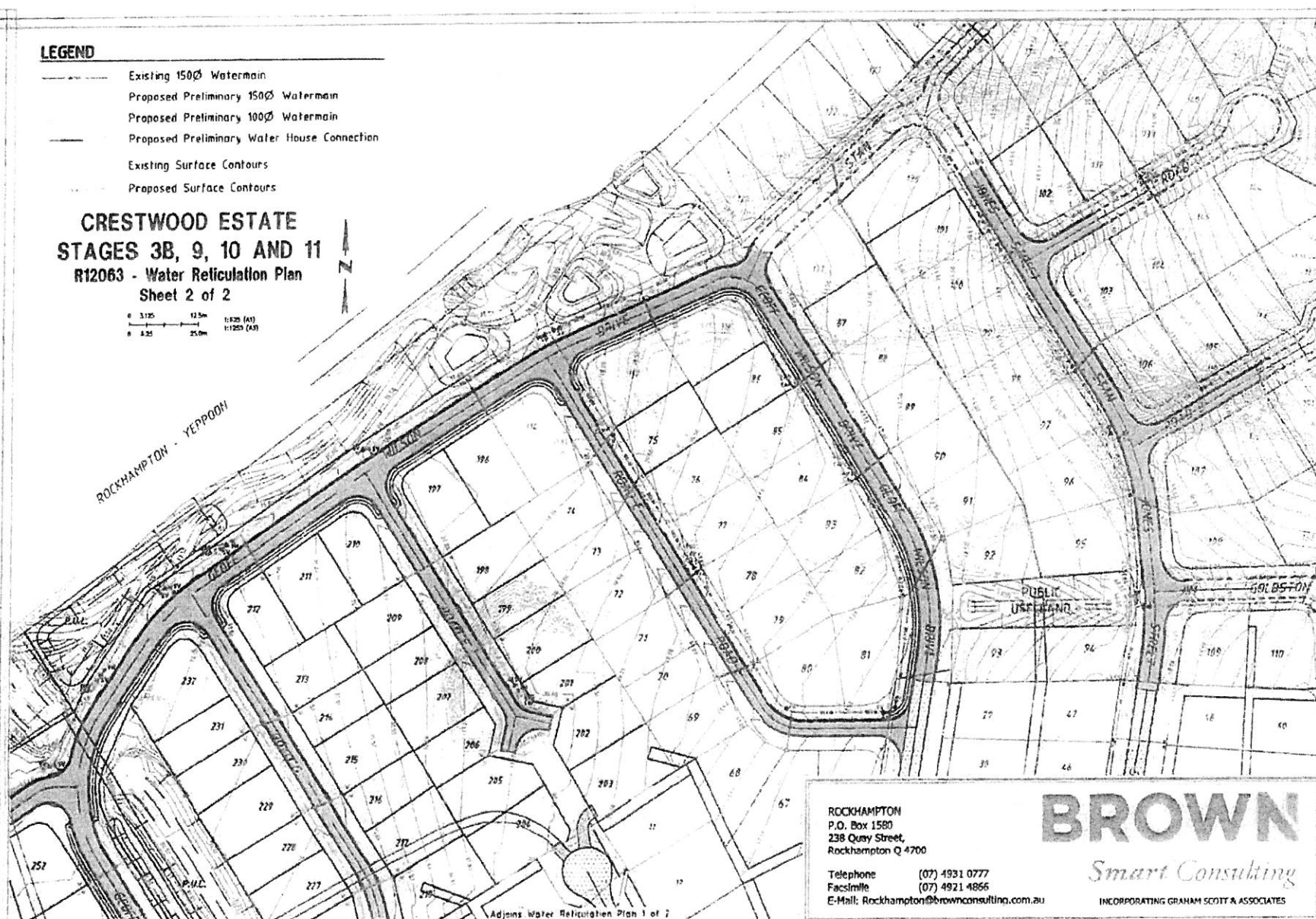
**BROWN**  
*Smart Consulting*  
INCORPORATING GRAHAM SCOTT & ASSOCIATES

# **LEGEND**

- Existing 150Ø Watermain
- Proposed Preliminary 150Ø Watermain
- Proposed Preliminary 100Ø Watermain
- Proposed Preliminary Water House Connection
- Existing Surface Contours
- Proposed Surface Contours

## **CRESTWOOD ESTATE STAGES 3B, 9, 10 AND 11 R12063 - Water Reticulation Plan Sheet 2 of 2**

0 3.125 12.5m 1:125 (A1)  
0 6.25 25.0m 1:1250 (A3)



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APPENDIX E2 – Letter Requesting Water Supply  
Network Analysis

---



Our Ref: R12063/RSsj/Ltr.FRW.Request.for.private.works.quotation.stages.5-11  
Contact: Russell Schirmer

**BROWN**

Fitzroy River Water  
PO Box 1860  
ROCKHAMPTON QLD 4700

16 April 2013

Attention: Mr Peter Wheelhouse

Dear Peter,

**Request for Private Works Quotation**  
**Crestwood Estate - Corner Rockhampton/Yeppoon Road & Norman Road, North**  
**Rockhampton**  
**Residential Development - Stages 5, 6, 7, 8, 9, 10 and 11**

On behalf of our client, Citimark Properties QLD Pty Ltd, we hereby request Rockhampton Regional Council/Fitzroy River Water to prepare a Private Works Quotation to carry out a water supply network analysis for the above-mentioned development.

This request for private works quotation is in relation to stages 5, 6, 7, 8, 9, 10 and 11 with all proposed lots included in these stages to be serviced with water reticulation.

To assist you with this application we have enclosed the following:


- A plan of the proposal showing the ultimate development

Please note your Quotation should be addressed to:-

Citimark Properties QLD Pty Ltd  
C/- Brown Consulting QLD Pty Ltd  
PO Box 1580  
ROCKHAMPTON QLD 4700

Should you have any questions at all, please do not hesitate to contact our office and speak with Russell Schirmer.

Yours sincerely  
**Brown Consulting (Qld) Pty Ltd**

  
Russell Schirmer  
Civil Manager - Rockhampton

Encl. Site Plan  
Cc Citimark Properties (QLD) Pty Ltd

**Private Works**  
**Application for Water and Sewerage Services**  
 ABN 59 923 623 766



Phone: 4932 9000 or 1300 22 55 77 Fax: 4936 8862 or 1300 22 55 79  
 Address: PO Box 1860, Rockhampton QLD 4700  
 Email: [enquiries@rrc.qld.gov.au](mailto:enquiries@rrc.qld.gov.au)

**FITZROY**  
**RIVER WATER**

Business Unit of RRC

[www.frw.com.au](http://www.frw.com.au)

**PRIVACY NOTICE:** Rockhampton Regional Council is collecting the personal information you supply on this form for the purpose of processing your application for water and sewerage services. Your personal details will not be disclosed to any other person or agency external to Council without your consent unless required or authorised by law.

Separate application forms to be completed for water and sewerage requests			
Applicant's Name:	Russell Schirmer		
Company Name:	Citimark Properties QLD Pty Ltd		
Postal Address:	C/- Brown Consulting 238 Quay St Rockhampton QLD 4700		
Telephone:	4931 0777	Mobile:	0418 743 523
Fax:	4921 4866	Email:	<a href="mailto:Russell.Schirmer@brownconsulting.com.au">Russell.Schirmer@brownconsulting.com.au</a>
Property Owner's Name:	Citimark Properties QLD Pty Ltd		
Work Site Address:	300 Yeppoon Road, Norman Gardens		
Site Description: (e.g. plan number)	Lot 300 SP216105		
Full description of work request. <i>Please attach applicable site plans and drawings.</i> (Note: 50% deposit is payable on acceptance of a private works quotation)			
Water Supply Network Analysis			
Applicant's Signature:		Date:	

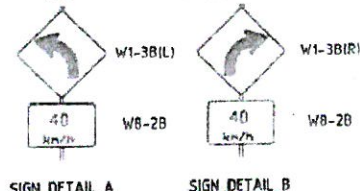
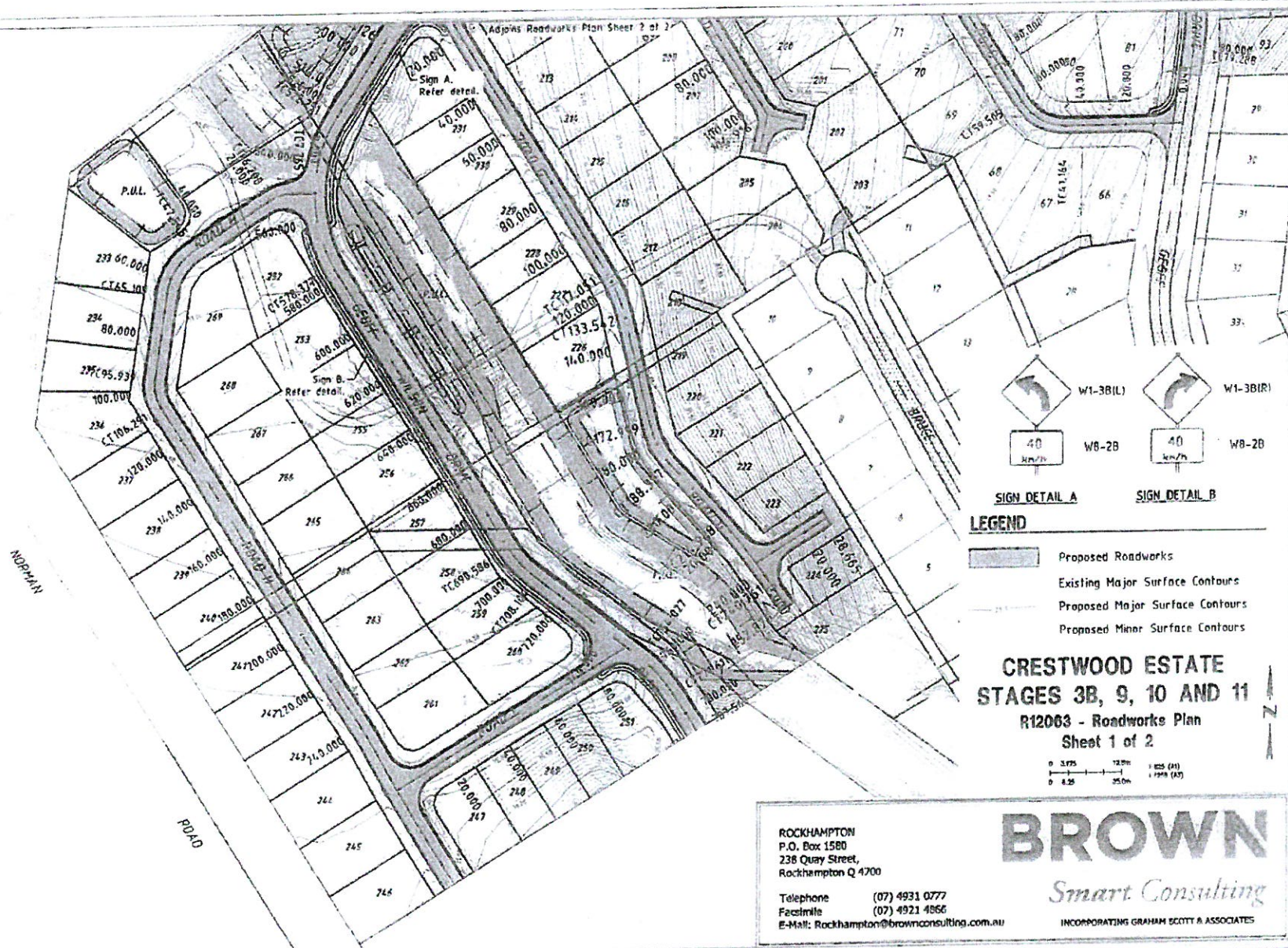
Please return completed form to: Customer Service, Rockhampton Regional Council,  
 PO Box 1860 Rockhampton QLD 4700  
 Fax: 4936 8862 or 1300 22 55 79  
 Email: [enquiries@rrc.qld.gov.au](mailto:enquiries@rrc.qld.gov.au)

OFFICE USE ONLY	Date Rec'd	Pathways Application No.	CSO Initials
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Customer Service > Dataworks > Network Services Administration Officer

## APPENDIX F1 – Roadworks Plans



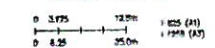


SIGN DETAIL A SIGN DETAIL B

**LEGEND**

- Proposed Roadworks
- Existing Major Surface Contours
- Proposed Major Surface Contours
- Proposed Minor Surface Contours

**CRESTWOOD ESTATE  
STAGES 3B, 9, 10 AND 11  
R12063 - Roadworks Plan  
Sheet 1 of 2**



ROCKHAMPTON  
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E-Mail: [Rockhampton@brownconsulting.com.au](mailto:Rockhampton@brownconsulting.com.au)





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# LEGEND

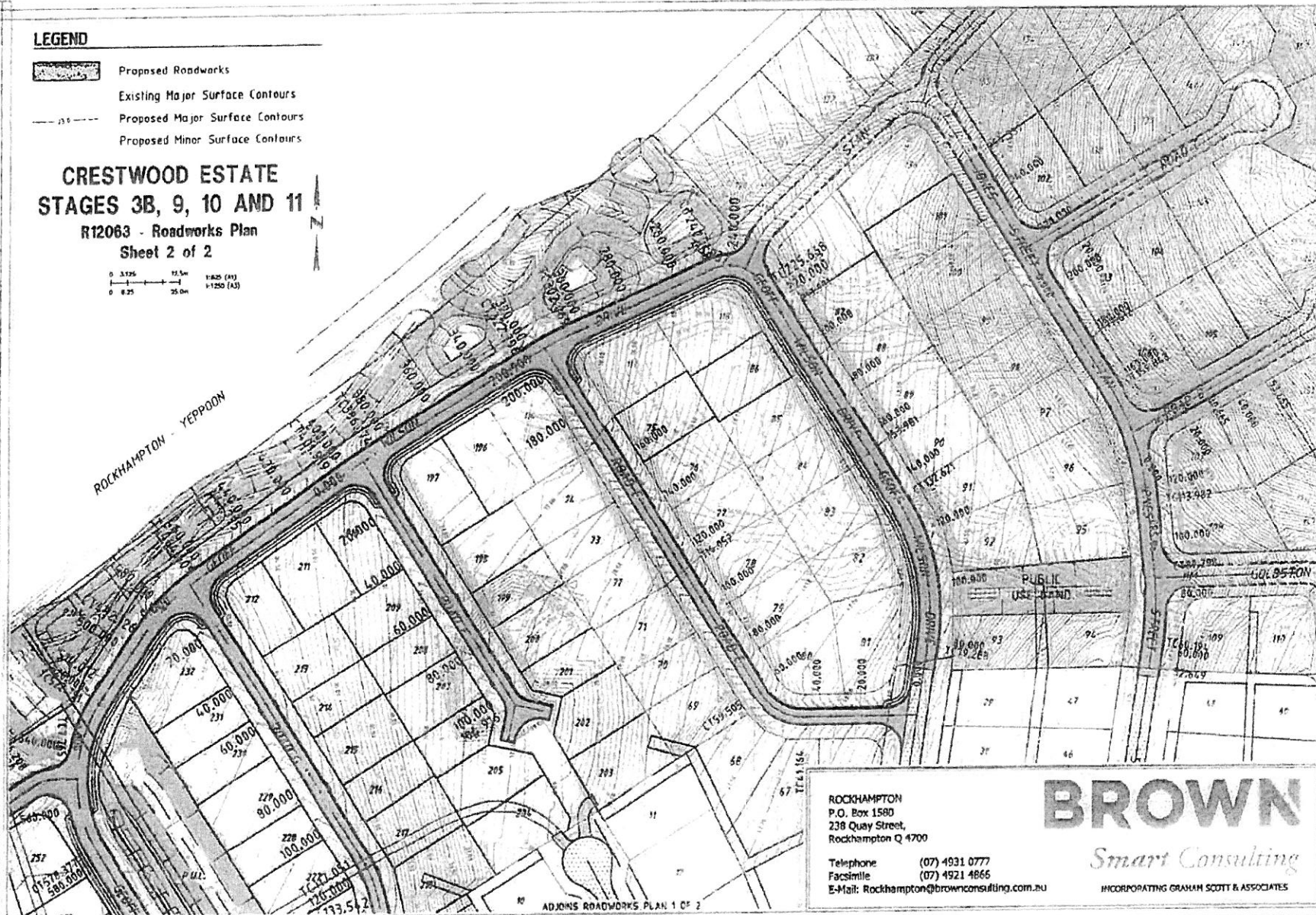
-  Proposed Roadworks
-  Existing Major Surface Contours
-  Proposed Major Surface Contours
-  Proposed Minor Surface Contours

## CRESTWOOD ESTATE STAGES 3B, 9, 10 AND 11

R12063 - Roadworks Plan  
Sheet 2 of 2

0 3.125 12.5m 1:625 (A1)  
0 8.25 35.0m 1:1250 (A3)

ROCKHAMPTON - YEPPON



ROCKHAMPTON  
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Rockhampton Q 4700

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ADJOINS ROADWORKS PLAN 1 OF 2

## APPENDIX F2 – Road Hierarchy Plans



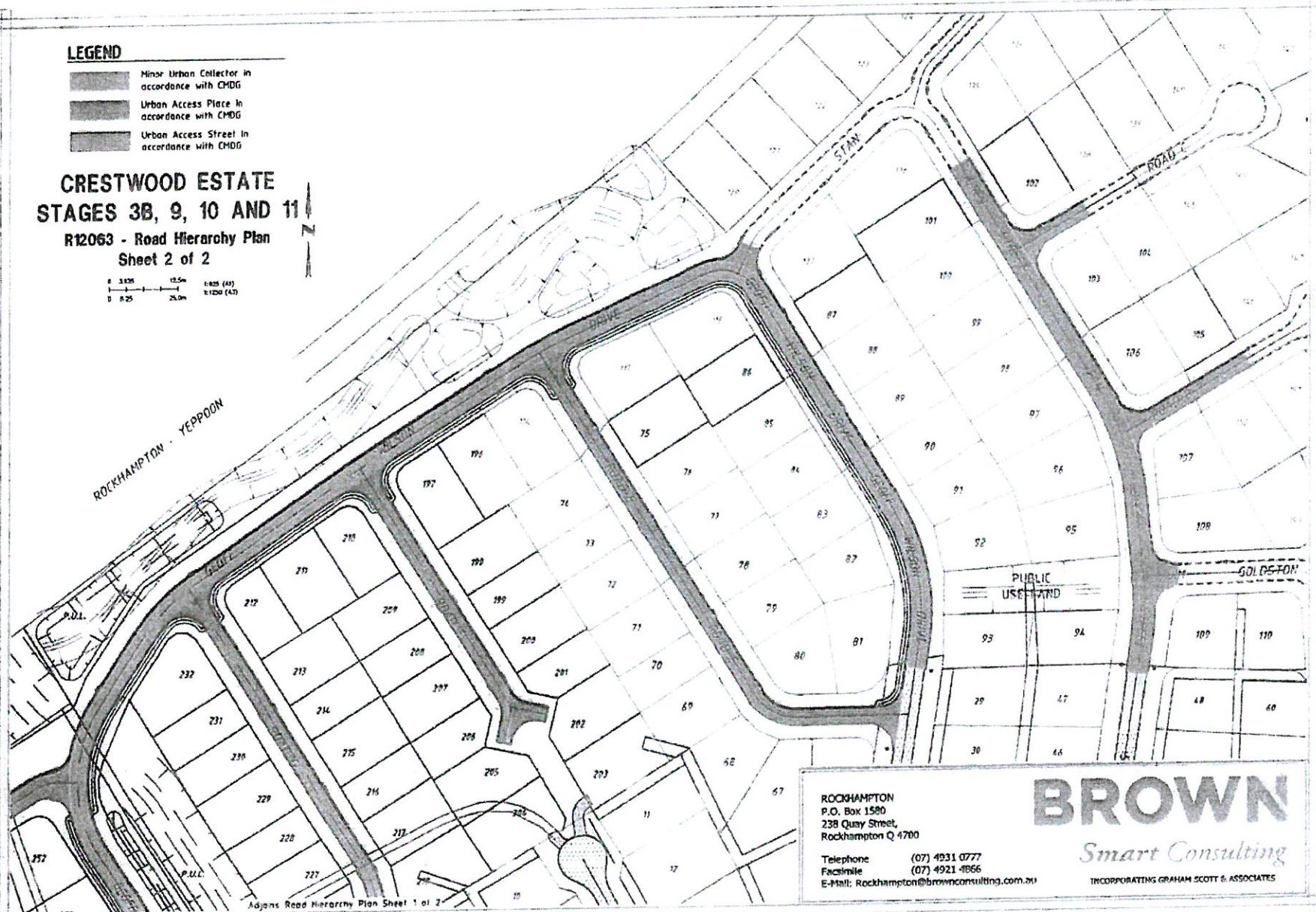


# LEGEND

-  Minor Urban Collector in accordance with CMDG
-  Urban Access Place in accordance with CMDG
-  Urban Access Street in accordance with CMDG

## CRESTWOOD ESTATE STAGES 3B, 9, 10 AND 11 R12063 - Road Hierarchy Plan Sheet 2 of 2

1:1250 (A3)  
1:1250 (A3)  
0 12.5m 25.0m



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## APPENDIX F3 – Intersection Sight Distance Plans



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Rockhampton Q 4700


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Facsimile (07) 4921 1566  
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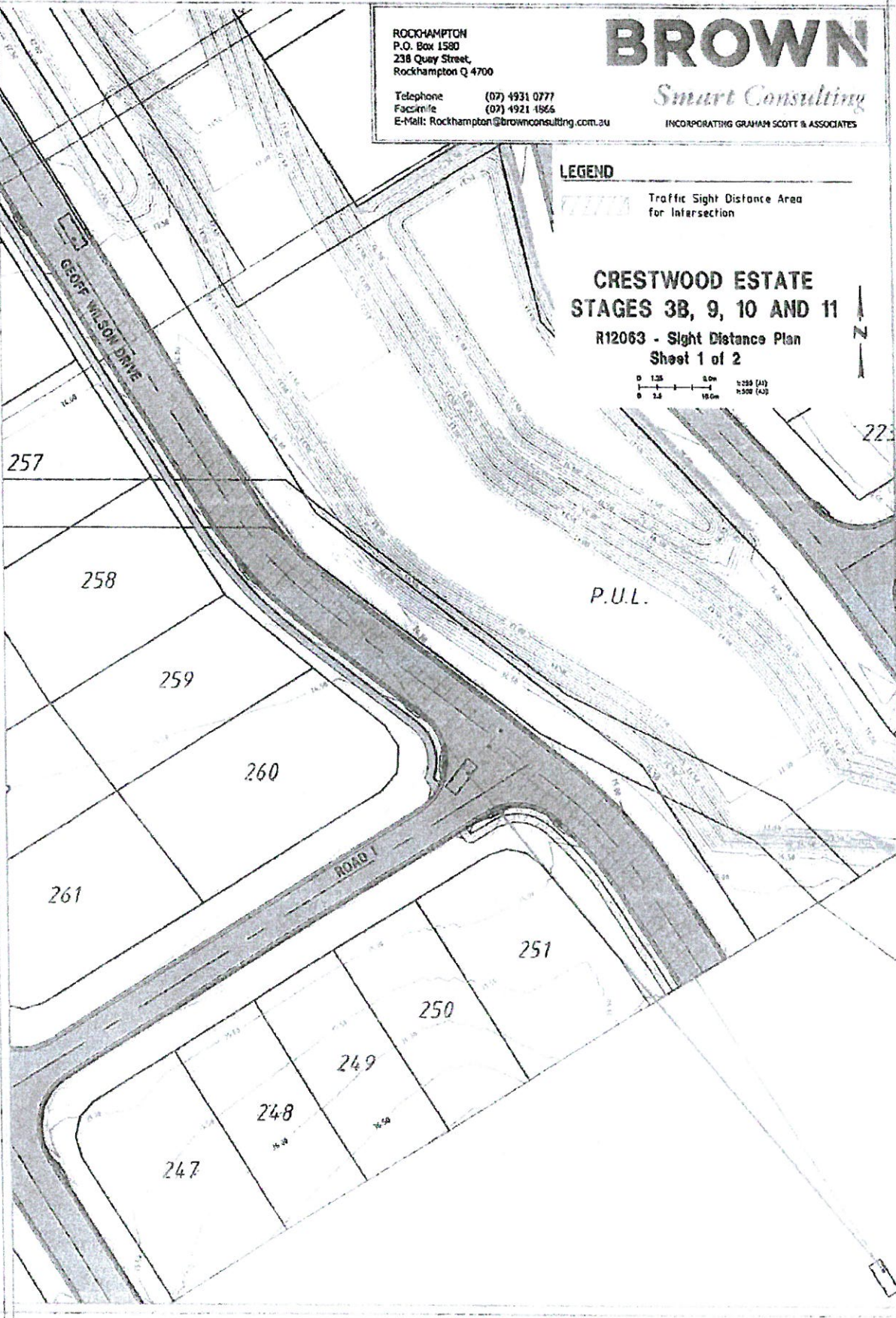
## LEGEND

 Traffic Sight Distance Area  
for Intersection


## CRESTWOOD ESTATE STAGES 3B, 9, 10 AND 11

R12063 - Sight Distance Plan  
Sheet 1 of 2

0 1.25 2.5 5.0m 1:250 (A1)  
0 3.1 6.2 12.5m 1:500 (A2)



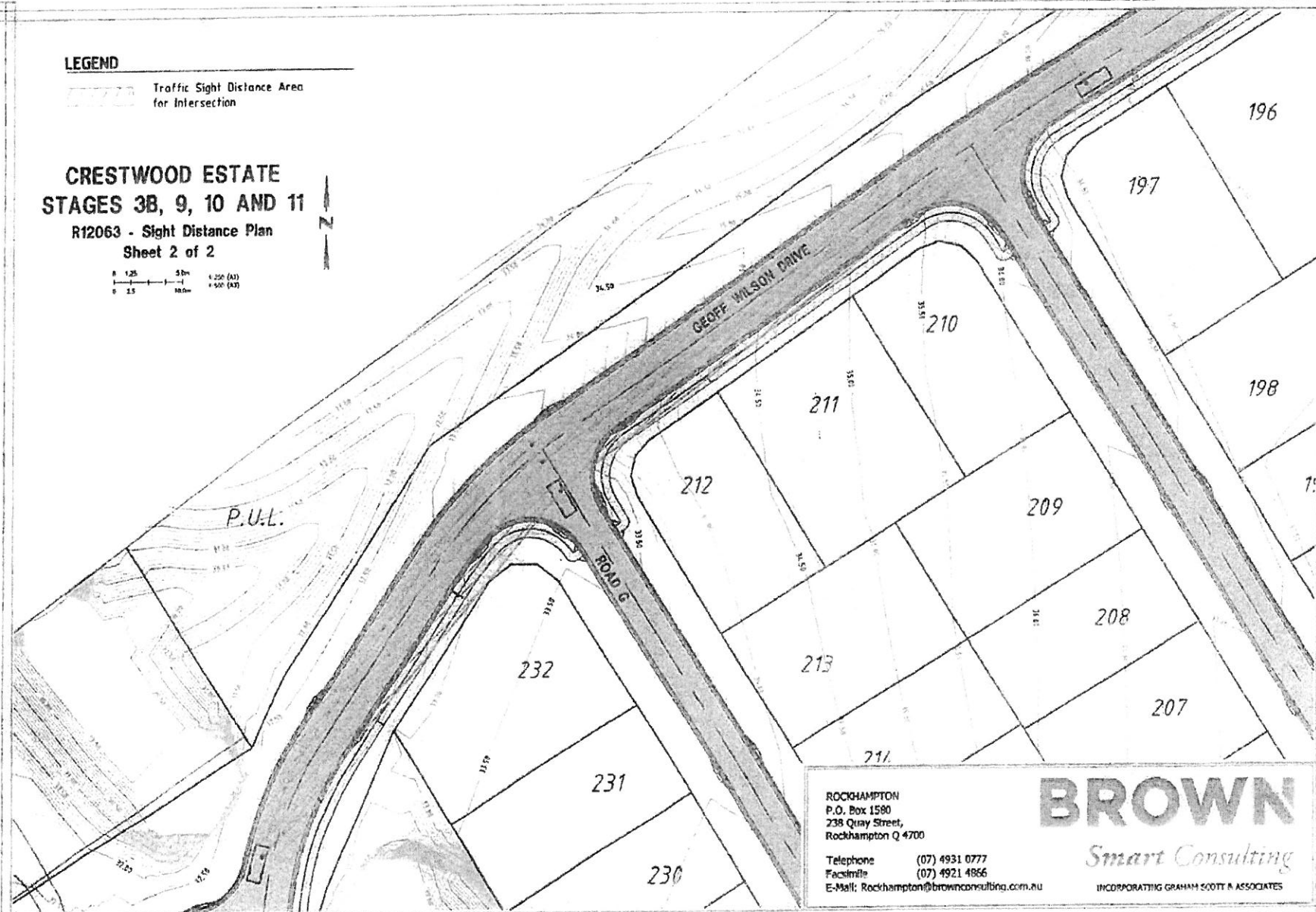
# LEGEND

 Traffic Sight Distance Area  
for Intersection

## CRESTWOOD ESTATE STAGES 3B, 9, 10 AND 11

R12063 - Sight Distance Plan  
Sheet 2 of 2

1:25 50m 1:250 (A3)  
0 2.5 100m 1:500 (A3)



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APPENDIX F4 – Roadworks Preliminary  
Longitudinal Sections

---



**CRESTWOOD ESTATE  
STAGES 3B, 9, 10 AND 11  
R12063 - Road Longitudinal Sections Plan  
Sheet 1 of 4**

0 10.0 40.0m 1:2000 H  
0 1.0 4.0m 1:200 V

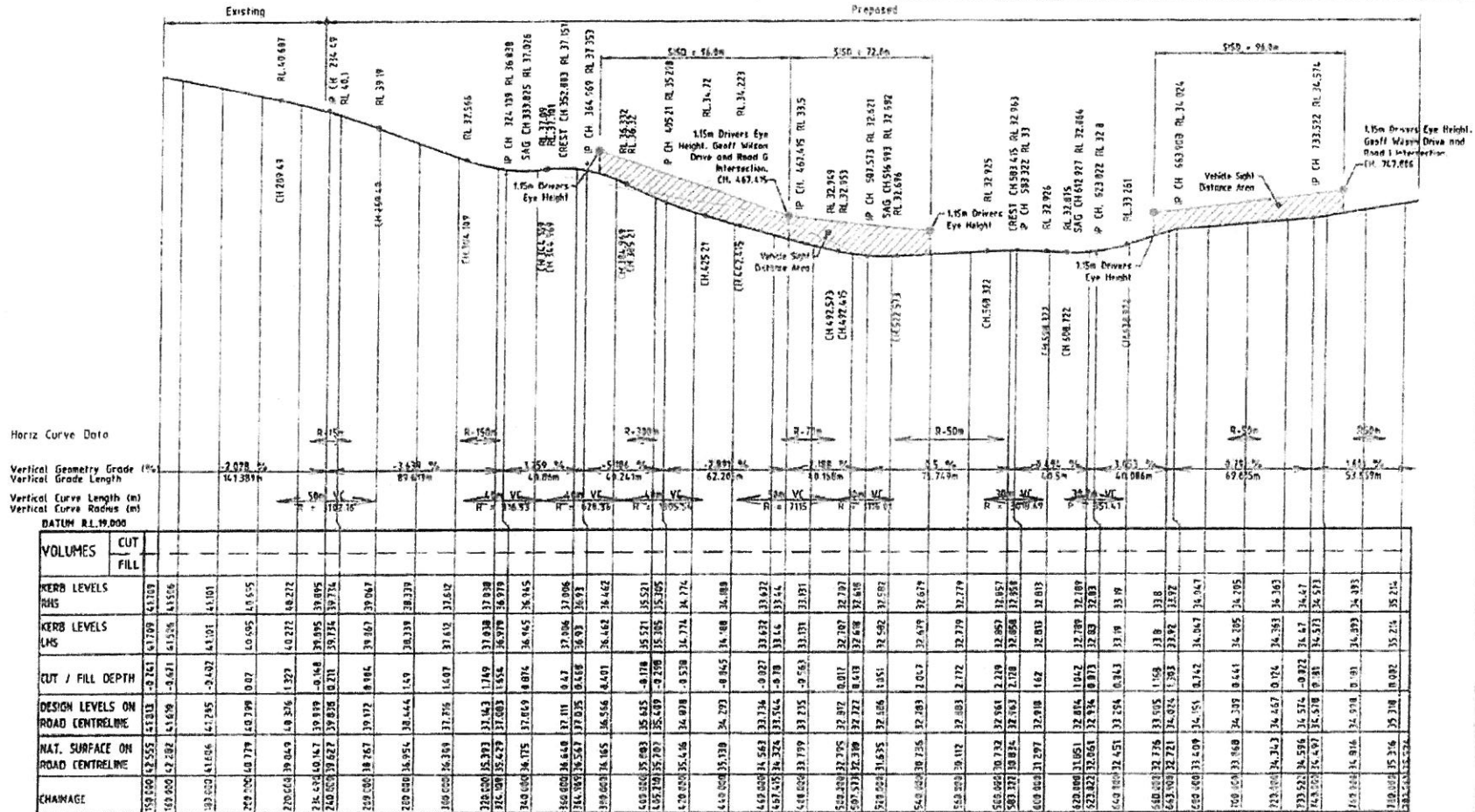
ROCKHAMPTON  
P.O. Box 1590  
238 Quay Street,  
Rockhampton Q 4700

Telephone (07) 4931 0777  
Facsimile (07) 4921 4066  
E-Mail: Rockhampton@brownconsulting.com.au

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LONGITUDINAL SECTION GEOFF WILSON DRIVE

**CRESTWOOD ESTATE  
STAGES 3B, 9, 10 AND 11  
R12063 - Road Longitudinal Sections Plan  
Sheet 2 of 4**

0 10.0 40.0m 1:2000 H  
0 1.0 4.0m 1:200 V

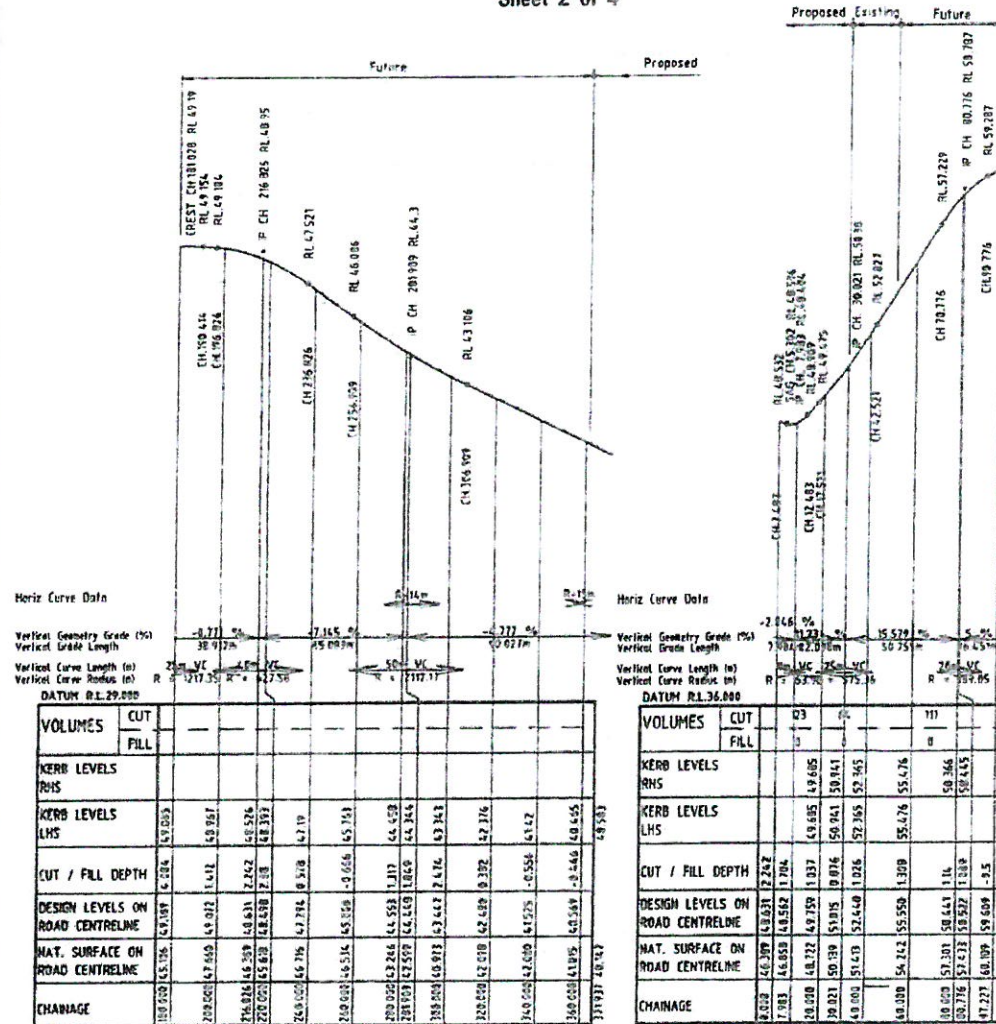
ROCKHAMPTON  
P.O. Box 1580  
238 Quay Street,  
Rockhampton Q 4700

Telephone (07) 4931 0777  
Facsimile (07) 4921 4866  
E-Mail: Rockhampton@brownconsulting.com.au

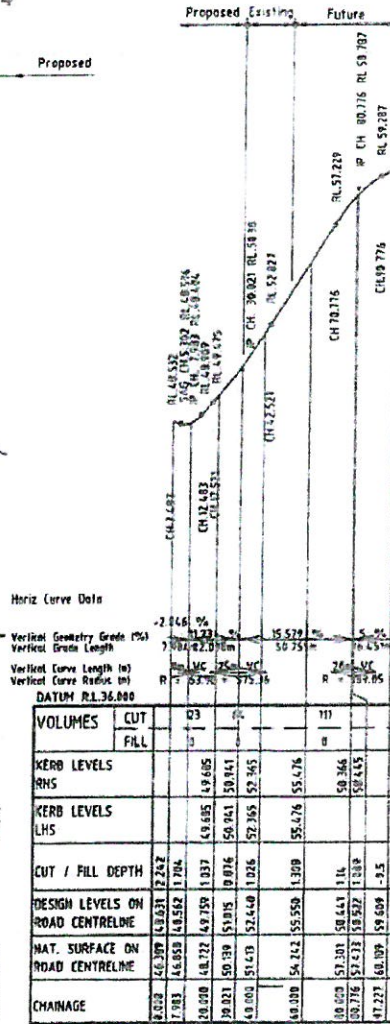
**BROWN**

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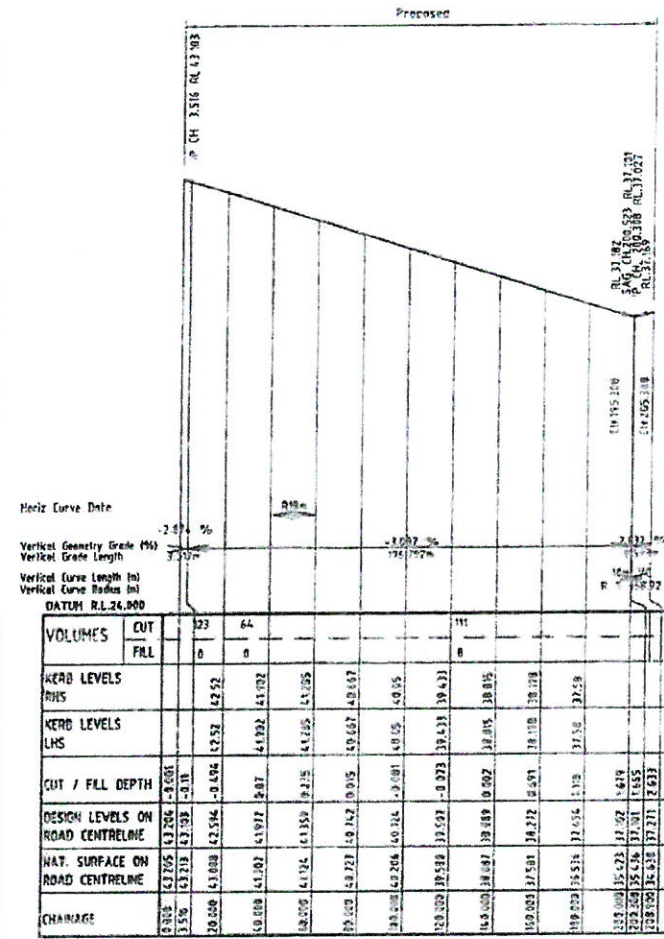
INCORPORATING GRAHAM SCOTT & ASSOCIATES



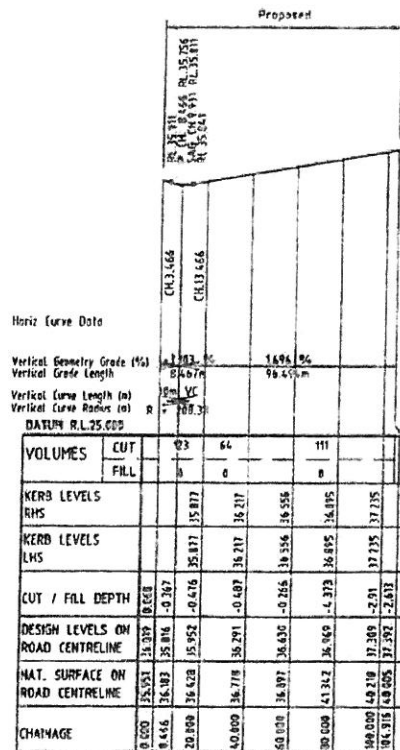
LONGITUDINAL SECTION STAN JONES STREET



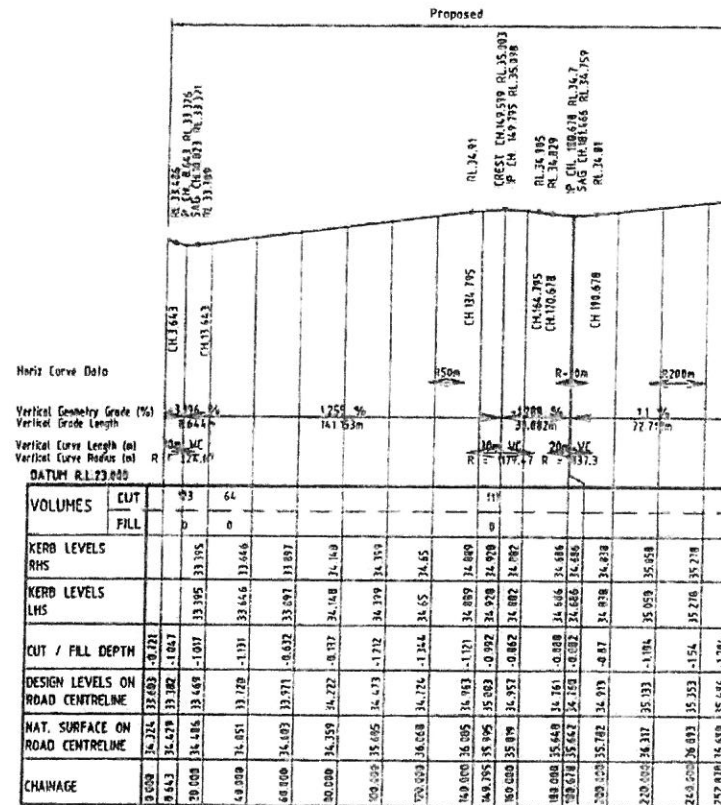
LONGITUDINAL SECTION ROAD C



LONGITUDINAL SECTION ROAD E



LONGITUDINAL SECTION ROAD F



LONGITUDINAL SECTION Road G

**CRESTWOOD ESTATE**  
**STAGES 3B, 9, 10 AND 11**  
**R12063 - Road Longitudinal Sections Plan**  
**Sheet 3 of 4**

0 10.0 40.0m 1:2000 H  
 0 1.0 4.0m 1:200 V

ROCKHAMPTON  
 P.O. Box 1580  
 236 Quay Street,  
 Rockhampton Q 4700

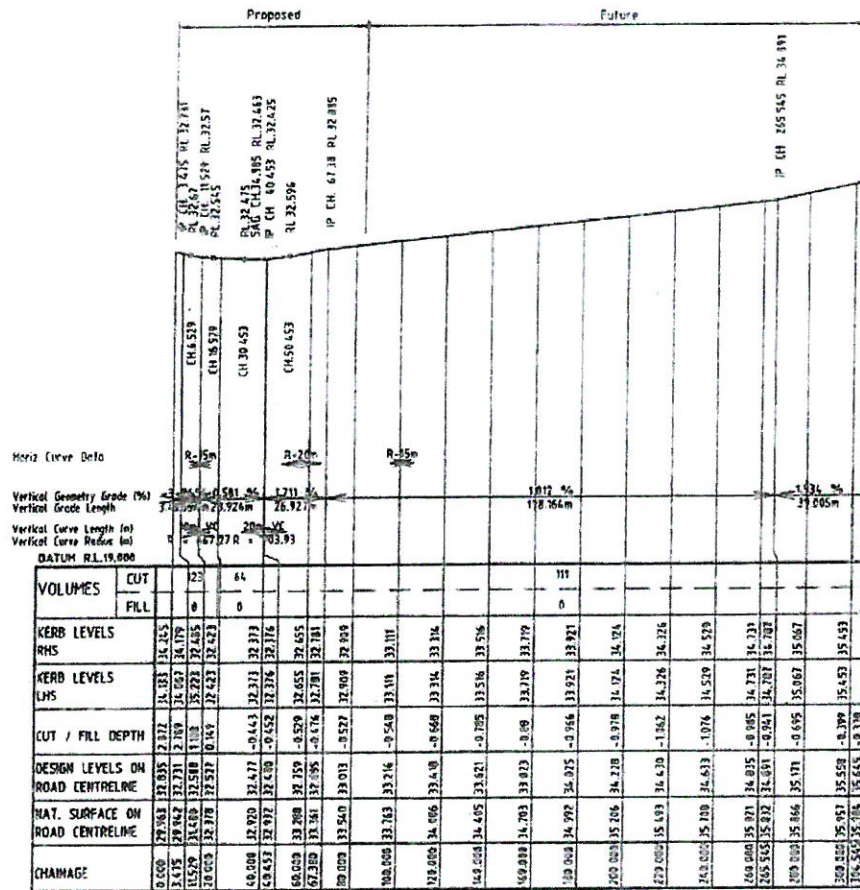
Telephone (07) 4931 0777  
 Facsimile (07) 4921 4866  
 E-Mail: Rockhampton@brownconsulting.com.au

**BROWN**

*Smart Consulting*

INCORPORATING GRAHAM SCOTT & ASSOCIATES



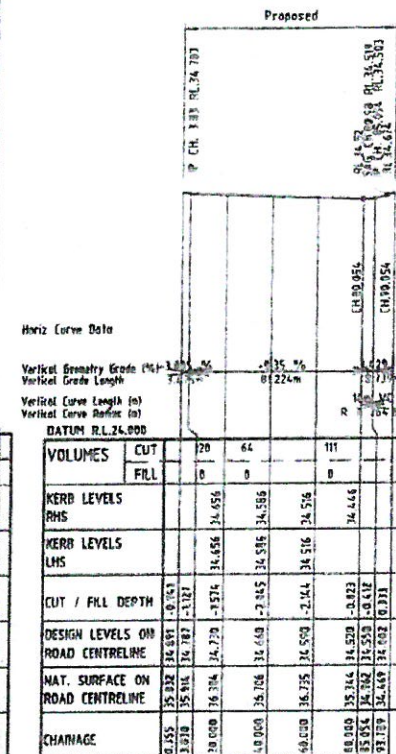


LONGITUDINAL SECTION ROAD H

CRESTWOOD ESTATE  
STAGES 3B, 9, 10 AND 11  
R12083 - Road Longitudinal Sections Plan

Sheet 4 of 4

0 10.0 40.0m 1:2000 H  
0 1.0 4.0m 1:200 V



LONGITUDINAL SECTION ROAD I

ROCKHAMPTON  
P.O. Box 1580  
238 Quay Street  
Rockhampton Q 4700

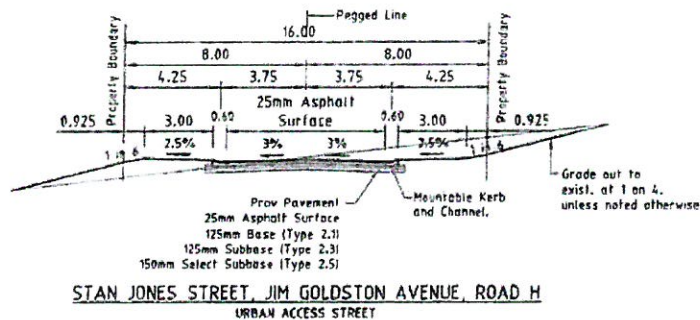
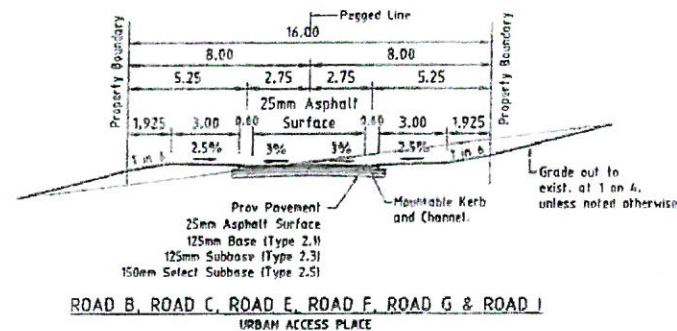
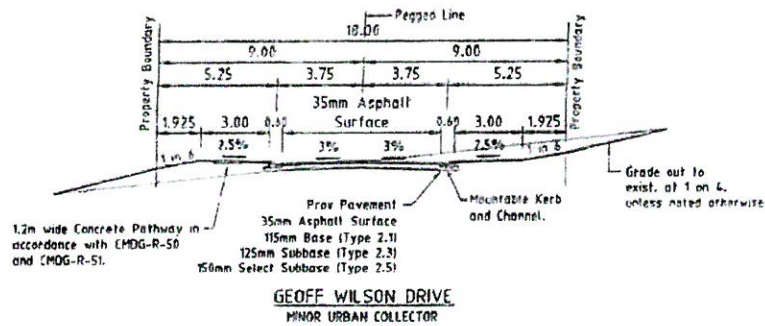
Telephone (07) 4931 0777  
Facsimile (07) 4921 4856  
E-Mail: Rockhampton@brownconsulting.com.au

**BROWN**

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INCORPORATING GRAHAM SCOTT & ASSOCIATES

## APPENDIX F5 – Roadworks Typical Sections



CRESTWOOD ESTATE  
STAGES 3B, 9, 10 AND 11  
R12063 - Typical Sections

NOT TO SCALE

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Rockhampton Q 4700

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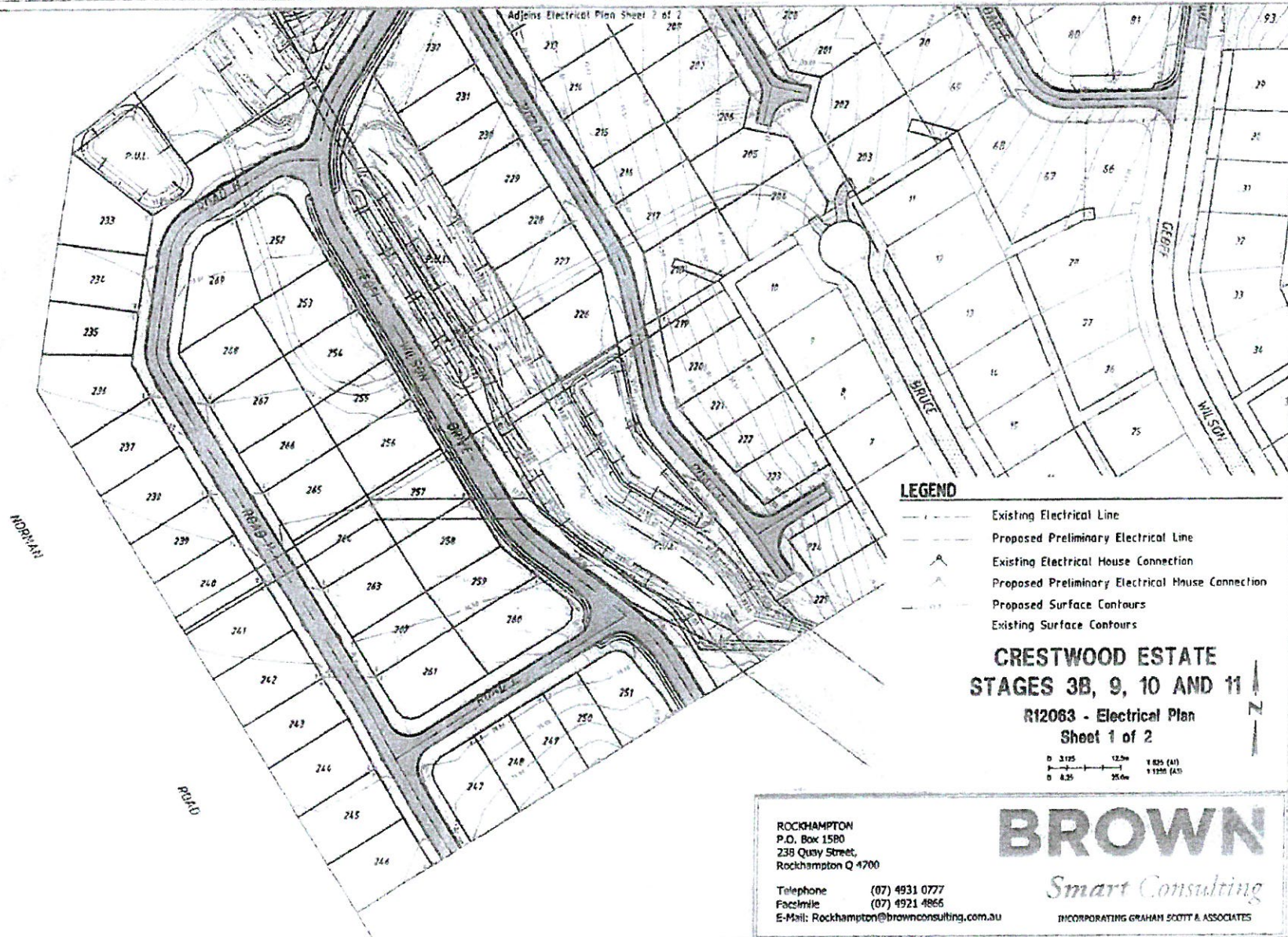
Smart Consulting

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APPENDIX G – Preliminary Electrical Layout  
Plans

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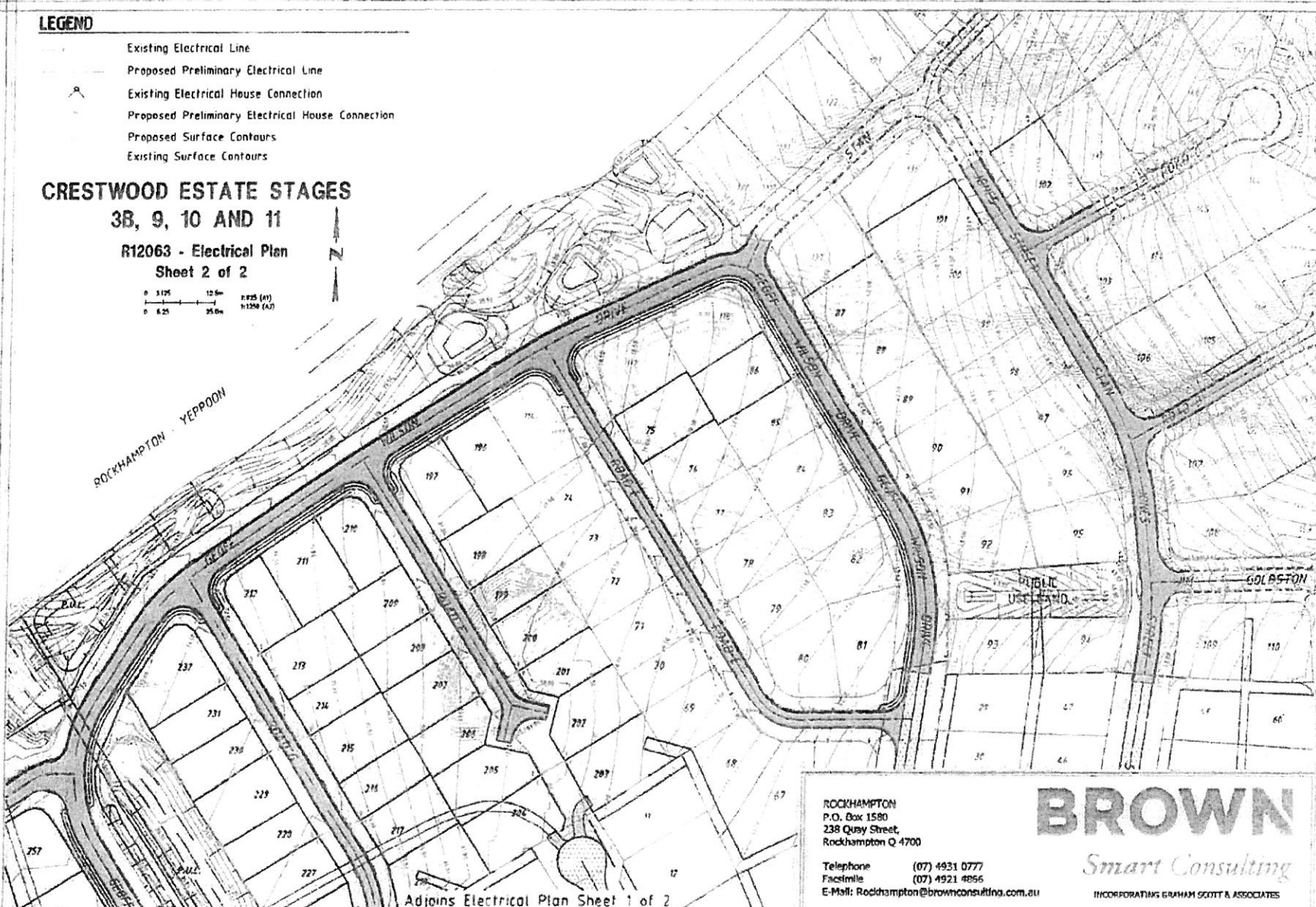
# **LEGEND**

- Existing Electrical Line
- Proposed Preliminary Electrical Line
- Existing Electrical House Connection
- Proposed Preliminary Electrical House Connection
- Proposed Surface Contours
- Existing Surface Contours

## **CRESTWOOD ESTATE STAGES 3B, 9, 10 AND 11**

R12063 - Electrical Plan  
Sheet 2 of 2

0 3.125 12.5m 1:125 (A1)  
0 6.25 35.6m 1:1250 (A2)



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P.O. Box 1580  
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Rockhampton Q 4700

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Facsimile (07) 4921 4856  
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**Addendum Environmental Traffic Noise Level Study for Proposed Residential  
Subdivision, Crestwood Estate Stages 3B, 5, 6, 9, 10A, 10B and 11,  
Rockhampton - Yeppoon Road and Norman Road, Norman Gardens**

**conducted for**

**Crestwood Land Pty Ltd**

**Report No: R15059/D2837/Rev.1/3.08.15**

Revision No.	Date	Comment
0	19.07.2015	Original report.
1	03.08.2015	Report amended in accordance with revised ground contour and pad level data, as provided by Calibre Consulting (Qld) Pty Ltd, email dated 28 July 2015

Report prepared for:

Crestwood Land Pty Ltd  
GPO Box 318  
BRISBANE QLD 4001

Telephone: 07 3002 6200  
Fax: -

Authorised by:

Mr Geoff McWilliam  
Director – Land  
Crestwood Land Pty Ltd

Dates of assessment:

Wednesday 28 to Friday 30 August 2013

Consultants:

David Moore & Associates Pty Ltd  
7 Eleanor Drive  
(PO Box 38)  
SILVAN VIC 3795

Telephone: 07 3170 3222  
Mobile: 0417 717 506



.....  
David Moore, B App Sc, MAAS

Our reference:

R15059/D2837/Rev.1/3.08.15

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NOISE LIMITS – ROAD TRAFFIC .....	5
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## INTRODUCTION

In 2013 David Moore & Associates Pty Ltd prepared a traffic noise impact assessment for Crestwood Estate, on the corner of Norman Road and the Rockhampton – Yeppoon Road, Norman Gardens. The associated report was titled *Environmental Traffic Noise Level Study for Proposed Residential Subdivision, Crestwood Estate Stages 3B, 5, 6, 9, 10A, 10B and 11, Rockhampton – Yeppoon Road and Norman Road, Norman Gardens conducted for Crestwood Land Pty Ltd, Report No: R13092/D2837/Rev. 1/1.10.13*. Since the preparation of this report and as a result of negotiations with Rockhampton City Council and the Department of Transport and Main Roads, the location and height of the acoustic barrier adjacent to the Rockhampton – Yeppoon Road has been decided. The location and height of the acoustic barrier for Norman Road has remained unchanged since the 2013 report.

For each of the above Stages this report details the required traffic noise control measures, based on the following drawings:

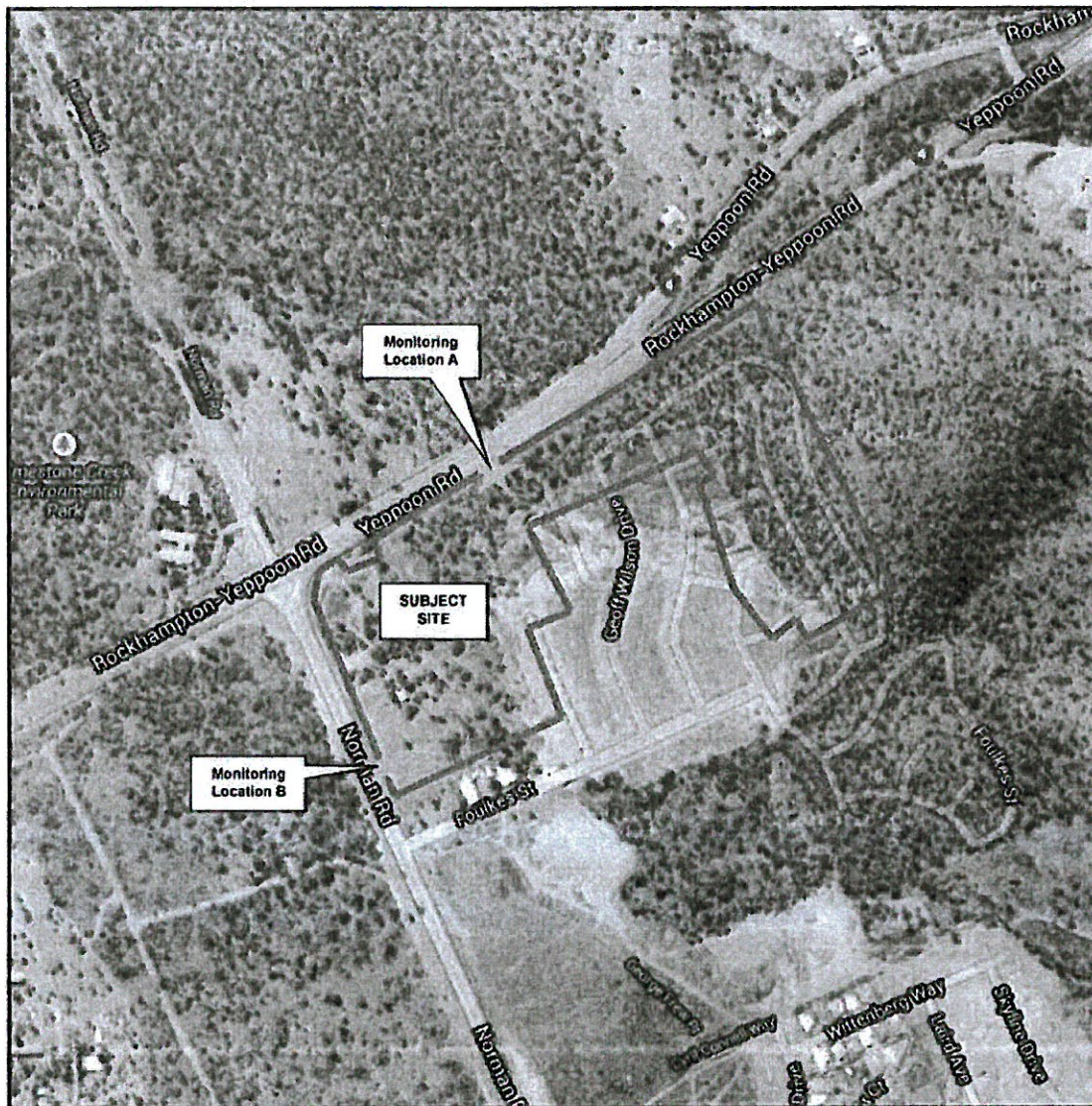
- Calibre Consulting (Qld) Pty Ltd drawing R12063-SK4401, Acoustic Barrier Layout, Revision 2 – For Information;
- Calibre Consulting (Qld) Pty Ltd drawing R12063-SK4402, Acoustic Barrier Typical Sections, Revision 2 – For Information;
- Brown Consulting (Qld) Pty Ltd drawing R12063-434, Acoustic Fence Detail, Issue D;
- Untitled site plan prepared by Calibre Consulting (Qld) Pty Ltd with ground contours (post earthworks and retaining wall construction), Lot numbers, Lots and internal roadways, as well as Norman Road and Rockhampton – Yeppoon Road.

Rockhampton – Yeppoon Road is a Department of Transport and Main Roads (DTMR) controlled road and Norman Road is a Rockhampton City Council controlled road. This assessment includes both on-site traffic noise monitoring and computer noise modelling for the Rockhampton – Yeppoon Road and Norman Road.

Traffic noise limits are defined for the future residential facades and external living areas. These noise limits are defined by DTMR and have been adopted for both Rockhampton – Yeppoon Road and Norman Road.

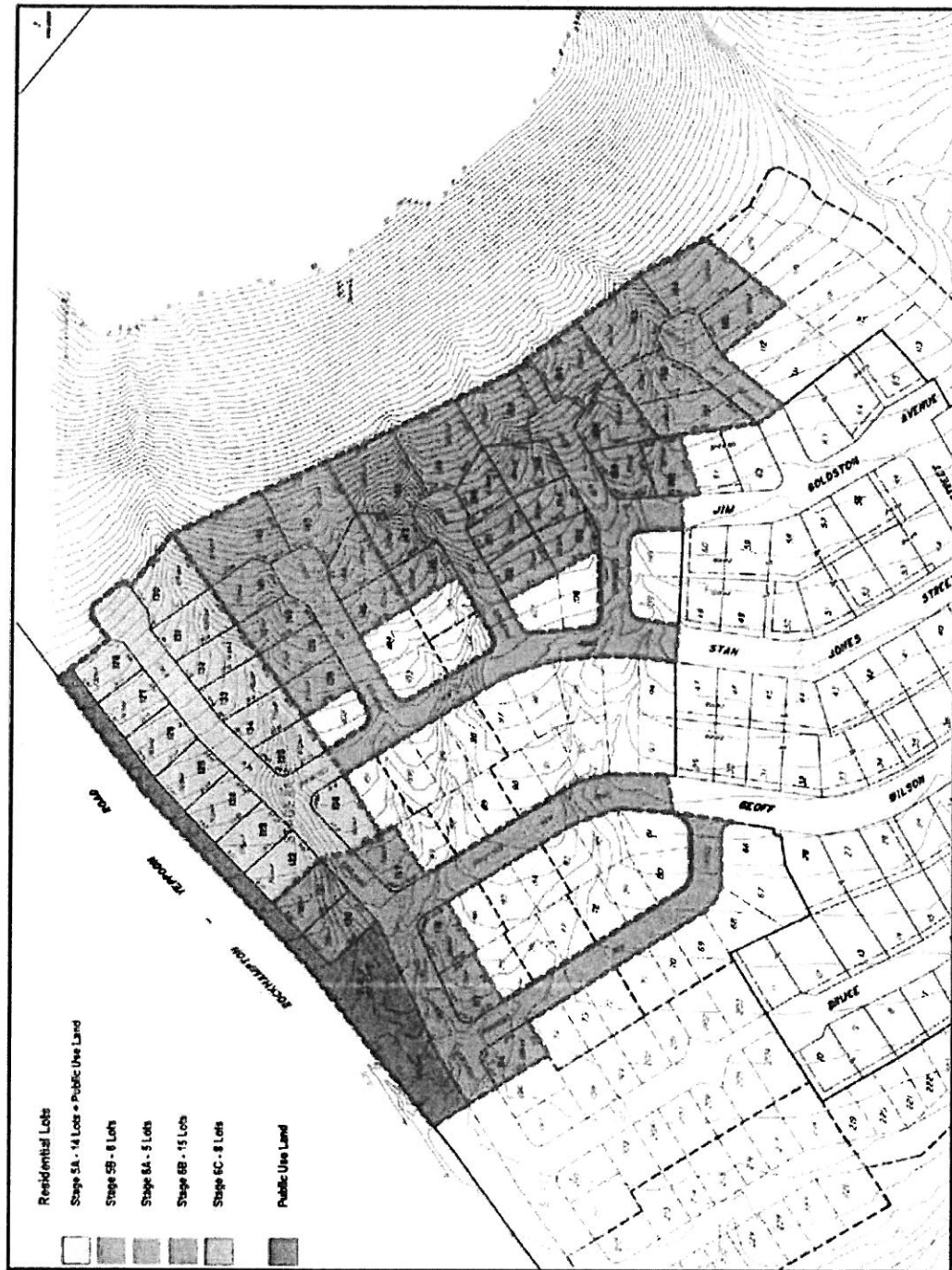
To determine Rockhampton – Yeppoon Road current (2013) traffic noise levels a 48-hour ambient noise level study was conducted from the subject site, from a location approximately 14 metres from the centre of the westbound carriageway of the Rockhampton – Yeppoon Road, with the microphone elevated 1.8 metres, at monitoring location A. For Norman Road a separate 48-hour ambient noise level study was conducted from the subject site, from a location approximately 25 metres from the centre of Norman Road, with the microphone elevated 1.8 metres, at monitoring location B. Refer previous report prepared in 2013 (reference R13092/D2837/Rev. 1/1.10.13) for further detail.

Refer Figure 1 for a general appreciation of the locality of the site and monitoring locations A and B, Figure 2 for the proposed residential subdivision Stages 5 and 6 and Figure 3 for proposed residential subdivision Stages 3B, 9, 10A, 10B and 11.



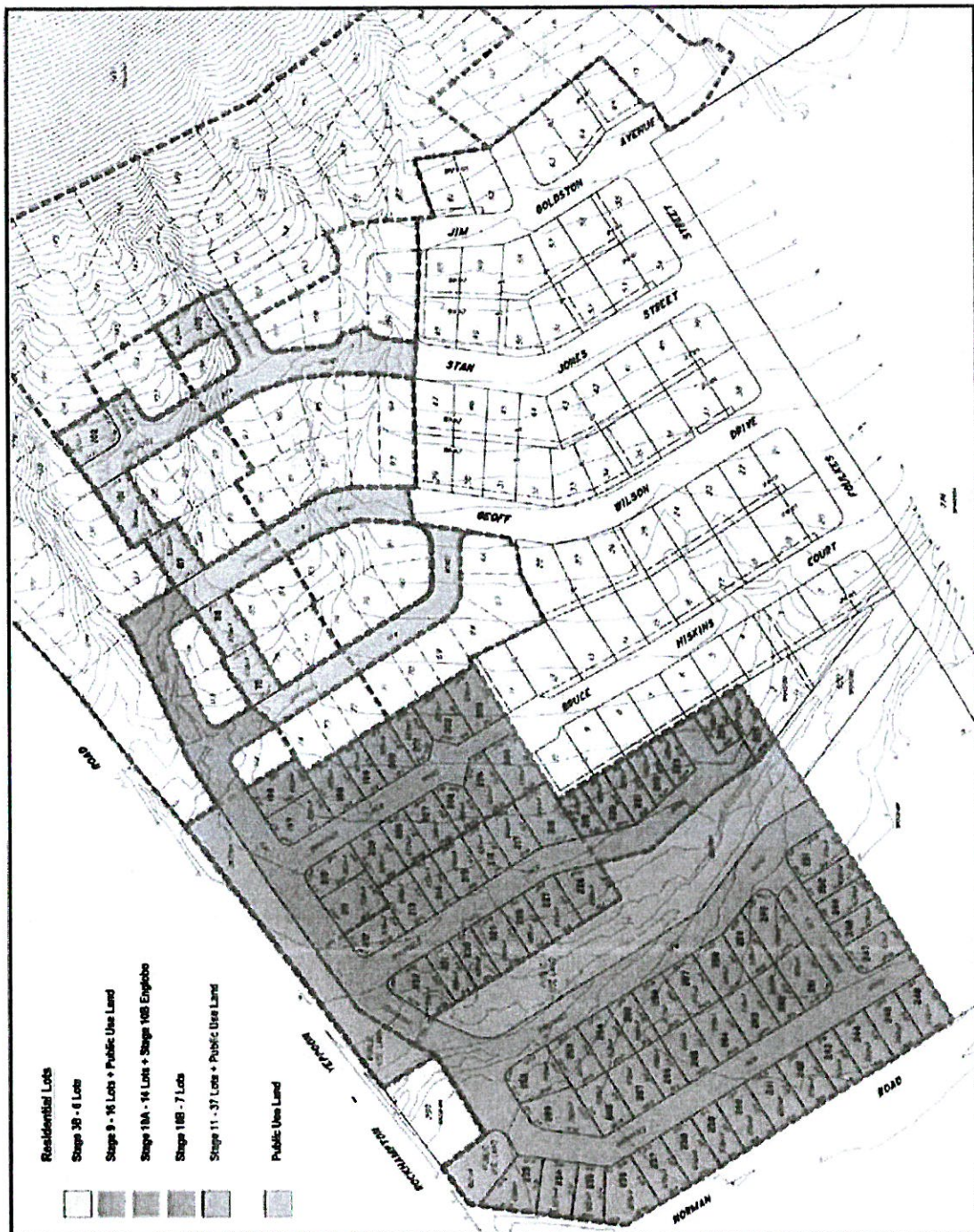
**Figure 1**  
 Approximate Locality Plan and Monitoring Locations A and B (Top of the Page is North)





**Figure 2**  
**Proposed Residential Subdivision Stages 5 and 6 (Top of the Page is East)**  
**Natural Ground Contours Prior to Earthworks**





**Figure 3**  
Proposed Residential Subdivision Stages 3B, 9, 10A, 10B and 11 (Top of the Page is East)  
Natural Ground Contours Prior to Earthworks

## CRITERIA

### Measurements and Calculations

All noise level measurements were generally conducted in accordance with the following:

- general requirements of the Queensland environmental protection legislation;
- Environmental Protection (Noise) Policy 2008;
- *Noise Measurement Manual*, Queensland Government, Department of Environment and Heritage Protection, Version 4, 22 August 2013;
- *Transport Noise Management: Code of Practice, Volume 1 – Road Traffic Noise*, Queensland Department of Transport and Main Roads, Issue 2, November 2013;
- Australian Standard AS 2702-1984, *Acoustics – Methods for the Measurement of Road Traffic Noise*; and
- Australian Standard AS 1055.1-1997, *Acoustics – Description and Measurement of Environmental Noise, Part 1, General Procedures*.

All traffic noise calculations were performed in accordance with the following:

- *Calculation of Road Traffic Noise*, Department of Transport, Welsh Office, HMSO, 1988; and
- Australian Standard AS 3671-1989, *Acoustics – Road Traffic Noise Intrusion – Building Siting and Construction*.

The acoustic barrier construction must comply with the Department of Transport and Main Roads Technical Specification *Transport and Main Roads Technical Specifications MRTS15 Noise Fences*, July 2015.

### Noise Limits – Road Traffic

In accordance with the (DTMR) Policy Position Statement *Development on Land Affected by Environmental Emissions from Transport and Transport Infrastructure Version 2, 10 May 2013* the state controlled road noise limits for 'accommodation activities' are:

- $\leq 60$  dB(A)  $L_{A10}$  (18 hour) facade corrected (measured  $L_{A90}$  (8 hour) free field between 10 pm and 6 am  $\leq 40$  dB(A);
- $\leq 63$  dB(A)  $L_{A10}$  (18 hour) facade corrected (measured  $L_{A90}$  (8 hour) free field between 10 pm and 6 am  $> 40$  dB(A).

Facade correction is +2.5 dB(A) to the free field result.

The same noise limits have been adopted for Norman Road, even though it is a Rockhampton City Council controlled road.

As the measured background was greater than 40 dB(A) the traffic noise limit for the Rockhampton-Yeppoon Road is 63 dB(A)  $L_{A10,18H}$  facade corrected. The same noise limit is also applicable to traffic on Norman Road.



## **TRAFFIC NOISE CONTROL**

To assist in determining traffic noise propagation across the complete site computer noise modelling was conducted using the Bruel and Kjaer Predictor version 7.1 software, including traffic noise calculations in accordance with the CORTN88 algorithms. This is in accordance with DTMR criteria.

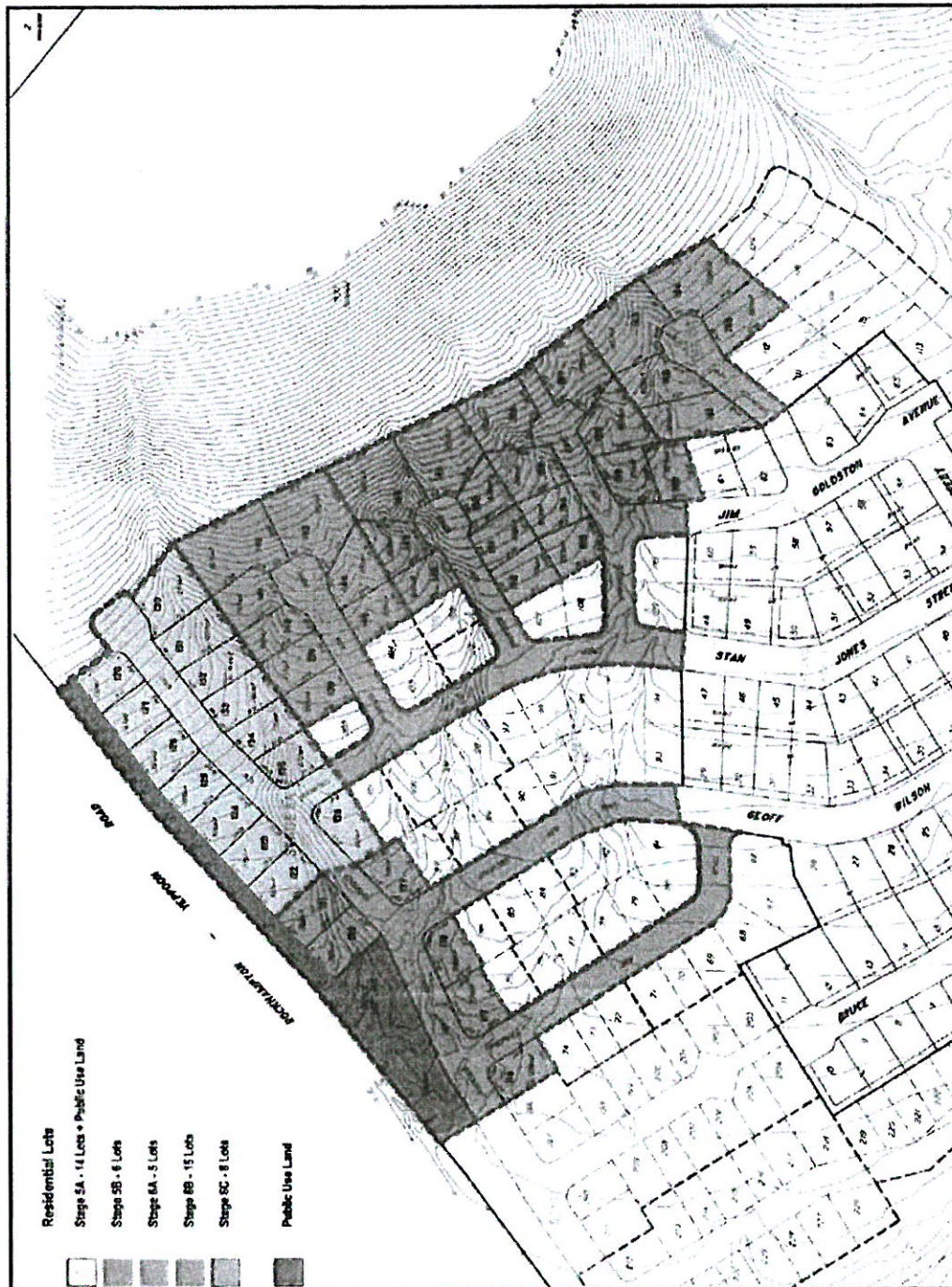
Traffic data for the Rockhampton-Yeppoon Road was obtained from DTMR and for Norman Road from the traffic consultant for this residential subdivision, Brown Consulting (Qld) Pty Ltd.

For this residential subdivision ground contours provided by Calibre Consulting (Qld) Pty Ltd, which reflect ground levels subsequent to earthworks and the construction of mounds and retaining walls form the basis of the computer modelling, together with the pad level details for each lot for the different Stages and also provided by Calibre Consulting (Qld) Pty Ltd. This information has been entered into the computer model. The location of the acoustic barrier for Rockhampton-Yeppoon Road is in accordance with the Calibre Consulting (Qld) Pty Ltd drawing. Refer Figure 4 for the location and height of the Norman Road acoustic barrier and Figure 5 for the location and height of the Rockhampton-Yeppoon Road acoustic barrier.

The acoustic barrier for the Rockhampton-Yeppoon Road is 2.4 metres high – 1.4 metre high acoustic fence on top of 1 metre high earth mound, whilst the acoustic barrier for Norman Road is 2 metres high adjacent to the intersection with Rockhampton-Yeppoon Road and 1.8 metres high for the remainder.







**Figure 5**  
**Rockhampton-Yeppoon Road 2.4 m High Acoustic Barrier (Bold Red Line)**  
**With 2.0 m High Return to Lot 128**

**Stage 3B**

For Stage 3B the Calibre Consulting (Qld) Pty Ltd nominated pad levels are detailed in Table 1. Table 2 details the computer modelled facade corrected ultimate traffic noise levels for a single storey dwelling (1.8 m high receptor), as well as the upper floor of a two storey dwelling (4.6 metre high receptor), with the nominated acoustic barriers in place.

<b>Table 1 Lot Numbers and Assumed Pad Level, AHD, metres, Stage 3B</b>	
<b>Lot Number</b>	<b>Pad Level, AHD, m</b>
75	39.0
86	39.9
87	41.8
101	45.7
102	49.5
105	54.0

<b>Table 2 Facade Corrected Ultimate Traffic Noise Levels, Stage 3B, With Acoustic Barriers in Place</b>		
<b>Lot Number</b>	<b>Ultimate Facade Traffic Noise Level, LA10,18H, dB(A)</b>	
	<b>1.8m High Receptor</b>	<b>4.6m High Receptor</b>
75	58.4	59.6
86	57.6	58.9
87	56.3	58.0
101	57.1	58.5
102	56.1	57.6
105	53.1	54.1

For Stage 3B, with the nominated acoustic barriers in place, ultimate facade corrected traffic noise levels comply with the 63 dB(A) LA10,18H noise limit for lowset dwellings (and the upper floor of any two storey dwellings), on all of the proposed Lots for this Stage.



**Stage 5**

For Stage 5 the Calibre Consulting (Qld) Pty Ltd nominated pad levels are detailed in Table 3. Table 4 details the computer modelled facade corrected ultimate traffic noise levels for a single storey dwelling (1.8 m high receptor), as well as the upper floor of a two storey dwelling (4.6 metre high receptor), with the nominated acoustic barriers in place.

<b>Table 3</b> <b>Lot Numbers and Assumed Pad Level, AHD, metres, Stage 5</b>	
<b>Lot Number</b>	<b>Pad Level, AHD, m</b>
114	37.4
117	38.5
118	39.5
120	40.5
121	41.7
122	42.85
123	44.15
124	46.3
125	48.8
126	51.9
127	55.6
128	58.8
130	61.1
131	59.25
132	56.4
133	53.3
134	50.8
135	47.4
136	44.7
137	41.4

<b>Table 4</b> <b>Facade Corrected Ultimate Traffic Noise Levels, Stage 5,</b> <b>With Acoustic Barriers in Place</b>		
Lot Number	Ultimate Facade Traffic Noise Level, $L_{A10,18H}$ , dB(A)	
	1.8m High Receptor	4.6m High Receptor
114	60.4	61.4
117	60.0	61.3
118	59.1	60.7
120	59.9	66.2
121	60.0	67.0
122	59.9	67.0
123	59.3	66.6
124	59.6	66.6
125	60.2	66.7
126	59.7	66.0
127	59.8	65.6
128	59.8	66.0
130	57.6	59.1
131	57.8	59.6
132	57.8	59.6
133	57.3	59.3
134	57.7	59.7
135	56.8	59.1
136	57.8	59.9
137	57.2	59.3

For Stage 5, with the nominated acoustic barriers in place, ultimate facade corrected traffic noise levels comply with the 63 dB(A)  $L_{A10,18H}$  noise limit for lowset dwellings for all of the proposed Lots for this Stage, but only comply with the noise limit for the upper floor of any two storey dwellings on Lots 114, 117 and 118 and Lots 130 to 137 inclusive.

**Stage 6**

For Stage 6 the Calibre Consulting (Qld) Pty Ltd nominated pad levels are detailed in Table 5. Table 6 details the computer modelled facade corrected ultimate traffic noise levels for a single storey dwelling (1.8 m high receptor), as well as the upper floor of a two storey dwelling (4.6 metre high receptor), with the nominated acoustic barriers in place.

<b>Table 5</b> <b>Lot Numbers and Assumed Pad Level, AHD, metres, Stage 6</b>	
<b>Lot Number</b>	<b>Pad Level, AHD, m</b>
138	52.85
139	55.8
140	58.75
141	60.8
142	64.5
143	65.5
144	59.85
145	56.9
146	57.2
147	59.4
148	64.5
149	64.5
150	59.0
151	56.5
152	53.4
153	52.5
154	55.7
155	59.0
156	64.5
157	64.25
158	59.0
159	55.0
160	55.1
161	57.6
162	59.3
163	64.0
164	64.0
165	59.9



<b>Table 6</b> <b>Facade Corrected Ultimate Traffic Noise Levels, Stage 6,</b> <b>With Acoustic Barriers in Place</b>		
Lot Number	Ultimate Facade Traffic Noise Level, $L_{A10,18H}$ , dB(A)	
	1.8m High Receptor	4.6m High Receptor
138	56.4	57.5
139	56.3	57.6
140	56.5	57.8
141	56.2	57.5
142	56.1	57.0
143	54.7	55.6
144	54.3	55.2
145	54.5	55.4
146	53.2	54.2
147	52.8	53.9
148	52.9	53.7
149	51.5	52.3
150	51.1	52.1
151	51.4	52.2
152	51.3	52.2
153	50.0	51.0
154	50.1	51.1
155	50.2	51.2
156	50.1	51.0
157	48.8	49.6
158	48.7	49.6
159	48.9	49.8
160	48.9	49.7
161	48.1	48.9
162	47.7	48.5
163	47.5	48.3
164	46.7	47.4
165	46.0	47.1

For Stage 6, with the nominated acoustic barriers in place, ultimate facade corrected traffic noise levels comply with the 63 dB(A)  $L_{A10,18H}$  noise limit for lowset dwellings (and the upper floor of any two storey dwellings), on all of the proposed Lots for this Stage.

**Stage 9**

For Stage 9 the Calibre Consulting (Qld) Pty Ltd nominated pad levels are detailed in Table 7. Table 8 details the computer modelled facade corrected ultimate traffic noise levels for a single storey dwelling (1.8 m high receptor), as well as the upper floor of a two storey dwelling (4.6 metre high receptor), with the nominated acoustic barriers in place.

<b>Table 7</b> <b>Lot Numbers and Assumed Pad Level, AHD, metres, Stage 9</b>	
<b>Lot Number</b>	<b>Pad Level, AHD, m</b>
196	37.2
197	36.8
198	37.5
199	37.75
200	38.1
201	38.3
202	38.5
203	39.0
204	37.75
205	37.4
206	37.0
207	36.6
208	36.3
209	36.0
210	35.7
211	35.0

<b>Table 8</b> <b>Facade Corrected Ultimate Traffic Noise Levels, Stage 9,</b> <b>With Acoustic Barriers in Place</b>		
Lot Number	Ultimate Facade Traffic Noise Level, $L_{A10,18H}$ , dB(A)	
	1.8m High Receptor	4.6m High Receptor
196	59.4	60.2
197	59.4	60.3
198	57.9	58.6
199	56.8	57.6
200	55.5	56.3
201	54.7	55.6
202	54.0	54.8
203	53.4	54.2
204	53.9	54.6
205	54.6	55.4
206	55.3	56.1
207	55.8	56.7
208	57.2	58.1
209	58.2	59.1
210	59.7	60.7
211	60.0	60.9

For Stage 9, with the nominated acoustic barriers in place, ultimate facade corrected traffic noise levels comply with the 63 dB(A)  $L_{A10,18H}$  noise limit for lowset dwellings (and the upper floor of any two storey dwellings), on all of the proposed Lots for this Stage.



**Stage 10A**

For Stage 10A the Calibre Consulting (Qld) Pty Ltd nominated pad levels are detailed in Table 9. Table 10 details the computer modelled facade corrected ultimate traffic noise levels for a single storey dwelling (1.8 m high receptor), as well as the upper floor of a two storey dwelling (4.6 metre high receptor), with the nominated acoustic barriers in place.

<b>Table 9</b> <b>Lot Numbers and Assumed Pad Level, AHD, metres, Stage 10A</b>	
<b>Lot Number</b>	<b>Pad Level, AHD, m</b>
212	33.9
213	34.05
214	34.2
215	34.45
216	34.75
217	35.1
218	35.55
226	34.25
227	34.05
228	33.8
229	33.6
230	33.4
231	33.2
232	33.1

<b>Table 10</b> <b>Facade Corrected Ultimate Traffic Noise Levels, Stage 10A,</b> <b>With Acoustic Barriers in Place</b>		
Lot Number	Ultimate Facade Traffic Noise Level, $L_{A10,18H}$ , dB(A)	
	1.8m High Receptor	4.6m High Receptor
212	59.9	61.0
213	57.7	59.0
214	56.9	58.0
215	55.6	56.7
216	55.0	56.1
217	54.5	55.5
218	53.8	54.7
226	54.4	55.2
227	54.9	55.9
228	55.6	56.6
229	56.2	57.3
230	57.5	58.6
231	58.3	59.4
232	60.1	61.0

For Stage 10A, with the nominated acoustic barriers in place, ultimate facade corrected traffic noise levels comply with the 63 dB(A)  $L_{A10,18H}$  noise limit for lowset dwellings (and the upper floor of any two storey dwellings), on all of the proposed Lots for this Stage.

**Stage 10B**

For Stage 10B the Calibre Consulting (Qld) Pty Ltd nominated pad levels are detailed in Table 11. Table 12 details the computer modelled facade corrected ultimate traffic noise levels for a single storey dwelling (1.8 m high receptor), as well as the upper floor of a two storey dwelling (4.6 metre high receptor), with the nominated acoustic barriers in place.

<b>Table 11 Lot Numbers and Assumed Pad Level, AHD, metres, Stage 10B</b>	
<b>Lot Number</b>	<b>Pad Level, AHD, m</b>
219	35.6
220	35.7
221	35.85
222	36.0
223	36.15
224	36.2
225	36.0

<b>Table 12 Facade Corrected Ultimate Traffic Noise Levels, Stage 10B, With Acoustic Barriers In Place</b>		
<b>Lot Number</b>	<b>Ultimate Facade Traffic Noise Level, LA10,18H, dB(A)</b>	
	<b>1.8m High Receptor</b>	<b>4.6m High Receptor</b>
219	53.2	54.2
220	52.9	53.8
221	52.5	53.4
222	52.1	52.9
223	51.7	52.5
224	50.8	51.8
225	50.6	51.5

For Stage 10B, with the nominated acoustic barriers in place, ultimate facade corrected traffic noise levels comply with the 63 dB(A) LA10,18H noise limit for lowset dwellings (and the upper floor of any two storey dwellings), on all of the proposed Lots for this Stage.



**Stage 11**

For Stage 11 the Calibre Consulting (Qld) Pty Ltd nominated pad levels are detailed in Table 13. Table 14 details the computer modelled facade corrected ultimate traffic noise levels for a single storey dwelling (1.8 m high receptor), as well as the upper floor of a two storey dwelling (4.6 metre high receptor), with the nominated acoustic barriers in place.

<b>Table 13</b> <b>Lot Numbers and Assumed Pad Level, AHD, metres, Stage 11</b>	
<b>Lot Number</b>	<b>Pad Level, AHD, m</b>
233	32.75
234	33.05
235	33.15
236	33.4
237	33.65
238	33.8
239	33.95
240	34.1
241	34.3
242	34.5
243	34.65
244	34.8
245	35.0
246	35.25
247	35.25
248	35.2
249	35.15
250	35.1
251	35.05
252	32.75
253	32.85
254	32.95
255	33.15
256	33.4
257	33.55
258	33.7
259	33.85
260	34.2
261	34.35
262	34.15
263	34.0
264	33.8

<b>Table 13</b> <b>Lot Numbers and Assumed Pad Level, AHD, metres, Stage 11</b>	
<b>Lot Number</b>	<b>Pad Level, AHD, m</b>
265	33.65
266	33.45
267	33.3
268	33.1
269	32.8

<b>Table 14</b> <b>Facade Corrected Ultimate Traffic Noise Levels, Stage 11,</b> <b>With Acoustic Barriers in Place</b>		
<b>Lot Number</b>	<b>Ultimate Facade Traffic Noise Level, LA10,18H, dB(A)</b>	
	<b>1.8m High Receptor</b>	<b>4.6m High Receptor</b>
233	59.6	63.7
234	60.1	63.1
235	60.2	63.1
236	60.4	64.0
237	59.9	63.5
238	59.0	63.1
239	58.7	62.7
240	58.1	62.2
241	57.8	62.2
242	57.5	62.0
243	57.3	62.0
244	57.0	61.6
245	56.7	61.4
246	57.1	61.4
247	54.2	55.9
248	53.5	54.9
249	53.1	54.3
250	52.6	53.8
251	52.1	53.2
252	58.3	59.6
253	57.3	58.4
254	56.3	57.5
255	55.7	56.9
256	55.2	56.3
257	54.5	55.7
258	54.0	55.3
259	53.5	54.6

<b>Table 14</b> <b>Facade Corrected Ultimate Traffic Noise Levels, Stage 11,</b> <b>With Acoustic Barriers in Place</b>		
Lot Number	Ultimate Facade Traffic Noise Level, $LA_{10,18H}$ , dB(A)	
	1.8m High Receptor	4.6m High Receptor
260	53.2	54.2
261	53.9	55.6
262	54.3	56.0
263	54.8	56.5
264	55.3	56.8
265	55.8	57.3
266	56.3	57.8
267	56.9	58.4
268	57.8	59.2
269	58.4	60.0

For Stage 11, with the nominated acoustic barriers in place, ultimate facade corrected traffic noise levels comply with the 63 dB(A)  $LA_{10,18H}$  noise limit for lowset dwellings (and the upper floor of any two storey dwellings, with the only exceptions being Lots 233, 236 and 237), on all of the proposed Lots for this Stage.

#### TRAFFIC NOISE CONTROL

Traffic noise control for Stages 3B, 5, 6, 9, 10A, 10B and 11 of Crestwood Estate are acoustic barriers, located as per Figures 4 and 5.

The acoustic barriers detailed in Figure 4 are as follows:

- 2.0 m high along the N and W boundaries of Lot 233;
- 2.0 m high along the W boundaries of Lots 234, 235 and Lot 236 to the change in direction;
- 1.8 m high for the SW boundary of Lot 236 (Norman Road boundary);
- 1.8 m high on the SW boundaries of Lots 237 to 246 inclusive;
- 1.8 m high return on Lot 246, 10 m long.

The acoustic barriers detailed in Figure 5 are in accordance with the Calibre Consulting (Qld) Pty Ltd drawing R12063-SK4401, Revision 2 and comprising an earth mound 1 metre high with a 1.4 metre high acoustic fence on top of the earth mound, for the Rockhampton – Yeppoon Road boundary and an at ground level 2.0 metre high acoustic barrier return along the north-eastern boundary of Lot 128.

The acoustic barriers must be located as per Figures 4 and 5 and as described above, be continuous and gap free, height relative to final ground level contours presented in the Calibre Consulting (Qld) Pty Ltd untitled site plan and have a minimum surface density of 15 kg/m<sup>2</sup>, excluding structural components, and a minimum  $R_w$  25. These acoustic barriers must be designed and constructed in accordance with MRTS 15. Examples of suitable materials of construction include:

- reinforced concrete;
- concrete block;
- brick;
- sheet metal at least 2 mm thick;
- earth mound;
- lapped timber palings, for example, kiln dried softwood palings 25 mm thick and overlapped a minimum 25 mm;



- any combination of the above.

## CONCLUSIONS

With the nominated acoustic barriers in place, namely:

- 2.0 metres high along the NE side of Lot 128 and 2.4 metres high (1 metre high mound with 1.4 metre high acoustic fence on top) along the boundaries of Lots 128 to 120 closest to the Rockhampton-Yeppoon Road and extending 20 metres to the SW beyond Lot 120 into the parkland;
- 1.8 metres high adjacent Norman Road (with a 1.8 metre high return along the side boundary of Lot 246) and 2.0 metres high adjacent to the Norman Road-Rockhampton-Yeppoon Road intersection, from the Norman Road boundary change in direction of Lot 236 to Lot 233, including the NE side of Lot 233.







the 63 dB(A)  $LA_{10,18H}$  facade corrected traffic noise limit for both the Rockhampton-Yeppoon Road and Norman Road are complied with for single storey dwellings on all of the proposed Lots for Stages 3B, 5, 6, 9, 10A, 10B and 11.

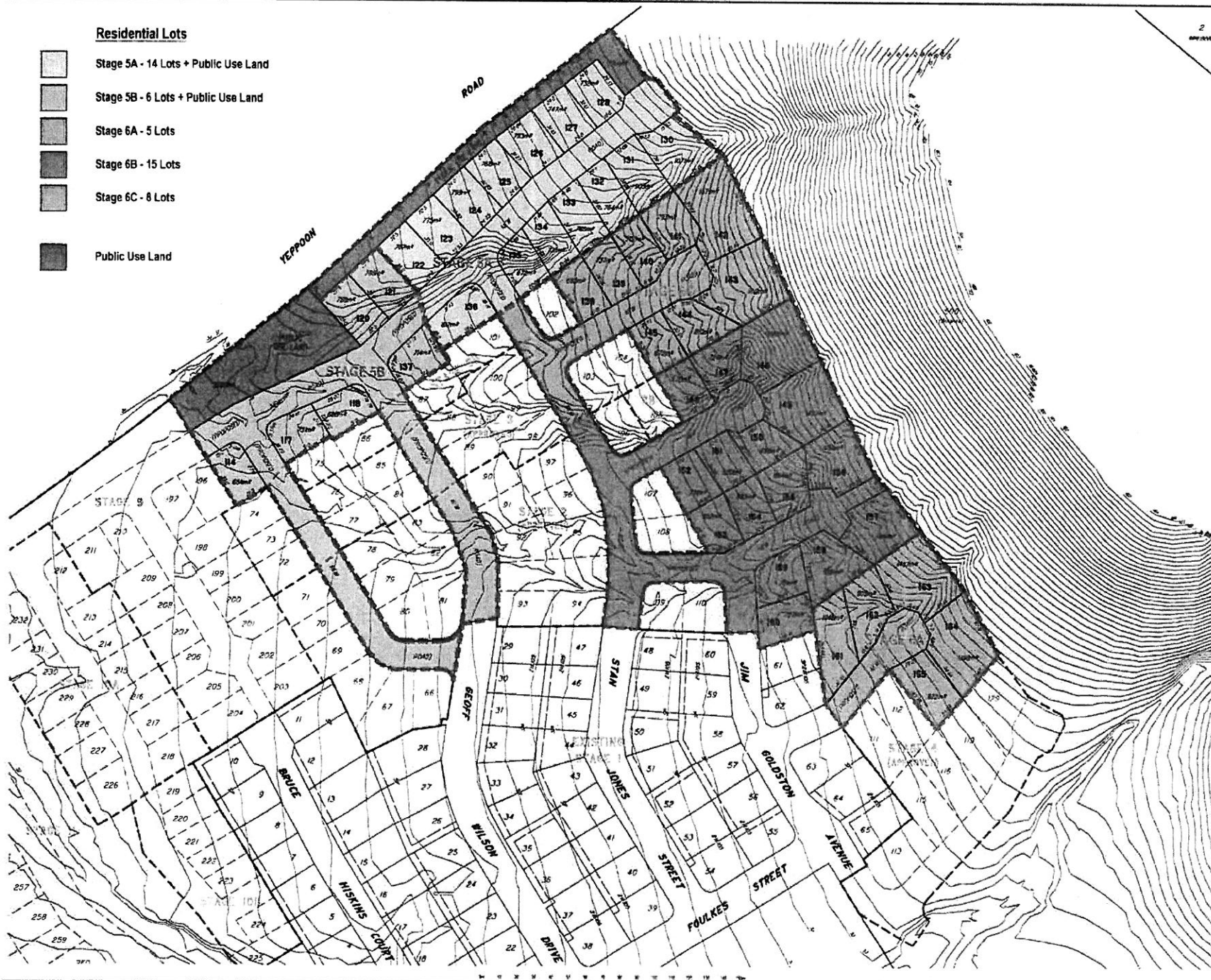
For the upper floor of any proposed two storey dwellings, the facade corrected noise limit of 63 dB(A)  $LA_{10,18H}$  is also complied with on all of the proposed Lots for Stages 3B, 5, 6, 9, 10A, 10B and 11, with the following exceptions:

- Stage 5, Lots 120 to 128 inclusive;
- Stage 11, Lots 233, 236 and 237.

The acoustic barriers must be located as per Figures 4 and 5 and as described above, be continuous and gap free, height relative to final ground level contours presented in the Calibre Consulting (Qld) Pty Ltd untitled site plan and have a minimum surface density of 15 kg/m<sup>2</sup>, excluding structural components, and a minimum Rw 25. These acoustic barriers must be designed and constructed in accordance with MRTS 15.

# Residential Lots

-  Stage 5A - 14 Lots + Public Use Land
-  Stage 5B - 6 Lots + Public Use Land
-  Stage 6A - 5 Lots
-  Stage 6B - 15 Lots
-  Stage 6C - 8 Lots
-  Public Use Land



## IMPORTANT NOTE

This plan was prepared to accompany a reconfiguration of a lot application to Rockhampton Regional Council and should not be used for any other purpose.

The dimensions and areas shown herein are subject to field survey and are to the requirements of council and any other authority which may have requirements to under any relevant legislation.

In particular, no reliance should be placed on the information on this plan for any financial dealings involving the land.

This notice is an integral part of this plan.

## Citimark Properties

project  
**Crestwood Estate**  
Geoff Wilson Drive,  
Norman Gardens

plan of  
**Reconfiguration of a Lot**  
Stage 5 & 6

lot  
**Lot 300 on SP216105**  
**& Lot 1 on RP618770**  
Parish of Murchison  
County of Livingstone

## Rockhampton Regional Council

REV	DATE	DESCRIPTION	BY	CHKD
A	25.05.2012	Stage boundaries imposed	CSG	CSG
B	25.05.2012			

**CSG**

capricorn survey group (cc)

scale  
**1:1000 @ A1**

sheet no  
**1 of 1**

plan no  
**5782-05-ROL-B**

**5782-05-ROL**

**B**

Our reference: SPD-0216-025454  
 Your reference: 5782  
 Assessment manager reference: D/279-2013

## Attachment 4 - SPA Appeal Provisions

### ***Sustainable Planning Act 2009—Representation and appeal provisions***

The following relevant appeal provisions are provided in accordance with s336(a) of the *Sustainable Planning Act 2009*.

#### **Chapter 6 Integrated development assessment system (IDAS)**

#### **Part 8 Dealing with decision notices and approvals**

#### **Division 1 Changing decision notices and approvals during applicant's appeal period**

##### **360 Application of div 1**

This division applies only during the applicant's appeal period.

##### **361 Applicant may make representations about decision**

- (1) The applicant may make written representations to the assessment manager about—
  - (a) a matter stated in the decision notice, other than a refusal or a matter about which a concurrence agency told the assessment manager under section 287(1) or (5); or
  - (b) the standard conditions applying to a deemed approval.
- (2) However, the applicant can not make representations under subsection (1)(a) about a condition attached to an approval under the direction of the Minister.

##### **362 Assessment manager to consider representations**

The assessment manager must consider any representations made to the assessment manager under section 361.

##### **363 Decision about representations**

- (1) If the assessment manager agrees with any of the representations about a decision notice or a deemed approval, the assessment manager must give a new decision notice (the ***negotiated decision notice***) to—
  - (a) the applicant; and
  - (b) each principal submitter; and
  - (c) each referral agency; and
  - (d) if the assessment manager is not the local government and the development is in a local government area—the local government.
- (2) Before the assessment manager agrees to a change under this section, the assessment manager must consider the matters the assessment manager was required to consider in assessing the application, to the extent the matters are relevant.
- (3) Only 1 negotiated decision notice may be given.
- (4) The negotiated decision notice—
  - (a) must be given within 5 business days after the day the assessment manager agrees with the representations; and
  - (b) must comply with section 335; and
  - (c) must state the nature of the changes; and
  - (d) replaces—



- (i) the decision notice previously given; or
  - (ii) if a decision notice was not previously given and the negotiated decision notice relates to a deemed approval—the standard conditions applying to the deemed approval.
- (5) If the assessment manager does not agree with any of the representations, the assessment manager must, within 5 business days after the day the assessment manager decides not to agree with any of the representations, give written notice to the applicant stating the decision about the representations.

#### **364 Giving new notice about charges for infrastructure**

- (1) This section applies if the development approved by the negotiated decision notice is different from the development approved in the decision notice or deemed approval in a way that affects the amount of an infrastructure charge, regulated infrastructure charge or adopted infrastructure charge.
- (2) The local government may give the applicant a new infrastructure charges notice under section 633, regulated infrastructure charges notice under section 643 or adopted infrastructure charges notice under section 648F to replace the original notice.

#### **366 Applicant may suspend applicant's appeal period**

- (1) If the applicant needs more time to make the representations, the applicant may, by written notice given to the assessment manager, suspend the applicant's appeal period.
- (2) The applicant may act under subsection (1) only once.
- (3) If the representations are not made within 20 business days after the day written notice was given to the assessment manager, the balance of the applicant's appeal period restarts.
- (4) If the representations are made within 20 business days after the day written notice was given to the assessment manager—
  - (a) if the applicant gives the assessment manager a notice withdrawing the notice under subsection (1)—the balance of the applicant's appeal period restarts the day after the assessment manager receives the notice of withdrawal; or
  - (b) if the assessment manager gives the applicant a notice under section 363(5)—the balance of the applicant's appeal period restarts the day after the applicant receives the notice; or
  - (c) if the assessment manager gives the applicant a negotiated decision notice—the applicant's appeal.

## **Chapter 7 Appeals, offences and enforcement**

### **Part 1 Planning and Environment Court**

#### **Division 8 Appeals to court relating to development applications and approvals**

##### **461 Appeals by applicants**

- (1) An applicant for a development application may appeal to the court against any of the following—
  - (a) the refusal, or the refusal in part, of the development application;
  - (b) any condition of a development approval, another matter stated in a development approval and the identification or inclusion of a code under section 242;
  - (c) the decision to give a preliminary approval when a development permit was applied for;
  - (d) the length of a period mentioned in section 341;
  - (e) a deemed refusal of the development application.

- (2) An appeal under subsection (1)(a), (b), (c) or (d) must be started within 20 business days (the **applicant's appeal period**) after—
  - (a) if a decision notice or negotiated decision notice is given—the day the decision notice or negotiated decision notice is given to the applicant; or
  - (b) otherwise—the day a decision notice was required to be given to the applicant.
- (3) An appeal under subsection (1)(e) may be started at any time after the last day a decision on the matter should have been made.

#### **462 Appeals by submitters—general**

- (1) A submitter for a development application may appeal to the court only against—
  - (a) the part of the approval relating to the assessment manager's decision about any part of the application requiring impact assessment under section 314; or
  - (b) the part of the approval relating to the assessment manager's decision under section 327.
- (2) To the extent an appeal may be made under subsection (1), the appeal may be against 1 or more of the following—
  - (a) the giving of a development approval;
  - (b) any provision of the approval including—
    - (i) a condition of, or lack of condition for, the approval; or
    - (ii) the length of a period mentioned in section 341 for the approval.
- (3) However, a submitter may not appeal if the submitter—
  - (a) withdraws the submission before the application is decided; or
  - (b) has given the assessment manager a notice under section 339(1)(b)(ii).
- (4) The appeal must be started within 20 business days (the **submitter's appeal period**) after the decision notice or negotiated decision notice is given to the submitter.

#### **463 Additional and extended appeal rights for submitters for particular development applications**

- (1) This section applies to a development application to which chapter 9, part 7 applies.
- (2) A submitter of a properly made submission for the application may appeal to the court about a referral agency's response made by a concurrence agency for the application.
- (3) However, the submitter may only appeal against a referral agency's response to the extent it relates to—
  - (a) development for an aquacultural ERA; or
  - (b) development that is—
    - (i) a material change of use of premises for aquaculture; or
    - (ii) operational work that is the removal, damage or destruction of a marine plant.
- (3) Despite section 462(1), the submitter may appeal against the following matters for the application even if the matters relate to code assessment—
  - (a) a decision about a matter mentioned in section 462(2) if it is a decision of the chief executive;
  - (b) a referral agency's response mentioned in subsection (2).

#### **464 Appeals by advice agency submitters**

- (1) Subsection (2) applies if an advice agency, in its response for an application, told the assessment manager to treat the response as a properly made submission.
- (2) The advice agency may, within the limits of its jurisdiction, appeal to the court about—
  - (a) any part of the approval relating to the assessment manager's decision about any part of the application requiring impact assessment under section 314; or
  - (b) any part of the approval relating to the assessment manager's decision under section 327.
- (3) The appeal must be started within 20 business days after the day the decision notice or negotiated decision notice is given to the advice agency as a submitter.
- (4) However, if the advice agency has given the assessment manager a notice under section 339(1)(b)(ii), the advice agency may not appeal the decision.

**465 Appeals about decisions relating to extensions for approvals**

- (1) For a development approval given for a development application, a person to whom a notice is given under section 389, other than a notice for a decision under section 386(2), may appeal to the court against the decision in the notice.
- (2) The appeal must be started within 20 business days after the day the notice of the decision is given to the person.
- (3) Also, a person who has made a request under section 383 may appeal to the court against a deemed refusal of the request.
- (4) An appeal under subsection (3) may be started at any time after the last day the decision on the matter should have been made.

**466 Appeals about decisions relating to permissible changes**

- (1) For a development approval given for a development application, the following persons may appeal to the court against a decision on a request to make a permissible change to the approval—
  - (a) if the responsible entity for making the change is the assessment manager for the application—
    - (i) the person who made the request; or
    - (ii) an entity that gave a notice under section 373 or a pre-request response notice about the request;
  - (b) if the responsible entity for making the change is a concurrence agency for the application—the person who made the request.
- (2) The appeal must be started within 20 business days after the day the person is given notice of the decision on the request under section 376.
- (3) Also, a person who has made a request under section 369 may appeal to the court against a deemed refusal of the request.
- (4) An appeal under subsection (3) may be started at any time after the last day the decision on the matter should have been made.

**467 Appeals about changing or cancelling conditions imposed by assessment manager or concurrence agency**

- (1) A person to whom a notice under section 378(9)(b) giving a decision to change or cancel a condition of a development approval has been given may appeal to the court against the decision in the notice.
- (2) The appeal must be started within 20 business days after the day the notice of the decision is given to the person.

**Division 11 Making and appeal to Court****481 How appeals to the court are started**

- (1) An appeal is started by lodging written notice of appeal with the registrar of the court.
- (2) The notice of appeal must state the grounds of the appeal.
- (3) The person starting the appeal must also comply with the rules of the court applying to the appeal.
- (4) However, the court may hear and decide an appeal even if the person has not complied with subsection (3).

**482 Notice of appeal to other parties—development applications and approvals**

- (1) An appellant under division 8 must give written notice of the appeal to—
  - (a) if the appellant is an applicant—
    - (i) the chief executive; and
    - (ii) the assessment manager; and
    - (iii) any concurrence agency; and
    - (iv) any principal submitter whose submission has not been withdrawn; and
    - (v) any advice agency treated as a submitter whose submission has not been withdrawn; or



- (b) if the appellant is a submitter or an advice agency whose response to the development application is treated as a submission for an appeal—
    - (i) the chief executive; and
    - (ii) the assessment manager; and
    - (iii) any referral agency; and
    - (iv) the applicant; or
  - (c) if the appellant is a person to whom a notice mentioned in section 465(1) has been given—
    - (i) the chief executive; and
    - (ii) the assessment manager for the development application to which the notice relates; and
    - (iii) any entity that was a concurrence agency for the development application to which the notice relates; and
    - (iv) the person who made the request under section 383 to which the notice relates, if the person is not the appellant; or
  - (d) if the appellant is a person mentioned in section 466(1)—
    - (i) the chief executive; and
    - (ii) the responsible entity for making the change to which the appeal relates; and
    - (iii) the person who made the request to which the appeal relates under section 369, if the person is not the appellant; and
    - (iv) if the responsible entity is the assessment manager—any entity that was a concurrence agency for the development application to which the notice of the decision on the request relates; or
  - (e) if the appellant is a person to whom a notice mentioned in section 467 has been given—the entity that gave the notice.
- (2) The notice must be given within—
- (a) if the appellant is a submitter or advice agency whose response to the development application is treated as a submission for an appeal—2 business days after the appeal is started; or
  - (b) otherwise—10 business days after the appeal is started.
- (3) The notice must state—
- (a) the grounds of the appeal; and
  - (b) if the person given the notice is not the respondent or a co-respondent under section 485—that the person may, within 10 business days after the notice is given, elect to become a co-respondent to the appeal by filing in the court a notice of election in the approved form.

#### **485 Respondent and co-respondents for appeals under div 8**

- (1) Subsections (2) to (8) apply for appeals under sections 461 to 464.
- (2) The assessment manager is the respondent for the appeal.
- (3) If the appeal is started by a submitter, the applicant is a co-respondent for the appeal.
- (4) Any submitter may elect to become a co-respondent for the appeal.
- (5) If the appeal is about a concurrence agency's response, the concurrence agency is a co-respondent for the appeal.
- (6) If the appeal is only about a concurrence agency's response, the assessment manager may apply to the court to withdraw from the appeal.
- (7) The respondent and any co-respondents for an appeal are entitled to be heard in the appeal as a party to the appeal.
- (8) A person to whom a notice of appeal is required to be given under section 482 and who is not the respondent or a co-respondent for the appeal may elect to be a co-respondent.
- (9) For an appeal under section 465—
  - (a) the assessment manager is the respondent; and

- (b) if the appeal is started by a concurrence agency that gave the assessment manager a notice under section 385—the person asking for the extension the subject of the appeal is a co-respondent; and
  - (c) any other person given notice of the appeal may elect to become a co-respondent.
- (10) For an appeal under section 466—
- (a) the responsible entity for making the change to which the appeal relates is the respondent; and
  - (b) if the responsible entity is the assessment manager—
    - (i) if the appeal is started by a person who gave a notice under section 373 or a pre-request response notice—the person who made the request for the change is a co-respondent; and
    - (ii) any other person given notice of the appeal may elect to become a co-respondent.
- (11) For an appeal under section 467, the respondent is the entity given notice of the appeal.

#### **488 How an entity may elect to be a co-respondent**

An entity that is entitled to elect to be a co-respondent to an appeal may do so, within 10 business days after notice of the appeal is given to the entity, by following the rules of court for the election.

#### **490 Lodging appeal stops particular actions**

- (1) If an appeal, other than an appeal under section 465, 466 or 467, is started under division 8, the development must not be started until the appeal is decided or withdrawn.
- (2) If an appeal is about a condition imposed on a compliance permit, the development must not be started until the appeal is decided or withdrawn.
- (3) Despite subsections (1) and (2), if the court is satisfied the outcome of the appeal would not be affected if the development or part of the development is started before the appeal is decided, the court may allow the development or part of the development to start before the appeal is decided.