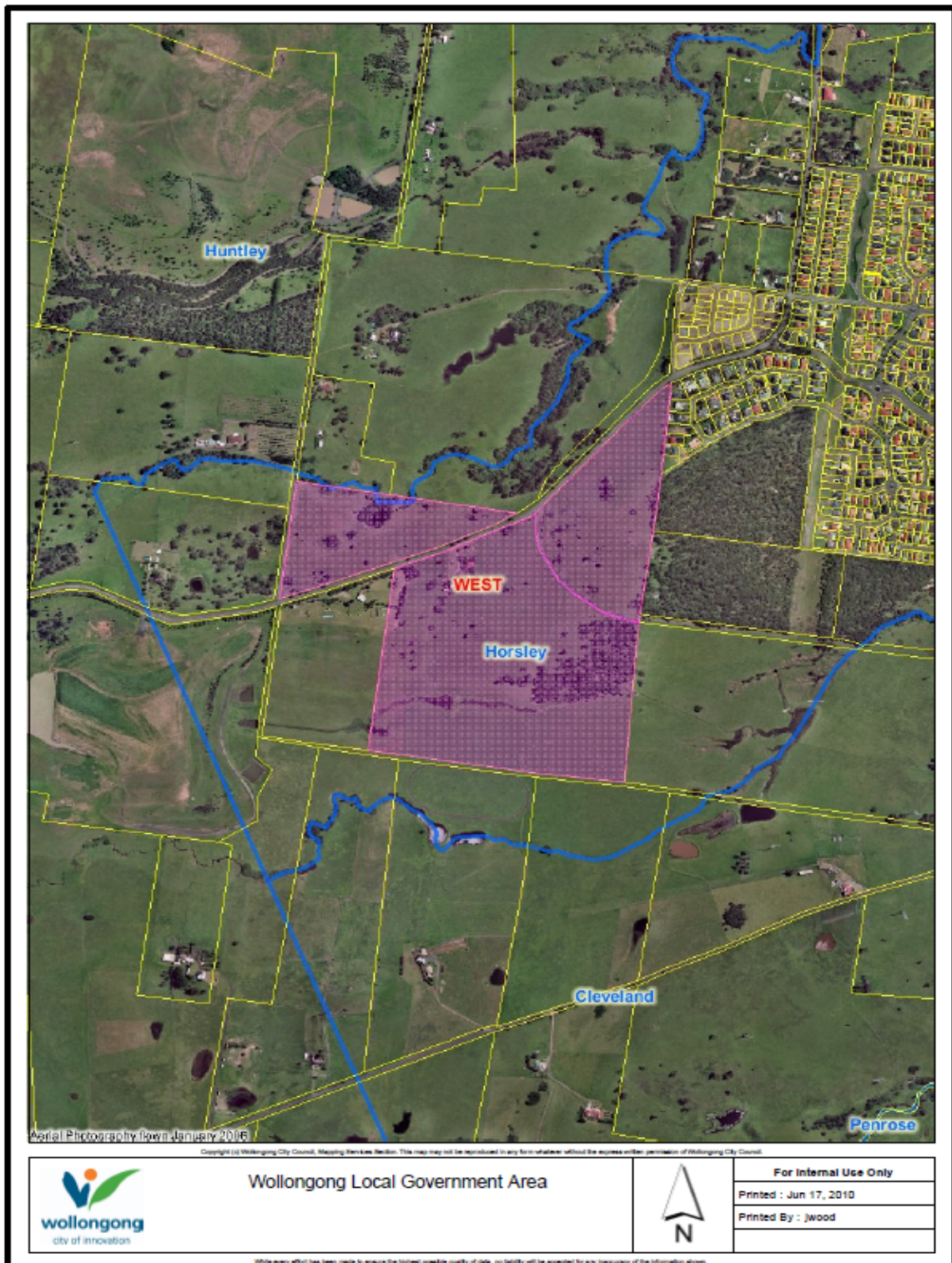
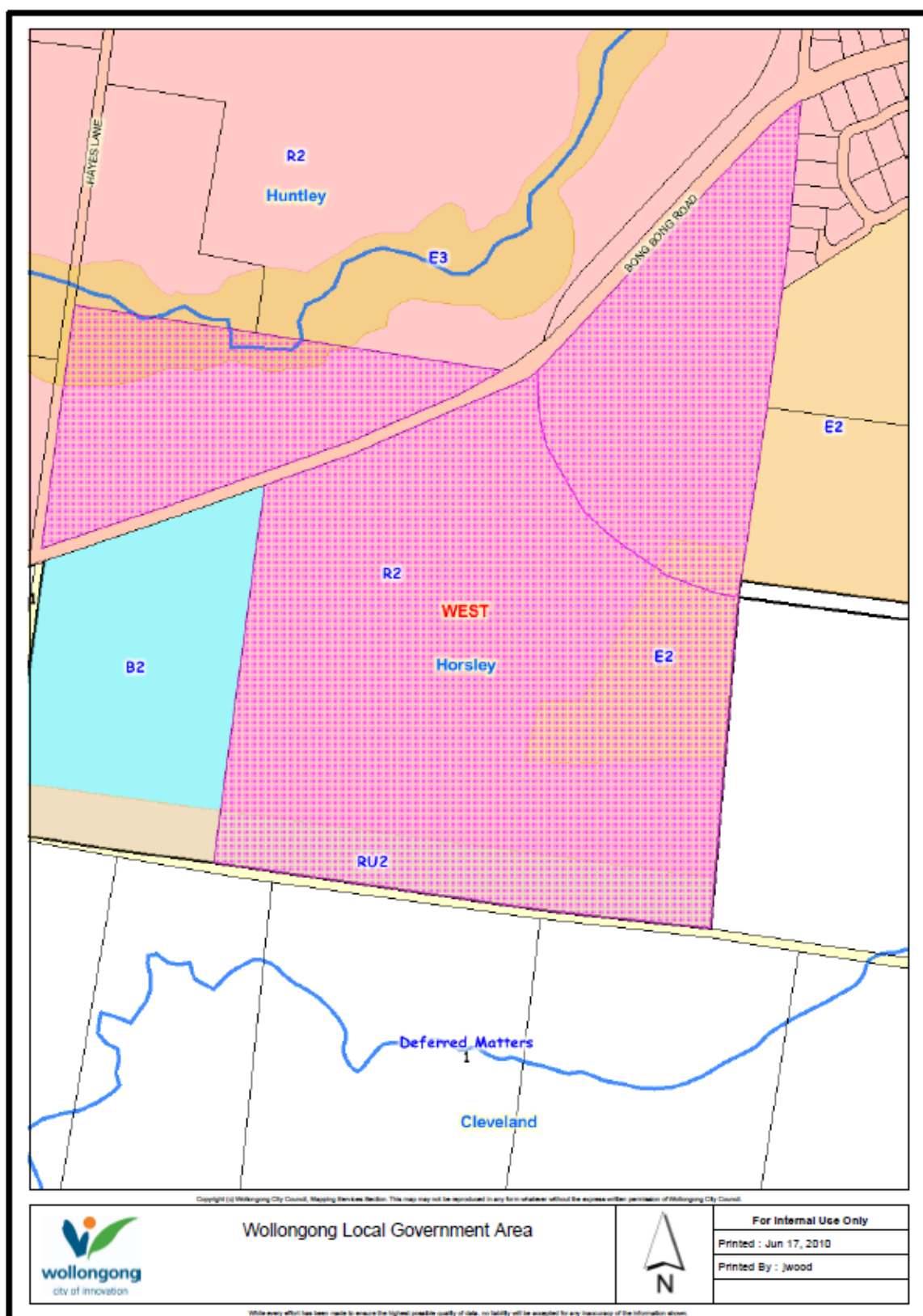


# Joint Regional Planning Panel| 06 May 2011

## Attachment 1. Aerial Photograph of development Site



## Attachment 2. WLEP 2010 (West Dapto) Zoning Map



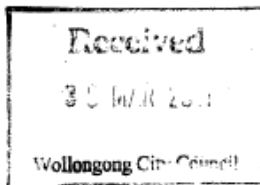
Attachment 3. NSW Department of Planning advice and 'Satisfactory Arrangements' Certification (SIC)



Planning

Office of the Director General

Mr David Farmer  
General Manager  
Wollongong City Council  
Locked Bag 8821  
Wollongong DC NSW 2500



GA36

11/05264

John W

Dear Mr Farmer

**Satisfactory Arrangements Certification for DA2010/693, West Dapto.**

I refer to Council's letter dated 8 March 2011 requesting certification under clause 6.1 of the *Wollongong Local Environmental Plan (West Dapto) 2010* ('LEP') in relation to Development Application 2010/693 for the proposed 295 lot subdivision of Lot 601 DP1054648 and part of Lot 60 DP1063539, 359 Bong Bong Road, Horsley.

Attached is the signed Satisfactory Arrangements Certificate. I have signed the certificate having had regard to an Executed Planning Agreement between the Minister for Planning and Stockland Developments concerning the State infrastructure contributions appropriate to the proposed development of a 295 lot subdivision contemplated by DA2010/693.

Please note that the certificate is issued for the purposes only of DA 2010/693 and it ceases to have effect if that development application is refused. Accordingly, the certificate may not be relied upon for the purpose of clause 6.1 of the LEP if DA2010/693 is refused and a new development application is lodged with the Council in relation to the land.

Further, the Department understands that Stockland Development has requested that a condition under section 93I (3) of the *Environmental Planning and Assessment Act 1979* be imposed on the development consent in relation to this matter and I confirm the Department's support for this request.

Should you have any further enquiries about this matter, I have arranged for Ms Linda Davis, Regional Planning Manager, Southern Region, to assist you. Ms Davis may be contacted at the Department's Wollongong Office on telephone number (02) 4224 9473.

Yours sincerely

Sam Haddad  
Director-General

24/3/2011  
Bridge St Office 23-33 Bridge St Sydney NSW 2000 GPO Box 39 Sydney NSW 2001 DX 22 Sydney



Planning

COPY

**Director-General's Certificate  
Satisfactory Arrangements for Designated State Public Infrastructure,  
Development Application 2010/693, 359 Bong Bong Road, Horsley**


In accordance with the provisions of clause 6.1 of *Wollongong Local Environmental Plan (West Dapto) 2010* ("LEP"), I, Sam Gabriel Haddad, Director-General of the Department of Planning, certify that satisfactory arrangements have been made to contribute to the provision of *designated State public infrastructure* in relation to the lots proposed in Development Application 2010/693 for the subdivision of Lot 601 DP1054648 and part of Lot 60 DP1063539, 359 Bong Bong Road, Horsley.

For the purposes of clause 6.1 (3) (a) of the LEP, the lot shown highlighted yellow on the attached plan is identified as a residue lot and, accordingly, this Certificate does not apply in relation to it.

This Certificate ceases to have effect if DA2010/693 is finally determined by the refusal of consent.

  
Sam Gabriel Haddad  
Director-General

Date: 24<sup>th</sup> March 2011.

<p>Our Ref: 497DA447 (10/1463) STH09/02479 Contact: Tim Webster 4221 2769 Your Ref: DA-2010/693</p>	<p>2-9 NOV 2010</p> 
<p>GA36</p>	<p>26 NOV 2010</p>

The General Manager  
Wollongong City Council  
Locked Bag 8821  
WOLLONGONG NSW 2500

Attention: Daniel Hodge

**WOLLONGONG CITY COUNCIL – DA-2010/693 – LOT 601 DP 1054648 & LOT 60 DP 1063539, BONG BONG ROAD, HORSLEY – 295 LOT RESIDENTIAL SUBDIVISION, WEST DAPTO RELEASE AREA, DRAFT PLANNING AGREEMENT**

Dear Sir,

Reference is made to your letter dated 17 September 2010 regarding the subject development application forwarded to the Roads and Traffic Authority (RTA) for consideration.

The RTA has reviewed the submitted information and has no objections to the proposed Voluntary Planning Agreement with respect to contributions towards local infrastructure however the RTA notes that no contribution has been proposed towards State and Regional road network infrastructure. In this regard, the RTA has been working with the Department of Planning with a view to capturing these State and Regional contributions by way of an Illawarra Special Infrastructure Contributions (SIC). The RTA understands that the Department of Planning is in the process of finalising this Illawarra SIC and that it will be put before Cabinet in the near future for approval.

As previously advised, Council can not determine applications within the West Dapto Release Area until such time that satisfactory arrangements have been made for State and Regional contributions. As such, and given the above, the RTA cannot support the approval of the subject development application or any other development applications within the West Dapto Release Area until such time as the Illawarra Special Infrastructure Contributions Plan is finalised.

If you have any further questions please contact Tim Webster on 4221 2769

Yours faithfully



Adam Berry  
Manager, Road Safety and Traffic Management  
Southern Operations and Engineering Services

CC – Linda Davis (Department of Planning, via email)

Roads and Traffic Authority ABN 64 480 155 255

Level 4, 90 Crown St Wollongong NSW 2500  
PO Box 477 Wollongong NSW 2520 DX 5178, Wollongong.

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Our Ref: 497DA447 (10/1249) STH09/0179  
Contact: Tim Webster 4221 2769  
Your Ref: DA-2010/693

# GA36

12 OCT 2010



07 OCT 2010

## ENTERED

John W

The General Manager  
Wollongong City Council  
Locked Bag 8821  
WOLLONGONG NSW 2500

Attention: John Wood

**WOLLONGONG CITY COUNCIL - DA-2010/693 - LOT 601 DP 1054648 & LOT 60 DP 1063539, BONG BONG ROAD, HORSLEY - 295 LOT RESIDENTIAL SUBDIVISION, WEST DAPTO RELEASE AREA**

Dear Sir,

Reference is made to your letter dated 17 September 2010 regarding the subject development application forwarded to the Roads and Traffic Authority (RTA) for consideration.

A number of issues raised by the Southern Regional Development Committee relate to the timing and provision of infrastructure associated with the West Dapto Initial Access Strategy (WDIAS) and ultimately, as indicated in the applicants response to the issues raised, this is a matter for Council to resolve with input from the RTA and is not the responsibility of the developer. Notwithstanding the above, this infrastructure is required to ameliorate the traffic impacts of the subject development and other subdivisions within the West Dapto Release Area (WDRA). Accordingly as Council would be aware, Council can not approve any development applications within the WDRA until the Department of Planning has confirmed that satisfactory arrangements have been reached either by way of a Special Infrastructure Contribution or Voluntary Planning Agreement.

The RTA considers that issues raised by the Committee regarding local roads and intersections are a matter for Council to determine. Those issues raised by the Committee and the subsequent responses by the applicant should be taken into consideration by Council in determining the application at such a time when a determination can be made.

With respect to the provision of public transport the RTA would be keen to be involved in any future public transport planning issues throughout the WDRA given the recognised need to achieve a significant mode shift away from the private motor vehicle. Achieving this goal is of vital importance to maintaining the road safety and traffic efficiency of the classified road network.

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Roads and Traffic Authority

While the RTA would not object to the subject development application in principle, as outlined above number of issues in relation to infrastructure contributions, infrastructure provision and public transport provision are yet to be resolved by Council and the RTA would appreciate a continued involvement in this process. If you have any questions please contact Tim Webster 4221 2769.

Yours faithfully



Adam Berry  
Manager, Road Safety and Traffic Management  
Southern Operations and Engineering Services

**From:** WEBSTER Timothy M [mailto:Timothy\_WEBSTER@rta.nsw.gov.au]  
**Sent:** Wednesday, 13 April 2011 12:22  
**To:** John Wood  
**Subject:** RE: DA-2010/693 STOCKLANDS SUBDIVISION

Hi John,

I confirm that the RTA has no outstanding issues in relation to the subject DA now that the Department of Planning have certified that satisfactory arrangements have been made to contribute to the provision of designated State public infrastructure in relation to the subject DA. As per previous RTA correspondence, local road issues raised through the Regional Development Committee are a matter for Council to consider and condition appropriately.

Regards

**Tim Webster**

BSc, GDURP  
Development Assessment Officer  
Road Safety & Traffic Management

#### **Roads and Traffic Authority**

---

L4 90 Crown Street  
PO Box 477 Wollongong NSW 2500  
T: 4221 2769  
[www.rta.nsw.gov.au](http://www.rta.nsw.gov.au)



RECEIVED

09 JUL 2010

The General Manager  
Wollongong City Council  
Locked Bag 8821  
WOLLONGONG DC NSW 2500

Attention: Ann Wheatley

Dear Madam

RECEIVED  
GDA24  
10 JUL 2010

DA2010/693  
09 JUL 2010

Contact: Jeremy Morice  
Phone: 02 4224 9736  
Fax: 02 4224 9740  
Email: [jeremy.morice@water.nsw.gov.au](mailto:jeremy.morice@water.nsw.gov.au)

Our ref: 10 ERM2009/1025  
File No: 9053657  
Your Ref: DA2010/693

7 July 2010

**Re: Integrated Development – Residential Subdivision  
Lot 601 DP 1054648, & Lot 60 DP 1063539, 359 Bong Bong Road, Horsely**

The NSW Office of Water has reviewed documents for the above development application and considers that, for the purposes of the *Water Management Act (2000)* a Controlled Activity Approval is not required and no further assessment by the NSW Office of Water is necessary.


It has been determined that the subject drainage line bisecting lot 60 does not meet the definition of waterfront land as defined by the *Water Management Act (2000)*.

Further information on Controlled Activity Approvals under the *Water Management Act 2000* can be obtained from the NSW Office of Water's website:

<http://www.water.nsw.gov.au/Water-Licensing/Approvals/Controlled-activities/default.aspx>

Please direct any questions regarding this correspondence to Jeremy Morice, [jeremy.morice@water.nsw.gov.au](mailto:jeremy.morice@water.nsw.gov.au).

Yours sincerely

  
**Jeremy Morice**  
Licensing Officer  
NSW Office of Water  
Licensing South



## Attachment 6. NSW Heritage Council Section 140 Excavation Permit



Locked Bag 5020  
Parramatta NSW 2124  
DX 8225 PARRAMATTA

heritage@planning.nsw.gov.au  
www.heritage.nsw.gov.au

Contact: Katrina Stankowski  
Telephone: 98738569  
Email: Katrina.Stankowski@planning.nsw.gov.au  
File: 10/20898  
Job ID No: B262318

Jeff Bannerman  
Stockland Development Pty Ltd  
Level 25  
133 Castlereagh Street  
SYDNEY NSW 2000

Dear Mr Bannerman

**Re: S140 Excavation Permit 2010/S140/21 – Lot 601 DP 1054648, Bong Bong Road, West Dapto – Test Excavation, Monitoring and potential Salvage of remaining archaeology on site.**

I refer to your application under Section 140 of the *Heritage Act* 1977 to undertake the Test Excavation, Monitoring and potential Salvage of the remaining archaeology present at Lot 601 DP 1054648, Bong Bong Road, West Dapto (Application number 2010/S140/21)

Under delegated authority approval is given for the S140 application for an archaeological excavation permit. Please note this permit is subject to the conditions attached. Acceptance of these statutory conditions by the Applicant and Excavation Director is a requirement of this permit. Please note the addition of conditions 13, 14 & 15 which have been included to suit the specific needs of your site:

13. The Applicant must ensure that if artefacts are left in situ, a suitably qualified conservator is contacted for advice regarding appropriate preservation methods to ensure the long term survival of the relics left in the ground.
14. The Applicant must ensure that at the completion of archaeological works, the results of the archaeological programme are interpreted within the completed redevelopment of the site. This interpretation should help the public understand the history and significance of the site.
15. The Applicant must ensure that an outline of the on-site interpretation plan, including information on the display and housing of artefacts, is submitted to the Heritage Council of NSW for approval within 6 months of the completion of the excavation programme. Final details of the interpretation plan must be submitted to the Heritage Council of NSW for approval within 12 months of the completion of the final excavation report for the site.

You are reminded that it is a condition of this permit that the Applicant is responsible for the safe keeping of all artefacts recovered from this site. You are required to nominate a repository for archaeologically excavated material, as well as referencing the final location in the excavation report as per section 146 (b) of the Act. This is to enable a record to be kept of the location of all archaeologically excavated material.

It should be noted that as the Applicant, this Approval (and the fulfilment of all subsequent conditions) rests with you and not the Land which is the subject of the works. Permits are not transferable without the written consent of the Heritage Council of New South Wales issued as a Variation under section 144 of the Heritage Act, 1977.

An approval for an archaeological permit under the Act covers only those archaeological works described in the application. Any additional archaeological investigations will require a further approval. Furthermore, an approval for an archaeological permit under the Act is additional to those which may be required from other local, State or Commonwealth Government authorities. Inquiries about any other approvals needed should, in the first instance, be directed to the local council, State and Commonwealth Government where appropriate.

Your attention is drawn to the right of appeal against these conditions in accordance with section 142 of the *Heritage Act, 1977*. Inquiries on this matter may be directed to Katrina Stankowski on 98738569 or via email at [Katrina.Stankowski@planning.nsw.gov.au](mailto:Katrina.Stankowski@planning.nsw.gov.au).

Yours sincerely



27/01/2011

**Vincent Sicari**  
Manager  
Conservation Team  
Heritage Branch  
Department of Planning

**As Delegate of the NSW Heritage Council**

CC: Ms Fenella Atkinson, AHMS, 349 Annandale Street, Annandale 2038.  
The General Manager, Wollongong City Council, DX 27811, WOLLONGONG COURT.

**Attachment 7. NSW DECCW Section 87 and Section 90 Aboriginal Heritage Impact Permits**

**Aboriginal Heritage Impact Permit**

*National Parks and Wildlife Act 1974 (NPW Act)*



**Environment,  
Climate Change  
& Water**

Your reference:  
Our reference: AHIMS No. 3328 / FIL10/10736  
Document number: 1119390  
Contact: Fran Scully (02) 9995 6830

STOCKLAND DEVELOPMENT PTY LTD,  
ABN 71 000 064 835,  
GPO Box 998,  
SYDNEY NSW 1041  
REGISTERED POST

**ABORIGINAL HERITAGE IMPACT PERMIT**

**AHIP No: 1119389**

Dear Mr Bannerman

**RE: s87 AHIP application, AHIMS #52-2-3277, Bong Bong Road, West Dapto**

I refer to your application for an Aboriginal Heritage Impact Permit under section 87 of the *National Parks and Wildlife Act 1974* (NPW Act) and accompanying information provided for the archaeological investigations at AHIMS #52-2-3277, Bong Bong Road, West Dapto received by the Department of Environment, Climate Change and Water (NSW) (DECCW) on 30 July 2010 and 10 September 2010.

DECCW has considered the application and supporting information provided and has decided to issue an AHIP subject to conditions. The AHIP is attached.

You should read the AHIP carefully and ensure you comply with its conditions. In particular please note the following conditions:

- All activities must be carried out in accordance with the methodology specified in **Archaeological Research Design & Methodology: AHIMS Site #52-2-3277, Lot 60 DP1063539, Bong Bong Road, West Dapto, NSW for Stockland Development, AHMS Pty Ltd, Final Report (Amended), September 2010.**
- A completed Aboriginal Site Impact Recording Form is to be provided to the AHIMS Registrar for each AHIMS site identified in Schedule C within 4 months of the completion of the authorised works.

You should note that it is an offence under the NPW Act to fail to comply with the conditions of the AHIP. The maximum penalty that a court may impose on a corporation for failing to comply with this AHIP \$22,000.

Page 1 of 2

## ***Aboriginal Heritage Impact Permit***

*National Parks and Wildlife Act 1974 (NPW Act)*



**Environment,  
Climate Change  
& Water**

If you have any questions, or wish to discuss this matter further please contact Fran Scully on (02) 9995 6830.

Ms Lou Ewins

Manager Planning & Aboriginal Heritage Section

Metropolitan

(by Delegation)

Date: 20-Sep-2010

Permit to disturb or excavate land for the purpose of  
discovering Aboriginal objects  
Permit to disturb or move Aboriginal objects on land

## **Aboriginal Heritage Impact Permit**

Section 87 of the National Parks and Wildlife Act 1974



**Environment,  
Climate Change  
& Water**

**AHIP number: 1119389**

**AHIMS number: 3328**

**AHIP Issued To:**

STOCKLAND DEVELOPMENT PTY LTD,  
ABN 71 000 064 835,  
GPO Box 998,  
SYDNEY NSW 1041  
REGISTERED POST

---

**DECCW office issuing this AHIP**

Department of Environment, Climate Change and Water (NSW)  
Metropolitan Branch  
PO Box 668  
Parramatta  
NSW 2124  
Ph (02) 9995 6830  
Fax (02) 9995 6900

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**Short description of activity and/or location**

Archaeological investigation of AHIMS #52-2-3277 (WDRA\_AX\_47) at Bong Bong Road  
within the West Dapto Urban Release Area

---

**Note: A Dictionary at the end of the AHIP defines terms used in this document. Further  
information about this AHIP is also set out after the Dictionary**

Permit to disturb or excavate land for the purpose of  
discovering Aboriginal objects  
Permit to disturb or move Aboriginal objects on land

## ***Aboriginal Heritage Impact Permit***

Section 87 of the National Parks and Wildlife Act 1974



Environment,  
Climate Change  
& Water

### **PERMIT TO DISTURB OR EXCAVATE LAND FOR THE PURPOSE OF DISCOVERING ABORIGINAL OBJECTS**

### **PERMIT TO DISTURB OR MOVE ABORIGINAL OBJECTS ON LAND**

#### **Background**

On 30-Jul-2010 an application was made to the Director-General of the Department of Environment, Climate Change and Water for a permit pursuant to s.87 of the National Parks and Wildlife Act 1974.

This application is to allow archaeological investigations at AHIMS #52-2-3277 (WDRA\_AX\_47) at Bong Bong Road within the West Dapto Urban Release Area prior to its destruction as part of a residential subdivision.

#### **Permit issued subject to conditions**

A permit is issued to:

- (a) disturb or excavate the land as described in Schedule A for the purpose of discovering Aboriginal objects, and
- (b) disturb or move on land Aboriginal objects identified in Schedule C

but only as expressly provided by the conditions of this AHIP.

This permit is issued pursuant to section 87 of the National Parks and Wildlife Act 1974.

Ms Lou Ewins

Manager Planning & Aboriginal Heritage Section

Metropolitan

(by Delegation)

DATED: 20-Sep-2010



# Variation of Aboriginal Heritage Impact Permit

*National Parks and Wildlife Act 1974 (NPW Act)*



Environment,  
Climate Change  
& Water

[Link to "1119389" notice record](#)

RECEIVED

21 DEC 2010

Your reference:  
Our reference: AHIMS No. 3328 / FIL10/10736  
Notice number: 1122544  
Contact: Fran Scully (02) 9995 6830

STOCKLAND DEVELOPMENT PTY LTD,  
ABN 71 000 064 835,  
GPO Box 998,  
SYDNEY NSW 1041

## NOTICE OF VARIATION OF ABORIGINAL HERITAGE IMPACT PERMIT NO. 1119389

Issued pursuant to section 90D(5) *National Parks and Wildlife Act 1974*

### BACKGROUND

- A. STOCKLAND DEVELOPMENT PTY LTD (the applicant) applied to the Department of Environment, Climate Change and Water (DECCW) to vary Aboriginal Heritage Impact Permit No. 1119389 (the AHIP) granted under section 90D *National Parks and Wildlife Act 1974* (NPW Act). The AHIP authorises the carrying out of Harm to Aboriginal Objects.
- B. DECCW received the application on 19-Nov-2010.
- C. DECCW has considered the matters set out in section 90K of the NPW Act.

### VARIATION OF ABORIGINAL HERITAGE IMPACT PERMIT

1. DECCW has decided to grant this variation. By this notice DECCW varies AHIP No. 1119389 in the following manner:

#### Variation 1

#### SALVAGE WORK AND RELATED OBJECTS

Condition 14, which states that:

"The salvage work must occur in accordance with **Archaeological Research Design & Methodology: AHIMS Site #52-2-3277, Lot 60 DP1063539, Bong Bong Road, West Dapto, NSW for Stockland Development, AHMS Pty Ltd, Final Report (Amended), September 2010, except, as otherwise expressly provided by a condition of this AHIP**".

is replaced by:

"The salvage work must occur in accordance with **the email diagram submitted as part of the variation application, via email on 18<sup>th</sup> November 2010 (copy attached)**, except as otherwise expressly provided by a condition of this AHIP".

Notice number 1122544

Page 1 of 2

## Variation of Aboriginal Heritage Impact Permit



Environment,  
Climate Change  
& Water

National Parks and Wildlife Act 1974 (NPW Act)

2. You must provide a copy of this AHIP variation notice to each Registered Aboriginal Party referenced in AHIP number 1119389, within 14 days.

Ms Lou Ewins

Manager Planning & Aboriginal Heritage Section

Metropolitan

(by Delegation)

Date: 16-Dec-2010

### INFORMATION ABOUT THIS VARIATION NOTICE

- Details provided in this notice will be available on DECCW's Public Register in accordance with section 188F of the NPW Act.
- You should read this Variation Notice carefully and ensure that you continue to comply with all conditions of the original AHIP 1119389 issued on 20-Sep-2010, as amended by this Variation Notice. The format of this Variation Notice requires that it must be read in conjunction with the original AHIP.

### When this notice begins to operate

- The variations to the AHIP specified in this notice begin to operate immediately from the date of this Variation Notice, unless another date is specified in this notice.

### Variation of this notice

- This Variation Notice may only be varied by subsequent notices issued by DECCW.

### Appeals against this decision

- You can appeal against this decision to the Land and Environment Court. The deadline for lodging the appeal is 21 days after the date that this notice was issued.



Headquarters  
15 Carter Street  
Lidcombe NSW 2141

Telephone: 8741 5175

e-mail: development.assessment@rfs.nsw.gov.au

Headquarters  
Locked Bag 17  
Granville NSW 2142

Facsimile: 8741 5433

29 JUN 2010



The General Manager  
Wollongong City Council  
Locked Bag 8821  
WOLLONGONG NSW 2500

GDA24

John W

Your Ref: DA-2010/693  
Our Ref: D10/0978  
DA10061070025 DM

**ATTENTION:** Anne Wheatley

28 June 2010

Dear Ms Wheatley

**Integrated Development for 601//1054648 & 60//1063539 Bong Bong Road  
Horsley 2530**

I refer to your letter dated 8 June 2010 seeking general terms of approval for the above Integrated Development in accordance with Section 91 of the 'Environmental Planning and Assessment Act 1979'.

This response is to be deemed a bush fire safety authority as required under section 100B of the 'Rural Fires Act 1997' and is issued subject to the following numbered conditions:

**Asset Protection Zones**

The intent of measures is to provide sufficient space and maintain reduced fuel loads so as to ensure radiant heat levels of buildings are below critical limits and to prevent direct flame contact with a building.

1. At the issue of subdivision certificate and in perpetuity the following asset protection zones shall be provided and are to be managed as an inner protection area (IPA) as outlined within section 4.1.3 and Appendix 5 of 'Planning for Bush Fire Protection 2006' and the NSW Rural Fire Service's document 'Standards for asset protection zones':
  - Lots within Stage 7: 25 metres from the forest vegetation to the east and 15 metres from the proposed reserve to the south
  - Lots within Stage 9: 10 metres from the proposed reserve to the north and 10 metres from the grassland to the south and east
  - Lots within Stages 1, 2 and 4: 15 metres from the proposed reserve to the east

Page 1 of 3

- Lots within Stages 10, 11: 10 metres from the grassland to the south and west
- Lots within Stages 3,5: 20 metres from the forest/riparian vegetation to the west
- Lots within Stage 1 and 8: 10 metres from the grassland to the west

#### **Water and Utilities**

The intent of measures is to provide adequate services of water for the protection of buildings during and after the passage of a bush fire, and to locate gas and electricity so as not to contribute to the risk of fire to a building.

2. Water, electricity and gas are to comply with section 4.1.3 of 'Planning for Bush Fire Protection 2006'.

#### **Access**

The intent of measures for public roads is to provide safe operational access to structures and water supply for emergency services, while residents are seeking to evacuate from an area.

3. Public road access shall comply with section 4.1.3 (1) of 'Planning for Bush Fire Protection 2006'.

#### **General Advice – consent authority to note**

This approval is for the subdivision of the land only. Any further development application for class 1,2 & 3 buildings as identified by the 'Building Code of Australia' must be subject to separate application under section 79BA of the EP & A Act and address the requirements of 'Planning for Bush Fire Protection 2006'.

#### **Planting Species**

The information provided identifies that habitat restoration works within the retained vegetation should be implemented. This has the potential to change the structure of the area of woodland within the proposed reserve. This consent is based on a woodland classification of the proposed reserve. If the structure is to change through re-vegetation then a new assessment will be required.

For any queries regarding this correspondence please contact Danielle Meggos on 8741 5175.

Yours sincerely



Nika Fomin  
Team Leader, Development Assessment and Planning

Hi Daniel and John

Condition - can I suggest:

"Pursuant to section 93I(3) of the Environmental Planning and Assessment Act 1979, the Applicant is required forthwith to enter into a planning agreement with Council in the terms of an offer made by the Applicant and as now reflected in the document entitled West Dapto Planning Agreement supplied to Council on the Applicant's behalf on 18 April 2011."

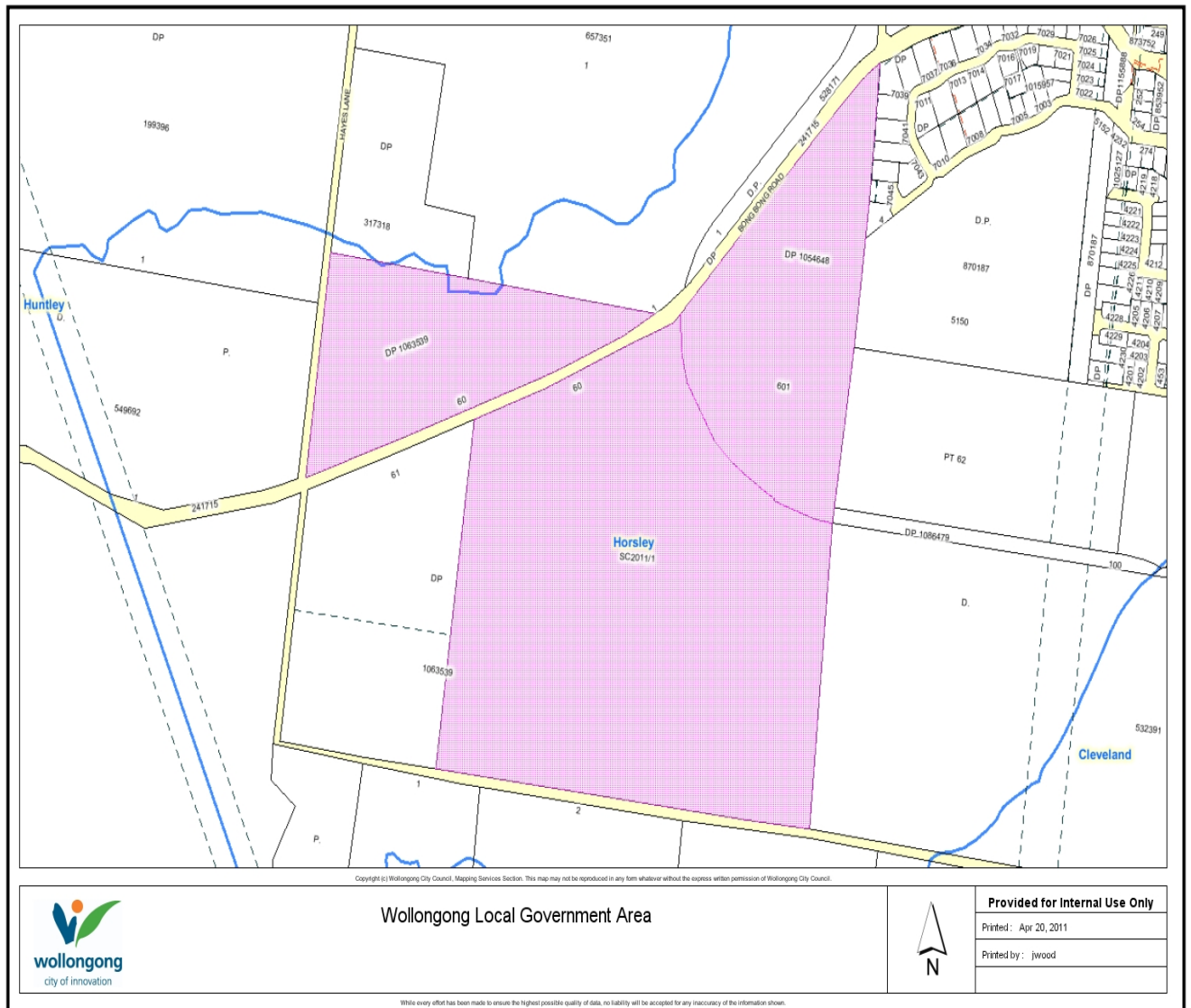
In relation to the status of the matter:

I have reviewed the most recent version of the West Dapto Planning Agreement, and everything appears suitable for Council to agree to its terms. The VPA is being reviewed by Council's external lawyers, with that process to be completed by Friday 29 April 2011. It is imperative that a copy of the VPA executed by the Applicant, is with Council prior to grant of any development consent.

regards

**Jeff Reilly** | General Counsel  
Accredited Specialist Local Government & Planning Law  
Wollongong City Council | 41 Burelli St, Wollongong  
p 02-4227-7215 f 02-4225-9964

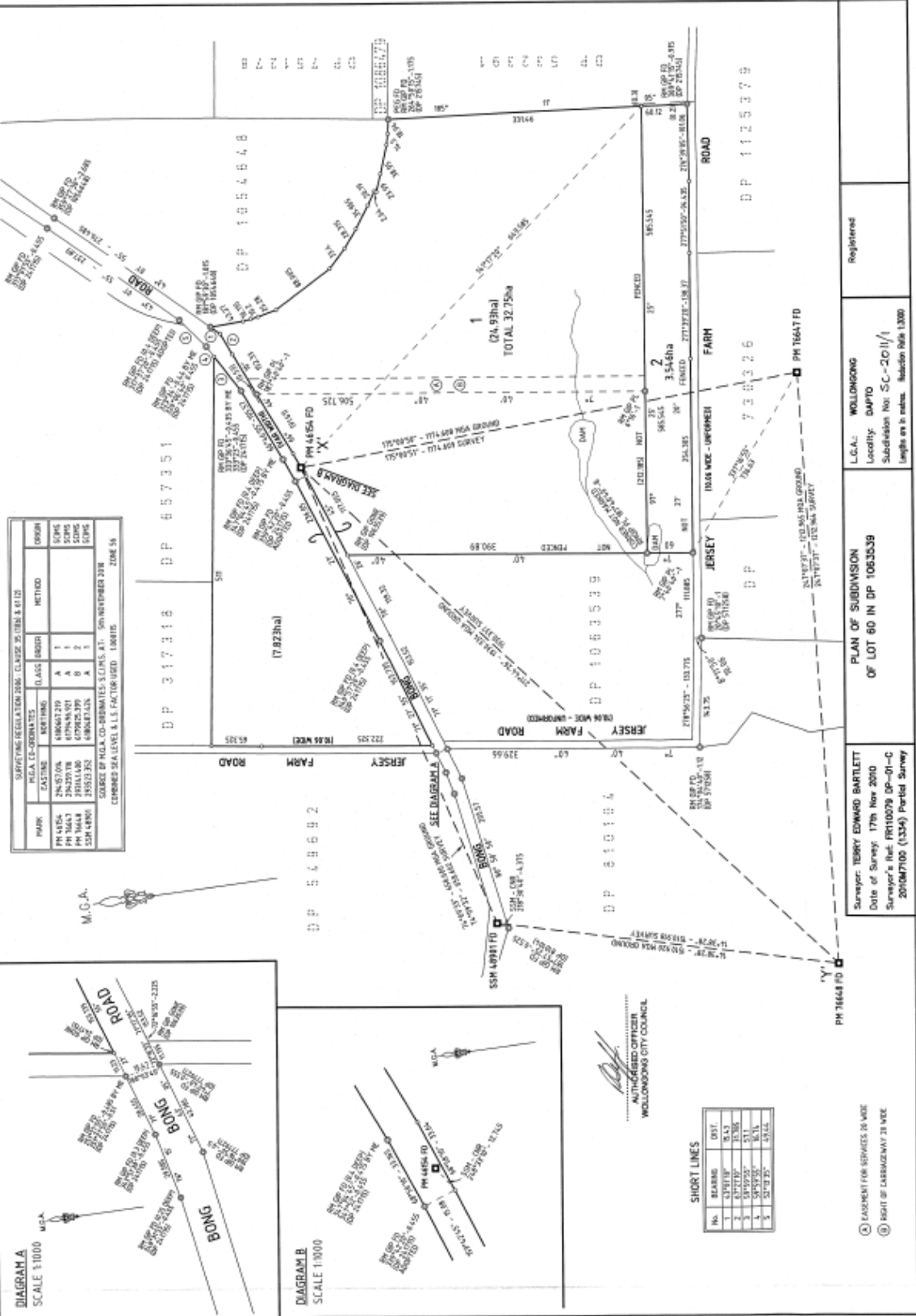




Current - Lot 60 DP 1063539 and Lot 160 DP 1054648 Bong Bong Road West Dapto.

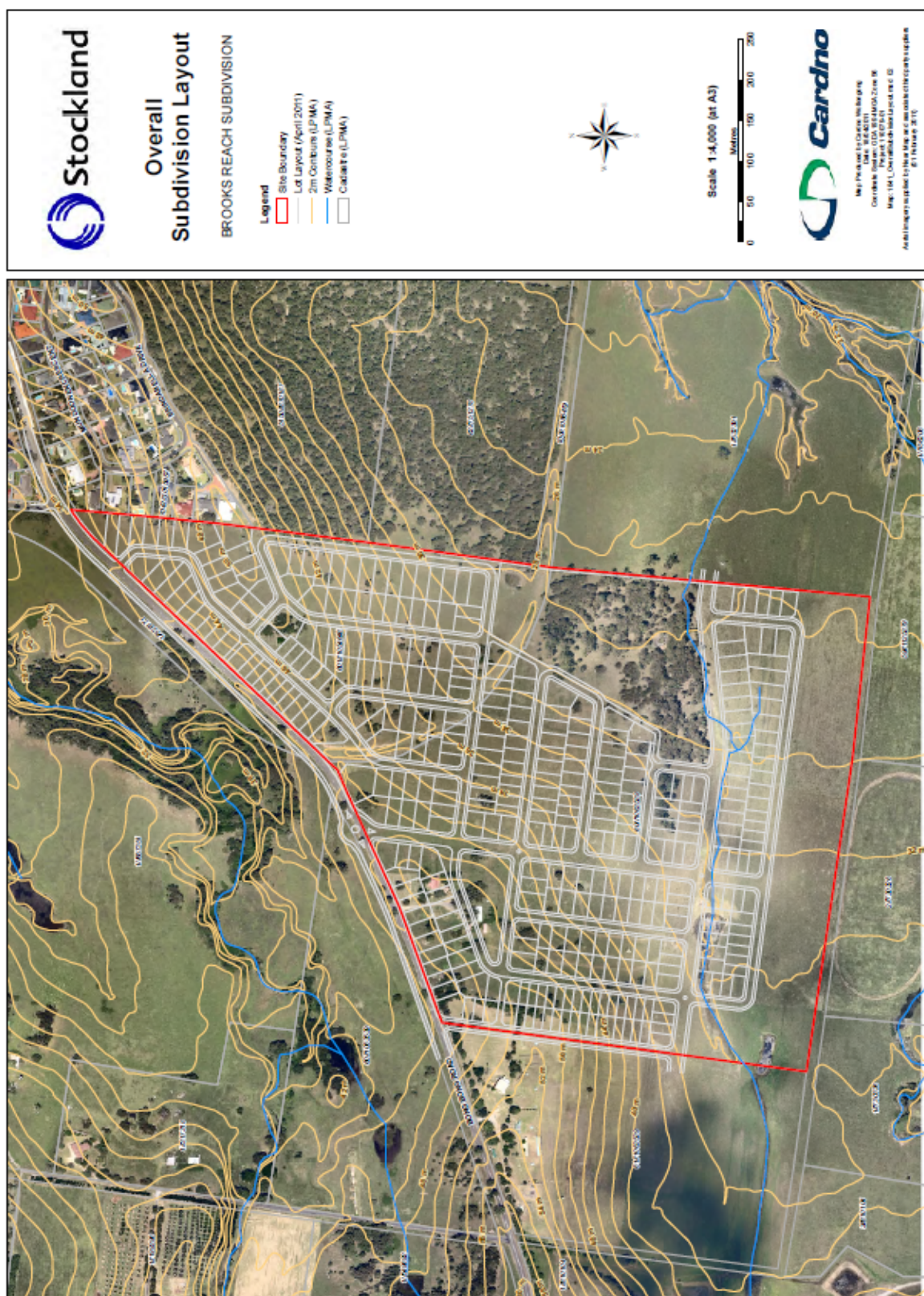
WARNING: CREASING OR FOLDING WILL LEAD TO REJECTION

PLAN FORM 2 (A2)



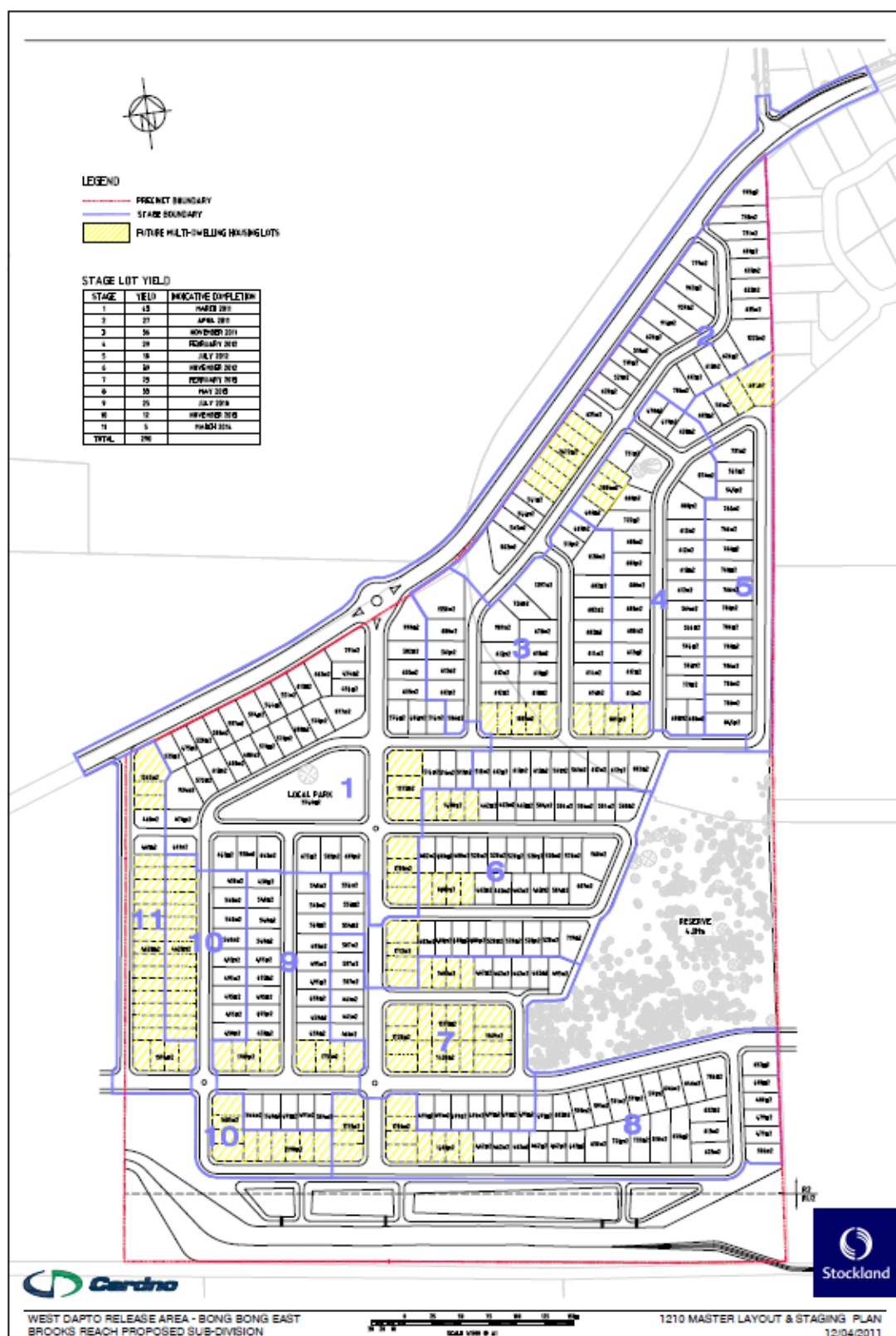
SC-2011/1 - Proposed lots 1 and 2 (former - Lot 60 DP 1063539) Bong Bong Road West Dapto).

## Attachment 11. Plans – Overall Layout/ Aerial Overlay

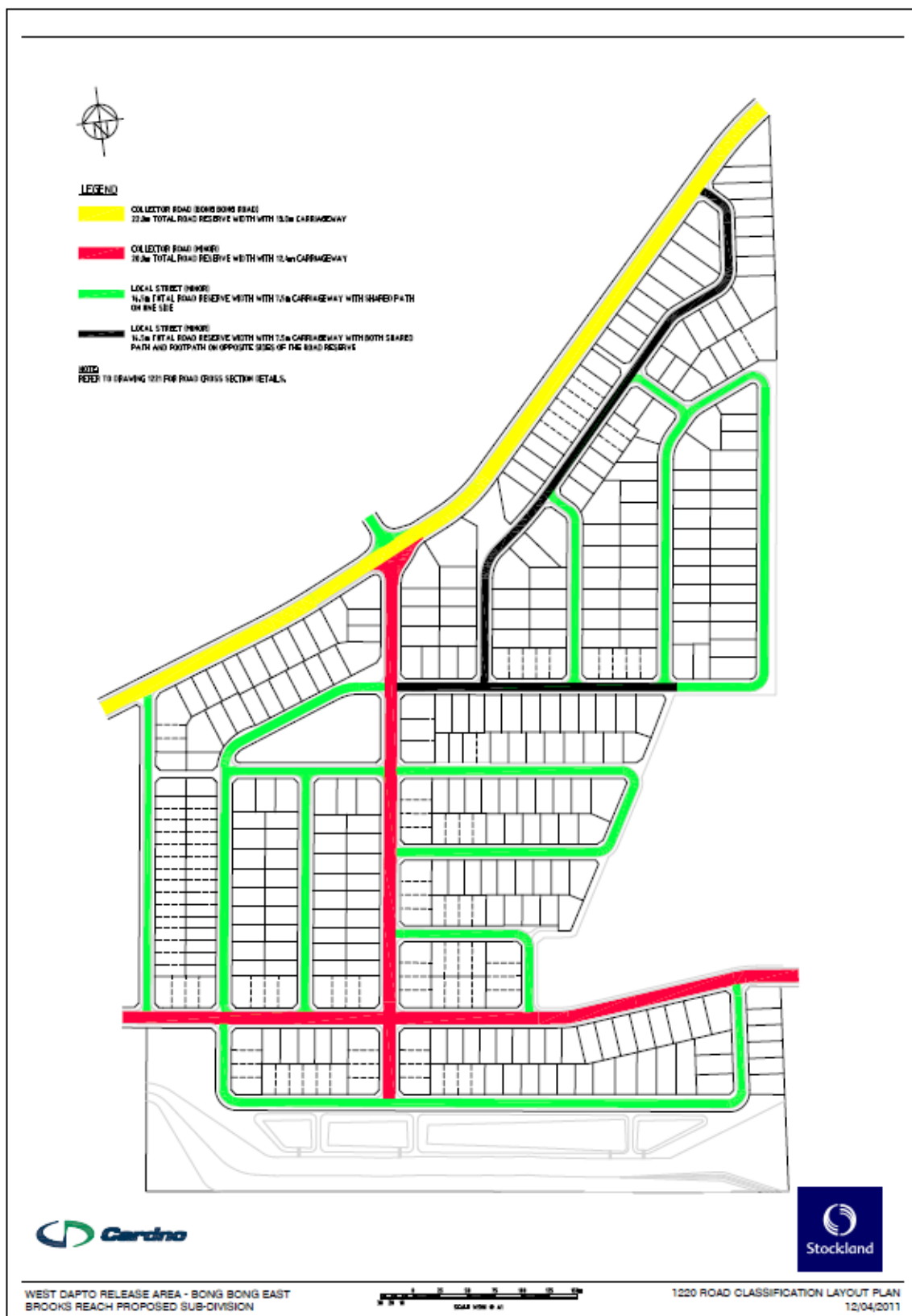




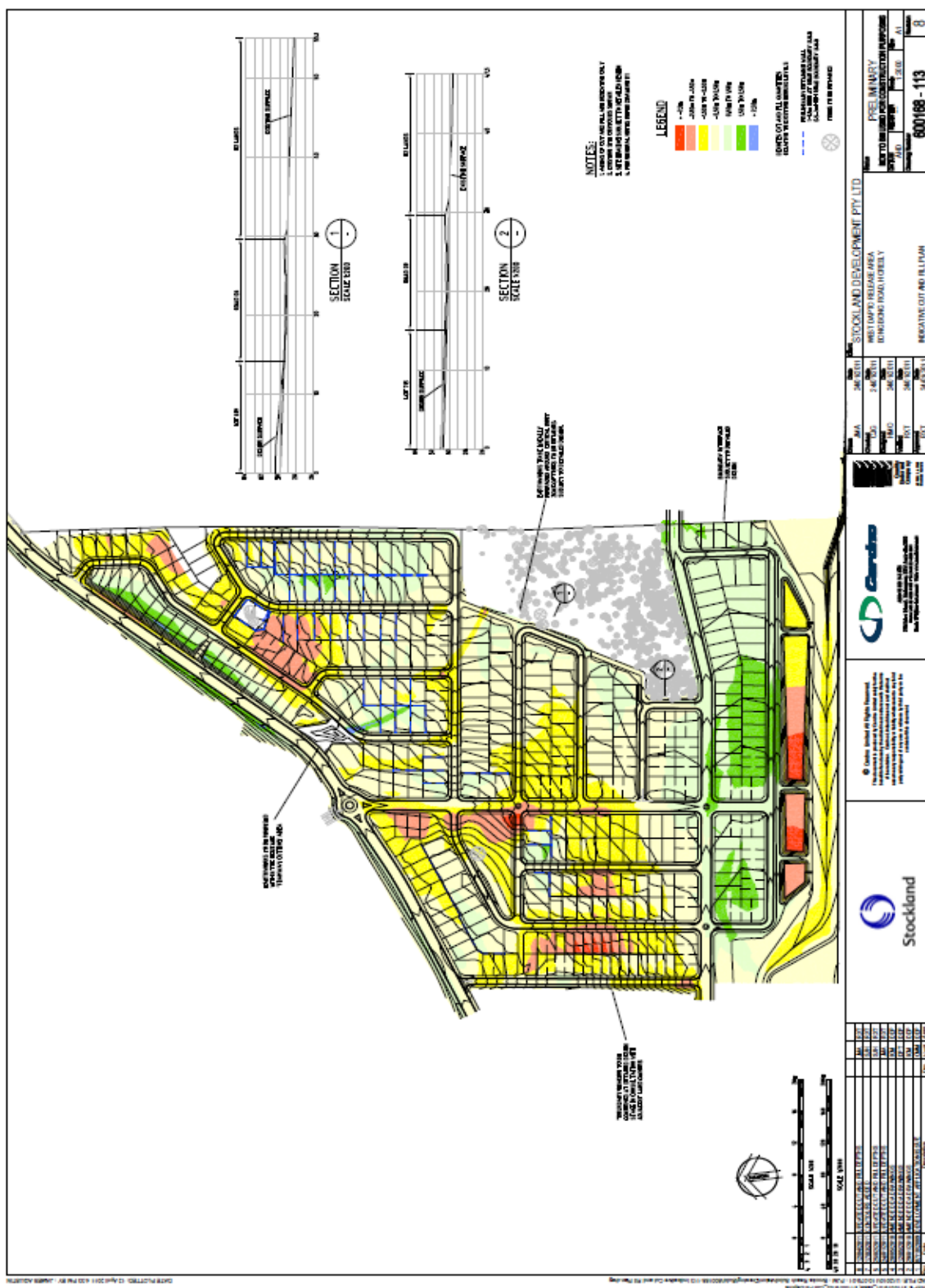
# Attachment 11. Plans – Staging and Lot Layout



## Attachment 11. Plans – Road Layouts and Hierarchy



## Attachment 11. Plans – Indicative Cut and Fill



## Attachment 12 – Draft Conditions of Consent



The development proposed is Integrated Development and approval is required from the approval bodies listed below:

### **Pursuant to s100B –authorisation under the Rural Fires Act 1997 – NSW Rural Fire Service**

This response is to be deemed a bush fire safety authority as required under section 100B of the 'Rural Fires Act 1997' and is issued subject to the following numbered conditions:

#### **Asset Protection Zones**

The intent of measures is to provide sufficient space and maintain reduced fuel loads so as to ensure radiant heat levels of buildings are below critical limits and to prevent direct flame contact with a building.

1. At the issue of subdivision certificates and in perpetuity the following asset protection zones shall be provided and are to be managed as an inner protection area (IPA) as outlined within section 4.1.3 and Appendix 5 of 'Planning for Bush Fire Protection 2006' and the NSW Rural Fire Service's document 'Standards for asset protection zones':
  - Lots within Stage 7: 25 metres from the forest vegetation to the east and 15 metres from the proposed reserve to the south
  - Lots within Stage 9: 10 metres from the proposed reserve to the north and 10 metres from the grassland to the south and east
  - Lots within Stages 1, 2 and 4: 15 metres from the proposed reserve to the east
  - Lots within Stages 10 and 11: 10 metres from the grassland to the south and west
  - Lots within Stages 3 and 5: 20 metres from the forest/riparian vegetation to the west
  - Lots within Stage 1 and 8: 10 metres from the grassland to the west

#### **Water and Utilities**

The intent of measures is to provide adequate services of water for the protection of buildings during and after the passage of a bush fire, and to locate gas and electricity so as not to contribute to the risk of fire to a building.

2. Water, electricity and gas are to comply with section 4.1.3 of 'Planning for Bush Fire protection 2006'.

#### **Access**

The intent of measures for public roads is to provide safe operational access to structures and water supply for emergency services, while residents are seeking to evacuate from an area.

3. Public road access shall comply with section 4.1.3 of 'Planning for Bush Fire protection 2006'.

#### **General Advice – notes**

This approval is for the subdivision of the land only. Any further development application for class 1, 2 and 3 buildings as identified by the 'Building Code of Australia' must be subject to separate application under section 79BA of the Environmental Planning & Assessment Act and address the requirements of 'Planning for Bush Fire Protection 2006'.

#### **Planting Species**

The information provided identifies that habitat restoration works within the retained vegetation should be implemented. This has the potential to change the structure of the area of woodland within the proposed reserve. If the structure is to change through re-vegetation then a new assessment will be required.

Conditions imposed by Council as part of this Integrated Development Consent are:

## Approved Plans and Specifications

- 1 The development is to be carried out in compliance with the plans and documentation listed below and endorsed with Council's stamp, except where amended by other conditions of this consent:

Plans and Specifications	To be inserted by Council
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## General Matters

- 2 **Voluntary Planning Agreement**  
Pursuant to section 93I(3) of the Environmental Planning and Assessment Act 1979, the Applicant is required forthwith to enter into a planning agreement with Council in the terms of an offer made by the Applicant and as now reflected in the document entitled West Dapto Planning Agreement supplied to Council on the Applicant's behalf on 18 April 2011.
- 3 **Geotechnical**
  - 3.1 Further geotechnical advice will be required with each land release stage Engineering Construction Certificate application to support the engineering designs of the subdivision.
  - 3.2 At the completion of engineering works for each land release stage a works-as-executed geotechnical report is required to confirm satisfactory completion of works, to detail any residual geotechnical constraints on development, to confirm the lot classification and to make recommendations for development of the created lots.
- 4 **Environmental Matters**  
Prior to undertaking any remediation work, the developer shall submit a site remediation action plan (RAP) to the Environment Section of Wollongong City Council for approval.
- 5 **Water Sensitive Urban Design (WSUD)**  
The following targets are recommended for the stormwater quality management of the development site:
  - 5.1 The applicant shall integrate all stages of the development concept plan for stormwater quality management.
  - 5.2 The treatment goals for the removal pollutants and nutrients shall be GP – 90%, TSS – 80%, TP – 60% and TN – 45%.
- 6 **Pocket Park**
  - 6.1 All park infrastructure to be provided within the pocket park is to be in accordance with Council's current park furniture including seating and shelters requirements and style and make must be endorsed by Council's Infrastructure Division and secured on concrete or paved pads.
  - 6.2 All landscaping should be of a nature that will require minimum maintenance and noting the size and location of the reserve BBQ's or playgrounds would be considered inappropriate at this location.
  - 6.3 All landscape and asset maintenance at this location should be undertaken by the developer for 12 months after the sale of all lots of the final stage of the subdivision.

- 6.4. An inspection of all assets should be undertaken prior to hand over with any assets demonstrating a condition assessment leading to potential replacement within 2 years having to be reinstated by the developer.
- 7 **Tree Retention**  
 The developer shall retain the existing trees indicated on the Tree Removal and Retention Plan by Taylor Brammer Landscape Architects Issue C dated 25.02.11 consisting of trees numbered 50, 51, 279 and all trees within the Illawarra Grassy Woodland EEC Reserve.  
 Any branch pruning which has been given approval, must be carried out by a qualified arborist in accordance with Australian Standard AS4373-2007.  
 All tree protection measures are to be installed in accordance with Australian standard AS4790-2009 Protection of Trees on development Sites.  
 All recommendations in Arborist's Report dated 1 March 2011 by David Potts, in particular sections 4 and 5, are to be implemented including and not restricted to: remedial tree pruning, deadwooding, fencing and signage, sediment buffer, stem protection, establishing tree protection zones and watering and root hormone application if required.
- 8 **Tree Removal**  
 This consent permits the removal of all trees on site with the exception of trees numbered 50, 51, 279 and all trees within the Illawarra Grassy Woodland EEC Reserve, as indicated on the on the Tree Removal and Retention Plan by Taylor Brammer Landscape Architects Issue C dated 25 February 2011. No other trees shall be removed without prior written approval of Council.
- 9 **Staging of Development Works**  
 The development shall proceed in two distinct stages:  
 Stage 1 – Demolition, Remediation and Validation of the development site.  
 Stage 2 - Civil works for the subdivision stages/land release.
- 10 **Subdivision Staging/Land Release**  
 The subdivision /land release shall occur sequentially as per the approved Subdivision Staging Plan.
- 11 **Engineering Construction Certificates**  
 Separate Engineering Construction Certificates are to be applied for at each sequential stage of the subdivision land release as per the approved Staging Plan and for any bulk earthworks, stormwater drainage or environmental protection works.
- 12 **Heritage Matters**  
 Should any unexpected archaeological 'relics' be discovered during works, works should cease and the Heritage Branch and a suitably qualified archaeologist be notified and advice requested.  
 A copy of the archival photographic recording submitted to Council is to be forwarded to the NSW Heritage Branch.
- 13 **Building Work - Compliance with the Building Code of Australia**  
 All building work must be carried out in compliance with the provisions of the Building Code of Australia.
- 14 **Construction Certificate**  
 A Construction Certificate must be obtained from Council or an Accredited Certifier prior to work commencing.  
 A Construction Certificate certifies that the provisions of Clauses 139-148 of the Environmental Planning and Assessment Amendment Regulations, 2000 have been satisfied, including compliance with all relevant conditions of Development Consent and the Building Code of Australia.

**Note:** The submission to Council of two (2) copies of all stamped Construction Certificate plans and supporting documentation is required within **two (2)** days from the date of issue of the Construction Certificate, in the event that the Construction Certificate is not issued by Council.

15 **NSW Department of Primary Industries**

The submission of documentary evidence to the Certifying Authority is required prior to the issue of the Construction Certificate confirming that a controlled activity approval under Section 91 of the Water Management Act 2000 has been obtained or is not required from the Department of Primary Industries for the proposed subdivision as relates to the final stormwater discharge points adjacent to watercourses.

16 **Separate Consent Required for Advertising Signage**

This consent does not authorise the erection of any advertising signage. Any such advertising signage will require separate Council approval, in the event that such signage is not exempt development, under Schedule 2 of Wollongong Local Environmental Plan 2009/Wollongong (West Dapto) Local Environmental Plan 2010.

Any new application for advertising signage must be submitted to Council in accordance with Chapter C1 – Advertising and Signage Structure of Wollongong Development Control Plan 2009.

17 **Protection of Public Infrastructure**

Council must be notified in the event of any existing damage to any of its infrastructure such as the road, kerb and gutter, road shoulder, footpath, drainage structures and street trees fronting the development site, prior to commencement of any work.

Adequate protection must be provided for Council infrastructure prior to work commencing and during building operations.

Any damage to Council's assets shall be made good, prior to the issue of any Occupation Certificate or commencement of the operation.

18 **Handover of Subdivision Works**

All Subdivision Works proposed to be handed over to Council must be done so in strict accordance with Wollongong City Council's Management of Assets Policy.

19 **Road Naming**

All roads must be named in accordance with Wollongong City Council's Road Naming Policy. The developer must provide Council with an appropriate name prior to issue of the Construction Certificate. If the developer fails to lodge an appropriate name prior to issue of the Construction Certificate, Council will reserve the right to nominate a suitable name.

20 **Public Road Access**

All lots are to have access from a dedicated public road. In this regard, all proposed roads are to be dedicated as public roads free of cost to Council.

21 **Splay Corner Lots**

Corner lots shall be provided a 4.25 metre splay. These splay corners are to be dedicated free of cost to Council and shall form part of the road reserve. The excised land must be dedicated at no cost to Council as road reserve on the Final Plan of Subdivision

22 **Defects liability period**

The developer must maintain the road, drainage and landscape works for a defects liability period of twelve months from the date of registration of the final plan of subdivision.

23 **Relocation of Services**

The cost of relocation of any public utilities must be borne by the applicant.

## Prior to Issue of Engineering Construction Certificate

### 24 Subdivision Registration

Prior to the issue of any Engineering Construction Certificate evidence shall be forwarded to Council that the land subdivision associated with SC-2011/1 issued by Council on 18 January 2011 has been registered with the NSW Land and Property Management Authority.

### 25 Subdivision Code

All works must be designed in accordance with the requirements set out in the version of the Wollongong City Council Subdivision Code current at the time of issue of this consent.

### 26 Engineering Construction Certificate

An Engineering Construction Certificate must be obtained prior to commencement of any works on site.

### 27 Construction Certificate Details

Details of all engineering works must be submitted to the Certifying Authority, for approval prior to the issue of a Construction Certificate.

### 28 Environmental Matters

The submission of a site contamination validation report is required to be submitted to the Environment section of Wollongong City Council. The validation report shall verify that:

28.1 all site contamination remediation works have been satisfactorily completed;

28.2 the site is not affected by any soil strata and/or groundwater table contamination, above NSW EPA threshold limit criteria; and

28.3 the site is rendered suitable for the proposed development.

The submission of a site audit statement/final clearance certificate to the Environment section of Wollongong City Council is also required from an accredited auditor pursuant to the provisions of Part 4 of the Contaminated Land Management Act 1997 confirming that the site has been satisfactorily remediated and is suitable for the proposed development.

### 29 Ecological Matters

29.1 The Consulting Ecologist shall obtain appropriate licences from the Office of Environment and Heritage for the translocation of fauna species (including threatened fauna species) from the hollow-bearing trees and farm buildings which are proposed for removal. The Consulting Ecologist is to show evidence of obtaining these licences to the Environment Section, Wollongong City Council, prior to commencement of any tree removal operations.

29.2 Habitat box detail is outlined in the Vegetation and Fauna Management Plan (VFMP) prepared by Eco Logical Australia. It is essential that this compensatory action is carried out well before any hollow-bearing trees are removed.

29.3 No less than 30 habitat boxes for microchiropteran bats shall be installed at suitable heights and orientation on mature trees within the Conservation Area.

29.4 No less than 10 habitat boxes for arboreal marsupials shall be installed at suitable heights and orientation on mature trees within the Conservation Area.

29.5 No less than 10 habitat boxes for birds shall be installed at suitable heights and orientation on mature trees within the Conservation Area.

29.6 If there are insufficient numbers of mature trees available for the installation of at least 50 habitat boxes within the Conservation Area, then suitable structures, such as old telegraph poles shall be installed within the Conservation Area.

- 29.7 A report detailing the installation, locations and types of habitat boxes shall be prepared by the Consulting Ecologist and submitted to the Environment Section, Wollongong City Council upon completion of installation.
- 30 **Water Sensitive Urban Design (WSUD)**  
The developer shall provide the detailed design with the hydraulic flow capacities of the WSUD treatment train specifications such as for the proposed diversion swales, bioretention basins and GPTs. The proposed hydraulic flows shall meet the urban stormwater guidelines.
- 31 **Heritage – Interpretation Plan**  
The developer is to prepare an interpretation plan which provides for the interpretation of the development site including key historical features such as the railway cutting and embankment, the former route of Bong Bong Pass, the archaeological site and vegetated hill top (former farm house on Lot 601), the Windmill, Milking shed and existing house site. This plan should also discuss and consider appropriate street names, and identify interpretive works and other measures which will assist future residents to understand the history of the site. The plan should give consideration to the possible retention of the Windmill, the Milking Shed and the row of Coral Trees on the eastern boundary of the site as interpretive mechanisms.  
  
The Interpretive Plan is to be provided to Council’s Heritage Officer for written approval prior to the release of the Construction Certificate and any proposed interpretive works are to be included in the Construction Plans.
- 32 **Internal Road Network**  
The internal road network is to be provided in accordance with the approved cross sections shown on drawing 1221, and on the Road Classification Layout Plan (drawing 1220). This requirement shall be reflected on the Construction Certificate plans.
- 33 **Roundabouts**  
Roundabouts are to be provided at the intersections of Road 1/Road 7; Road 1/Road 14; and Road 14/Road 9. Design is to be on accordance with ‘Austroads’ Road Design criteria, Part 4B: Roundabouts, this requirement shall be reflected on the Construction Certificate plans.
- 34 **Bus Stops**  
The applicant shall negotiate with Transport NSW over suitable bus stop locations within the development site which are to be submitted for approval by Council prior to the issue of the Construction Certificate for each stage of the proposed development as applicable. This requirement shall be reflected on the Construction Certificate plans.
- 35 **Street Trees**  
The applicant shall submit a Street Tree Plan for approval by Council prior to the issue of the Construction Certificate for each stage of the proposed development as applicable. The proposed street tree locations shall not obstruct vehicle sight lines or proposed bus stop locations. This requirement shall be reflected on the Construction Certificate plans.
- 36 **Transport and Travel Plans**  
Prior to the issue of the Stage 2 Construction Certificate the applicant shall prepare:  
  
A Residential Travel Plan:  
The Plan which includes incentives to encourage walking, cycling, car pooling and the increased use of public transport; such as a sustainable travel website, car pool/bicycle clubs, information on the benefits of active transport etc  
  
A Transport Access Guide:  
A pocket brochure which identifies footpaths, cycleways and provides public transport information and timetables.
- 37 **Street Trees**  
The developer must address the street frontages by installing street tree planting and protective bollards. The street trees are to be 100 litre pot 2.5 m minimum height, 1.2m wide and 40mm minimum calliper. The species are to be in accordance with the Landscape Master Plan LC01 Rev B and LC02 Rev B dated 18 August 2010 by Taylor Brammer Landscape Architects. Trees are to be installed in accordance with Wollongong Development Control Plan 2009 – Chapter



E6: Landscaping. Dial before you Dig must be consulted prior to any excavation on site. Pot holing must be carried out to determine service location. Location of street tree plantings to be sited to ensure no conflict occurs with street light poles. Bollards to consist of a minimum of two (2 No.) 1800mm x 90 x 90mm ACQ treated/ hardwood posts with weathered top, decorative rebate and set min one third into firm ground. Brick edging to consist of 110mm wide paver on 150mm thick reinforced concrete footing.

Tree pits must be adequately mulched, plants installed and bollards/edging installed to the satisfaction of WCC Manager of Works.

These requirements shall be reflected on the Construction Certificate plans and any supporting documentation.

38 **Management Plan - Illawarra Grassy Woodland EEC Reserve**

The developer shall provide a Management Plan that addresses the following items, but not limited to: signage – regulatory/information/directional/interpretive, perimeter fencing, walking trail network plan, maintenance practices and control of vehicular movements. The Management Plan shall be developed in conjunction with Wollongong City Council Landscape, Works and Environment Sections. The Management Plan shall correlate to the approved Vegetation Management Plan by Eco Logical. The Management Plan is to be submitted to Council prior to the issue of the Subdivision Certificate.

39 **Footpaths**

A footpath must be constructed in accordance with Wollongong City Council standards along the frontage of all lots in accordance with the Road Classification Layout Plan by Cardno dated 21 March 2011, and the relevant typical cross sections indicated in the Road Cross Sections Details by Cardno Revision 1, dated 18 March 2011.

The type of paving for this development is unreinforced broom finished concrete A minimum two percent (2%) cross fall is to be provided from property line to back of kerb.

Footpath must be installed to the satisfaction of WCC Manager of Works.

Landscape Plan to be submitted to Council prior to the issue of the Construction Certificate showing proposed paving and location of all services.

40 **Planting near playgrounds**

The developer shall ensure that proposed planting is child friendly and must **not** include any of the types of plants listed below:

- 40.1 plants known to produce toxins;
- 40.2 plant with high allergen properties;
- 40.3 plants with profuse scented flowers or known to attract high numbers of bees, spiders, and insects;
- 40.4 species which produce small nuts or fruits;
- 40.5 plants with thorns or spiky foliage and branches; and
- 40.6 any weed or potential weed species.
- 40.7 Avoid planting plants such as Asthma weed (*Parietaria judaica*), Rhus (*Toxicodendron succedaneum*), Yellow oleander (*Thevetia peruviana*), Cactus, chillies, Dumb cane (*Diffenbachia*), Mushrooms, Angels Trumpet (*Brumansia*), Cycads, Grevilleas, Oleander (*Nerium oleander*), Poinsettia, Rhubarb, White cedar (*Melia azederach*), Yesterday Today Tomorrow (*Brunsfelsia*), Agapanthus, Amaryllis, Arum Lily, Azaleas and Rhododendrons, Daffodils, Foxgloves, Lily of the Valley and any other species that have the characteristics listed above which could place children at risk. The developer shall consult and undertake further research to ensure the most up to date information is available to determine plant suitability.

These requirements shall be reflected on the Construction Certificate plans and any supporting documentation.

41 **Section 73 Compliance Certificate**

A Section 73 Compliance Certificate under the Sydney Water Act 1994 must be obtained from Sydney Water Corporation. Application must be made through an authorised Water Servicing Coordinator. Please refer to the Building Developing and Plumbing section of the web site [www.sydneywater.com.au](http://www.sydneywater.com.au) then refer to "Water Servicing Coordinator" under "Developing Your Land" or telephone 13 20 92 for assistance.

Following application, a "Notice of Requirements" will advise of water and sewer infrastructure to be built and charges to be paid. Please make early contact with the Coordinator, since building of water/sewer infrastructure can be time consuming and may impact on other services and building, driveway or landscape design.

The Notice of Requirements must be submitted to the Principal Certifying Authority prior to issue of the construction certificate.

42 **Integral Energy Requirements**

The submission of documentary evidence from Integral Energy to the Principal Certifying Authority is required confirming that satisfactory arrangements have been made with Integral Energy for the provision of electricity supplies to the development, prior to the release of the Construction Certificate.

**Note:** Applications should be made to Customer Connections – South Coast, Integral Energy PO Box 6366, Blacktown 2148.

43 **Telecommunications**

The submission of documentary evidence from an approved telecommunications carrier to the Principal Certifying Authority confirming that underground telecommunication services are available for this development is required prior to the issue of the Construction Certificate.

44 **Landscaping**

The submission of a final Landscape Plan in accordance with the requirements of Wollongong City Council Landscape DCP 2009 Chapter E6 Landscape and in accordance with the approved Landscape Plan (ie as part of this consent) for the approval by the Principal Certifying Authority, prior to the release of the Construction Certificate.

45 **Final Landscape Plan**

The submission of a final Landscape Plan to the Principal Certifying Authority, prior to the release of the Subdivision Certificate. The final Landscape Plan shall address the following requirements:

- 45.1 the landscape plan must be amended to include the road blister design, including details of soil/structural soil, drainage methods and construction details. It must also reflect the final approved plans for the road layout and cross sections.
- 45.2 a lockable gate is to be installed at either end of the proposed footpath and bushfire tracks located adjacent to the Woodland Reserve and lots 326, 609 and lots 638 and 706 (lots as shown on the General Arrangement Plan sheets 2 of 3 and 3 of 3, by Cardno, Revision 6, dated 2 March 2011). The gates are to impede vehicle movements (with the exception of emergency vehicles) but permit pedestrian access. The paths are to be a minimum of 2 metres wide and constructed of concrete, and built to Wollongong City Council standards.
- 45.3 a schedule of proposed planting, including botanic name, common name, expected mature height and staking requirements as well as number of plants and pot sizes;
- 45.4 the location of all proposed and existing overhead and underground service lines. The location of such service lines shall be clear of the dripline of existing and proposed trees.

46 **Certification**

The submission of certification from a suitably qualified and experienced landscape designer and drainage consultant to the Principal Certifying Authority prior to the release of the Construction Certificate, confirming that the landscape plan and the drainage plan are compatible.

- 47     **Landscape Maintenance**  
The implementation of a landscape maintenance program in accordance with the approved Landscape Plan for a minimum period of 12 months to ensure that all landscape work becomes well established by regular maintenance. Details of the program must be submitted with the Landscape Plan to the Principal Certifying Authority prior to release of the Construction Certificate.
- 48     **Tree Protection and Management**  
The existing trees to be retained upon the subject property and any trees on adjoining properties shall not be impacted upon during the excavation or construction phases of the development. This will require the installation and maintenance of appropriate tree protection measures, including (but not necessarily limited to the following:
- a)     Installation of Tree Protection Fencing - Protective fencing shall be 1.8 metre cyclone chainmesh fence, with posts and portable concrete footings;
  - b)     Mulch Tree Protection Zone: Areas within a Tree Protection Zone are to be mulched with minimum 75 mm thick 100% recycled hardwood chip/leaf litter mulch.
- Details and location of protective fencing must be indicated on the architectural and engineering plans to be submitted to the Principal Certifying Authority prior to the release of the Construction Certificate.
- 49     **Site Offices**  
All site offices must be located on the site plan and are to be located in already cleared areas outside the canopy of any existing trees to be retained. Details of the location of the site offices shall be submitted to the Principal Certifying Authority, prior to release of the Construction Certificate.
- 50     **Channel/Swale Details**  
A detailed long section and cross sections shall be provided for the proposed flood mitigation channel located on site and swale located within the paper road. This requirement shall be reflected on the Construction Certificate plans and supporting documentation.
- 51     **Stormwater Flows to E2 Zone**  
The stormwater flows to the E2 zoned forest area shall be limited to a maximum 1 in 3 month Average Recurrence Interval occurring in the pre developed state. A catchment plan and supporting calculations shall be provided indicating the contributing pre and post developed stormwater flows to this area. Also the method adopted to physically restrict the post developed flows and dispersal locations using level spreaders into the E2 zoned area shall be reflected on the Construction Certificate plans and supporting documentation.
- 52     **Bong Bong Road Design**  
A detailed civil engineering design shall be provided for the Bong Bong Road upgrade in accordance with the current version of Wollongong City Council's Subdivision Code, DCP 2009 and Austroads Road Design Standards. The plans shall include levels of existing infrastructure such as kerb and gutter, public utility, pits, poles and stormwater drainage structures as well as adjacent road carriageway and footpath levels and extend a minimum of 20 metres past the limit of the development site. Where any adjustments to public utilities are proposed the applicant must also submit documentary evidence that they have the consent of the owner of the public utility authority. These requirements shall be reflected on the Construction Certificate plans and supporting documentation and must be approved by Wollongong Council's Local Traffic Committee prior to the release of the Construction Certificate for those works.
- 53     **Detailed Drainage Design**  
The developer must submit a detailed drainage design for the proposed subdivision in accordance with Chapter E14 of the Wollongong DCP 2009. The design shall clearly indicate the extent of works proposed for each stage of the development. This requirement shall be reflected on the Construction Certificate plans and supporting documentation.

- 54     **Scour Protection**  
All stormwater outlets and overland flow paths must incorporate appropriate scour/erosion protection measures. The final details of the proposed scour protection measures shall be reflected on the Construction Certificate plans.
- 55     **Existing/Proposed Levels**  
Existing and proposed levels to Australian Height Datum (AHD), including ground, grate, pipe inverts and pavement levels, shall be shown on the detailed drainage design. This requirement shall be reflected on the Construction Certificate plans and supporting documentation.
- 56     **Overland Flow Path**  
Details of the overland flow paths from each on-site detention (OSD) storage facility shall be provided in conjunction with the detailed drainage design for the site. This requirement shall be reflected on the Construction Certificate plans and supporting documentation.
- 57     **Orifice/Weir Calculations**  
Orifice and weir calculations for each on-site detention facility must be provided to the Principal Certifying Authority for approval prior to the release of the Construction Certificate.
- 58     **Stormwater Pipelines**  
A hydraulic grade line analysis and longitudinal section of all stormwater pipelines, showing calculated flows, velocity, pipe size/class, grade, inverts and ground levels shall be provided in conjunction with the detailed drainage design for the site. The analysis shall demonstrate the suitable performance of the proposed drainage system as specified in Section 4.1 - Chapter E14 of the Wollongong DCP 2009. These requirements shall be reflected on the Construction Certificate plans and supporting documentation.
- 59     **Drainage Pits**  
All new drainage pits proposed within the road reserve shall be in accordance with the current version of Wollongong City Council's Engineering Standard Drawings. This requirement shall be reflected on the Construction Certificate plans.
- 60     **Designated Overland Flow Paths**  
Details of each overland flow path shall be provided with the detailed drainage design. Each overland flow path must be capable of catering for the 1 in 100 year storm event flows from the contributing catchment area. Blocked pipe situations must be incorporated into the design for this event. Overland flow paths must also be provided in low points and depressions. Each overland flow path shall be free of any vegetation and/or structures that are likely to impede natural overland flow, or make provision for such obstructions, so there will be no adverse flood impacts upon future lots and adjoining properties. Full Manning's calculations shall be provided on the capacity of each overland flow path. These requirements shall be reflected on the Construction Certificate plans and supporting documentation.
- 61     **Batter Slopes**  
All grassed batter slopes of surface storage detention basins shall not be steeper than 1 vertical to 4 horizontal. Where this requirement cannot be met, a report shall be submitted to Council demonstrating how access and maintenance will be achieved for the operational phase of each basin. This shall be provided with the supporting documentation issued for Construction Certificate.
- 62     **Flood Warning Signs**  
The developer must provide flood warning signs at each proposed on-site detention facility. This requirement shall be reflected on the Construction Certificate plans and supporting documentation.
- 63     **Road Design Criteria**  
The following design criteria must be adopted in the final design of the road network:
- 63.1     Provision for the turning manoeuvre of a 12.5 metre rigid vehicle at all bends, roundabouts and cul-de-sacs. Evidence that the truck turning manoeuvre satisfies this requirement must be shown on the engineering plans.

- 63.2 A concrete accessway must be provided to proposed lots 705 & 706, to the following standards:
- 63.2.1 A minimum of 3.5 metre wide;
  - 63.2.2 a minimum of 150 mm thick, with a minimum 25MPa compressive strength after 28 days; and
  - 63.2.3. reinforced with a minimum SL72 mesh from the kerb for the full length of the access corridor underlain by a minimum 75 mm thickness of DGS20 compacted to 95% of modified density.
  - 63.2.4 Drainage over the accessway must be contained in a kerb or central dish and conveyed to a public road or piped drainage system. Details of the accessway, including long-section, cross-sections, typical cross-sections and the effect on adjoining land must be provided with the Construction Certificate.
  - 63.2.5 Gradient of ramps and access driveways shall be provided in accordance with the current version of Australian Standard AS2890.1 - Off Street Car Parking. This requirement shall be reflected on the Construction Certificate plans.
- 63.3 All flexible pavements are to be designed in accordance with Wollongong City Council's Subdivision Code and the 'Australian Road Research Board' design criteria current at the date of this consent.
- 63.4 All concrete roads must be constructed in accordance with the principles of the Cement and Concrete Association's design criteria current at the date of this consent.
- 64 **Footpath Crossing**  
Footpath crossings must be designed in accordance with the Wollongong City Council standards.
- 65 **Turning Head**  
A temporary turning head to the satisfaction of the Certifying Authority must be provided for each stage where roads are to be extended in future stages. The temporary turning head must be designed to accommodate the turning movements of a large rigid vehicle with a maximum length of 12.5m to Austroads Standards.
- 66 **Service Location to be Shown**  
The depth and location of all services (ie gas, water, sewer, electricity, telephone, traffic lights, etc) must be ascertained and reflected on the Construction Certificate plans and supporting documentation.
- 67 **Pit/Pipe Alteration**  
Details of the proposed pits and the connecting pipeline to Council's existing drainage system shall be provided in conjunction with the detailed drainage design for the site. This requirement shall be reflected on the Construction Certificate plans and supporting documentation.
- 68 **OSD Connection**  
Details of the proposed method of connection of each On-site Detention (OSD) facility to Council's drainage system or defined watercourse must be provided with the detailed drainage design for the site. The details must be submitted to the Certifying Authority prior to the issue of the Construction Certificate.
- 69 **Interallotment Drainage**  
A minimum 150mm diameter, PVC Class SH inter-allotment drainage system must be provided to drain proposed lots where roof water and surface water from future development cannot be discharged directly into the street drainage system with a positive gradient.
- 70 **On-Site Detention Requirement**  
On-site detention (OSD) storage must be provided for stormwater runoff from the subdivision. The Site Storage Requirement (SSR) and Permissible Site Discharge (PSD) values for the site must be designed in accordance with Chapter E14 of the Wollongong DCP 2009. Details of the detention facility and SSR/PSD values must be submitted with the Construction Certificate application.

- 71 **On-Site Detention – Scour Protection**  
Scour protection must be provided at the outlet of each on-site detention facility. This requirement shall be reflected on the Construction Certificate plans.
- 72 **On-Site Detention- Design Criteria**  
Each on-site detention facility must incorporate access for maintenance purposes, provision for a perimeter safety fence, debris control screen and a suitably graded invert to the outlet point. Also details of the orifice plate including diameter of orifice and method of fixing shall be provided. These requirements shall be reflected on the Construction Certificate plans.
- 73 **Geotechnical Report – Construction Certificate**  
The submission of a final geotechnical report, prepared by a suitably qualified and experienced geotechnical engineer, to the Certifying Authority prior to the issue of the Construction Certificate.  
  
The report must cover, but not be limited to the following:
- 73.1 Extent and stability of proposed embankments including those acting as retarding basins;
  - 73.2 recommended Geotechnical testing requirements;
  - 73.3 required level of geotechnical supervision for each part of the works as defined under AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments;
  - 73.4 compaction specification for all fill within private subdivisions;
  - 73.5 the level of risk to existing adjacent dwellings as a result of a construction contractor using vibratory rollers anywhere within the site the subject of these works. In the event that vibratory rollers could affect adjacent dwellings, high risk areas shall be identified on a plan and the engineering plans shall be amended to indicate that no vibratory rollers shall be used within that zone;
  - 73.6 the impact of the installation of services on overall site stability and recommendations on short term drainage methods, shoring requirements and other remedial measures that may be appropriate during installation;
  - 73.7 the preferred treatment of any unstable areas within privately owned allotments;
  - 73.8 requirement for subsurface drainage lines;
  - 73.9 overall suitability of the engineering plans for the proposed development.
- 74 **Environmental Management Plan**  
The submission of a detailed Environmental Management Plan which addresses but is not limited to, the following issues:
- 74.1 Introduction
    - 74.1.1 Project Description.  
This section should include:
      - 74.1.1.1 Timing and duration of works;
      - 74.1.1.2 location of work sites offices, compounds, stockpiles and refuelling areas;
      - 74.1.1.3 a description of the site and surrounds and location of environmentally sensitive areas.
    - 74.1.2 Objectives of the CEMP.  
This section should state what the CEMP is trying to achieve
    - 74.1.3 Context of the CEMP.  
This section should specify how the CEMP fits into the planning process of the project.



## 74.2 Planning Project Environmental Actions

### 74.2.1 EIA Obligations.

This section should identify all Environmental Impact Assessment documentation related to this project.

### 74.2.2 Environmental Aspects.

This section should reference or describe the aspects and impacts associated with the construction activities. Each impact should be assigned a risk ranking of low, medium or high. Control measures should be selected for all impacts ranked as medium or high. Low risk impacts should be monitored to ensure that they do not increase.

### 74.2.3 Legal and Other Requirements.

This section should detail the legislative requirements of the work, and all other specifications.

### 74.2.4 Supplementary Environmental Plans.

These include:

#### 74.2.4.1 Erosion and Sediment Control Plan (ESCP) or Soil and Water Management Plan (SWMP)

**Note:** Requirements for ESCPs and SWMPs are provided in “Managing Urban Stormwater: Soils and Construction” NSW Dept of Housing, 1998.

#### 74.2.4.2 Noise and Vibration Management Plan

#### 74.2.4.3 Landscaping and Revegetation Plan

#### 74.2.4.4 Flora and Fauna Management Plan

#### 74.2.4.5 Traffic Management Plan (TCP)

#### 74.2.4.6 Air Quality Management Plan

#### 74.2.4.7 Waste Management Plan

#### 74.2.4.8 Acid Sulphate Soil Management Plan (ASSMP)

#### 74.2.4.9 Indigenous and European Heritage Plan

#### 74.2.4.10 Contaminated Soil Management Plan

## 74.3 Implementation

### 74.3.1 On-site Structure and Responsibility.

This section should state the duties and responsibilities of all contractors and sub-contractors working on site and the relationship between these parties.

### 74.3.2 Training, Awareness and Competence.

This section should detail the environmental training that all site personnel are required to undertake. Environmental training should include:

#### 74.3.2.1 Knowledge and understanding of the CEMP

#### 74.3.2.2 Site induction

And may include:

#### 74.3.2.3 Emergency response training

#### 74.3.2.4 Familiarisation with site environmental controls

#### 74.3.2.5 Erosion and sediment control training

### 74.3.3 Communication.

This section should include how the contractor plans to keep affected residents informed as to the nature and scope of works, the type of consultation and frequency.

This section should identify and list details for relevant external stakeholders such as:

#### 74.3.3.1 EPA

#### 74.3.3.2 NPWS

#### 74.3.3.3 NSW Fisheries

- 74.3.3.4 DNR
- 74.3.3.5 Aboriginal Groups
- 74.3.3.6 Council

This section should also detail the procedures for the notification of complaints and identify the person responsible for its maintenance and follow up action.

#### 74.3.4 Emergency Planning and Response.

This section should detail the procedure to be followed in the event of an environmental emergency. An environmental emergency is any event that causes or has the potential to cause environmental damage. The procedure needs to include:

- 74.3.4.1 The names of key emergency response personnel;
- 74.3.4.2 personnel responsibilities and contact details;
- 74.3.4.3 contact details for emergency services (ambulance, fire brigade, spill clean up services);
- 74.3.4.4 the location of on site information on hazardous materials, including MSDSs and spill containment material;
- 74.3.4.5 the procedure to follow to minimise/control the emergency;
- 74.3.4.6 procedures for notifying the Superintendent, the public and/or EPA.

Emergency Response Contacts should be listed in table form.

### 74.4 Auditing and Monitoring

#### 74.4.1 Environmental Action Monitoring.

This section should detail how all Environmental Actions identified in Section 2 are going to be monitored and verified. This section should also detail or refer to a procedure to ensure that all monitoring results that exceed set criteria are acted on quickly and that the appropriate regulatory authorities are notified.

#### 74.4.2 Auditing.

This section should detail audit criteria, frequency and scope.

#### 74.4.3 Non-Conformance and Corrective and Preventive Action.

This section should state how these items should be addressed.

### 74.5 Review of CEMP

This section should detail the procedure and frequency of reviewing the CEMP and how those using it will be aware of changes.

### 74.6 Appendix 1 - Environmental Action Table

The environmental action table should provide sufficient information to ensure effective and efficient on-site environmental management. The Environmental Actions Table should include all Environmental Actions that were identified in Section 2.0 of the CEMP. The Environmental Actions Table must clearly convey what action is required, when it needs to be done and who is supposed to do it.

### 74.7 Appendix 2 - Environmental Action Monitoring Table

This section should detail how all of the environmental actions listed in Appendix 1 are going to be monitored and verified. The monitoring must clearly convey what monitoring is required, when the monitoring is to take place and who is to do it.

## 75 Environmental Management Plan

The submission of a detailed Environmental Management Plan which addresses the following issues:

### 75.1 Environmental monitoring methods involving:

- 75.1.1 ground and surface waters;
- 75.1.2 dust generation and mitigating measures;
- 75.1.3 flora and fauna management (if relevant); and

- 75.1.4 erosion and sedimentation controls and proposed soil erosion control measures;
- 75.2 on-site materials management including soil conservation;
- 75.3 emergency/contingency plans; and
- 75.4 site rehabilitation works.

The Environmental Management Plan is to be submitted to the Principal Certifying Authority for approval prior to the issue of the Construction Certificate.

## 76 **Soil and Water Management Plan (SWMP)**

Prior to the issue of the construction certificate, the applicant shall submit to and obtain Council approval of a Soil and Water Management Plan and Statement which clearly identifies site features, constraints and soil types together with the nature of the proposed land disturbing activities and also specifies the type and location of erosion and sediment control measures and also rehabilitation techniques necessary to deal with such activities.

The plan shall take into account the requirements of “Managing Urban Stormwater: Soils and Construction” NSW Dept of Housing, 4<sup>th</sup> Edition, and must be compatible with any construction management clearly demonstrating that the following objectives are achieved, namely:

- 76.1 All possible sediment controls are installed prior to the commencement of work;
- 76.2 To minimize the area of soils exposed at any one time;
- 76.3 To conserve topsoil for reuse on site;
- 76.4 To identify and protect proposed stockpile locations;
- 76.5 To preserve existing vegetation and identify revegetation techniques and materials;
- 76.6 To control surface water flows through the development construction site on a manner that:
  - 76.6.1 Diverts clean run-off around disturbed areas.
  - 76.6.2 Minimises slope gradient and flow distance within disturbed areas.
  - 76.6.3 Ensures surface run-off occurs at non-erodible velocities.
  - 76.6.4 Ensures disturbed areas are promptly rehabilitated;
- 76.7 Trap sediment on site to prevent off site damage. To ensure regular monitoring and maintenance of erosion and sediment control measures and rehabilitation works until the site is stabilized (includes landscaping);
- 76.8 A program for the treatment/flocculation of sediment ponds including proposed time frames and proposed gypsum dosage (or other proposed materials). Temporary sediment ponds must be fenced where the batter slope exceeds a slope of 1 vertical to 5 horizontal;
- 76.9 Specific measures to control dust generated as a result of construction activities on site.

## 77 **Retaining Wall Design Criteria**

All retaining walls must be designed by a suitably qualified civil and/or structural engineer and shall be detailed on engineering plans which include, but is not limited to the following:

- 77.1 A plan of the wall showing location and proximity to property boundaries.
- 77.2 An elevation of the wall showing ground levels, maximum height of the wall, materials to be used and details of the footing design and longitudinal steps that may be required along the length of the wall.
- 77.3 Details of fencing or handrails to be erected on top of the wall.
- 77.4 Sections of the wall showing wall and footing design, property boundaries and backfill material. Sections shall be provided at sufficient intervals to determine the impact of the wall on existing ground levels. The designer must note that the retaining wall and footing structure must be contained wholly within the subject property.

- 77.5 The proposed method of subsurface and surface drainage, including water disposal.
- 77.6 Reinforcing and joining details of the bends in the wall at the passing bay of the accessway.
- 77.7 The assumed traffic loading used by the engineer for the wall design.
- 78 **Retaining Wall Heights**  
The maximum height of a retaining wall located within 3 metres of the adjoining boundary shall be 600 mm.
- 79 **Retaining Wall Terracing**  
Terracing of the retaining wall must be incorporated into the design. In this regard, a maximum vertical rise of 1.0 metre must be accompanied by minimum horizontal setback of 1.0 metre. This requirement shall be reflected on the Construction Certificate plans.
- 80 **Retaining Wall Fencing**  
Only a see through fence is permissible on top of the retaining wall. This requirement shall be reflected on the Construction Certificate plans.
- 81 **Road Widths - Construction**  
The roads in the subdivision shall be designed and constructed in accordance with the approved plans.
- 82 **Traffic Management**  
The submission of a traffic management plan to Council for its approval, prior to the release of the Construction Certificate.
- 83 **Subsoil Drainage**  
Subsoil drainage must be detailed on the Construction Certificate plans and specifications in accordance with the version of the Wollongong City Council Subdivision Code current at the time of issue of this consent.
- 84 **Pram Ramps**  
All kerb returns must be provided with pram ramps to Wollongong City Council standards, unless otherwise approved in writing by Wollongong City Council.
- 85 **Signs and Linemarking**  
A sign and linemarking diagram must be approved by the Local Traffic Committee prior to the issue of the Construction Certificate.
- 86 **Street Lighting**  
An electricity provider approved street lighting plan must be submitted to the Certifying Authority for approval prior to the release of the Construction Certificate. All costs associated with the installation of street lighting must be borne by the developer.
- 87 **No Adverse Run-off Impacts on Adjoining Properties**  
The design of the development shall ensure there are no adverse effects to adjoining properties or upon the land as a result of flood or stormwater run-off.
- 88 **Re-direction or Treatment of Stormwater Run-off**  
Allowance must be made for surface run-off from adjoining properties. Any redirection or treatment of that run-off must not adversely affect any other property.
- 89 **On-Site Detention - Maintenance Schedule**  
A maintenance schedule for each on-site stormwater detention facility must be submitted with the Construction Certificate plans for the proposed development. The maintenance schedule must be in accordance with Chapter E14 of the Wollongong DCP 2009.
- 90 **On-Site Detention – Structural Design**  
Each on-site detention facility must be designed to withstand loadings (where applicable) occurring from any combination of hydrostatic, earth, traffic and buoyancy forces. Details must be provided demonstrating these requirements have been achieved prior to the issue of the Construction Certificate.

- 91     **Stormwater Disposal**  
Stormwater for the land must be piped to Council's existing stormwater drainage system or directed to an existing defined watercourse. The stormwater discharge into the watercourse shall be orientated in the direction of natural flow of the receiving watercourse. Where it is proposed to drain to an existing Council piped drainage system, a hydraulic analysis shall be provided to demonstrate the suitable performance of this system for the 10 year ARI storm occurrence. In the event that the Council drainage system is not found to have the required capacity, then that section of pipeline shall be amplified, or the flows shall be restricted from the subject site to ensure the capacity of the existing Council drainage system is not exceeded. These requirements shall be reflected on the Construction Certificate plans and supporting documentation.
- 92     **On-Site Detention - Identification**  
Details shall be provided of a corrosion resistant identification plaque for location on or close to each on-site detention (OSD) facility. The plaque shall include the following information:
- 92.1     The structure is an OSD facility, being part of the stormwater drainage network, and is not to be tampered with;
  - 92.2     Identification number [DA-2010/693];
  - 92.3     Any specialist maintenance requirements.

## **Prior to the Commencement of Works**

- 93     **Appointment of Principal Certifying Authority**  
Prior to the commencement of work, the person having the benefit of the Development Consent and the Construction Certificate must:
- 93.1     appoint a Principal Certifying Authority (PCA) and notify Council in writing of the appointment. Irrespective of whether Council or an accredited private certifier is appointed; and
  - 93.2     notify Council in writing of their intention to commence works (at least 2 days notice is required.).

You are advised that Wollongong City Council's type M10 form sets out the above requirements.

- 94     **Sign – Supervisor Contact Details**  
Before commencement of any work, a sign must be erected in a prominent, visible position:
- 94.1     stating that unauthorised entry to the work site is not permitted;
  - 94.2     showing the name, address and telephone number of the Principal Certifying Authority for the work; and
  - 94.3     showing the name and address of the principal contractor in charge of the work site and a telephone number at which that person can be contacted at any time for business purposes.

This sign shall be maintained while the work is being carried out and removed upon the completion of the construction works.

- 95     **Supervision of Works**  
A suitably qualified and experienced Civil Engineer, Registered Surveyor or experienced Civil Engineering Foreman must be appointed by the developer before any work commences. The supervisor's name, address and contact telephone number must be submitted to the Principal Certifying Authority, two days prior to the commencement of any work.

- 96     **Site Documentation**  
The supervisor must have on-site at all times a copy of the following documents:
- 96.1     a copy of the Development Consent;
  - 96.2     a copy of the Construction Certificate and approved drawings; and

- 96.3 a copy of the approved Environmental Management Plan (if required by the conditions of the Development Consent).
- 97 **Temporary Toilet/Closet Facilities**  
 Toilet facilities are to be provided at or in the vicinity of the work site on which work involved in the erection or demolition of a building is being carried out at the rate of one toilet for every 20 persons or part of 20 persons employed at the site.  
 Each toilet provided must be:
- 97.1 a standard flushing toilet; and
  - 97.2 connected to either:
    - 97.2.1 the Sydney Water Corporation Ltd sewerage system or
    - 97.2.2 an accredited sewage management facility or
    - 97.2.3 an approved chemical closet.
- The toilet facilities shall be provided on-site, prior to the commencement of any works.
- 98 **Ecological Matters**
- 98.1 The Conservation Area and parkland trees shall be fenced according to the Tree Protection and Fencing Recommendations included in Australian Standards AS4970 – 2009 Protection of Trees on Construction Sites. The fences shall be installed beyond the outer drip zone of all trees.
  - 98.2 The Consulting Arborist shall determine the location of the protective fence and all signage.
  - 98.3 The Consulting Ecologist shall carry out searches of all hollow-bearing trees on the afternoons and evenings prior to the removal of any hollow-bearing trees. The procedures outlined in 4.2.1 Management Actions of the VFMP prepared by Eco Logical Australia shall be followed. In particular, the following steps shall be strictly followed:
    - 98.3.1 “All appropriate licences with respect to harming native fauna are to be obtained prior to any clearing”. N.B. because the application process may take at least three months, this step is also included in 2.0;
    - 98.3.2 “If roosts or dens are identified during pre-clearing surveys, works in the area of the roost are to stop and the hollow-bearing tree is to be retained in situ until the roost or den is no longer active”;
    - 98.3.3 “Clearing of hollow-bearing trees is to be done in late Summer/Autumn to prevent impacts during critical lifecycle periods for fauna species”;
    - 98.3.4 A report detailing the methods, results and actions shall be prepared by the Consulting Ecologist and submitted to the Environment Section, Wollongong City Council upon completion of these actions.
- 99 **Permit to Enter and Exit Demolition or Construction Site**  
 Any use of the footpath or road reserve for demolition or construction purposes requires Council approval under the Roads Act 1993.  
 Where it is proposed to carry out demolition activities or construction vehicles entering and leaving the site from a public road reserve and/or installation of a fence or hoarding, a permit must be obtained from Council’s Regulation and Enforcement Division prior to the works commencing.
- 100 **Site Management, Pedestrian and Traffic Management (Where Works are Proposed in or from a Public Road Reserve)**  
 The submission, as part of an application for a permit under Section 138 of the Roads Act 1993, of a Site Management, Pedestrian and Traffic Management Plan to Council’s Manager Regulation and Enforcement for approval is required, prior to works commencing on the site. This plan shall address what measures will be implemented for the protection of adjoining properties, pedestrian safety and traffic management and shall be in compliance with the requirements of the latest versions of Australian Standard AS1742 - Traffic Control Devices for Works on Roads and the RTA Traffic Control at Worksites Manual.



This plan is required to maintain public safety, minimise disruption to pedestrian and vehicular traffic within this locality and to protect services, during demolition, excavation and construction phases of the development. This plan shall include the following aspects:

- 100.1 proposed ingress and egress points for vehicles to/from the construction site;
- 100.2 proposed protection of pedestrians, adjacent to the construction site;
- 100.3 proposed pedestrian management whilst vehicles are entering/exiting the construction site;
- 100.4 proposed measures to be implemented for the protection of all roads and footpath areas surrounding the construction site from building activities, crossings by heavy equipment, plant and materials delivery and static load from cranes, concrete pumps and the like;
- 100.5 proposed method of loading and unloading excavation machines, building materials formwork and the erection of any part of the structure within the site;
- 100.6 proposed areas within the site to be used for the storage of excavated material, construction materials and waste containers during the construction period;
- 100.7 proposed traffic control measures such as advanced warning signs, barricades, warning lights, after hours contact numbers etc are required to be displayed where works are in progress in any road reserve and shall be in accordance the latest versions of the NSW Roads and Traffic Authority's Specification - "Traffic Control at Work Sites Manual" and the Australian Standard AS1742. – "Manual of Uniform Traffic Control Devices" and accompanying field handbooks (SAA HB81);
- 100.8 proposed method of support of any excavation, adjacent to adjoining buildings or the road reserve. The proposed method of support is to be certified by an accredited certifier in Civil Engineering; and
- 100.9 proposed measures to be implemented, in order to ensure that no soil/excavated material is transported on wheels or tracks of vehicles or plant and deposited on the roadway.

The approved plan shall be implemented, prior to the commencement of any works upon the construction site.

**Note:** Any proposed works or placement of plant and equipment and/or materials within any road reserve will require the separate approval of Council, prior to the commencement of such works, pursuant to the provisions of the Roads Act 1993.

#### 101 **Heritage – Archaeological Briefing**

Prior to the commencement of works including any ground surface disturbance, a briefing of the work crew is to be undertaken by an Archaeologist on the Aboriginal and non-Aboriginal archaeological potential of the site. This should outline the likely finds that may occur on the site and the necessary procedures that should be followed under the National Parks and Wildlife Act 1974 and the NSW Heritage Act 1977 in the event of an archaeological find.

#### 102 **Heritage – Excavation Permit**

Prior to the commencement of works associated with the proposed development on Lot 601, archaeological investigations are to be undertaken in strict accordance with the conditions and requirements of the S140 Excavation Permit 2010/S140/21 issued by the NSW Heritage Council on the 27 January 2011 and with the procedures outlined in the 'Historical Archaeological Research Design & Excavation Methodology' report by AHMS and dated December 2010. A report on the archaeological investigation is to be provided to the NSW Heritage Branch and Wollongong City Council prior to the commencement of works.

#### 103 **Enclosure of the Site**

The site must be enclosed with a suitable security fence to prohibit unauthorised access, to be approved by the Principal Certifying Authority. No building work is to commence until the fence is erected.

- 104     **Demolition Works**  
The demolition of the existing structures shall be carried out in accordance with Australian Standard AS2601 (2001): The Demolition of Structures or any other subsequent relevant Australian Standard and the requirements of the NSW WorkCover Authority.
- No demolition materials shall be burnt or buried on-site. The person responsible for the demolition works shall ensure that all vehicles leaving the site carrying demolition materials have their loads covered and do not track soil or waste materials onto the road. Any unforeseen hazardous and/or intractable wastes shall be disposed of to the satisfaction of the Principal Certifying Authority. In the event that the demolition works may involve the obstruction of any road reserve/footpath or other Council owned land, a separate application shall be made to Council to enclose the public place with a hoarding or fence over the footpath or other Council owned land.
- 105     **Consultation with NSW WorkCover Authority**  
Prior to any work commencing on the site it is the responsibility of the owner to contact NSW WorkCover Authority in writing in respect to any demolition or use of any crane, hoist, plant or scaffolding.
- 106     **Demolition Notification to Surrounding Residents**  
Demolition must not commence unless at least 2 days written notice has been given to adjoining residents of the date on which demolition works will commence.
- 107     **Consultation with NSW WorkCover Authority – Prior to Asbestos Removal**  
The applicant or appointed contractor is to give NSW WorkCover Authority at least seven days advanced notice, prior to the removal of asbestos from the site.
- 108     **Waste Management**  
The developer must provide an adequate receptacle to store all waste generated by the development pending disposal. The receptacle must be regularly emptied and waste must not be allowed to lie or accumulate on the property other than in the receptacle. Consideration should be given to the source separation of recyclable and reusable materials.
- 109     **Supervising Arborist – Tree Inspection and Installation of Tree Protection Measures**  
Prior to the commencement of any demolition, excavation or construction works, the supervising arborist must certify in writing that tree protection measures have been inspected and installed in accordance with the arborist's recommendations and relevant conditions of this consent.
- 110     **Certification from Arborist - Adequate Protection of Trees to be Retained**  
A qualified arborist is required to be engaged for the supervision of all on-site excavation or land clearing works. The submission of appropriate certification from the appointed arborist to the Principal Certifying Authority is required which confirms that all trees and other vegetation to be retained are protected by fencing and other measures, prior to the commencement of any such excavation or land clearing works.
- 111     **Notification to Council of any Damage to Council's Infrastructure**  
Council must be notified in the event of any existing damage to any of Council's infrastructure including, but not limited to the road, kerb and gutter, road shoulder, footpath, drainage structures and street trees fronting the development prior to the commencement of work. Adequate protection must be provided to Council infrastructure prior to work commencing and during the construction period. Any damage to Council's assets shall be restored in a satisfactory manner prior to the issue of the Occupation Certificate.
- 112     **Dilapidation Report**  
The developer shall provide Council with a dilapidation report, identifying the condition of Council assets and all land in the vicinity of the proposed works within the road reserve prior to the commencement of works.
- 113     **Geotechnical Requirements During Construction**  
All works must be carried out in accordance with reports submitted in support of the Development Application and Construction Certificate Application.

- 114     **Works to be in accordance with Environmental Management Plan**  
All works on the site must be carried out in accordance with the approved environmental management plan for the full duration of construction works.
- 115     **Works to be in accordance with Soil and Water Management Plan**  
All works must be carried out in accordance with the approved Soil & Water Management Plan.
- 116     **Erosion and Sediment Control Measures**  
Erosion and sedimentation control measures are to be established in accordance with the requirements of Council. All erosion and sedimentation control measures are to be in place, prior to the commencement of any works and shall be maintained for a minimum period of six (6) months after the completion of all works. Daily maintenance of the erosion and sedimentation control measures is to undertaken to ensure their effectiveness.
- 117     **Sediment Traps**  
Sediment traps must be installed on-site around all affected stormwater inlets and drainage lines, in accordance with “Managing Urban Stormwater: Soils and Construction, NSW Dept of Housing - 4th Edition”, prior to the commencement of any works. All sediment control measures must be maintained on a daily basis until the site has been fully revegetated.
- 118     **Deposited Materials on Roads**  
Any material deposited on public roads resulting from the works must be removed within the same day.
- 119     **Dust Control**  
The emission of dust from the site must be controlled and in this regard watering equipment shall be kept on the site at all times for this purpose.
- 120     **Shaker Pads**  
Shaker pads are to be installed at the entry/exit points to the site to prevent soil material leaving the site on the wheels of vehicles and other plant and equipment. An additional vehicle wash down facility must also be provided as part of the soil and water management plan.
- 121     **Vibratory Rollers**  
No vibratory rollers are to be used during the construction of the subdivision without the prior written approval of the Principal Certifying Authority. The Principal Certifying Authority shall not issue this approval unless the geotechnical consultant has confirmed in writing that the use of vibratory rollers will not affect existing adjacent dwellings.
- 123     **Geotechnical Supervision**  
A Suitably Qualified Geotechnical Engineer must supervise all filling within the development.
- 124     **Certification – Installation of Erosion and Sedimentation Control Devices**  
Prior to any excavation, demolition or construction works being carried out a certificate from the appointed site supervisor must be submitted to the Principal Certifying Authority confirming that all erosion and sedimentation control devices have been satisfactorily installed as per the approved Construction Certificate plans and specifications.
- 125     **Dam and Temporary Sediment Basins – Water and Silt Analysis**  
The submission to the Principal Certifying Authority of a water & silt analysis report by an accredited certifier, prior to the breaching and/or draining of any dams or temporary sediment basins must be provided.
- Should the report indicate the presence of any heavy metal or other contaminants above the NSW Environment Protection Authority threshold criteria, the water and/or silt within the dam is to suitably removed from the site and disposed of at a registered waste disposal site, prior to the removal of the dam or commencement of subdivision construction works.
- The concentration of suspended solids in water discharged from ponds must not exceed 50mg/L. Water from the sediment basins must not be released unless the pH is in the rang of 7.0 to 8.5.

- 126 **Forty-eight Hours Notice – Prior to Works Commencing in any Road Reserve**  
The site supervisor must give the Principal Certifying Authority 48 hours notice, prior to any works commencing in any road reserve (footpath/carriageway).
- 127 **Notification to Adjoining Property Owners Prior to Commencement of Works**  
The site supervisor shall provide written notification to the adjoining property owners prior to the commencement of any works associated with the subdivision. The site supervisor shall also maintain access to existing properties.
- 128 **Public Liability Insurance**  
All contractors working in Council's road reserve shall take out public liability insurance for a minimum amount of \$10 million. This policy shall indemnify Council from all claims arising from the execution of any such works. It will be the site supervisor's responsibility to ensure that this condition of consent is complied with.
- 129 **Pavement Design**  
The pavement design for all subdivision roads must be carried out by a qualified geotechnical/civil engineer in accordance with the 'Australian Road Research Board' design criteria and the version of the Wollongong City Council Subdivision Code which are current at the date of this consent. The pavement design must be submitted to the Certifying Authority for approval prior to the laying of pavement material.

## **During Demolition, Excavation or Construction**

- 130 **Restricted Hours of Work**  
The developer must not carry out any work other than emergency procedures to control dust or sediment laden runoff outside the hours of 7.00 am to 6.00 pm, Monday to Friday and 8.00 am to 4.00 pm Saturdays without the prior written consent of the Principal Certifying Authority and Council.
- 130.1 No work is permitted on public holidays, Sundays or the Saturday adjacent to public holidays on Mondays or Fridays.
- 130.2 Any request to vary these hours shall be submitted to the Council in writing, detailing:
- 130.2.1 the variation in hours required;
  - 130.2.2 the reason for that variation;
  - 130.2.3 the type of work and machinery to be used.
- Note: The developer is advised that other legislation may control the activities for which Council has granted consent including but not limited to the Protection of the Environment Operations Act 1997. Developers must note that the NSW DECCW Construction Noise Guideline August 2008 states that the maximum allowable construction noise levels are Background + 10 dB(A) during the standard working hours i.e. between the hours of 7.00 am to 6.00 pm Mondays to Fridays and 8.00 am to 4.00 pm on Saturdays.
- The developer must carry out work at all times in a manner which will not cause a nuisance, by the generation of unreasonable noise, dust or other activity, to the owners and/or occupiers of adjoining and adjacent land.
- 131 **Compliance Inspections**  
The construction of the subdivision will require regular inspections in accordance with the Wollongong City Council Subdivision Code. If Wollongong City Council is to carry out compliance inspections you are advised that inspections must be paid for at the time of submission of Wollongong City Council's type M10 form and booked a minimum of 24 hours prior to taking place.
- 132 **Water Sensitive Urban Design (WSUD)**
- 132.1 The developer shall install the WSUD infrastructure as stated in the final approved engineering design documents. Upon completion of the WSUD infrastructure the developer shall submit an engineering certificate stating that the WSUD infrastructure was installed as stated in the final approved engineering design documents.

- 132.2 The developer shall ensure the E2 - Environmental Conservation Zone vegetation continues to receive overland flows with the suitable stormwater dispersion outlets as stated in Section 6.10 of the Water Cycle Management Study Report dated April 2011 reference no. 110079-01/Report 001Rev 9 by Cardno throughout all bulk earthworks, environmental protection, stormwater quality and land release construction stages of the development.
- 132.3 The developer at each construction certificate stage shall demonstrate that the water flow to the E2 - Environmental Conservation Zone has not been affected due to the development proposal.
- 133 **Ecological Matters**
- 133.1 The Consulting Arborist shall supervise the fill operations along the edges, of as well as within the Conservation Area, in order to ensure that no areas of Structural Root Zone of any retained trees are buried to a depth greater than 75mm.
- 133.2 The Consulting Arborist shall supervise the cut operations along the edges of the Conservation Area, in order to ensure that there is no significant loss to areas of Structural Root Zone of any retained trees. The Consulting Arborist shall trim, according to Australian Standards AS4373 – 2007; Pruning of Amenity Trees all branches and roots that have been damaged by excavation or other operations.
- 133.3 No parking or storage of building materials shall be permitted within the Conservation Area.
- 133.4 The VFMP prepared by Eco Logical Australia shall be implemented as soon as possible after completion of earthworks. The following tasks shall be carried out within the first twelve months: Weed control; nest box maintenance; installation of permanent fencing and planting.
- 134 **Heritage – Interpretation Works**
- The interpretive works identified in the Interpretation Plan are to be implemented during the course of the works.
- 135 **Protection of Public Places**
- If the work involved in the erection or demolition of a building involves the enclosure of a public place or is likely to cause pedestrian/vehicular traffic in a public place to be obstructed or rendered inconvenient, or have the potential for conflict between pedestrians and vehicles:
- 135.1 A hoarding or fence must be erected between the work site and the public place;
- 135.2 an awning is to be erected, sufficient to prevent any substance from, or in connection with, the work falling into the public place;
- 135.3 the work site must be kept lit between sunset and sunrise if it is likely to be hazardous to persons in a public place;
- 135.4 safe pedestrian access must be maintained at all times;
- 135.5 any such hoarding, fence or awning is to be removed when the work has been completed.
- 136 **Temporary Road Closure(s)**
- If a road closure is required, an approval must be obtained from City of Wollongong Traffic Committee and Wollongong City Council.
- Note:** It may take up to six weeks for approval. An application for approval must include a Traffic Control Plan prepared by a suitably qualified person which is to include the date and times of closure and any other relevant information. The traffic control plan shall satisfy the requirements of the latest versions of Australian Standard AS1742-Traffic Control Devices for Works on Roads and the RTA Traffic Control at Worksites Manual.
- 137 **Branch or Root Pruning in accordance with Australian Standard**
- Any branch or root pruning which has been given approval, must be carried out by a qualified arborist in accordance with Australian Standard AS4373 (2007).

- 138 **Copy of Consent to be in Possession of Person carrying out Tree Removal**  
The applicant/developer must ensure that any person carrying out tree removal/vegetation clearance is in possession of this development consent and/or the approved landscape plan, in respect to the trees/vegetation which have/has been given approval to be removed in accordance with this consent.
- 139 **Restricted Washing of Equipment or Disposal of Materials on any Tree Dripline Area**  
No washing of equipment and or the disposal of building materials such as cement slurry must occur within the drip line of any tree which has been nominated for retention of the site and adjacent property.
- 140 **Treatment of any Tree Damage by a Supervised Arborist**  
Any damage inflicted on a tree during the construction phase which has been nominated for retention shall be treated by an approved arborist at the developer's expense.
- 141 **Nuisance Mitigation**  
The developer must carry out work at all times in a manner which will not cause a nuisance, by the generation of unreasonable noise, lighting of the premises, dust or other activity, to the owners and/or occupiers of adjoining and adjacent land or to motorists on adjoining or nearby roads.
- 142 **Site Management**  
Stockpiles of sand, gravel, soil and the like must be located to ensure that the material:
- 142.1 Does not spill onto the road pavement and
- 142.2 is not placed in drainage lines or watercourses and cannot be washed into these areas.
- 143 **Site Operations**  
Building operations such as brick cutting, the washing of tools or paint brushes, or other equipment and the mixing of mortar must not be carried out on the roadway or public footpath or any other locations which could lead to the discharge of materials into the stormwater drainage system or natural watercourse.
- 144 **Dust Suppression Measures**  
Activities occurring during the construction phase of the development must be carried out in a manner that will minimise the generation of dust. All sealed surfaces intended to carry vehicular traffic must be managed with the aim of preventing wind blown dust emissions
- 145 **Truck Management**  
Trucks which are entering and leaving the premises and carrying loads must be sealed or covered at all times, except during loading and unloading.
- 146 **Asbestos – Removal, Handling and Disposal Measures/Requirements Asbestos Removal by an Approved Contractor**  
The removal of any asbestos material must be carried out by an approved contractor if over 10 square metres in area in strict accordance with WorkCover Authority requirements.
- 147 **Asbestos Waste Collection**  
The asbestos waste must be collected and stored on-site in impermeable bags inside an adequate waste receptacle pending transportation. The receptacle must be lined and covered in accordance with the bin provider's requirements and of the Protection of the Environment Operations Waste Regulations 2005.
- 148 **Asbestos Waste Preparation and Disposal**  
Asbestos waste must be prepared in accordance with WorkCover requirements and disposed of to an EPA licensed landfill site.
- 149 **Provision of Waste Receptacle**  
The developer must provide an adequate receptacle to store all waste generated by the development, pending disposal. The receptacle must be regularly emptied and waste must not be allowed to lie or accumulate on the property other than in the receptacle. Consideration should be given to the source separation of recyclable and re-usable materials.



- 150     **External Plant and Equipment**  
External plant such as air conditioners, compressors and other machinery likely to emit noise shall be located so adjoining areas are not adversely affected.
- 151     **Compliance with Statutory Authorities/Government Departments**  
Compliance with the requirements of any Statutory Authorities or Government Departments such as, but not limited to:
- NSW Workcover Authority;
  - NSW Roads & Traffic Authority;
  - NSW Environment Protection Authority;
  - NSW Police Service; and
  - NSW Fire Brigades.
- 152     **Pipe Connection**  
All pipe connections to pits within the road reserve must be constructed in accordance with good engineering practice. The developer must ensure that the condition of the pit is not compromised and that the service life of the pit is not reduced as a result of the connection.
- 153     **Protection of Council Infrastructure**  
The developer shall provide adequate protection to all Council assets prior to work commencing and during construction. Council must be notified immediately in the event of any damage to Council's assets. Any damage to Council's assets shall be made good to the satisfaction of Council, with all associated costs borne by the developer.
- 154     **Supervision of Engineering Works**  
A suitably qualified civil engineer, registered surveyor or experienced civil engineering foreman appointed by the developer must be on site at all time during working hours.
- 155     **Drainage Inspections**  
A suitably qualified civil engineer appointed by the developer must regularly visit the site to ensure that all drainage construction complies with the approved Construction Certificate drawings.
- 156     **Noise Control – Construction Works**  
The construction works shall comply with the Australian Standard AS 2436- 1981 “Guide to Noise Control on Construction, Maintenance & Demolition Sites” and any other requirements as specified by Council or the NSW Environment Protection Authority.
- 157     **Prior to Pouring of Concrete**  
A suitably qualified civil and/or structural engineer appointed by the developer must review and approve any structural reinforcement prior to pouring of concrete.
- 158     **Formwork**  
A suitably qualified civil and/or structural engineer appointed by the developer must review and approve all formwork prior to pouring of concrete.
- 159     **Notice to Council – Road Openings**  
The site supervisor must notify Council's Works Department 48 hours prior to the opening of any public road.
- 160     **Temporary Road Closures**  
If a road closure is required an approval must be obtained from City of Wollongong Traffic Committee.  
  
Note: It may take up to 6 weeks for approval. An application for approval must include a Traffic Control Plan prepared by a suitably qualified person which is to include the date and times of closure and any other relevant information.
- 161     **Traffic Control Plan**  
Approval must be obtained from Wollongong City Council Traffic Section for any interruption to pedestrian and vehicular traffic within the road reserve caused by the construction of this development. A traffic control plan prepared and implemented by a suitably qualified person

must be submitted for approval with the appropriate fee, 48 hours prior to expected implementation. The traffic control plan shall be to the requirements of Wollongong City Council.

Note: This includes temporary road closures for the delivery of materials, plant and equipment, concrete pours etc.

**162 Notification to Council of any Damage to any Road, Drainage Structure or Footpath**

Council must be notified in the event of any existing damage to the road, kerb and gutter, road shoulder, footpath, drainage structures and street trees fronting the development prior to the commencement of work. Adequate protection must be provided for Council infrastructure prior to work commencing and during subdivision operations. Any damage to Council's assets shall be made good, prior to the release of the Subdivision Certificate.

**Prior to Issue Subdivision Certificate/Release of Final Subdivision Plan**

**163 Dedication of Land**

The areas of land to be dedicated to Council must be subdivided to create separate parcels. This must be detailed on the final plans submitted for the Subdivision Certificate. The land must be transferred to Council at no cost.

**164 Asset Management – Roads, Drainage and Landscaping**

Prior to release of the Subdivision Certificate the following documentation must be submitted to the Principal Certifying Authority (Council) for approval and must be in a format agreed to and provided by Wollongong City Council:

- 164.1 The length, square meterage and cost of constructed roadworks to be dedicated as public road.
- 164.2 An itemised list of the size, length and type of pipe, associated pits and water quality features in the proposed drainage system to be handed over to Council (not including common drainage lines or inter-allotment drainage).
- 164.3 Itemised list of street signs and street furniture including their current cost.
- 164.4 Itemised list of plantings in public areas. Cost of plantings must be provided (to be based on current Landscape Contractors' Association figures).
- 164.5 Maintenance schedule of landscape works and civil works and costs to Council associated with the ongoing maintenance of the work.
- 164.6 Risk assessment of carrying out maintenance of landscape works and drainage/water quality systems. Appropriate traffic control plans (prepared in accordance with RTA guidelines) will need to be submitted for approval where maintenance work takes place in a proposed road reserve. Current costs will need to be provided in implementing the Traffic Control Plan.
- 164.7 Maintenance requirements and Schedules of all Water Sensitive Urban Design (WSUD) facilities including (but not limited to) GPT's, Bioretention Swales, Wetlands and Water Quality Ponds

165 **Practical Completion**

Upon completion of all works stipulated in the Development Consent and Construction Certificate, the developer must obtain either a Certificate of Practical Completion from Wollongong City Council or a Compliance Certificate from an accredited Private Certifier.

In order to attain a Certificate of Practical Completion the following items must be lodged with Wollongong City Council:

- 165.1 completed M3 Form which references the Construction Certificate application number and stipulates that a Certificate of Practical Completion is required;
- 165.2 work-as executed drawings as conditioned in this consent;
- 165.3 CCTV as conditioned in this consent;
- 165.4 final Certifications as conditioned in this consent;
- 165.5 final Reports as conditioned in this consent;
- 165.6 all pipelines compaction data (all layers) and road density testing data (all courses) as per Wollongong City Council subdivision code requirements;
- 165.7 Asset Management report as conditioned in this consent.

166 **Bonding of Roadworks**

The developer must asphalt Bong Bong Road with a 50mm AC14. All internal Roads must be constructed in accordance with the requirements of Council's Subdivision Code, however should the internal roads be constructed in two layers, a 20mm AC5 wearing course and a final 30mm GG10 must be used. The first layer must be placed prior to the issue of the Subdivision Certificate. The second layer must be placed 12 to 18 months after the issue of the Subdivision Certificate. A bank guarantee must be lodged with Wollongong City Council which covers the cost of the works plus an additional 30% of the work prior to the issue of the subdivision certificate.

167 **Drainage within Road Reserve WAE**

The developer shall obtain written verification from a suitably qualified civil engineer, stating that the construction of the drainage infrastructure works within Council's road reserve has been undertaken in accordance with the approved plans. In addition, full work-as-executed plan, prepared and signed by a Registered Surveyor must be submitted. This plan must include the location and levels of the drainage lines, structures and finished surface levels. This information must be submitted to Wollongong City Council's Manager Design and Technical Services for approval prior to the issue of the final Subdivision Certificate.

168 **Flood Affection Certificate**

The submission of a report from a suitably qualified and experienced civil (hydrology) engineer to the Principal Certifying Authority is required, prior to the issue of the Subdivision Certificate. This report is required to certify that the 'as-constructed' subdivision will not have any detrimental effects to adjoining properties or upon the subject land with respect to the loss of flood storage, changes in flood levels and alteration of flood conveyance, as a result of flooding or stormwater run-off.

169 **On-Site Detention - Structural Certification**

The submission of a certificate from a suitably qualified practising civil and/or structural engineer to the Principal Certifying Authority is required prior to the issue of the Subdivision Certificate. This certification is required to verify the structural adequacy of each on-site detention facility and that each facility has been constructed in accordance with the approved Construction Certificate plans.

170 **Restriction on use – On-site Detention System**

The applicant must establish a Restriction on use over each on-site detention system. The following terms must be included on an 88B instrument for approval of Council:

"The registered proprietor of the lot burdened must not make or permit or suffer the making of any alterations to any on-site stormwater detention system on the lot(s) burdened without the

prior consent in writing of the authority benefited. The expression 'on-site stormwater detention system' shall include all ancillary gutters, pipes, drains, swales, kerbs, pits, grates, basins and surfaces designed to temporarily detain stormwater as well as all surfaces graded to direct stormwater to those structures.

Name of the authority having the power to release, vary or modify the restriction referred to is Wollongong City Council."

The 88B instrument, showing the restriction must be submitted to the Principal Certifying Authority for endorsement prior to the issue of the Subdivision Certificate.

171 **Final Geotechnical Report - Subdivision Certificate**

The submission of a final geotechnical report by a suitably qualified and experienced geotechnical consultant to the Principal Certifying Authority, prior to the issue of the Subdivision Certificate. The report shall include, but is not necessarily limited to:

- 171.1 All earthwork operations;
- 171.2 The suitability of each allotment for residential development. In this regard each lot shall be given a classification in accordance with AS2870.1 - Residential Slabs and Footings;
- 171.3 A fill plan showing extent and depth of fill;
- 171.4 Certification that all earthworks within the site have complied with the Subdivision Code. This shall include appropriate test results, and test location diagram and date of testing;
- 171.5 Certification that all recommendations contained in geotechnical reports lodged in support of this development have been satisfied;
- 171.6 The exact extent of any restricted building zones or any other restrictions affecting any of the allotments. Particular attention shall be paid to the location of subsurface drainage lines, which shall be burdened with a restriction-as-to-user within the Section 88B Instrument;
- 171.7 identification of all land affected by landslip or instability constraints (if applicable).

172 **Certification - Geotechnical**

A suitably qualified geotechnical engineer must supervise all filling activity. The geotechnical engineer shall provide written certification that the completed landfilling or land re-shaping works are in compliance with the approved plans and specifications. The certification shall include appropriate test results, a test location diagram and date of testing.

173 **Works-As-Executed Plans**

The submission of two sets (minimum) of Works-As-Executed (WAE) plans to the Principal Certifying Authority, prior to the release of the Subdivision Certificate. The Works-As-Executed plans shall be certified by a registered surveyor indicating that the survey is a true and accurate record of the works that have been constructed. The Works-As-Executed dimensions and levels must also be shown in red on a copy of the approved Construction Certificate plans. The Works-As-Executed (WAE) plans must be submitted as a hard copy and also in electronic format (such as an AutoCAD file). The Works-As-Executed (WAE) plans must include:

- Final locations and levels for all works associated with the subdivision which also indicates the final volume of the on-site detention and subsoil drainage locations;
- a separate conduit plan showing the location of all conduits laid beneath the constructed road system;
- a separate fill plan showing extent and depth of filling;
- a separate plan which indicates the extent of flood inundation for 1% AEP and PMF storm event;
- the location of the on-site detention identification plaque; and

- the plan(s) must include but not be limited to the requirements Chapter E14 of the Wollongong DCP 2009.

174 **Piped Natural Watercourse**

The piped natural watercourse must be chartered on the final subdivision plan.

175 **Natural Watercourse**

The natural watercourse must be chartered on the final subdivision plan.

176 **Existing Easements**

All existing easements must be acknowledged on the final subdivision plan.

177 **Existing Restriction as to Use**

All existing restriction on the use of land must be acknowledged on the final subdivision plan.

178 **Encroaching Pipes**

A minimum one (1) metre wide easement to drain water shall be created over any encroaching drainage pipes.

179 **Encroaching Services**

A minimum one (1) metre wide easement for services must be created over any encroaching utility service.

180 **Compliance Certificates – Subdivision Works**

Where an accredited Private Certifying Authority has been appointed to carry out inspections, a Compliance Certificate must be submitted stating that all work has been constructed in accordance with:

- 180.1 the Development Consent;
- 180.2 the approved Construction Certificate;
- 180.3 the Wollongong City Council Subdivision Code.

181 **Section 88B Instrument**

The submission of a Final Section 88B Instrument to Council/Principal Certifying Authority, which incorporate (but is not necessarily limited to) the requirements stipulated in the letter from Jeff Bannerman of Stocklands dated 21 March 2011, and the following restrictions, easements and covenants, where applicable:

- 181.1 Easement for services;
- 181.2 easement to drain water;
- 181.3 drainage easement over overflow paths;
- 181.4 restriction-as-to-user over the ‘on-site stormwater detention system’ which prohibits its alteration and/or removal;
- 181.5 restriction-as-to-user over bund walls which prohibits its alteration and/or removal;
- 181.6 positive covenant that requires maintenance to be in accordance with the Construction Certificate approved On-Site Detention System and Maintenance Schedule – (Application number to be referenced);
- 181.7 easement for encroachment;
- 181.8 rights of accessway;
- 181.9 restricted building zone over the 1% AEP flood inundation area of the natural watercourse which prohibits the erection of structures, fences, pools, ancillary buildings, the placement of fill and the planting of trees;
- 181.10 restriction as to user which defines a restricted building zone;
- 181.11 restriction as to user defining minimum floor levels for any lots which have any part of the lot below the 1% AEP flood level. This shall be accompanied by the 1% flood profile of the natural watercourse with superimposed lot boundary location;

- 181.12 restriction as to user over any filled lots which stipulates that footings must be designed by a suitably qualified civil and/or structural engineer;
- 181.13 restriction as to user over sub-surface drainage pipes contained within the building area of allotments;
- 181.14 minimum floor levels.
- 182 **88B Instrument Easements/Restrictions**  
Any easements or restrictions required by this consent must nominate Wollongong City Council as the authority to vary, modify or release/extinguish the easements or restrictions. The form of the easement(s) or restriction(s) created as a result of this consent must be in accordance with the standard format for easements and restrictions as accepted by the Land and Property Information Office.
- 183 **Restriction on Fencing of any Lot adjoining land earmarked or created as Public Reserve or Drainage Reserve**  
The creation of a restriction on the use of the land pursuant to Section 88B of the Conveyancing Act 1919 providing that:
- 183.1 No fence shall be erected on the boundary of any lot adjoining land which is or is to be created as Public Reserve or Drainage Reserve without the written consent of Wollongong City Council;
- 183.2 Such consent shall not be withheld, however, if such fence is erected without expense to Wollongong City Council;
- 183.3 The restrictions shall remain in force only during such time as Wollongong City Council is the registered proprietor of the land immediately adjoining the land burdened in the plan and shall bind all successive owners and assigns of each lot burdened. The 88B Instrument shall contain a provision that it may not be altered, modified or extinguished, except with the written consent of Wollongong City Council.
- 184 **Certification - Earthworks**  
The approved landfilling or land re-shaping works must be supervised at all times by a suitably qualified geotechnical engineer. Upon completion of the landfilling/land re-shaping works, written certification from the geotechnical engineer stating that all landfilling/land re-shaping works have been completed in accordance with the approved Construction Certificate plans and specifications. The certification must also include appropriate test results, a test location diagram and the date of testing.
- 185 **Certification Retaining Wall**  
The submission of a Certificate of Structural Sufficiency from a suitably qualified Civil and/or Structural Engineer for all retaining walls constructed.
- 186 **Certificate - Structures**  
The submission of written certification from a suitably qualified civil and/or structural engineer stating that all structures have been constructed in accordance with the approved Construction Certificate plans.
- 187 **All Works to be Completed**  
All works as specified in the development Consent and Construction Certificate must be completed prior to the issue of a Subdivision Certificate. All works shall be fully borne by the developer and any damage to Council's assets shall be made good, prior to the issue of the Subdivision Certificate.
- 188 **Final Documentation Required Prior to Issue of Subdivision Certificate**  
The submission of the following information/documentation to the Principal Certifying Authority, prior to the issue of a Subdivision Certificate:
- 188.1 Completed Subdivision Certificate application form and fees in accordance with Council's fees and charges;



- 188.2 Original Construction Certificates and approved drawings (where issued by an accredited Private Certifying Authority);
  - 188.3 Certificate of Practical completion from Wollongong City Council or a Compliance Certificate from an accredited Private Certifying Authority;
  - 188.4 Final plan of Subdivision prepared by a registered surveyor plus four (4) equivalent size paper copies of the plan;
  - 188.5 Section 88B Instrument covering all necessary easements and restrictions on the use of any lot within the subdivision;
  - 188.6 Original Subdivider/Developer Compliance Certificate pursuant to Section 73 of the Water Board (Corporatisation) Act 1994 from Sydney Water;
  - 188.7 Original Notification of Arrangement from an Integral Energy regarding the supply of underground electricity to the proposed allotments;
  - 188.8 Original Compliance Certificate from Telstra or another Telecommunications Service Provider which confirms that the developer has consulted with the Provider with regard to the provision of telecommunication services for the development.
- 189 **CCTV**  
All stormwater pipes within road reserves and within drainage easements intended to be dedicated to Council must be inspected by CCTV. A copy of the CCTV inspection must be submitted to the Principal Certifying Authority prior to the issue of the Subdivision Certificate. Below standard work must either be replaced or repaired to the Principal Certifying Authority's satisfaction prior to the issuing of a Subdivision Certificate.
- 190 **Benkelman Beam**  
Prior to issue of the Subdivision Certificate, Benkelman beam testing must be undertaken on all roads proposed for dedication as road reserve. Testing must be carried out in accordance with the current version of the Wollongong City Council Subdivision Code at the time of issue of this consent. The acceptance criteria are based on the tolerable deflections as specified by the Australian Road Research Board and AUSTROADS at the time of issue of this consent.
- 191 **Street Signs**  
All proposed street signs must be approved by Wollongong City Council and installed prior to the issue of the Subdivision Certificate.
- 192 **On-Site Detention – Certificate of Hydraulic Compliance**  
The developer shall obtain a certificate of Hydraulic Compliance (using Council's M19 form) from a suitably qualified civil engineer, to confirm that all stormwater drainage and on-site detention works have been constructed in accordance with the approved plans. The certificate must satisfy the requirements of hydraulic compliance as stated in Chapter E14 of the Wollongong DCP 2009. This information must be submitted with the full works-as-executed plans to the Principal Certifying Authority prior to the issue of the Subdivision Certificate.
- 193 **Registered Surveyors Certification**  
A Registered Surveyor must certify in writing that all stormwater pits and pipelines, services and vehicular accessways are located wholly in an appropriate easement on the final plan of subdivision. This certification must be submitted with the Subdivision Certificate application.

## Operational Phases of the Development/Use of the Site

- 194 **Monitoring of Stormwater Quality prior to hand over of WSUD Infrastructure to Council**
- 194.1 The developer shall undertake stormwater quality monitoring after the completion of 85% of residential dwellings are built and shall include at least two events sampling representing dry and wet periods.
  - 194.2 Prior to handover of the WSUD treatment infrastructure to the Council, the developer shall undertake sufficient water sampling and analysis to prove statistically that the

WSUD treatment train is functional and achieving the targeted improvement in the water quality.

195     **Ecological matters**

Biennial reports shall be submitted to the Environment Section, Wollongong City Council. The reports shall be prepared according to Chapter 6 Monitoring and Reporting, detailed in the VFMP prepared by Eco Logical Australia.

196     **Loading/Unloading Operations/Activities**

All loading/unloading operations are to take place at all times wholly within the confines of the site.

## Reasons

The reasons for the imposition of the conditions are:

- 1       To minimise any likely adverse environmental impact of the proposed development.
- 2       To ensure the protection of the amenity and character of land adjoining and in the locality.
- 3       To ensure the proposed development complies with the provisions of Environmental Planning Instruments and Council's Codes and Policies.
- 4       To ensure the development does not conflict with the public interest.

## Notes

- 1       This consent becomes effective and operates from the date shown as **"Endorsement Date"** on the front page of this notice. This consent will lapse unless development is commenced within five years from the endorsement date shown on this notice.
- 2       Section 97 of the Environmental Planning and Assessment Act confers on an applicant who is dissatisfied with the determination of a consent authority a right of appeal to the Land and Environment Court exercisable within twelve months from the date of receipt of this notice.
- 3       The holder of a development consent that is being acted upon must also hold a current:
  - a       Construction Certificate under the provisions of the Environmental Planning and Assessment Act, 1979.
  - b       Subdivision Certificate under the provisions of the Environmental Planning and Assessment Act, 1979.
- 4       Where the consent is for building work or subdivision work, no temporary buildings may be placed on the site and no site excavation, filling, removal of trees or other site preparation may be carried out prior to the issue of a Construction Certificate and appointment of a Principal Certifying Authority.
- 5       A Tree Management Order has been proclaimed in the City of Wollongong. Under this order, no tree on the land the subject of this approval may be ringbarked, cut down, topped, lopped or wilfully destroyed except with the prior consent of Council which may be given subject to such conditions as Council considers appropriate. However, unless specified otherwise in this consent, those trees which are specifically designated to be removed on the plans approved under this consent or are within 3 metres of an approved building footprint may be removed, provided that a Construction Certificate has been issued for the development the subject of this consent and a Principal Certifying Authority appointed.
- 6       In this consent the developer means the applicant for development consent and any person or corporation who carries out the development pursuant to that consent.

- 7 Section 82A of the Environmental Planning and Assessment Act confers on an applicant who is dissatisfied with the determination of a consent authority a right to request the consent authority to review the determination. The request for review must be made within 12 months after the date on which the applicant received the notice of determination and must be accompanied by the fee set by the Regulations; it does not apply to an application in respect of Designated Development or Integrated Development.
- 8 Council recommends that NSW Wildlife Information and Rescue Service (WIRES) be contacted (phone (02) 4285 5630) for assistance in relocating native fauna prior to removal of trees and bushland.