



Eureka Funds Management
Boundary Rd, North Medowie
Due Diligence Report

Rural Residential Development

Hyder Consulting Pty Ltd

ABN 76 104 485 289
Level 5, 141 Walker Street
Locked Bag 6503
North Sydney NSW 2060
Australia
Tel: +61 2 8907 9000
Fax: +61 2 8907 9001
www.hyderconsulting.com



Eureka Funds Management

Boundary Rd, North Medowie

Due Diligence Report

Rural Residential Development

Author Gustavo Pereira

A handwritten signature in blue ink that reads "Gustavo P. Pereira".

Checker Greg Ives

A handwritten signature in blue ink that reads "Greg Ives".

Approver Greg Ives

A handwritten signature in blue ink that reads "Greg Ives".

Report No DN000139

Date 20 January 2010

Revision 04

This report has been prepared for Eureka Funds Management in accordance with the terms and conditions of appointment for Due Diligence Report dated 19/06/2009. Hyder Consulting Pty Ltd (ABN 76 104 485 289) cannot accept any responsibility for any use of or reliance on the contents of this report by any third party.



CONTENTS

1	Introduction	1
1.1	Locality	2
2	General Services	3
2.1	Sewer and Water	3
2.2	Electricity	6
2.3	Telecommunications	6
2.4	Gas	7
3	Conclusion	7

Appendices

- Appendix A
Correspondence
- Appendix B
Drawings

1 Introduction

Hyder has been commissioned by Eureka Funds Management to undertake an initial infrastructure investigation to determine the extent of services within the vicinity of the site and their capability to service a proposed rural residential development for a site located at Boundary Road, North Medowie. The site has an approximate area of 127 Ha and is proposed to be developed as rural residential subdivision of approximately 300 to 350 lots.

This report details the following civil infrastructure items:

General Services:

- Locations of existing services and the likely connection points to supply the site;
- Potential service upgrades required to ensure adequate capacity for the site;
- Timing of service upgrades;
- Land requirements – location of major service infrastructure requiring dedication of land;
- Letters / correspondence confirming availability of supply.

Initial approach to the utilities suppliers was made in June 2009 enquiring for a rural development of 300 to 400 lots based on a previous land use layout provided by Eureka. Ongoing discussions with Hunter Water have occurred and the final sewer and potable water assessment was made on the basis of a development of 300 lots. The new land use layout of 300 to 350 lots provided in December 2009 is expected to have minimal implications to the utilities suppliers' responses. Figure 1 indicates the new land use proposal.

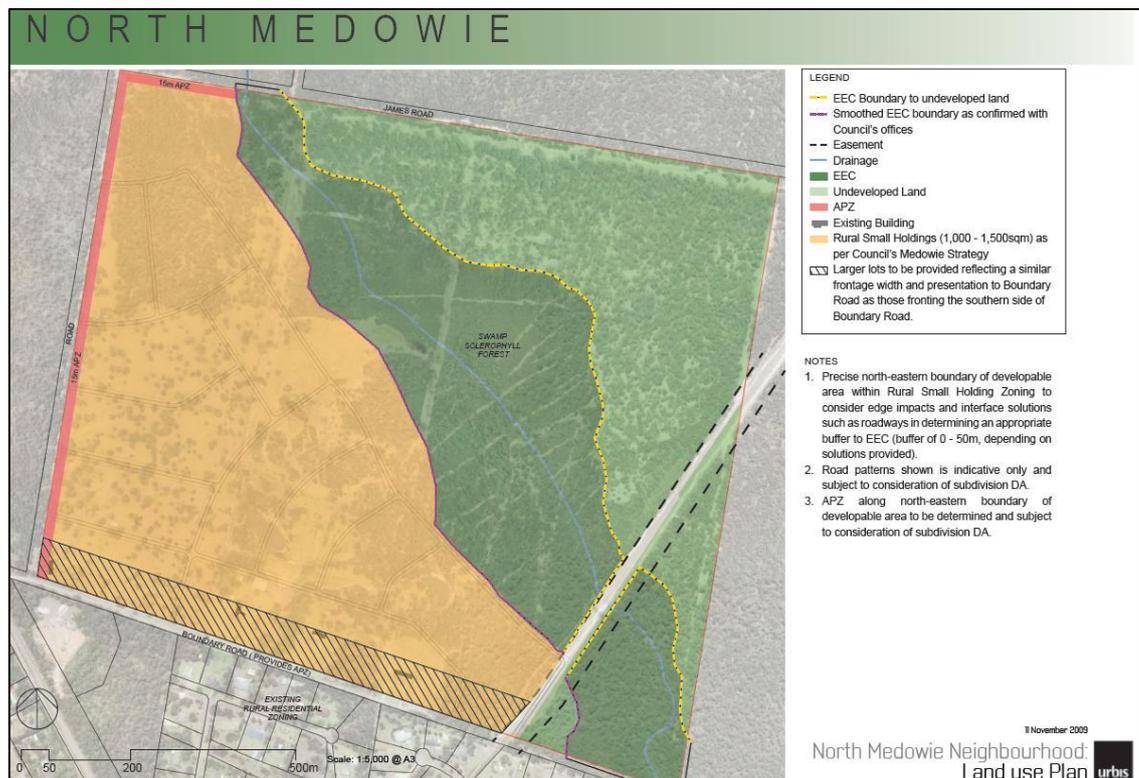


Figure 1 – Land Use Layout

1.1 Locality

The site is located in the Port Stephens Government Area on the north side of Boundary Rd, to the east of Medowie Rd. The site is composite by the lots 93/94/95/96 of DP 753194. Refer to Figure 2 and attached SKC001 in Appendix B. The site is currently accessed via Boundary Rd and is partly undeveloped and partly used for farming purpose with 4 houses and associated machinery buildings on the 4 properties.

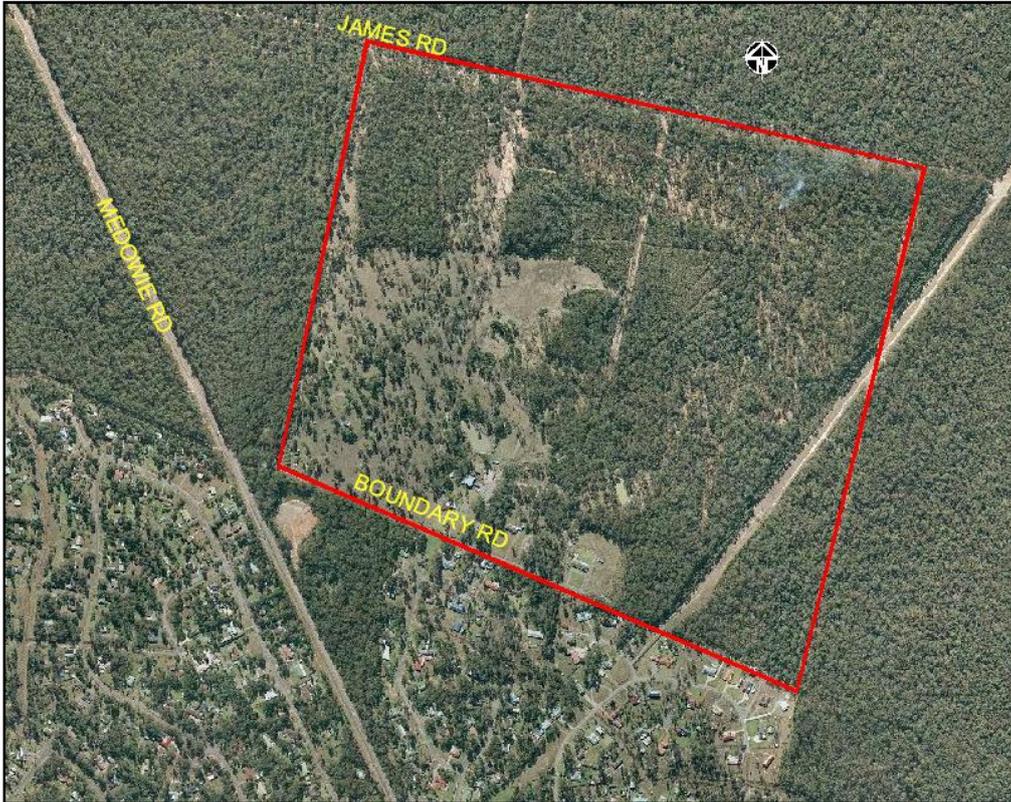


Figure 2 – Site Location

AUSIMAGE © Sinclair Knight Merz Pty Ltd 2009

2 General Services

The following asset owners are located within the vicinity of the site and / or surrounding road reserves:

- Sewer – Hunter Water Corporation
- Water – Hunter Water Corporation
- Electrical – Energy Australia
- Telecommunications – Telstra

Gas infrastructure was not found within the surrounding site area.

2.1 Sewer and Water

Dial Before You Dig investigations in the area have shown that water and sewer system exists within the access roads that service the residential lots to the south of the site. Both existing pipe systems in the area appear to have capacity to supply only the residential lots to the south of the proposed development. Refer SKC002 in Appendix B.

Investigations of a previous development proposal for the site were carried out in November 2006. The proposal at that time was for a much larger development than currently proposed including approximately 1300 dwellings as single lots.

Hunter Water advised that due to the time elapsed since 2006, the advice given at that time is no longer valid and requested a formal application for Preliminary Servicing Advice prior to provision of any information.

In response of the application, Brett Lewis, Manager Sales and Business Development from Hunter Water, has provided via letter on 21 July 2009 some preliminary advice for the proposed development. In this advice, it was confirmed that developer charges for water and sewer within Hunter Water's area of operation has been abolished.

To discuss the information given on the Preliminary Advice and options to service the development, a meeting was undertaken with Hunter Water in a meeting on 18 August 2009. During this meeting, Malcolm Withers from Hunter Water advised that Hunter Water has no objections to rezoning the site.

Regarding the capability of the existing water and sewer system, the following issues are relevant to the development of the site:

2.1.1 Water System

The existing water supply assets in the vicinity include:

- Medowie Reservoir at Silver Wattle Drive;
- Ø300mm water main from the reservoir;
- Local reticulation mains.

Hunter Water has confirmed in their Preliminary Advice letter that the water supply system has spare capacity to supply the ultimate size of the proposed development. Hunter Water also mentioned that the area has been highlighted as a significant growth region and such spare capacity might not be available due to other developments. In order to cater for all demand,

Hunter Water has plans to upgrade the existing infrastructure with an additional reservoir and duplication of existing trunk main by 2015.

It was advised that the water connection to the site will be available via the existing Ø300mm water main at the intersection of Medowie Rd and Silver Wattle Drive, located about 2km from the site (Refer Figure 2).

Hunter Water has confirmed in the meeting following the Preliminary Advice that the planned upgrades of the reservoir appear to suit the proposed development. Hunter Water also confirmed that the total demand would be based on peak demand and it would not be significantly reduced with the use of rainwater tanks.

2.1.2 Sewer system

The existing sewer system in the area comprises a number of small pump stations that pump to Medowie Wastewater Pump Station (WWPS) No. 10, which then pumps to the Raymond Terrace Wastewater Treatment Works (WWTW).

Hunter Water has advised on the Preliminary Advice letter that the sewer from the development should be discharged to Medowie 10 WWPS. The connection point for the development is the access chamber H1144, immediately adjacent to Medowie 10 WWPS, located at Ferodale Rd, close to the intersection of Kirrang Dr (about 3km from the site, refer Figure 2). Alternatively, the connection could be made via the access chamber H913 located at Ferodale Rd. However this would require upgrade in the downstream pipe system up to Medowie 10 WWPS.

Malcolm Withers, from Hunter Water, has confirmed in a meeting on 18 August 2009 that currently Medowie 10 WWPS and Raymond Terrace WWTW have spare capacity for initial stages of the development. However, there is a potential demand for future use of this spare capacity, from Medowie 6 WWPS.

Upgrades in the Medowie 10 WWPS and Raymond Terrace WWTW are scheduled by Hunter Water. Raymond Terrace WWTW is currently running at capacity with upgrades under construction and due for completion at end of 2010. These upgrades do not include the inlet works and this is considered a limitation to any upgrading of Medowie 10 WWPS until the next stage of works is completed. The next stage of upgrades is planned for completion in 2015. Further upgrades of Medowie 10 WWPS are currently not within the funding programme and as such are reported as future works "2025". During the meeting on 18 August 2009, Malcolm Withers noted that the program for upgrades is reviewed regularly against the project demand and this works can be brought forward to match WWTW end of works in 2015. A record of the agreed minutes is attached.

Bob Daniels, from Hunter Water, has confirmed via email from 27 July 2009 that if there is any intention to bring the upgrades forward, this would require exact timing for the development and continued consultation with Hunter Water. Funding of these upgrades would be determined at the appropriate time.

As Hunter Water does not reserve capacity, detailed investigation will need to be carried out at each stage of the development to confirm capacity availability. If spare capacity is not available at the commencement of the development, site sewer storage combined with controlled discharge on off-peak times was confirmed by Malcolm Withers to be a potential solution to service the development.



Figure 2 – Hunter Water Connections

2.2 Electricity

Investigations showed no electrical cables buried in the site vicinity, only overhead 11kV distribution line running along the north side of Boundary Rd. The eastern side of the site (lots 95 and 96) is crossed from north to south by an aerial transmission line which is covered by a 45m wide easement in favour of Energy Australia. Refer SCK003 in Appendix B.

Daniel Dafo, Energy Australia Engineering Officer, has confirmed that the existing 11kV distribution line is supplied from Williamtown Zone Substation, located on Nelson Bay Road, about 12km from the site. It was advised that currently there is limited capability available in their system. Daniel Dafo has confirmed via email on 15 July 2009 that currently the spare capacity can only cater for an initial stage of the development of about 50 lots can be supplied via the existing 11kV feeder.

Energy Australia is currently reviewing the supply to the Medowie area for provision of additional capacity, with the possibility of a new zone substation within the area. However, the provisional of additional capacity is only at the initial planning stage and it is advised that the completion of works can not be expected at least some time after 2012.

Investigations into possible zone substation sites are still being undertaking and at the moment Energy Australia is unable to determine if the proposed site within the development would be a potentially suitable location. However, this option is being investigated by Energy Australia and if it is determined as a potential option, Energy Australia will look at discussing the option with the developer.

2.3 Telecommunications

Telecommunications infrastructure in the area consists of (Refer SKC004 in Appendix B):

- Local buried cables along the north side of Boundary Rd, western side of Medowie Rd and on local access roads.
- Optical buried cables along western side of Medowie Rd.

Telstra has advised via letter on 10 June 2009, that Telstra maintains existing networks in the area, however the existing network does not have currently sufficient capacity to meet the likely demand of the development.

Telstra has no objection to the approval of the development, however indicates that the current network would require upgrades.

The following are required by Telstra to the Developer to achieve the upgrade needs:

- Provision of trenches to install telecommunications infrastructure within the development;
- Suitable locations to install above ground housing and / or cabinets within the development.

The technology and services provided would be determined closer to the time of development commencement, depending on Telstra deployment policy and any negotiations based on a commercial agreement.

Telstra will require the protection of or relocation of its telecommunications infrastructure that may be impacted by activities on the site.

2.4 Gas

Investigation showed there is no currently gas infrastructure in the vicinity of the site. Greg Knight, Network Development Manager from Jemena has confirmed via email on 03 June 2009 that they currently have no infrastructure in the area and there are no plans to them to extend into the area.

Greg has mentioned that Jemena has investigated the area a number of times and has found no justification to extend their gas main to the area, unless significant contributions to be made from the developers.

3 Conclusion

During the investigation the major utility providers were approached as to the feasibility of servicing the proposed development and no objections were raised for rezoning of the site.

Telstra confirmed they maintain existing infrastructure in the area and only requires the developer to provide trenches for the installation of Telstra cables and suitable locations to install above ground housing and cabinets.

Energy Australia has confirmed that they currently have spare capacity for an initial stage of 50 lots. However this needs to be confirmed at the time of the commencement of the development. Upgrades are been planned by Energy Australia to increase the service capability in Medowie area within 5 years and would be sufficient to supply the remaining of the development.

Negotiations have been instigated with Energy Australia as to the feasibility of a parcel of land within the site being suitable for a zone substation. The proposal is to make the site available to Energy Australia and thereby assist with their planning and delivery of the proposed zone substation.

Water supply to the site is available from the existing watermain located at the intersection of Medowie Rd and Silver Wattle Dr, and enough capacity will be available by the time of commencement of the development.

Hunter Water has confirmed that the upgrades in the sewer system are scheduled to cater for the site development and other future demand. It was advised that the sewer system currently has spare capacity for initial stages of the development. However this needs to be confirmed at the time of commencement of each stage. Alternatively there is an option of site sewer storage combined with controlled site sewer discharge on off-peak times.

Whilst Jemena raised no objections, they advised that supply of gas would require funding by the developer.

Appendix A

Correspondence

Hunter Water Corporation Correspondence [8 page(s)]

Energy Australia Correspondence [2 page(s)]

Telstra Correspondence [1 page(s)]

Jemena Correspondence [1 page(s)]

Hunter Water Correspondence



HUNTER WATER CORPORATION, PO BOX 6171, HUNTER NEW SOUTH WALES, TEL: 0770 057 000
35 HONEYBUCKLE DRIVE, NEWCASTLE, ABN 48 325 01 5 446, E: HUNTERWATER@HWA.NZ

Hyder Consulting
RECEIVED

23 JUL 2009

21 July 2009

Ref:2008-631

Eureka 1 Project 10 Pty Ltd/Eureka 1 Project 4 Pty Ltd
C/- Hyder Consulting
Looked Bag 6503
North Sydney NSW 2060

Att: Greg Ives

Dear Greg

RE: PRELIMINARY ADVICE FOR PROPOSED DEVELOPMENT

Hunter Water has considered your request for our requirements for the provision of water and sewer services to your proposed development at Lots 93, 94, 95 & 96 DP 753194, Boundary Road, Medowie.

As the development is subject to rezoning and approval by Local Council, any information at this point is indicative only and maybe subject to significant change prior to your development proceeding.

These indicative requirements are not commitments by Hunter Water. Once rezoning has been approved and the decision is made to proceed with the development application you will need to lodge an Application under Section 49 with Hunter Water.

On receipt of the Section 49 Application Hunter Water will forward a **Notice of Formal Requirements**. You will need to comply with each of the requirements for the issue of a Section 50 compliance certificate.

Hunter Water's Indicative Requirements provide general information on water and sewer issues relevant to the proposed development. The information provided is based on Hunter Water's knowledge of its system performance and other potential development in the area at the present time. As you will appreciate there could be significant change by the time the development proceeds to the lodging of a Development Application and therefore these indicative requirements maybe different to the Notice of Formal Requirements provided in the future.

In this instance, Hunter Water's Preliminary Advice for the provision of water and sewerage facilities to the proposed development are as follows:

1. Applicable developer charges

As of 1.00pm December 17, 2008 the NSW State Government has announced that developer charges for water and sewer within Hunter Water's area of operations have been abolished. Accordingly, this Notice of Indicative Requirements does not include a requirement to pay for water and sewer developer charges.

Contributions by developers will still be required for recycled water schemes, out of sequence development and infrastructure required in advance of Hunter Water's current Forward Capital Works Program. All other fees and charges remain applicable.

2. Water Supply

The proposed development is located within the Williamstown/Medowie Water Supply System. Water connection will be available via the DN300 watermain at the intersection of Medowie Road and Silver Water Avenue. For your information, the water supply system has some spare capacity at this time to service the ultimate size (300 ET) of this development. However, the surrounding area has been highlighted as a significant growth region with the existing spare capacity likely to be consumed by other nearby developments. In planning for growth and ultimate development of the area it was highlighted that an additional reservoir is required at the existing Medowie Reservoir site and a duplicate trunkmain from Williamstown 1A WPS. These are included in Hunter Water's capital works program for upgrade in 2015. Please note that this timeframe may be amended for a number of reasons, including competing priorities and/or uncertainties associated with design and environmental approval requirements.

A developer funded water servicing strategy will be required to be undertaken for this development. The proposed water servicing strategy should address issues including lot layouts and staging of development, identification of alternative and least cost options, security of supply, minimum pressure requirements, fire fighting requirements and identify potential future developments in the immediate vicinity and incorporating servicing options for those developments.

3. Wastewater Transportation

The recommended point of connection for the development is access chamber H1144, which is immediately upstream of Medowie 10 WWPS. Alternatively, connection to access chamber H913 on Ferodale Rd within the Medowie 10 catchment can also be considered, which would require upsizing of downstream gravity mains. Connection to the wastewater system will be dependent on the upgrading of Medowie 10 WWPS. You are advised that an upgrade of Medowie 10 WWPS is not scheduled to be undertaken by Hunter Water until 2025. It may be possible for you to bring this work forward however it will need to coincide with the inlet works upgrading at Raymond Terrace WWTW (as discussed below). Some local upgrading works may be required and this will be assessed in detail following the submission of the servicing strategy described below.

A developer funded sewer servicing strategy will be required to be undertaken for this development. The strategy would need to address issues including overall loadings for the area, topography of the site, surrounding potential developments, proposed connection points to the existing sewerage system, details of new or existing WWPS's that the development would connect to and its impact on HWC's wastewater infrastructure, staging of development, investigation of alternative options and identification of the least community cost option.

4. Wastewater Treatment

Raymond Terrace WWTW currently is at capacity with upgrades under construction and due for completion at the end of 2010. This upgrading work does not include improvements to the inlet works which is also at capacity. Due to this limitation no further upgrades to pumping capacity can be undertaken on WWPS's that pump directly to the WWTW, including Medowie 10 WWPS, until the next stage of upgrades

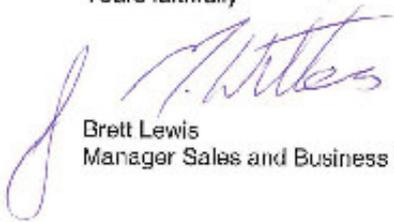
are commissioned on the plant. The next stage of upgrades are planned for completion in 2015. Please note that this timeframe may be amended for a number of reasons, including competing priorities and/or uncertainties associated with design and environmental approval requirements.

5. Review of Environmental Factors

Prior to providing final approval of designs, Hunter Water may require a Review of Environmental Factors (REF) to be submitted (refer Section 1 of Hunter Water's Water and Sewer Design Manual). A REF considers the likely impacts a development may have on the environment. At all times, methods for preventing or reducing adverse environmental impacts should be considered and where appropriate, incorporated into the project design. Hunter Water, where appropriate, may make a determination in accordance with the EP&A Act 1979.

This Preliminary Advice is not a commitment by Hunter Water and maybe subject to significant change prior to this development proceeding. If you have any enquiries, please do not hesitate to contact Bob Daniels on 49799723.

Yours faithfully



Brett Lewis
Manager Sales and Business Development



Date: 21/07/2009
Notes: Medowie
HWC

Scale: 1 : 15000

From: Daniels Bob [mailto:bob.daniels@hunterwater.com.au]
Sent: Monday, 27 July 2009 8:20 AM
To: Gustavo Pereira
Subject: RE: Rural Residential Development - North Medowie

Gustavo

In reference to your queries I offer the following advice;

1. Medowie 10 currently has some capacity, however, in the near future (end of 2010) that capacity will be consumed by upgrades being carried out on Medowie No.6. Essentially this leaves no spare capacity for any stages of the development until upgrades are completed.
2. To bring the upgrades forward would require exact timing for the development and continued consultation with HWC. Funding would need to be determined following discussions.
3. Medowie 8 WWPS is a very small station that was specifically sized for the development it serves. There is spare capacity for only an additional 4 ET.

regards Bob

From: Gustavo Pereira [mailto:Gustavo.Pereira@hyderconsulting.com]
Sent: Thursday, 23 July 2009 2:12 PM
To: Daniels Bob
Subject: Rural Residential Development - North Medowie

Hi Bob,

I refer to our phone conversation regarding the preliminary advice for the proposed development on Boundary Rd, North Medowie (your reference No 2006-631 attached to this email).

Following are a number of questions we would appreciate with you could clarify to us at your earlier convenience:

Wastewater Transportation

- Hunter Water suggests the sewer system from the site to be connected direct on Medowie 10 WWPS (via either chamber H1144 or H913, with upgrades). It is also mentioned that currently the 10 WWPS needs upgrading. At the moment does 10WWPS (and Raymond Terrace WWTW) have spare capacity to receive any initial flow from the development (i.e. 50 initial lots)?
- If the 10 WWPS upgrade is brought forward (and consequently the upgrade of Raymond Terrace WWTW inlet capacity), would it be entirely funded by the developer?
- We understand that close to the south-eastern corner of the proposed is located Medowie No. 8 WWPS. Does 8 WWPS (and downstream system) have any spare capacity to receive flows from the site, or for an initial 50 lots?

Any question, please do not hesitate to call.

Kind Regards,

Gustavo Pereira

Civil Engineer
Hyder Consulting Pty Ltd
Locked Bag 6503, North Sydney, NSW 2060 Australia
Level 5, 141 Walker Street North Sydney NSW 2060 Australia
Direct: +61 (0) 2 8907 9113 / Fax +61 (0) 2 8907 9001
Web: <http://www.hyderconsulting.com/www.hyderconsulting.com>

MINUTES

Issue date 19 August 2009
Issued by Gustavo Pereira
Subject Sewer and Water Servicing on Proposed Development at Boundary Rd.
Reference AA002615 – DN00160
Client Eureka Funds Management
Meeting date 18 August 2009
Time 2:00pm
Location Hunter Water - Newcastle
Present Andrew Simons - Eureka
 Malcolm Withers - HWC
 Brad Healy - HWC
 Tony McClymont - HWC
 Greg Ives - Hyder
 Gustavo Pereira - Hyder

The purpose of the meeting was to discuss the "Preliminary Advice for Proposed Development" issued by Hunter Water dated 21 July 2009.

Item	Comments	Action by												
Site Development	<ul style="list-style-type: none"> Hyder and Eureka Funds Management confirmed that they are in discussion with Council with a view to submitting a rezoning application at the end of August 2009 Hyder and Eureka Funds Management presented the current proposal for 260 lots and advised that the most likely program for release of lots is: <table border="1" data-bbox="678 1232 949 1411"> <thead> <tr> <th>Year</th> <th>Number of Lots</th> </tr> </thead> <tbody> <tr> <td>2012</td> <td>50</td> </tr> <tr> <td>2013</td> <td>50</td> </tr> <tr> <td>2014</td> <td>50</td> </tr> <tr> <td>2015</td> <td>50</td> </tr> <tr> <td>2016</td> <td>60</td> </tr> </tbody> </table> 	Year	Number of Lots	2012	50	2013	50	2014	50	2015	50	2016	60	- Note
Year	Number of Lots													
2012	50													
2013	50													
2014	50													
2015	50													
2016	60													
Site Sewer Service	<ul style="list-style-type: none"> Hunter Water confirmed that in preparing the "Preliminary Advice" they had reviewed the existing capacity of Medowie 8 SPS and the most cost effective solution is to provide an on site pumping station with rising main to Medowie 10 SPS which drains to Raymond Terrace waster Water Treatment. The report also noted that to cater for the projected increase in demand from this development and other potential developments upgrades would be required at Medowie 10 SPS and Raymond Terrace WWTW. Upgrades on Raymond Terrace WWTW are to be completed in 2015. Upgrades on Medowie 10 are schedule only for 2025, but these works can be brought forward to match WWTW end of works in 2015. Currently Medowie 10 and Raymond Terrace WWTW have spare capacity for initial stages of the development. However, there is a large demand for 	- Note												

	<p>future use of this spare capacity and HWC does not reserve capacity.</p> <ul style="list-style-type: none"> ▪ Detail investigation will need to be carried out at each stage to confirm the available capacity in Medowie 10 and Raymond Terrace WWTW is sufficient to cater for the stage demand. ▪ Options can be investigated at final design phase to make most use of the available capacity. ▪ Site sewer storage combined with controlled site sewer discharge on Medowie 10 on off-peak times is a valid option if there will be no enough spare capacity by the time of the development commencement. 	
Water	<ul style="list-style-type: none"> ▪ Hunter Water confirmed that the planned upgrades of the reservoir appear to suit the proposed releases. ▪ It was noted that it is proposed that each of the lots would have a substantial rainwater harvesting tank. The capacity of these tanks may be taken into account at detail design stage. However, peak demand may not be significantly reduced. 	- Note
General	<ul style="list-style-type: none"> ▪ Greg Ives, Hyder, asked whether Hunter Water Corporation had any objection to rezoning of the site for rural residential lots. Malcolm Withers advised there were no objections and added that the available capacity will need to be confirmed at DA phase of each stage. 	- Note

From: Withers Malcolm [mailto:malcolm.withers@hunterwater.com.au]
Sent: Monday, 31 August 2009 1:25 PM
To: Greg Ives
Subject: RE: Norht Medowie development - Minute of meeting on 18/08/09

Good afternoon Greg,

The minutes are fine.

If you have any questions, please do not hesitate to contact me.

Regards

Malcolm Withers

senior account executive - major development | product & business development | hunter water corporation
p: 02 4979 9545 | f: 02 4979 9711 | e: malcolm.withers@hunterwater.com.au

Energy Australia Correspondence

From: Daniel Dafo [mailto:ddafo@energy.com.au]
Sent: Monday, 6 July 2009 11:28 AM
To: Gustavo Pereira
Subject: RE: Fw: Rural development - North Medowie

Gustavo,

Upon investigation of the proposed development site in Boundary Road, North Medowie, the following has been identified:

- A 132kV overhead transmission line (Feeder 963 - Tomago to Taree) exists on lots 95 and 96 and is covered by a 45m wide easement in favour of EnergyAustralia. The easement is subject to the terms outlined in the attached 'Easement Memorandum' and any intention to relocate these assets will be subject to the approval of EnergyAustralia and will be **entirely** at the developer's expense.
- An existing overhead 11kV distribution line (Feeder 34983) is located within the vicinity of the development in road reserve along Boundary Rd & Medowie Rd and is fed from Williamtown Zone Substation. However, all 11kV feeders within this area currently have no spare capacity available for provision of supply to developments. The Medowie area is currently under planning review for provision of additional capacity, with the possibility of a new zone substation within the area. However, the provision of this additional capacity is only at the initial planning stage and practical completion of the required works can not be expected until at least some time after 2012. This date is only an estimate and will depend upon the extent of work required to increase capacity for expected growth within the area. Therefore no firm date for the availability of additional capacity can be provided at this stage.

EnergyAustralia's ES10 document outlines the requirements for electricity connection to developments.

The principles for determining the responsibility for costs associated with connecting electricity to a development are detailed in ES8.

Generally the works will be classified as contestable and the developer will be responsible for the cost of connection works from the development up to the linkage point (and beyond for large load customers) required to enable a suitable electricity service to be provided to each end use customer within the development. The connection works include:

- all 11kV & LV reticulation including streetlighting,
- customer substations as required by the development,
- all associated trenching & civil works.

The linkage point is the point on the network where the use of assets changes from being shared with customers to assets fully dedicated to a customer or group of customers requiring customer connection services. The linkage point is determined by EnergyAustralia at the time of issue of design information.

EnergyAustralia's electrical supply standards can be found at:

<http://www.energy.com.au/energy/ea.nsf/Content/Network+Electrical+supply+standards>.

Regards,

DANIEL DAFO | ENGINEERING OFFICER

CUSTOMER SUPPLY PLANNING & RELIABILITY – LOWER HUNTER

Distribution Operations & Reliability | EnergyAustralia

Wallsend Administration Building, 145 Newcastle Road, Wallsend NSW 2287 AUSTRALIA

☎ (02) 4951 9532 (59532) | 📞 0419 973 460

✉ (02) 4951 9459 (59459) | ✉ ddafo@energy.com.au

From: Daniel Dafo [mailto:ddafo@energy.com.au]
Sent: Wednesday, 15 July 2009 10:32 AM
To: Gustavo Pereira
Subject: RE: Fw: Rural development - North Medowie

Gustavo,

If the developer wishes to proceed with an initial stage of the development (consisting of 50 lots) then supply can be initially connected to the existing 11kV feeder within the vicinity of the development site. As discussed, the area is currently constrained and is under EnergyAustralia planning review. However, a staged development can proceed as it is expected to be some time before substantial load is connected. EnergyAustralia reserves the right to load limit the development if necessary to prevent overloading our network, until such time that increased capacity is provided to the area.

As previously mentioned, EnergyAustralia's ES10 document outlines requirements for connection to developments. We will assess each stage of the development as each application is received.

Regards,

DANIEL DAFO | ENGINEERING OFFICER
CUSTOMER SUPPLY PLANNING & RELIABILITY – LOWER HUNTER
Distribution Operations & Reliability | EnergyAustralia
Wallsend Administration Building, 145 Newcastle Road, Wallsend NSW 2287 AUSTRALIA
☎ (02) 4951 9532 (59532) | 📞 0419 973 460
📠 (02) 4951 9459 (59459) | ✉ ddafo@energy.com.au

Telstra Correspondence



10 June 2009

Network and Technology
Forecasting and Area Planning

Locked Bag 16
Hamilton Delivery Centre 2303

Gustavo Pereira
Civil Engineer
Hyder Consulting Pty Ltd
Locked Bag 6503, North Sydney,
NSW 2060 Australia

Telephone (02) 4923 9253
Facsimile (02) 4924 8212

richard.carmichael@team.telstra.com

Re: Boundary Road, North Medowie
(Lots 93/94/95/96 DP753194 and Lots 21/22 DP570152)

Dear Gustavo,

Based on the provided information relating to the proposed North Medowie Subdivision of Lots 93/94/95/96 DP753194 and Lots 21/22 DP570152 a review was undertaken of the area and nearby telecommunications infrastructure.

Telstra maintains existing network throughout the land marked for development. This network is currently not sufficient to meet the likely demand of this development. Telstra has no objection to the approval of a development consent.

To accommodate the proposed development, the telecommunications network would require upgrade. To achieve this, Telstra may require:

- A developer provided trench supplied to install telecommunications infrastructure within the development.
- Suitable locations to install above ground housings and/or cabinets within the development

The technology and services provided would be determined closer to the time of development commencement, depending on Telstra deployment policy and any negotiations based on a commercial agreement.

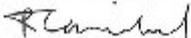
Telstra will require the protection of/relocation of its telecommunications infrastructure that may be impacted by activities on this site. To minimise risk of liability due to any damage, the Telstra 1100 Inquiry number should be contacted to obtain location of Telstra plant before commencement of construction work.

Further discussions regarding details for network expansion are strongly encouraged once detailed planning for the development is in progress.

Please note that Telstra reserves the right to change its decision in relation to network deployment within the development without prior notice.

For future correspondence and enquiries regarding this matter, please contact the undersigned on (02) 4923 9253.

Yours faithfully,


Richard Carmichael
Area Planner

Jemena Correspondence

From: Knight, Greg [mailto:Greg.Knight@jemena.com.au]

Sent: Wednesday, 3 June 2009 5:02 PM

To: Gustavo Pereira

Subject: RE: Rural development - North Medowie

Gustavo,

We have no infrastructure at Medowie and we have no plans to extend into the area. We have investigated this area several times but have been unable to justify extending the main without significant contributions being required from the developers.

regards

Greg Knight
Network Development Manager



Jemena Gas Networks (NSW) Limited, PO Box 8212 Tumbi Umbi NSW 2261

Mobile 0402 060 241 **Email** greg.knight@jemena.com.au

www.thenaturalchoice.com.au

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Appendix B

Drawings

SKC001 – Locality Plan

SKC002 – Water and Sewer Plan

SKC003 – Electricity Plan

SKC004 – Telecommunication Plan

SKC006 – Water and Sewer Major Infrastructure

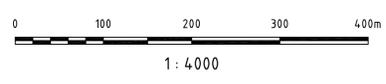


LEGEND

	EXISTING LOCAL CABLES
	EXISTING OPTIC FIBRE CABLE

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P1	ISSUE FOR INFORMATION	JJB	GP	GI	03.07.09
Issue	Description	Drwn	Ckd	Appd	Date



Status INFORMATION ONLY NOT TO BE USED FOR CONSTRUCTION			
Scales	1:4000	Current Issue Signatures	
Original Size	A1	Drawn	JJB
Height Datum	AHD	Designed	GP
Grid	MGA	Checked	GP
		Approved	GI

Project	BOUNDARY ROAD NORTH MEDOWIE
Title	TELECOMMUNICATION PLAN



HYDER CONSULTING PTY LTD
 ABN 76 104 485 289
 Level 5, 141 Walker St
 North Sydney NSW 2060
 Australia
 Tel: +61 (0)2 8907 9000
 Fax: +61 (0)2 8907 9001
 www.hyderconsulting.com
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Drawing No.	Project No.	Issue
SKC004	AA002615	P1

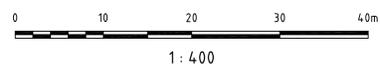


LEGEND

	EXISTING OVERHEAD POWERLINES
	EXISTING 132kV TRANSMISSION LINES

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P1	ISSUE FOR INFORMATION	JJB	GP	GI	03.07.09
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Original Size	A1	Drawn	JJB
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		Approved	GI

Project	BOUNDARY ROAD NORTH MEDOWIE
Title	ELECTRICITY PLAN



HYDER CONSULTING PTY LTD
 ABN 76 104 485 289
 Level 5, 141 Walker St
 North Sydney NSW 2060
 Australia
 Tel: +61 (0)2 8907 9000
 Fax: +61 (0)2 8907 9001
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SKC003	AA002615	P1



LEGEND

	EXISTING ϕ 100mm POTABLE WATER MAIN
	EXISTING ϕ 150mm POTABLE WATER MAIN
	EXISTING ϕ 200mm POTABLE WATER MAIN
	EXISTING ϕ 50mm SEWER MAIN
	EXISTING ϕ 80mm SEWER MAIN
	EXISTING ϕ 150mm SEWER MAIN

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Issue	Description	Drwn	Ckd	Appd	Date



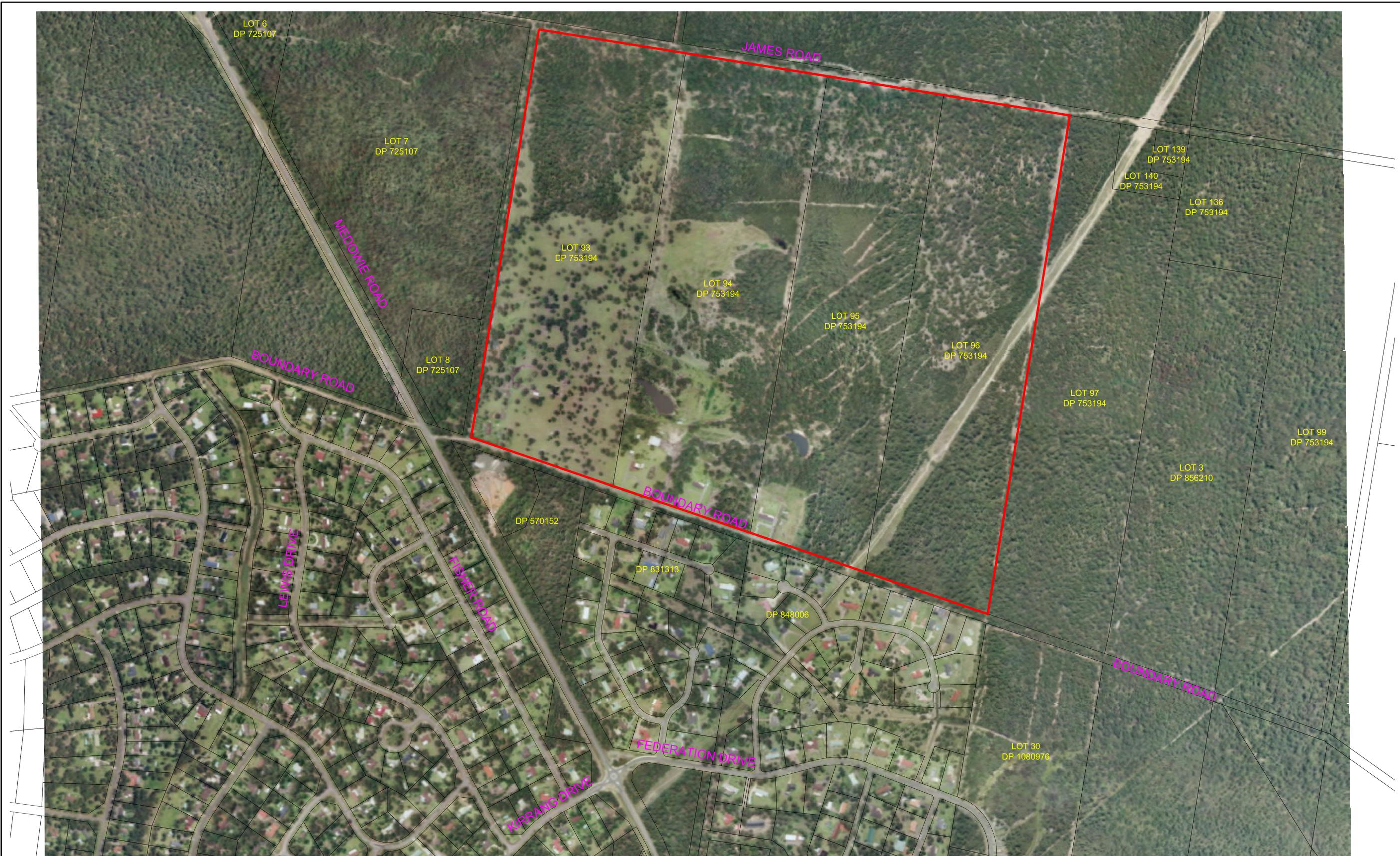
Status INFORMATION ONLY NOT TO BE USED FOR CONSTRUCTION			
Scales	1:4000	Current Issue Signatures	
Original Size	A1	Drawn	JJB
Height Datum	AHD	Designed	GP
Grid	MGA	Checked	GP
		Approved	GI

Project	BOUNDARY ROAD NORTH MEDOWIE
Title	WATER AND SEWER PLAN



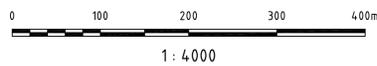
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 ABN 76 104 485 289
 Level 5, 141 Walker St
 North Sydney NSW 2060
 Australia
 Tel: +61 (0)2 8907 9000
 Fax: +61 (0)2 8907 9001
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SKC002	AA002615	P1



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Original Size	A1	Drawn	JJB
Height Datum	AHD	Designed	GP
Grid	MGA	Checked	GP
		Approved	GI

Project	
BOUNDARY ROAD NORTH MEDOWIE	
Title	
LOCALITY PLAN	
Drawing No.	Project No.
SKC001	AA002615
Issue	P1



HYDER CONSULTING PTY LTD
 ABN 76 104 485 289
 Level 5, 141 Walker St
 North Sydney NSW 2060
 Australia
 Tel: +61 (0)2 8907 9000
 Fax: +61 (0)2 8907 9001
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Issue	Description	Drawn	Ckd	Appd	Date
P1	ISSUE FOR INFORMATION	JJB	GP	GI	03/07/09

LEGEND

- SEWER MAIN TO BE CONSTRUCTED
- WATER MAIN TO BE CONSTRUCTED

Scale: 1 : 10000

0 200 400 600 800 1000m



INFORMATION ONLY
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Original Size	Design	Current Issue Signatures
A1	Designed	JJB
Height	Checked	GP
Drawn	Approved	GP
Grid	MGA	GI

BOUNDARY ROAD NORTH MEDOWIE

WATER AND SEWER MAJOR INFRASTRUCTURE

HYDER CONSULTING PTY LTD
 ABN 76 104 485 289
 Level 5, 141 Walker St
 North Sydney NSW 2060
 Australia
 Tel: +61 (0)2 8907 9000
 Fax: +61 (0)2 8907 9001
 www.hyderconsulting.com
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