



# Infrastructure & Services Plan

Amity College  
Leppington, NSW 2179



<b>1. INTRODUCTION.....</b>	<b>4</b>
<b>2. SERVICES EXECUTIVE SUMMARY .....</b>	<b>6</b>
<b>3. HYDRAULIC SERVICES .....</b>	<b>7</b>
<b>4. ELECTRICAL SERVICES .....</b>	<b>10</b>
<b>5. SUSTAINABILITY .....</b>	<b>12</b>
<b>6. AUTHORITY INFORMATION .....</b>	<b>13</b>

Rev	Date	Description of Revision	Prepared By	Reviewed By
0	25/01/19	Preliminary Report	MR	MS
1	04/03/19	Preliminary Report (updated)	MR	MS
2	14/03/19	Preliminary Report (updated)	MS	SF
3	15/03/19	Preliminary Report (updated)	MS	SF
4	21/03/19	Preliminary Report (updated)	MS	SF
5	22/03/19	Preliminary Report (updated)	MS	SF
6	27/03/2019	Preliminary Report (updated)	MS	SF
7	18/04/2019	Preliminary Report (updated)	MS	SF
8	21/05/2019	Submission	MS	SF
9	31/05/2019	Submission	MS	SF
10	19/06/2019	Submission	MR	MS

## Change register

Rev	Date
0	-
1	None noted
2	Electrical section consolidated, additional authority information added, cost information added, Hydraulic sections revised.
3	NBN application outcome added, reworded NBN commentary.
4	Endeavour application form added, Telstra communication added, minor grammar corrections.
5	Endeavour Letter of Offer added, commentary in electrical section updated to reflect.
6	Jemena correspondence and information added.
7	Comments incorporated where possible
8	Expansion on BMS commentary added
9	Executive summary including staging references
10	Comments incorporated

The reader's attention is drawn to the following important information:

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# 1.introduction

## 1.1 general

The project site is at No. 85 Byron Road and No 63 Ingleburn Road at Leppington, comprising Pt Lots 1 & 2 DP 525996. It lies within a part of the NSW Government's South West Priority Growth Area, at Leppington, within the Camden Local Government Area. The project site lies approximately 1.2km away from the planned Leppington Major Centre railway station.

The project site is rectangular in shape and has an area of approximately 2ha. It is bounded to the south-east by Byron Road. The lots adjacent to the Project Site are currently undeveloped, however a low density residential area appears to be currently under construction to the south-west. Adjacent land to the north-west and to the north-east has been planned for medium density housing.



Location plan

erbas™ have been engaged to undertake an infrastructure report to meet the SEARs requirements for the proposed Amity College Leppington for hydraulic, electrical, and fire services infrastructure with the aim to identify supply and infrastructure requirements or supply parameters with relationship to utility services currently supplied to the site.

A detailed conceptual layout and planning reporting has been provided and utilised to draw the assumptions within this report.

In summary this report will outline;

- Authority services alignments & existing service assessments (where information is available);
- Required essential services over view;
- Intended services strategies;
- Authority correspondences and confirmations;
- Preliminary costing information.

The information used to compile this report is current at the time of issue. It is noted that any future infrastructure or adjoining development plans not available for public information have not been considered in its preparation.

It is noted that plans may exist to amplify or augment the surrounding infrastructure due to the areas designation from the NSW Government as a *Priority Growth Area*. In the event there is undisclosed plans for the infrastructure in or around this area, the recommendations and approach of this report will change accordingly.

The information within this report has assumed optimal use of available site information whilst also considering the Building Code of Australia, relevant Australian Standards and Codes, client driven design guidance and best practice industry guidelines.

Where specific information was not able to be verified within the remit of the site visit these aspects have been noted to be further investigated.

The assumptions of this report;

- Site preparation works, including temporary services and facilities to support demolition and clearance of the existing areas as required by the works;
- Advice for any required infrastructure augmentation and integration of services required for the Public domain improvements surrounding the site;
- Installation of services to meet equivalent quality of the current Performance objectives of the current legislation and the intended site uses.

## 1.2 applicable documents

The following standards will be applicable throughout the project:

- National Construction Code BCA (2016);
- NSW Statutory Regulations;
- Relevant Australian Standards including but not limited to AS 1170, AS2118, AS 2441, AS 2419, AS 1668.1, AS 1668.2, AS 3666, AS 4254, AS 1432, AS 3000, AS 3008, AS3500 and AS 5601;
- Secretary's Environmental Assessment Requirements (SEARs)

## 1.3 sources of information

This report is based upon the following information:

- Existing utilities information;
- Non-intrusive site investigation.
- DA Staging plan drawings prepared by Gran Associates and reporting

## 2.services executive summary

The detailed impact assessment of the Project had the following focus areas;

- Existing infrastructure capacity and redundancy;
- Existing infrastructure proximity to the footprint;
- Services augmentation or diversions that may be required;

### **Summary Statement;**

The services infrastructure has been reviewed and the result of the investigations and enquiries outlined herein is that to service the proposed development will require;

- amplification of the electrical infrastructure via a substation,
- extension of the sewer to achieve a gravity connected site,
- water tanks and pumps to achieve the required water performance flows for the essential services operation,

No easements have been identified into or serving the property and service connections are surrounding the site. The footprints of the proposed staged works do not appear to affect any internally located infrastructure as none is recorded or present from the current level of surveying available.

Should extension of the sewer main take place building placement will be considered to ensure maintainability and adaptability of the connected service.

Similarly, the placement of the sub station will need to take consideration for the site layouts of structure in the proposed plan.

It is recommended that all infrastructure extension, or augmentation take place in the earliest stages of development possible to allow the servicing of subsequent staging in line with the Construction Management plan.

The review of the master planning documentation (ref; G&A Staging Plans, issued 30.04.2019) suggests that all major service alignments and extensions of the surrounding infrastructure is to be considered as soon as possible after conditional approval is received to ensure ample time to design and construct services augmentations required to serve the project. This will need to be completed (or planned prior to Stage 3 considerations of the Bus Bay and Main entry enter detailed excavation.

Water services connection will also be required to take place at such a time to afford any temporary fire protection needs of the development as construction progresses.

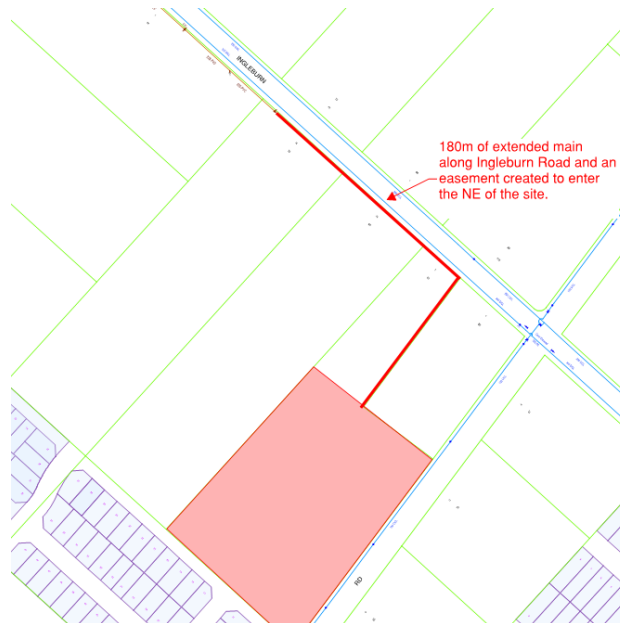
These works will need to be costed and programmed for the initial stage 1 works to ensure adequate time for them to be applied for, designed and constructed by Authority Contractors as required for the project.

### 3.hydraulic services

From the information received from the relevant authorities we can ascertain the connections and mains within the surrounding streets will require a degree of works to satisfy the performance needs of the project. This assessment is based on the review of the proposed intent of the facility, its population and the regulatory requirements of capacity required to adequately serve a development of this type.

**Sewer drainage connection** to the site is currently located within a service pit in front of 75 Ingleburn Road. This connection provision is around 180m along Ingleburn Rd to the north-west of the site and will require a further 120m easement to connect to the property. At 225mm in diameter it appears adequate for the intended capacity of the development. The distance from the site will require for it to be extended into the site boundary from its current location. These works will require Authority acceptance, design and construction as part of the Section 73 process from the Authority, being Sydney Water.

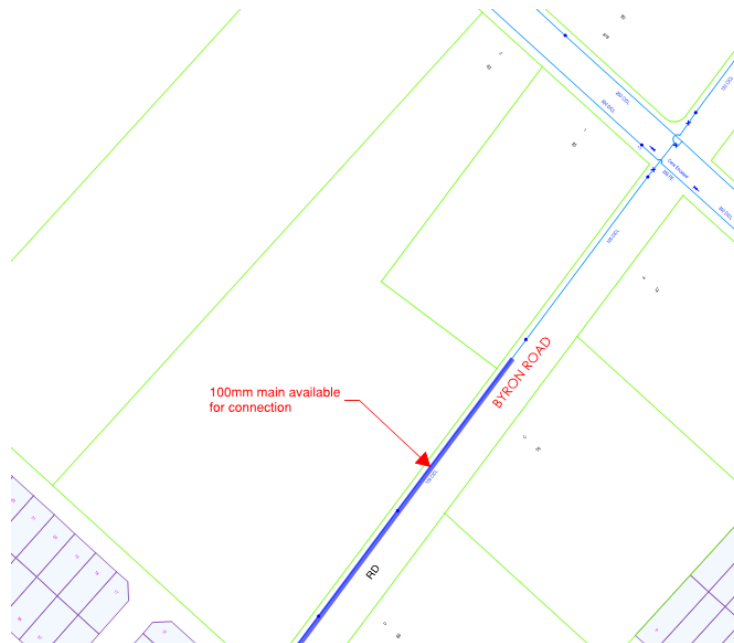
An application has been made to Sydney Water and has been referred to seek further detail through a Sydney water Approved Water Services Coordinator (WSC). Application number #610986 is still active and should be utilised to further this process. Engagement with a WSC will be required to further develop the needs for the sewer connection beyond the planning and application process.



A desktop assessment of the grades of the surrounding area allow a gravity connection to take place. The proposed connection and extension works would align NE/SE. Consequently, falls run NE/SE at an estimated grade more than 3%. Assuming main extension into this area is accepted by Sydney Water, an extension of service to the developed site will be feasible and plausible.

**Potable water service connections** are available from Byron Rd via a 100mm water main. Mains flow data from an adjacent main has been sourced showing reasonable flow (up to 40l/s), but low pressures (below 250kPa). Application number # 439467.

This performance will require pressure boosting via a pump to supply domestic/ commercial uses. Additionally, this will not be sufficient to meet performance of the essential services without augmentation or a supplemented supply.



**Hydrant and sprinkler/drencher protection** will be required to serve the site. The Conceptual plans show a combined floor area greater than 500m<sup>2</sup> thus requiring hydrant protection. Minimum water performance for this element is 10l/s @250kPa. The characteristics of the supplying mains does not meet the pressure required so pumps will be needed to boost this to an adequate performing pressure to meet compliance.

The requirement for a supplementary water supply (fire tanks) will be driven largely by building placement. Specifically, any required drenching due to proximity of structure to boundary, or structure to structure clearances. The Conceptual layouts show this will be required for the project in two locations.

A booster set for the hydrant supply will be positioned adjacent the principal entry to the site, and a pump room will be required on the ground floor with direct access to open space.

**Rainwater** the alignment of multiple roofs allows for rainwater reuse. This can be done by multiple smaller capacity tanks or one consolidation of the larger catchments.

Rainwater reuse can be utilised in several ways around the site and dependant on the use will be the amount of filtration or pumping required.

Irrigation and water closet flushing will require a standard UV and 0.5-micron filtration package.

This level of filtration will be required for irrigation due to the potential for herb gardens and student contact with watered areas.

Providing UV to water closet flushing minimises staining from any stray tannins or discolouration's that captured water can make on toilet pans.

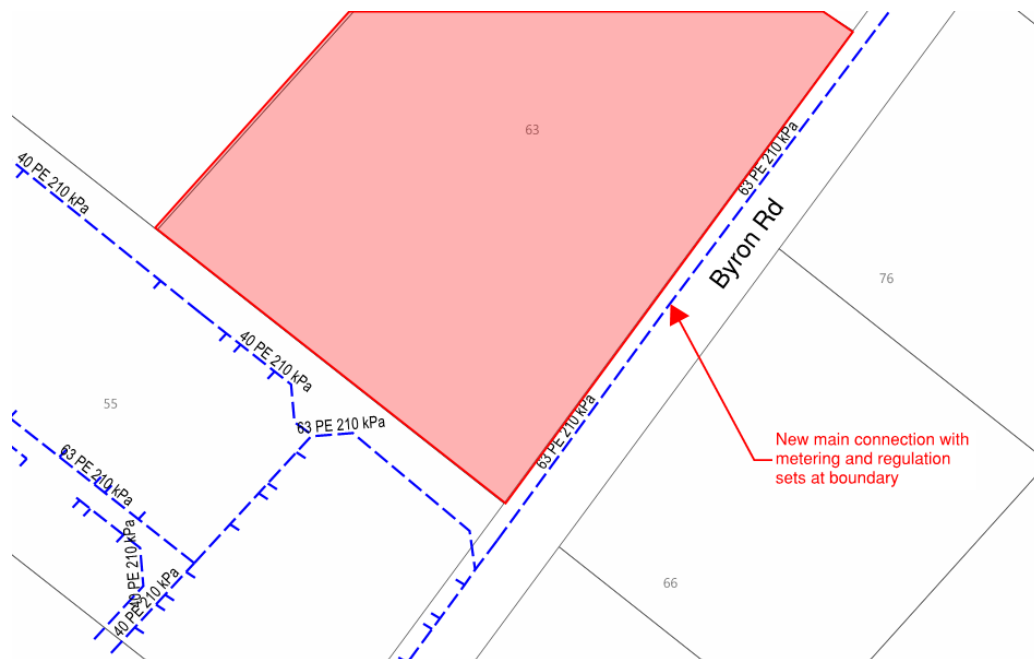


**Natural gas** is currently available via a 63mm PE 210kPa gas main located in Byron Road, along the NE boundary. This is a medium pressure asset and will require regulation to low pressure (5kPa) to supply the site with any required fuel gas.

A space at the boundary of the site will be required to facilitate the regulation and metering of the gas supply. The size of the space will depend on the amount of gas usage intended for the site. It has been assumed that mechanical service boilers, hot water and some space heating requirements will be needed. There is sufficient capacity within the mains infrastructure to supply this demand.

Negotiations can take place with a preferred supplier of natural gas and implementation of an extension of the main to boundary complete with meter set will be done by Jemena on receipt of this application. This will result in a commercial agreement between the School and the supplier and cannot be processed by a third party prior to detail design progression.

Jemena has confirmed the availability to connect site via email received 26/03/2019.



## 4.electrical services

From the information received from the relevant authorities and by calculations of maximum demand based on AS3000 framework we can ascertain the connections and mains within the surrounding streets will require a degree of works to satisfy the performance needs of the project. This assessment is based on the review of the proposed intent of the facility, its population and the regulatory requirements of capacity required to adequately serve a development of this type.

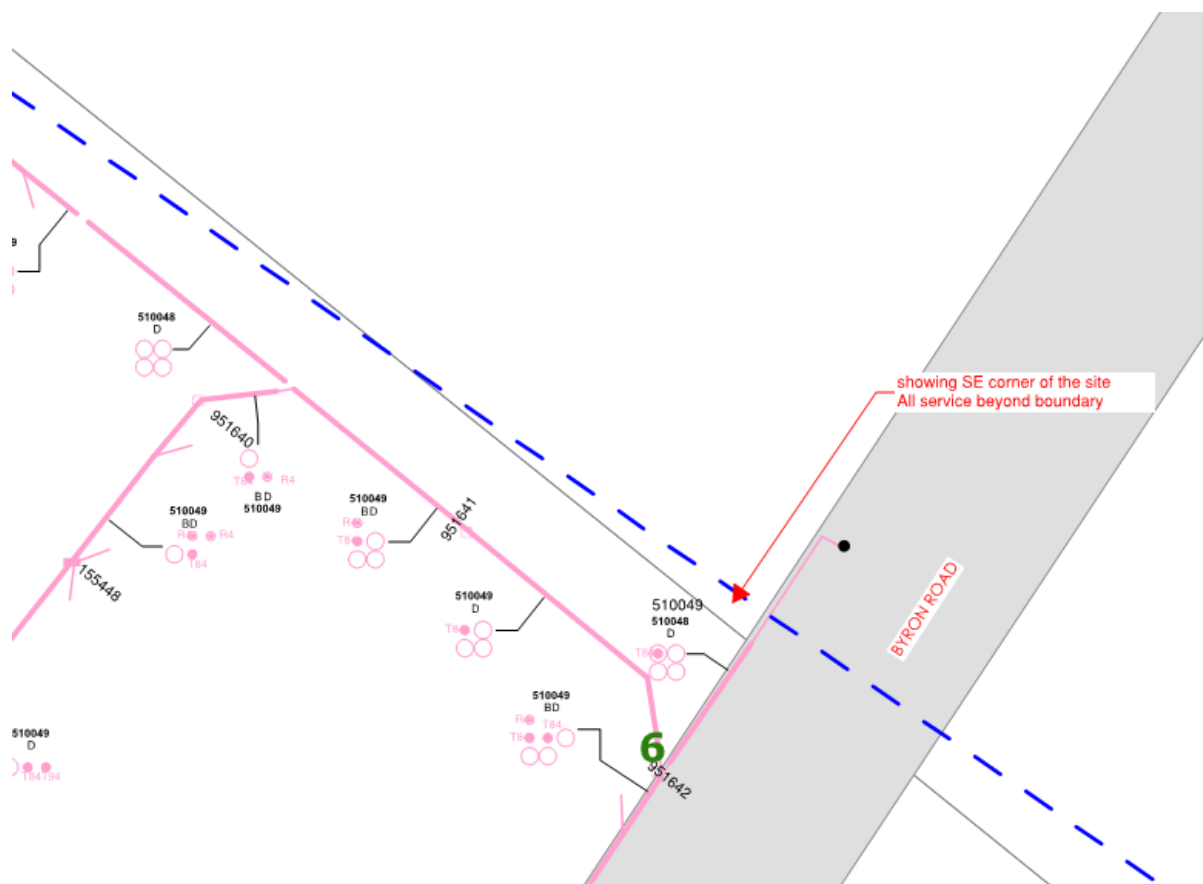
We have received formal correspondence that a kiosk substation will be required for the site. A Level 3 ASP accredited designer will be required to complete this project application and installation.

Electricity will be supplied to the new campus from an Endeavour Energy electrical supply. The exact size of the required electrical supply will be known after design completion by the ASP/3 designer.

The recommended location for the kiosk substation is on property boundary along Byron Road so that the substation can be delivered and loaded from the existing infrastructure located within the street at the Eastern corner of the site (final location to be confirmed by ASP/3 Designer).

The kiosk substation needs to have direct access to a road and be minimum 300mm above 1 in 100-year flood line. The final location and size of the substation is to be confirmed by the ASP/3 Designer. A location in close proximity to the NE corner will be the first option for consideration.

The current plans show a landscaped area and a terraced courtyard that may provide some flexibility for its placement.



A **main switchroom** (housing the main switchboard) will be required in one of the new buildings. It is likely that the main switchboard will have the following minimum ratings: 630A, 25kA for 1 second, IP42 and Form 3B.

The required minimum size of the main switch room would be 5m x 3m. The main switch room must be 2-hour fire rated and have 2 hour fire rated self-closing fire doors. It will require 2 emergency exit paths: doors need to open in the direction of egress (outwards) without the use of a key or tool. The doors should be spaced well apart (i.e. on opposite side of the room). The main switch room should be located as close as possible to the kiosk substation, on the ground floor.

Consumer mains cables will be required from the substation to the main switchboard. These cables will be reticulated in underground electrical conduits (minimum 4 x 100mm). It is likely that the main switchboard will require consumer mains cables rated at minimum 630A. These will be sized as per AS 3008 requirements. The actual size of the cables will depend on the length of the run and associated voltage drop allowances.

The main switchboard will require a **supply authority (Endeavour Energy) electrical meter**. It is assumed that the electrical supply to each building will not be separately metered.

A lead-in telecommunications service will be required from **Telstra**. An application has been made to NBN co. and has come back the site is not currently eligible for a connection. Therefore, a Telstra fibre or copper lead-in service will be required. A minimum of two 100mm underground communications conduits will be required from a communications pit on the street to the main communications room in the new campus. An application has been made to Telstra (AFR Number: 17443029). The occupancy date has been nominated as 1/6/21. Within 6 months of this date, Telstra will contact us regarding an offer for provision of telecommunications services.

A main **communications (server) room** will be required in one of the new buildings. The minimum internal size of this room will be 4 metres wide by 3 metres long. This room will house the MDF, wall mounted security/MATV equipment and communications cabinets.

## 5.sustainability

As with many of our past School projects we understand each school aspires to demonstrate environmental leadership, responsibility and a reduced carbon footprint.

The consideration of the environmental framework to be used by the school will contain some key elements of this framework which would ensure the provision of:

- Natural light and ventilation used throughout;
- Rainwater collection and reuse;
- High quality internal environmental quality (IEQ) throughout;
- Intelligent BMS
- Centralised plant wherever feasible to serve the school's needs for power, cooling and water capture.
- Solar Cells (photo voltaic)

We anticipate this will be achieved by a bespoke environmental framework, not under Green Star Design and As-built framework and to contribute positively to energy efficiency and environmental sustainability by reducing energy consumption during the life of the proposed development.


The environmental approach has no major planning or infrastructure influences however will need to become a key part of the initial planning processes to ensure a consistent site wide approach is maintained without any unacceptable off-site impacts to adjoining or surrounding properties or the public domain in terms of amenity, traffic, social and environmental impacts.

The integrated BMS system will permit seamless interface between the air conditioning and natural ventilation to provide optimum ventilation and temperature control efficiencies as well as controlling lighting systems to respond to varying natural lighting conditions. The BMS is to be designed in a way to respond to varying natural elements to ensure a peak use of environmental conditions to supplement the way the services interact with the spaces.

## 6.authority information

### 6.1 Sydney Water feasibility letter

Pending



## Building plan assessment application

Application number: 610986  
Property address: 85 Byron Rd, Leppington 2179  
Lot details: Lot 1, Deposited Plan 525996  
Property Number: 4386698

26/02/2019

Dear Michael Slatter

Your building plan assessment application requires

### FURTHER ASSESSMENT

The proposed location of one or more of your buildings or excavation works may impact our assets. You will need to engage a Water Servicing Coordinator to complete your assessment.

Please read the details below to understand the reasons why your application was referred.

### REASONS


Application automatically referred by system

#### NEXT STEPS

1. Engage a Water Servicing Coordinator to complete your assessment  
A list of Water Servicing Coordinators is available on our website [www.sydneywater.com.au](http://www.sydneywater.com.au) and go to the plumbing, building and developing page for a list of water servicing coordinators.
2. Take this referral to the Water Servicing Coordinator so they can complete the application for you.
3. You will need to use the following Sydney Water reference number when you contact the Water Servicing Coordinator .

**REF-050390759**

## 6.2 Gas feasibility response




Tue 26/03/2019 2:44 PM

Zachary Kennett <Zachary.Kennett@jemena.com.au>


RE: Re; Feasibility for connection - 85 Byron Rd, Leppington

To

 Michael Rickert

Cc

 Parimala Vemulakonda

 FollowUp. Completed on Wednesday, 27 March 2019.

You forwarded this message on 27/03/2019 11:44 AM.



Hi Michael,



Jemena can confirm gas is available at this location, based on the below information we should be able to connect this required load.

Once the property is further along and has exact specifications of what's required we will be able to provide further confirmation and a connection offer.

Thanks,

Regards,  
**Zachary Kennett**  
Gas New Connections Team Leader  
**Jemena**  
99 Walker Street, North Sydney NSW 2060  
PO Box 1220, North Sydney NSW 2059  
Tel: 1300 137 078 | [www.jemena.com.au](http://www.jemena.com.au)





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Visit [yournetwork.jemena.com.au](http://yournetwork.jemena.com.au)

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Infrastructure & Services Plan Amity College

14

## 6.3 Endeavour Energy application

### Application for Connection of Permanent Load including all Strata Developments



Please return completed form along with all attachments to: Endeavour Energy, PO Box 811 Seven Hills NSW 1730  
Email: [cwadmin@endeavourenergy.com.au](mailto:cwadmin@endeavourenergy.com.au) | Fax: 02 9853 7925 | For connection enquiries, please contact 133 718

**This form is to be used where** connection of load or increase in load applications are required for all multi occupant developments, commercial premises, urban loads greater than 100 amps single phase or 63 amps three phase, rural connections and upgrades, and high voltage connections. (For urban connections less than 100 amps single phase or 63 amps three phase please complete an online application visit: [www.endeavourenergy.com.au](http://www.endeavourenergy.com.au) ).

**Note: For Temporary Builders Supply (TBS) use FPJ 6011 – Application for Temporary Builder Supply (TBS).**

**All information requested should be provided. Where not applicable please insert N/A.  
Applications submitted with inadequate information will not be accepted.**

#### Retail Customer Details

In order for your application to be accepted, you must have a Retail Electricity account with the Retailer of your choice for your site and a National Meter Identifier (NMI). Please indicate below.

Retail Company \_\_\_\_\_ NMI NA (new build)

Customer Name \_\_\_\_\_

Further information regarding establishing a Retail account and choosing a Retailer can be found at [http://www.ipart.nsw.gov.au/Home/For\\_Consumers/Choosing\\_an\\_energy\\_supplier](http://www.ipart.nsw.gov.au/Home/For_Consumers/Choosing_an_energy_supplier)

#### Site Details

Lot & DP No. \_\_\_\_/\_\_\_\_ Street No. \_\_\_\_ Street Name 85 Byron Road

Cross Street \_\_\_\_\_ Suburb / Town Leppington Post Code 2179

Local Council / Shire \_\_\_\_\_ UBD Map & Reference No. \_\_\_\_/\_\_\_\_

Nearest Substation No. \_\_\_\_\_ Adjacent Pole No. \_\_\_\_\_ Pillar No. \_\_\_\_\_

☒ New Connection ☐ Existing Service Upgrade (3 phase)

☐ Additional Load

Please list any related Endeavour Energy CAP reference: \_\_\_\_\_

Date permanent supply is required 1 / 6 / 20

Specify Land Zoning (For land zoning, refer to local Council, Development Application or Rates Notice) \_\_\_\_\_

Development Type: ☐ Domestic ☐ Commercial ☐ Shop ☐ Industrial

☒ Government ☐ Utilities ☐ Other Specify \_\_\_\_\_

☐ Units, No. of Units \_\_\_\_\_ (Please provide NMI's for each unit as an attachment to this application)

Gas reticulation on site ☐ Yes ☒ No

Footpaths/driveways to be constructed on site ☐ Yes ☒ No

#### Load Details

Calculated Maximum Demand Summary			
	A	B	C
Removed Load			
Existing Load			
Additional Load			
Total Load	2194	2194	2194

Number of phases required: ☐ Single Phase  
☒ Three Phase

\* **Maximum demand assessment** based on AS3000 **must** be attached

\* For **multi-residential developments** please provide details of floor area, in squares, for each unit on a separate attachment.

\* For **industrial/commercial developments** with uniform load, provide building area and VA/m<sup>2</sup> showing kVA and amps.

\* For **larger developments** supporting load details **must** be provided on a separate attachment.



### **Load Details (Continued)**

Load details need to be completed by an electrical qualified person. For multiple occupancy residential premises, villas, units, townhouses, etc, calculate the maximum demand using AS/NZS 3000. The final load assessment will be carried out by Endeavour Energy and the assessed load may be lower or higher than the applied load.

#### **Note:**

Please provide detailed information describing your development with site plans and a **copy of the Development Agreement (DA)** as attachments to support your request including harmonic loads, excessive motor starting or other types of load that may cause quality of supply issues on the network.

### **Applicant Contact Details**

Name / Company Amity College Australia Ltd Contact Person Recep Aydogan  
Street No. \_\_\_\_\_ Street Name 163 Kurrajong Rd, NSW  
PO Box \_\_\_\_\_ Suburb / Town Prestons Post Code 2170  
Phone 02 8784 3111 Mobile \_\_\_\_\_ Fax \_\_\_\_\_  
Email raydogan@amity.nsw.edu.au

### **Applicant's Representatives Contact Details**

Name / Company Erbas Contact Person Anton Smolin  
Street No. \_\_\_\_\_ Street Name Level 1, 15 Atchison Street, NSW  
PO Box \_\_\_\_\_ Suburb / Town St Leonards Post Code 2065  
Phone 02 9437 1022 Mobile \_\_\_\_\_ Fax \_\_\_\_\_  
Email anton.smolin@erbas.com.au

All correspondence to be sent to (select ONE only): ☐ Applicant ☒ Applicant's Representative

### **Applicant's Acknowledgement and Agreement**

I acknowledge and agree that:

1. in signing and submitting this application I am requesting an expedited connection;
2. I have read and understood the terms of Endeavour Energy's Model Standard Offers for a LV Basic Connection Service and Standard Connection Service (as published on its website at [www.endeavourenergy.com.au](http://www.endeavourenergy.com.au)) and a connection offer by Endeavour Energy for a LV Basic Connection Service or Standard Connection Service on the terms of the relevant Model Standing Offer is acceptable to me; and
3. if Endeavour Energy is satisfied that the service requested by me falls within the terms of Endeavour Energy's Model Standing Offer for either a LV Basic Connection Service or Standard Connection Service, then I will have taken to have accepted a connection offer by Endeavour Energy on the terms of the relevant Model Standing Offer on the date that Endeavour Energy receives this application.

Applicant's/Applicant's Representative Signature:

*A. Smolin*

Date: 28 / 2 / 19

\* Do you consent to the release of your contact details to other customers with similar works in progress nearby to facilitate co-operation in design and construction activities. ☒ Yes ☐ No



## 6.4 Endeavour Energy Letter of Offer



21 March 2019

**Endeavour Energy Ref: UCL10007– 2019/00493/001**

**Customer Ref:**

Erbas & Associates  
Floor 1 / 15 Atchison Street  
ST LEONARDS NSW 2065

**Attention: Greg Dunk**

### **CONNECTION OFFER – STANDARD CONNECTION SERVICE**

**UCL10007– LOT 1, DP 525996, Connection of Load Application: 85 Byron Road, LEPPINGTON**

Thank you for your application providing information of the proposed development at the above location. Your application has been registered under the above reference number. Please quote this reference number on all future correspondence.

This connection offer is made in accordance with the Terms and Conditions of the Model Standing Offer for a Standard Connection Service available on our website. To accept this offer, please complete the enclosed Notice of Advice form and obtain your Level 3 Accredited Service Provider (ASP) signature on the form prior to returning it to Endeavour Energy.

Endeavour Energy has completed a preliminary desk top assessment of the information provided in your application and issued an enclosed Supply Offer. Your next step is to obtain the services of a Level 3 ASP to prepare and provide an electrical design to Endeavour Energy in the form of a Proposed Method of Supply. This activity is customer funded contestable work and you will need to pay for it. An estimate of fees related to review of your design is attached.

A list of the Accredited Service Providers is available at the NSW Trade and Investment website: <https://energysaver.nsw.gov.au/households/you-and-energy-providers/installing-or-altering-your-electricity-service> or can be obtained via phone 13 77 88.

Please note under the National Electricity Rules (NER) customer may choose to enter into a negotiated agreement. A negotiation framework describing this process is available on our website.

Should you have any enquiries regarding your application please contact the undersigned.

Yours faithfully,

A handwritten signature in black ink, appearing to read "Venu Krishna".

Venu Krishna  
Contestable Works Engineer  
Ph: 9853 5685  
Fax: 9853 7925  
Email: cwtech@endeavourenergy.com.au

**APPLICATION NO: UCL10007**

**DATE: 21 March 2019**

**SUBJECT: SUPPLY OFFER FOR**

**85 Byron Road, LEPPINGTON**

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Endeavour Energy has carried out a desk top assessment and has prepared the attached Supply Offer for this development.

The supply offer will assist your Level 3 ASP to develop the most efficient solution to meet your needs whilst complying with Endeavour Energy's standards and with the Terms and Conditions of the Model Standing Offer for a Standard Connection Service. Please find below a list of some requirements that will need to be addressed by your nominated Level 3 ASP.

- Field visit to verify physical details
- Trench length
- Cable length
- Length of cable using existing ducts
- Length of new ducts required to be installed
- Substation location shown on a preliminary sketch and HV switchgear numbers
- Types and number of poles to be replaced or installed
- Complexity of trenching (ie rock, under-bore, commercial area etc)
- Earthing requirements and complexity
- Overhead construction and isolation point requirements
- Asset Valuation form must be completed including any extraordinary costing requirements
- Environmental issues addressed in a fully documented Environmental Assessment
- Generation requirements
- Rail Crossing requirements

A sketch of the proposed design utilising the GIS as a base must be returned with the above information.

This Supply Offer is part of the Connection Offer for a Standard Connection Service and is valid for three (3) months from the date of issue.

Where this Connection Offer has lapsed, you or your Level 3 ASP must contact Endeavour Energy with the request to extend the Connection Offer. Endeavour Energy will assess your request and will inform you of the outcome. It must be recognised that the network is being constantly extended/augmented as new customers get connected. This means that for your Connection Offer to be extended, your Supply Offer may require alteration. If this is the case, additional fees to cover administrative costs may apply.

The fees applicable to this phase of the project will need to be paid prior to design certification and are outlined in the Network Price List available on the Endeavour Energy website.

21 March 2019

Endeavour Energy Ref: UCL10007– 2019/00493/001

## SUPPLY OFFER

(Based on a desktop assessment)

### **Development Details & Applicant's Assessed Load:**

Application is for Lot 1, DP 525996, 85 Byron Road, Leppington. Total proposed load = 2194A three phase. (Commercial development – College/School site)

### **Endeavour Energy Assessed Load:**

Total proposed load = 2194 – to be confirmed by Level 3 ASP.

### **Development & Site Plans received/not received:**

Site Plans received.

### **HV/LV Connection Point & Connection Asset Requirements:**

HV and Network is available on Ingleburn Road. As per Endeavour Energy determination the developer needs to install a PM Substation with underground reticulation to supply the proposed development. Developer needs to engage a Level 3 ASP and submit a proposed method of supply for assessment.

In addition, Level 3 ASP needs to submit another maximum demand calculation based on Table C2 of AS3000 wiring rules. Furthermore Level 3 ASP needs to submit site inspection photos with the Proposed Method of Supply.

- **Level 3 ASP needs to ensure the PMOS comply with MDI 0028, MCI 0006, MCI 0005, EDI 100 & MDI 0044.**

### **Network Constraints & Limitations**

The scope of works is to be undertaken in accordance with the Terms and Conditions of the Model Standing Offer for a Standard Connection Service and must comply with all relevant policies, regulations and network standards.

## 6.5 NBN request correspondence

**From:** Developer Liaison [<mailto:developerliaison@nbnco.com.au>]  
**Sent:** Friday, 15 March 2019 2:58 PM  
**To:** Anton Smolin <[Anton.Smolin@erbas.com.au](mailto:Anton.Smolin@erbas.com.au)>  
**Subject:** Your nbn new development application is ineligible for STG-W000062787



Dear Anton Smolin,

Thank you for submitting your request for 85 Byron Road, Leppington NSW 2179, Australia.

Unfortunately, this address is ineligible to receive **nbn**<sup>™</sup> network infrastructure at this time.

This address has been identified to have an active **nbn**<sup>™</sup> network service with a **nbn**<sup>™</sup> supplied equipment. This means that **nbn** will need to recover the equipment at the existing premises to avoid disruption in re-connecting the new development to the **nbn**<sup>™</sup> network. An email has also been sent to the Property Owner of this premises.

### Your new development application

Reference number: STG-W000062787  
Date issued: 15/3/2019  
Contact name entered: Anton, Smolin  
Contact email entered: [anton.smolin@erbas.com.au](mailto:anton.smolin@erbas.com.au)  
Development address entered: 85 Byron Road, Leppington NSW 2179, Australia  
Latitude and longitude of development address: <-33.96618480000001, 150.8089942>

**nbn** has based the assessment on the details as shown above. If you have any questions and would like to contact **nbn** please call 1800 687 626 and quote your reference number.

Thank you and regards,  
**nbn**<sup>™</sup> New Developments team.

[View the frequently asked questions](#)  
[Subscribe to our Construction Industry eNewsletter](#)

## 6.6 Telstra correspondence

**From:** registration@telstrasmartcommunity.com [mailto:registration@telstrasmartcommunity.com]

**Sent:** Friday, 15 March 2019 3:12 PM

**To:** Anton Smolin <Anton.Smolin@erbas.com.au>

**Subject:** Application for Reticulation Confirmation - Amity College Stage 1 - Leppington 2179

Hi Anton Smolin,

Thank you for submitting your Application for Reticulation (AFR) on the Telstra Smart Community website for your development.

Your AFR number is: 17443029. You can use it and your password to view, change or add details at any stage of your development.

Please note this email is an acknowledgement of your application only. It is not a commitment by Telstra to provide infrastructure to your development.

Telstra's Land Development Liaison Consultant will discuss with you any charges and other conditions relating to Telstra infrastructure and/or service provisioning.

Attached are the details provided with your application, which you might want to keep handy. They can also be viewed on the Telstra Smart Community website at <https://www.telstra.com.au/smart-community>

For your reference, here are the details of Telstra's Land Development Liaison Consultant for Leppington:

dev4nsw@team.telstra.com

Locked Bag 6018 Hunter Region Mail Centre 2310

Please refer to the Telstra Smart Community website for further information on New Developments and your responsibilities as a Developer.

Important information for Developers and their Contractors regarding Asbestos

The construction of Telstra's network dates back over many years. Some of Telstra's pits and ducts were manufactured from asbestos-containing cement. You must take care in conducting any works in the vicinity of Telstra's pits and ducts. You must refrain from in any way disturbing and damaging Telstra's network infrastructure when conducting your works. We recommend that before you conduct any works in the vicinity of Telstra infrastructure that you ensure your processes and procedures eliminate any possibility of disturbing, damaging or interfering in any way with Telstra's infrastructure. Your processes and procedures should incorporate measures having regard to the nature of this risk.

Best regards,

Telstra's Land Development Liaison Team

Telstra - <https://telstra.com.au/>

Privacy - <https://www.telstra.com.au/privacy/privacy-statement/>

Contact us - <http://www.telstra.com.au/help/contact/>

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## 6.7 Space & Cost implications for major authority works (TBC)

Pending

Service	Space requirements / comments	Cost implications	Authority advice
Sewer	180m of main extension to serve the site. Connection point to be provided at boundary. These works will be completed by the Authority as part of a minor works contract.	\$100-120,000	Pending (will require Section 73)
Water	New connection requirements for Water & Fire services. Each to be brought into the boundary.	\$15-20,000	Pending (will require Section 73)
Fire services	Fire pumps are likely due to insufficient pressure in the supply main. Pumps can be in an external pump house or located within the site structure.	\$40-60,000	
Gas	New connection requirements for Natural Gas service. NG passes through Byron Road and is available to the site without extension.	\$5-8,000	Pending (will require gas application once gas loads for the site are finalised)
Electrical	New Kiosk substation will be required. This will likely be installed in close proximity to the supply location in the Eastern corner of the site (final location to be confirmed by ASP/3 Designer).	\$150 – 200,000	See part 6.4 of this report for letter of offer
Other	Rainwater reuse system. 20kL with circulation and filtration.	\$15- 20,000	

## 7.conclusion

Based on responses that have been obtained from the relevant services authorities, the proposed development can only be serviced by some current infrastructure and some infrastructure will require future works to service the development.

Detailed requirements from the service authorities will be obtained as the project progresses through application submissions and incorporated into relevant design documentation for service authority approval.