

If a building becomes architecture, then it is art. Clearly, if a building is not functionally and technically in order, then it isn't architecture either – it's just a building.
Arne Jacobsen

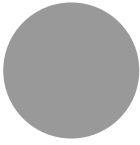
Mechanical Engineering
Lighting Design
Sustainable Design
Electrical Engineering

Copenhagen
London
Sydney
Canberra
Hong Kong
New York

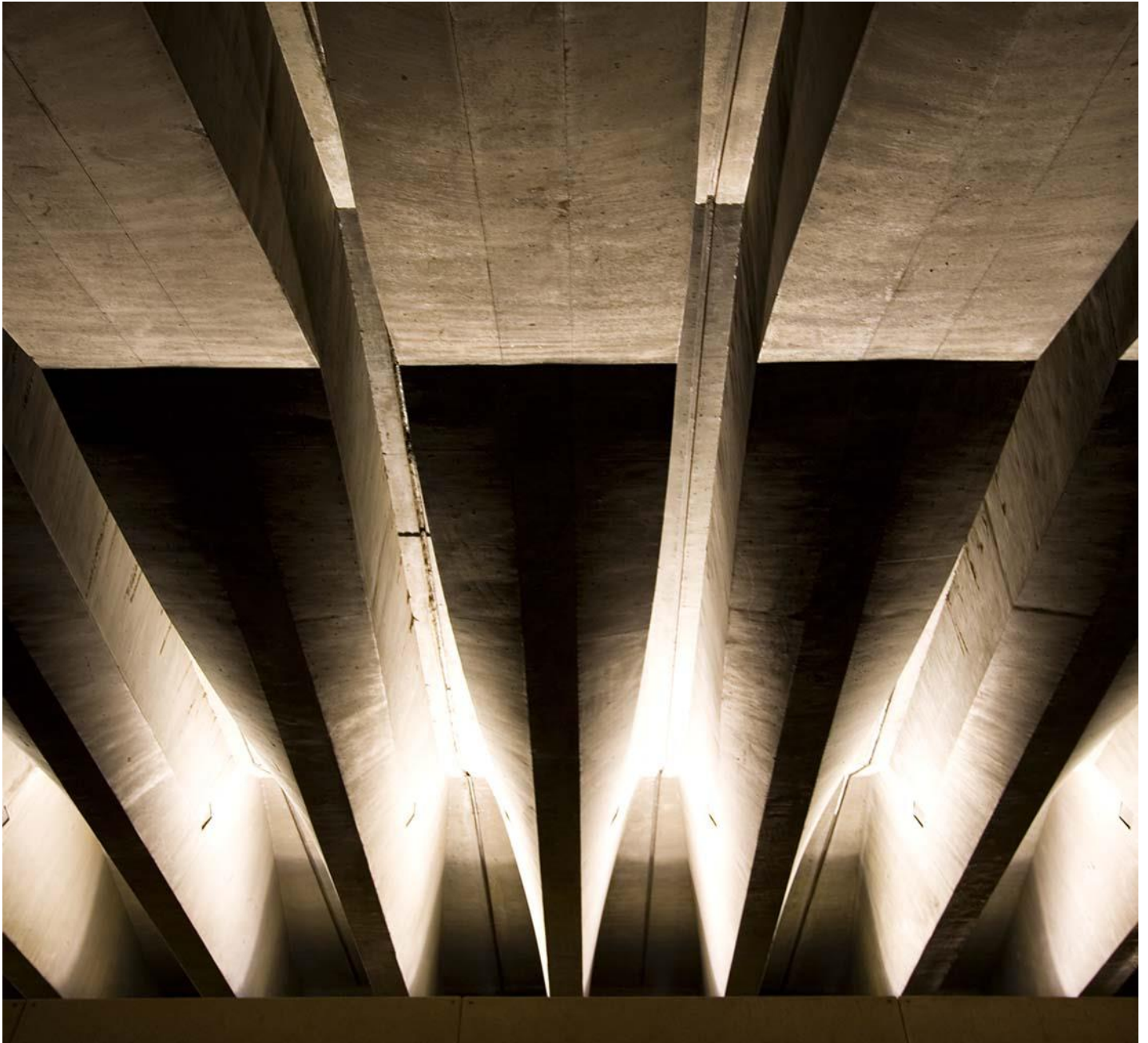
Level 8, 9 Castlereagh Street
Sydney, NSW, 2000, Australia
ABN 50 001 189 037
t : +61 / 02 9967 2200
e : info@steensenvarming.com

BUILDING SERVICES

STEENSEN VARMING



New High School for Leppington and Denham Court Electrical and Telecommunications Utility Infrastructure Assessment



If a building becomes architecture, then it is art. Clearly, if a building is not functionally and technically in order, then it isn't architecture either – it's just a building.
Arne Jacobsen

Mechanical Engineering
Lighting Design
Sustainable Design
Electrical Engineering

Copenhagen
London
Sydney
Canberra
Hong Kong
New York

Level 8, 9 Castlereagh Street
Sydney, NSW, 2000, Australia
ABN 50 001 189 037
t : +61 / 02 9967 2200
e : info@steensenvarming.com

STEENSEN VARMING

Document Revision and Status

Sydney November 22nd, 2024
Ref. No. 237220 LPHS E35

Date	Rev	Issue	Notes	Checked	Approved
22-11-2024	1	Final Draft	For Comment	IM	IM
10-01-2025	2	Final		IM	IM

Ivan Mira
Associate

ivan.mira@steensenvarming.com
9967 2200

Disclaimers and Caveats:

Copyright © 2025, by Steensen Varming Pty Ltd.
All rights reserved. No part of this report may be reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of Steensen Varming Pty Ltd. This document is confidential and contains privileged information regarding existing and proposed services for the building. The information contained in the documents is not to be given to or discussed with anyone other than those persons who are privileged to view the information. Privacy protection control systems designed to ensure the highest security standards and confidentiality are to be implemented. You should only re-transmit, distribute or commercialise the material if you are authorised to do so.

If a building becomes architecture, then it is art. Clearly, if a building is not functionally and technically in order, then it isn't architecture either – it's just a building.
Arne Jacobsen

Mechanical Engineering
Lighting Design
Sustainable Design
Electrical Engineering

Copenhagen
London
Sydney
Canberra
Hong Kong
New York

Level 8, 9 Castlereagh Street
Sydney, NSW, 2000, Australia
ABN 50 001 189 037
t : +61 / 02 9967 2200
e : info@steensenvarming.com

STEENSEN VARMING

Table of Contents

1.0	Introduction	2
1.1	Site Description	2
1.2	Proposed Activity Description	3
2.0	Electricity	4
2.1	Description of Works	4
2.2	Mitigation Measures	4
3.0	Telecommunications	5
3.1	Description of Works	5
3.2	Mitigation Measures	5
4.0	Appendix A – Endeavour Energy Supply Offer	6
5.0	Appendix B – Telstra Desktop Study Correspondence	7

1.0 Introduction

This 'Electrical and Telecommunications Utility Infrastructure Assessment' report has been prepared to support a Review of Environmental Factors (REF) for the Department of Education (DoE) for the new high school for Leppington and Denham Court (the activity). The purpose of the REF is to assess the potential environmental impacts of the activity prescribed by *State Environmental Planning Policy (Transport and Infrastructure) 2021* (T&I SEPP) as "development permitted without consent" on land carried out by or on behalf of a public authority under Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The activity is to be undertaken pursuant to Chapter 3, Part 3.4, Section 3.37A of the T&I SEPP.

The proposed activity is for the construction of a new high school located at 128-134 Rickard Road, Leppington, NSW, 2179 (the site).

The purpose of this report is to identify the any environmental impacts of the project due to the works related to the electrical and telecommunications.

1.1 Site Description

The site is known as 128-134 Rickard Road, Leppington, NSW, 2179 and is legally described as Lots A and B in Deposited Plan 411211. The site is located on the eastern side of Rickard Road and is approximately 4.1ha in area. The site is located immediately south of the existing Leppington Public School at 144 Rickard Road and is approximately 700m south of Leppington Train Station.

Figure 1 below provides an aerial image of the site.



Figure 1 Aerial image of site (source: NearMap)

The northern portion of the site is currently used for residential purposes. The southern portion of the site is used for agricultural purposes, with multiple greenhouses and an existing pond on the property.

1.2 Proposed Activity Description

The proposed activity is for a new high school for Leppington and Denham Court. The new high school will accommodate up to 1,000 students across 3 new buildings that will comprise 48 permanent teaching spaces (PTS), 3 support teaching spaces (STS), 9 specialist labs/workshops/kitchens and a hall. Buildings A, B and C will wrap the western and southern boundaries of the site, with the hall being located in the south-east corner. The activity also includes the construction of a sports field in the centre of the site and 3 x multipurpose courts along the northern boundary. The proposed scope of works is illustrated in Figure 2 below.



Figure 2 New High School for Leppington and Denham Court (source: djrd)

2.0 Electricity

2.1 Description of Works

The activity will be constructed on the site at the address noted in section 1.0 of this report.

Steensen Varming has consulted with a level 3 consultant to complete a desktop study of incoming power supply options for the activity as well as submitting an application for connection to Endeavour Energy for the proposed activity. A supply offer from Endeavour Energy has been received for the activity confirming that a level 3 designer needs to be engaged to confirm the supply methodology. Endeavour Energy has not indicated that there would be any issues in providing the required power provisions to the activity.

The activity is proposed to be provided with one 1000kVA kiosk transformers to satisfy the anticipated maximum demand for the 1000 student activity. The maximum demand has been calculated at 960kVA. The desktop study by our level 3 consultant suggests that there should be sufficient capacity in the area to accommodate the proposed load. It should be noted that load is not allocated/reserved for our site by the Endeavour Energy until a methodology of supply is submitted by a level 3 designer which is then reviewed/accepted by Endeavour Energy through the issue of a design brief.

Refer to the supply offer from Endeavour Energy in Appendix A of this report.

2.2 Mitigation Measures

No specific mitigation measures are deemed necessary due to the works required to the electricity network as a result of the activity. The works are not considered to be of a significant impact nor do they have an impact on the Environmental Factors outlined in section 3 of the Guidelines for Division 5.1 assessments guidelines.

3.0 Telecommunications

3.1 Description of Works

Based on the dial before you dig results, there are existing telecommunications services near the proposed site. Any telecommunications services that run into the site will be isolated and demolished as part of the works.

It is proposed to establish a new main communications room on ground floor which will service the new site and that a new incoming telecommunications services will be established to the main communications room and distributed to the rest of the site.

The submission of the formal application for telecommunication services is completed by the Department of Education's Information Technology Directorate (ITD). A desktop study for the site has been completed by Telstra which has confirmed the required works to obtain an enterprise level connection at the site. A copy of this desktop study is provided in appendix B of this report

Based on the NBNCo website, the area is serviced by the NBN network and a new connection to the activity can be established. The below screenshot is direct from the NBNCo website (<https://www.nbnco.com.au/>)

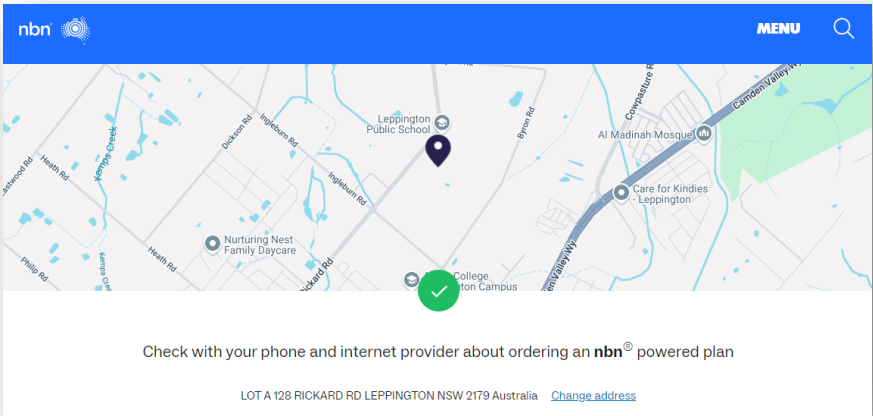


Figure 3 NBNCo website confirmation of service

3.2 Mitigation Measures

No specific mitigation measures are deemed necessary due to the works required to the telecommunications network as a result of the activity. The works are not considered to be of a significant impact nor do they have an impact on the Environmental Factors outlined in section 3 of the Guidelines for Division 5.1 assessments guidelines.

If a building becomes architecture, then it is art. Clearly, if a building is not functionally and technically in order, then it isn't architecture either – it's just a building.
Arne Jacobsen

Mechanical Engineering
Lighting Design
Sustainable Design
Electrical Engineering

Copenhagen
London
Sydney
Canberra
Hong Kong
New York

Level 8, 9 Castlereagh Street
Sydney, NSW, 2000, Australia
ABN 50 001 189 037
t : +61 / 02 9967 2200
e : info@steensenvarming.com

STEENSEN VARMING

4.0 Appendix A – Endeavour Energy Supply Offer

14 October, 2024

New Connections**ULL3672****Site Details**

LGA Name		CAMDEN			
Main Address	Address	Lot	Section	DP	Part Lot
☒	128 RICKARD ROAD, LEPPINGTON, New South Wales, 2179	A		411211	☐

Application Details

Type of Connection	New Permanent Connection		
Type of Development	Government		
Connection Date	30/09/2025		
Load Details			
Select Phase	Three Phase		
	Phase A	Phase B	Phase C
Existing Load	0 Amps	0 Amps	0 Amps
Removed Load	0 Amps	0 Amps	0 Amps
New Load	2,800 Amps	2,800 Amps	2,800 Amps
Total	2,800 Amps	2,800 Amps	2,800 Amps
NMI Info			
NMI	Status	Comments	
No items			
Reason for NMI unavailability	New Connection		
Additional Application Details	It is proposed that the new high school will be serviced by 2 x 1000kVA transformers located indicatively on the concept design site plan.		

Supporting Documents

 Max Demand.PNG 3h ago  LeppingtonHS_SitePlan.pdf 3h ago	
☒ Site Plan	
Reason for Required Documents Unavailable	Concept Stage Design Documents

Contact Details

Applicant	☒
Contact Name	Richard Hopkins
Company Name	Steensen Varming
Contact Number	0299672200
Email	richard.hopkins@steensenvarming.com
Address	Castlereagh Street,Sydney NSW,2000

Developer	☒
Contact Name	Richard Hopkins
Company Name	Steensen Varming
Contact Number	0299672200
Email	richard.hopkins@steensenvarming.com
Address	Castlereagh Street,Sydney NSW,2000

Have you engaged an Accredited Service Provider associated with this application?

No

Legal Disclaimer

By submitting this application, as the Applicant you agree to the following:

1. I have read and understood the terms of Endeavour Energy's Model Standard Offers as published on our website (www.endeavourenergy.com.au).
2. I am requesting an expedited connection as per the terms contained within the applicable Model Standing Offer and am doing so on the basis that I am:
 - a) the owner of the premises for which the expedited connection is requested or
 - b) a person who is expressly authorised to make the request by or on behalf of the owner of that premises.
3. If Endeavour Energy is satisfied that the service requested by me falls within the terms of Endeavour Energy's Model Standing Offers, 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.
4. I consent to the release of my contact details to other customers with similar works in progress nearby to facilitate co-operation in design and construction activities.
5. I accept that all correspondence relating to my application will be sent to my nominated email address.

If you need to discuss any of the above points, please contact us at **Customer Network Solutions** on **02 9853 7977** or email cwadmin@endeavourenergy.com.au

☒ Applicant Acceptance of the above agreement

Standard Connection Offer

25 October 2024

Endeavour Energy Ref: ULL3672

Customer Ref:

Richard Hopkins

Steensen Varming

Sydney NSW 2000

ULL3672 – LOT A, DP 411211, Connection of Load Application: 128 RICKARD ROAD, LEPPINGTON

Thank you for your application for Endeavour Energy to provide connection services in respect of the proposed development at the above location ("**Proposed Development**"). Your application for connection services in respect of the Proposed Development ("**Connection Application**") has been registered under the above reference number. Please quote this reference number on all future correspondence relating to the Connection Application.

Endeavour Energy has completed a preliminary desk top assessment of the information provided in the Connection Application and is pleased to make the Supply Offer enclosed with this letter. The enclosed Supply Offer is to provide standard connection services for the Proposed Development in accordance with the terms and conditions of Endeavour Energy's Model Standing Offer for a Standard Connection Service ("**Connection Offer**"). A copy of Endeavour Energy's Model Standing Offer for a Standard Connection Service is available on our website at <https://www.endeavourenergy.com.au/connections/connection-contracts-and-fees>.

Supply Offer

The enclosed Supply Offer forms part of this Connection Offer and it will assist your Level 3 Accredited Service Provider (ASP) to develop the most efficient design solution to meet your needs. Some general requirements that will need to be addressed by your nominated Level 3 ASP includes, but is not limited to:

- Field visit to verify physical site details
- Details of new and existing assets, including quantities
- Substation location, HV switchgear and earthing details
- Construction methods and isolation point requirements.
- Asset Valuation
- Environmental Assessment (Summary Environmental Report)

A sketch of the proposed design utilising our Geographic Information System (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.

Payment of design related ancillary network services.

Ancillary Network Services (ANS) are the main connection services we provide to customers for which ANS fees are payable. ANS include our interactions with ASPs to ensure that the contestable network services they provide, meet the design and technical requirements to be connected to and form part of our network.

The design related ANS fees payable for this project will be sent to you with a Design Brief. Payment of Design related ANS fees must be made before we can accept your L3 ASP design submission and commence design checking.

Please note that further ANS fees will also apply for the construction and connection phase of the project. These fees will be conveyed to you after the receipt of a signed Letter of Intent indicating that you will proceed with the construction phase of the project. We may also amend or charge you further ANS fees if your application details or project scope changes.

Accepting this Connection Offer

To accept this Connection Offer, please:

- a) appoint a Level 3 Accredited Service Provider (ASP);
- b) confirm your appointed Level 3 ASP contact details in the attached Notice of Advice form; and
- c) complete and sign the Notice of Advice form yourself and return it to Endeavour Energy.

A list of the Accredited Service Providers is available at the Energy NSW website:

<https://energysaver.nsw.gov.au/households/you-and-energy-providers/installing-or-altering-your-electricity-service> or can be obtained via phone on 13 77 88.

If you accept this Connection Offer, a connection contract will be formed between Endeavour Energy and the retail customer or real estate developer who requires the connection services for the Proposed Development ("**Developer**") on and from the date that Endeavour Energy receives the completed Notice of Advice form. The connection contract will be on the terms and conditions of the Supply Offer and Model Standing Offer for a Standard Connection Service.

If you accept this Connection Offer and you are not the Developer, you will be accepting this Connection Offer as the Developer's authorised agent.

Next steps

Your next step after accepting this Connection Offer is to engage your Level 3 ASP to prepare and provide an electrical design to Endeavour Energy in the form of a Proposed Method of Supply. Under the Model Standing Offer for a Standard Connection Service, this activity is "Customer Funded Contestable Work", and you will need to pay for it.

Please note under the National Electricity Rules (NER) the Connection Customer may choose to enter into a negotiated connection contract. A negotiation framework describing this process is available on our website at <https://www.endeavourenergy.com.au/your-energy/our-services/your-right-to-negotiate>.

Should you have any enquiries regarding your application please contact the undersigned, who has been appointed as Endeavour Energy's representative for the purposes of this Connection Offer.

Yours faithfully,

Parisa Sadeghi

Parisa Sadeghi

Customer Network Engineer

Ph: 02 9853 5628

Email: CWTech@endeavourenergy.com.au

Enclosed:

1. Supply Offer
2. Initial Funding Arrangements
3. Notice of Advice – to be completed and returned when you have engaged your L3 ASP

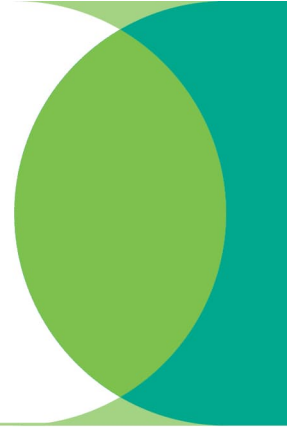
Supply Offer

(Based on desktop assessment)

25 October 2024

Endeavour Energy Reference: ULL3672

Development Details & Applicant's Assessed Load:	Application for provision of electricity network for connection of a new high school located at 128 Rickard Road, Leppington. Applicant's estimated load is 2,800A/phase.
Endeavour Energy Assessed Load:	As per customer's total applied load of 2,800A/phase. A detailed maximum demand calculation is to be provided by the customer at the MOS stage.
Development & Site Plans received/not received:	Site plan received
HV/LV Connection Point & Connection Asset Requirements:	The existing LV network does not have sufficient capacity for the customer's applied load. New substation(s) to be established on site. The Level 3 ASP designer to investigate and provide the proposed method of supply for this application. HV Linkage Point is 11kV Feeder NL1332 – North Leppington.
Transmission Assets:	There is no transmission asset identified near the site.
Connection Options:	Customer is to engage a Level 3 Accredited Service Provider to investigate and submit a proposed Method of Supply (MOS) to Endeavour Energy for further assessment. The scope of works is to be undertaken in accordance with Endeavour Energy Connection Policy and must comply with all the relevant policies, regulations and network standards. All service works are to comply with the requirements of the NSW service and Installations Rules.



Initial Funding Arrangements

25 October 2024

Endeavour Energy Reference: ULL3672

Endeavour Energy Supplied Materials:	Nil
Endeavour Energy Funded and Constructed:	Nil
Endeavour Energy Funded and Level1 ASP Constructed – Reimbursement Paid by Endeavour Energy	Nil
Reimbursement to be paid to Endeavour Energy by Customer:	Nil
Customer Funded Monopoly Services:	Network switching, commissioning, contractor inspection, ancillary fees, etc.
Customer Funded Contestable Works:	All other works required

Notice of Advice

[Insert date here]

Endeavour Energy Ref: ULL3672

Endeavour Energy
PO Box 811
Seven Hills NSW 1730
cwadmin@endeavourenergy.com.au

Attention: Customer Connections Administrator

APPOINTMENT OF ACCREDITED DESIGNER FOR THE PROPOSED DEVELOPMENT AT: LOT A, DP 411211, 128 RICKARD ROAD, LEPPINGTON ("PROPOSED DEVELOPMENT")
Please complete and return this letter when a Level 3 ASP has been appointed

I refer to Endeavour Energy’s offer to provide standard connection services in respect of the Proposed Development (“**Connection Offer**”).

This letter confirms that:

- a) the retail customer or real estate developer for the Proposed Development (“**Developer**”) owns, or is developing, the land on which the Proposed Development is to be located;
- b) the Developer intends to supply the Proposed Development in accordance with Endeavour Energy’s requirements;
- c) the Developer has appointed the Level 3 Accredited Service Provider (“**Level 3 ASP**”) described below for the purposes of the Proposed Development; and
- d) the Developer agrees to acquire standard connection services from Endeavour Energy in respect of the Proposed Development on the terms and conditions set out in the Connection Offer.

Confirmation of Key Contacts:

(1) Applicant	
Company/Name:	Steensen Varming Richard Hopkins
Address:	Sydney NSW 2000
Email:	richard.hopkins@steensenvarming.com
Phone:	0299672200
(2) Developer	

Company/Name:	Steensen Varming Richard Hopkins
Address:	Sydney NSW 2000
Email:	richard.hopkins@steensenvarming.com
Phone:	0299672200

(3) L3 ASP (if you did not nominate a Level 3 ASP in your initial application, please do so below)

Company/Name:	
Address:	
Email:	
Phone:	

Please ensure all fields above are completed.

The Fees will be Paid to Endeavour Energy by*:

(*Please check only one responsible party in relevant check box below)

☐ Applicant

☐ Developer

☐ Level 3 ASP

Notice of Advice Execution and Acceptance of Connection Offer:

By signing this Notice of Advice, I accept the Connection Offer made by Endeavour Energy in respect of the Proposed Development, including the terms and conditions of Endeavour Energy's Model Standing Offer for a Standard Connection Service.

Where I am accepting the Connection Offer on behalf of the Developer, I declare that:

- a) I have the authority to execute this Notice of Advice and accept the Connection Offer on their behalf; and
- b) I am not aware of any fact or circumstance that might affect my authority to execute this Notice of Advice and accept the Connection Offer on their behalf.

Developer/ Developer's Authorised Agent:

Signature of Developer/Developer's Authorised Agent

Name of Developer/Developer's Authorised Agent

Date

Company Name

If a building becomes architecture, then it is art. Clearly, if a building is not functionally and technically in order, then it isn't architecture either – it's just a building.
Arne Jacobsen

Mechanical Engineering
Lighting Design
Sustainable Design
Electrical Engineering

Copenhagen
London
Sydney
Canberra
Hong Kong
New York

Level 8, 9 Castlereagh Street
Sydney, NSW, 2000, Australia
ABN 50 001 189 037
t : +61 / 02 9967 2200
e : info@steensenvarming.com

STEENSEN VARMING

5.0 Appendix B – Telstra Desktop Study Correspondence

Ivan Mira

From: Rory Wynbergen <Rory.Wynbergen@det.nsw.edu.au>
Sent: Thursday, 9 January 2025 4:57 PM
To: Ivan Mira
Cc: Shay Bergin (Shay Bergin); Damien Mitchell; David Thalouth; Nitesh Poudyal; Mathew Romanous
Subject: FW: Leppington/Denham Court (new high school) - ICT
Categories: 237220 - LPHS

CAUTION: This email originated from outside the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Hi Ivan,

As discussed, see below.

Regards,

Rory Wynbergen

Project Director | Infrastructure Delivery | School Infrastructure NSW

0449 948 449 | rory.wynbergen@det.nsw.edu.au | education.nsw.gov.au

Follow us

Twitter: [@NSWEducation](https://twitter.com/NSWEducation)

Facebook: [@NSWDepartmentofEducation](https://facebook.com/NSWDepartmentofEducation)

YouTube: [NSWDepartmentofEducation](https://youtube.com/NSWDepartmentofEducation)

Instagram: [@NSWEducation](https://instagram.com/NSWEducation)



Education

I acknowledge the homelands of all Aboriginal people and pay my respect to Country.

Confidentiality: This email is from the NSW Department of Education. The contents are confidential and may be protected by legal professional privilege. The contents are intended only for the named recipient of this email. If the reader of this email is not the intended recipient you are hereby notified that any use, reproduction, disclosure or distribution of the information contained in the email is prohibited. If you have received this email in error, please reply to us immediately and delete the document.

From: David Natoli <david.natoli3@det.nsw.edu.au>
Sent: Tuesday, 26 November 2024 9:21 AM
To: Rory Wynbergen <Rory.Wynbergen@det.nsw.edu.au>; Damien Mitchell <Damien.Mitchell12@det.nsw.edu.au>
Cc: Shay Bergin (Shay Bergin) <Shay.Bergin1@det.nsw.edu.au>
Subject: RE: Leppington/Denham Court (new high school) - ICT

Hi Rory,

Update regarding Leppington HS Telstra Survey

Customer Summary: Firm construction Enterprise Works price is \$15,230 ex GST.

The feasibility response is valid for 90 days, after which a new feasibility will be required to confirm capacity availability.

This price does not include any CW for a new lead-in or FFS costs for internal building works which may apply and will either be determined at time of order or through a customer funded site visit.

Access solution: The following are the works required from the Telstra access point to the customer boundary.

Core summary diverse – Capacity is available & has been reserved for 90 days.

Total fibre haul (m): 115

NTU required: OS-V8

Estimate access build time: CAT3.

In summary

- Capacity is available and reserved for the next 90 days. I am not concerned about this even if we go over the 90 days before placing the order.
- The costs quoted above are to run fibre from the Telstra access point in the street to the site boundary (113 metres). There will be further costs to run the fibre from the boundary to the main communication room (MCR) which are determined during an onsite survey once construction of the building, MCR and lead in conduits and pits are underway by the contractor.
- I recommend we review this early next year once the tender is awarded to assess when to submit the Telstra application.

With Regards,

David Natoli

Senior ICT Coordinator

ICT Infrastructure Coordination and Operational Readiness

0472 876 123